

# Health, United States, 2008

With Special Feature on the Health of Young Adults



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Centers for Disease Control and Prevention  
National Center for Health Statistics

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## Preface

*Health, United States, 2008* is the 32nd report on the health status of the Nation and is submitted by the Secretary of the Department of Health and Human Services to the President and the Congress of the United States in compliance with Section 308 of the Public Health Service Act. This report was compiled by the National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC). The National Committee on Vital and Health Statistics served in a review capacity.

The *Health, United States* series presents national trends in health statistics. Each report includes an executive summary, highlights, a chartbook, trend tables, extensive appendixes, and an index.

## Chartbook

The 2008 Chartbook includes 41 charts and introduces this year's special feature on young adults, a group making many life choices including decisions about education, marriage, childbearing, and health behaviors such as tobacco and alcohol use, which will affect both their future economic and health status as well as that of their families. The chartbook assesses the Nation's health by presenting trends and current information on selected determinants and measures of health status and utilization of health care. Many measures are shown separately for persons of different ages because of the strong effect of age on health. Selected figures also highlight differences in determinants and measures of health status and utilization of health care by such characteristics as sex, race, Hispanic origin, education, and poverty level.

## Trend Tables

The chartbook section is followed by 151 trend tables organized around four major subject areas: health status and determinants, health care utilization, health care resources, and health care expenditures. A major criterion used in selecting the trend tables is availability of comparable national data over a period of several years. The tables present data for selected years to highlight major trends in health statistics. Earlier editions of *Health, United States* may present data for additional years that are not included in the current printed report. Where possible, these additional years of data are available in Excel spreadsheet files on the *Health, United*

*States* website. Tables with additional data years are listed in [Appendix III](#).

## Racial and Ethnic Data

Many tables in *Health, United States* present data according to race and Hispanic origin consistent with Department-wide emphasis on expanding racial and ethnic detail when presenting health data. Trend data on race and ethnicity are presented in the greatest detail possible after taking into account the quality of data, the amount of missing data, and the number of observations. Standards for classification of federal data on race and ethnicity are described in detail by data system in [Appendix II, Race](#).

## Education and Income Data

Many tables in *Health, United States* present data according to socioeconomic status, using education and family income as proxy measures. Education and income data are generally obtained directly from survey respondents and are not generally available from records-based data collection systems. State vital statistics systems currently report mother's education on the birth certificate and, based on an informant, decedent's education on the death certificate. See [Appendix II, Education](#); [Family income](#); and [Poverty](#).

## Disability Data

Disability is a complex concept and can include presence of physical or mental impairments that limit a person's ability to perform an important activity and affect the use of or need for supports, accommodations or interventions required to improve functioning. Information on disability in the U.S. population is critical to health planning and policy. Although some information is currently available from federal data collection systems, the information is limited by lack of standard definitions and survey questions on disability. Several current initiatives are underway to coordinate and standardize measurement of disability across federal data systems. Until such standardized information is available, *Health, United States* includes the following disability-related information for the civilian noninstitutionalized population: prevalence of limitations of activity due to chronic conditions ([Table 58](#)), vision and hearing limitations for adults ([Table 59](#)), and limitations in Activities of Daily Living (ADL) and

Instrumental Activities of Daily Living (IADL) for the population age 65 and over (Table 58). In addition, disability-related information is provided for Medicare enrollees (Table 144), Medicaid recipients (Table 145), and veterans with service-connected disabilities (Table 147).

For more information on disability statistics see: Altman B, Bernstein A. Disability and health in the United States, 2001–2005. Hyattsville, MD: NCHS. 2008. Available at: <http://www.cdc.gov/nchs/data/misc/disability2001–2005.pdf>.

## Changes in This Edition

Each volume of *Health, United States* is prepared to maximize its usefulness as a standard reference source while maintaining its continuing relevance. Comparability is fostered by including similar trend tables in each volume. Timeliness is maintained by (1) adding new tables each year to reflect emerging topics in public health and (2) improving the content of ongoing tables. *Health, United States, 2008* includes four new trend tables on the following: incidence and prevalence of end-stage renal disease, based on data from the United States Renal Data System (USRDS) (Table 55); international comparisons of influenza vaccination for the population age 65 and over, based on data from the Organisation for Economic Co-operation and Development (Table 84); use of selected dietary supplements, based on data from the National Health and Nutrition Examination Survey (Table 99); and state per capita personal health care expenditures, based on data from the National Health Expenditures Accounts produced by the Centers for Medicare and Medicaid Services (Table 148)

The *Health, United States, 2008* Chartbook section includes new charts on children under 18 years of age living with a single parent (Figure 3); leisure-time physical activity and strength training (Figure 8); rate of acute viral hepatitis (Figure 9); current asthma prevalence among adults 18 years of age and over (Figure 10); per capita personal health care expenditures by state of residence (Figure 20); visits to physician offices and hospital outpatient departments for attention-deficit/hyperactivity disorder (ADHD) among children (Figure 21); selected leading reasons for emergency department visits among adults 18 years of age and over (Figure 22); dental visits for cleaning in the past year among persons 2 years of age and over (Figure 23); influenza and pneumococcal vaccination among middle-age and older adults (Figure 24); any-listed pneumonia discharges from nonfederal

short-stay hospitals among persons 65 years of age and over (Figure 25); and cesarean delivery rates by maternal age (Figure 26). The Special Feature includes 15 charts on sociodemographic characteristics of young adults, their health behaviors, their access to health care, and their health care utilization (Figures 27–41).

## Appendixes

Appendix I describes each data source used in the report and provides references for further information about the sources. Data sources are listed alphabetically within two broad categories: (1) Government Sources and (2) Private and Global Sources.

Appendix II is an alphabetical listing of terms used in the report. It also presents standard populations used for age-adjustment (Tables I, II, and III); ICD codes for causes of death shown in *Health, United States* from the Sixth through Tenth Revisions and the years when the Revisions were in effect (Tables IV and V); comparability ratios between ICD–9 and ICD–10 for selected causes (Table VI); ICD–9–CM codes for external cause-of-injury, diagnostic, and procedure categories (Tables VII, X, and XI); effects on health insurance rates of adding probe questions for Medicare and Medicaid coverage in the National Health Interview Survey (Table VIII); industry codes according to the 2007 North American Industry Classification System (Table IX); National Drug Code (NDC) Therapeutic Class recodes of generic analgesic drugs (Table XII); and sample tabulations of NHIS data comparing the 1977 and 1997 Standards for the Classification of Federal Data on Race and Ethnicity (Tables XIII and XIV).

Appendix III lists tables for which additional years of trend data are available electronically in Excel spreadsheet files on the *Health, United States* website and CD-ROM, described below under Electronic Access.

## Index

The Index to Trend Tables and Chartbook Figures is a useful tool for locating data by topic. Tables are cross-referenced by such topics as Child and adolescent health; Older population age 65 years and over; Women's health; Men's health; State data; American Indian, Asian, Black, and Hispanic origin populations; Education; Injury; Disability; and Metropolitan and nonmetropolitan data.

## Electronic Access

*Health, United States* may be accessed in its entirety on the World Wide Web at <http://www.cdc.gov/nchs/hus.htm>. From the *Health, United States* website, one may also register for the *Health, United States* electronic mailing list to receive announcements about release dates and notices of updates to tables.

*Health, United States, 2008*, the chartbook, and each of the trend tables are available as Acrobat PDF files on the website. Chartbook figures are available as downloadable PowerPoint® slides. Trend tables and chartbook data tables are available as downloadable Excel spreadsheet files. Trend tables listed in [Appendix III](#) include additional years of data not shown in the printed report or PDF files. Both PDF and spreadsheet files for selected tables will be updated on the website if more current data become available near the time when the printed report is released. Readers who register with the electronic mailing list will be notified of these table updates. Previous editions of *Health, United States* and chartbooks, starting with the 1993 edition, also may be accessed from the *Health, United States* website.

*Health, United States* is also available on CD-ROM, where it can be viewed, searched, printed, and saved using Adobe Acrobat software on the CD-ROM.

## Copies of the Report

Copies of *Health, United States, 2008*, and the CD-ROM can be purchased from the Government Printing Office (GPO) <http://bookstore.gpo.gov>.

## Questions?

For answers to questions about this report, contact:

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## Executive Summary

*Health, United States, 2008*, is the 32nd annual report on the health status of the Nation prepared by the Secretary of the Department of Health and Human Services for the President and Congress. In a chartbook and 151 detailed tables, it provides an annual picture of the health of the entire Nation. Trends are presented on health status and health care utilization, resources, and expenditures. This year's report includes a special feature on young adults, age 18 to 29 years. As young people in this age group reach legal adulthood, they make many life choices, including decisions about education, marriage, childbearing, and health behaviors such as tobacco and alcohol use, which will affect both their future economic and health status as well as affect the well-being of their families.

For those entrusted with safeguarding the Nation's health, monitoring the health of the American people is an essential step in making sound health policy and setting research and program priorities. Health measures provide essential information for assessing how the Nation's resources should be directed to improve the population's health. Examination of emerging trends identifies diseases, conditions, and risk factors that warrant study and intervention. *Health, United States* presents trends and current information on measures and determinants of the Nation's health. It also identifies variation in health, health behaviors, and health care among people by race and ethnicity, gender, education and income level, and geographic location. Given the increasing diversity of the Nation and the continuing changes in the health care infrastructure, this is a challenging and critically important task.

## The Nation and its Health

The Nation is growing more diverse and the related health and health care needs of its population are changing. The percentage of the population that is of Hispanic or Asian origin has more than doubled since 1980 (data table for Figure 2). Between 1970 and 2004, the percentage of the U.S. population that was foreign-born also more than doubled (1).

Birth rates have decreased since the 1960s, and have remained relatively stable since 1995 (Table 4). Between 2005 and 2006 (preliminary data), the birth rate for teenagers 15–19 years rose 3%, from 40.5 live births per 1,000 females to 41.9 (2). This follows a 14-year downward trend in which the teen birth rate fell by 34% from its all-time peak of 61.8

births per 1,000 in 1991 (2). Teenage pregnancy increases the risk of adverse birth outcomes independently of important known risk factors (3). The 2006 (preliminary data) birth rate for unmarried women reached a record high of 50.6 births per 1,000 unmarried women age 15–44 years, up 7% from 2005. In 2006, 39% of all births were to unmarried women (preliminary data, 2). Women who have nonmarital births have, on average, lower educational attainment and lower income, are less likely to work full-time, and are more likely to receive public assistance (4,5).

In 2006, American men could expect to live 3.6 years longer, and women 1.9 years longer, than they did in 1990 (preliminary data, Table 26, and Figure 14). Mortality from heart disease, stroke, and cancer has continued to decline in recent years (Figure 16). Infant mortality, one major component of overall life expectancy, declined (Table 21 and Figure 15) through 2001 and has changed little since then.

In 2005, however, at least 29 other (selected) countries had infant mortality rates lower than those in the United States, compared with only 11 of the same comparison countries in 1960; and life expectancy for both men and women is higher in many other developed countries than in the United States (Tables 24 and 25). In 2004, the United States ranked 23rd in life expectancy at birth for men and 25th for women; the United States ranked 9th for men and women in life expectancy at 65 years of age (Table 25).

Longer life spans are generally considered desirable, particularly when healthy years of life are increased. However, with an aging population and longer life expectancy comes increasing total prevalence of chronic diseases and conditions associated with aging, such as disability and limitation of activity. The percentage of the population 75 years of age and over was 6% in 2006 and is projected to double by 2050 (Figure 1). In 2006, 42% of those age 75 years and over living in the community reported having a limitation in their usual activity due to a chronic condition, compared with 13% of people 45–54 years of age (Table 58).

Chronic diseases such as hypertension and diabetes are associated with aging, as is end-stage renal disease. Sixty-five percent of men and 80% of women age 75 years and over either had high blood pressure or were taking antihypertensive medication in 2003–2006, compared with about 36% of adults age 45–54 years (Table 71). The proportion of the population with high serum cholesterol levels has been dropping, in large part due to increased use of

cholesterol-lowering drugs (Tables 72 and 97). In 2003–2006, 16% of adults had high serum cholesterol. Women age 55 and over were substantially more likely to have high cholesterol than their male counterparts (Table 72). The incidence and prevalence of end-stage renal disease has increased since 1980 (Table 55). Nearly one-quarter of older adults (age 60 and over) had diabetes (either physician diagnosed or undiagnosed) in 2003–2006 (Table 54).

The number of new cases of many infectious diseases such as hepatitis types A, B, and C, childhood diseases such as measles and rubella, and invasive pneumococcal disease has been greatly reduced through vaccination and other prevention initiatives (Table 50 and Figure 9). However, incidence rates of some communicable diseases including pertussis (for which an effective vaccination exists) and Chlamydia have increased in recent years (Table 50). In addition, newly recognized infectious agents have emerged and caused substantial public health concern and investment, including SARS, H5N1 Avian Influenza, and some particularly virulent or drug-resistant strains such as Methicillin-Resistant Staphylococcus aureus (MRSA) (6). Pneumonia hospitalizations have increased, notably among persons 85 years of age and over (Figure 25). Influenza and pneumonia remain major causes of death, particularly among persons 65 years of age and over, and HIV/AIDS continues to spread (Table 31).

Of concern for all Americans is the high prevalence of people with risk factors such as obesity and insufficient exercise, which are associated with chronic diseases such as heart disease, diabetes, and hypertension. Obesity rates do not appear to be increasing as rapidly as they did in past decades, but remain at unacceptable levels with over one-third of adults age 20 and over considered to be obese in 2005–2006 (Tables 70, 75, and Figure 7). The percentage of adults 18 years of age and over who engaged in regular leisure-time physical activity (about one-third of adults in 2005–2006) and strength training (about one-fifth of adults in 2005–2006) remains low (Figure 8).

Unintentional injuries remain in the top ten leading causes of death for all age groups, and are the number one cause of death for persons 1–44 years of age (Tables 30 and 31). However, deaths from unintentional injuries have declined since 1970, which is in part associated with increased use of seat belts, helmets, and other public health injury-prevention initiatives (7, Table 28). Among young adults 18–29 years of age, the percentage of motor-vehicle fatalities that were

alcohol related declined from 72% in 1982 to 51% in 2006 (8).

## Health Care Resources

Health care technologies, facilities, equipment, and provider specialties have changed over recent decades. Until the mid-20th century, general hospitals and primary care physicians were the major providers of health care. There are now more specialized health care facilities, including imaging centers, outpatient surgical centers, and dialysis centers, as well as physician specialties and subspecialties (Tables 110 and 121). More procedures are being furnished on an outpatient basis and the average length of inpatient hospital stays has shortened since 1995, especially among persons 65 years of age and over (Tables 102 and 106). The supply of assisted living facilities is increasing rapidly, whereas the number of nursing homes has declined slightly since the year 2000 (9, Table 120). The number of physicians per capita has been increasing, but they are not distributed equally across the Nation (Table 109). The supply of allied health professionals is shifting. The numbers of massage therapists, dental hygienists and dental assistants, diagnostic medical sonographers, medical equipment preparers, medical assistants, pharmacy technicians, and occupational therapist assistants have increased 5% or more per year, on average, between 1999 and 2006, whereas the numbers of respiratory therapy technicians and recreational therapists have declined by 3% or more per year, on average, over the same period (Table 112). Projections indicate that there may be a continuing shortage of nurses, pharmacists, and other health professionals needed to care for our aging population (10,11).

## Expenditures and Health Insurance

The United States spends more on health per capita than any other country, and health spending continues to increase (Table 123). In 2006, national health care expenditures in the United States totaled \$2.1 trillion, a 6.7% increase from 2005 (Table 124). Hospital spending, which accounts for 31% of national health expenditures, increased by 7% in 2006 (Table 127). Spending for prescription drugs accounted for 10% of national health expenditures in 2006. This spending increased 8.5% in 2006, up from 5.8% in 2005, accelerating for the first time in 6 years (Table 127).

Overall, private health insurance paid 36% of total personal health care expenditures in 2006, the federal government 35%, state and local governments 10%, and out-of-pocket payments 15% (data table for Figure 19). Personal health care expenditures differ by state of residence as well as by age, sex, and other sociodemographic characteristics. In 2004, the latest year for which estimates are available for 50 states and the District of Columbia, the highest per capita spending was in the District of Columbia (\$8,295), followed by, Massachusetts, Maine, New York, and Alaska. The lowest per capita spending was in Utah (\$3,972), followed by Arizona, Idaho, New Mexico, and Nevada (Table 148 and Figure 20). State expenditures per resident are associated with differences in payer mix, provider supply, demographic and sociodemographic distributions, and policy factors such as Medicaid spending and state payment policies (12).

## Use of and Access to Health Care Services

Americans consume vast amounts of health care services, as indicated by the large amount they spend on personal health care services. In 2006, there were 1.1 billion visits to physician offices, hospital outpatient departments and emergency departments (Table 94). In 2006, about two-thirds of people age 2 years and over had a dental visit in the past year (Table 96) and 83% of all people had at least one visit to a doctor's office, emergency department, or a home visit in the past year (Table 83). About 7% of persons 1 year of age or over, had at least one hospital stay in the past year, and 21% of persons age 75 and over had a hospitalization in the past year (Table 101). In 2001–2004, about one-half (47%) of Americans had at least one drug prescribed in the past month and one-fifth (20%) had three or more drugs prescribed (Table 98). Sixty percent of people age 65 and over had three or more drugs prescribed in the past month.

Although Americans are increasingly using many types of clinical preventive services, utilization remains below recommended levels for some services. In 2006, 77% of children age 19–35 months received a combined vaccination series protecting them against several childhood infectious diseases, an increase from 66% in 2002 (Table 85). The percentage of mothers receiving prenatal care in the first trimester of pregnancy remained unchanged from 2004 to 2005 at 84% for the 37 states, the District of Columbia, and New York City for which comparable trend data were

available (Table 7). In 2003–2004, 61% of the population age 2 years and older reported having a dental cleaning in the past year (Figure 23). Children 2–17 years of age were more likely than adults to have their teeth cleaned in the past year (79% compared with 51%–65%) (Figure 23).

Whereas most Americans have access to the health care services they need, in 2006, 8% of adults 18–64 years of age reported that they did not get needed medical care, 10% reported they received delayed medical care, and 9% reported they did not get needed prescription drugs during the past 12 months, due to the cost (Table 80). Access to health care is strongly associated with health insurance coverage. People with no health insurance are less likely to receive some needed health services than people with insurance (Table 80 and Figure 39). An estimated 44 million people or 17% of Americans under 65 years of age did not have health insurance coverage at the time they were interviewed in 2006 (Table 140).

## Disparities in Health and Health Care by Income and Racial and Ethnic Group

*Health, United States, 2008*, identifies major disparities in health and health care by socioeconomic status, race, ethnicity, and insurance status. Many aspects of the health of the Nation have improved, but the health of some income, and racial and ethnic groups has improved less than others and for some groups, the gap has widened.

Persons living in poverty are considerably less likely to have used many types of health care than those with income of 200% of the poverty line or higher (Tables 82, 83, and 96). People with a family income of at least 200% of poverty were substantially more likely to have had a dental visit for cleaning in the past year than people living below 200% of poverty (68% compared with 47%–50% in 2003–2004) (data table for Figure 23). Children living below the poverty threshold remain less likely than children living at or above poverty to have received the combined vaccination series (73% compared with 78% in 2006) (Table 85).

Significant racial and ethnic disparities exist across a wide range of health and utilization measures. The gap in life expectancy between the black and white populations has narrowed, but persists (Table 26 and Figure 14). Obesity, a major risk factor for many chronic diseases, varies by race



and ethnicity—53% of non-Hispanic black women age 20 years and over were obese in 2003–2006, compared with 42% of women of Mexican origin and 32% of non-Hispanic white women (Table 75, age-adjusted). Differences in health status by race and Hispanic origin documented in this report may be explained by factors including socioeconomic status, health practices, psychosocial stress and resources, environmental exposures, discrimination, and access to health care (13). Socioeconomic and cultural differences among racial and ethnic groups in the United States will likely also influence future patterns of disease, disability, and health care use.

In 2006, among persons under 65 years of age, those of Hispanic origin and American Indians and Alaska Natives were more likely to be uninsured at a point in time than were those in other racial and ethnic groups (Table 140). More than two-fifths of people of Mexican origin were uninsured for at least part of the 12 months prior to interview (Figure 18).

Use of preventive care also varies by race and ethnicity. Since 1998, mammography levels have been lower among Hispanic and Asian women compared with non-Hispanic white and black women (Table 89). In 2005, the percentage of mothers with early prenatal care was lowest among American Indian or Alaska Native mothers and was highest among non-Hispanic white mothers (Table 7).

## Special Feature: Young Adults Age 18–29 Years

The period starting with age 18 and spanning the 20s is often considered the transition to adulthood, when young people obtain legal and emotional independence, invest in education, begin working to obtain financial independence, and choose to marry or to have children (14,15). This transition is also the period when financial and other support services previously provided by parents, social and government programs, and school health and education programs are decreased or terminated, often abruptly. Young adults may lose their insurance eligibility under their parents' plan or their qualification for the State Children's Health Insurance Program (SCHIP). As parental and other adult oversight decreases, young people assume increasing responsibility for decisions that will directly affect their current and future health status—e.g., alcohol, cigarette, and illicit drug use or nonuse; sexual activity; childbearing; exercise; eating habits—as well

as decisions that will indirectly affect their future health such as investment in education, employment, or other activities that help determine future income and lifestyle as well as affect the well-being of their families.

Young adults today have more choices (or more perceived choices) about the course to pursue after age 17 than in past generations. They increasingly complete high school and go to college or other post-high-school educational programs. Young adults are also likely to work for pay (Figures 27 and 28). Marriage rates are decreasing and age at first marriage is increasing (16). Birth rates for unmarried black women ages 18–19 and 20–24 years of age have decreased over the past decade and a half, while rates have increased among unmarried non-Hispanic white women age 25–29 over the same time frame (Figure 30). Educational enrollment and attainment of young adults is higher than in past years (Figure 28), which should in theory increase their income. However, disparities in income by race, gender, and ethnicity remain (data table for Figure 29).

Even with public and school education campaigns emphasizing the consequences of smoking and alcohol abuse, trends in cigarette smoking and alcohol consumption among young adults 18–29 years of age have changed little over the past decade. More than one-quarter of young adult men and one-fifth of young women were current smokers (2006 data), and nearly one-quarter of young men and 9% of young women 18–29 years of age reported 5 or more drinks in a day on at least 12 days in the past year (Figure 31). More than one-fifth of 18–20 year olds, and 14% of 26–29 year olds, reported using illicit drugs in the past month; and 19% of 18–20 year olds reported using marijuana or hashish in the past month (Figure 32). Obesity rates of young adults have tripled between 1971–1974 and 2005–2006 (Figure 7); in 2005–2006 about one-quarter of young adults were obese. Participation in regular leisure-time exercise among young adults, although higher than among older adults, is below recommended levels (Figure 8), and has been stable since 1999–2000.

Young adults are sometimes called the “young invincibles,” but they are not immune to death, illness, or injury. In 2005, there were more than 47,000 deaths among young adults 18–29 years of age with three-quarters of them occurring among young men (data table for Figure 37). Unintentional injuries are by far the leading cause of death in this age group, with other leading causes including homicide, suicide, cancer, and heart disease (Figure 37). Young adults also have

among the highest rate of emergency department visits for all adult age groups (17,18) and the highest rate of injury-related emergency department visits (see related Table 93 and Figure 41). Regardless of the extent of physical injuries, suicidal behavior and interpersonal violence, including physical and sexual violence perpetrated by intimate partners, acquaintances, or strangers, can have substantial immediate and long-term emotional, social, and financial consequences for victims and their families (19).

Young adults are also not immune to chronic health problems. Fifteen percent of young adults in 2004–2006 reported ever being diagnosed with one of the following chronic health conditions: arthritis (3.9%), current asthma (7.2%), diabetes (1.1%), cancer (1.1%), heart disease (0.4%), and hypertension (3.3%) (data table for Figure 35). In 1999–2004, almost 9% of young adults 20–29 years of age had major depression, generalized anxiety disorder, or panic disorder in the past 12 months. (Figure 36).

In addition to the need for medical care for chronic and acute conditions, young adults have a need for preventive care such as routine dental check-ups and cleanings and periodic eye examinations, and may require other preventive services or screening tests based on their health status (20–23).

Young adult women often need health services for reproductive-associated reasons and contraception.

However, young adults, and young men in particular, are more likely to lack health insurance than any other age group (Table 140). In 2006, 15% of young adults reported that they did not receive needed dental care in the past year due to cost and about 9%–10% did not receive needed medical care and prescription medicines (data table for Figure 39).

Young adulthood is a critical period in forming adult patterns relating to health habits and behaviors that can have major effects later in life. Targeting this age group with health information is vital. But as young adults undergo transitions and strive to achieve financial and emotional independence during this critical period, reaching out to them to provide education about both the short- and long-term consequences of the health-related decisions they are making can be challenging because young adults are diverse and unpredictable with respect to geographic location, school enrollment, and workforce patterns. In addition, young adults use a wide variety of new technologies for receiving health information and communicating with each other.

To improve the health of all Americans, it is critical to keep collecting data about all components of health, documenting trends in access to and utilization of health care services, and disseminating reliable and accurate information about the health of our population. Equally important is gaining an understanding of the health care needs and utilization patterns of population subgroups, such as young adults. Such insight will enable policymakers to monitor future trends, target resources most effectively, and set program priorities. The following highlights from *Health, United States, 2008* summarize the latest findings gathered from the public and private health care sectors to help the Department of Health and Human Services, the President, and the Congress in carrying out their mission of monitoring and improving the health of the Nation.

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## Highlights

*Health, United States, 2008, is the 32nd report on the health status of the Nation. The report contains a chartbook and 151 trend tables presenting current and historic information on the health of the U.S. population. The trend tables are organized around four major subject areas: health status and determinants, health care utilization, health care resources, and health care expenditures and payors. The 2008 chartbook focuses on selected determinants and measures of health and includes a special feature on young adults 18–29 years of age.*

## Life Expectancy and Mortality

*As overall death rates have declined, racial and ethnic disparities in mortality have persisted, but the gap in life expectancy between the black and white populations has narrowed. Life expectancy at birth in the United States lags behind that in most other industrialized countries. Life expectancy and infant mortality are often used to gauge the overall health of a population. Life expectancy shows a long-term upward trend and infant mortality shows a long-term downward trend.*

In 2006, **life expectancy at birth** for the total population reached a record high of 78.1 years, up from 75.4 years in 1990 (preliminary data and [Table 26](#)).

Between 1990 and 2006, **life expectancy at birth** increased 3.6 years for **males** and 1.9 years for **females**. The gap in life expectancy between males and females narrowed from 7.0 years in 1990 to 5.3 years in 2006 (preliminary data and [Table 26](#)).

Between 1990 and 2006, **life expectancy at birth** increased more for the **black** than for the **white population**, thereby narrowing the gap in life expectancy between these two racial groups. In 1990, life expectancy at birth for the white population was 7.0 years longer than for the black population. By 2006, the difference had narrowed to 4.9 years (preliminary data, [Figure 14](#), and [Table 26](#)).

Among the **37 countries and territories** that submitted data to the Organisation for Economic Co-operation and Development (OECD) in 2004, Hong Kong had the highest **life expectancy** at birth for men (79.0 years) and Japan for females (85.6 years). The Russian Federation had the lowest life expectancy at birth for both males (59.1 years) and

females (72.4 years). In 2004, the U.S. ranked 23rd in life expectancy at birth for males and 25th for females ([Table 25](#)).

Overall mortality was 28% higher for **black Americans** than for white Americans in 2006 compared with 37% higher in 1990 (preliminary data). In 2005, age-adjusted death rates for the black population exceeded those for the white population by 46% for **stroke** (cerebrovascular disease), 31% for **heart disease**, 22% for **cancer** (malignant neoplasms), 108% for **diabetes**, and 782% for **HIV disease** ([Table 28](#)).

In 2006, the **infant mortality** rate was 6.71 infant deaths per 1,000 live births, 27% lower than in 1990 (preliminary data and [Figure 15](#)).

Large disparities in **infant mortality** rates among **racial and ethnic groups** continue to exist. In 2005, infant mortality rates were highest for infants of non-Hispanic black mothers (13.6 deaths per 1,000 live births), American Indian mothers (8.1 per 1,000) and Puerto Rican mothers (8.3 per 1,000); and lowest for infants of Cuban (4.4 per 1,000), Central and South American (4.7 per 1,000 live births) and Asian or Pacific Islander mothers (4.9 per 1,000) ([Table 18](#)).

The **leading cause of death** differs by age group. In 2006, the leading cause of death was congenital malformations for infants, unintentional injuries for people age 1–44 years, cancer for adults age 45–64 years, and heart disease for adults age 65 years and over (preliminary data and [Table 31](#)).

Age-adjusted mortality from **heart disease**, the leading cause of death overall, declined 38% between 1990 and 2006, continuing a long-term downward trend (preliminary data, [Figure 16](#), and [Table 35](#)).

Age-adjusted mortality from **cancer** (malignant neoplasms), the second leading cause of death overall, decreased 16% between 1990 and 2006 (preliminary data, [Figure 16](#), and [Table 37](#)).

The age-adjusted death rate for **motor vehicle-related injuries** has remained stable since the early 1990s following a period of decline. Death rates for motor vehicle-related injuries are higher at age 15–24 years and 75 years and over than at other ages ([Table 43](#)).

The age-adjusted death rate for **HIV disease** has declined slowly since 1999, after a sharp decrease during the late 1990s. The death rate for HIV disease is higher at age 35–54 years than at other ages ([Table 41](#)).

The **homicide rate for black males 15–24 years of age** decreased sharply from the early to the late 1990s and has remained relatively stable since then. Homicide continues to be the leading cause of death for young black males 15–34 years of age (Table 44).

The **suicide rate for non-Hispanic white men 65 years of age and over** is higher than in other groups. In 2005, the suicide rate for older non-Hispanic white men was about 2 to 3 times the rate for older men in other race or ethnicity groups and nearly 8 times the rate for older non-Hispanic white women (Table 45).

## Health Behaviors and Risk Factors

*Health behaviors affect health status. Pregnant teenagers are less likely to receive early prenatal care and more likely to drop out of school and to live in poverty than are older pregnant women. Heavy and chronic use of alcohol and use of illicit drugs increase the risk of disease and injuries. Cigarette smoking increases the risk of lung cancer, heart disease, emphysema, and other diseases. Obesity increases the risk of heart disease, diabetes, and stroke. Regular physical activity reduces the risk of disease and enhances mental and physical functioning.*

Between 2005 and 2006, the **birth rate for teenagers 15–19 years of age** rose 3%, from 40.5 to 41.9 live births per 1,000 females age 15–19 years (preliminary data). This follows a 14-year downward trend in which the teen birth rate fell by 34% from its recent peak of 61.8 births per 1,000 in 1991 (Table 4).

In 2006 (preliminary data), the **birth rate for unmarried women** reached a record high of 50.6 births per 1,000 unmarried women age 15–44 years, up 7% from 2005. In 2006, 38.5% of all births were to unmarried women. The increases in 2006 in the rate and proportion of births to unmarried women were the largest single-year increases reported in these measures since 1988–1989 (Table 10).

**Low birthweight** is associated with elevated risk of death and disability in infants. In 2006 (preliminary data), the low birthweight rate (less than 2,500 grams, or 5.5 pounds, at birth) increased slightly to 8.3% from 8.2% in 2005. The 2006 rate is 19% higher than that for 1990 (7%) (Table 12).

Between 1988–1994 and 2005–2006, the prevalence of **overweight among preschool-age children 2–5 years of**

age increased by more than 50%, from about 7% to 11% (Table 70).

The prevalence of **overweight among school-age children** increased between 1988–1994 and 2005–2006. Among children 6–11 years of age, the prevalence of overweight increased from 11% to 15% and among adolescents 12–19 years of age grew from 11% to 18% (Tables 70 and 76).

Between 1991 and 2007, the percentage of **high school students** who reported attempting suicide (7%–9%) and whose **suicide attempts** required medical attention (2%–3%) remained fairly constant. Girls were more likely than boys to consider or attempt suicide. However, in 2005 adolescent boys (15–19 years of age) were four times as likely to die from suicide as were adolescent girls, in part reflecting their choice of more lethal methods, such as firearms (Tables 45 and 62).

In 2006, 6% of people age 12 years and over reported marijuana use in the past month, and 3% reported nonmedical use of prescription drugs. Use of **illicit drugs** was highest among young adults age 18–25 years (Table 66 and Figure 32).

In 2006, 20% of adults age 18 years and over reported **drinking five or more drinks on at least one day in the past year** and 9% reported **five or more drinks on at least 12 days in the past year**. (Table 69).

Between 2003 and 2007, the percentage of **high school students who reported smoking cigarettes** in the past month remained stable at 20%–23%, after declining from 36% in 1997 (Figure 6).

In 2006, 21% of U.S. **adults** were current **cigarette smokers**, the same percentage as in the previous two years, suggesting that the decline in cigarette smoking prevalence is stalling. Men were more likely to be current cigarette smokers than women (24% compared with 18%) (Figure 6 and Table 63).

American adults have made no substantial progress toward achieving recommended levels of physical activity or strength training. Between 1995–1996 and 2005–2006, the percentage of **adults 18 years of age and over engaged in regular leisure-time physical activity or strength training activities** remained level (Figure 8 and Table 74).

Among **adults 20–74 years of age**, **obesity** rates have more than doubled since 1960–1962. From 1960–1962 to 2003–2006, the percentage of adults who were obese has increased from 13% to 34% (age-adjusted) (Table 75).



## Health Status and Health Conditions

*Measures of health status presented in this report include respondent-assessed health status, limitation in activity caused by chronic conditions, and serious psychological distress. Measures of morbidity include the incidence and prevalence of selected specific diseases and conditions.*

In 2006, the percentage of noninstitutionalized **adults** reporting their **health as fair or poor** ranged from 6% of those age 18–44 years to 28% of those age 75 years and over. The proportion with fair or poor health was higher among non-Hispanic black and Hispanic persons compared with non-Hispanic white persons (Table 60).

In 2005–2006, 3% of the noninstitutionalized population 18 years of age and over reported having **serious psychological distress**. Adults living below the poverty level were more than four times as likely to report serious psychological distress as adults in families with an income at least twice the poverty level (8% compared with 2%, age-adjusted) (Table 61).

In 2006, 6% of noninstitutionalized adults 65 years of age and over reported a **limitation in activities of daily living (ADLs)** and 11% reported a **limitation in instrumental activities of daily living (IADLs)**. Among older adults, those living in poverty were more than twice as likely to report an ADL or IADL limitation as those with a family income above twice the poverty level (age-adjusted estimates) (Table 58).

In 2006, 22% of adults 75 years of age and over had **trouble seeing even with glasses or contacts** and 16% had **a lot of trouble hearing or were deaf** (Table 59).

In 2006, **activity limitation** caused by chronic health conditions was reported for 7% of **children** under the age of 18 years. Among school-age children (5–17 years of age), speech problems, learning disabilities, and attention-deficit/hyperactivity disorder (ADHD or ADD) were the most frequently reported causes of activity limitation (Figure 11 and Table 58).

Between 1996–1998 and 2004–2006, physician office and hospital outpatient department visits for **attention-deficit/hyperactivity disorder** among children 4–17 years almost doubled. Among boys, visits increased from 8 to 14 visits per 100 children. The visit rate among boys was three times the visit rate among girls in 2004–2006 (Figure 21).

Arthritis and other musculoskeletal conditions were the **leading causes of activity limitation** among working-age **adults 18–64 years** of age in 2005–2006. Mental illness was the second most frequently mentioned condition causing activity limitation among adults 18–44 years of age and the third most frequently mentioned among adults 45–54 years of age (Figure 12).

The prevalence of **hypertension**, defined as elevated blood pressure or taking antihypertensive medication, increases with age. In 2003–2006, 36% of men and women age 45–54 years had hypertension, compared with 65% of men and 80% of women age 75 years and over (Table 71).

Between 1988–1994 and 2003–2006, the percentage of both men and women 55 years and over with a **high total serum cholesterol level** (greater than or equal to 240 mg/dL) declined. However, older women were more likely to have high serum cholesterol than older men. In 2003–2006, 24% of women age 65–74 years had high serum cholesterol, compared with 11% of men of the same age (Table 72).

In 2003–2006, the prevalence of **diabetes** (including both diagnosed and undiagnosed) among adults increased by more than 23% from 1988–1994 (8%) to 2003–2006 (10%). The prevalence increased by slightly more than one-quarter among men to 11% and almost one-fifth among women to 9% (percents are age-adjusted) (Table 54).

Between 1980 and 2005 the **incidence of end-stage renal disease** increased 4.6 fold to 350 new cases per million people. In 2005, nearly 480 thousand Americans were living with end-stage renal disease (Table 55).

In 2004–2006, **current asthma prevalence** was 9% among women compared with 5% among men. Eleven percent of adults living below poverty had asthma compared with 6% of those with a family income of 200% or more of the poverty level (Figure 10).

From 1990 to 2005, the annual percent change in **new cases of lung and bronchus cancer** declined 2% among males and remained unchanged among females. Cancer of the lung and bronchus is the second most common site of newly diagnosed cancer among males and females (age-adjusted rates; Table 52).

Between 1988–1994 and 2001–2004, approximately one-quarter of **adults 20–64 years** of age had **untreated dental caries**, down from nearly one-half in 1971–1974 (Table 77).



In 2006, approximately 2.1 million **workplace injuries and illnesses** in the private sector involved days away from work, job transfer, or restricted duties at work for a rate of 2.3 cases per 100 full-time workers (FTW). The transportation and warehousing industry reported the highest injury and illness rate, with 4.3 cases per 100 FTW. The next highest rates were reported by the manufacturing industry (3.3 per 100 FTW), and the construction industry and the agriculture, forestry, fishing, and hunting industry (3.2 per 100 FTW) ([Table 49](#)).

In 2006, there were nearly thirty-seven thousand **new AIDS cases** reported. Males 13 years of age and older accounted for 73% of all new cases. Black males made up 31% of all cases and black females accounted for 17% of all cases ([Table 51](#)).

**Incidence rates** for some **infectious diseases** have increased since 1990. From 1990 to 2006, the incidence rate for chlamydia increased from 160 to 348 cases per 100,000 population and the incidence rate for pertussis increased from 1.8 to 5.3 cases per 100,000 population. During this time period, the incidence for most vaccine-preventable diseases (e.g. measles) as well as other diseases (e.g. gonorrhea and syphilis) declined ([Table 50](#)).

In 2006, incident cases of acute viral **hepatitis A and B** were at historically low levels ([Figure 9](#)). Hepatitis A incidence rates declined from 12.0 cases per 100,000 population in 1995, when hepatitis A vaccine became available, to 1.2 cases per 100,000 population in 2006. Incident cases of acute **hepatitis B** declined from 9.6 per 100,000 population in 1982, the year hepatitis B vaccine was approved, to 1.6 cases per 100,000 in 2006. Incidence of acute **hepatitis C** declined from 2.4 to 0.3 cases per 100,000 population from 1992 to 2006 ([Figure 9](#)).

## Health Care Expenditures and Payors

*The United States spends more on health per capita than any other country, and U.S. health spending continues to increase. Spending increases are due to increased intensity and cost of services, and a higher volume of services needed to treat an aging population. Major payors for health care include private health insurers and public programs such as Medicaid and Medicare. Medicaid is jointly funded by the federal and state governments to provide health care for certain groups of low-income persons. Medicare is funded by the federal government and covers the health care of most persons 65 years of age and over and disabled persons.*

The United States spends a larger **share of its gross domestic product (GDP) on health** than does any other major industrialized country. In 2005, the United States devoted 15% of its GDP to health compared with 12% in Switzerland, the country with the next highest share ([Table 123](#)).

In 2006, **national health care expenditures** in the United States totaled \$2.1 trillion, a 6.7% increase from 2005. The average per capita expenditure on health in the United States was \$7,026 in 2006 ([Table 124](#)).

**Prescription drug expenditures** increased 9% between 2005 and 2006 compared with a 6% increase between 2004 and 2005 ([Table 127](#)).

**Expenditures for hospital care** accounted for 31% of all national health expenditures in 2006. Physician and clinical services accounted for 21% of the total in 2006, prescription drugs for 10%, and nursing home care for 6% ([Table 127](#)).

In 2006, 35% of **personal health care expenditures** were paid by the federal government and 10% by state and local government; private health insurance paid 36% and consumers paid 15% out-of-pocket ([Figure 19](#) and [Table 128](#)).

In 2007, the **Medicare** program had about 44 million **enrollees and expenditures** of \$432 billion, up from \$408 billion the previous year. Expenditures for the new Medicare drug program (Part D), introduced in 2006, were \$50 billion in 2007 (preliminary data) ([Table 142](#)).

Of the 36 million **Medicare enrollees in the fee-for-service program** in 2006, 12% were 85 years of age and over and 17% were under 65 years of age ([Table 143](#)).

In 2005, children under 21 years of age accounted for 47% of **Medicaid recipients** but only 17% of expenditures. Aged, and blind and disabled persons accounted for 22% of recipients and 66% of expenditures (Table 145).

In 2004, **per capita personal health care expenditures** varied widely by state of residence. The states with the highest spending per resident were concentrated in the New England and Mideast regions and the states with the lowest spending were concentrated in the Southwest, Rocky Mountains, and Far West regions of the country (Figure 20 and Table 148).

## Health Care System Influences, Personnel, and Resources

*Major changes continue to occur in the delivery of health care in the United States, driven in part by changes in payment policies intended to rein in rising costs and by advances in technology that have allowed more complex treatments to be performed on an outpatient basis. The ratio of physicians per population continues to increase slowly, but the supply is not equally distributed across the country. The supply of other practitioners, including pharmacists and nurses, may not be increasing as rapidly as needed to keep pace with our aging population.*

Between 1999 and 2006, the **number** of massage therapists, dental hygienists and assistants, diagnostic medical sonographers, medical equipment preparers, medical assistants, and pharmacy technicians increased by 5%–10% annually. During this period, the **hourly wages** of radiation therapists, nuclear medicine technologists, pharmacists, and physician assistants increased more than wages in other health occupations (Table 112).

In 2006, 63% of **surgeries** in community hospitals were performed on an **outpatient** basis compared with 51% in 1990 and 16% in 1980 (Table 106).

Between 1990 and 2006, the number of **community hospital beds** declined 13%, from about 927 to 803 thousand. Since 1990, the community hospital occupancy rate has remained steady at 63%–67% (Table 116).

Between 1990 and 2004, the overall rate of **inpatient mental health beds** per 100,000 civilian population in the United States declined by 45%. In state and county mental hospitals, the number of mental health beds per 100,000 population

declined by 53%, in private psychiatric hospitals the decline was 48%, and in nonfederal general hospital psychiatric services the decline was 34% (Table 117).

In 2007, there were about 1.7 million **nursing home beds** in about 16,000 certified nursing homes. Between 1995 and 2007, nursing home bed occupancy was relatively stable at 83%–85%. **Occupancy rates** were 90% or higher in 17 states and the District of Columbia in 2007 (Table 120).

## Utilization of Health Care Services

*Factors associated with the utilization of health care services include health behaviors, health status, health insurance coverage, health care resources, family income and other demographic variables. Use of inpatient hospital care remained relatively stable over the past decade, use of physician services and hospital outpatient care increased slowly, and use of prescription drugs increased more rapidly.*

In 2006, there were about 1.1 billion **visits to physicians' offices, hospital outpatient departments, and hospital emergency departments**. There were 902 million to physicians' offices, 102 million visits to hospital outpatient departments, and 119 million visits to hospital emergency departments (Table 94).

Between 1995 and 2006 the **rate of visits to office-based physicians** increased from 266 to 307 per 100 persons. During the same period, the **hospital outpatient department visit rate** increased from 26 to 35 visits per 100 persons. Since 2000, the **hospital emergency department visit rate** has remained stable at about 40 visits per 100 population after a slight increase from 37 visits per 100 population in 1995 (Table 94).

In 2006, 43% of doctor visits were to **specialty care physicians**, up from 34% in 1980. During this period, the proportion of office-based doctor visits to **general and family practice physicians** decreased from 34% to 23% (Table 95).

In 2005–2006, 6% of children under 6 years of age and 14% of children 6–17 years of age **did not have a health care visit to a doctor's office or a clinic** in the past year (Table 82).

In 2006, 21% of children under age 18 years had at least one **emergency department visit** in the past year and 8% had two or more visits. Emergency department utilization was higher among children under 6 years of age than for older

children (28% compared with 18% of older children) (Table 91).

In 2006, 20% of adults 18 years of age and over had at least one **emergency department visit** in the past year and 7% had two or more visits. Emergency department utilization was higher among persons with family income below 200% of poverty than for higher income persons (24%–28% compared with 18%) (Table 92).

In 2006, **visit rates to physician offices and hospital outpatient departments** among persons 18–44 years of age were more than twice as high for **women** as for **men**, largely due to medical care associated with female reproduction (Table 94).

Between 1997 and 2006, about two-thirds of persons 2 years of age and over **had seen a dentist in the past year**. Dental visit rates were higher among children 2–17 years of age than among adults, with three-quarters of children having had a recent dental visit in 2006 (Table 96).

In 2003–2004, 61% of persons 2 years of age and over reported having a dental visit for **teeth cleaning by a dentist or dental hygienist** in the past year. Females were more likely than males to have had their teeth cleaned by a dental professional (65% compared with 57%). Children 2–17 years of age were more likely than adults 18 years and older to have had their teeth cleaned by a dental professional in the past year (Figure 23).

Between 1995 and 2006, nonfederal short-stay **hospital discharge rates** remained stable after declining sharply during the 1980s. During this period, average length of stay declined by about one-half a day to 4.8 days in 2006 (Table 102).

Between 1979–1980 and 2005–2006, rates of **hospitalizations with any-listed pneumonia diagnosis** nearly doubled among persons 65 years and over (Figure 25).

In 2005, the **cesarean** rate increased to 30.3 per 100 live births. The rate of cesarean delivery (c-section) has increased steadily since 1996; and in 2005, the rate reached the highest level ever recorded in the United States. Cesarean delivery rates increase with increasing maternal age (Figure 26).

The percentage of the population with at least one **prescription drug** during the previous month increased from 39% in 1988–1994 to 47% in 2001–2004. During the same

period, the percentage taking three or more prescription drugs increased from 12% to 20% (Table 98).

In 2001–2004, the percentage of **adults** who reported using **prescription drugs** in the prior month increased from 38% of those 18–44 years of age to 66% at 45–64 years of age and 87% at 65 years of age and over. In each age group women were more likely than men to use prescription drugs (Table 98).

In 2001–2004, 53% of **adults** 20 years of age and over reporting taking a **dietary supplement** in the past month. The use of dietary supplements is higher among women (59%) than men (47%) and reported use increases with age (percents are age-adjusted) (Table 99).

In 1973–1974, the **nursing home resident** rate for the white population 65 years of age and over was more than twice that for the black population (61 compared with 28 per 1,000 population; age-adjusted). By 2004, the resident rate for the black population (50) exceeded that for the white population (34) (Table 107).

In 2006, 77% of children 19–35 months of age received the **combined vaccination** series of four doses of DTaP (diphtheria-tetanus-acellular pertussis) vaccine, three doses of polio vaccine, one dose of measles containing vaccine, three doses of Hib (Haemophilus influenzae type b) vaccine, three doses of hepatitis B vaccine, and one dose of varicella vaccine. Children living below the poverty threshold were less likely than were children living at or above poverty to have received the combined vaccination series (73% compared with 78%) (Table 85).

Between 1987 and 2005, the percentage of women 18–44 years of age who had a **Pap smear in the past 3 years** remained level at 83%–87%. In 2005, Pap smear use was higher among insured women 18–64 years of age than uninsured women (86% compared with 68%) (Table 90).

The percentage of mothers receiving **prenatal care** in the first trimester of pregnancy remained unchanged from 2004 to 2005 at 84% for the 37 states, DC, and New York City for which comparable trend data were available. In 2005, the percentage of mothers with early prenatal care varied substantially by **race and ethnicity**, from 70% for American Indian or Alaska Native mothers to 89% for non-Hispanic white mothers (Table 7).

Between 1989 and 2006, the percentage of noninstitutionalized adults 65 years of age and over who received an **influenza vaccination** in the past year more than doubled (30% to 64%). In 2006, 60% of those 65–74 years of age and 69% of those 75 years of age and over had an influenza vaccination in the past year (Table 87).

Between 1989 and 2006, the percentage of noninstitutionalized adults 65 years of age and over who ever received a **pneumococcal vaccination** quadrupled (14% to 57%). In 2006, 52% of those 65–74 years of age and 63% of those 75 years of age and over ever had a pneumococcal vaccination (Figure 24 and Table 88).

The percentage of adults 18–64 years of age who reported **not getting needed medical care** due to the cost increased from 6% to 8% between 1997 and 2006. Similarly, the percentage **not getting needed prescription drugs** increased from 6% to 9%. Ten percent of adults 18–64 years reported **delaying medical care** due to cost in 1997 and 2006 (Table 80).

In 2006, 19% of people under age 65 years of age who were uninsured for all or part of the preceding year **did not receive needed medical care** in the past 12 months **due to the cost**, compared with 3% of people covered by health insurance for the full year. Twenty-three percent of people under age 65 years who were **uninsured** for the entire preceding year did not receive needed medical care (Table 80).

On January 1, 2006, Medicare Part D, which provides coverage for prescription medications for Medicare beneficiaries, went into effect. The percentage of **adults 65 years and over** with income below the poverty level who **did not get the prescription drugs** they needed due to cost declined from 12% in 2005 to 8% in 2006 (Table 80).

## Lack of Health Insurance

*Lack of health insurance coverage is a major barrier to obtaining most health care services. Out-of-pocket health care expenses may deter people from seeking health care services. People without health insurance are likely to face the highest costs, but the insured may also face substantial copayments, deductibles, and other out-of-pocket health care expenses.*

In 2006, the percentage of the **population under 65 years of age with no health insurance coverage** (public or private) **at a point in time** was 17%. Between 1995 and 2006, this percentage fluctuated between 16% and 18% (Figure 17 and Table 140).

Among the under 65 population, those with a family income less than 200% of the poverty level were more than twice as likely to be **uninsured at a point in time** than persons in higher income families (Table 140).

In 2006, 10% of **children** under 18 years of age were **uninsured at a point in time**. Between 2000 and 2006, among children in families with income just above the poverty level (100%–150% of poverty), the percentage uninsured dropped from 25% to 17%, while the percentage with Medicaid or State Children's Health Insurance Program (SCHIP) coverage increased from 35% to 52% (Tables 139 and 140).

In 2006, among persons under 65 years of age, more than one-third of **Hispanic persons and American Indians and Alaska Natives persons** were **uninsured at a point in time** compared with less than one-fifth of those in other racial and ethnic groups (Table 140).

Many people under 65 years of age, particularly those with a low family income, do not have health insurance coverage consistently throughout the year. In 2006, one-fifth of people under 65 years of age **were uninsured for at least part of the 12 months prior to interview** (Figure 18).

In 2006, two-fifths of people of **Mexican origin** were **uninsured for at least part of the 12 months prior to interview** compared with one-sixth of non-Hispanic white people (Figure 18).



## Special Feature: Young Adults Age 18–29 Years

*Young adults 18–29 years of age are facing a time of transition in their lives with many educational, occupational, and personal life style choices to be made that can have repercussions on their health both in the short and long term. Although most are healthy, they have the same need for many preventive services as other age groups, and may have injuries or conditions that require medical care. Many in this age group also have low income and lack health insurance coverage.*

Between 1980 and 2005, the percentage of adults 18–24 years of age enrolled in school rose from 46% to 68% among 18–19 year olds, from 31% to 49% among 20–21 year olds, and from 16% to 27% among 22–24 years olds (Figure 28).

Among **young adults** 18–29 years of age, **obesity** rates have tripled since 1971–1974. In 1971–1974, 8% of young adults were obese; in 2005–2006, the percentage of young adults who were obese had grown to 24% (Figure 7).

In 2005–2006, 39% of young men 18–29 years of age and 32% of young women engaged in **regular leisure-time physical activity**. One-third of young men and nearly one-fifth of young women reported **strength training activities** at least twice a week (Figure 8).

In 2006, young men were more likely to smoke **cigarettes** than young women (29% compared with 21%). Between 1997 and 2006, the percentage of women 18–29 years of age who currently smoked cigarettes declined nearly 20% but current smoking did not decline significantly among young men (Figure 31).

In 2006, about one-quarter of young men 18–29 years of age reported **drinking 5 or more drinks in a day on at least 12 days in the past year**, compared with 9% of young women (Figure 31).

In 2006, almost 40% of young people age 18–20, about one-third of 21–25 year olds, and one-quarter of 26–29 year olds reported **using an illicit drug in the past year**. Marijuana or hashish were the most commonly reported drugs (32% of 18–20 year olds), followed by nonmedical use of prescription drugs (reported by 17% of 18–20 year olds) (Figure 32).

In 2002, 21% of women 18–44 years of age reported having been **forced to have sexual intercourse** when they were under 30 years of age. Types of force reported included being physically held down, physically hurt or physically threatened, or being forced nonphysically by being given alcohol or drugs or pressured by words or actions (Figure 34).

In 2003–2004, 45% of women 20–24 years of age and 27% of women 25–29 years of age were positive for **human papillomavirus (HPV)**. Women 20–29 years of age with family income below 100% of the poverty level had a higher prevalence of HPV (46%) than women with higher family income (31%) (Figure 33).

In 2004–2006, 18% of young women and 12% of young men reported being told by a physician that they had at least one of six specified **health conditions** and 4%–5% of young women and men reported overall **fair or poor health**, or an **activity limitation** due to a chronic health condition (Figure 35).

In 1999–2004, almost 9% of young adults 20–29 years of age had **major depression, generalized anxiety disorder, or panic disorder in the past 12 months**. Almost 7% of young adults had a diagnosis of major depression in the past year. Young women (11%) were almost twice as likely as young men (6%) to have major depression, generalized anxiety disorder, or a panic disorder in the past 12 months (Figure 36).

In 2005, unintentional injuries (“accidents”), homicide, and suicide accounted for 70% of **deaths among young adults** 18–29 years of age. Three-quarters of the 47 thousand deaths in this age group occurred among young men (Figure 37).

Young adults have the highest rate of injury-related emergency department visits of all age groups (Table 93). The three most common mechanisms of injury for **young adults** age 18–29 years with **injury-related emergency department (ED) visits** in 2005–2006 were motor vehicle traffic accidents (252 ED visits per 10,000 population), being struck by or against objects or persons (215 ED visits per 10,000 population), and falls (209 ED visits per 10,000 population) (Figure 41).

In 2006, 84% of young women reported a **doctor visit** in the past 12 months, compared with 57% of young men. Young women were almost four times as likely to report a **hospital stay** in the past year (11%) as young men (3%) and twice as

likely to report taking a **prescription drug** in the past month (39% compared with 19% in 1999–2004) (Figure 40).

In 2003–2004, 51% of young adults 18–29 years of age reported having their **teeth cleaned by a dental professional** in the past year, similar to adults 30–64 years of age. Young adults were less likely to have a dental visit for teeth cleaning than those 2–17 years of age (79%) or older adults 65–74 years of age and 75 years and over (63%–65%) (Figure 23).

In 2006, both **young men and women** age 18–29 years were equally likely to be covered by **private health insurance**. Young women were more likely to be covered by **Medicaid** than young men, and young men were more likely to be **uninsured** than young women (34% compared with 25%) (Figure 38).

In 2006, **young adults age 20–24** years were more likely to be **uninsured at a point in time** (34%) than those age 18–19 and 25–29 years (21% and 29%), and more than twice as likely to be uninsured as those 45–64 years of age (13%) (Figure 38 and Table 140).

In 2004–2006, 17% of **young adults** 18–29 years of age reported that they needed and **did not receive one or more of the following services in the past year because they could not afford them**: medical care, prescription medicines, mental health care, or eyeglasses (Figure 39).

In 2004–2006, 15% of **young adults** 18–29 years of age reported that they needed and **did not receive dental care in the past year because they could not afford it** (Figure 39).





# Population

## Age

*The population age 65 and over is increasing at a faster rate than the total population.*

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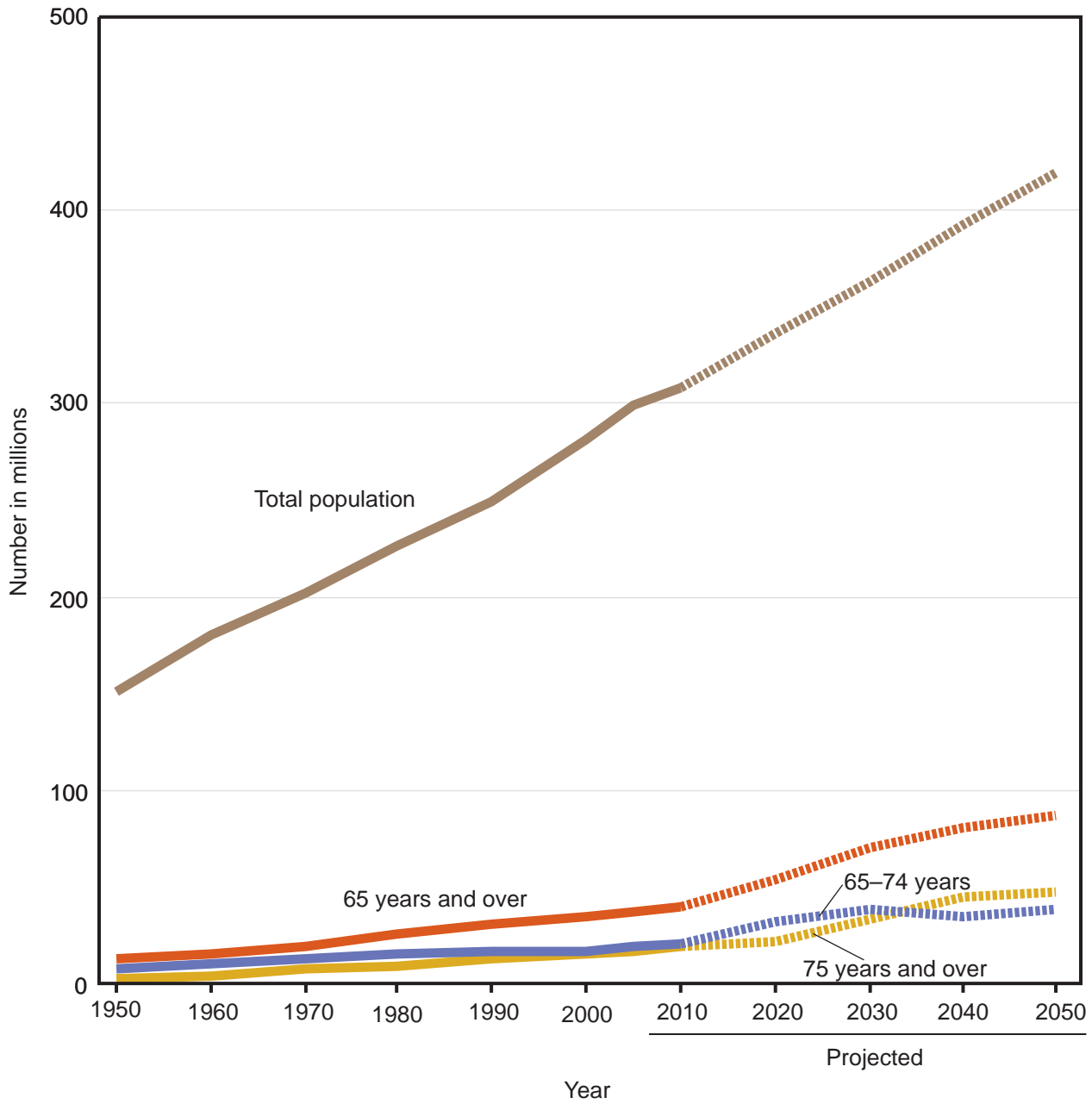
From 1950 to 2006, the total resident population of the United States increased from 151 to 299 million persons, representing an average annual growth rate of 1.2% (Figure 1). During the same period, the population 65–74 years of age grew, on average, 1.5% per year, increasing from 8 to 19 million persons. The population 75 years of age and over grew the fastest (on average, 2.8% per year), increasing from 4 to 18 million persons.

By 2029, all of the baby boomers (those born in the post World War II period 1946–1964) will be age 65 years and over (1). As a result, the population age 65–74 years will increase from 6% to 10% of the total population between 2006 and 2030 (data table for Figure 1). As the baby boomers age, the population 75 years of age and over will rise from 6% in 2006 to 9% of the population by 2030 and continue to grow to 12% in 2050. By 2040, the population age 75 years and over will exceed the population 65–74 years of age.

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**Figure 1. Total population and older population: United States, 1950–2050**



NOTE: See [data table for Figure 1](#) for data points graphed and notes.

SOURCE: U.S. Census Bureau.

## Race and Ethnicity

*The percentage of Americans who identify themselves as Hispanic or Asian continues to increase.*

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Changes in the racial and ethnic composition of the population have important consequences for the United States' health because many measures of disease and disability differ significantly by race and ethnicity. One of the overarching goals of U.S. public health policy is elimination of racial and ethnic disparities in health.

Diversity has long been a characteristic of the U.S. population, but the racial and ethnic composition of the United States has changed over time. In 2007, about 30% of adults and over 40% of children were members of racial or ethnic minority populations ([data table for Figure 2](#)). The percentage of the population that is of Hispanic origin or Asian has more than doubled in recent decades ([data table for Figure 2](#)).

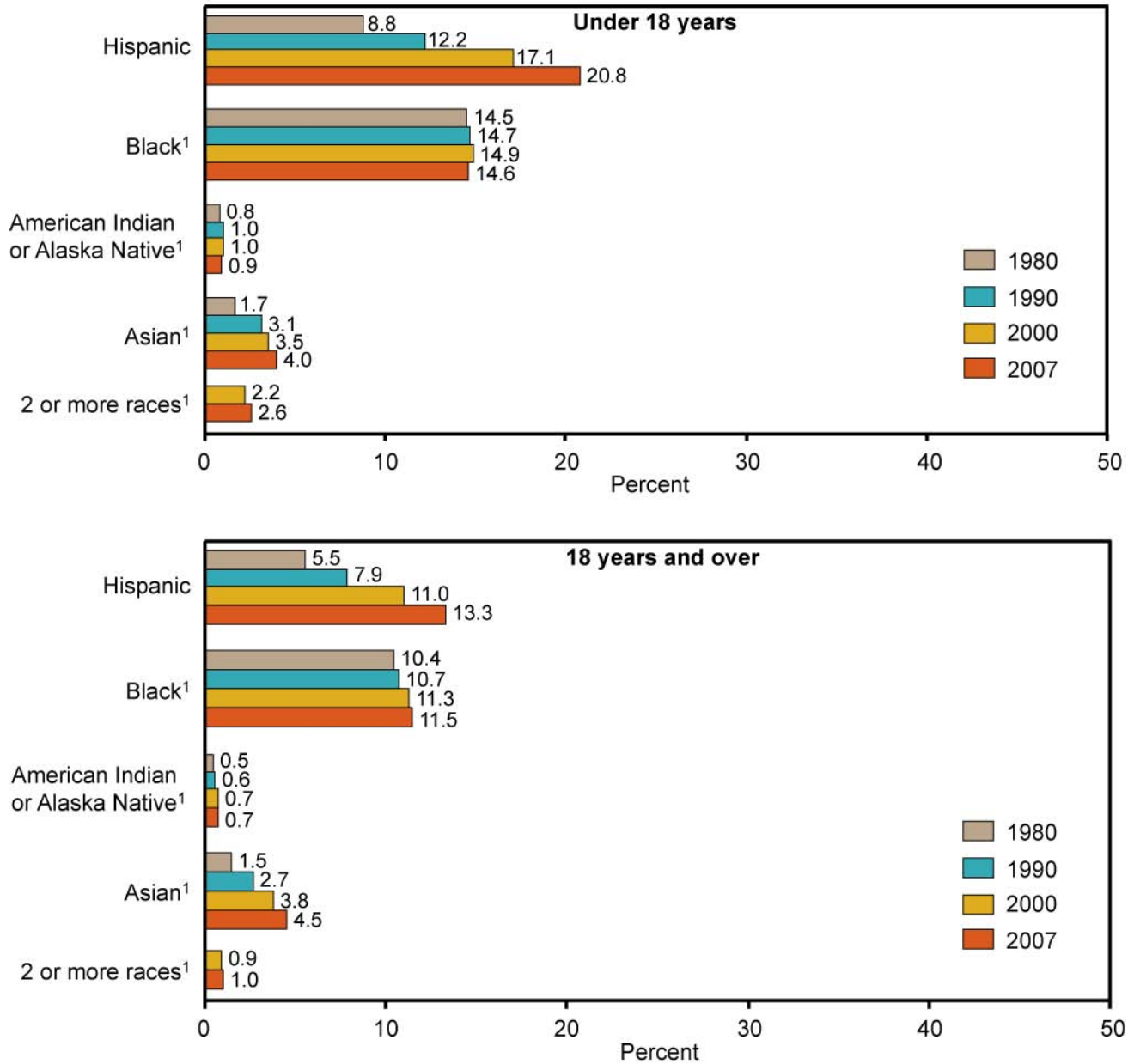
In the 1980 and 1990 decennial censuses, Americans could choose only one racial category to describe their race (1). Beginning with the 2000 census, the question on race was modified to allow the choice of more than one racial category. Although, overall, a small percentage of persons of non-Hispanic origin selected two or more races in 2007, the percentage of children described as being of more than one race was more than twice as high as the percentage of adults ([Figure 2](#)). The number of American adults identifying themselves or their children as multiracial is expected to increase in the future (2).

The percentage of persons reporting two or more races varies considerably among racial groups. For example, the percentage of persons reporting a specified race in combination with one or more additional racial groups was 1.4% for white persons and 38.0% for American Indian or Alaska Native persons in 2007 (3).

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**Figure 2. Population in selected race and Hispanic origin groups, by age: United States, 1980–2007**



<sup>1</sup>Not Hispanic.

NOTES: Persons of Hispanic origin may be of any race. Race data for 2000 and beyond are not directly comparable with data for 1980 and 1990. Individuals could report only one race in 1980 and 1990, and more than one race in 2000 and beyond. Persons who selected only one race in 2000 and beyond are included in single-race categories; persons who selected more than one race in 2000 and beyond are

shown as having 2 or more races and are not included in single-race categories. In 1980 and 1990, the Asian category included Asian and Native Hawaiian or Other Pacific Islander; in 2000 and beyond, this category includes only Asian. See [data table for Figure 2](#) for data points graphed and data for Native Hawaiian or Other Pacific Islander.

SOURCE: U.S. Census Bureau.

## Children Living with a Single Parent

*The percentage of children living with a single parent more than doubled between 1970 and 2006, increasing from 12% to 28%.*

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Children living in single parent households, particularly when the single parent is the mother, tend to be more financially disadvantaged and to have poorer physical and mental health than children living with two biological parents (1). Even when children are born to married couples, many will spend part of their childhood living with a single parent because of parental divorce, separation, or death (2).

In 2006, 28% of children under 18 years of age were living with a single parent, an increase from 12% in 1970. Mothers account for the vast majority of single parents. In 2006, there were 17.2 million children living with their mother only, compared with 3.5 million children living with their father only (3).

Increases in the percentage of children under 18 years of age living with single parents have moderated in recent years. The percentage of children living with single parents increased, on average, 5.0% per year in the 1970s and 2.4% per year during the 1980s. The percentage of children living with single parents has stayed fairly stable at around 27%–28% from 1992 through 2006 (data table for Figure 3).

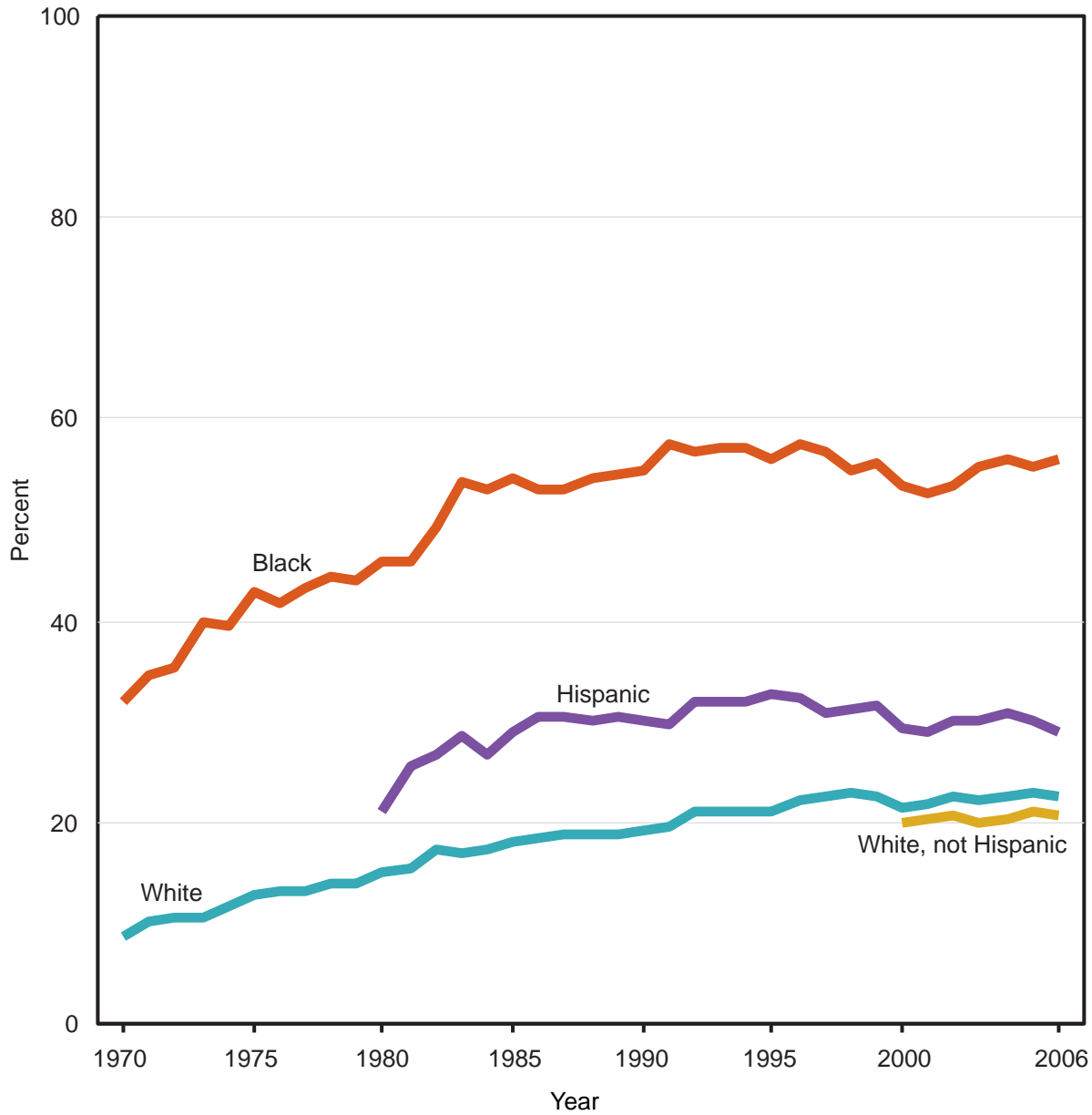
The percentage of children living with single parents varies by race and ethnicity (Figure 3). In 2006, black children (56%) were more likely than white (23%) or Hispanic children (29%) to live with a single parent. Between 1970 and 2006, the percentage of children living with single parents increased 159% among white children and increased 76% among black children. Among Hispanic children, the percentage living with single parents increased 38% since 1980 when data on Hispanic ethnicity became available.

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**Figure 3. Children under 18 years of age living with a single parent, by race and Hispanic origin: United States, 1970–2006**



NOTES: Starting with 2003 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. See notes in the [data table for Figure 3](#) for detailed information on race-specific estimates and data points graphed.

SOURCE: U.S. Census Bureau, Current Population Survey.

## Poverty and Low Income

*In 2006, Hispanic and black Americans in all age groups were more likely to live in poverty than white and Asian Americans.*

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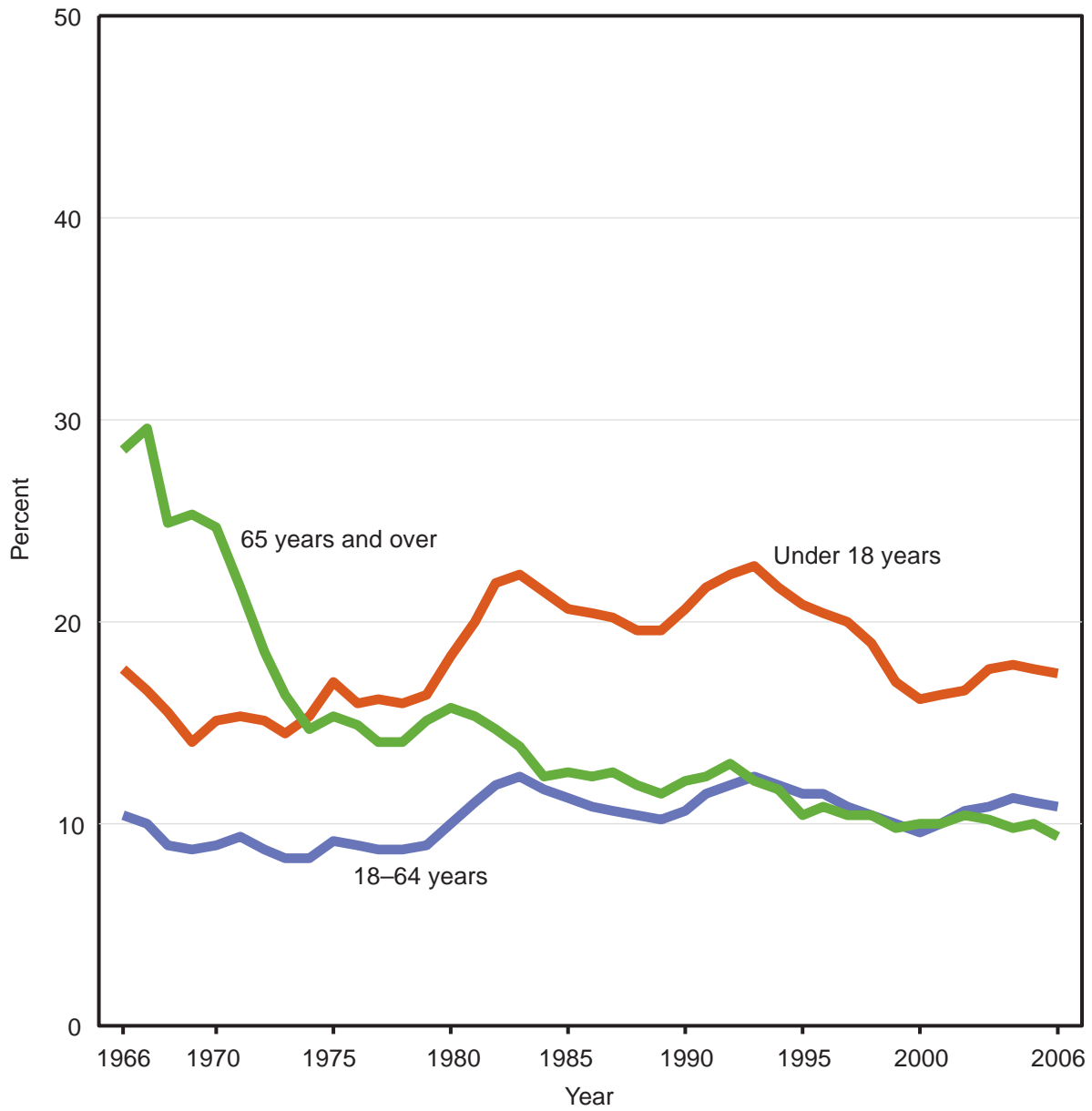
Children and adults in families with income below or near the federal poverty level have worse health than those with higher income (see [Appendix II, Poverty](#), for a definition of the federal poverty level). Although in some cases illness can lead to poverty, more often poverty causes poor health by its connection with inadequate nutrition, substandard housing, exposure to environmental hazards, unhealthy lifestyles, and decreased access to and use of health care services (1).

In 2006, the overall percentage of the U.S. population living in poverty declined to 12.3%. This was the first decline in the poverty rate since 2000 (2). The poverty rate decreased for all age groups from 2005 to 2006 with the largest decline among people 65 years of age and over ([data table for Figure 4](#)).

Starting in 1974, children have been more likely than either working-age or older adults to be living in poverty ([Figure 4](#)). In 2006, 13 million children (17.4%) lived in poverty and another 16 million children (21.6%) were classified as near-poor with family income of 100% to less than 200% of the poverty level ([data table for Figure 5](#)). In 2006, children represented 35% of people living in poverty but only 25% of the total population (2).

Prior to 1974, persons 65 years of age and over were more likely to live in poverty than people of other ages. With the increased benefits provided by government social insurance programs such as Social Security, the poverty rate of older adults declined rapidly until 1974 and from then continued a gradual decline through 1999 (3). Between 1999 and 2005, rates fluctuated but increased overall compared with the poverty rate in 1999. In 2006, the poverty rate among older adults was the lowest since 1959, the first year for which poverty estimates were available, with 9.4% or 3.4 million persons age 65 years and over living in poverty. An additional 26.2% or 9.4 million older persons were near-poor ([data table for Figure 5](#)).

**Figure 4. Poverty by age: United States, 1966–2006**



NOTES: Data shown are the percentage of persons with family income below the poverty level. See [data table for Figure 4](#) for data points graphed and additional notes.

SOURCE: U.S. Census Bureau, Current Population Survey.

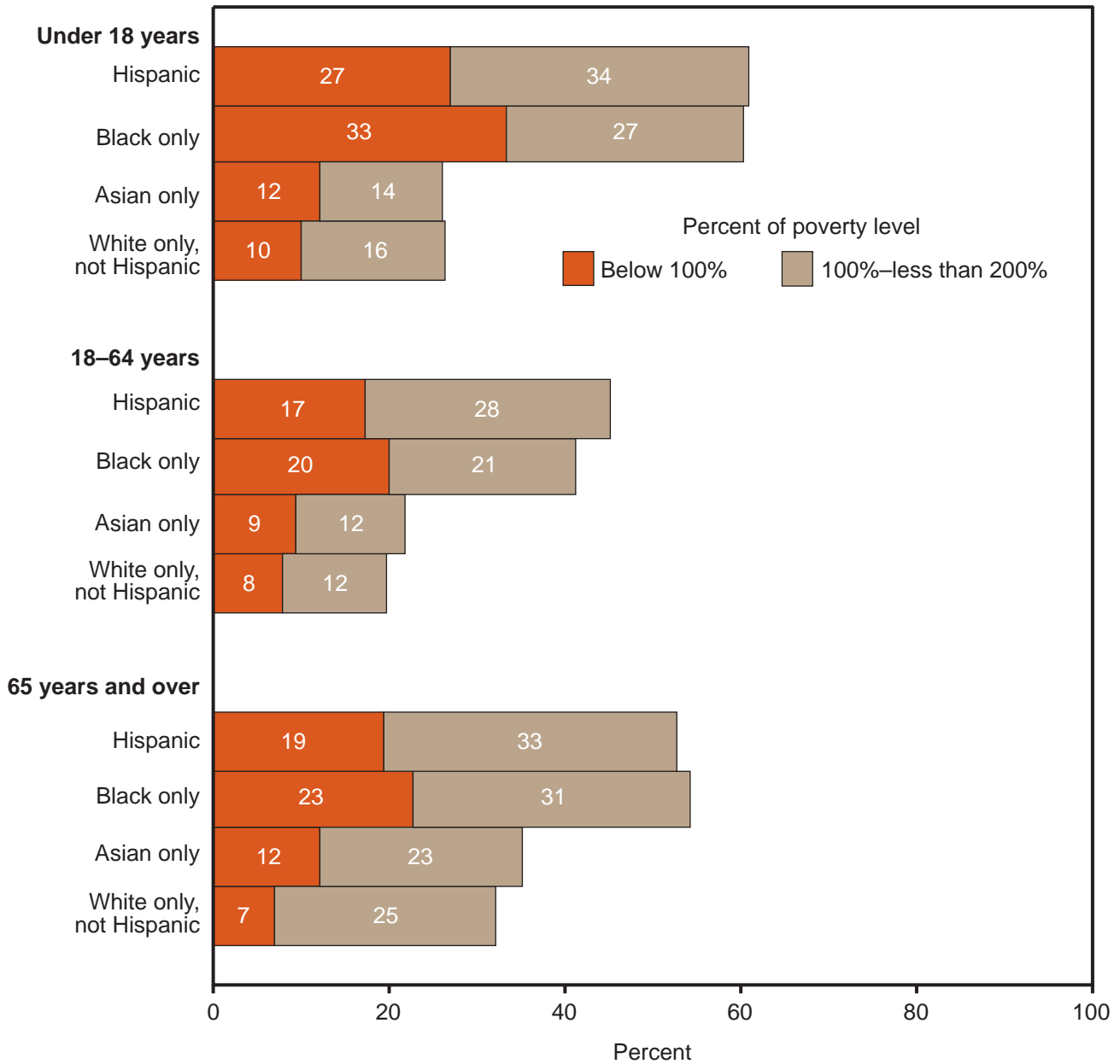
## Poverty and Low Income *(Continued)*

At all ages, a higher percentage of Hispanic and black persons than non-Hispanic white persons were poor (Figure 5). In 2006, 27%–33% of Hispanic and black children were poor compared with 10%–12% of non-Hispanic white and Asian children. Similarly, among persons 65 years of age and over, almost one-fifth of Hispanic and one-quarter of black persons were poor, compared with 7% of non-Hispanic white persons and 12% of Asians. In 2004–2006, 27% of American Indian or Alaska Native persons lived in poverty (estimate based on 3 years of data) (4).

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**Figure 5. Low income by age, race and Hispanic origin: United States, 2006**



NOTES: Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Persons of Hispanic origin may be of any race. Black and Asian races include persons of Hispanic and non-Hispanic origin. See [data table for Figure 5](#) for data points graphed and additional notes.

SOURCE: U.S. Census Bureau, Current Population Survey.

# Health Risk Factors

## Tobacco Use

*Nearly one-fifth of women and high school students and one-quarter of men still are current cigarette smokers, as are almost 11% of pregnant women.*

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Smoking is associated with a significantly increased risk of heart disease, stroke, lung and other types of cancer, and chronic lung diseases (1). Decreasing cigarette smoking among adolescents and adults is a major public health objective for the United States. Preventing smoking among teenagers and young adults is critical because smoking usually begins in adolescence (2). Smoking during pregnancy contributes to elevated risk of miscarriage, premature delivery, and having a low birthweight infant (3).

Following the first Surgeon General's Report on smoking in 1964, cigarette smoking declined sharply for men and at a slower pace for women (Figure 6). The percentage of men and women who smoke declined more slowly starting in 1990, reaching the lowest level for men in 2004 (23%). The proportion of men and women who smoke has not changed significantly since 2004, suggesting a stall in the decline in cigarette smoking among adults (4). In 2006, 24% of men and 18% of women were smokers. Cigarette smoking by adults continues to be strongly associated with educational attainment. Adults with less than a high school education were three times as likely to smoke as those with a bachelor's degree or more education (Table 64).

In 2007, 20% of high school students in grades 9–12 had smoked cigarettes in the past month. Cigarette smoking rates among high school students peaked in 1997 and then decreased and leveled off. In 2007, 14% of high school students had smoked cigars and 8% had used smokeless tobacco in the past month (5).

Among mothers with a live birth, the percentage reporting on the birth certificate that they smoked cigarettes during pregnancy declined from 20% in 1989 to 11% in 2002. The rate remained at 11% during the period 2004–2005, when 36 states, D.C., and New York City continued to use the 1989 revision of the U.S. Standard Certificate of Live Birth (see Appendix II, Cigarette smoking). Maternal smoking has

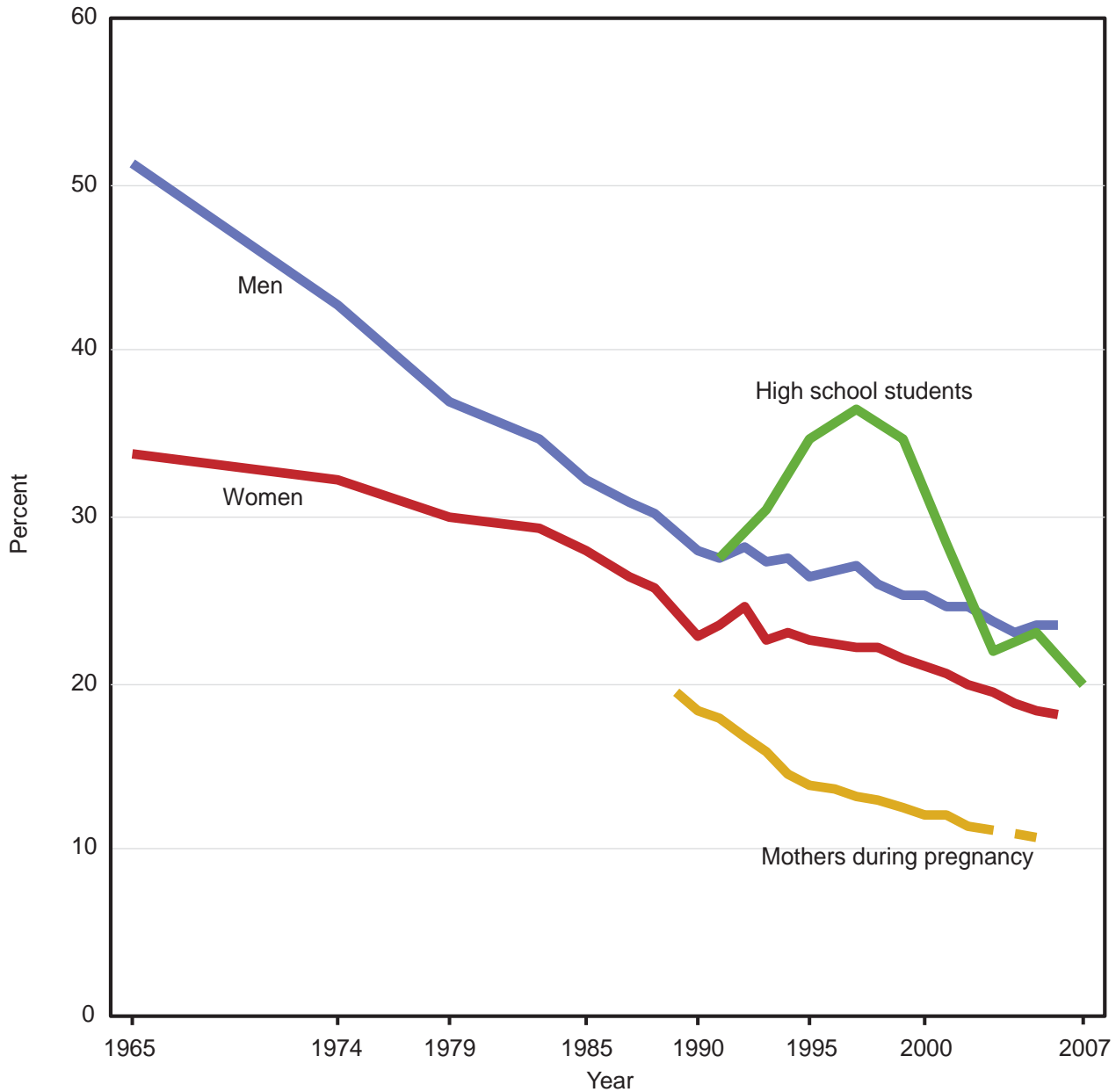
declined for all racial and ethnic groups, but differences among these groups persist (Table 11).

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**Figure 6. Cigarette smoking among men, women, high school students, and mothers during pregnancy: United States, 1965–2007**



NOTES: Estimates for men and women are age-adjusted. Cigarette smoking is defined as: (for men and women 18 years and over) at least 100 cigarettes in lifetime and now smoke every day or some days; (for students in grades 9–12) 1 or more cigarettes in the 30 days preceding the survey; and (for mothers with a live birth) during pregnancy. Data for 2004 and 2005 for mothers during pregnancy are based on the 36 states, D.C., and New York City that continued to use the 1989 Revision of the U.S. Certificate of Live Births in 2005. See [data table for Figure 6](#) for data points graphed, standard errors, and additional notes.

SOURCES: CDC/NCHS, National Health Interview Survey (data for men and women); National Vital Statistics System (data for mothers during pregnancy); National Center for Chronic Disease Prevention and Health Promotion, Youth Risk Behavior Survey (data for high school students).

## Overweight and Obesity

*The proportion of American adults who are obese has doubled over the past three decades to about one-third of all American adults.*

Excess body weight is associated with excess morbidity and mortality (1), but the magnitude of excess weight appears to matter. Obesity is correlated with excess mortality. In addition, obesity is associated with increased risk of heart disease, diabetes, osteoarthritis, and disability (2,3,4,5,6). The health implications of being overweight and not obese, however, are mixed and complex (7). Research has found that persons who are overweight but not obese do not have excess mortality compared with persons of normal weight (8,9). Diet, physical inactivity, genetic factors, environment, and health conditions all contribute to overweight and obesity. The potential health benefits from reducing the prevalence of obesity are of significant public health importance.

Findings from the National Health and Nutrition Examination Survey show that the proportion of adults who are obese has more than doubled from 15% in 1971–1974 to 34% in 2003–2006 for adults 20–74 years (age-adjusted) (Table 75). In contrast, the proportion of American adults who are overweight but not obese has been steady during that time period, at about one-third from 1971–1974 through 2003–2006 (Table 75).

Evidence suggests that the morbidity associated with obesity may increase with longer duration of obesity (7,8,10). Therefore overweight and obesity trends among young adults and children may signal future morbidity. Although young adults (18–29 years, and the topic of this year's Special Feature) have lower prevalence of obesity (24%) compared with persons 30 years and over (31%–41%), it is noteworthy that the proportion of young adults who are obese has more than tripled from 8% in 1971–1974 to 24% in 2005–2006 (Figure 7), while in most other adult age groups the prevalence doubled during that time period.

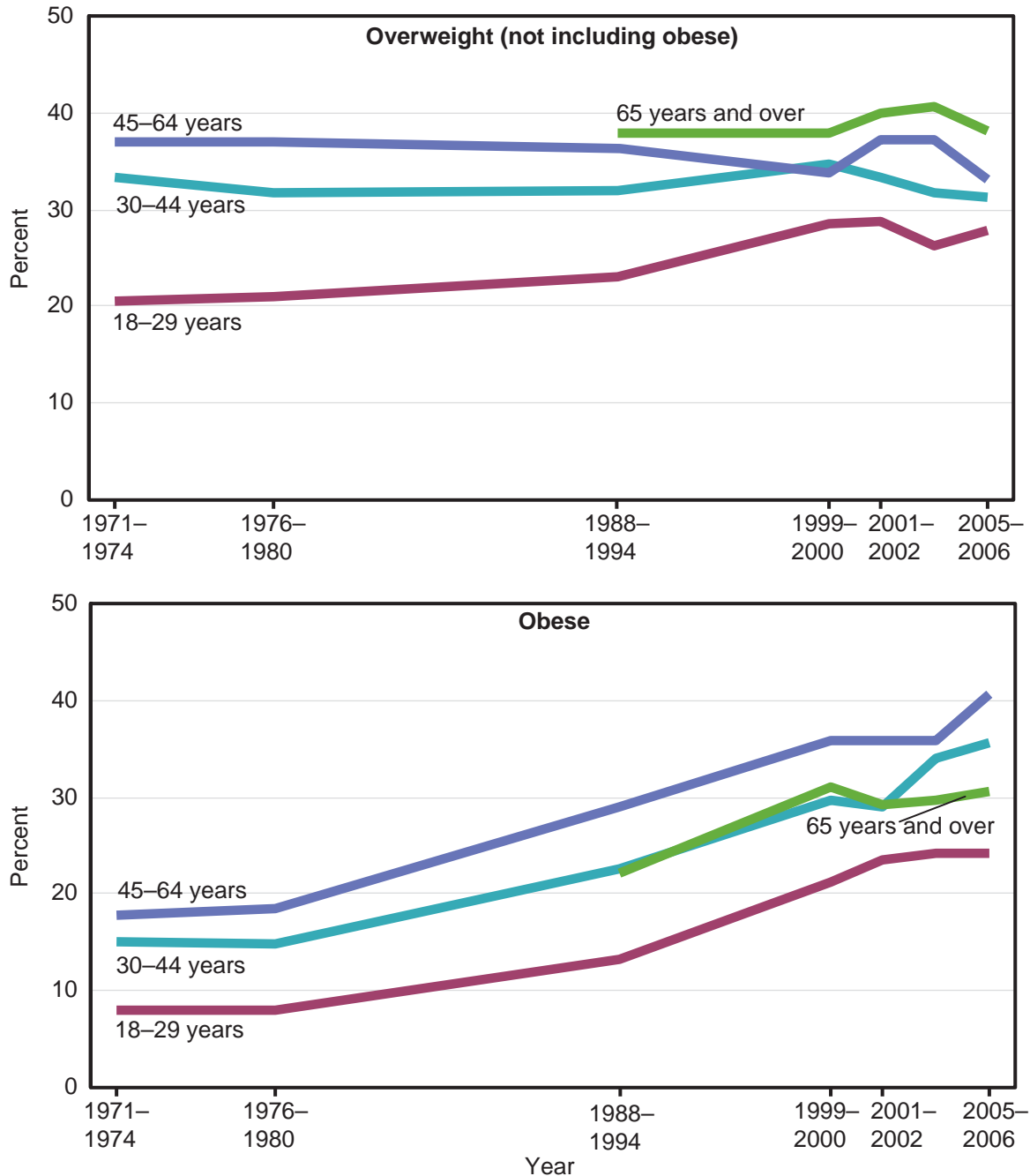
The increasing prevalence of obesity among adults has been accompanied by an increase of overweight among children (defined as a body mass index (BMI) at or above the sex- and age-specific 95th percentile BMI cut points from the 2000 CDC Growth Charts). The percentage of children (6–11 years of age) and adolescents (12–17 years of age) who are overweight has risen since 1976–1980. The percentage of

preschool-age children (2–5 years of age) who are overweight doubled from 1976–1980 (5%) to 2005–2006 (11%) (11; data table for Figure 7; see related Table 76). In 2005–2006, 15%–18% of children and adolescents were overweight (data table for Figure 7). Between 1999–2000 and 2005–2006, the percentage of children and adolescents who were overweight has been steady (12).

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**Figure 7. Overweight and obese, by age: United States, 1971–1974 through 2005–2006**



NOTES: Overweight (not including obese) is defined as a body mass index (BMI) greater than or equal to 25 but less than 30 and obese as a BMI greater than or equal to 30. See [data table for Figure 7](#) for estimates for children, data points graphed, standard errors, and additional notes.

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey.

## Leisure-time Physical Activity and Strength Training

*In recent years, American adults have made no substantial progress towards achieving recommended levels of physical activity or strength training.*

Benefits of regular physical activity include a reduced risk of premature mortality and reduced risks of coronary heart disease, diabetes, colon cancer, hypertension, and osteoporosis (1). Regular physical activity also improves symptoms associated with musculoskeletal conditions and mental health conditions such as depression and anxiety. Physical activity, along with a healthy diet, plays an important role in the prevention of overweight and obesity (Figure 7, Tables 75 and 76). Benefits of strength training include a lessening of loss of muscle mass, functional decline, and fall-related injuries (2).

In 1995, the Centers for Disease Control and Prevention (CDC) and the American College of Sports Medicine (ACSM) issued a public health recommendation that every U.S. adult should accumulate 30 minutes or more of moderate-intensity physical activity on most, preferably all, days of the week. In 2007, the ACSM and the American Heart Association issued updated recommendations on the types and amounts of physical activity needed by healthy adults to improve and maintain health. They recommended moderate-intensity aerobic physical activity for a minimum of 30 minutes on five days per week or vigorous-intensity aerobic activity for a minimum of 20 minutes on three days per week. They also added a recommendation that adults should perform activities that maintain or increase muscular strength and endurance a minimum of two days each week (3). In October 2008, the U.S. Department of Health and Human Services released guidance to help Americans age 6 and older improve their health through appropriate physical activity (4).

Between 1999–2000 and 2005–2006, about one-third of adults reported regular leisure-time physical activity (see Technical Notes for definition). During this period, the trend in the percentage of Americans who engaged in regular leisure-time physical activity remained relatively stable for adults in all age groups (Figure 8). In 2005–2006, the percentage of Americans engaged in regular leisure-time physical activity declined with increasing age from 36% among young adults 18–29 years of age to 22% among older

adults. Regular leisure-time physical activity levels were higher among men than women in the youngest and oldest age groups (data table for Figure 8).

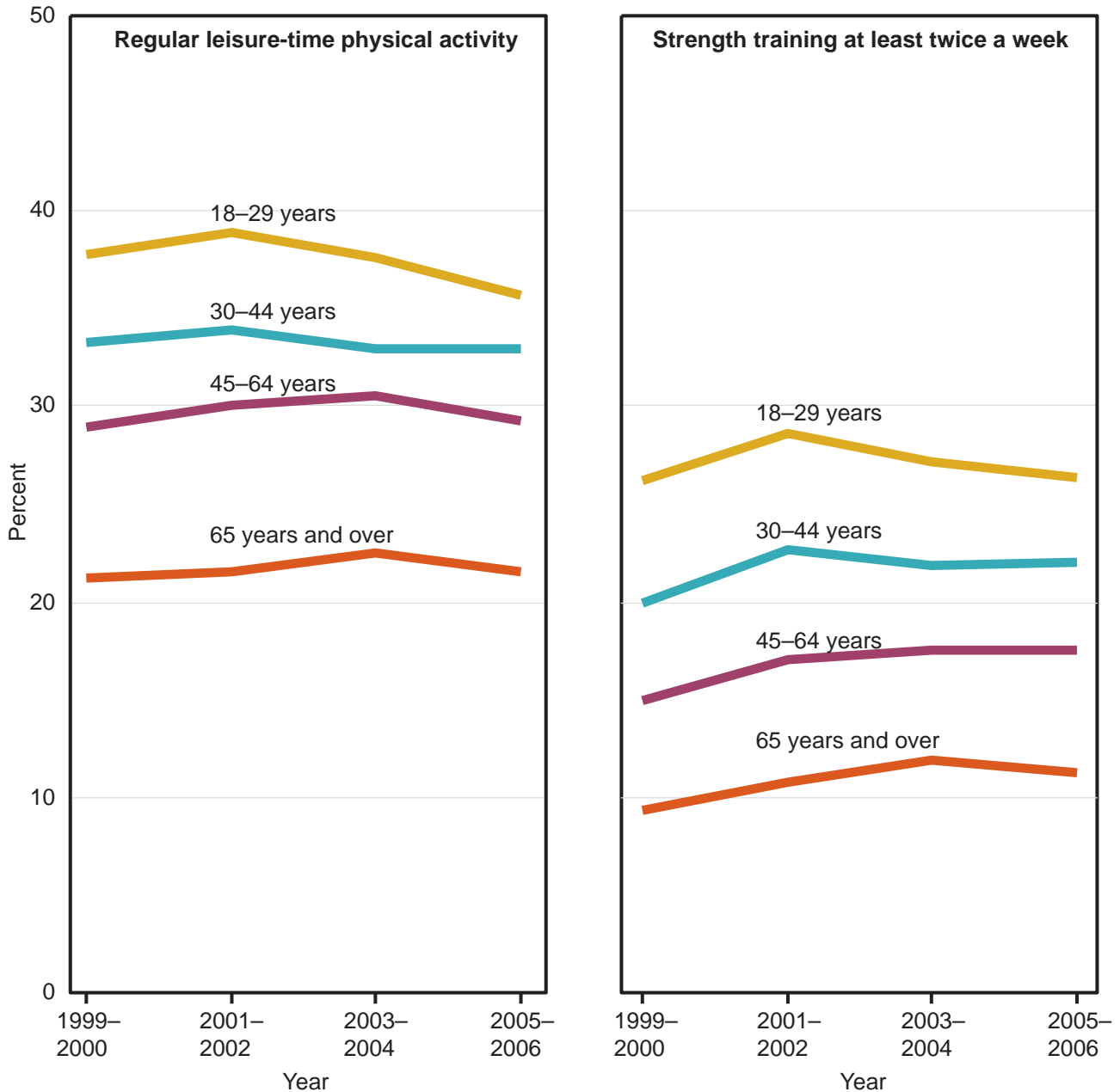
The proportion of Americans who engaged in regular leisure-time physical activity varied by sociodemographic factors (Table 74). Participation in regular leisure-time physical activity was more common among those with higher levels of education and family income.

Between 1999–2000 and 2005–2006, about one-fifth of adults reported participating in strength training at least twice a week (see Technical Notes for definition). During this period, the trend in the percentage of Americans who engaged in strength training remained fairly constant (Figure 8). The percentage of Americans who participated in strength training was even lower than the percentage of Americans who participated in regular leisure-time physical activity. Participation in strengthening activities decreased sharply with increasing age. The level among older adults was less than half that of adults 18–29 years of age. Men 18–44 years of age were more likely to participate in strength training than women of the same age (data table for Figure 8).

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**Figure 8. Regular leisure-time physical activity and strength training at least twice a week among adults 18 years of age and over, by age: United States, 1999–2006**



NOTES: Data are for the civilian noninstitutionalized population. Adults who engaged in regular leisure-time physical activity reported three or more sessions per week of vigorous activity lasting at least 20 minutes or five or more sessions per week of light or moderate activity lasting at least 30 minutes. See [data table for Figure 8](#) for data points graphed, standard errors, and additional notes.

SOURCE: CDC/NCHS, National Health Interview Survey.

# Morbidity and Limitation of Activity

## Acute Viral Hepatitis

*In 2006, incidence of acute viral hepatitis types A, B, and C was at or near record-low levels.*

Acute viral hepatitis, an acute illness characterized by nausea, abdominal pain, and jaundice, is most frequently caused by infection with one of three, unrelated viruses: hepatitis A virus (HAV), hepatitis B virus (HBV), or hepatitis C virus (HCV) (1). In addition to acute illness, HBV and HCV can cause chronic infection associated with increased risk of chronic liver disease and liver cancer. In 2005, viral hepatitis was listed as the cause of death on approximately 5,500 U.S. death certificates (2).

HAV is usually spread when a person ingests fecal matter, even in microscopic amounts, from contact with objects, food, or drinks contaminated by the feces of an infected person. In 2006, the most commonly identified risk factor for hepatitis A was international travel (1). HBV is transmitted through exposure to the blood or body fluids of an infected person. Transmission occurs through exposures such as sexual contact with an infected person, injection-drug use, and from an infected mother to her infant during delivery (1). The most commonly identified risk factors for HBV infection in 2006 were sexual-risk factors such as sexual contact with an infected person and having multiple sex partners. HCV is also transmitted through exposure to the blood or body fluids of an infected person; the most common risk factor identified for HCV infection in 2006 was injection drug use (1).

Periodic outbreaks of hepatitis A have occurred in the United States every decade, with the last outbreak in 1995 (Figure 9). Since 1995, when vaccine to prevent HAV infection was introduced, the incidence rate of acute hepatitis A has declined steadily from 12 cases per 100,000 population to 1.2 cases per 100,000 population in 2006 (data table for Figure 9), the lowest rate since surveillance began in 1966. The 2006 rate represents about 3,600 acute symptomatic cases and an estimated 32,000 new infections, because reported cases represent only a portion of hepatitis virus infections that occur (1). Historically, hepatitis A rates were highest among children 5–14 years and were higher in the

western region of the country, but routine immunization of children living in the states that have consistently had the highest rates of hepatitis A has resulted in significant declines in rates (1).

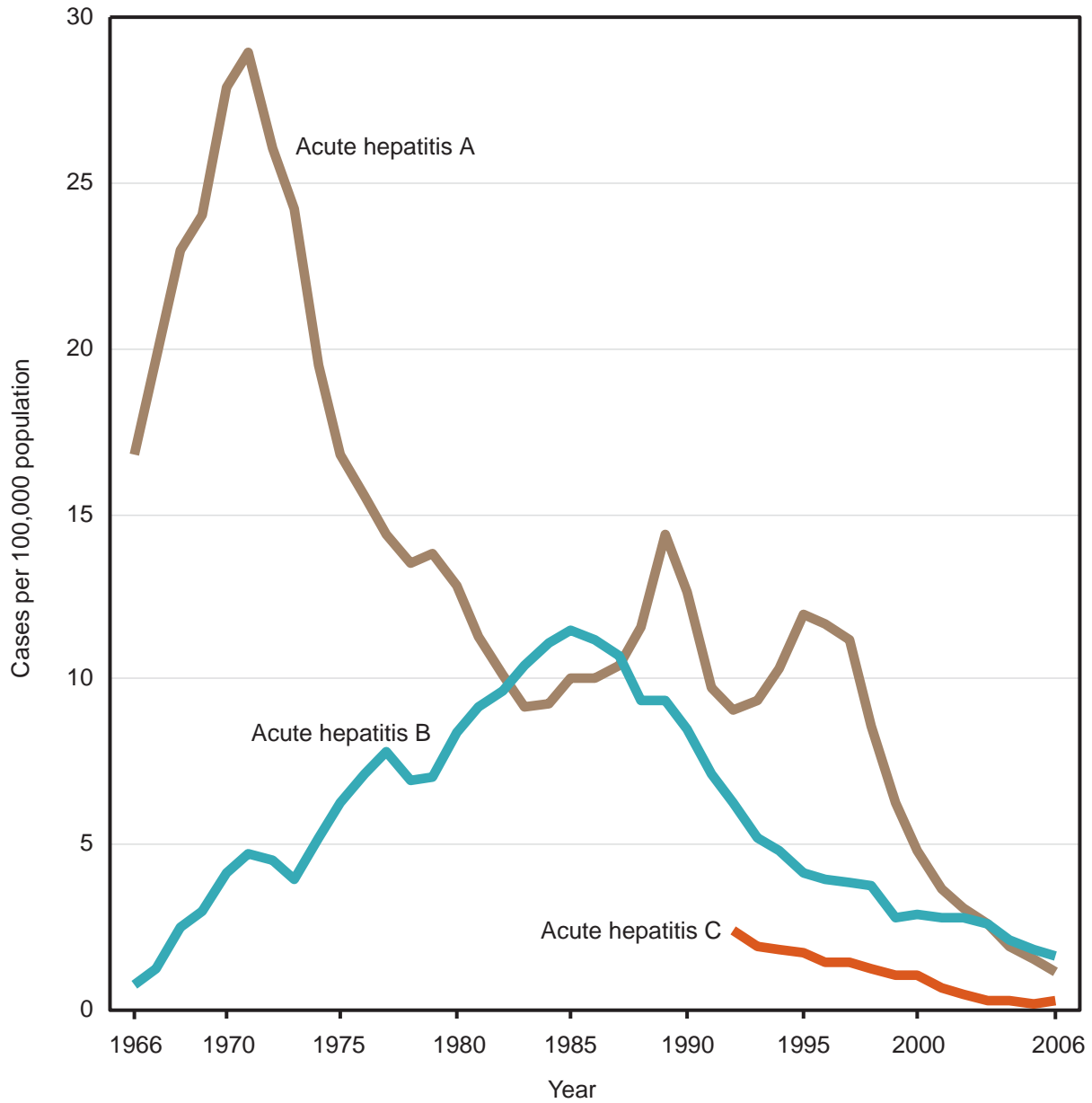
Vaccine to prevent HBV infection has been available since 1982 and is now part of the routine childhood immunization schedule (3). Since 1985, the incidence rate of hepatitis B has declined from 11.5 to 1.6 cases per 100,000 population in 2006 (Figure 9). This represents about 4,700 reported cases and an estimated 46,000 new infections in 2006 (1). In 2006, few cases of hepatitis B occurred among dialysis patients and health-care workers, populations previously considered at high risk, due to improvements in infection control and high vaccination rates (1). The greatest decrease in rates of hepatitis B occurred among the cohort of children who received routine immunization (1). It is estimated that about 1.3 million people in the United States were chronically infected with HBV in 2006 (4).

The incidence rate of acute hepatitis C has been declining since 1992, even though there is currently no vaccine to prevent infection (Figure 9). This decline is attributed to risk reduction practices among injection drug users, such as reduced needle-sharing (1). In 2006, the incidence rate of acute hepatitis C was 0.3 cases per 100,000 population compared with 2.4 per 100,000 population in 1992 (data table for Figure 9). However, approximately 3.2 million people in the United States remain chronically infected with HCV in 2006, making it the most prevalent blood-borne infection in the United States (1).

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**Figure 9. Incidence of acute viral hepatitis, by type and year: United States, 1966–2006**



NOTE: See [data table for Figure 9](#) for data points graphed and notes.

SOURCE: CDC. National Notifiable Disease Surveillance System, 1966–2006. Surveillance for acute viral hepatitis—United States, 2006. Surveillance Summaries, March 21, 2008. MMWR 2008;57(No.SS-2).



## Asthma Among Adults

*Current asthma prevalence is higher for adult women than for men, and varies by income and race and ethnicity.*

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Asthma is a chronic inflammatory disorder of the airways that is characterized by airway hyperresponsiveness and reversible episodes of airflow obstruction (1). These acute episodes or attacks are characterized by wheezing, chest tightness, and shortness of breath. While some industrial agents have been shown to cause asthma in adult workers, there is little definitive information on what causes individuals to develop asthma (2). In people who have asthma, attacks can be caused by triggers such as environmental tobacco smoke, dust, mites, and cold air. Although asthma cannot be cured, symptoms can be controlled by appropriate medical care and limiting trigger exposure (1).

People with asthma require frequent interaction with the health care system to effectively manage their asthma. It is recommended that patients see their physicians every 1 to 6 months depending on the severity of their disease (3). Although most emergency department visits and inpatient hospitalizations resulting from asthma exacerbations are preventable, these episodes commonly occur. In 2006, among adults there were about 1 million emergency department visits and 290,000 hospital discharges with asthma as the first-listed diagnosis (4).

Although asthma is often thought of as a childhood disease, it also affects adults. Boys are more likely to have current asthma than girls; but among adults, women have a higher prevalence than men (1). In 2004–2006, 9% of women age 18 years and over and 5% of adult men reported having current asthma (data table for Figure 10). Women have higher rates than men in all racial and ethnic groups, and regardless of income level (Figure 10).

Prevalence of asthma varies by poverty status. Almost 11% of adults with family income below the poverty level reported having current asthma in 2004–2006 compared with 6% of adults with an income of 200% or more of the poverty level (data table for Figure 10).

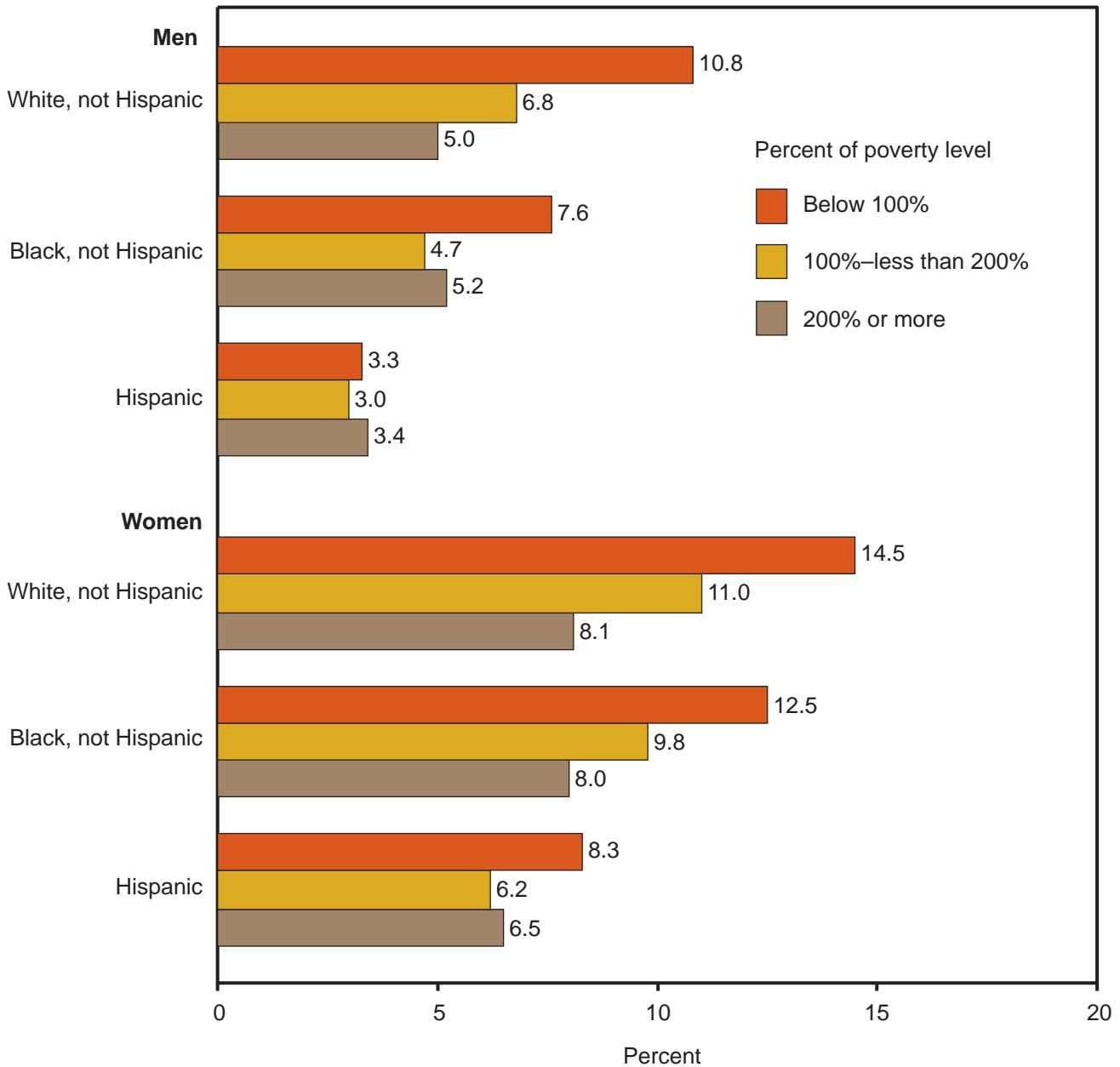
Current asthma prevalence differs by race and ethnicity, independent of poverty status and sex. Non-Hispanic black and white adults report higher asthma prevalence rates

(7%–8%) than Hispanic and Asian adults (5%) (data table for Figure 10). When examining specific Hispanic populations, however, Hispanic persons of Puerto Rican ancestry had the highest prevalence of any group, with about 18% of women and 8% of men reporting current asthma (data table for Figure 10).

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**Figure 10. Current asthma prevalence among adults 18 years of age and over, by sex, race and Hispanic origin, and percent of poverty level: United States, 2004–2006**



NOTES: Estimates are age-adjusted. Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 35%–36% of adults in 2004–2006. Current asthma prevalence estimates are based on the questions “Have you ever been told by a doctor or other health professional that you had asthma?”

and “Do you still have asthma?” See [data table for Figure 10](#) for data points graphed, standard errors, and additional notes.

SOURCE: CDC/NCHS, National Health Interview Survey.

## Limitation of Activity Due to Chronic Conditions: Children

*Conditions associated with learning, emotional, behavioral, and developmental problems are leading causes of activity limitation among children.*

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Limitation of activity due to chronic physical, mental, or emotional conditions is a broad measure of health and functioning that gauges a child's ability to engage in major age-appropriate activities. This measure of health is also related to a child's need for special educational and medical services. The National Health Interview Survey identifies children with activity limitation through questions about specific limitations in activities such as play, self-care, walking, memory, and other activities, and the current use of special education or early intervention services. Estimates of the number of children with an activity limitation may differ depending on the type of limitations included and the methods used to identify them (1).

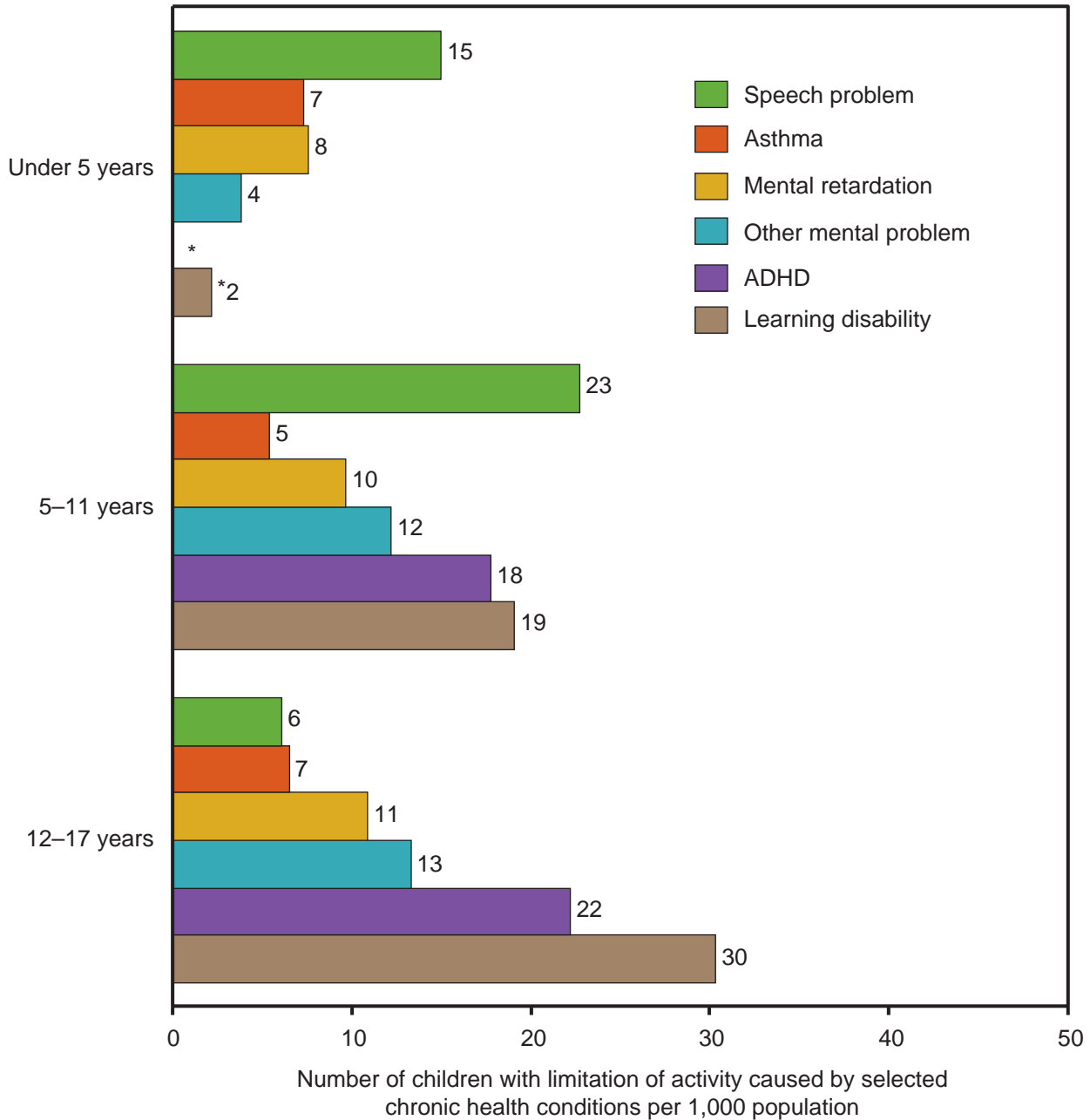
Between 1997 and 2006, the percentage of children with activity limitation was 7% (Table 58). In 2005–2006, the percentage of school-age children with activity limitation (8%) was double the percentage of preschoolers with activity limitation (4%). Most school-age children with activity limitation were identified as limited solely by their participation in special education (2).

In 2005–2006, chronic health conditions causing activity limitation in children varied by age (Figure 11). A speech problem, mental retardation, and asthma were identified by parents as the leading causes of activity limitation among preschool children. Learning disability and attention-deficit/hyperactivity disorder (ADHD or ADD) were mentioned as important causes of activity limitation among all school-age children. Among younger school-age children, a speech problem was also reported as an important condition causing activity limitation. Among older school-age children, a mental, emotional, or behavioral problem (other than ADHD, mental retardation, or another developmental problem) was reported as an important condition causing activity limitation.

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**Figure 11. Limitation of activity caused by selected chronic health conditions among children, by age: United States, 2005–2006**



\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

NOTES: Data are for noninstitutionalized children. Children with more than one chronic health condition causing activity limitation were counted in

each category. See [data table for Figure 11](#) for data points graphed, standard errors, and additional notes.

SOURCE: CDC/NCHS, National Health Interview Survey.

## Limitation of Activity Due to Chronic Conditions: Working-age and Older Adults

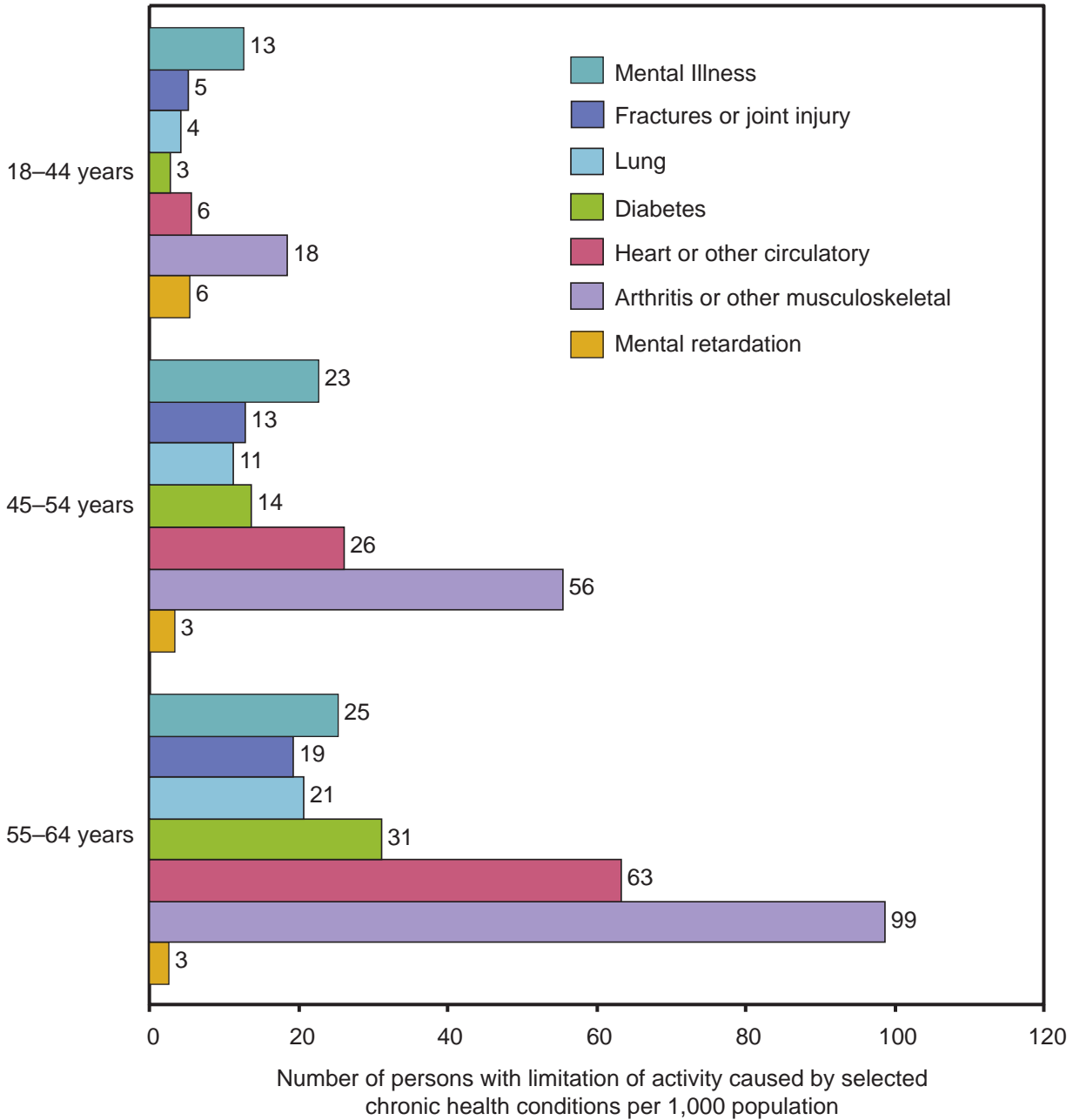
*Arthritis and other musculoskeletal conditions are the most frequently reported cause of activity limitation among both working-age and older adults.*

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Chronic physical, mental, and emotional conditions can limit the ability of adults to perform important activities such as working and doing everyday household chores. With advancing age, an increasing percentage of adults experience limitation of activity. Estimates of the number of working-age and older adults with limitation of activity are important for determining current and future health care needs and associated costs (1).

Between 1997 and 2006, the percentage of non-institutionalized working-age adults 18–64 years of age reporting an activity limitation caused by a chronic health condition remained relatively stable (Table 58). In 2005–2006, the percentage of working-age adults who reported limitations ranged from 6% at age 18–44 years to 20% at age 55–64 years (2). Arthritis and other musculoskeletal conditions were the most frequently mentioned conditions causing limitation among working-age adults of all ages in 2005–2006 (Figure 12). Among adults 18–44 years of age, mental illness was the second leading cause of activity limitation. Among adults 45–64 years of age, heart and circulatory conditions were the second leading cause of limitation. Other frequently mentioned conditions included mental illness and diabetes.

**Figure 12. Limitation of activity caused by selected chronic health conditions among working-age adults, by age: United States, 2005–2006**



NOTES: Data are for the civilian noninstitutionalized population. Adults with more than one chronic health condition causing activity limitation were counted in each category. See [data table for Figure 12](#) for data points graphed, standard errors, and additional notes.

SOURCE: CDC/NCHS, National Health Interview Survey.

## Limitation of Activity Due to Chronic Conditions: Working-age and Older Adults *(Continued)*

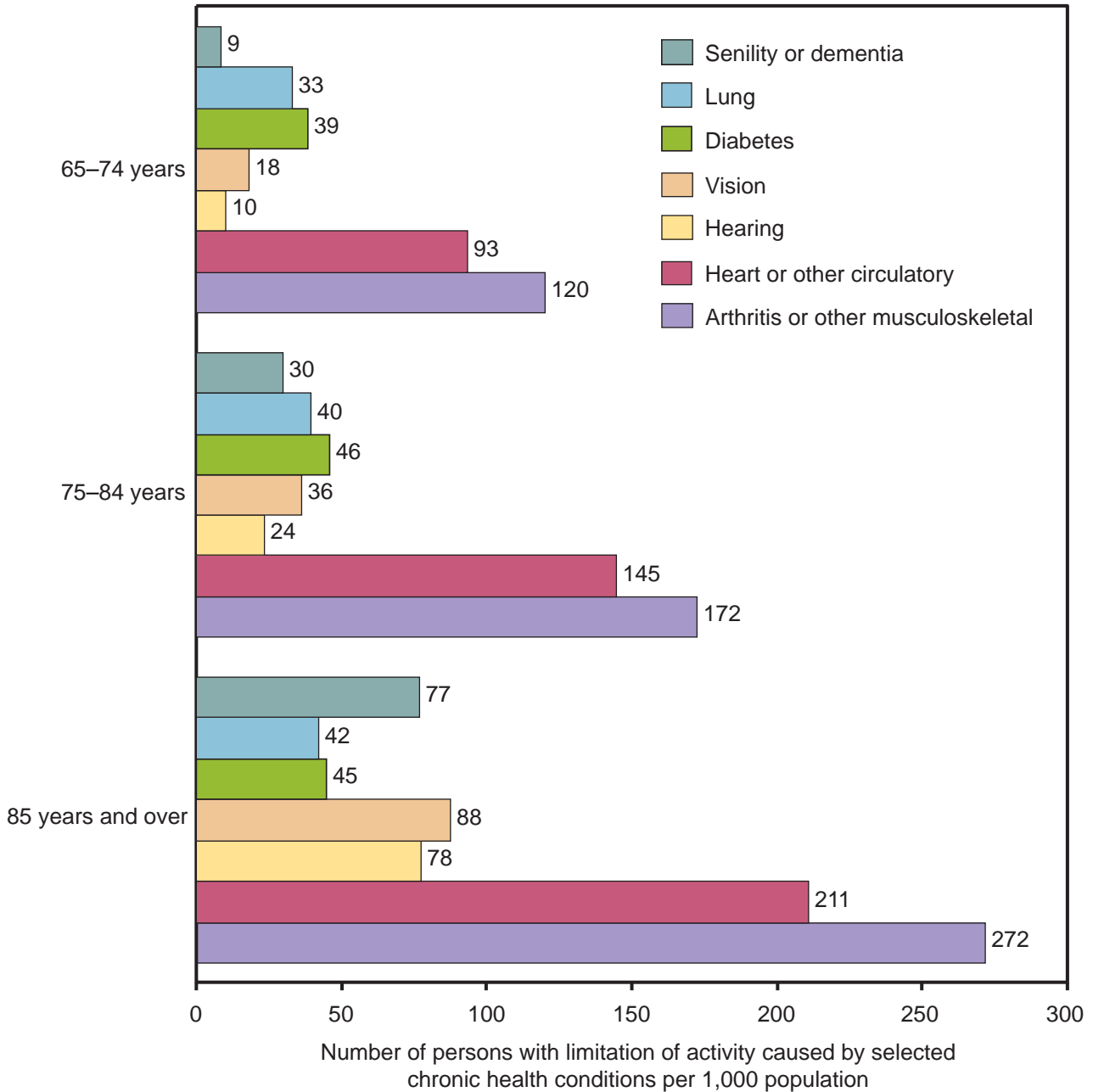
Between 1997 and 1999, the percentage of non-institutionalized adults 65 years and over with limitation of activity decreased. Between 2000 and 2006, the percentage was relatively stable (Table 58). In 2005–2006, the percentage of older adults with limitation of activity ranged from 25% of 65–74 year olds to 60% of adults 85 years old and over (2). Arthritis and other musculoskeletal conditions were the most frequently mentioned chronic conditions causing limitation of activity (Figure 13). Heart and circulatory conditions were the second leading cause of activity limitation. Among noninstitutionalized adults 85 years and over, senility or dementia, vision conditions, and hearing problems were frequently mentioned causes of activity limitation.

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2. CDC/NCHS, National Health Interview Survey, unpublished analysis.



**Figure 13. Limitation of activity caused by selected chronic health conditions among older adults, by age: United States, 2005–2006**



NOTES: Data are for the civilian noninstitutionalized population. Adults with more than one chronic health condition causing activity limitation were counted in each category. See [data table for Figure 13](#) for data points graphed, standard errors, and additional notes.

SOURCE: CDC/NCHS, National Health Interview Survey.

# Mortality

## Life Expectancy

*The gap in life expectancy at birth between white persons and black persons persists, but has narrowed since 1990.*

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Life expectancy is a measure often used to gauge the overall health of a population. As a summary measure of mortality, life expectancy represents the average number of years of life that could be expected if current death rates were to remain constant. Shifts in life expectancy are often used to describe trends in mortality. Life expectancy at birth is strongly influenced by infant and child mortality. Life expectancy later in life reflects death rates at or above a given age and is independent of the effect of mortality at younger ages (1).

From 1900 through 2005, life expectancy at birth increased from 46 to 75 years for men and from 48 to 80 years for women (Table 26). Life expectancy at age 65 also increased during this period (2). Among men, life expectancy at age 65 rose from 12 to 17 years and among women from 12 to 20 years from 1900 through 2005. In contrast to life expectancy at birth, which increased sharply early in the 20th century, life expectancy at age 65 improved primarily after midcentury. Improved access to health care, advances in medicine, healthier lifestyles, and better health before age 65 are factors underlying decreased death rates among older Americans.

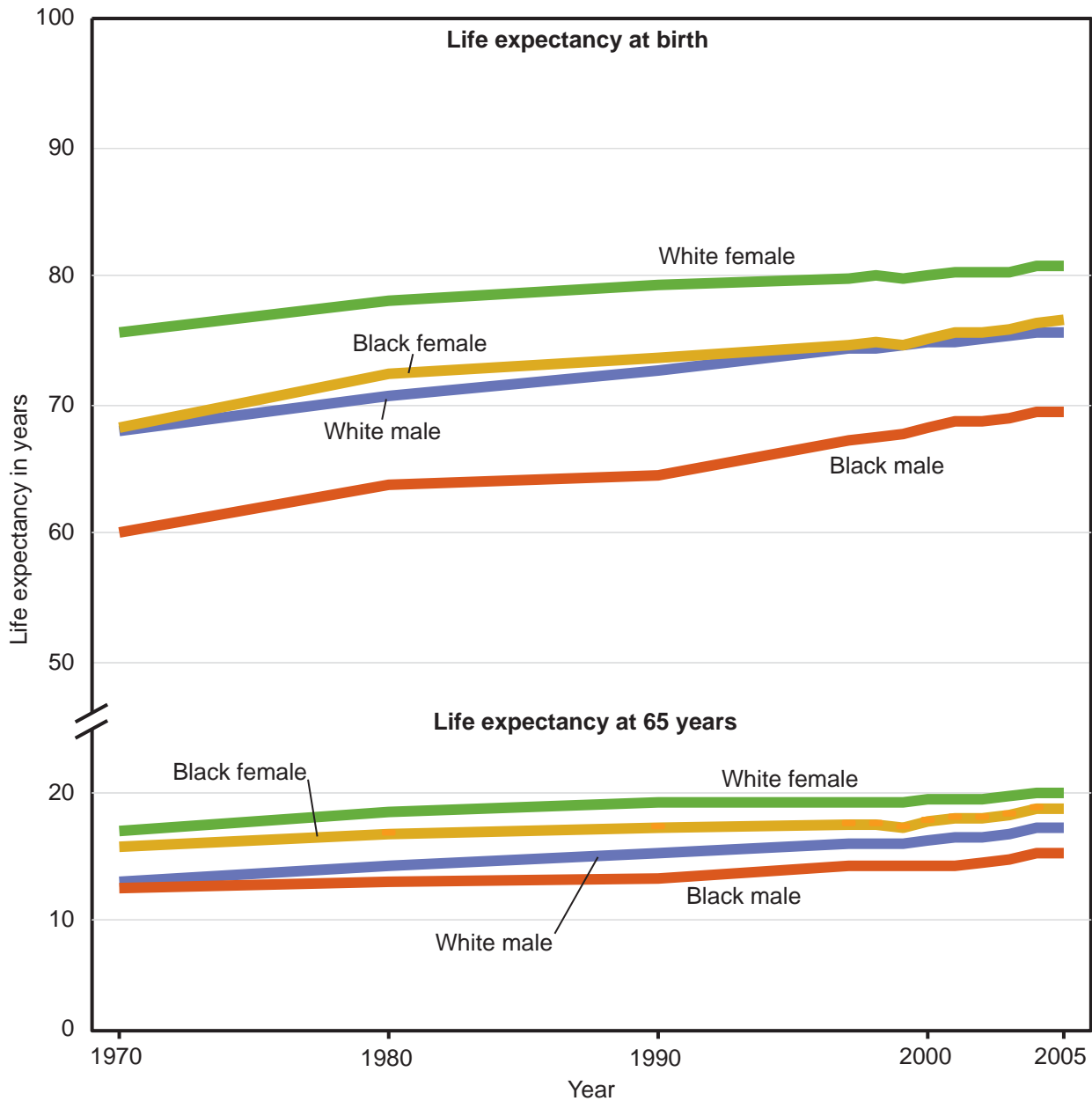
In 2005, life expectancy at birth was 76 years for white males compared with 70 years for black males and 81 years for white females compared with 77 years for black females (data table for Figure 14). Life expectancy at birth increased more for the black than for the white population between 1990 and 2005 (Figure 14). During this period, the gap in life expectancy between white males and black males narrowed from 8 years to 6 years (data table for Figure 14). During the same period, the gap in life expectancy between white females and black females decreased from 6 years to 4 years.

The gap in life expectancy between white and black people at age 65 is narrower than at birth. Between 1990 and 2005, the difference in life expectancy at age 65 between white males and black males remained stable at 2 years. In 2005, life expectancy at age 65 was 17 years for white males and 15 years for black males. The difference in life expectancy between white and black females has also been stable in recent years; in 2005, at age 65, white females and black females could expect to live an additional 20 and 19 years, respectively.

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**Figure 14. Life expectancy at birth and at 65 years of age, by race and sex: United States, 1970–2005**



NOTES: Death rates used to calculate life expectancies for 1997–1999 are based on postcensal 1990–based population estimates; life expectancies for 2000 and beyond are calculated with death rates based on census 2000. See [data table for Figure 14](#) for data points graphed and additional notes.

SOURCE: CDC/NCHS, National Vital Statistics System.

## Infant Mortality

*After declining substantially between 1950 and 2000, infant, neonatal, and postneonatal mortality rates have remained constant in recent years .*

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The infant mortality rate, the risk of death during the first year of life, is related to the underlying health of the mother, public health practices, socioeconomic conditions, and availability and use of appropriate health care for infants and pregnant women. Disorders related to short gestation and low birthweight and congenital malformations are the leading causes of death during the neonatal period (less than 28 days of life). Sudden Infant Death Syndrome (SIDS) and congenital malformations rank as the leading causes of infant deaths during the postneonatal period (28 days through 11 months of life) (1). Results from a new analysis of preterm-related causes of death show that 37% of infant deaths in 2004 were due to preterm-related causes (2).

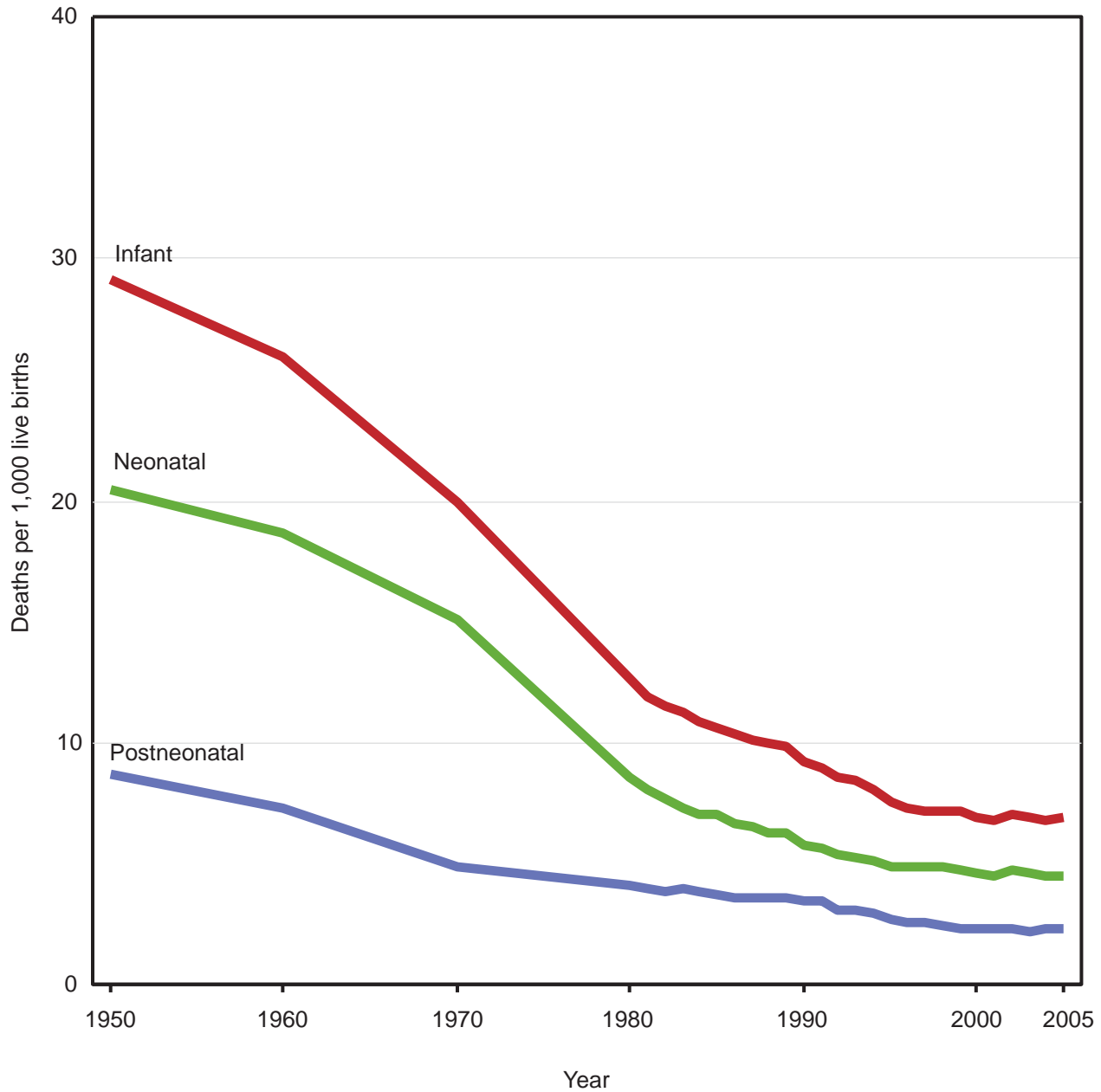
There has been little progress in lowering the U.S. infant mortality rate from 2000–2005. In 2005, the infant mortality rate was 6.87 infant deaths per 1,000 live births—which is not statistically different than the rate in 2004 (6.79) (Figure 15) (3). The 2005 infant mortality rate was 76% lower than in 1950, due to annual declines in the infant mortality rate from 1960–2000.

Infant mortality rates have declined for most racial and ethnic groups, but large disparities among the groups remain. During 1995–2004, the infant mortality rate was consistently highest for infants of non-Hispanic black mothers. Infant mortality rates were also high among infants of American Indian or Alaska Native mothers and Puerto Rican mothers. Infants of mothers of Cuban origin had the lowest infant mortality rates (2).

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**Figure 15. Infant, neonatal, and postneonatal mortality rates: United States, 1950–2005**



NOTES: Infant is defined as under 1 year of age, neonatal as under 28 days of age, and postneonatal as 28 days through 11 months of life. See [data table for Figure 15](#) for data points graphed and additional notes.

SOURCE: CDC/NCHS, National Vital Statistics System.

## Leading Causes of Death for All Ages

*Mortality from heart disease, stroke, and unintentional injuries is substantially lower than in 1950.*

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In 2005, a total of 2.4 million deaths were reported in the United States (Table 30). The overall age-adjusted death rate was 45% lower in 2005 than in 1950. The reduction in overall mortality since 1950 was driven mostly by declines in mortality for such leading causes of death as heart disease, stroke, and unintentional injuries (Figure 16).

In 2005, the age-adjusted death rate for heart disease, the leading cause of death, was 64% lower than the rate in 1950 (Table 35). The age-adjusted death rate for stroke, the third leading cause of death, declined 74% since 1950 (Table 36). Heart disease and stroke mortality are associated with risk factors such as high cholesterol, high blood pressure, smoking, and dietary factors. Other important factors include socioeconomic status, obesity, and physical inactivity. Factors contributing to the decline in heart disease and stroke mortality include better control of risk factors, improved access to early detection, and better treatment and care, including new drugs and expanded uses for existing drugs (1).

Overall age-adjusted death rates for cancer, the second leading cause of death, rose between 1960 and 1990 and then reversed direction (Table 37). Between 1990 and 2005, overall death rates for cancer declined 15%. The trend in the overall cancer death rate reflects the trend in the death rate for lung cancer (Table 38). Since 1970, the death rate for lung cancer for the total population has been higher than the death rate for any other cancer site.

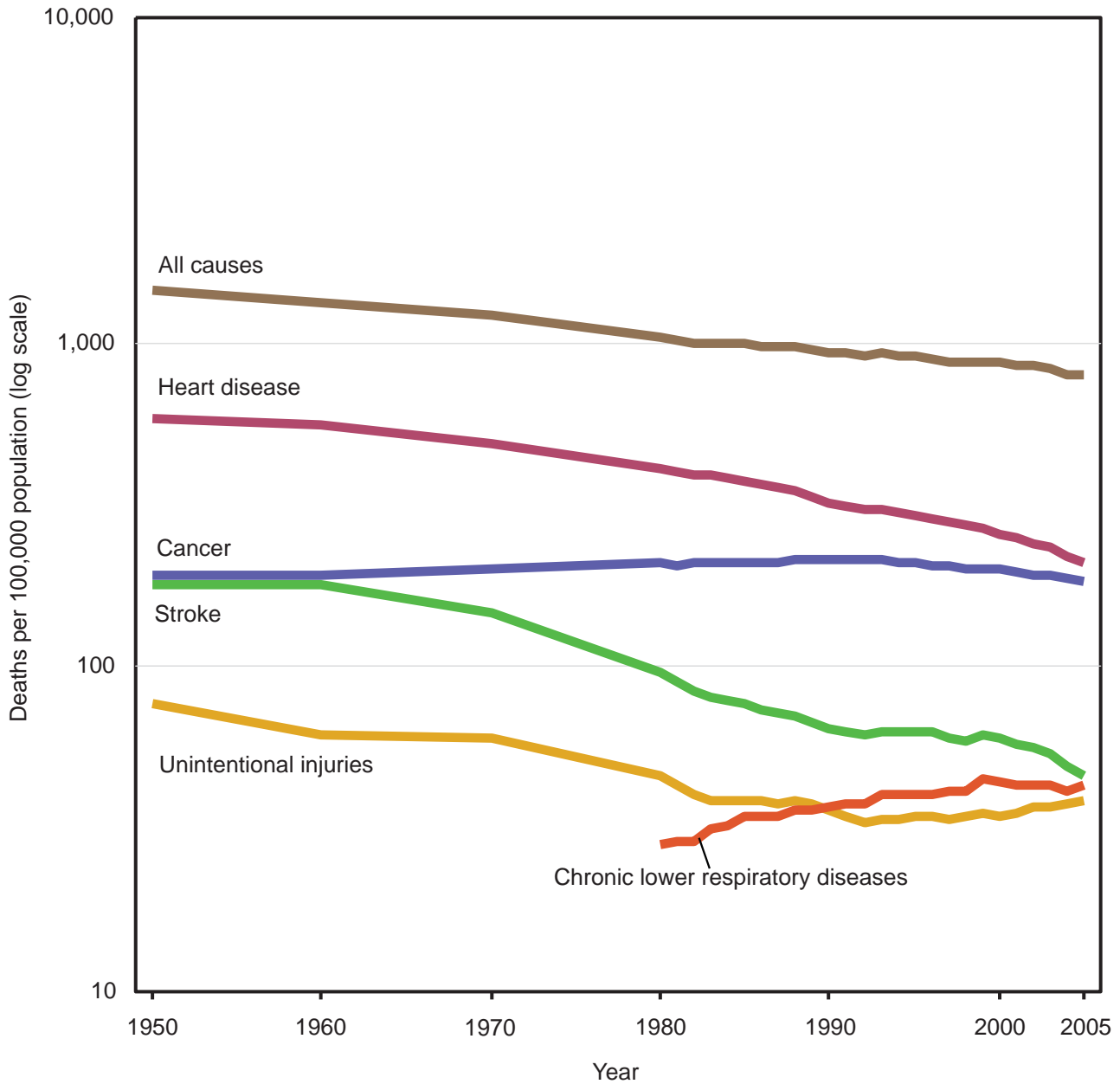
Chronic lower respiratory diseases (CLRD) were the fourth leading cause of death in 2005. The age-adjusted death rate for CLRD in 2005 was 53% higher than the rate in 1980 (Table 40).

The fifth leading cause of death in 2005 was unintentional injuries. Age-adjusted death rates for unintentional injuries declined during the period 1950–1992 (Table 28). Since 1992, the unintentional injury mortality rate has gradually increased. Despite recent increases, the death rate for unintentional injuries in 2005 was still 50% lower than the rate in 1950.

## Reference

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**Figure 16. Death rates for leading causes of death for all ages: United States, 1950–2005**



NOTES: Estimates are age-adjusted. Causes of death shown are the five leading causes of death for all ages in 2005. Starting with 1999 data, causes of death were coded according to ICD-10. See [data table for Figure 16](#) for data points graphed and additional notes.

SOURCE: CDC/NCHS, National Vital Statistics System.



# Health Insurance and Expenditures

## Health Insurance Coverage at the Time of Interview

*Between 1999 and 2006, the percentage of people under age 65 with private health insurance declined while enrollment in public coverage programs expanded, leaving the uninsured rate unchanged.*

Health insurance coverage is an important determinant of access to health care (1). Uninsured children and adults under 65 years of age are substantially less likely to have a usual source of health care or a recent health care visit than their insured counterparts (Tables 78, 79 and 83). Uninsured people are more likely to forego needed health care because they cannot afford it (Table 80). The major source of coverage for persons under 65 years of age is private employer-sponsored group health insurance. Private health insurance may also be purchased on an individual basis, but is generally more costly and tends to provide less adequate coverage than group health insurance. Public programs such as Medicaid and the State Children's Health Insurance Program (SCHIP) provide coverage for many low-income children and adults. Almost all adults age 65 and over are covered by the Medicare program, resulting in very few older adults without health insurance. Medicare enrollees may obtain additional private or public coverage to supplement their Medicare benefit package.

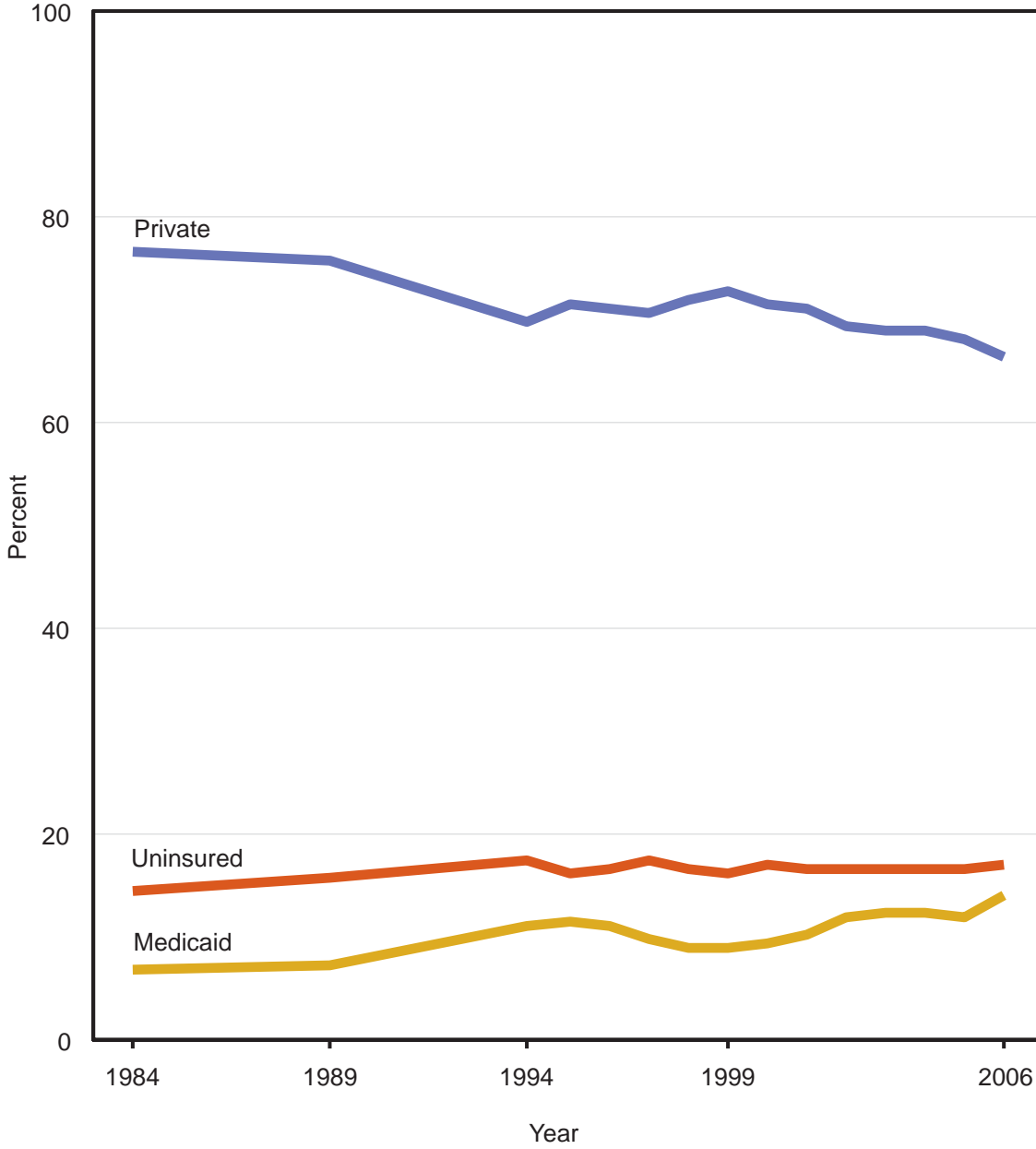
Between 1984 and 1994, private coverage declined among people under 65 years of age while Medicaid enrollment and the percentage with no health insurance increased (Figure 17, Appendix II, Health insurance coverage). After rising to 73% in 1999, the percentage with private health insurance has declined each year, reaching 66% in 2006. This decrease has been offset by an increase in the percentage with Medicaid or SCHIP, resulting in little change in the percentage of persons under age 65 who were uninsured.

In recent years, 16%–17% of people under 65 years had no health insurance at the time of their interview. In 2006, cost was cited by more than one-half of these uninsured as the reason for their lack of coverage (2). Other reasons given were having lost a job or a change in employment (23%), Medicaid benefits stopped (11%), and ineligibility for family insurance coverage due to age or leaving school (9%).

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**Figure 17. Health insurance coverage at the time of interview among persons under 65 years of age: United States, 1984–2006**



NOTE: See [data table for Figure 17](#) for data points graphed, standard errors, and notes.

SOURCE: CDC/NCHS, National Health Interview Survey.

## Length of Time Without Health Insurance Coverage

*People of Mexican origin are more likely than those in other racial or ethnic groups to be uninsured for more than 12 months.*

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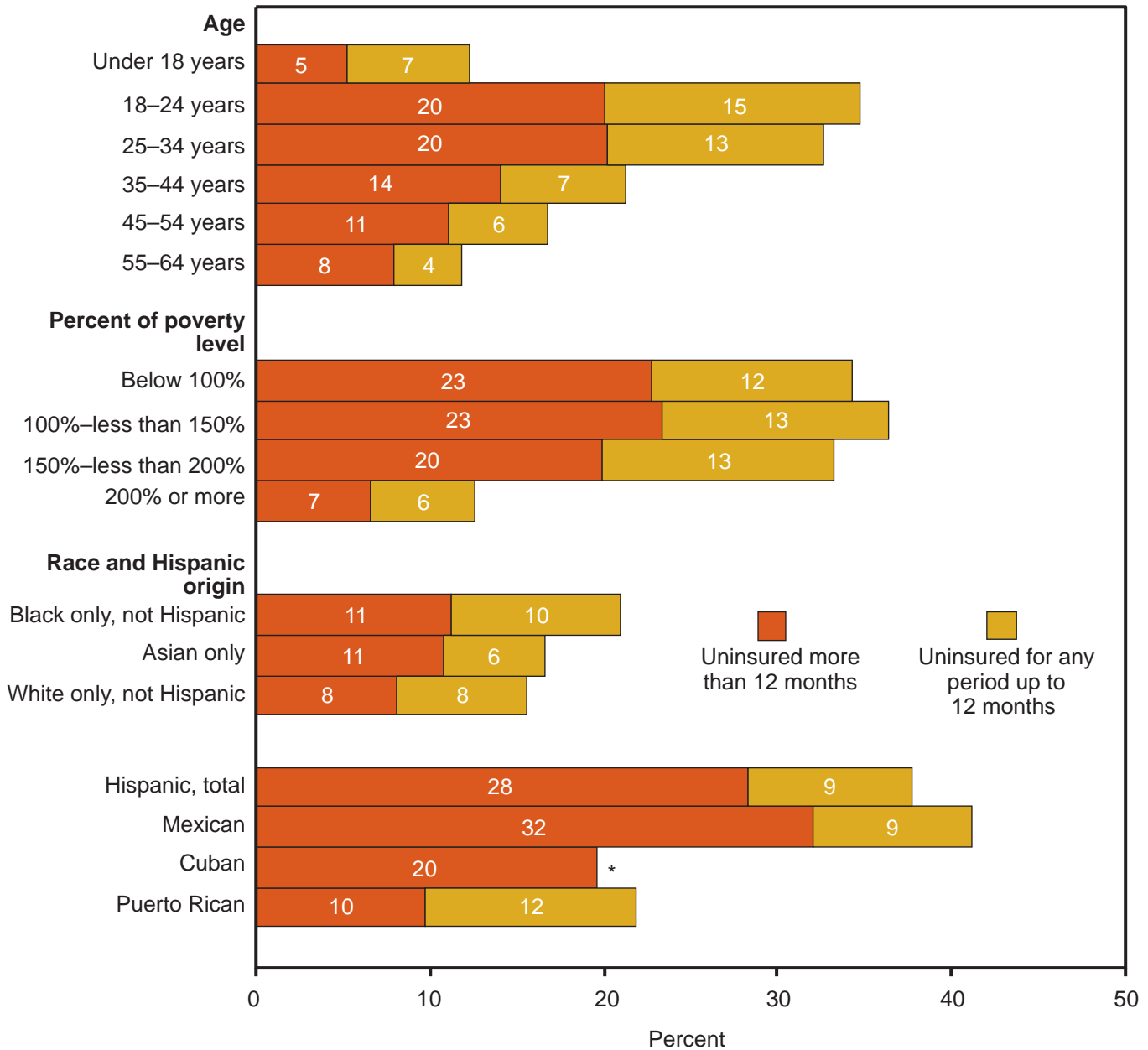
Many people under age 65, particularly those with low income, do not have health insurance coverage consistently throughout the year. Reasons for discontinuities in coverage may include loss or change of employment and financial reversals, divorce, births and other changes in life circumstances, and migration between states. To estimate the percentage of people without coverage at a point-in-time, respondents to the National Health Interview Survey (NHIS) were asked whether they had health insurance at the time of their interview (Figure 17) (see Appendix II, Health insurance coverage). To estimate the percentage without coverage for different lengths of time those covered by health insurance at the time of interview were asked whether there was any time during the 12 months prior to the interview when they did not have health insurance and those who were uninsured at the time of interview were asked how long it had been since they last had health coverage (Figure 18).

In 2006, 21% of people under 65 years of age reported being uninsured for at least part of the 12 months prior to interview. Among those who reported any time without insurance coverage during the 12 months prior to interview, the majority reported being uninsured for more than 12 months. About 12% of people under 65 years reported being uninsured for more than 12 months, 8% reported being uninsured for any period up to 12 months, and 1% reported being uninsured and had missing data for the length of time they were uninsured (data table for Figure 18).

Children under 18 years of age were less likely to be uninsured than were adults because low income children are eligible for public programs such as SCHIP designed specifically for them. The percentage of adults under 65 years of age without health insurance coverage decreased with age (Figure 18). In 2006, adults 18–34 years of age were more likely than adults age 55–64 years to lack coverage for at least part of the 12 months prior to interview (34%–36% compared with 13%). About 20% of persons 18–34 years of age lacked coverage for more than 12 months.

More than one-third of people with low family income (less than twice the poverty level) had no health insurance coverage for at least part of the 12 months prior to interview compared with 14% of those with higher family income. More than one-fifth of people in these lower income families were uninsured for more than 12 months, compared with 7% of people in higher income families. People of Mexican origin were more likely than those in any other racial or ethnic group to be uninsured for at least part of the 12 months prior to interview. In 2006, 42% of Mexican-origin people lacked coverage for at least part of the 12 months prior to interview with 32% lacking coverage for more than 12 months.

**Figure 18. Uninsured for at least part of the 12 months prior to interview among persons under 65 years of age, by length of time uninsured and selected characteristics: United States, 2006**



\* Estimates are considered unreliable. Data not shown have a relative standard error of greater than 30%.

NOTES: Persons of Hispanic origin may be of any race. Asian only race includes persons of Hispanic and non-Hispanic origin. Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty

thresholds. See [data table for Figure 18](#) for data points graphed, standard errors, and additional notes.

SOURCE: CDC/NCHS, National Health Interview Survey.

## Health Care Expenditures

*In 2006, the largest shares of personal health care expenditures were paid by private health insurance and the federal government.*

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In 2006, the United States spent 16% (up from 14% in 2000) of its Gross Domestic Product (GDP) on health care, a greater share than any other developed country for which data are collected by the Organisation for Economic Co-operation and Development (Tables 123 and 124).

In 2006, the United States spent \$2.1 trillion on health care, an average of \$7,026 per person (Table 124). Personal health care expenditures, a component of national health expenditures that includes spending for hospital care, physician services, prescription drugs, nursing home care, dental care, and other types of medical care, accounted for 84% of national health expenditures in 2006. The remaining 16% was spent on administration, government public health activities, research, and structures and equipment (Table 127) (1).

Private health insurance paid for 36% of total personal health expenditures in 2006, the federal government 35%, state and local government 10%, and out-of-pocket payments 15% (Figure 19). The share of personal health care expenditures paid out-of-pocket decreased from 27% in 1980 to 15% in 2006 (Table 128). This decrease resulted from an expansion of benefits in both private health insurance plans and government programs. Despite the decrease in the share of health care expenditures paid out-of-pocket, the growth in health care costs over recent years means that consumers may still have significant out-of-pocket expenditures for their health care.

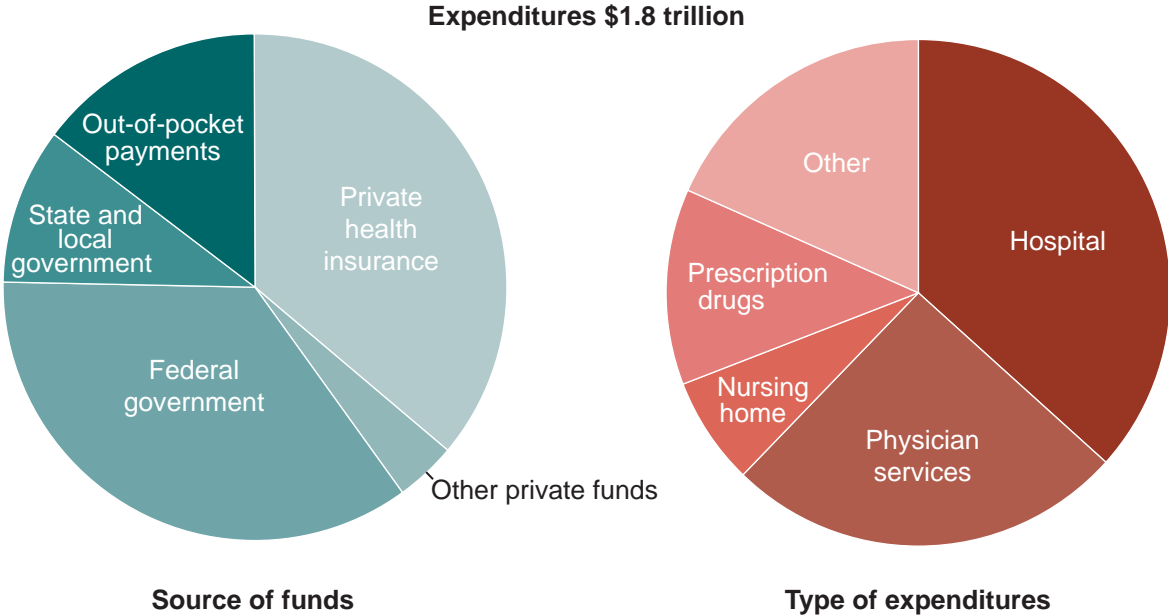
In 2006, 37% of personal health care expenditures were for hospital care, 25% for physician services, 12% for prescription drugs, 7% for nursing home care, and the remaining 18% for other personal health care, including visits to nonphysician medical providers, medical supplies, and other health services (Figure 19). Prescription drug spending increased by 9% in 2006, partly as a result of the implementation of Medicare Part D, a Medicare expansion that partially finances prescription drugs for the elderly and disabled. The share of total personal health care expenditures devoted to hospital

care decreased from 47% in 1980 to 37% in 2006 and the prescription drug expenditures share more than doubled from 6% to 12% over the same period, reflecting the shift in health care from inpatient to ambulatory care settings and the increasing contribution of prescription drugs to health care services and spending (calculated from Table 127).

### Reference

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**Figure 19. Personal health care expenditures, by source of funds and type of expenditures: United States, 2006**



NOTE: See [data table for Figure 19](#) for data points graphed and notes.

SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group, National Health Expenditure Accounts.

## Per Capita Personal Health Care Expenditures by State of Residence

*In 2004, per capita personal health care expenditures varied by state from a high of \$6,700 per Massachusetts resident to a low of \$4,000 per Utah resident.*

Personal health care expenditures, a component of national health expenditures, includes spending for hospital care, physician services, prescription drugs, nursing home care, dental care, medical products and devices, and other types of health care that are used directly by patients (see [Appendix II, Health expenditures, national](#)). State health expenditure data provide state-specific personal health care spending trends by service, using consistent definitions and methodologies that allow for comparisons across time and across states (1). These expenditures have been assigned to the state of residence of the patient rather than the state where the expenditures occurred. Many medical facilities are used by out-of-state residents attracted by the services offered and specialist availability, as well as travel convenience, so significant border-crossing to obtain medical care exists.

In 2004, per capita personal health care expenditures averaged \$5,300 for each U.S. resident. There was, however, a wide range of expenditures by state from \$4,000 for each Utah resident to \$6,700 for each Massachusetts resident ([data table for Figure 20](#)). The states with the highest spending per resident were concentrated in the New England region (\$6,400 on average) and the Mideast region (\$6,200) ([Figure 20](#)). These two regions contained eight of the ten states and the District of Columbia with the highest per capita spending on health care. The states with the lowest levels of spending were concentrated in the Southwest, Rocky Mountains, and Far West regions of the country. Alaska was an exception to the low spending prevalent in the Far West region.

Suggested reasons underlying state per capita differences in health care expenditures are varied. They include the age, health, and income distribution of the state population; the supply of health facilities and health care providers; differences in utilization patterns; differential prices of health care services; the distance necessary to travel to obtain medical care that may reduce access to medical care in rural states and cause residents to receive less medical care; and

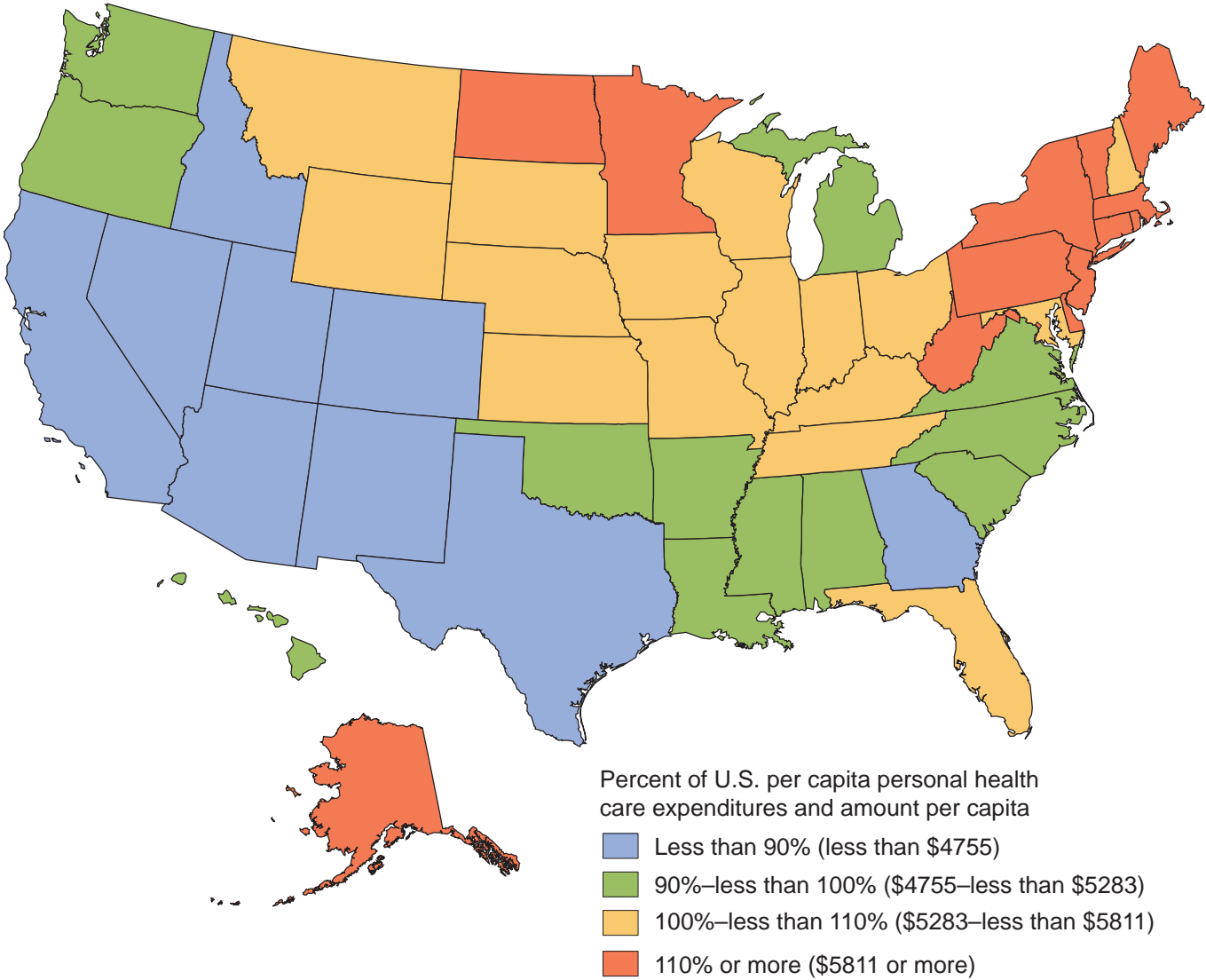
differences in Medicaid spending (2). Variations in the level of expenditures in Medicaid publicly-funded health care programs may contribute to these state differences. Medicaid is a joint federal and state program for the poor, and within certain guidelines states determine their own eligibility rules and services covered for Medicaid as well as their payment rates to medical care providers. Consequently, Medicaid expenditures vary widely by state ([Table 150](#)). The pattern of lower expenditures in the Southwest, Rocky Mountains, and Far West regions of the United States is similar to that observed for health insurance coverage with lower rates of health insurance coverage in these regions ([Table 140](#)). People with no health insurance have lower health care expenditures than those who are covered by insurance ([Table 151](#)), adding to state spending differences.

### References

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**Figure 20. Per capita personal health care expenditures, by state of residence: United States, 2004**



NOTE: See [data table for Figure 20](#) for data points graphed and notes.

SOURCE: Centers for Medicare & Medicaid Services.

# Utilization of and Access to Health Care

## Attention-Deficit/Hyperactivity Disorder

*Physician office and hospital outpatient department visit rates for attention-deficit/hyperactivity disorder (ADHD) were about three times higher for boys than for girls age 4–17, and visit rates for both boys and girls increased about 70% between 1996–1998 and 2004–2006.*

Attention-deficit/hyperactivity disorder (ADHD) is a neurobehavioral disorder characterized by pervasive inattention and hyperactivity-impulsivity that is usually diagnosed in childhood (1). Symptoms often occur with other conditions, such as learning disabilities, anxiety disorders, and oppositional defiant disorder (2). Children with ADHD often have trouble in school and with peer and family relationships (3). ADHD can persist into adulthood, and adolescents and adults with ADHD have a higher prevalence of substance abuse disorders, risky sexual behavior, and a history of accidents (2). Although the causes of ADHD are not fully understood, there appears to be a strong genetic component to development of the disorder (3).

In 2003, one study found that 8% of U.S. children age 4–17 years had ever been diagnosed with ADHD, with boys having more than twice the rate of girls (11% versus 4%) (1). Prevalence estimates of ADHD in the United States vary widely though the pattern of increased prevalence among boys is consistently found (2).

Management of ADHD includes psychosocial interventions—such as parent and school-based interventions—and pharmaceutical management (3). The most commonly used medications are stimulants (3). About 4% of U.S. children age 4–17 years or 56% of those ever diagnosed with ADHD were taking medication to treat ADHD in 2003 (1). High prescription medication use and the need for behavioral interventions among children with ADHD lead to frequent interaction with the health care system.

From 1996–1998 to 2004–2006, visits to physician offices and hospital outpatient departments for which ADHD was the primary diagnosis at the visit increased from 5.4 visits to 9.2

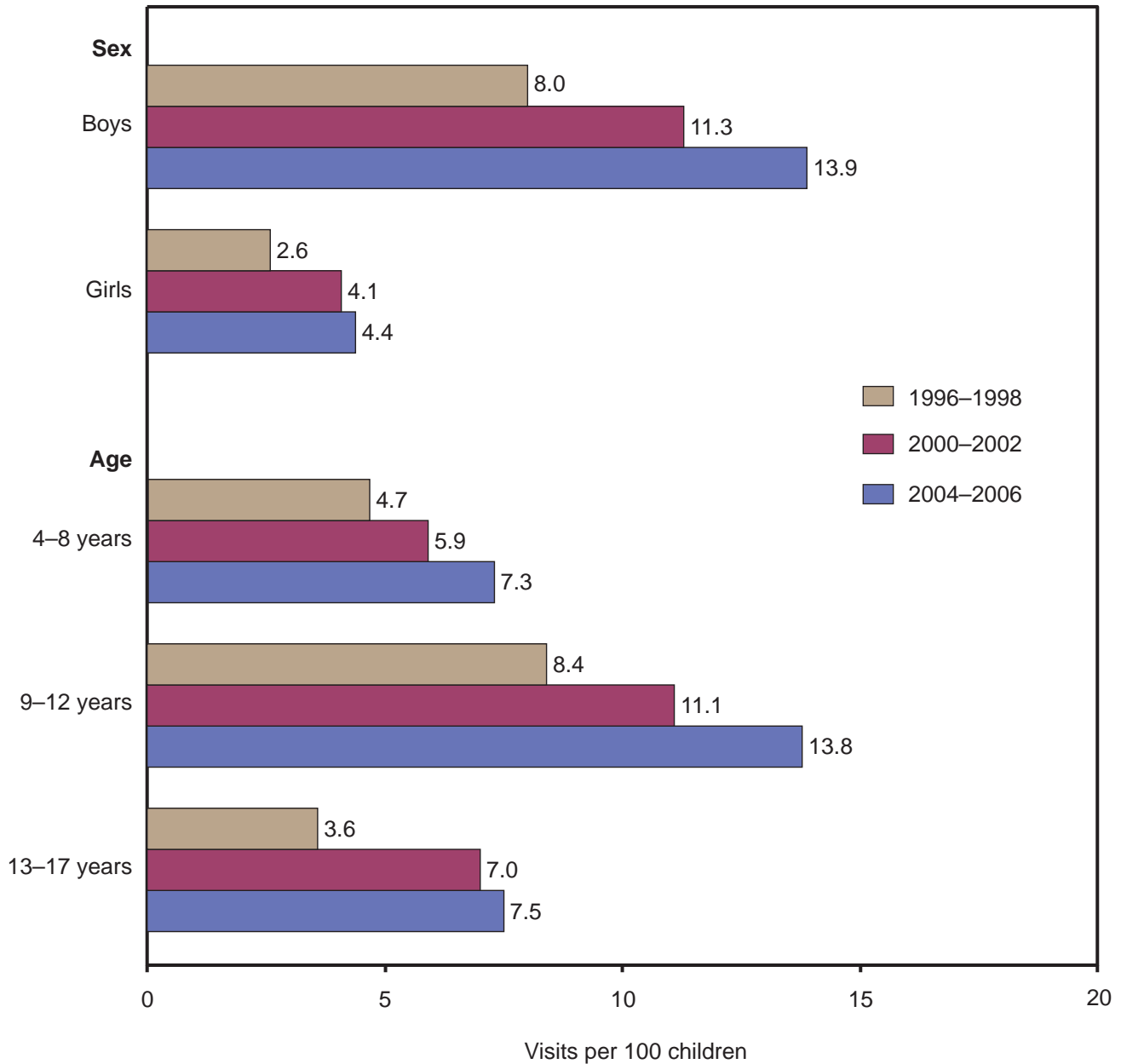
visits per 100 children age 4–17 years (data table for Figure 21). Over this same period, among boys, ADHD visits increased from 8.0 to 13.9 visits per 100 children and among girls, from 2.6 to 4.4 visits per 100 children (Figure 21).

The highest rates of ADHD visits were among children 9–12 years of age (Figure 21). Visits in this age group increased from 8.4 to 13.8 visits per 100 children from 1996–1998 to 2004–2006 (Figure 21). Increases were seen in all children age 4–17 years over this time period (Figure 21). The reasons for these increases are not well understood, although increased availability and acceptability of pharmaceuticals to treat ADHD, as well as access to special education services due to coverage of ADHD under the Individual Disability Education Act of 1990 (ADHD was not included in the list of covered services until 1991), may have led to heightened awareness and acceptability of the diagnosis (4).

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**Figure 21. Visits to physician offices and hospital outpatient departments for attention-deficit/hyperactivity disorder (ADHD) among children 4–17 years of age, by sex and age: United States, 1996–2006**



NOTES: ADHD visits were identified by a primary diagnosis ICD–9–CM code of 314.00 or 314.01. See [data table for Figure 21](#) for data points graphed, standard errors, and additional notes.

SOURCES: CDC/NCHS, National Ambulatory Medical Care Survey and National Hospital Ambulatory Medical Care Survey.

## Principal Reasons for Emergency Department Visits

*The most frequently reported principal reasons given by adults for visiting the emergency department (ED) in 2006 were stomach and abdominal pain, chest pain, headache, and cough.*

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Hospital emergency departments (EDs) provide unscheduled care for a wide variety of reasons that range from life-threatening conditions to nonurgent problems that could be treated in a primary care setting. Over the past two decades, there has been an increasing demand for emergency services, resulting in ED overcrowding and ambulance diversions (1,2). In 2006, 119.2 million visits (40.5 visits per 100 persons) were made to emergency departments, a 24% increase over the 96.5 million visits made in 1995 (Table 94). Between 1995 and 2006, the overall ED utilization rate increased by 10%, from 36.9 to 40.5 visits per 100 persons. During the same period, the number of hospital emergency departments decreased about 9% (1).

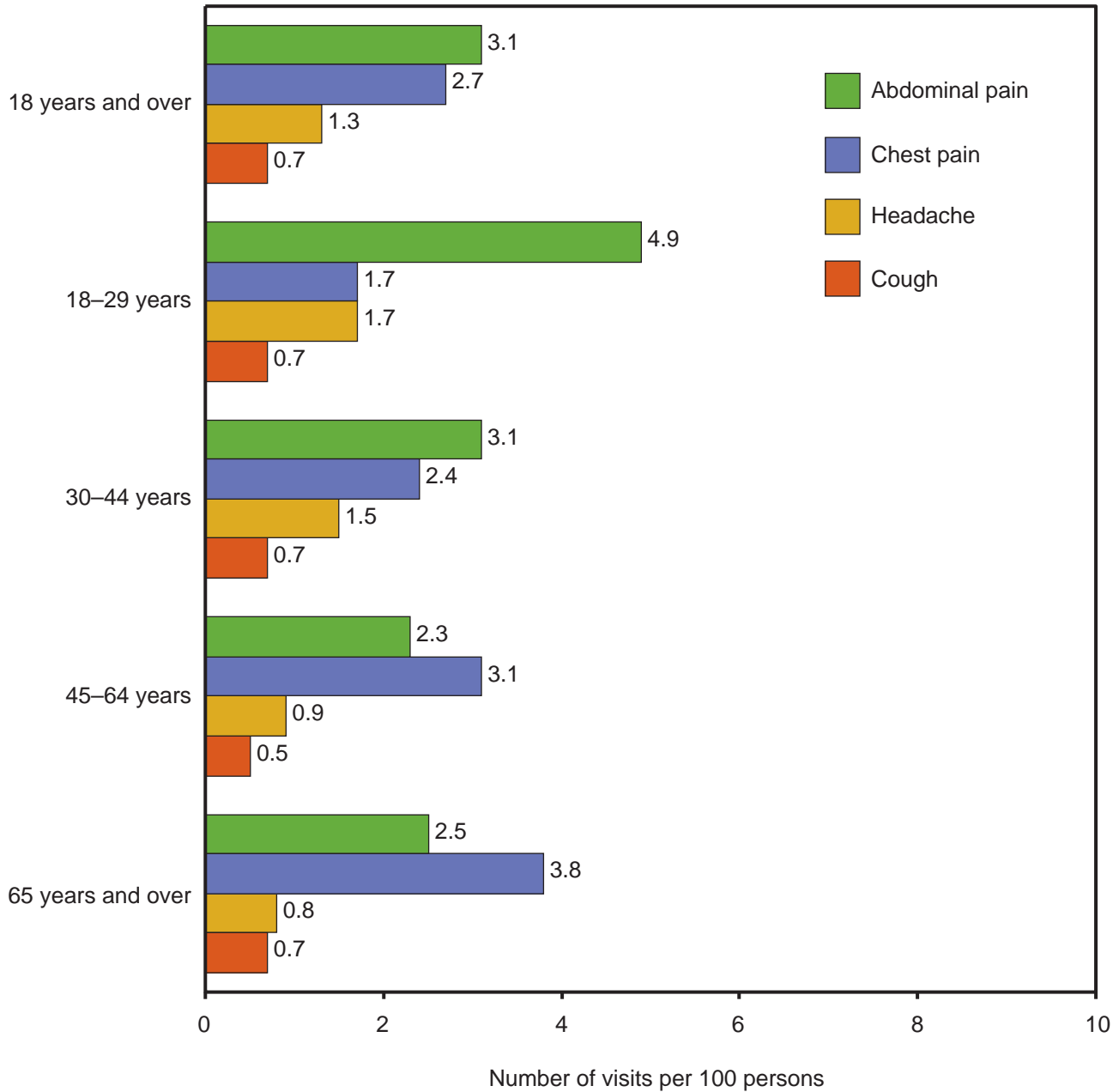
The National Hospital Ambulatory Medical Care Survey (NHAMCS) collects data on the utilization and provision of ambulatory care services in hospital emergency departments. The patient's main complaint, symptom, or other reason for visiting the ED was coded according to A Reason for Visit Classification for Ambulatory Care (RVC) coding typology (3). In 2006, the most frequently reported principal reasons given by adults 18 years of age and over for visiting the ED were stomach and abdominal pain, chest pain, headache, and cough. Together these four principal reasons for ED visits accounted for almost one-fifth of all ED visits by adults in 2006 (4).

Among adults, the principal reasons for visiting the ED varied by age (Figure 22). Chest pain was the most frequently reported reason by adults 65 years of age and over. For young adults 18–29 years of age, abdominal pain was the most frequently reported principal reason for visiting the ED. Younger adults came into the ED for headaches more frequently than older adults. In contrast, fever, which was not a common reason for visit among adults, was the most common reason among children (data table for Figure 22).

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**Figure 22. Selected principal reasons for emergency department visits among adults 18 years of age and over, by age: United States, 2006**



NOTE: See [data table for Figure 22](#) for data points graphed, standard errors, and notes.

SOURCE: CDC/NCHS, National Hospital Ambulatory Medical Care Survey.

## Dental Visits for Teeth Cleaning

*In 2003–2004, 61% of people 2 years of age and over reported having their teeth cleaned by a dentist or dental hygienist within the past year.*

Regular dental visits are important for early diagnosis, prevention, and treatment of oral diseases, as well as assessment of self-care practices. The American Academy of Pediatric Dentistry emphasizes the importance of initiating professional oral health intervention in infancy and continuing through adolescence and beyond (1,2). People who have their teeth cleaned by a dental professional at least once a year are less likely to have plaque, gingivitis, and calculus than people reporting less frequent visits (3). The recommended frequency of professional teeth cleaning depends on the health of an individual's teeth and gums. Healthy children and adults should have their teeth cleaned at least once every 12–24 months (4).

In the 2003–2004 National Health and Nutrition Examination Survey (NHANES), respondents were asked how long it has been since they had their teeth cleaned by a dentist or dental hygienist. This analysis includes those with at least one natural tooth.

Sixty-one percent of persons 2 years of age and over reported having a dental cleaning in the past year (Figure 23). Females were more likely than males to have had their teeth cleaned in the past year (65% compared with 57%). Children 2–17 years of age were more likely than adults to have their teeth cleaned in the past year (79% compared with 51%–65%). Older adults 65 years of age and over were more likely to have their teeth cleaned than younger adults 18–44 years old. One-third of persons 75 years of age and over and one-fourth of persons 65–74 years old were edentulous (without any teeth); they were excluded from the denominators of percentages.

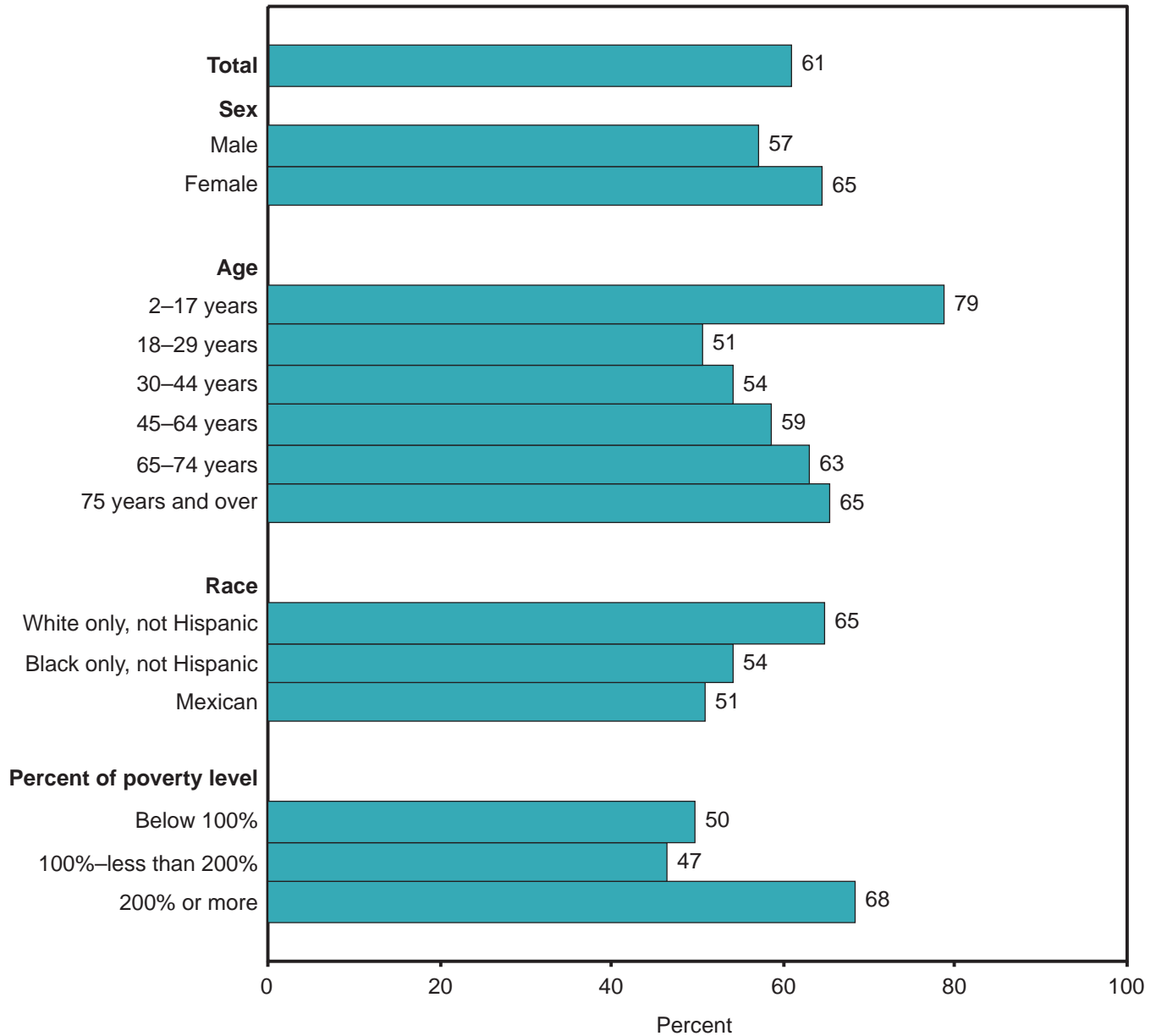
Professional teeth cleaning varied substantially by family income and race and ethnicity. Non-Hispanic white people were more likely to see a dental professional for a cleaning in the past year than non-Hispanic black or Mexican-origin people (Figure 23). People with a family income of at least 200% of poverty were more likely to have had a dental visit for cleaning in the past year than people living below 200% of poverty (68% compared with 47%–50%). People 2 years of age and over living in families with family income below

200% of poverty were more than twice as likely to report delaying visits to dentists due to cost (16%–17% for people living in families with family income below 200% of poverty compared with 7% for family income of 200% of poverty or more) (5).

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**Figure 23. Dental visits for teeth cleaning by a dentist or dental hygienist in the past year among persons 2 years of age and over, by selected characteristics: United States, 2003–2004**



NOTE: See [data table for Figure 23](#) for data points graphed, standard errors, and notes.

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey.

## Influenza and Pneumococcal Vaccination Among Middle-age and Older Adults

*Between 1989 and 2006, influenza and pneumococcal vaccination levels increased substantially but differences by age remain.*

Vaccination of persons at risk for complications from influenza is a key public health strategy for preventing morbidity and mortality in the United States. In the United States, annual epidemics of influenza occur typically during the winter season (1). It is estimated that during 1990–1999, approximately 36,000 of the respiratory and circulatory deaths that occurred each year were associated with influenza (1). During 1979–2001, an estimated 226,000 of the primary respiratory and circulatory hospitalizations that occurred each year on average were associated with influenza (2).

In April 2000, the Advisory Committee on Immunization Practices (ACIP) recommended that all adults 50 years of age and over receive an annual influenza vaccination (3). In response to the unexpected shortfall in the 2000–2001 and 2004–2005 influenza vaccine supply, the ACIP and the Centers for Disease Control and Prevention modified the universal recommendation for influenza vaccination among adults 50 years of age and over, and established vaccine priority groups. These groups included persons 65 years of age and over, and children and adults with chronic underlying health conditions (4,5).

Between 1989 and 1997, influenza vaccine coverage among persons living in the community tripled for adults 50–64 years of age and approximately doubled for adults 65 years of age and over (Figure 24). Between 1997 and 2004, influenza vaccine coverage remained essentially stable. As a result of the 2004–2005 influenza vaccine shortage, 2005 estimates of vaccine coverage decreased among adults 50–64 years, 65–74 years, and 75–84 years of age and were unchanged among adults 85 years of age and over. In 2006, influenza vaccine coverage generally returned to the 2004 level. Influenza vaccine coverage increases with older age; persons 85 years of age and over were twice as likely as those 50–64 years of age to have had a vaccination in the past 12 months in 2006.

Pneumococcal infection is a serious disease that kills more people in the United States each year than any other vaccine-preventable bacterial disease (6). Each year in the United States, pneumococcal infection causes an estimated 40,000 deaths with the highest mortality rates among older persons and those with underlying medical conditions. A one-time pneumococcal polysaccharide vaccine has been recommended by the ACIP for all adults 65 years of age and over since 1997.

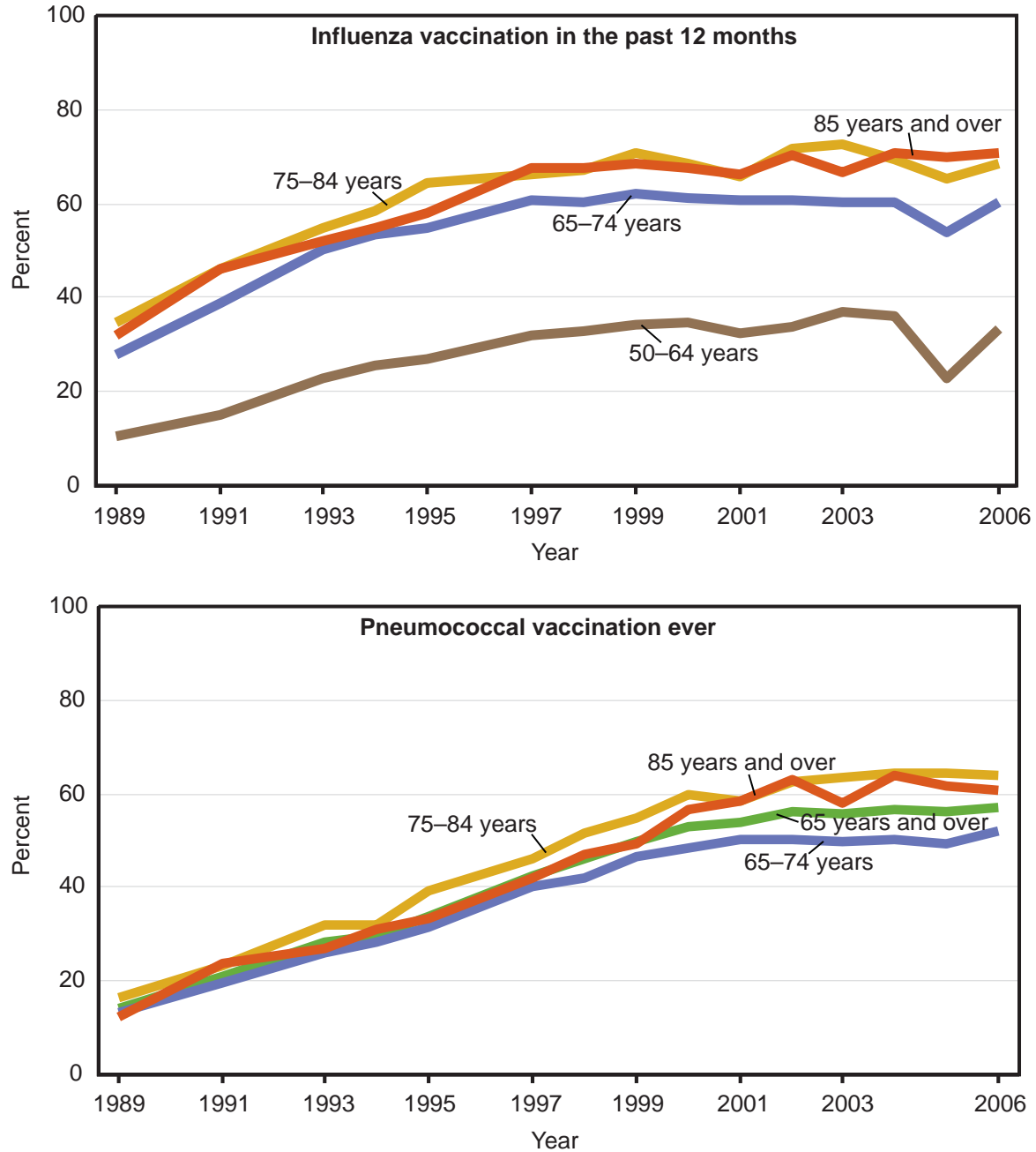
Between 1989 and 2002 the percentage of non-institutionalized adults 65 years of age and over who reported ever having received a pneumococcal vaccination increased from 14% to 56% and then remained level through 2006 (Figure 24). Pneumococcal vaccination coverage has remained consistently below that of influenza vaccination coverage. Pneumococcal vaccination rates were lower among adults 65–74 years of age than for older adults, and at a similar level among adults 75–84 years and 85 years of age and over.

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**Figure 24. Influenza and pneumococcal vaccination among middle-age and older adults, by age: United States, 1989–2006**



NOTES: In 1997, the Advisory Committee on Immunization Practices recommended universal pneumococcal vaccination for adults 65 years of age and over; and in 2000, they recommended universal influenza vaccination for adults 50 years of age and over. See [data table for Figure 24](#) for data points graphed, standard errors, and additional notes.

SOURCE: CDC/NCHS, National Health Interview Survey.

## Pneumonia Hospitalizations Among Older Adults

*Between 1979–1980 and 2005–2006, rates of hospitalizations with any-listed pneumonia diagnosis nearly doubled among persons 65 years of age and over.*

Pneumonia deaths among older adults have declined markedly in the United States during the 20th century, but pneumonia remains an important cause of morbidity and mortality (1). In 2005, there were 54,000 pneumonia deaths among adults 65 years of age and over (2). Because pneumonia is one of the serious complications of influenza, annual influenza vaccination of adults age 50 and over is an important component of pneumonia prevention efforts (3, Figure 24, Table 87). Research also suggests that efforts to prevent pneumonia include controlling preventable comorbid health conditions such as chronic cardiac or pulmonary disease and diabetes (4).

Any-listed pneumonia hospitalizations are defined as those for which pneumonia was listed as any of the seven possible discharge diagnoses collected in the National Hospital Discharge Survey (see Appendix II, Table X for ICD–9–CM codes). This includes hospitalizations to treat community-acquired pneumonia in addition to hospitalizations during which pneumonia developed (nosocomial or hospital-acquired pneumonia). Any-listed pneumonia discharge rates measure the overall burden of pneumonia diagnosis and treatment during hospitalization.

Between 1979–1980 and 2005–2006, any-listed pneumonia discharge rates per 10,000 population nearly doubled among persons 65–74 years and increased more than 70% among persons 75–84 years and 85 years of age and over (Figure 25). By contrast, hospitalization rates for all causes among persons 65–84 years of age increased between 1979–1980 and 1983–1984, when Medicare initiated prospective payment for inpatient hospital services based on diagnosis-related groups (DRGs), and then declined and leveled off (data table for Figure 25). Among persons 85 years of age and over, hospitalization rates for all causes also increased from 1979–1980 until 1983–1984 and then declined only briefly before increasing to approximately pre-DRG levels.

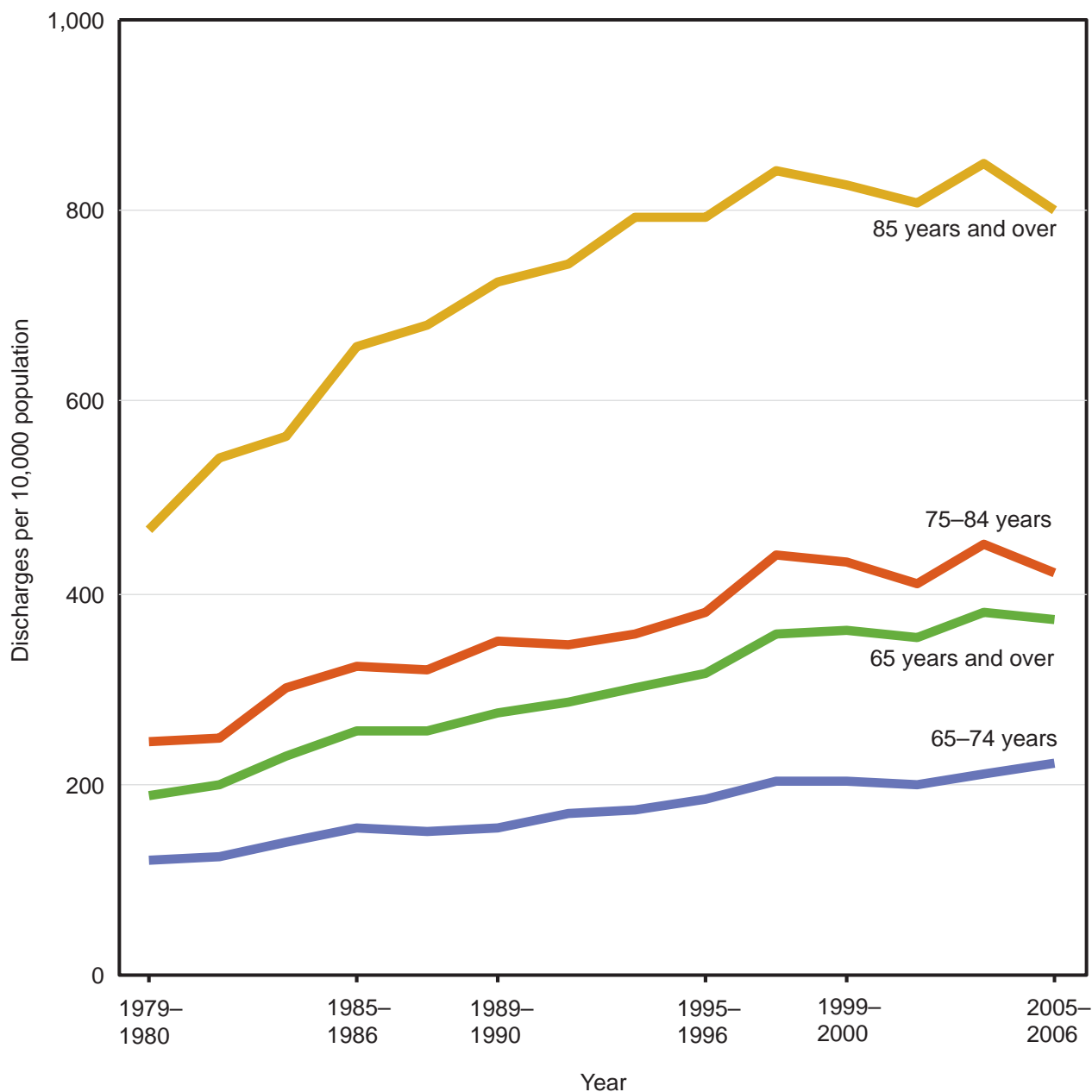
Hospital discharge rates for any-listed pneumonia diagnosis increase with age among older persons (Figure 25). In 2005–2006, the any-listed pneumonia hospitalization rate among persons 85 years of age and over was more than three times that among persons 65–74 years of age.

Between 1979–1980 and 2005–2006, the share of all hospitalizations among persons age 65 years and over with an any-listed pneumonia diagnosis doubled (data table for Figure 25). In 2005–2006, pneumonia was listed as one of the seven possible discharge diagnoses for 9% of all hospital discharges among persons 65–74 years, 10% among persons 75–84 years, and 14% among persons 85 years of age and over.

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**Figure 25. Any-listed pneumonia discharges from nonfederal short-stay hospitals among persons 65 years of age and over, by age: United States, 1979–2006**



NOTES: Any-listed pneumonia discharges include ICD–9–CM codes 480–486, 487.0 as any of up to seven discharge diagnoses. See [data table for Figure 25](#) for data points graphed and additional notes.

SOURCE: CDC/NCHS, National Hospital Discharge Survey.

## Cesarean Delivery

*Cesarean delivery rates increased by 45% between 1996 and 2005 among young women 18–29 years of age, the age group that accounts for the largest proportion of births in the United States.*

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The rate of cesarean delivery (c-section) has reached the highest point ever recorded in the United States. In 2006, the (preliminary) cesarean rate increased to 31.1 per 100 live births (1). After declining somewhat in the early and mid-1990s among women under 45 years of age, cesarean delivery rates have increased steadily since 1997. Among women 45 years of age and over, although c-section rates were consistently much higher than rates for younger women, rates fluctuated from 1990–1998, rose sharply from 1998–2002 and again fluctuated slightly during 2002–2005. By 2005, the c-section rate among women 45 years of age and over was nearly double the rate in 1990.

Cesarean delivery rates increased with increasing maternal age. Among women ages 45 years and older, the rate was more than twice that of women 18–29 years of age in 2005 (Figure 26). The higher cesarean delivery rates for older mothers in more recent years may be related to increased rates of multiple births in part due to the use of assisted reproductive technologies, their higher rates of complications during labor, and patient or practitioner concerns (2,3). Researchers have found that cesarean delivery for the diagnoses of failure to progress and fetal distress was more frequent in older women (2).

In 2005, 59% of all births and 68% of first births in the United States occurred among young women 18–29 years of age (4). With the recent steep rise in the cesarean rate among this age group (from 18.5 per 100 live births in 1996 to 26.8 in 2005), total cesarean rates are likely to rise further, as the overwhelming majority of women who have a first cesarean go on to have repeat cesareans with subsequent births (4).

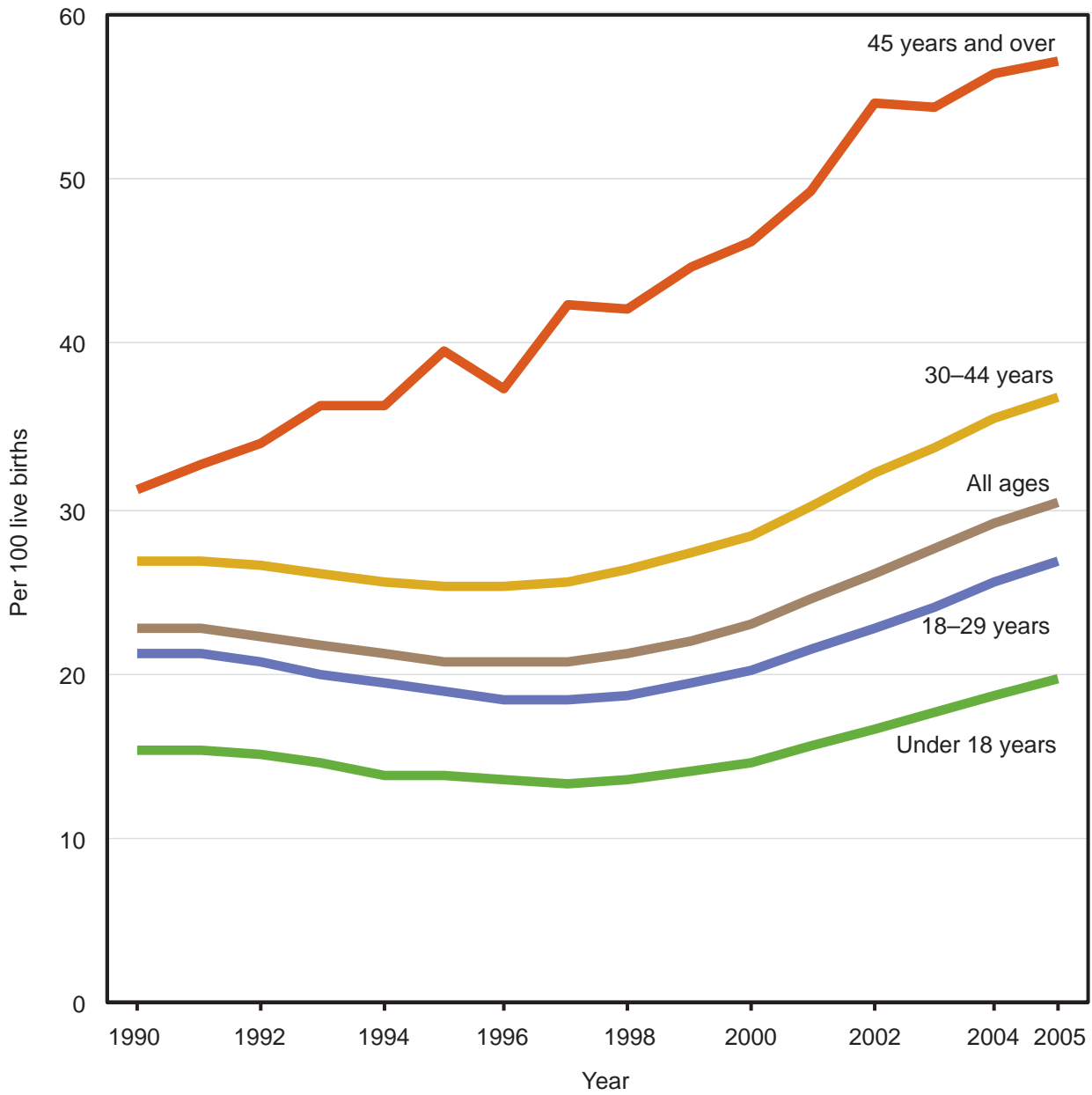
Cesarean section is recommended when vaginal delivery might pose a risk to the mother or baby. Some cesarean deliveries are elective (no medical indication). The risks, benefits, and long-term consequences of cesarean delivery, especially for cesarean delivery with no medical or obstetrical indication are the subject of intense debate (5). A National Institutes of Health expert panel recently acknowledged a lack of national data or other studies on mothers' preferences and

recommended against cesareans that are not medically indicated for women desiring several children, and for pregnancies of less than 39 weeks of gestation (3).

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**Figure 26. Cesarean delivery rates by maternal age: United States, 1990–2005**



NOTE: See [data table for Figure 26](#) for data points graphed and notes.

SOURCE: CDC/NCHS, National Vital Statistics System.

# Special Feature: Young Adults Age 18–29 Years

## Introduction

*The period from age 18–29 years is a transitional period in terms of education, marital status, family structure, and employment; and a critical time when many behaviors and risk factors are established that will affect health status later in life.*

The period from age 18–29 years is a period of transitions. Age 18 is often considered the advent of legal “adulthood.” Upon reaching age 18, young people can, with a few exceptions, vote, drive an automobile, marry without parental consent, be employed for pay, and in almost all but a few states enter into binding contracts. They can join the military and obtain credit (and debt) in their own names. They are tried and sentenced in criminal cases as adults. They can consent to medical procedures without parental consent or legal interference. At age 18 young adults can legally have consensual sex. By age 19 they can buy cigarettes and by age 21, young adults can legally buy and consume alcohol.

Yet the period starting with age 18 and spanning into the late twenties is also often considered just the beginning of a transition to adulthood, when young people seek to obtain financial and emotional independence (1,2). Financial and other support services previously provided to children by government-sponsored social programs, such as food assistance, Medicaid, State Children’s Health Insurance Programs (SCHIP), or school programs are reduced or terminated, often abruptly, as they age out of the programs. In addition, during this period young adults often transition from financial and other support, such as health insurance coverage, previously provided by parents. As parental and other adult oversight decreases, young people assume increasing responsibility for their own decisions. This includes decisions that will either directly affect their current and future health status—such as alcohol, cigarette, and illicit drug use or nonuse; sexual activity; childbearing; exercise; and eating habits—as well as decisions that will indirectly affect their future health. These decisions include whether to pursue higher education, which helps to determine future income; whether to work and type of employment, which is highly

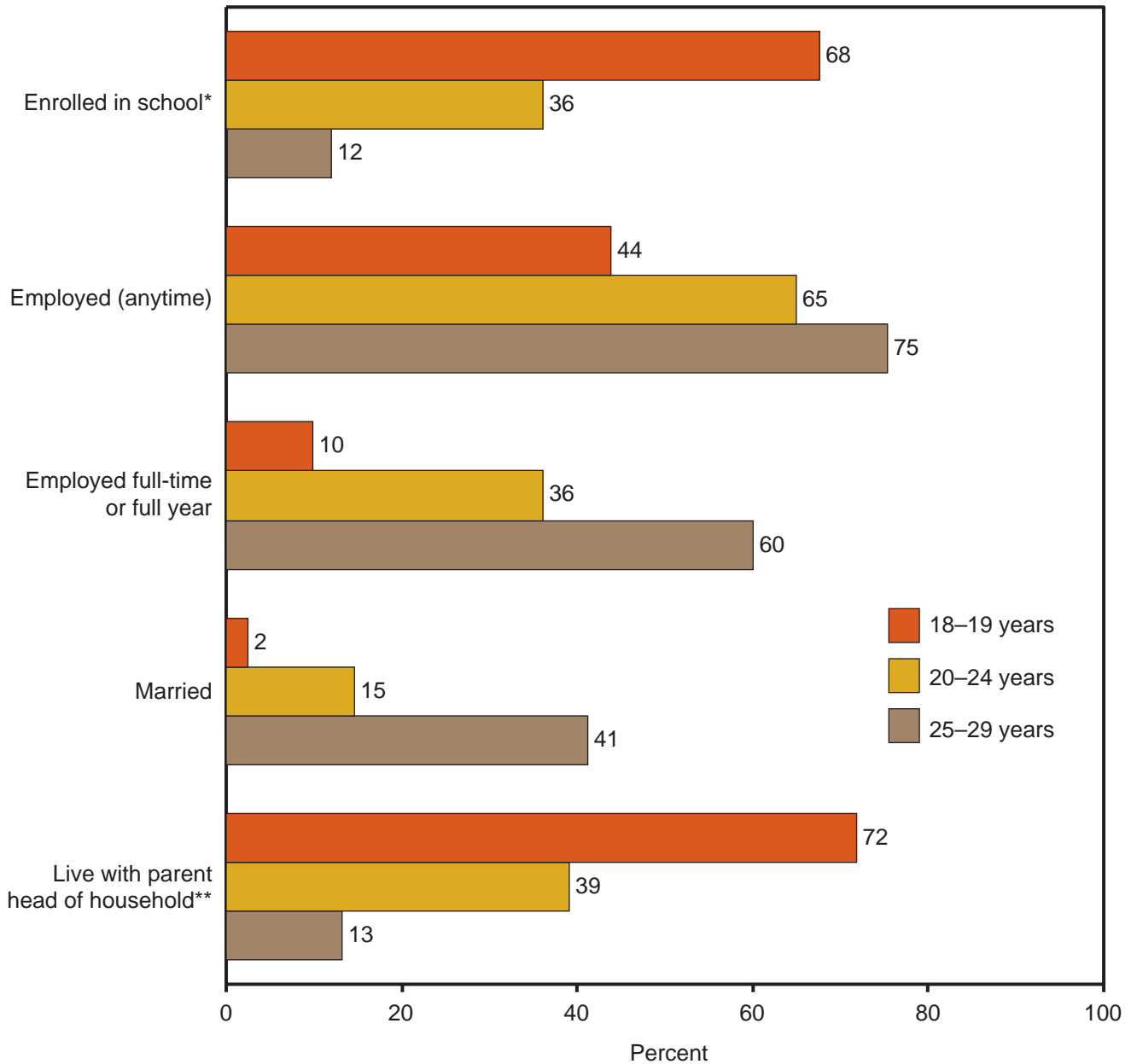
correlated with having health insurance coverage; whether to marry and/or to have children; and other decisions that help determine future income and lifestyle as well as affect the well-being of their families.

In 2007, the estimated 51 million people age 18–29 years, defined in this report as young adults, made up about 17% of the total resident population (3). About 49 million were in the civilian, noninstitutionalized population with the remainder in the group quarter population, including those living in college dormitories, military barracks, and prisons and jails (4, Table 2).

Like the rest of the United States population, the population age 18–29 is becoming more racially and ethnically diverse (5, Figure 2). The racial and ethnic composition of a population group has important consequences for health because many risk factors and diseases differ by race and ethnicity. Almost 19% of young adults are of Hispanic origin, compared with about 15% of the entire population (data table for Figure 27; Figure 2). The percentage of young adults who were not born in the United States is also increasing. A large number of foreign-born young adults are not naturalized citizens. Noncitizen foreign-born persons are disproportionately low income and uninsured (6). Additionally, noncitizen status affects access to government-sponsored social and health insurance programs. In 2007, 12% of young adults, 42% of Hispanic young adults, and 39% of Asian young adults were not citizens (7).

Young adults of both sexes are increasingly postponing marriage. In 1980, the median age at first marriage was 24.7 for men and 22.0 for women; by 2006 the median age had increased to 27.5 years for men and 25.5 years for women (8). In 2007, less than 3% of young adults age 18–19 were married and living with their spouse, increasing to 15% at age 20–24 years (Figure 27). By age 25–29 years, 41% were married (36% of men and 47% of women) (data table for Figure 27). This represents a substantial decline from 1980 when 62% of men and 70% of women age 25–29 years were married (9). Marriage rates also vary by race and ethnicity. In 2007, 9% of non-Hispanic black men 18–29 years of age were married compared with 21% of non-Hispanic white men, and 24% of Hispanic men. Differences by race and ethnicity are even larger for young adult women—in 2007, 12% of non-Hispanic black women, 30% of non-Hispanic white women, and 37% of Hispanic women age 18–29 years were married (data table for Figure 27).

**Figure 27. Selected characteristics of young adults 18–29 years of age, by age: United States, 2007**



NOTES: \* Data for enrollment as of 2005.  
 \*\* Data for 2006. See [data table for Figure 27](#) for data points graphed and additional notes.

SOURCE: U.S. Census Bureau, Current Population Survey.

## Introduction *(Continued)*

Investment in postsecondary (past high school) education and training programs has been shown to be correlated with increased future income and more stable employment patterns (10). Decisions about postsecondary education—particularly college enrollment—are usually made between the ages of 18–24. Family income, and race and ethnicity can be influential in decisions about life course, particularly education and employment. College enrollment for all races, ethnicities, and income groups has increased over time (Figure 28). Young women are more likely to be enrolled in college than young men, and this gender enrollment gap has widened over time (11). College enrollment rates (immediately following high school graduation) also vary by family income. High school graduates from wealthier families are considerably more likely to be enrolled than poorer graduates, although college attendance for all income groups has increased over time (12). Among high school graduates in the bottom 20% of family income, college enrollment rates increased from 33% in 1980 to 54% in 2005; and for high school graduates in the highest 20% of family income college enrollment rates increased from 65% to 81% over the same time period.

In 2005, two-thirds of young adults 18–19 years of age, one-half of 20–21 year-olds, more than one-quarter of 22–24 year-olds, and 12% of 25–29 year-olds were enrolled in school (of any type) (data table for Figure 28). Many more young adults under age 25 are enrolled in school than in past years, but the percentage of those 25–29 years of age enrolled in school has not increased substantially since 1980. Asian young adults are more likely than young adults in other racial and ethnic subgroups to be enrolled in school, especially those 20 years of age and over (data table for Figure 28).

As college enrollment rates have increased, there has been a corresponding decrease in high school status dropout rates (the percentage of 16–24 year olds who were not enrolled in high school and who lack a high school credential), from 14% in 1980 to 9% in 2005 (13). High school dropouts have lower earning potential and are more likely to be unemployed, or incarcerated, than high school graduates. In 2005, 22% of Hispanic youth age 16–24 years were considered dropouts compared with 10% of non-Hispanic black youth and 6% of non-Hispanic white youth.

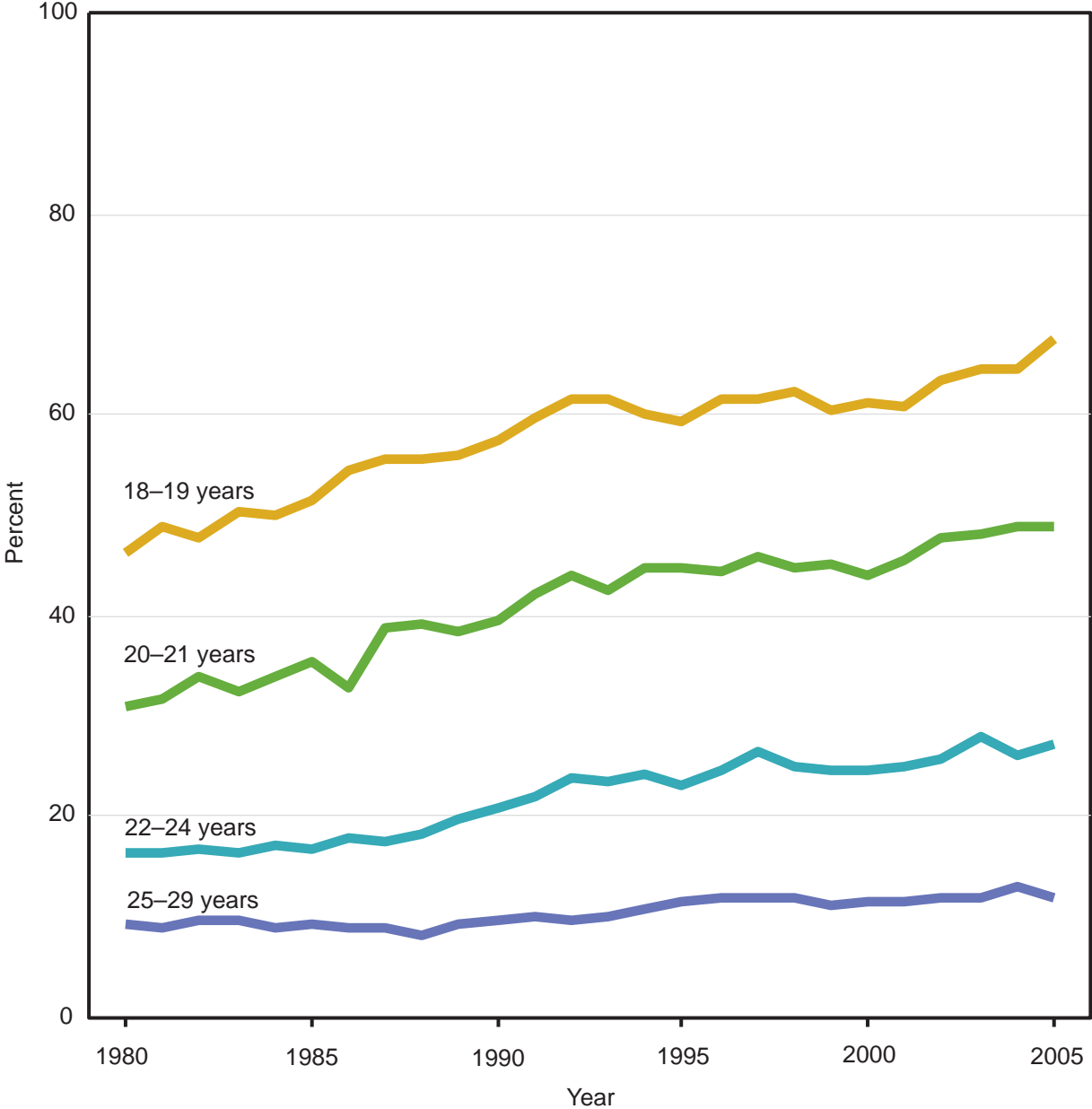
Most young adults 18–29 years of age are employed for pay (about 66%) but only 42% are employed full-time, year round (data table for Figure 27). Full-time employment is a major source of private employer-sponsored health insurance coverage, although health insurance offerings vary widely by industry and firm size, and firms with a larger share of younger workers are less likely to offer health insurance than firms with a smaller share of younger workers (14). Young adults are less likely to be employed in firms that offer such insurance than are older adults. Hispanic males are the most likely young adult group to be employed full-time for a full year (58%), and young women of all races are less likely than young men of all races to be employed full-time (data table for Figure 27).

Young people who are neither working nor in school are considered to be at risk for future lower earnings and poverty, because they are neither investing in their education nor gaining work experience. In 2006, 13% of youth age 18–19 were disengaged (15). Non-Hispanic black and Hispanic youth age 16–19 are more likely to not be working and not in school than non-Hispanic white or Asian youth, and youth from poor and near poor families are more likely to be neither working nor in school than those from wealthier families.

Residents of prisons or jails are considered part of the civilian institutionalized population and thus not part of the labor force. Prisons are disproportionately, and increasingly, populated by young adults age 18–29 years. Between 1999 and 2006 there was a 15% increase in the number of young adult men, and a 25% increase in the number of young adult women in jail or prison (Table 2). Black young adults are particularly likely to be incarcerated. In 2006, about 5% of non-Hispanic black men age 18–19 years, 11% age 20–24 years, and 12% age 25–29 years were in prison or jail, compared with less than 2% of non-Hispanic white men and about 4% of Hispanic men in those age groups (Table 2).



**Figure 28. School enrollment of young adults 18–29 years of age, by age: United States, 1980–2005**



NOTE: See [data table for Figure 28](#) for data points graphed and notes.

SOURCE: U.S. Census Bureau, Current Population Survey.

## Introduction (Continued)

Young adults take many paths to independence. The paths they take are strongly influenced both by their environment and their families' income. Young adults today have more choices (or more perceived choices) about what course to pursue after age 17 than in past generations. They increasingly postpone marriage, and are more likely to experience a nonmarital birth. Today, young adults take many different, and often nonlinear, routes to adulthood and financial independence, with alternating periods of school and employment (or both school and employment, or neither), and moving in and out of their childhood homes and other living arrangements. As young adults become more independent, schools and family members become increasingly less influential in young adults' decision-making.

The remainder of this Special Feature (Figures 29–41) focuses on the health of young adults and the factors that influence it, and on their access to and utilization of health services. Poverty and nonmarital childbearing can delay education and delay or precipitate employment, and rates vary by age and race/ethnicity (Figures 29 and 30). Smoking and heavy drinking, use of illicit drugs, sexually transmitted diseases, and forced sexual activity are common risk factors during this life period and may have lasting effects on health (Figures 31–34). Although they are healthier than older adults, young adults are still subject to chronic diseases, activity limitations, and death, and need health care for various reasons (Figures 35–37 and 40–41). However, they are the age group least likely to have health insurance (Figure 38), and when they do need health care, they experience problems accessing the health care system (Figure 39). In addition to the data provided in the Special Feature, data on young adults age 18–29 are included along with data for other age groups in the first section of the Health, United States Chartbook, including data on overweight and obesity (Figure 7), leisure-time physical activity (Figure 8), principal reason for emergency department visits (Figure 22), dental cleanings (Figure 23), and cesarean section hospitalization rates (Figure 26).

The period between ages 18 and 29 sets the foundation for future health behaviors and health status, and may be the time in life when health education and preventive care may arguably have their greatest impact. Finding ways to target health education programs among this diverse group, however, is challenging.

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## Poverty and Low Income

*One-half of black and Hispanic young adults live below 200% of the poverty line, compared with less than one-third of white and Asian young adults.*

Most 18-year olds are starting on their path to independent living with few skills and little job experience. They often start out with low (or no) income, with the hope that their education—for those who receive postsecondary education—will enable them to obtain better paying jobs, or that employment experience will increase their earnings over time. Young adults age 18–24 years are most likely of all people age 18 and over to have family income that classifies them as below the poverty threshold, or to be near poor (defined as 100%–less than 200% of the poverty threshold) (1). More than one-third of young adults 18–29 years (36%) were poor or near poor in 2004–2006 (data table for Figure 29). The group age 18–24 years is more likely to be poor or near poor (38%) than those age 25–29 years (33%).

The distribution of family income for young adults by race and ethnicity mirrors the distribution of income for the whole population by race and ethnicity (Figure 5). There is also evidence that children's subsequent economic position is heavily influenced by the economic position of their parents (2). About 12% of all Americans live below the poverty threshold and 18% are near poor, compared with 16% of young adults who are poor and 20% who are near poor (data tables for Figures 5 and 29). Even if young adults are not living with parents, their families often provide financial assistance, with wealthier families providing more economic support than less wealthy families (3).

Education is a major path out of poverty and near poverty status (4). Simulations of lifetime earnings estimate that people with no high school degree earn an average of \$18,900 per year over their lifespan, \$25,900 for those with a high school diploma, \$45,400 for those with bachelor's degrees, and \$99,300 for those with professional degrees (earnings are in constant 1999 dollars). Men of all ages, however, earn more than women at each education level. Average earnings also vary by race and ethnicity, with non-Hispanic white adults earning more than non-Hispanic black or Hispanic adults at almost every educational attainment level (4).

With the exception of young Asian adults, young adult women are more likely to live in poverty than are young adult men in each racial and ethnic group (Figure 29). This relationship holds even though young women are more likely to graduate from high school and to attend college (5). Among racial and ethnic groups examined, non-Hispanic black women (31%) were the most likely of the young adult groups to be poor, followed by Hispanic women (25%). Non-Hispanic white and non-Hispanic Asian women were significantly less likely to be poor (15%) (Figure 29).

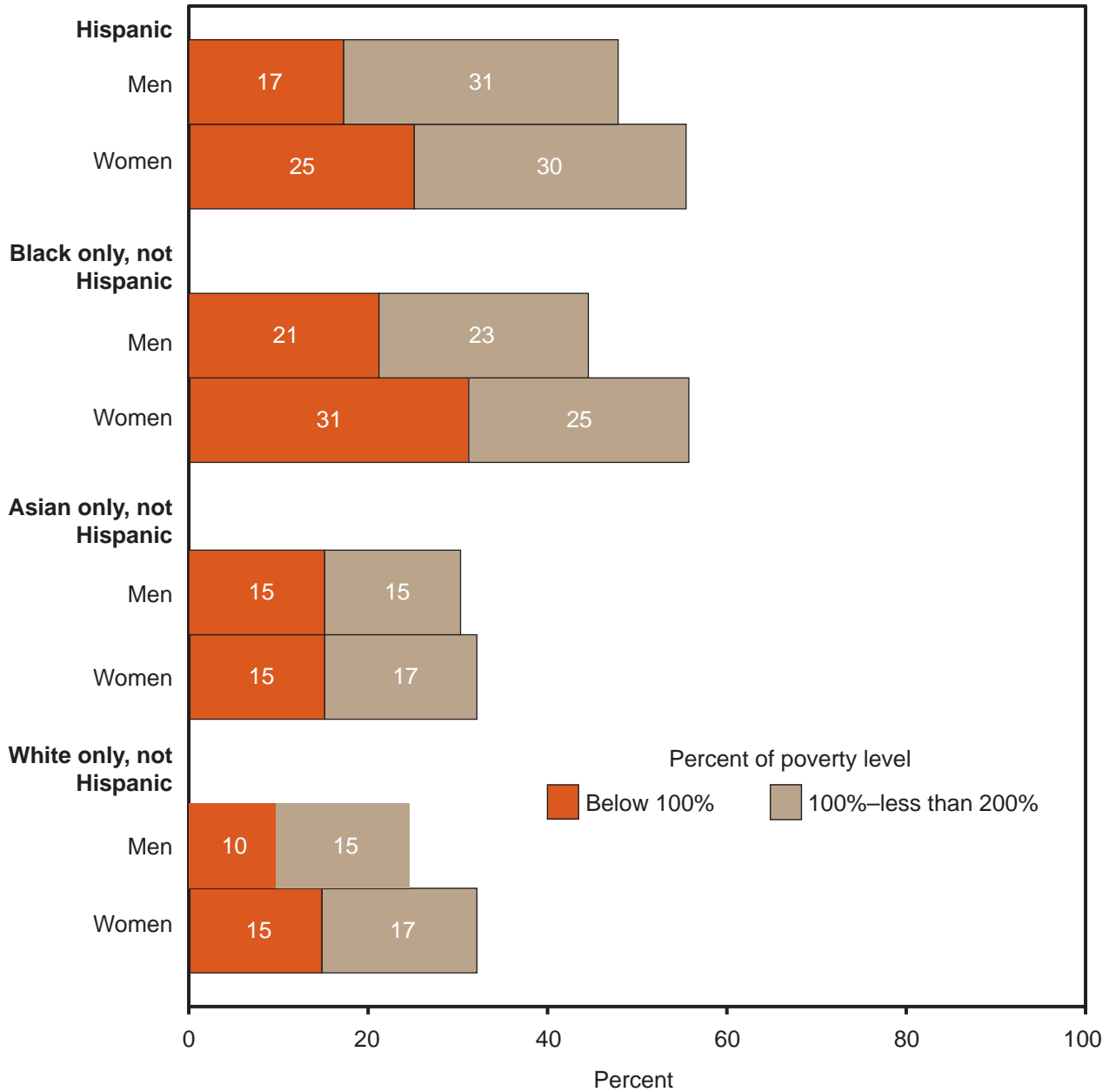
High school dropouts are disproportionately represented in the prison population and prison stays may also impact future employment and income opportunities (6–8). Forty percent of state prison inmates and one-quarter of federal inmates did not have a high school degree or its equivalent (7).

Differentials in wages by race and ethnicity also contribute to higher poverty rates among black and Hispanic young adults, compared with non-Hispanic white and Asian young adults (9). A gap in earnings by gender across racial and ethnic group persists, but has been narrowing (10). In addition, nonmarital childbearing is associated with lower earnings (11). These three factors combined help to explain higher poverty rates among non-Hispanic black and Hispanic young adult women (Figure 30).

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**Figure 29. Low income among young adults 18–29 years of age, by sex, race and Hispanic origin: United States, 2004–2006**



NOTE: See [data table for Figure 29](#) for data points graphed and notes.

SOURCE: U.S. Census Bureau, Current Population Survey.

## Poverty and Low Income *(Continued)*

### References—*Continued*

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## Births to Unmarried Women

*Young adult non-Hispanic white women have considerably lower nonmarital birth rates than black or Hispanic young adult women.*

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Unmarried mothers and their children are more likely to be disadvantaged and have a generally less favorable health status than married mothers and children, even when differences in age and education are taken into account. Women who have nonmarital births have lower educational attainment and lower income, are less likely to work full-time, and are more likely to receive public assistance (1–3). They are twice as likely to smoke while pregnant and, among mothers age 20 years and over, about twice as likely to have a low birthweight baby (3). Low birthweight is a major correlate of infant illness and mortality.

Between 1990 and 2005, the proportion of births that are to unmarried women was highest for women under age 20. Between 1990 and 2005, the proportion of births to unmarried women rose from 66% to 84% for women age 18 years, from 58% to 77% for women age 19, from 37% to 56% for women age 20–24, and from 18% to 29% for women age 25–29. Proportionally, the increase in the share of births to unmarried women was greater for women 25–29 (63%) and women 20–24 (52%) than for women age 19 (33%) and women age 18 (26%). The proportion of births that are to unmarried women is a function both of decreasing birth rates among married women and of increasing birth rates among unmarried Hispanic women of all age groups and unmarried non-Hispanic white women in their twenties.

Birth rates for unmarried women varied considerably by age as well as by race and ethnicity. In 2005, the highest birth rate for unmarried women was among women 20–24 years of age (74.9 per 1,000 women) and the second highest was among women age 25–29 years (71.1 per 1,000 women). The lowest nonmarital birth rate among young adults was among teenagers, 18–19 years (58.4 per 1,000 women). Rates for nonmarital births among all other age groups were lower (5).

Among young adult women, nonmarital birth rates and patterns differ markedly by race and Hispanic origin (Figure 30). Non-Hispanic white women have considerably lower nonmarital birth rates than black or Hispanic women in all three age groups (18–19, 20–24, and 25–29 years). In

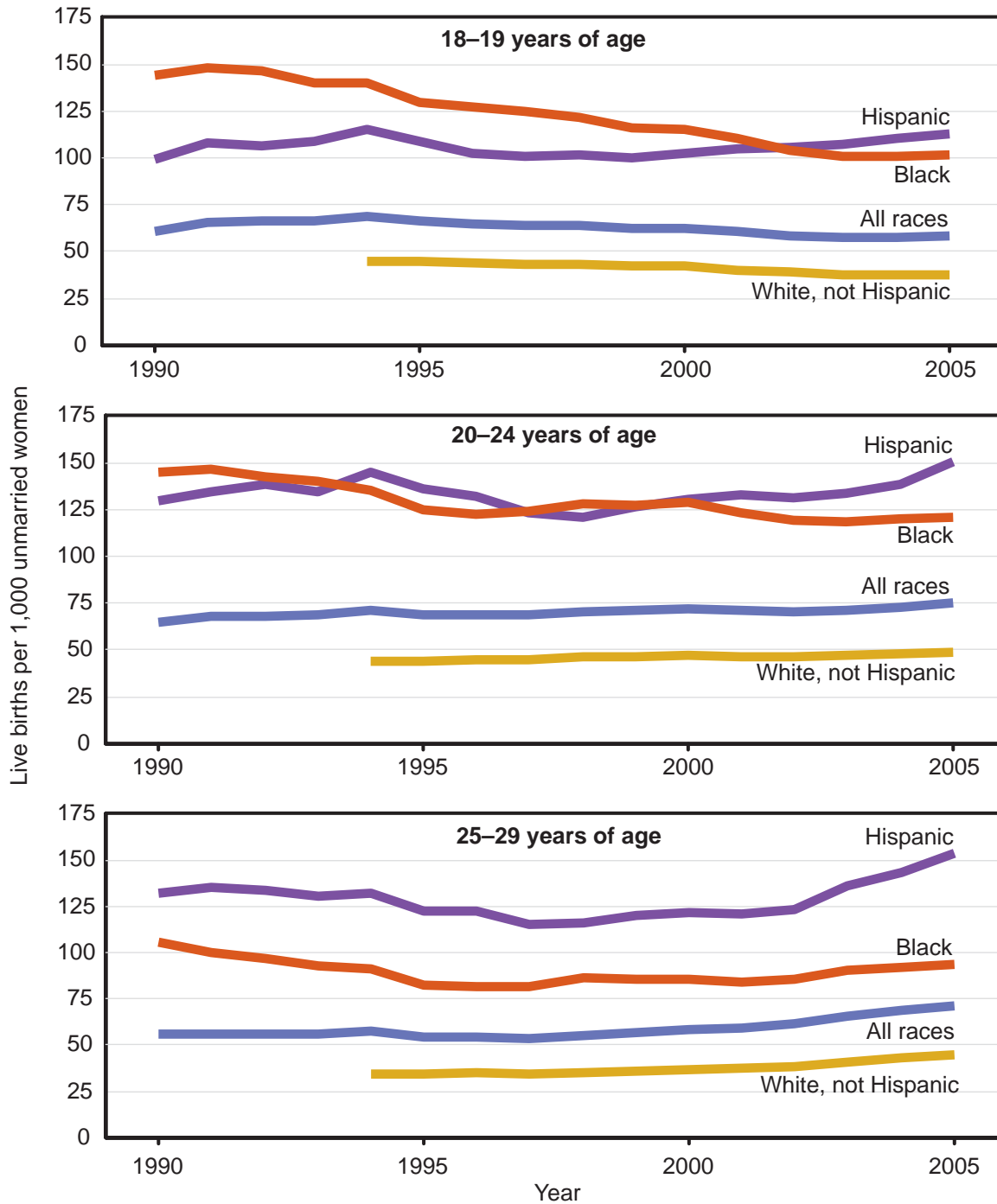
2005, Hispanic women had higher nonmarital birth rates than black or non-Hispanic white young women in all three age groups, although the difference between black and Hispanic young women age 18–19 years was relatively small.

Trends in nonmarital birth rates for young non-Hispanic white women have been relatively stable since 1990. Among unmarried Hispanic women, birth rates have fluctuated somewhat but have been increasing since the late 1990s. For black women, 18–19 years of age, nonmarital birth rates declined by 29% between 1990 and 2005. They had higher nonmarital birth rates than their Hispanic counterparts until 2002, when the ongoing decline resulted in the rate dropping below that of Hispanic women age 18–19 years.

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**Figure 30. Live birth rates for unmarried women 18–29 years of age, by age, race and Hispanic origin: United States, 1990–2005**



NOTES: Data are not available for non-Hispanic white women for 1991–1993. Data for states in which marital status was not reported have been inferred from other items on the birth certificate and included with data from states reporting marital

status. Persons of Hispanic origin may be of any race. See [data table for Figure 30](#) for data points graphed.

SOURCE: CDC/NCHS, National Vital Statistics System.



## Cigarette Smoking and Alcohol Use

*Between 1997 and 2006, the prevalence of cigarette smoking and alcohol consumption among young adults 18–29 years of age remained unchanged.*

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By age 19, young adults can legally purchase tobacco in all 50 states, and by age 21 they can legally purchase alcohol, although under-age use of both of these products is apparent (Tables 66 and 67). Since 1964, the Surgeon General's reports on smoking and health have concluded that tobacco use is a major cause of disease, disability, and death (1). Alcohol use contributes to increased mortality from alcohol-related unintentional injuries, including motor-vehicle crashes while under the influence of alcohol (2). Some drinking patterns—particularly regular heavy alcohol consumption and drinking 5 or more drinks in one day—can have both acute and chronic detrimental effects on health (3).

Smoking among young adults continues to be a public health concern. In 2006, young adult men were 37% more likely to smoke cigarettes than young adult women (29% compared with 21%) (Figure 31). Between 1997 and 2006, the current smoking rate declined nearly 20% among young adult women but did not decline significantly among young adult men (Figure 31). Among young adult women, the decline was primarily among women 18–24 years of age (data table for Figure 31).

Although recent research has shown a consistently higher rate of at-risk drinking behaviors, including heavy drinking and binge drinking, among college students than among their nonstudent counterparts, the differences in rates between these two groups are not large (4). Trends in heavy drinking remained constant for both men and women during the period, with about 6%–8% of young men and 3%–5% of young women reporting heavy drinking (Figure 31). Heavy drinking is defined as more than 14 drinks per week for men and more than seven drinks per week for women, on average.

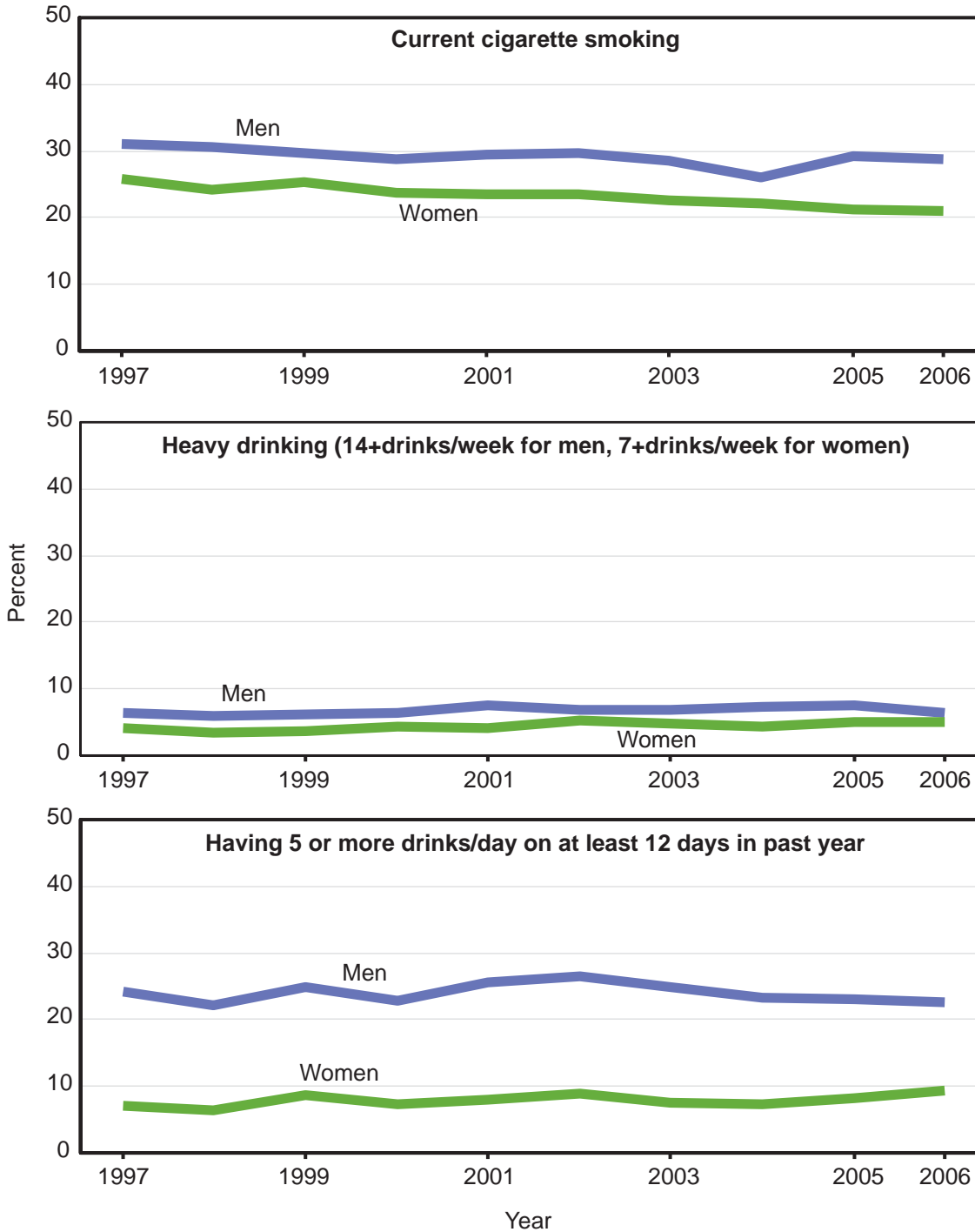
Having 5 or more drinks in a day on at least 12 days in the past year typically peaks during young adulthood (Table 69). Between 1997 and 2006, about one-quarter of young men 18–29 years of age reported having 5 or more drinks in a day on at least 12 days in the past year (Figure 31). During the period, the percentage of young women reporting this

level of drinking (7%–9%) was substantially lower than that reported by young men.

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**Figure 31. Cigarette smoking and alcohol use among young adults 18–29 years of age, by sex: United States, 1997–2006**



NOTE: See [data table for Figure 31](#) for data points graphed, standard errors, and additional notes.

SOURCE: CDC/NCHS, National Health Interview Survey.

## Illicit Drug Use

*Almost 40% of young adults 18–20 years of age, about one-third of 21–25 year-olds, and one-quarter of 26–29 year-olds reported using an illicit drug in the past year.*

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Use of illicit drugs, such as heroin, marijuana, cocaine, and methamphetamine, or nonmedical use of prescription drugs such as pain relievers, tranquilizers, stimulants, and sedatives, can be associated with serious consequences. These include injury, illness, disability, and death as well as crime, domestic violence, and lost school or workplace productivity (1,2). Long-term consequences, such as chronic depression, sexual dysfunction, and psychosis as well as drug use disorders may also result from drug use (2,3).

The National Survey on Drug Use & Health asks noninstitutionalized civilians age 12 and over about their use of illicit drugs, alcohol, tobacco, and other substances. Illicit drug use includes marijuana or hashish, cocaine including crack cocaine, heroin, inhalants, other illegal drugs used recreationally, and nonmedical use of prescription medications, whether obtained legally or illegally.

Recent use of illicit drugs (in the month prior to interview) among young adults 18–29 years of age decreases sharply with age (Figure 32). In 2006, nearly one-quarter (22%) of 18–20 year-olds compared with 18% of 21–25 year-olds, and 14% of 26–29 year-olds reported illicit drug use in the past month. Recent use of illegal drugs was at its highest level among persons 18–20 years of age. Levels among this age group were higher than among teenagers under age 18 or persons age 30 and over (3).

Illicit drug use in the past year followed a similar pattern by age to use in the past month. In 2006, almost 40% of young people age 18–20, about one-third of 21–25 year-olds, and one-quarter of 26–29 year-olds reported using an illicit drug in the past year.

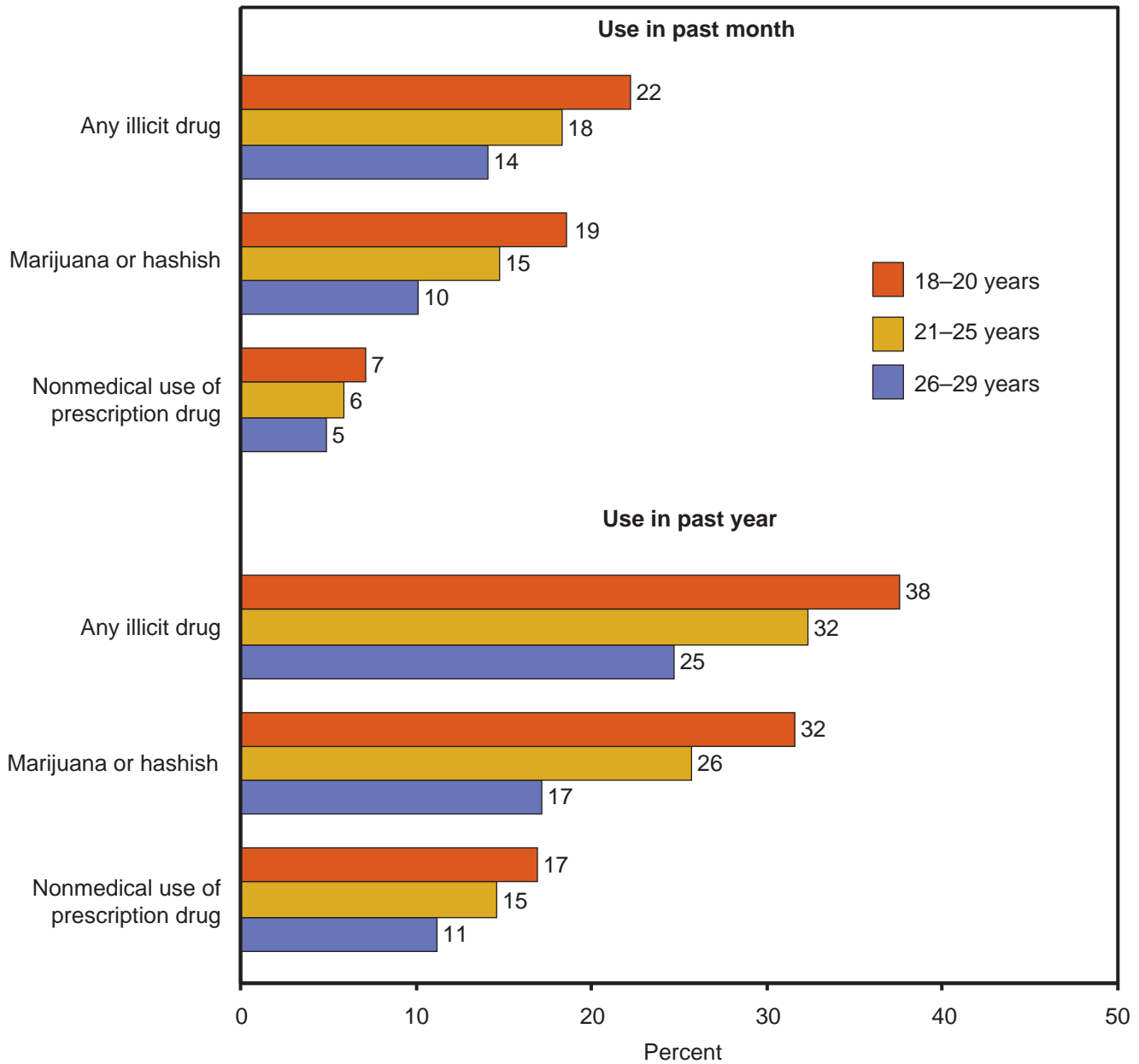
Marijuana or hashish was the most commonly reported illicit drug. Almost one-third of 18–20 year olds reported marijuana use in the past year, and nearly one-fifth in the past month. Fifteen percent of 21–25 year-olds and 10% of 26–29 year-olds also reported marijuana use in the past month (Figure 32). Recent use of marijuana among persons 26–29 years of age was about half that of 18–20 year-olds.

Nonmedical use of prescription drugs was the next most commonly reported illicit drug; this includes pain relievers, tranquilizers, stimulants, and sedatives but not over-the-counter drugs. Eleven to seventeen percent of young adults 18–29 years of age reported using prescription drugs for nonmedical reasons in the past year, as did 5%–7% during the past month (Figure 32).

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**Figure 32. Illicit drug use among young adults 18–29 years of age, by age: United States, 2006**



NOTES: Any illicit drug includes marijuana or hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. Nonmedical use of prescription-type psychotherapeutics includes the nonmedical use of pain relievers, tranquilizers, stimulants, or sedatives and does not include over-the-counter drugs. See [data table for Figure 32](#) for data points graphed, standard errors, and additional notes.

SOURCE: Substance Abuse and Mental Health Services Administration, Office of Applied Studies, National Survey on Drug Use and Health.

## Prevalence of Human Papillomavirus Infection

*Among young women age 20–24 years in the United States, 45% were infected with human papillomavirus in 2003–2004.*

Human papillomavirus (HPV) refers to a group of viruses that includes over 100 different strains or types (1). More than 40 of these viruses are sexually transmitted, and can infect the anogenital area (2). These viruses are classified according to their risk of causing cervical cancer. “High-risk” types, including HPV 16 and HPV 18, are detected in 99% of cervical cancers and can also cause anal and other genital cancers (3). Other strains of HPV, such as HPV 6 and HPV 11, are classified as “low-risk” types and can cause mild Pap test abnormalities and genital warts (4). About 1% of sexually active adolescents and adults had clinically apparent genital warts in 2003 (3).

Approximately 6.2 million people are newly infected with HPV annually (5). It is estimated that by age 50, at least 80% of women will have acquired HPV (1). The majority of infections are transient—70% of new HPV infections clear within 1 year and approximately 90% clear within 2 years (3). Persistent infection with the high-risk types of HPV affects only a small proportion of women but is the main risk factor for cervical cancer (1). In 2003, cervical cancer incidence in the United States was 8.1 per 100,000 women representing approximately 11,820 new cases (3).

Most cases of HPV infection are asymptomatic and cause no disease. A subset of infections result in subclinical disease, detected by either an abnormal Pap test or by visual discovery of anogenital warts (1). A DNA test to detect infection with any of 13 high risk types of HPV is approved by the FDA for women with mild Pap test abnormalities, or women older than 30 years, but currently, no test exists for HPV detection in men (1).

The prevalence of HPV infection is higher among young women, with the highest prevalence in women age 20–24 years (6). Using data from the laboratory component of the 2003–2004 National Health and Nutrition Examination Survey, 45% of women age 20–24 years tested positive for HPV infection (Figure 33). Women age 25–29 years had a prevalence of 27% (Figure 33). Non-Hispanic black women

age 20–29 years had a prevalence of HPV infection of 47% compared with 30%–33% among Mexican and non-Hispanic white women (Figure 33). Women with family income below 100% of poverty had a higher prevalence compared with higher income groups (46% compared with 31%–38%) (Figure 33).

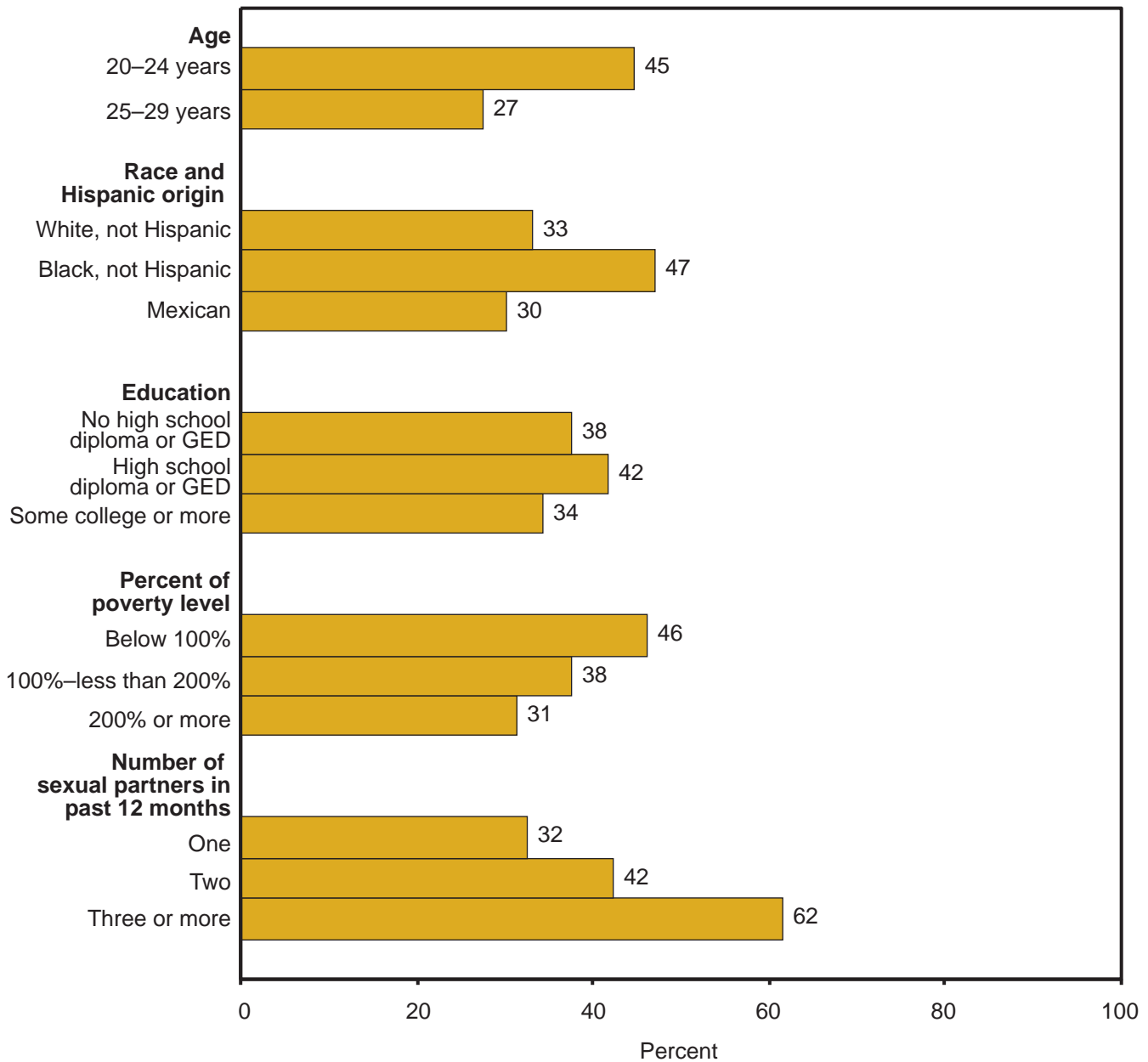
Because HPV is spread by sexual contact, the number of sexual partners is the most consistent risk factor for HPV infection (3). In 2003–2004, 62% of women age 20–29 years who had three or more sexual partners in the past year were positive for HPV compared with 32% of women who had one partner in the past year (Figure 33).

In June, 2006, a vaccine to protect against four different strains of HPV (6,11,16, and 18) was approved by the U.S. Food and Drug Administration for females age 9–26 years (3). The Advisory Committee on Immunization Practices recommends routine vaccination of females age 11–12 years, and catch-up vaccination for females age 13–26 years who have not been previously vaccinated (3). Routine cervical screening continues to be recommended among sexually active young women because the vaccine does not prevent all types of HPV that are associated with cervical cancer (3).

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**Figure 33. Prevalence of human papillomavirus (HPV) infection among women 20–29 years of age, by selected characteristics: United States, 2003–2004**



NOTES: Infection determined by DNA extraction from self-collected cervicovaginal swabs. See [data table for Figure 33](#) for data points graphed, standard errors, and additional notes.

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey.

## Forced Sexual Intercourse

*About one-fifth of women 18–44 years of age reported forced sexual intercourse before the age of 30.*

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Forced sexual intercourse may have lasting physical, psychological, and social consequences for its victims. Potential physical effects include gynecological and other injury, infection with a sexually transmitted disease, and unwanted pregnancy. The psychological consequences may include depression, suicidal thoughts, and the adoption of unhealthy behaviors including poor diet, substance abuse, and high-risk sexual behaviors (1–4).

The 2002 National Survey of Family Growth (NSFG) asked women and men age 18–44 if they had ever been forced to have sexual intercourse, and if so, the type of force experienced. Classifying an encounter as forced and identifying the types of force used are subjective, based on the respondent's perception of force. The force may have been from intimidation (due to the perpetrator's size or words), from the use of alcohol or drugs, or due to physical threat, injury, or restraint.

Twenty-three percent of women and about 8% of men 18–44 years of age reported forced intercourse at some time in their lives (5,6). The first incident of forced sexual intercourse for women generally occurs before age 30. Twenty-one percent of women reported forced sexual intercourse before age 30. This may have consequences that affect the young adult years and possibly beyond (7).

Non-Hispanic white or black women 18–44 years of age were more likely than Latinas to report forced sexual intercourse under age 30 (22%–23% compared with 17%). Women with family income below 200% of poverty were more likely than higher income women to report forced sexual intercourse before age 30 (24%–25% compared with 19%).

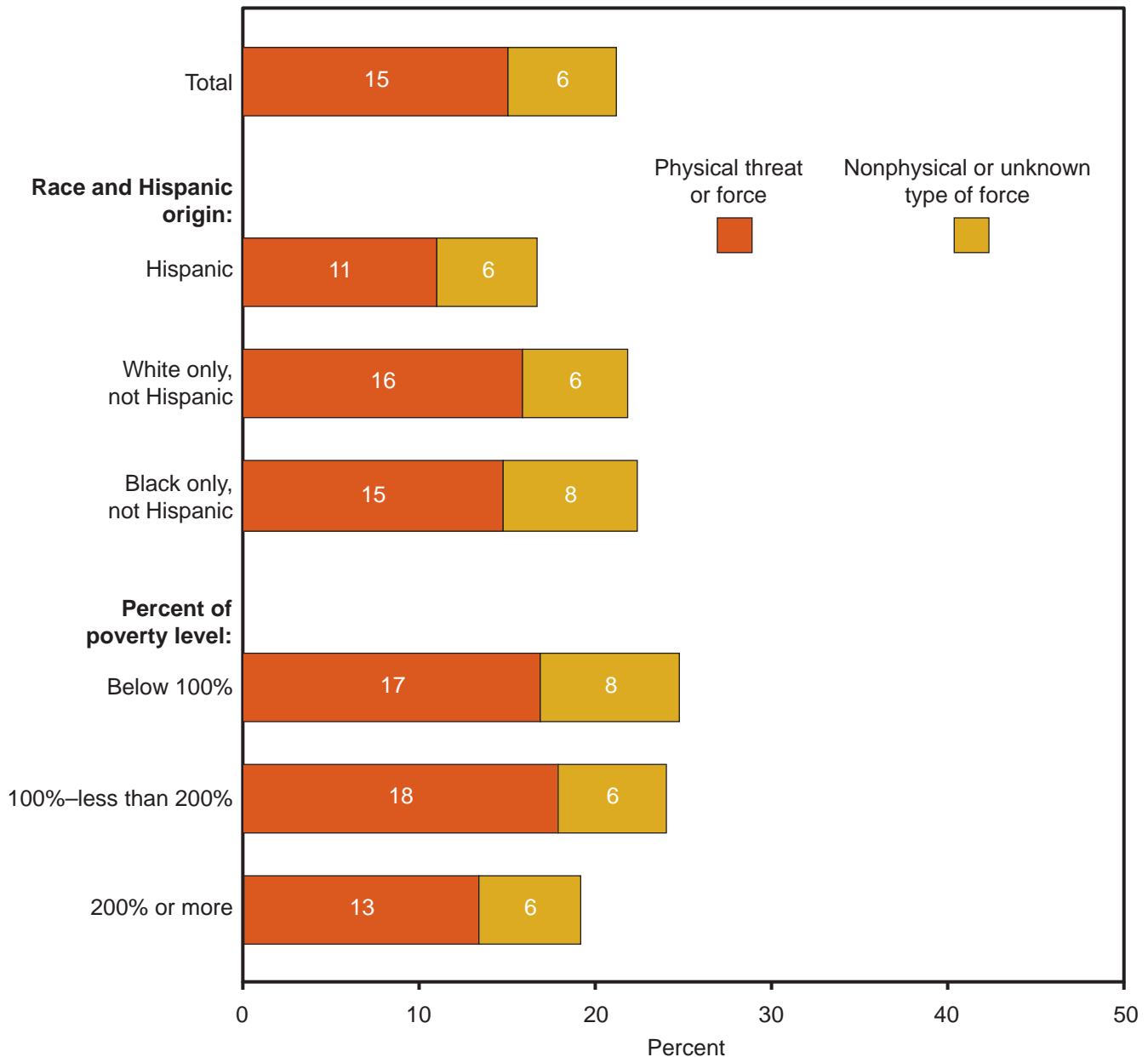
To better understand the nature of forced sexual intercourse, the NSFG included questions designed to capture the nature and degree of force. For the exact wording of the questions, see the [Technical Notes](#). Types of force were grouped into two mutually exclusive categories for [Figure 34](#): physical threat or force (if threats of physical harm, physical harm, or being physically held down were reported) and nonphysical force (only nonphysical types of force or unknown type of force). Fifteen percent of women reported being physically

threatened or forced before age 30 ([Figure 34](#)). Non-Hispanic white or black women were more likely than Hispanic women to report being physically threatened or forced (15%–16% compared with 11%). Women with family income below 200% of poverty were more likely than higher income women to report being physically threatened or forced before age 30 (17%–18% compared with 13%).

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**Figure 34. Any report of forced sexual intercourse before age 30 among women 18–44 years of age at interview, by type of force, race and Hispanic origin, and percent of poverty level: United States, 2002**



NOTES: Based on questions asked of women age 18–44 years at time of interview. Physical threat or force includes threats of physical harm, physical harm, or being physically held down. See [Technical Notes](#) for survey questions. See [data table for Figure 34](#) for data points graphed, standard errors, and additional notes.

SOURCE: CDC/NCHS, National Survey of Family Growth.



## Selected Health Indicators

*Eighteen percent of young women and 12% of young men reported at least one of six selected serious health conditions in 2004–2006, and 4%–5% of young women and young men reported overall fair or poor health or an activity limitation due to a chronic health condition.*

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The young adult years can be challenged by the presence of chronic health conditions, poor overall health, or limitations in usual activity due to the presence of chronic health conditions. The presence of serious physical and mental health conditions among young adults, coupled with the high prevalence of risk factors and unhealthy behaviors, has health and economic implications for successful transition into adulthood (1,2).

Obesity and lack of exercise are risk factors for developing chronic conditions as are unhealthy behaviors such as cigarette smoking, heavy or binge alcohol use, and illicit drug use. The proportion of young adults 18–29 years of age who were obese more than tripled from 8% in 1971–1974 to 24% in 2003–2004 (Figure 7). Nearly two-thirds of young adults did not have regular leisure-time physical activity and three-quarters did not report strength-training at least twice a week (Figure 8). Nearly 30% of young adults were current cigarette smokers, one-fifth reported 5 or more drinks in a day on at least 12 days in the past year, and between one-quarter and one-third of young adults reported using an illicit drug in the past year (Figures 31 and 32).

The health of this age group was assessed in several different ways using data from the National Health Interview Survey. Young adults were asked if they have ever been told by a physician or other health provider that they had any of six specific health conditions (arthritis, current asthma, cancer, diabetes, heart disease, or hypertension. See [Technical Notes](#) for survey questions). Their overall health status was assessed by respondent-report using a scale ranging from excellent to poor. Another series of questions asked the survey respondents about limitations in their ability to perform activities usual for their age group due to a chronic physical, mental, or emotional condition.

Four percent of young adults assessed their current overall health status as fair or poor and five percent reported activity limitation due to a chronic condition (data table for Figure 35). Fifteen percent of young adults reported being told by a

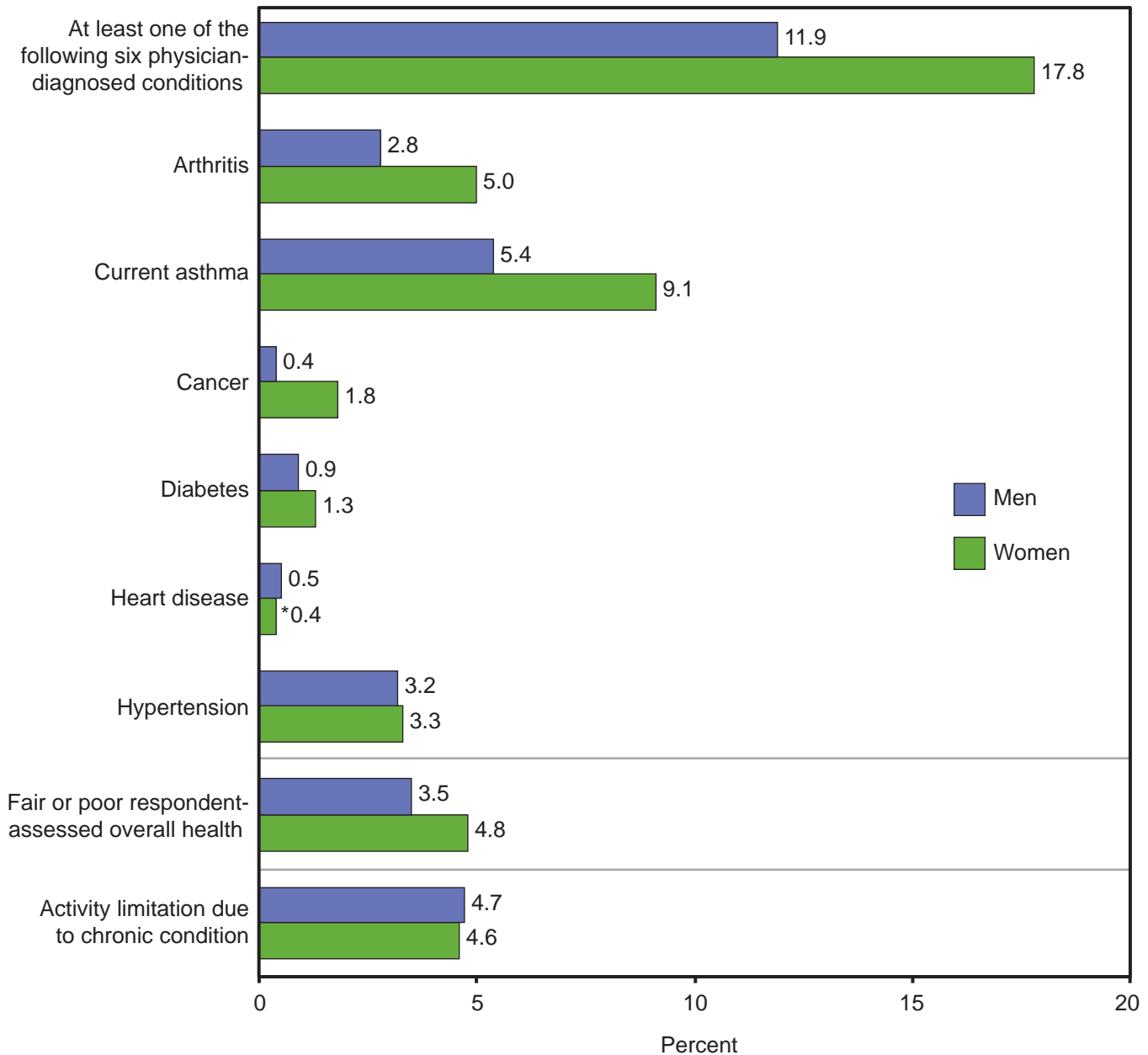
physician that they had at least one of six specified health conditions with a higher prevalence among young adult women compared with young adult men (18% compared with 12%) (Figure 35).

Current asthma was the most commonly reported of the six conditions and was more common among young women than young men (9% compared with 5%) (Figure 35). The second most common condition was arthritis, also more common among young women than men (5% compared with 3%). Hypertension was the third most commonly reported condition, reported by about 3% of young women and young men. About 1%–2% of young women and young men reported cancer, diabetes, or heart disease.

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**Figure 35. Selected physician-diagnosed health conditions, respondent-assessed fair or poor health, or activity limitation due to a chronic condition among young adults 18–29 years of age, by sex: United States, 2004–2006**



\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error of 20%–30%.

SOURCE: CDC/NCHS, National Health Interview Survey.

NOTES: Conditions are physician diagnosed. See [data table for Figure 35](#) for data points graphed, standard errors, and additional notes.

## Selected Mental Disorders

*In 1999–2004, almost 9% of young adults 20–29 years of age had major depression, generalized anxiety disorder, or panic disorder in the past 12 months.*

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The young adult years represent a critical period for identifying mental health problems, because three-quarters of all lifetime cases of diagnosable mental disorders begin by age 24 (1). The range of mental health problems that young adults encounter is generally similar to those of older adults, and includes major depression, panic disorder, and anxiety disorders. These mental health problems can lead to suicide attempts, substance abuse, self-harm, eating disorders, and other behavioral difficulties (2).

Mental health disorders such as major depression rank among the top 10 causes of disability worldwide (3). The category of “selected mental disorders” presented in Figure 36 includes major depressive episode (referred to here as major depression), generalized anxiety disorder, or panic disorder. Major depression is the largest component of this category and is characterized by many different physical and psychological symptoms, including profound sadness, loss of interest or pleasure in activities normally enjoyed, and other symptoms that impair a person’s ability to function. Episodes of major depression may occur suddenly or gradually and usually last several months. It is common for depression to recur and it can take an enormous toll on functional status, productivity, quality of life, and physical health—depression is associated with elevated risk of heart disease and suicide (4). The total economic burden of depression in the United States (including direct care, mortality, and workplace costs) has been estimated at \$83 billion in 2000, with over 60% of the costs resulting from lowered productivity and absenteeism in the workplace (5).

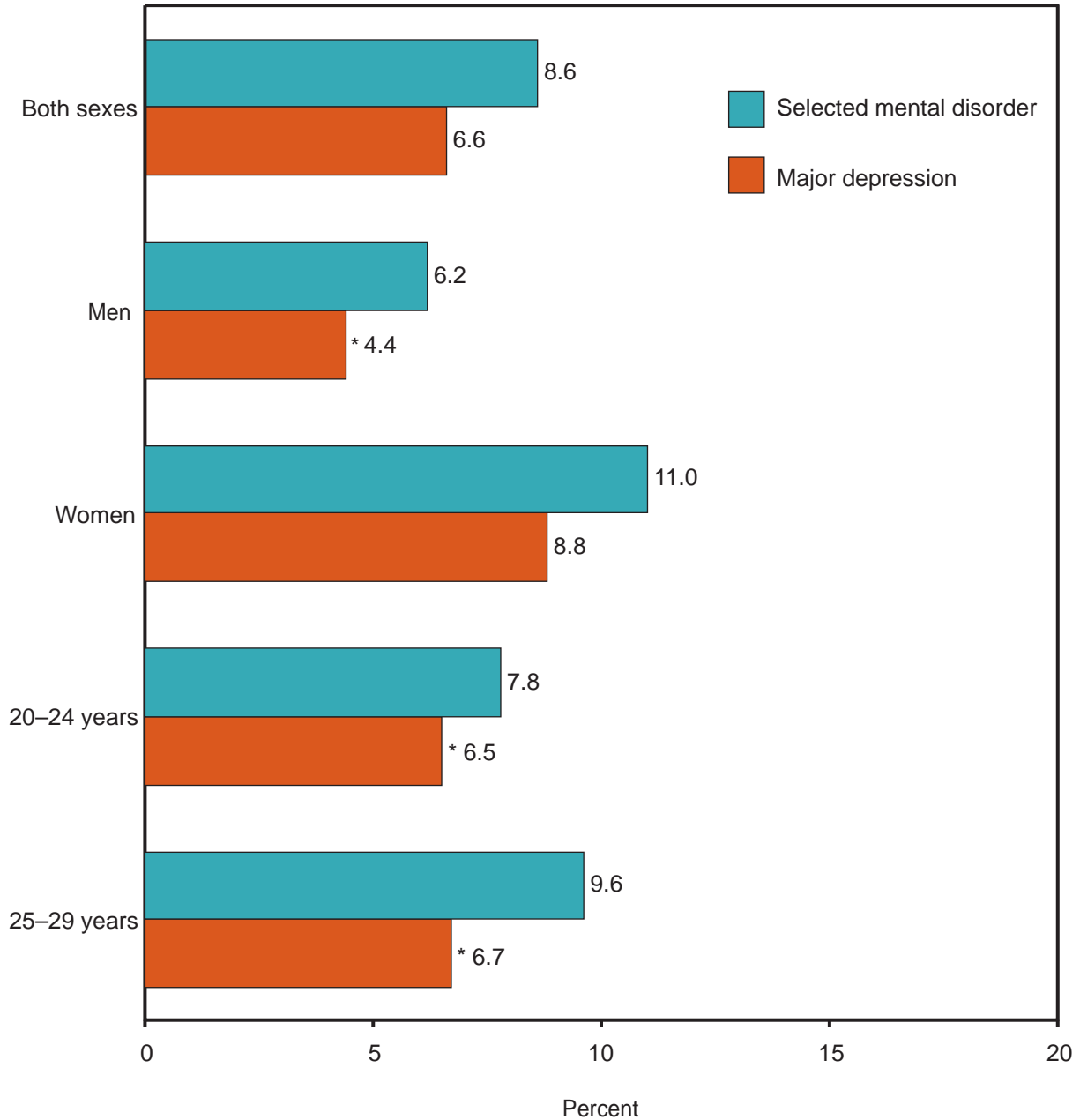
From 1999–2004, trained lay interviewers from National Health and Nutrition Examination Survey (NHANES) administered three diagnostic modules—major depression, generalized anxiety disorder, and panic disorder from the World Health Organization’s Composite International Diagnostic Interview (CIDI). The CIDI modules are computer-based comprehensive and structured interviews that assess mental disorders using definitions and criteria from the International Classification of Diseases, Tenth Revision and the Diagnostic and Statistical Manual of Mental Diseases

(DSM IV). Each module obtains information about symptoms and persistence of symptoms over the past 12 months and uses a computer algorithm to define each diagnosis (6). Almost 9% of young adults 20–29 years of age had one or more of these three illnesses in the past 12 months (Figure 36). An estimated 7% of young adults 20–29 years of age had a diagnosis of major depression in the past 12 months. Young women (11%) were almost twice as likely as young men (6%) to have major depression, generalized anxiety disorder, or a panic disorder in the past 12 months.

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**Figure 36. Selected mental disorders in the past 12 months among young adults 20–29 years of age, by sex and age: United States, 1999–2004**



\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error of 20%–30%.

NOTES: Selected mental disorders includes major depression, generalized anxiety disorder, and panic disorder. See [data table for Figure 36](#) for data points graphed, standard errors, and additional notes.

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey.

## Mortality

*Between 1980 and 2005, death rates for all causes declined 30% among young men and 22% among young women.*

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The vast majority of deaths among young adults 18–29 years of age are injury-related with unintentional injury (“accidents”), homicide, and suicide being the three leading causes of death among this age group. Together, the three injury-related causes accounted for 70% of the 47,000 deaths that occurred among young adults 18–29 years of age in 2005. Deaths from motor vehicle-related injuries accounted for 26% of all deaths in this age group. Public health efforts to reduce deaths from motor vehicle-related injuries include campaigns on safe driving such as initiatives against drinking and driving. Alcohol plays a significant role in fatal motor-vehicle crashes among young adults (1). In 2006, 51% of motor-vehicle fatalities among young adults 18–29 years of age were alcohol-related, down from 72% in 1982 (2). Public health efforts towards reducing deaths from violence include strategies to raise awareness about suicide as a preventable public health problem, and primary prevention programs designed to reduce risk for suicidal behavior and perpetration of violence through integrated use of complementary strategies (e.g., monitoring risk behaviors, promoting help-seeking, improving social problem solving skills, and enhancing availability of health and social support services) (3).

Deaths among young adults varied substantially by sex, with three-quarters of deaths among this age group occurring among young adult men. In 2005, the all cause death rate among young adult men was nearly three times the rate among young adult women, over three times for unintentional injuries, over six times for homicide, and nearly five times for suicide (data table for Figure 37).

Between 1980 and 2005, death rates for all causes among young adult men 18–29 years of age declined by 30% (Figure 37). Unintentional injuries, which were the leading cause of death for young adult men throughout the period, declined 39%. Homicide and suicide were the second and third leading causes of death among young adult men during the period. Homicide rates rose between 1980 and the early 1990s, declined sharply in the later part of the 1990s, and then stabilized. Suicide rates declined by one-quarter between

1980 and 2005. Death rates for cancer and heart disease, the fourth and fifth leading causes of death among young adult men, were much lower than for the other leading causes. Between 1980 and 2005, cancer death rates among young adult men declined by over one-third while heart disease death rates remained fairly constant.

The mechanism of injury provides information on the events that preceded the injury death (4). In 2005, motor vehicle-related injuries accounted for 27%, firearm-related injuries for 24%, and poisoning for 12% of all deaths among young adult men in 2005 (data table for Figure 37). Death rates from poisoning (which includes drug overdoses) among young adult men have nearly doubled in the past 7 years.

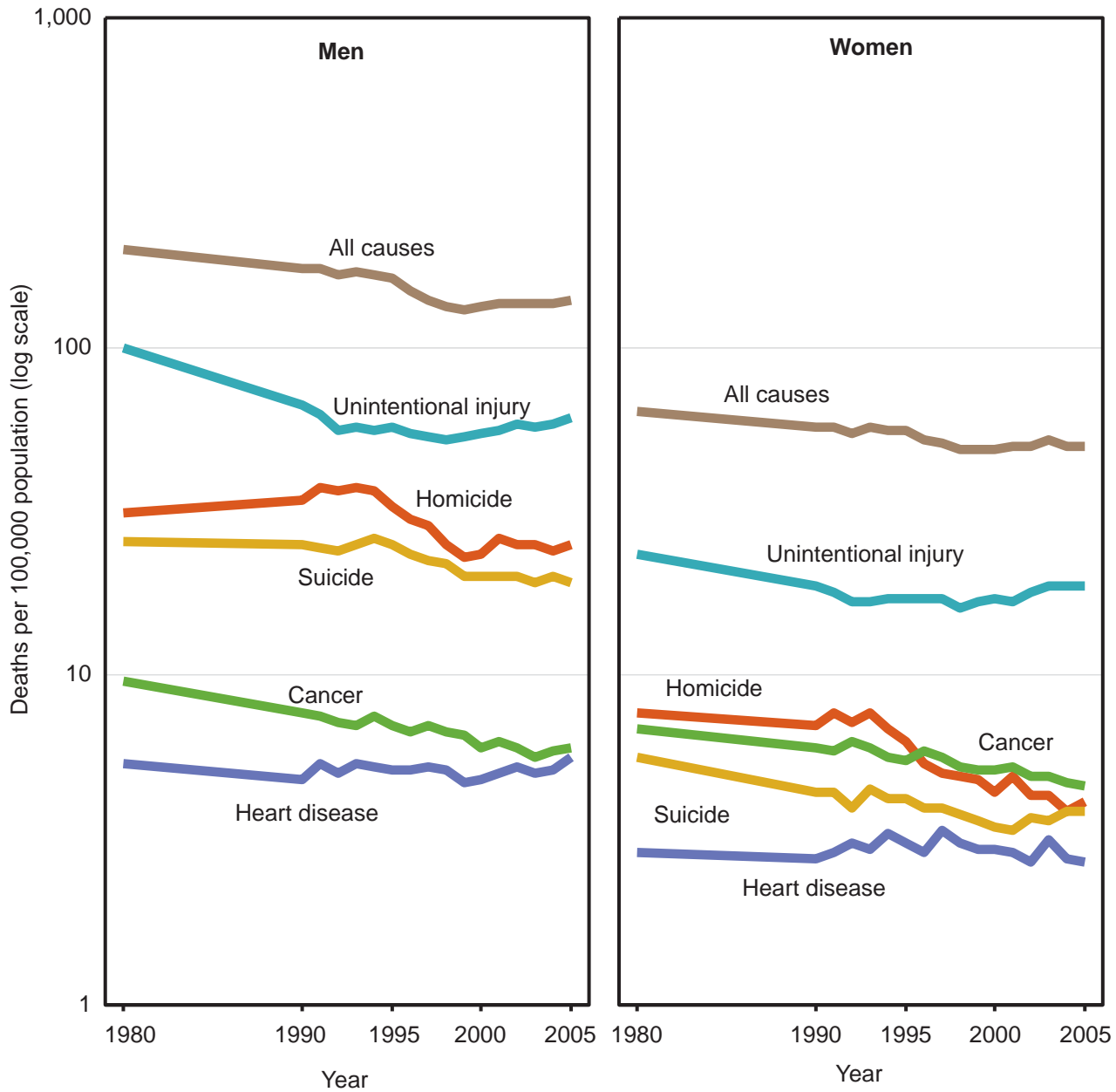
All cause mortality rates among young adult women 18–29 years of age declined by 22% between 1980 and 2005 (Figure 37). As with young men, unintentional injuries were the leading cause of death among young adult women with a 19% decline during the period. During this period, homicide rates declined by nearly one-half, and suicide and cancer death rates by nearly one-third, while heart disease death rates remained fairly constant. Cancer has been the second leading cause of death for young women but the fourth leading cause for men since 1996.

In 2005, motor vehicle-related injuries accounted for 25%, poisoning for 12%, and firearm-related injuries for 7% of all deaths among young adult women in 2005 (data table for Figure 37). As with young adult men, poisoning death rates among young adult women have doubled in the past 7 years.

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**Figure 37. Death rates for leading causes of death among young adults 18–29 years of age, by sex: United States, 1980–2005**



NOTES: Causes of death shown are the five leading causes of death for young adults 18–29 in 2005. Starting with 1999 data, causes of death were coded according to ICD–10. See [data table for Figure 37](#) for data points graphed and additional notes.

SOURCE: CDC/NCHS, National Vital Statistics System.

## Health Insurance Coverage at the Time of Interview

*One-third of young adults age 20–24 are uninsured—the highest percentage of any age group.*

Most young adults are healthy, but when they do become ill or need medical services, lacking health insurance can be a barrier to receiving health care. Lack of insurance is of particular importance to this age group because a large percentage of young adults are poor or have low income (1,2, Figure 29). During the period between age 18 and 29, young adults typically transition from their parents' health insurance to their own. When they reach age 19 they generally lose coverage under their parents' plans, although private plans often give an exception to full-time students with dependent status ending at graduation or a specified age. Age 19 is also almost always the end of eligibility for federal and state programs such as State Children's Health Insurance Program (SCHIP) and Medicaid. This is a particular problem for adolescents with special health care needs, who age out of supportive public assistance and health care coverage programs (3).

Young adults age 20–24 years are the most likely age group to be uninsured in the United States (34% in 2006). In 2006, 30% of young adults age 18–29 years were uninsured, compared with 9.5% of children under 18 years of age, and 19% of adults 35–44 years of age (data table for Figure 38 and Table 140). Young adult men were more likely than young adult women, especially among those 20–24 years of age, to be uninsured (Figure 38).

Whereas the majority of young adults had private health insurance coverage in 2006 (58%), they are less likely to have this type of insurance than other adult age groups (Table 137). Private coverage is obtained in three possible ways: through a family health insurance policy carried by a parent of the young adult; as a single person (working or in college); or as the health insurance policy holder or spouse in a new family (more likely among 24–29 year-olds). Young men and young women have similar rates of private health insurance (Figure 38). Rates of private health insurance among young adults are lowest among those 20–24 years of age. Young adults age 18–24 are also the age group least likely to have employer-sponsored private insurance (Table 138). In recent years, employers have been less likely to offer health coverage, which has led to an overall decline in private health insurance coverage. This is particularly true among young adults, who have less job tenure, less

attachment to the labor force, and are least likely to be grandfathered under existing employer-sponsored benefits (4,5).

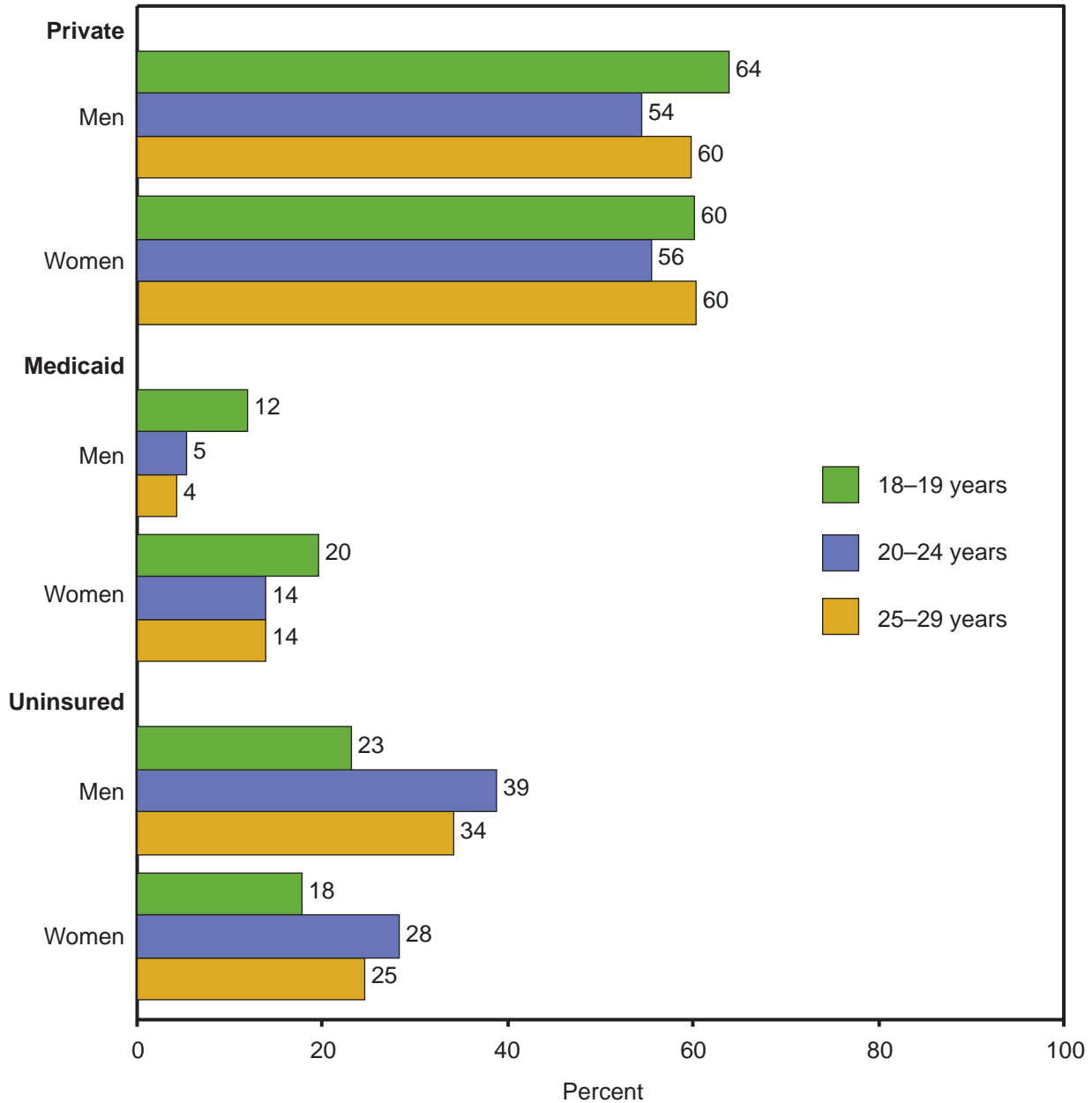
Two other major sources of health care coverage for adolescents and young adults are Medicaid and SCHIP. Medicaid is a health program for the poor, and among young adults it has traditionally targeted poor single mothers with children. SCHIP targets near poor children. States coordinate their SCHIP and Medicaid programs; some do not have a separate SCHIP program but instead have expanded their Medicaid program to cover low income children, and some states have enacted SCHIP expansions to allow buy-ins to the program for some poor families, further blurring the distinction between the two programs. Because of some National Health Interview respondents' inability to distinguish Medicaid from SCHIP programs, Medicaid and SCHIP participation rates have been combined in Figure 38. In 2006, young women were more likely than young men to be covered by Medicaid or SCHIP (15% compared with 6%), primarily because of their eligibility status through childbearing and because they are more likely to live in poverty or have low income (Figure 28).

In an attempt to address directly the high rates of uninsurance among young adults, state lawmakers are proposing and enacting legislation that extends dependent benefits to older children. Some states and insurers have addressed additional populations within this age group, ensuring that students who take a leave of absence from school due to illness, injury, or service in the armed forces do not lose their health insurance (6).

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**Figure 38. Health insurance coverage at the time of interview among young adults 18–29 years of age, by age: United States, 2006**



NOTE: See [data table for Figure 38](#) for data points graphed, standard errors, and notes.

SOURCE: CDC/NCHS, National Health Interview Survey.



## Unmet Need for Health-related Services Due to Cost

*In 2004–2006, 28% of uninsured young adult men and 40% of uninsured young adult women reported they did not receive at least one of the following needed health-related services in the past 12 months—prescription medicines, medical care, eyeglasses, or mental health care—because they could not afford them.*

Although young adults 18–29 years of age are generally thought of as “healthy,” significant percentages of them have health conditions or other reasons for accessing the health care system (see related [Figure 40](#)). All young adults have a need for preventive care such as routine dental examinations and cleanings and periodic eye examinations (1,2). Young adult women need recommended gynecological screening and other services (3). Although many chronic conditions are more common with advancing age ([Tables 54, 71, and 72](#)), the young adult years can be complicated by the presence of, or a history of, serious health conditions such as arthritis, asthma, hypertension, cancer, heart disease, or diabetes ([Figure 35](#)). Nine percent of young adults had major depression, generalized anxiety disorder, or panic disorder in the past 12 months ([Figure 36](#)). Young adults may have difficulty affording needed health care because substantial numbers of them are low income ([Figure 29](#)) and uninsured ([Figure 38](#)).

Dental care was the most commonly reported individual health-related service not received due to cost. In 2004–2006, 15% of young adults reported they did not receive dental care in the past 12 months due to cost. Dental care is associated with higher out-of-pocket costs because fewer people have dental insurance than general medical insurance coverage, and for those who do have dental insurance, coverage is generally less comprehensive than medical insurance (4,5).

Seventeen percent of young adults reported they did not receive at least one of the following needed services in the past 12 months because they could not afford them—prescription medicines, medical care, eyeglasses, or mental health care ([data table for Figure 39](#)). About 9%–10% of young adults reported not receiving needed prescription medicines and medical care, 7% did not receive needed eyeglasses, and 3% did not receive needed mental health care in the past 12 months due to cost. Young adults were

about as likely as other adults 18–64 years of age to report not receiving needed medical care due to cost ([Table 80](#)).

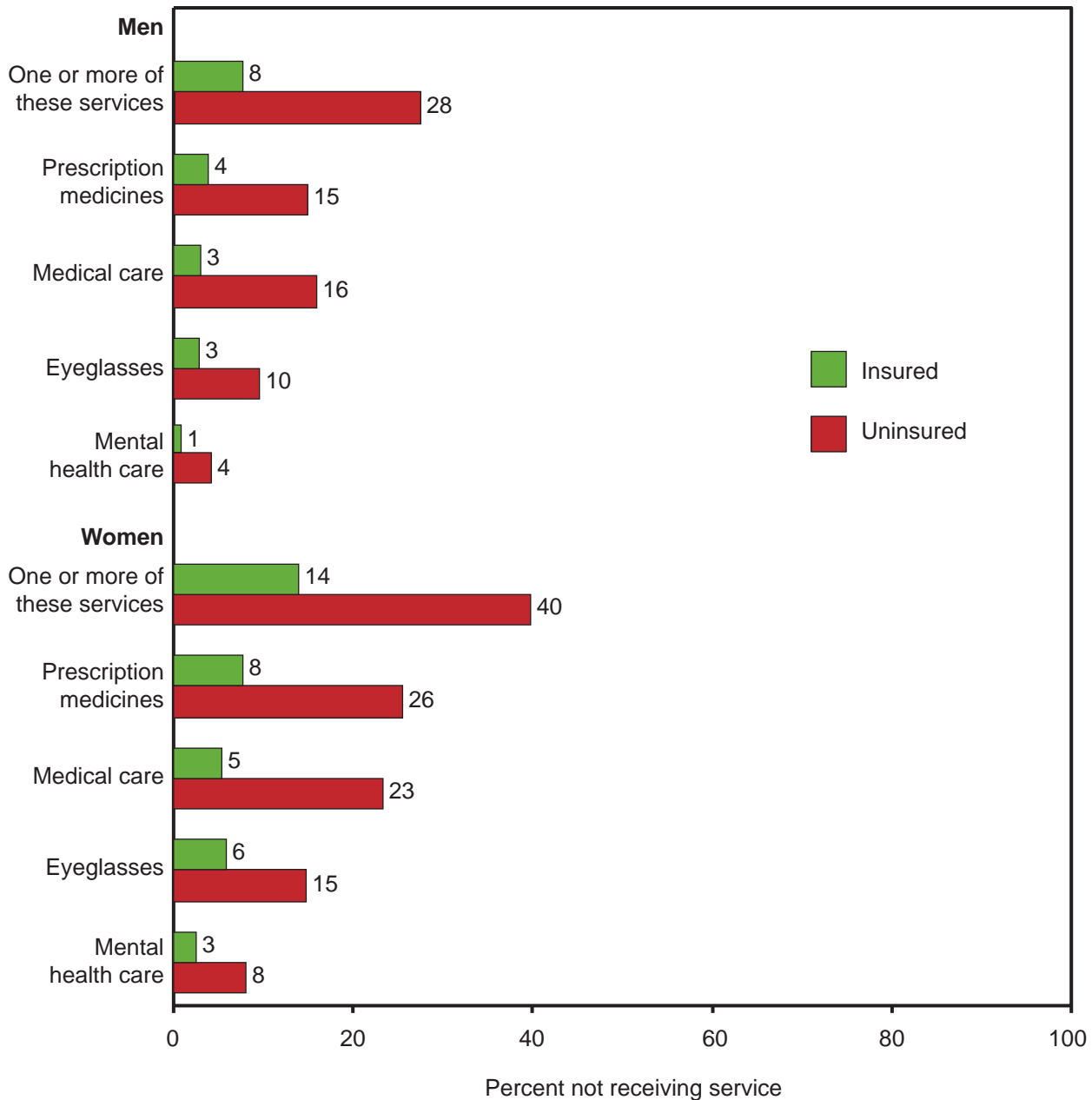
Not receiving needed health-related services due to cost varied by sex and health insurance status ([Figure 39](#)). Forty percent of uninsured young adult women, compared with 28% of uninsured young adult men, did not receive at least one needed health service in the past 12 months due to cost. Almost twice as many insured young women (14%) as insured young men (8%) reported they did not receive at least one needed health service in the past 12 months due to cost.

Prescription medicines and medical care were the most common health services (other than dental care) not received in the past 12 months due to cost for both young adult men and women. Fifteen to sixteen percent of uninsured men compared with 3%–4% of insured men, and about one-quarter of uninsured women compared with 5%–8% of insured women reported not receiving needed prescription medicines or medical care in the past 12 months because they could not afford it.

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**Figure 39. Young adults 18–29 years of age reporting they did not receive needed health-related services in the past 12 months because they could not afford them, by sex and health insurance status: United States, 2004–2006**



NOTE: See [data table for Figure 39](#) for data points graphed, standard errors, and notes.

SOURCE: CDC/NCHS, National Health Interview Survey.

## Health Care Utilization

*Seventy percent of young adults had a doctor visit in the past 12 months, 24% reported an emergency department visit, and 7% had a visit to a mental health care provider in 2006.*

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Although young adults age 18–29 years are generally considered to be healthy, they may use health care to control, ameliorate, or prevent medical conditions. In 2004–2006, about 15% reported having at least one of these chronic medical conditions: arthritis, asthma, cancer, diabetes, heart disease, or hypertension (see [Figure 35](#) for more information). Chronic conditions and poorer health status were more commonly reported by young women than young men. In addition to chronic conditions, young adults have the highest rate of injury-related emergency department visits among all age groups ([Figure 41](#) and [Table 93](#)). Besides seeking health care to treat medical conditions or injuries, young adults use health care for preventive services and reproductive care. About one-third of young women reported using a prescribed contraceptive method of birth control—such as the pill, contraceptive patch, or an injectable contraceptive—in the month prior to interview (1,2).

Two surveys that collect data from respondents on their health and health care utilization are the National Health Interview Survey (NHIS) and the National Health and Nutrition Examination Survey (NHANES). The NHIS asks respondents about their health care utilization, including medical visits and hospital stays during the 12 months prior to interview. NHANES collects a variety of information on health status and utilization, including information on prescription drugs used in the month prior to the interview.

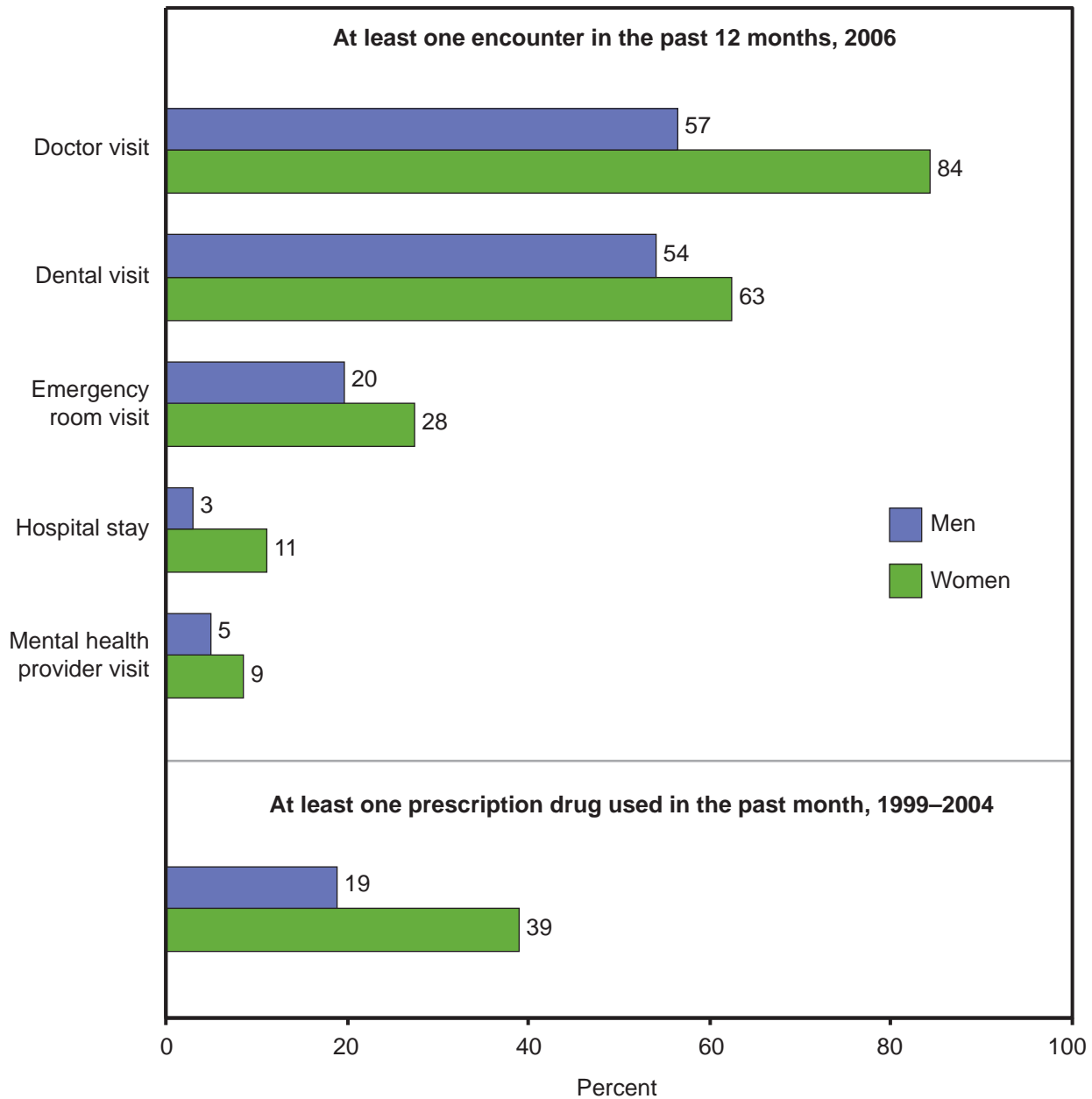
Young women were substantially more likely to report all types of health care utilization than young men ([Figure 40](#)). In 2006, 84% of young women reported a doctor visit in the past 12 months, compared with 57% of young men ([Figure 40](#)); and 63% of young women and 54% of young men reported a dental visit. Young women (28%) were more likely to visit an emergency room in the past 12 months than young men (20%), although young men have a higher visit rate to emergency rooms for injuries ([Figure 41](#)). Nine percent of young women and 5% of young men reported a visit to a mental health provider in the past 12 months. Young women were almost four times as likely to report a hospital stay in

the past year (11%) as young men (3%) and twice as likely to report taking a prescription drugs in the past month (39% compared with 19%). Women of reproductive age use more health care than men, in part due to the need for contraceptive services, gynecological checkups, and visits and hospitalizations associated with childbearing (3).

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**Figure 40. Selected types of health care utilization among young adults 18–29 years of age, by sex: United States, 1999–2004 and 2006**



NOTE: See [data table for Figure 40](#) for data points graphed, standard errors, and notes.

SOURCES: CDC/NCHS, National Health Interview Survey and National Health and Nutrition Examination Survey.

## Injury-related Emergency Department Visits

*Young adults have the highest rate of injury-related emergency department visits of all age groups; being struck was the leading mechanism of injury for young men with emergency department visits, and motor vehicle traffic accidents were the leading mechanism of injury among young women.*

Injuries cost society directly—in medical costs—but also indirectly in lost productivity from premature death due to fatal injuries and lost work time due to nonfatal injuries (1). It is estimated that in 2000, medical expenditures related to injuries for all ages accounted for about 10% of all U.S. medical expenditures (1). In 2004, injuries accounted for approximately 167,000 deaths (2), nearly 2 million hospitalizations (3), and 31 million emergency department visits (3). Nonfatal injuries are a leading reason for health care utilization among young adults. Young adults have among the highest rate of emergency department visits (4,5) and the highest rate of injury-related emergency department visits (see related Table 93) among all age groups. Whereas the majority of ambulatory care visits for nonfatal injuries were in physician offices, injuries resulting in an emergency department visit are often more serious (6).

The National Hospital Ambulatory Medical Care Survey (NHAMCS) collects data on visits to hospital emergency departments (ED). In this analysis, an emergency department visit was classified as an injury-related visit if there was a valid injury diagnosis code or a valid external cause of injury code and if it was the initial visit for that injury (7). In 2005–2006, there were an average of 7 million injury-related ED visits per year by young adults, age 18–29 years (8). Young men had higher rates of emergency department visits for injuries (1,615 ED visits per 10,000 civilian population) than young women (1,286 visits per 10,000 civilian population) (data table for Figure 41).

The five leading mechanisms of injury for which young men and women (age 18–29 years) sought treatment in emergency departments were being struck by or against objects or persons, motor vehicle traffic accidents, falls, cut or pierce injuries, and overexertion (Figure 41). The emergency department visit rate for injuries due to being struck was twice as high for young men (289 visits per 10,000

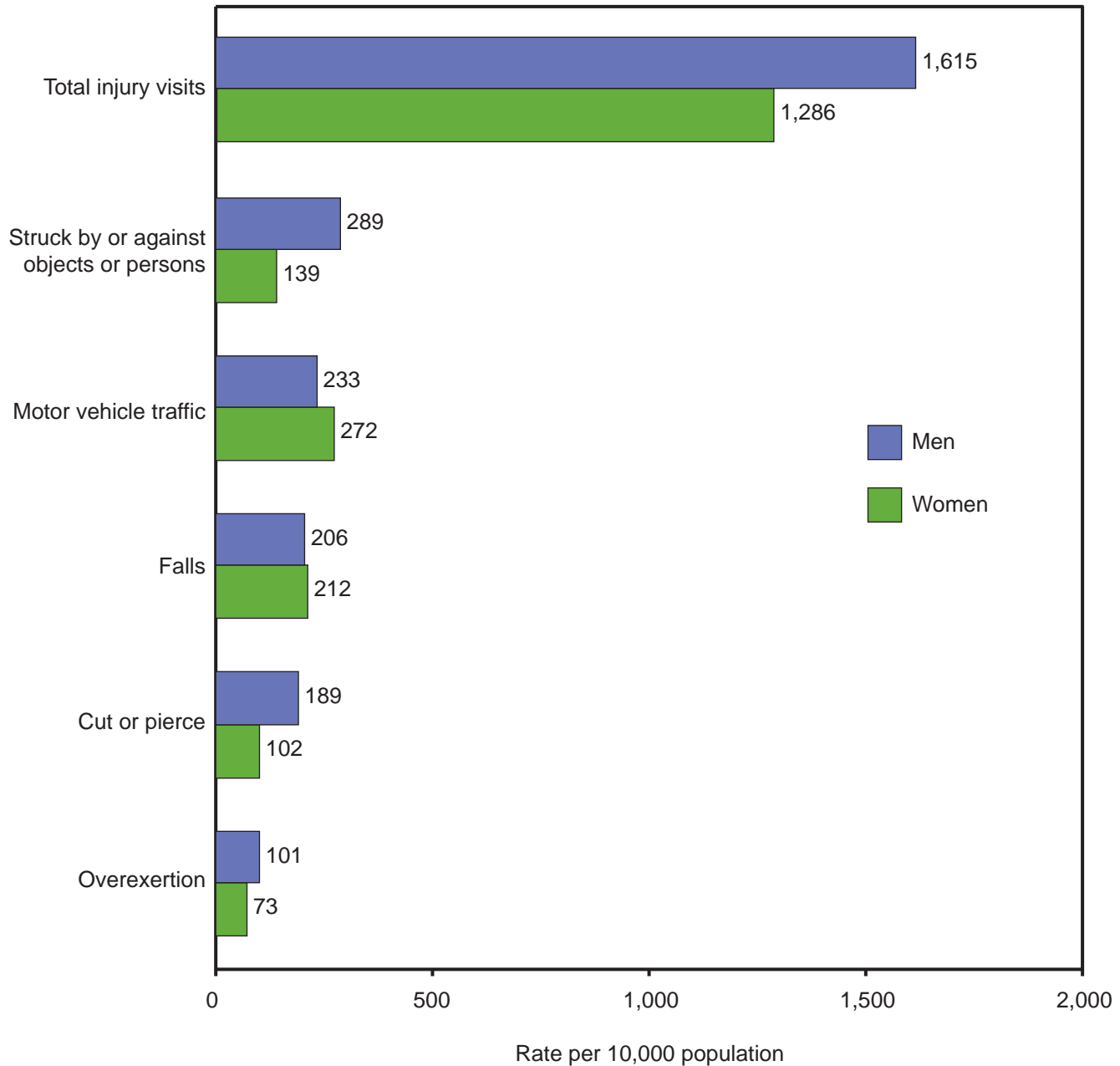
population) compared with young women (139 visits per 10,000 population). ED visit rates per 10,000 population for injuries related to motor vehicle traffic accidents were similar among young women (272 visits) than young men (233 visits). Visit rates for falls were also similar for young women (206 visits) and young men (212 visits).

Efforts to reduce injuries include the promotion of injury prevention activities such as the reduction of drunk driving, the use of seat belts and air bags, increased availability of functioning smoke detectors in homes, the use of helmets for sporting activities, along with efforts to reduce the number of suicides and assaults (9).

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**Figure 41. Injury-related visits to hospital emergency departments among young adults 18–29 years of age, by sex and mechanism of injury: United States, 2005–2006**



NOTES: External cause of injury codes were reclassified into mechanism of injury categories. See [data table for Figure 41](#) for data points graphed, standard errors, and additional notes.

SOURCE: CDC/NCHS, National Hospital Ambulatory Medical Care Survey.

## Technical Notes

### Data Sources and Comparability

Data for the *Chartbook* come from many surveys and data systems and cover a broad range of years. Detailed descriptions of data sources are in [Appendix I](#).

### Data Presentation

Many measures in the Chartbook section are shown for people in specific age groups because of the strong effect age has on most health outcomes. Some estimates are age-adjusted using the age distribution of the 2000 standard population, and this is noted in the data tables that accompany each figure (see [Appendix II, Age adjustment](#)). Age-adjusted rates are computed to eliminate differences in observed rates that result from age differences in population composition. For some figures, data years are combined to increase sample size and reliability of the estimates. Some charts present time trends and others focus on differences in estimates among population subgroups for the most recent time point available.

### Graphic Presentation

Most trends are shown on a linear scale to emphasize absolute differences over time. The linear scale is the scale most frequently used and recognized, and it emphasizes the absolute changes between data points over time (1). The time trends for overall mortality measures are shown on a logarithmic (or log) scale to emphasize the rate of change and to enable measures with large differences in magnitude to be shown on the same chart. Log scales emphasize the relative or percentage change between data points. Readers are cautioned that one potential disadvantage to log scale is that the absolute magnitude of changes may appear smaller than the untransformed statistics would indicate (2). When interpreting data on a log scale, the following points should be kept in mind:

1. A sloping straight line indicates a constant rate (not amount) of increase or decrease in the values,
2. A horizontal line indicates no change,
3. The slope of the line indicates the rate of increase or decrease,

4. Parallel lines, regardless of their magnitude, depict similar rates of change (1).

### Tabular Presentation

Following the Technical Notes are data tables that present the data points graphed in each figure. Some data tables contain additional data that were not graphed because of space considerations. Standard errors for data points are provided for many measures. Additional information clarifying and qualifying the data are included in table notes and [Appendix I](#) and [II](#) references.

### Survey Questions and Coding:

Additional information on data used in the Chartbook and Special Feature, including exact wording of questions and coding schemes, is detailed below.

### National Health Interview Survey (NHIS)

**Figure 8:** Persons who engaged in regular leisure-time physical activity reported five or more sessions per week of light or moderate activity lasting at least 30 minutes or three or more sessions per week of vigorous physical activity lasting at least 20 minutes. See [Appendix II, Physical activity, leisure-time](#).

**Strength training:** To assess participation in strength training activities, adults were asked: "How often do you do leisure-time physical activities specifically designed to strengthen your muscles such as lifting weights or doing calisthenics?" (Include all such activities even if you have mentioned them before). This figure shows estimates for those who reported engaging in strength training at least twice a week.

**Figure 22:** Data are based on the patient's main complaint, symptom, or other reason for visiting the emergency department and were coded according to A Reason for Visit Classification for Ambulatory Care (RVC). Up to three reasons could be coded per visit, and only the most important reason (principal reason) coded was used in this analysis. The following codes were used in this analysis:

Abdominal pain: 1545.0, 1545.1–1545.3

Chest pain: 1050.0, 1050.1, 1050.2, 1050.3



Fever: 1010.0

Headache: 1210.0

Cough: 1440.0

**Figure 24:** These questions were asked of respondents living in the community. “During the past 12 months, have you had a flu shot? A flu shot is usually given in the fall and protects against influenza for the flu season.” Estimates exclude persons who reported Flu Mist. Respondents were asked: “Have you ever had a pneumonia shot? This shot is usually given only once or twice in a person’s lifetime and is different from the flu shot.”

**Figure 31:** See [Appendix II, Alcohol consumption, Cigarette smoking](#).

**Figure 35:** Data are for the civilian noninstitutionalized population. Young adults who reported more than one condition were counted in each category. Conditions refer to response categories in the NHIS. Conditions, except for current asthma, were determined by asking “Have you ever been told by a doctor or other health professional that you had a specific condition?” Current asthma prevalence estimates are also based on the question, “Do you still have asthma?” Arthritis includes arthritis, rheumatoid arthritis, gout, lupus, and fibromyalgia. Diabetes includes all types with the exception of diabetic conditions related to pregnancy. Heart disease includes coronary heart disease, angina or angina pectoris, or heart attack or myocardial infarction. Cancer excludes nonmelanoma skin cancer or skin cancers of unknown types. Hypertension is told on two or more different visits. Condition questions were asked of the young adult during the sample adult questionnaire; and health status and activity limitation questions were asked of the survey respondent in the family questionnaire. See [Appendix II, Health status, respondent-assessed; Limitation of activity](#).

**Figure 39:** This analysis is based on the following two questions: “The following questions were about the use of health care. Do not include dental care. DURING THE PAST 12 MONTHS, was there any time when [you/someone in the family] needed medical care, but did not get it because [you/the family] couldn’t afford it?” (In this analysis, results are presented for sample adults to be consistent with the rest of the chart. Therefore, estimates in this figure may differ slightly from those presented in [Table 79](#).)

“DURING THE PAST 12 MONTHS, was there any time when you needed any of the following, but didn’t get it because you couldn’t afford it?” (asked of sample adults)

- \_\_\_ prescription medicines
- \_\_\_ mental health care or counseling
- \_\_\_ dental care (including checkups)
- \_\_\_ eyeglasses

**Figure 40:** This analysis uses the following five questions from NHIS, along with National Health and Nutrition Examination Survey data: “DURING THE PAST 12 MONTHS, HOW MANY TIMES have you seen a doctor or other health care professional about your own health at a DOCTOR’S OFFICE, A CLINIC, OR SOME OTHER PLACE?” DO NOT INCLUDE TIMES YOU WERE HOSPITALIZED OVERNIGHT, VISITS TO HOSPITAL EMERGENCY ROOMS, HOME VISITS, DENTAL VISITS, OR TELEPHONE CALLS.

“About how long has it been since you last saw a dentist?” Include all types of dentists, such as orthodontists, oral surgeons, and all other dental specialists, as well as dental hygienists.

“DURING THE PAST 12 MONTHS, that is since {12 month ref. date}, have you seen or talked to any of the following health care providers about your own health? . . . A mental health professional such as a psychiatrist, psychologist, psychiatric nurse, or clinical social worker.”

“DURING THE PAST 12 MONTHS, HOW MANY TIMES have you gone to a HOSPITAL EMERGENCY ROOM about your own health?” (This includes emergency room visits that resulted in a hospital admission.)

“[Were you/has anyone in the family] been hospitalized OVERNIGHT in the past 12 months? Do not include an overnight stay in the emergency room.”

Data on doctor, dental, emergency room, and mental health professional visits are from the NHIS sample adult questionnaire and are weighted using the weight from that file. Data on hospital stays are from the NHIS family core questionnaire and are weighted using the weight from that file. For more information, see [Appendix I, National Health Interview Survey \(NHIS\)](#) and [Appendix II, Dental visit; Emergency department or emergency room visit; Health care contact; Hospital utilization](#).



## National Hospital Discharge Survey (NHDS)

**Figure 25:** See [Appendix II, Table X](#) for list of ICD-9-CM codes.

## National Health and Nutrition Examination Survey (NHANES)

**Figure 40:** The questionnaire administered to all participants also included a question on whether they had taken a prescription drug in the past month. Those who answered “yes” were asked to show the interviewer the medication containers for all the prescriptions. For each drug reported, the interviewer entered the product’s complete name from the container. If no container was available, the interviewer asked the participant to verbally report the name of the drug. More information on prescription drug data collection and coding in NHANES is available from: [http://www.cdc.gov/nchs/data/nhanes/frequency/rxq\\_rxdoc.pdf](http://www.cdc.gov/nchs/data/nhanes/frequency/rxq_rxdoc.pdf). Also see [Appendix I, National Health and Nutrition Examination Survey](#).

## National Survey of Family Growth (NSFG)

**Figure 34:** The National Survey of Family Growth (NSFG) provides national data on factors affecting birth and pregnancy rates, topics related to family formation, and reproductive health of men and women. In-person interviews were conducted with a sample of women and men age 15–44 years. Most of the survey was administered using computer-assisted personal interviewing, in which a trained female interviewer asks the questions and enters the answers into a computer. In the last portion of the survey, however, the respondent used the interviewer’s computer to answer the most sensitive items directly—including questions about forced sexual intercourse—by entering his or her own answers into the computer. The respondent could read the questions on the screen, as well as listen to them through headphones. The object of this interviewing technique is to give respondents a more private opportunity to report this sensitive information.

The questions about forced sexual intercourse were asked only of respondents 18–44 years of age. Both women and men were asked about forced sexual experiences. For [Figure 34](#), data are presented only for women. Whether the respondent had ever been forced to have intercourse was ascertained with the following question: “At any time in your

life, have you ever been forced by a male to have vaginal intercourse against your will?” This question is used in conjunction with the responses to two sets of questions. The first set of questions related to the respondent’s first vaginal intercourse. The second set related to sexual intercourse subsequent to the first time. For the first set of questions, respondents were asked: “Would you say then that this first vaginal intercourse was voluntary or not voluntary, that is, did you choose to have sex of your own free will or not?” Respondents who selected “not voluntary” in response to this question were classified as having been forced to have sexual intercourse. The second series of questions began with this question: “(Besides the time you already reported,) have you ever been forced by a male to have vaginal intercourse against your will?” Respondents who selected “yes” in response to this question were classified as having been forced to have sexual intercourse. In both series of questions, respondents indicating that they had been forced to have sexual intercourse were asked additional questions that elicited the age at which this first happened and the type of force that was used. Respondents were asked if each of seven different types of force was used and could indicate as many types of force as appropriate. The types of force asked about were:

- Were you given alcohol or drugs?
- Did you do what he said because he was bigger than you or a grownup, and you were young?
- Were you told that the relationship would end if you didn’t have sex?
- Were you pressured into it by his words or actions, but without threats of harm?
- Were you threatened with physical hurt or injury?
- Were you physically hurt or injured?
- Were you physically held down?

For the purposes of [Figure 34](#), women were classified as having been physically threatened or physically forced if they indicated that they were threatened with physical hurt or injury, physically hurt or injured, or physically held down. Women not reporting one of these types of force (but responding to at least one of the types of force questions), were classified as having been forced with nonphysical force. Women reporting forced sexual intercourse but not reporting the type of force used were included with nonphysical force.

The estimates presented in [Figure 34](#) include both women who were forced on their first time of vaginal intercourse and those first forced at a subsequent time. If a respondent had been forced more than once, she is only counted once, because the data are at the person level. If a respondent reported that her first vaginal intercourse was not voluntary and also reported that she was subsequently forced to have sexual intercourse, the age at which she was first forced and the type of force used is based on her responses to the questions related to her first vaginal intercourse.

For more information on the survey, see [Appendix I, National Survey of Family Growth \(NSFG\)](#) and Chandra A, Martinez GM, Mosher WD, Abma JC, Jones J. Fertility, family planning, and reproductive health of U.S. women: Data from the 2002 National Survey of Family Growth. *Vital health stat* 2005;23(25). Available from: [http://www.cdc.gov/nchs/data/series/sr\\_23/sr23\\_025.pdf](http://www.cdc.gov/nchs/data/series/sr_23/sr23_025.pdf).

## References

1. Page RM, Cole GE, Timmreck TC. Basic epidemiological methods and biostatistics: A practical guidebook. Sudbury, MA: Jones and Bartlett Publishers, 1995.
2. Jekel JF, Elmore JG, Katz DL. Epidemiology biostatistics and preventive medicine. Philadelphia, PA: W.B. Saunders Company, 1996.

## Data Tables for Figures 1–41

Data table for Figure 1. Total population and older population: United States, 1950–2050

Year	All ages	65 years and over	65–74 years	75 years and over
Number				
1950	150,697,361	12,194,612	8,339,960	3,854,652
1960	179,323,175	16,559,580	10,996,842	5,562,738
1970	203,211,926	20,065,502	12,435,456	7,630,046
1980	226,545,805	25,549,427	15,580,605	9,968,822
1990	248,709,873	31,078,895	18,045,495	13,033,400
2000	281,421,906	34,991,753	18,390,986	16,600,767
2006	299,398,484	37,260,352	18,916,844	18,343,508
2010	308,935,581	40,243,713	21,269,509	18,974,204
2020	335,804,546	54,631,891	31,779,159	22,852,732
2030	363,584,435	71,453,471	37,947,933	33,505,538
2040	391,945,658	80,049,634	35,469,908	44,579,726
2050	419,853,587	86,705,637	37,942,437	48,763,200
Percent				
1950	100.0	8.1	5.5	2.6
1960	100.0	9.2	6.1	3.1
1970	100.0	9.9	6.1	3.8
1980	100.0	11.3	6.9	4.4
1990	100.0	12.5	7.3	5.2
2000	100.0	12.4	6.5	5.9
2006	100.0	12.4	6.3	6.1
2010	100.0	13.0	6.9	6.1
2020	100.0	16.3	9.5	6.8
2030	100.0	19.7	10.4	9.2
2040	100.0	20.4	9.0	11.4
2050	100.0	20.7	9.0	11.6

NOTES: Data are for the resident population. Data for 1950 exclude Alaska and Hawaii. Data for 2010–2050 are projected. See [Appendix II, Population](#).

**SOURCES:** U.S. Bureau of the Census: 1950 Nonwhite population by race. Special Report P-E, No. 3B. Washington. U.S. Government Printing Office, 1951 [data for 1950]; U.S. Census of Population: 1960, Number of inhabitants, PC(1)-A1, United States Summary, 1964 [data for 1960]; Number of inhabitants, final report PC(1)-A1, United States Summary, 1971 [data for 1970]; U.S. Census Bureau, 1980 Census of Population, General population characteristics, United States Summary (PC80-1-B1) [data for 1980]; 1990 Census of Population, General population characteristics, United States Summary (CP-1-1) [data for 1990]; U.S. Census Bureau: Annual estimates of the population by sex and five-year age groups for the United States: April 1, 2000, to July 1, 2006 (NC-EST2006-01), available from: <http://www.census.gov/popest/national/asrh/NC-EST2006-sa.html> [data for 2000 and 2006]; U.S. interim projections by age, sex, race, and Hispanic origin, 2004. Detail File available from: <http://www.census.gov/ipc/www/usinterimproj/> [data for projections].

**Data table for Figure 2. Population in selected race and Hispanic origin groups, by age: United States, 1980–2007**

Race and Hispanic origin	All ages				Under 18 years				18 years and over			
	1980	1990	2000	2007	1980	1990	2000	2007	1980	1990	2000	2007
	Percent distribution											
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Hispanic or Latino	6.4	9.0	12.5	15.2	8.8	12.2	17.1	20.8	5.5	7.9	11.0	13.3
Not Hispanic or Latino:												
White	79.9	75.7	69.5	65.9	74.2	68.9	61.3	57.0	82.1	78.1	72.3	68.8
Black or African American	11.5	11.8	12.2	12.3	14.5	14.7	14.9	14.6	10.4	10.7	11.3	11.5
American Indian or Alaska Native	0.6	0.7	0.7	0.8	0.8	1.0	1.0	0.9	0.5	0.6	0.7	0.7
Asian	1.6	2.8	3.7	4.4	1.7	3.1	3.5	4.0	1.5	2.7	3.8	4.5
Native Hawaiian or Other Pacific Islander	...	...	0.1	0.1	...	...	0.2	0.2	...	...	0.1	0.1
2 or more races	...	...	1.2	1.4	...	...	2.2	2.6	...	...	0.9	1.0

... Category not applicable.

NOTES: Data are for the resident population. Persons of Hispanic origin may be of any race. Race data for 2000 and beyond are not directly comparable with data for 1980 and 1990. Individuals could report only one race in 1980 and 1990, and more than one race in 2000 and beyond. Persons who selected only one race in 2000 and beyond are in single-race categories; persons who selected more than one race in 2000 and beyond are shown as having 2 or more races and are not included in single-race categories. In 1980 and 1990, the Asian category included Asian and Native Hawaiian or Other Pacific Islander; in 2000 and beyond, this category includes only Asian. See [Appendix II, Hispanic origin; Race](#).

SOURCES: U.S. Census Bureau: U.S. population estimates, by age, sex, race, and Hispanic origin: 1980 to 1991. Current population reports, series P-25, no 1095. Washington, DC: U.S. Government Printing Office, February 1993 [data for April 1, 1980 and April 1, 1990]; U.S. Census Bureau: Monthly postcensal resident populations, from July 1, 2000 to July 1, 2007 by age, sex, race, and Hispanic origin. Available from: [http://www.census.gov/popest/national/asrh/2006\\_nat\\_res.html](http://www.census.gov/popest/national/asrh/2006_nat_res.html) [data for April 1, 2000 and July 1, 2007].

Data table for Figure 3. Children under 18 years of age living with a single parent, by race: United States, 1970–2006

Year	Total		White		Black		Hispanic		White, not Hispanic	
	Number in thousands	Percent	Number in thousands	Percent	Number in thousands	Percent	Number in thousands	Percent	Number in thousands	Percent
1970	8,200	11.9	5,110	8.7	2,995	31.8	---	---	---	---
1971	9,478	13.5	5,923	10.0	3,437	34.4	---	---	---	---
1972	9,634	14.0	6,120	10.5	3,385	35.3	---	---	---	---
1973	10,093	14.9	6,128	10.7	3,782	39.7	---	---	---	---
1974	10,489	15.6	6,550	11.6	3,774	39.6	---	---	---	---
1975	11,245	17.0	7,095	12.8	4,043	42.7	---	---	---	---
1976	11,121	17.1	7,055	13.0	3,936	41.6	---	---	---	---
1977	11,311	17.7	7,105	13.3	4,046	43.2	---	---	---	---
1978	11,710	18.5	7,362	14.0	4,173	44.4	---	---	---	---
1979	11,528	18.5	7,211	14.0	4,089	44.0	---	---	---	---
1980	12,466	19.7	7,901	15.1	4,297	45.8	1,152	21.1	---	---
1981	12,619	20.1	8,024	15.5	4,309	45.8	1,341	25.5	---	---
1982	13,701	22.0	8,781	17.2	4,614	49.2	1,436	26.8	---	---
1983	14,006	22.5	8,614	16.9	5,024	53.6	1,574	28.6	---	---
1984	14,024	22.6	8,702	17.2	4,978	53.1	1,509	26.8	---	---
1985	14,635	23.4	9,139	18.0	5,114	54.0	1,746	28.8	---	---
1986	14,759	23.5	9,303	18.3	5,058	53.1	1,955	30.4	---	---
1987	15,071	23.9	9,569	18.7	5,087	52.9	2,027	30.5	---	---
1988	15,329	24.3	9,624	18.9	5,247	54.1	2,048	30.2	---	---
1989	15,493	24.3	9,626	18.8	5,362	54.5	2,129	30.5	---	---
1990	15,867	24.7	9,869	19.2	5,484	54.7	2,154	30.0	---	---
1991	16,624	25.5	10,142	19.5	5,874	57.5	2,222	29.8	---	---
1992	17,578	26.6	10,971	20.9	5,934	56.9	2,447	32.1	---	---
1993	17,872	26.7	11,110	20.9	6,080	57.0	2,472	31.8	---	---
1994	18,591	26.7	11,434	20.9	6,384	57.1	3,019	31.8	---	---
1995	18,938	27.0	11,719	21.2	6,339	56.1	3,215	32.7	---	---
1996	19,752	27.9	12,335	22.1	6,560	57.4	3,321	32.4	---	---
1997	19,799	27.9	12,543	22.5	6,469	56.9	3,260	31.0	---	---
1998	19,777	27.7	12,772	22.8	6,254	54.8	3,397	31.3	---	---
1999	19,899	27.8	12,654	22.5	6,352	55.6	3,529	31.4	---	---
2000	19,220	26.7	12,192	21.6	6,080	53.3	3,425	29.5	9,046	19.9
2001	19,250	26.7	12,263	21.8	6,115	52.8	3,625	29.1	8,943	20.2
2002	19,770	27.3	12,600	22.4	6,210	53.3	3,853	30.1	9,050	20.5
2003	20,093	27.5	12,334	22.1	6,279	55.4	3,998	30.1	8,785	20.1
2004	20,474	28.0	12,518	22.4	6,415	56.2	4,220	30.7	8,738	20.2
2005	20,722	28.2	13,002	23.1	6,234	55.2	4,298	30.2	9,141	21.2
2006	20,619	28.0	12,693	22.5	6,283	56.0	4,277	29.1	8,898	20.8

--- Data not available.

NOTES: Data for 2001 and subsequent years use population controls based on Census 2000 and an expanded sample of households designed to improve state estimates of children with health insurance. Data for 1970 and 1980 are revised based on population from the decennial census for that year. Starting with 2003 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. For 1970–2002 data, white children include white alone or in combination with one or more other races. Starting with 2003 data, white children are children whose race was reported as white only. For 1970–2002 data, black children include black alone or in combination with one or more other races. Starting with 2003 data, black children are children whose race was reported as black only. For 2000–2002 data, white, not Hispanic children include white alone or in combination with one or more other races. Starting with 2003 data, white, not Hispanic children are children whose race was reported as white only. Children of Hispanic origin may be of any race. See [Appendix II, Hispanic origin; Race](#).

SOURCE: U.S. Census Bureau, Current Population Survey, March and Annual Social and Economic Supplements, 2006 and earlier. Available from: <http://www.census.gov/population/www/socdemo/hh-fam.html>.

**Data table for Figure 4. Poverty by age: United States, 1966–2006**

Year	All ages	Under 18 years	18–64 years	65 years and over
Percent of persons with family income below the poverty level				
1966	14.7	17.6	10.5	28.5
1967	14.2	16.6	10.0	29.5
1968	12.8	15.6	9.0	25.0
1969	12.1	14.0	8.7	25.3
1970	12.6	15.1	9.0	24.6
1971	12.5	15.3	9.3	21.6
1972	11.9	15.1	8.8	18.6
1973	11.1	14.4	8.3	16.3
1974	11.2	15.4	8.3	14.6
1975	12.3	17.1	9.2	15.3
1976	11.8	16.0	9.0	15.0
1977	11.6	16.2	8.8	14.1
1978	11.4	15.9	8.7	14.0
1979	11.7	16.4	8.9	15.2
1980	13.0	18.3	10.1	15.7
1981	14.0	20.0	11.1	15.3
1982	15.0	21.9	12.0	14.6
1983	15.2	22.3	12.4	13.8
1984	14.4	21.5	11.7	12.4
1985	14.0	20.7	11.3	12.6
1986	13.6	20.5	10.8	12.4
1987	13.4	20.3	10.6	12.5
1988	13.0	19.5	10.5	12.0
1989	12.8	19.6	10.2	11.4
1990	13.5	20.6	10.7	12.2
1991	14.2	21.8	11.4	12.4
1992	14.8	22.3	11.9	12.9
1993	15.1	22.7	12.4	12.2
1994	14.5	21.8	11.9	11.7
1995	13.8	20.8	11.4	10.5
1996	13.7	20.5	11.4	10.8
1997	13.3	19.9	10.9	10.5
1998	12.7	18.9	10.5	10.5
1999	11.9	17.1	10.1	9.7
2000	11.3	16.2	9.6	9.9
2001	11.7	16.3	10.1	10.1
2002	12.1	16.7	10.6	10.4
2003	12.5	17.6	10.8	10.2
2004	12.7	17.8	11.3	9.8
2005	12.6	17.6	11.1	10.1
2006	12.3	17.4	10.8	9.4

NOTES: Data are for the civilian noninstitutionalized population. Poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. See [Appendix II, Poverty](#). See related [Table 3](#).

SOURCES: U.S. Census Bureau, Current Population Survey, March 1967–2007. DeNavas-Walt C, Proctor BD, Smith J. Income, poverty, and health insurance coverage in the United States: 2006. Current population reports, series P-60, no 233. Washington, DC: U.S. Government Printing Office. 2007.

Data table for Figure 5. Low income by age, race and Hispanic origin: United States, 2006

Characteristic	Percent of poverty level			
	Below 100%	100%–less than 200%	Below 100%	100%–less than 200%
	Percent		Number in millions	
<b>All ages</b>				
All races and origins . . . . .	12.3	18.2	36.5	54.0
Hispanic or Latino . . . . .	20.6	30.3	9.2	13.6
Black or African American only . . . . .	24.3	23.7	9.0	8.9
Asian only . . . . .	10.3	13.6	1.4	1.8
White only, not Hispanic or Latino . . . . .	8.2	14.7	16.0	28.9
<b>Under 18 years</b>				
All races and origins . . . . .	17.4	21.6	12.8	16.0
Hispanic or Latino . . . . .	26.9	34.1	4.1	5.1
Black or African American only . . . . .	33.4	26.8	3.8	3.0
Asian only . . . . .	12.2	14.0	0.4	0.4
White only, not Hispanic or Latino . . . . .	10.0	16.3	4.2	6.9
<b>18–64 years</b>				
All races and origins . . . . .	10.8	15.4	20.2	28.7
Hispanic or Latino . . . . .	17.3	27.8	4.7	7.6
Black or African American only . . . . .	19.9	21.2	4.6	4.8
Asian only . . . . .	9.4	12.4	0.9	1.1
White only, not Hispanic or Latino . . . . .	7.8	11.8	9.8	14.6
<b>65 years and over</b>				
All races and origins . . . . .	9.4	26.2	3.4	9.4
Hispanic or Latino . . . . .	19.4	33.3	0.5	0.8
Black or African American only . . . . .	22.7	31.4	0.7	1.0
Asian only . . . . .	12.0	23.0	0.1	0.3
White only, not Hispanic or Latino . . . . .	7.0	25.2	2.0	7.3

NOTES: Data are for the civilian noninstitutionalized population. Persons of Hispanic origin may be of any race. Black and Asian races include persons of both Hispanic and non-Hispanic origin. Populations for age groups may not sum to the total due to rounding. Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. See related [Table 3](#). See [Appendix II, Hispanic origin; Poverty; Race](#).

SOURCES: U.S. Census Bureau, Current Population Survey, March 1967–2007. DeNavas-Walt C, Proctor BD, and Smith J. Income, poverty, and health insurance coverage in the United States: 2006. Current population reports, series P-60, no 233. Washington, DC: U.S. Government Printing Office. 2007. Available from: <http://www.census.gov/prod/2007pubs/p60-233.pdf>. Age and sex of all people, family members, and unrelated individuals iterated by income-to-poverty ratio and race: 2006, available from: [http://pubdb3.census.gov/macro/032007/pov/new01\\_000.htm](http://pubdb3.census.gov/macro/032007/pov/new01_000.htm).

**Data table for Figure 6. Cigarette smoking among men, women, high school students, and mothers during pregnancy: United States, 1965–2007**

Year	Men		Women		High school students		Mothers during pregnancy
	Percent	SE	Percent	SE	Percent	SE	Percent
1965	51.2	0.3	33.7	0.3	---	---	---
1974	42.8	0.5	32.2	0.4	---	---	---
1979	37.0	0.5	30.1	0.5	---	---	---
1983	34.8	0.6	29.4	0.4	---	---	---
1985	32.2	0.5	27.9	0.4	---	---	---
1987	30.9	0.4	26.5	0.4	---	---	---
1988	30.3	0.4	25.7	0.3	---	---	---
1989	---	---	---	---	---	---	19.5
1990	28.0	0.4	22.9	0.3	---	---	18.4
1991	27.6	0.4	23.5	0.3	27.5	1.4	17.8
1992	28.1	0.5	24.6	0.5	---	---	16.9
1993	27.3	0.6	22.6	0.4	30.5	1.0	15.8
1994	27.6	0.5	23.1	0.5	---	---	14.6
1995	26.5	0.6	22.7	0.5	34.8	1.2	13.9
1996	---	---	---	---	---	---	13.6
1997	27.1	0.4	22.2	0.4	36.4	1.1	13.2
1998	25.9	0.4	22.1	0.4	---	---	12.9
1999	25.2	0.5	21.6	0.4	34.8	1.3	12.6
2000	25.2	0.4	21.1	0.4	---	---	12.2
2001	24.6	0.4	20.7	0.4	28.5	1.0	12.0
2002	24.6	0.4	20.0	0.4	---	---	11.4
2003	23.7	0.4	19.4	0.4	21.9	1.1	A
2004	23.0	0.4	18.7	0.4	---	---	10.9
2005	23.4	0.5	18.3	0.4	23.0	1.2	10.7
2006	23.6	0.5	18.1	0.4	---	---	---
2007	---	---	---	---	20.0	1.2	---

SE is standard error.

--- Data not available.

A Data not shown. Due to a change in reporting, data are not comparable to other years.

NOTES: Data for men and women are for the civilian noninstitutionalized population. Estimates for men and women are age-adjusted to the 2000 standard population using five age groups: 18–24 years, 25–34 years, 35–44 years, 45–64 years, and 65 years and over. Age-adjusted estimates in this table may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. Cigarette smoking is defined as follows: among men and women 18 years and over, those who ever smoked 100 cigarettes in their lifetime and now smoke every day or some days; among high school students in grades 9–12, those who smoked cigarettes on 1 or more of the 30 days preceding the survey; and among mothers with a live birth, those who smoked during pregnancy. Some states did not require the reporting of mother's tobacco use during pregnancy on the birth certificate and are not included in this analysis. Reporting of tobacco use during pregnancy increased from 43 states and the District of Columbia (DC) in 1989 to 49 states and DC in 2000–2002. Reporting areas that have adopted the 2003 revision of the U.S. Certificate of Live Birth are excluded because maternal tobacco use data based on the 2003 revision are not comparable with data based on the 1989 and earlier revisions of the U.S. Standard Certificate of Live Birth. Data for 2004 and 2005 include the 36 states, D.C., and New York City that used the 1989 revision of the U. S. Standard Certificate of Live Birth in 2005. In addition, California did not require reporting of tobacco use during pregnancy. See [Appendix II, Age adjustment](#); [Cigarette smoking](#); [Tobacco use](#). See related [Tables 11](#) and [63](#).

SOURCES: CDC/NCHS, National Health Interview Survey (data for men and women); National Vital Statistics System (data for mothers during pregnancy); National Center for Chronic Disease Prevention and Health Promotion, Youth Risk Behavior Survey (data for high school students).



Data table for Figure 7. Overweight and obese, by age: United States, 1971–1974 through 2005–2006

Year	Overweight in children					
	Preschool-age children 2–5 years		School-age children 6–11 years		Adolescents 12–17 years	
	Percent	SE	Percent	SE	Percent	SE
1971–1974 . . . . .	---	---	4.0	0.7	6.0	0.7
1976–1980 . . . . .	---	---	6.5	0.7	5.0	0.6
1988–1994 . . . . .	7.2	0.7	11.3	1.0	11.1	1.1
1999–2000 . . . . .	10.3	1.7	15.1	1.4	14.9	0.9
2001–2002 . . . . .	10.6	1.8	16.3	1.6	16.8	1.3
2003–2004 . . . . .	13.9	1.6	18.8	1.3	17.2	1.9
2005–2006 . . . . .	11.0	1.2	15.1	2.1	17.8	1.8

Age and year	Adults					
	Overweight including obese		Overweight but not obese		Obese	
	Percent	SE	Percent	SE	Percent	SE
18–29 years						
1971–1974 . . . . .	28.5	1.3	20.6	1.2	7.9	0.5
1976–1980 . . . . .	29.0	1.2	21.1	0.9	7.9	0.6
1988–1994 . . . . .	36.3	1.3	23.1	1.1	13.2	1.0
1999–2000 . . . . .	49.7	2.3	28.5	2.4	21.3	2.2
2001–2002 . . . . .	52.3	1.8	28.7	1.5	23.6	1.5
2003–2004 . . . . .	50.3	1.9	26.3	1.7	24.1	1.6
2005–2006 . . . . .	52.1	2.0	27.8	1.5	24.3	2.7
30–44 years						
1971–1974 . . . . .	48.4	1.0	33.4	1.1	15.1	0.8
1976–1980 . . . . .	46.6	1.3	31.7	1.2	14.9	0.6
1988–1994 . . . . .	54.6	1.4	31.9	0.9	22.7	1.0
1999–2000 . . . . .	64.3	2.6	34.6	2.1	29.6	2.0
2001–2002 . . . . .	62.4	1.5	33.4	1.9	29.0	1.4
2003–2004 . . . . .	65.7	1.8	31.8	1.9	34.0	1.8
2005–2006 . . . . .	66.9	2.3	31.3	1.7	35.6	2.4
45–64 years						
1971–1974 . . . . .	55.1	1.3	37.4	1.2	17.7	0.8
1976–1980 . . . . .	55.4	1.0	37.0	0.8	18.4	0.8
1988–1994 . . . . .	65.5	1.2	36.4	1.2	29.1	1.1
1999–2000 . . . . .	69.7	2.3	33.8	1.1	35.9	2.5
2001–2002 . . . . .	73.1	1.3	37.3	1.6	35.8	1.7
2003–2004 . . . . .	73.1	1.6	37.2	1.7	35.9	2.1
2005–2006 . . . . .	73.7	1.3	33.0	1.6	40.7	2.3

See footnotes at end of table.

Data table for Figure 7. Overweight and obese, by age: United States, 1971–1974 through 2005–2006—Con.

Age and year	Adults					
	Overweight including obese		Overweight but not obese		Obese	
	Percent	SE	Percent	SE	Percent	SE
65 years and over						
1971–1974 . . . . .	---	---	---	---	---	---
1976–1980 . . . . .	---	---	---	---	---	---
1988–1994 . . . . .	60.1	1.3	37.9	1.0	22.2	0.9
1999–2000 . . . . .	69.0	1.7	38.0	1.7	31.0	2.0
2001–2002 . . . . .	69.0	1.8	39.9	2.3	29.2	1.3
2003–2004 . . . . .	70.5	1.9	40.7	2.4	29.7	1.7
2005–2006 . . . . .	68.6	1.4	38.1	1.3	30.5	1.5
65–74 years						
1971–1974 . . . . .	55.3	1.4	38.2	0.7	17.2	1.2
1976–1980 . . . . .	57.2	1.5	39.3	1.2	17.9	0.9
1988–1994 . . . . .	64.1	1.7	38.5	1.5	25.6	1.2
1999–2000 . . . . .	73.5	2.7	37.2	2.0	36.3	2.6
2001–2002 . . . . .	73.1	2.6	37.2	2.5	35.9	2.2
2003–2004 . . . . .	74.0	2.3	39.4	3.1	34.6	2.0
2005–2006 . . . . .	73.8	2.3	38.8	2.3	35.0	1.8

SE is standard error.

--- Data not available.

NOTES: Data are for the civilian noninstitutionalized population. For children and adolescents: overweight is defined as a body mass index (BMI) at or above the sex- and age-specific 95th percentile BMI cut points from the 2000 CDC Growth Charts: United States (available from: <http://www.cdc.gov/growthcharts/>). For adults: overweight including obese is defined as a BMI greater than or equal to 25; overweight but not obese as a BMI greater than or equal to 25 but less than 30; and obese as a BMI greater than or equal to 30. Pregnant adolescents and pregnant women 18 years of age and over were excluded in all years. See Appendix II, Body mass index (BMI). See related Tables 70, 75, and 76.

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey.

**Data table for Figure 8. Regular leisure-time physical activity and strength training at least twice a week among adults 18 years of age and over, by sex and age: United States, 1999–2006**

Sex and age	1999–2000		2001–2002		2003–2004		2005–2006	
	Percent	SE	Percent	SE	Percent	SE	Percent	SE
<b>Both sexes</b>		<b>Regular leisure-time physical activity</b>						
18 years and over . . . . .	31.0	0.3	31.8	0.3	31.5	0.3	30.5	0.3
18–29 years . . . . .	37.8	0.6	38.9	0.6	37.6	0.6	35.7	0.6
30–44 years . . . . .	33.2	0.4	34.0	0.4	33.0	0.4	32.9	0.5
45–64 years . . . . .	28.9	0.4	30.1	0.4	30.5	0.4	29.3	0.5
65 years and over . . . . .	21.3	0.5	21.6	0.5	22.5	0.5	21.6	0.5
<b>Men</b>								
18 years and over . . . . .	34.7	0.4	35.5	0.4	33.6	0.4	32.5	0.4
18–29 years . . . . .	43.8	0.8	44.2	0.9	41.5	0.9	39.1	1.0
30–44 years . . . . .	35.1	0.6	36.8	0.6	33.6	0.6	33.7	0.7
45–64 years . . . . .	31.0	0.7	32.1	0.6	31.1	0.6	30.3	0.6
65 years and over . . . . .	26.9	0.8	26.2	0.8	26.7	0.8	25.2	0.9
<b>Women</b>								
18 years and over . . . . .	27.6	0.3	28.5	0.3	29.6	0.4	28.6	0.4
18–29 years . . . . .	32.0	0.7	33.7	0.7	33.7	0.8	32.4	0.8
30–44 years . . . . .	31.4	0.6	31.2	0.5	32.4	0.6	32.2	0.7
45–64 years . . . . .	26.9	0.6	28.3	0.5	29.9	0.5	28.3	0.6
65 years and over . . . . .	17.3	0.5	18.2	0.6	19.5	0.6	19.0	0.7
<b>Both sexes</b>		<b>Strength training at least twice a week</b>						
18 years and over . . . . .	18.1	0.2	20.3	0.2	20.0	0.2	19.7	0.3
18–29 years . . . . .	26.2	0.5	28.6	0.5	27.1	0.6	26.4	0.6
30–44 years . . . . .	19.9	0.3	22.7	0.4	21.8	0.4	22.0	0.4
45–64 years . . . . .	15.0	0.3	17.0	0.3	17.6	0.3	17.6	0.4
65 years and over . . . . .	9.4	0.3	10.8	0.3	11.9	0.4	11.2	0.4
<b>Men</b>								
18 years and over . . . . .	21.5	0.3	23.8	0.3	22.6	0.4	22.5	0.4
18–29 years . . . . .	33.0	0.8	36.2	0.8	33.4	0.9	33.3	1.0
30–44 years . . . . .	22.6	0.5	25.5	0.5	23.8	0.6	24.3	0.6
45–64 years . . . . .	16.3	0.5	17.9	0.5	17.9	0.5	18.1	0.5
65 years and over . . . . .	11.3	0.5	13.2	0.6	13.8	0.6	12.3	0.6
<b>Women</b>								
18 years and over . . . . .	15.1	0.3	17.1	0.3	17.7	0.3	17.1	0.3
18–29 years . . . . .	19.6	0.6	21.2	0.6	21.0	0.7	19.4	0.7
30–44 years . . . . .	17.3	0.4	20.0	0.5	19.9	0.5	19.7	0.6
45–64 years . . . . .	13.9	0.4	16.1	0.5	17.4	0.4	17.1	0.5
65 years and over . . . . .	8.0	0.4	9.1	0.4	10.5	0.4	10.3	0.5

SE is standard error.

NOTES: Data are for the civilian noninstitutionalized population. Adults who engaged in regular leisure-time physical activity reported three or more sessions per week of vigorous activity lasting at least 20 minutes or five or more sessions per week of light or moderate activity lasting at least 30 minutes. To assess participation in strength training activities, adults were asked: "How often do you do LEISURE-TIME physical activities specifically designed to STRENGTHEN your muscles such as lifting weights or doing calisthenics? (Include all such activities even if you have mentioned them before)." See [Appendix II, Physical activity, leisure-time](#). See related [Table 74](#).

SOURCE: CDC/NCHS, National Health Interview Survey.

Data table for Figure 9. Incidence of acute viral hepatitis, by type: United States 1966–2006

Year	Acute Hepatitis A	Acute Hepatitis B	Acute Hepatitis C
	Cases per 100,000 population		
1966	16.8	0.8	---
1967	19.7	1.3	---
1968	23.0	2.5	---
1969	24.0	3.0	---
1970	27.9	4.1	---
1971	28.9	4.7	---
1972	26.0	4.5	---
1973	24.2	4.0	---
1974	19.5	5.2	---
1975	16.8	6.3	---
1976	15.5	7.1	---
1977	14.4	7.8	---
1978	13.5	6.9	---
1979	13.8	7.0	---
1980	12.8	8.4	---
1981	11.3	9.2	---
1982	10.1	9.6	---
1983	9.2	10.4	---
1984	9.3	11.1	---
1985	10.0	11.5	---
1986	10.0	11.2	---
1987	10.4	10.7	---
1988	11.6	9.4	---
1989	14.4	9.4	---
1990	12.6	8.5	---
1991	9.7	7.1	---
1992	9.1	6.3	2.4
1993	9.4	5.2	1.9
1994	10.3	4.8	1.8
1995	12.0	4.1	1.7
1996	11.7	4.0	1.4
1997	11.2	3.9	1.4
1998	8.6	3.8	1.3
1999	6.3	2.8	1.1
2000	4.8	2.9	1.1
2001	3.7	2.8	0.7
2002	3.1	2.8	0.5
2003	2.6	2.6	0.3
2004	1.9	2.1	0.3
2005	1.5	1.8	0.2
2006	1.2	1.6	0.3

--- Data not available.

NOTES: Rates are for the resident population. Cases of acute viral hepatitis are reported to CDC by state and territorial health departments. Case reports received represent only a proportion of hepatitis virus infections that occur each year. For all three viruses, a substantial number of infections occur with few or no symptoms. For an estimate of total cases see report cited below. Hepatitis C (classified as non-A, non-B hepatitis until 1995) became a reportable disease in 1982. From 1982–1991 (data not shown), rates for hepatitis C were unreliable, reflecting the erroneous reporting of chronically infected persons as acute cases when testing for hepatitis C virus antibody first became widely available. Data for 1985 and 1986 exclude cases from New York City. Hepatitis C data for 2002–2004 exclude cases from Missouri and for 2002, exclude cases from New Jersey. Hepatitis B data for 2006 exclude cases from Arizona.

SOURCE: National Notifiable Disease Surveillance System, 1966–2006. CDC. Surveillance for acute viral hepatitis--United States, 2006. Surveillance Summaries, March 21, 2008. MMWR 2008;57 (No. SS-2).

**Data table for Figure 10. Current asthma prevalence among adults 18 years of age and over, by sex, race and Hispanic origin, and percent of poverty level: United States, 2004–2006**

Race	Percent of poverty level							
	Total		Below 100%		100%–less than 200%		200% or more	
	Percent	SE	Percent	SE	Percent	SE	Percent	SE
Both sexes . . . . .	7.1	0.1	10.5	0.4	7.8	0.3	6.4	0.1
White, not Hispanic . . . . .	7.4	0.1	12.8	0.6	9.1	0.4	6.5	0.2
Black, not Hispanic . . . . .	7.8	0.3	10.7	0.7	7.7	0.6	6.6	0.4
Asian . . . . .	4.6	0.4	*4.7	1.1	*5.4	1.2	4.4	0.5
Hispanic . . . . .	5.0	0.2	6.1	0.5	4.7	0.5	4.8	0.3
Mexican . . . . .	4.0	0.3	4.8	0.6	3.4	0.5	4.2	0.5
Puerto Rican . . . . .	13.4	1.1	18.4	2.3	14.4	2.6	11.0	1.6
Men								
All races . . . . .	5.2	0.1	8.0	0.6	5.6	0.4	4.8	0.2
White, not Hispanic . . . . .	5.6	0.2	10.8	1.0	6.8	0.6	5.0	0.2
Black, not Hispanic . . . . .	5.5	0.4	7.6	1.1	4.7	0.8	5.2	0.5
Asian . . . . .	3.6	0.6	*	*	*	*	*3.4	0.7
Hispanic . . . . .	3.3	0.3	3.3	0.5	3.0	0.5	3.4	0.4
Mexican . . . . .	2.9	0.4	*3.0	0.7	*2.6	0.6	3.2	0.6
Puerto Rican . . . . .	8.4	1.4	*	*	*	*	*8.9	2.4
Women								
All races . . . . .	8.8	0.2	12.4	0.5	9.7	0.4	7.9	0.2
White, not Hispanic . . . . .	9.1	0.2	14.5	0.8	11.0	0.6	8.1	0.2
Black, not Hispanic . . . . .	9.7	0.4	12.5	0.9	9.8	0.8	8.0	0.6
Asian . . . . .	5.6	0.7	*6.0	1.6	*	*	5.2	0.8
Hispanic . . . . .	6.8	0.4	8.3	0.7	6.2	0.7	6.5	0.5
Mexican . . . . .	5.2	0.4	6.4	0.9	4.3	0.7	5.4	0.7
Puerto Rican . . . . .	17.7	1.6	24.6	3.0	*18.9	3.8	13.0	2.2

SE is standard error.

\*Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have a relative standard error greater than 30%.

NOTES: Data are for the civilian noninstitutionalized population. Estimates are age-adjusted to the 2000 standard adult population using three age groups: 18–44 years, 45–64 years, and 65 years and over. Persons of Hispanic origin may be of any race. Asian race includes persons of Hispanic and non-Hispanic origin. Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 35%–36% of adults in 2004–2006. Current asthma prevalence estimates are based on the questions “Have you ever been told by a doctor or other health professional that you had asthma?” and “Do you still have asthma?” See [Appendix II, Poverty](#).

SOURCE: CDC/NCHS, National Health Interview Survey.

**Data table for Figure 11. Limitation of activity caused by selected chronic health conditions among children, by age: United States, 2005–2006**

Type of chronic health condition	Under 5 years		5–11 years		12–17 years	
	Rate	SE	Rate	SE	Rate	SE
Number of children with limitation of activity caused by selected chronic health conditions per 1,000 population						
Speech problem . . . . .	15.0	1.3	22.7	1.4	6.1	0.8
Asthma or breathing problem . . . . .	7.3	0.9	5.4	0.6	6.5	0.8
Mental retardation or other developmental problem . . . . .	7.6	0.9	9.7	0.9	10.9	0.9
Other mental, emotional, or behavioral problem . . . . .	3.8	0.7	12.2	1.0	13.3	1.0
Attention-deficit/hyperactivity disorder . . . . .	*	*	17.8	1.2	22.2	1.4
Learning disability . . . . .	*2.2	0.5	19.1	1.3	30.3	1.7

SE is standard error.

\*Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

NOTES: Data are for noninstitutionalized children. Children with limitation of activity caused by chronic health conditions were either identified by enrollment in special programs (special education or early intervention services) or by a limitation in their ability to perform activities usual for their age group because of a physical, mental, or emotional problem. Conditions refer to response categories in the National Health Interview Survey. Children with more than one chronic health condition causing activity limitation were counted in each condition category. Starting in 2001, the condition list for children was expanded to include categories for attention-deficit/hyperactivity disorder (ADHD or ADD) and learning disability. Thus, comparable data for this figure are not available prior to 2001. See [Appendix II, Condition; Limitation of activity](#). See related [Table 58](#).

SOURCE: CDC/NCHS, National Health Interview Survey.

**Data table for Figure 12. Limitation of activity caused by selected chronic health conditions among working-age adults, by age: United States, 2005–2006**

Type of chronic health condition	18–44 years		45–54 years		55–64 years	
	Rate	SE	Rate	SE	Rate	SE
Number of persons with limitation of activity caused by selected chronic health conditions per 1,000 population						
Mental illness . . . . .	12.7	0.5	22.8	1.1	25.4	1.4
Fractures or joint injury. . . . .	5.2	0.4	12.9	0.8	19.2	1.1
Lung . . . . .	4.3	0.3	11.2	0.8	20.8	1.3
Diabetes . . . . .	2.8	0.3	13.7	0.9	31.1	1.6
Heart or other circulatory . . . . .	5.7	0.4	26.1	1.2	63.4	2.2
Arthritis or other musculoskeletal. . . . .	18.4	0.7	55.5	1.8	98.6	2.6
Mental retardation . . . . .	5.5	0.4	3.4	0.4	2.7	0.4

SE is standard error.

NOTES: Data are for the civilian noninstitutionalized population. Conditions refer to response categories in the National Health Interview Survey; some conditions include several response categories. Mental illness includes depression, anxiety or emotional problem, and other mental conditions. Heart or other circulatory includes heart problem, stroke problem, hypertension or high blood pressure, and other circulatory system conditions. Arthritis or other musculoskeletal includes arthritis or rheumatism, back or neck problem, and other musculoskeletal system conditions. Mental retardation includes mental retardation and other developmental problems (e.g., cerebral palsy). Persons with more than one chronic health condition causing activity limitation were counted in each condition category. See [Appendix II, Condition; Limitation of activity](#). See related [Table 58](#).

SOURCE: CDC/NCHS, National Health Interview Survey.

**Data table for Figure 13. Limitation of activity caused by selected chronic health conditions among older adults, by age: United States, 2005–2006**

Type of chronic health condition	65–74 years		75–84 years		85 years and over	
	Rate	SE	Rate	SE	Rate	SE
Number of persons with limitation of activity caused by selected chronic health conditions per 1,000 population						
Senility or dementia . . . . .	8.7	1.0	30.1	2.4	77.0	6.7
Lung . . . . .	33.2	2.3	39.7	2.6	42.4	4.8
Diabetes . . . . .	38.5	2.1	46.1	2.8	45.0	5.5
Vision . . . . .	18.1	1.6	36.4	2.6	87.7	7.7
Hearing . . . . .	10.3	1.2	23.7	2.3	77.6	7.4
Heart or other circulatory . . . . .	93.3	3.3	144.9	5.1	210.7	10.9
Arthritis or other musculoskeletal . . . . .	119.9	4.0	172.3	5.3	271.9	11.4

SE is standard error.

NOTES: Data are for the civilian noninstitutionalized population. Conditions refer to response categories in the National Health Interview Survey; some conditions include several response categories. Vision includes vision conditions or problems seeing, and hearing includes hearing problems. Heart or other circulatory includes heart problem, stroke problem, hypertension or high blood pressure, and other circulatory system conditions. Arthritis or other musculoskeletal includes arthritis or rheumatism, back or neck problem, and other musculoskeletal system conditions. Senility is the term offered to respondents on a flash card, but this category may include Alzheimer's disease or other types of dementia reported by the respondent. Persons with more than one chronic health condition causing activity limitation were counted in each condition category. See [Appendix II, Condition; Limitation of activity](#). See related [Table 58](#).

SOURCE: CDC/NCHS, National Health Interview Survey.

Data table for Figure 14. Life expectancy at birth and at 65 years of age, by race and sex: United States, 1970–2005

Year	Male	Female	White male	Black male	White female	Black female
At birth			Life expectancy in years			
1970	67.1	74.7	68.0	60.0	75.6	68.3
1980	70.0	77.4	70.7	63.8	78.1	72.5
1990	71.8	78.8	72.7	64.5	79.4	73.6
1997	73.6	79.4	74.3	67.2	79.9	74.7
1998	73.8	79.5	74.5	67.6	80.0	74.8
1999	73.9	79.4	74.6	67.8	79.9	74.7
2000	74.3	79.7	74.9	68.3	80.1	75.2
2001	74.4	79.8	75.0	68.6	80.2	75.5
2002	74.5	79.9	75.1	68.8	80.3	75.6
2003	74.7	80.0	75.3	68.9	80.4	75.9
2004	75.2	80.4	75.7	69.5	80.8	76.3
2005	75.2	80.4	75.7	69.5	80.8	76.5
At 65 years						
1970	13.1	17.0	13.1	12.5	17.1	15.7
1980	14.1	18.3	14.2	13.0	18.4	16.8
1990	15.1	18.9	15.2	13.2	19.1	17.2
1997	15.9	19.2	16.0	14.2	19.3	17.6
1998	16.0	19.2	16.1	14.3	19.3	17.4
1999	16.1	19.1	16.1	14.3	19.2	17.3
2000	16.2	19.3	16.3	14.2	19.4	17.7
2001	16.4	19.4	16.5	14.4	19.5	17.9
2002	16.6	19.5	16.6	14.6	19.5	18.0
2003	16.8	19.7	16.8	14.8	19.7	18.3
2004	17.1	20.0	17.2	15.2	20.0	18.6
2005	17.2	20.0	17.2	15.2	20.0	18.7

NOTES: Death rates used to calculate life expectancies for 1997–1999 are based on postcensal 1990-based population estimates; life expectancies for 2000 and beyond are calculated with death rates based on census 2000. See [Appendix I, Population Census and Population Estimates](#). Deaths to nonresidents were excluded beginning in 1970. See [Appendix II, Life expectancy](#). See related [Table 27](#).

SOURCE: National vital statistics reports. United States life tables, 1997–2004. Hyattsville, MD: NCHS. 1999–2006. National vital statistics reports. Deaths: Final data for 2005. 2008;56(10). Hyattsville, MD: NCHS.



Data table for Figure 15. Infant, neonatal, and postneonatal mortality rates: United States, selected years 1950–2005

<i>Year</i>	<i>Infant</i>	<i>Neonatal</i>	<i>Postneonatal</i>
	Deaths per 1,000 live births		
1950.....	29.21	20.50	8.71
1960.....	26.04	18.73	7.31
1970.....	20.01	15.08	4.93
1980.....	12.60	8.48	4.13
1981.....	11.93	8.02	3.91
1982.....	11.52	7.70	3.82
1983.....	11.16	7.28	3.88
1984.....	10.79	7.00	3.79
1985.....	10.64	6.96	3.68
1986.....	10.35	6.71	3.64
1987.....	10.08	6.46	3.62
1988.....	9.95	6.32	3.64
1989.....	9.81	6.23	3.59
1990.....	9.22	5.85	3.38
1991.....	8.94	5.59	3.35
1992.....	8.52	5.37	3.14
1993.....	8.37	5.29	3.07
1994.....	8.02	5.12	2.90
1995.....	7.59	4.91	2.67
1996.....	7.32	4.77	2.55
1997.....	7.23	4.77	2.45
1998.....	7.20	4.80	2.40
1999.....	7.06	4.73	2.33
2000.....	6.91	4.63	2.28
2001.....	6.85	4.54	2.31
2002.....	6.97	4.66	2.31
2003.....	6.85	4.62	2.23
2004.....	6.79	4.52	2.27
2005.....	6.87	4.54	2.34

NOTES: Infant is defined as under 1 year of age, neonatal as under 28 days of age, and postneonatal as 28 days through 11 months of life. See related [Table 22](#).

SOURCE: CDC/NCHS, National Vital Statistics System: Kung HC, Hoyert DL, Xu JQ, Murphy SL. Deaths: Final data for 2005. National vital statistics reports. 2008;56(10). Hyattsville, MD: NCHS. Available from: [http://www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56\\_10.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56_10.pdf).

Data table for Figure 16. Death rates for leading causes of death for all ages: United States, 1950–2005

Year	All causes	Heart disease	Cancer	Stroke	Chronic lower respiratory diseases	Unintentional injuries
Deaths per 100,000 population						
1950	1,446.0	586.8	193.9	180.7	---	78.0
1960	1,339.2	559.0	193.9	177.9	---	62.3
1970	1,222.6	492.7	198.6	147.7	---	60.1
1980	1,039.1	412.1	207.9	96.2	28.3	46.4
1981	1,007.1	397.0	206.4	89.5	29.0	43.4
1982	985.0	389.0	208.3	84.2	29.1	40.1
1983	990.0	388.9	209.1	81.2	31.6	39.1
1984	982.5	378.8	210.8	78.7	32.4	38.8
1985	988.1	375.0	211.3	76.4	34.5	38.5
1986	978.6	365.1	211.5	73.1	34.8	38.6
1987	970.0	355.9	211.7	71.6	35.0	38.2
1988	975.7	352.5	212.5	70.6	36.5	38.9
1989	950.5	332.0	214.2	66.9	36.6	37.7
1990	938.7	321.8	216.0	65.3	37.2	36.3
1991	922.3	312.5	215.2	62.9	37.9	34.7
1992	905.6	304.0	213.5	61.5	37.7	33.2
1993	926.1	308.1	213.5	62.7	40.7	34.2
1994	913.5	297.5	211.7	62.6	40.3	34.2
1995	909.8	293.4	209.9	63.1	40.1	34.4
1996	894.1	285.7	206.7	62.5	40.6	34.5
1997	878.1	277.7	203.4	61.1	41.1	34.2
1998	870.6	271.3	200.7	59.3	41.8	34.5
1998 (Comparability-modified)	870.6	267.4	202.1	62.8	43.8	35.6
1999	875.6	266.5	200.8	61.6	45.4	35.3
2000	869.0	257.6	199.6	60.9	44.2	34.9
2001	854.5	247.8	196.0	57.9	43.7	35.7
2002	845.3	240.8	193.5	56.2	43.5	36.9
2003	832.7	232.3	190.1	53.5	43.3	37.3
2004	800.8	217.0	185.8	50.0	41.1	37.7
2005	798.8	211.1	183.8	46.6	43.2	39.1

--- Data not available.

NOTES: Estimates are age-adjusted to the year 2000 standard population using the following age groups: under 1 year, 1–4 years, 10-year age groups from 5–14 through 75–84 years, and 85 years and over. Causes of death shown are the five leading causes of death for all ages in 2005. The 1950 death rates are based on the 6th revision of the International Classification of Disease (ICD–6), 1960 death rates on the ICD–7, 1970 death rates on the ICD–8, and 1980–1998 death rates on the ICD–9. The 1998 (comparability-modified) death rates use comparability ratios to adjust the rate to be comparable to records classified according to ICD–10. Starting with 1999 data, death rates are based on ICD–10. Comparability ratios across revisions for selected causes are available from: <http://www.cdc.gov/nchs/data/statab/comp2.pdf>. Death rates for chronic lower respiratory diseases are available from 1980 when a category that included bronchitis, emphysema, asthma, and other chronic lung diseases was introduced in ICD–9. Cancer refers to malignant neoplasms; stroke to cerebrovascular diseases; and unintentional injuries is preferred to “accidents” in the public health community. Rates for 1991–1999 were computed using intercensal population estimates based on the 2000 census. Rates for 2000 were computed using 2000 census counts. Rates for 2001 and later years were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#). See [Appendix II, Age adjustment; Cause of death; Comparability ratio; Table V](#). See related [Tables 29, 31, 32, 35–39](#), and [41](#).

SOURCE: CDC/NCHS, National Vital Statistics System.

**Data table for Figure 17. Health insurance coverage at the time of interview among persons under 65 years of age: United States, 1984–2006**

Year	Health insurance coverage at the time of interview					
	Private		Medicaid		Uninsured	
	Percent	SE	Percent	SE	Percent	SE
1984	76.8	0.6	6.8	0.3	14.5	0.4
1989	75.9	0.4	7.2	0.2	15.6	0.3
1994	69.9	0.4	11.2	0.3	17.5	0.3
1995	71.3	0.4	11.5	0.2	16.1	0.2
1996	71.2	0.5	11.1	0.3	16.6	0.3
1997	70.7	0.4	9.7	0.2	17.5	0.2
1998	72.1	0.4	8.9	0.2	16.6	0.2
1999	72.8	0.3	9.1	0.2	16.1	0.2
2000	71.5	0.4	9.5	0.2	17.0	0.3
2001	71.2	0.4	10.4	0.2	16.4	0.3
2002	69.4	0.4	11.8	0.2	16.8	0.2
2003	68.9	0.4	12.3	0.2	16.5	0.3
2004	68.8	0.4	12.5	0.2	16.4	0.2
2005	68.2	0.4	12.9	0.2	16.4	0.2
2006	66.3	0.5	14.0	0.3	17.0	0.3

SE is standard error.

NOTES: Data are for the civilian noninstitutionalized population. Medicaid includes other public assistance through 1996; includes state-sponsored health plans starting in 1997; and includes State Children's Health Insurance Program (SCHIP) starting in 1999. Uninsured persons are not covered by private insurance, Medicaid, SCHIP, public assistance (through 1996), state-sponsored or other government-sponsored health plans (starting in 1997), Medicare, or military plans. Persons with Indian Health Service only are considered to have no coverage. Percents do not add to 100 because the percentage of persons with Medicare, military plans, and other government-sponsored plans is not shown and because persons with both private insurance and Medicaid appear in both categories. Starting with data from the third quarter of 2004, persons under 65 years of age with no reported coverage were asked explicitly about Medicaid coverage. Estimates for Medicaid coverage shown in this table include the additional information. See [Appendix II, Health insurance coverage](#). See related [Tables 137, 139, and 140](#).

SOURCE: CDC/NCHS, National Health Interview Survey.

**Data table for Figure 18. Uninsured for at least part of the 12 months prior to interview among persons under 65 years of age, by length of time uninsured and selected characteristics: United States, 2006**

Characteristics	Length of time uninsured prior to interview					
	Total uninsured prior to interview		More than 12 months		Any period up to 12 months	
	Percent	SE	Percent	SE	Percent	SE
Age						
Under 65 years . . . . .	21.1	0.3	11.9	0.2	8.1	0.2
Under 18 years . . . . .	13.2	0.4	5.2	0.3	7.1	0.3
18–24 years. . . . .	36.4	0.9	20.1	0.7	14.7	0.6
25–34 years. . . . .	33.8	0.7	20.2	0.6	12.5	0.4
35–44 years. . . . .	22.6	0.6	14.1	0.5	7.1	0.3
45–54 years. . . . .	17.9	0.5	11.1	0.4	5.6	0.3
55–64 years. . . . .	12.9	0.5	8.0	0.4	3.9	0.3
Percent of poverty level						
Below 100% . . . . .	35.7	0.9	22.8	0.8	11.5	0.6
100%–less than 150% . . . . .	37.5	1.2	23.4	0.9	13.0	0.8
150%–less than 200% . . . . .	34.3	1.1	19.9	0.9	13.4	0.8
200% or more . . . . .	13.7	0.3	6.6	0.2	5.9	0.2
Race and Hispanic origin						
Black or African American only, not Hispanic or Latino . . . . .	22.1	0.7	11.2	0.5	9.7	0.5
Asian only. . . . .	18.0	1.1	10.8	0.9	5.8	0.6
White only, not Hispanic or Latino . . . . .	16.6	0.4	8.1	0.2	7.5	0.3
Hispanic or Latino (total) . . . . .	38.8	0.8	28.3	0.8	9.4	0.4
Mexican. . . . .	42.3	0.9	32.0	1.0	9.2	0.5
Cuban. . . . .	26.9	3.5	19.6	3.0	*	*
Puerto Rican . . . . .	22.4	1.9	9.8	1.3	12.0	1.6

SE is standard error.

\* Estimates are considered unreliable. Data not shown have a relative standard error of greater than 30%.

NOTES: Data are for the civilian noninstitutionalized population. Total uninsured prior to interview includes people uninsured more than 12 months, people uninsured any period up to 12 months, and people uninsured for an unknown length of time (1.3% for persons under 65 years). Persons of Hispanic origin may be of any race. Total for Hispanic includes groups not shown separately. Asian only race includes persons of Hispanic and non-Hispanic origin. Uninsured persons are not covered by private insurance, Medicaid, State Children’s Health Insurance Program (CHIP), state-sponsored or other government-sponsored health plans, Medicare, or military plans. Persons with Indian Health Service only are considered uninsured. Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 34% of persons under 65 years of age in 2006. See [Appendix II, Family income](#); [Health insurance coverage](#); [Hispanic origin](#); [Poverty](#); [Race](#).

SOURCE: CDC/NCHS, National Health Interview Survey.

**Data table for Figure 19. Personal health care expenditures, by source of funds and type of expenditures: United States, 2006**

Source of funds	Type of expenditures					
	Total	Hospital care	Physician services	Nursing home	Prescription drugs	Other
Amount in billions						
All personal health care expenditures . . . . .	\$1,762.0	\$648.2	\$447.6	\$124.9	\$216.7	\$324.6
Percent distribution						
All personal health care expenditures . . . . .	100.0	36.8	25.4	7.1	12.3	18.4
Source of funds						
Percent distribution						
All sources of funds . . . . .	100.0	100.0	100.0	100.0	100.0	100.0
Out-of-pocket payments . . . . .	14.6	3.3	10.3	26.4	22.0	33.4
Private health insurance . . . . .	36.0	36.2	49.1	7.4	43.9	23.3
Other private funds . . . . .	4.1	4.5	6.4	3.7	0.0	3.1
Government . . . . .	45.3	55.9	34.2	62.5	34.2	40.2
Medicaid . . . . .	16.2	17.1	7.0	43.4	8.8	21.7
Medicare . . . . .	21.6	28.9	20.6	16.7	18.2	12.8
Other government . . . . .	7.5	9.9	6.6	2.4	7.1	5.7
Federal . . . . .	35.1	44.8	28.2	43.0	27.1	27.4
State and local . . . . .	10.2	11.2	6.0	19.5	7.0	12.8

0.0 Quantity more than zero but less than 0.05.

NOTES: Other expenditures include dental services, other professional services, home health care, nonprescription drugs and other medical nondurables, vision products and other medical durables, and other personal health care, not shown separately. Medicaid includes federal and state and local funds but excludes SCHIP and SCHIP expansion funds. State and local includes expenditures on Medicaid SCHIP and SCHIP expansion. See related [Tables 127](#) and [128](#). See [Appendix I, National Health Expenditure Accounts](#).

SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group, National Health Expenditure Accounts.

Data table for Figure 20. Per capita personal health care expenditures, by state of residence: United States, 2004

<i>Region and state of residence</i>	<i>Amount per capita</i>	<i>Percent of U.S. per capita</i>	<i>Region and state of residence</i>	<i>Amount per capita</i>	<i>Percent of U.S. per capita</i>
United States . . . . .	\$5,283	100%	United States . . . . .	\$5,283	100%
New England . . . . .	6,409	121	Southeast . . . . .	5,172	98
Connecticut . . . . .	6,344	120	Alabama . . . . .	5,135	97
Maine . . . . .	6,540	124	Arkansas . . . . .	4,863	92
Massachusetts . . . . .	6,683	126	Florida . . . . .	5,483	104
New Hampshire . . . . .	5,432	103	Georgia . . . . .	4,600	87
Rhode Island . . . . .	6,193	117	Kentucky . . . . .	5,473	104
Vermont . . . . .	6,069	115	Louisiana . . . . .	5,040	95
Mideast . . . . .	6,151	116	Mississippi . . . . .	5,059	96
Delaware . . . . .	6,306	119	North Carolina . . . . .	5,191	98
District of Columbia . . . . .	8,295	157	South Carolina . . . . .	5,114	97
Maryland . . . . .	5,590	106	Tennessee . . . . .	5,464	103
New Jersey . . . . .	5,807	110	Virginia . . . . .	4,822	91
New York . . . . .	6,535	124	West Virginia . . . . .	5,954	113
Pennsylvania . . . . .	5,933	112	Southwest . . . . .	4,542	86
Great Lakes . . . . .	5,394	102	Arizona . . . . .	4,103	78
Illinois . . . . .	5,293	100	New Mexico . . . . .	4,471	85
Indiana . . . . .	5,295	100	Oklahoma . . . . .	4,917	93
Michigan . . . . .	5,058	96	Texas . . . . .	4,601	87
Ohio . . . . .	5,725	108	Rocky Mountains . . . . .	4,557	86
Wisconsin . . . . .	5,670	107	Colorado . . . . .	4,717	89
Plains . . . . .	5,538	105	Idaho . . . . .	4,444	84
Iowa . . . . .	5,380	102	Montana . . . . .	5,080	96
Kansas . . . . .	5,382	102	Utah . . . . .	3,972	75
Minnesota . . . . .	5,795	110	Wyoming . . . . .	5,265	100
Missouri . . . . .	5,444	103	Far West . . . . .	4,740	90
Nebraska . . . . .	5,599	106	Alaska . . . . .	6,450	122
North Dakota . . . . .	5,808	110	California . . . . .	4,638	88
South Dakota . . . . .	5,327	101	Hawaii . . . . .	4,941	94
			Nevada . . . . .	4,569	86
			Oregon . . . . .	4,880	92
			Washington . . . . .	5,092	96

NOTES: Data are shown for Bureau of Economic Analysis (BEA) regions that are constructed to show economically interdependent states. These BEA geographic regions differ from U.S. Census Bureau geographic divisions shown in some *Health, United States* tables. See [Appendix II, Geographic region and division](#). See [Table 148](#). Personal health care expenditures are outlays for goods and services relating directly to patient care. The expenditures in this category are total national health expenditures minus expenditures for research and construction, health insurance program administration, and government public health activities. See [Appendix II, Health expenditures, national](#).

SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group. Available from: <http://www.cms.hhs.gov/NationalHealthExpendData/downloads/res-us.pdf>.

**Data table for Figure 21. Visits to physician offices and hospital outpatient departments for attention-deficit/hyperactivity disorder (ADHD) among children 4–17 years of age, by sex and age: United States, 1996–2006**

Sex and age	1996–1998		2000–2002		2004–2006	
	Rate	SE	Rate	SE	Rate	SE
Number of visits per 100 children						
Children 4–17 years . . . . .	5.4	0.5	7.8	0.7	9.2	0.9
Sex						
Boys . . . . .	8.0	0.8	11.3	1.1	13.9	1.4
Girls . . . . .	2.6	0.5	4.1	0.6	4.4	0.5
Age						
4–8 years . . . . .	4.7	0.7	5.9	0.9	7.3	1.0
9–12 years . . . . .	8.4	1.2	11.1	1.3	13.8	1.5
13–17 years . . . . .	3.6	0.5	7.0	0.8	7.5	1.0

SE is standard error.

NOTES: ADHD visits were identified by a primary diagnosis *International Classification of Diseases, Ninth Revision, Clinical Modification* code of 314.00 or 314.01. Rates are for the civilian noninstitutionalized population. For 1996–1999 data, population estimates are 1990-based postcensal estimates as of July 1 and are adjusted for net underenumeration using the 1990 National Population Adjustment Matrix from the U.S. Census Bureau. For data years 2000 and beyond, population estimates are based on the 2000 census. See [Appendix I, Population Census](#) and [Population Estimates](#).

SOURCES: CDC/NCHS, National Ambulatory Medical Care Survey and National Hospital Ambulatory Medical Care Survey.

Data table for Figure 22. Selected principal reasons for emergency department visits, by age and sex: United States, 2006

Age and sex	Principal reason for visit									
	Abdominal pain	SE	Chest pain	SE	Fever	SE	Headache	SE	Cough	SE
Visits per 100 population										
Total . . . . .	2.7	0.2	2.1	0.1	1.5	0.1	1.1	0.1	1.0	0.1
Under 18 years . . . . .	1.4	0.1	0.4	0.1	4.6	0.3	0.7	0.1	2.0	0.2
18 years and over . . . . .	3.1	0.2	2.7	0.2	0.5	0.0	1.3	0.1	0.7	0.0
18–29 years . . . . .	4.9	0.4	1.7	0.2	0.7	0.1	1.7	0.2	0.7	0.1
30–44 years . . . . .	3.1	0.2	2.4	0.2	0.4	0.1	1.5	0.1	0.7	0.1
45–64 years . . . . .	2.3	0.2	3.1	0.2	0.4	0.0	0.9	0.1	0.5	0.1
65 years and over . . . . .	2.5	0.2	3.8	0.3	0.7	0.1	0.8	0.1	0.7	0.1
65–74 years . . . . .	2.0	0.3	3.8	0.5	*0.4	0.1	*1.0	0.2	*0.5	0.1
75 years and over . . . . .	3.1	0.3	3.8	0.4	0.9	0.2	*0.6	0.2	0.9	0.2
Sex										
Male . . . . .	1.8	0.1	2.1	0.1	1.5	0.1	0.9	0.1	0.9	0.1
Female . . . . .	3.6	0.2	2.2	0.2	1.5	0.1	1.4	0.1	1.0	0.1

SE is standard error.

0.0 Quantity more than zero but less than 0.05.

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%.

NOTES: Rates are for the civilian population. Data are based on the patient's main complaint, symptom, or other reason for visiting the emergency department and were coded according to A Reason for Visit Classification for Ambulatory Care (RVC). Schneider D, Appleton L, McLemore T. A reason for visit classification for ambulatory care. NCHS. Vital Health Stat 1979;2(78). Up to three reasons could be coded per visit, but only the most important reason (principal reason) coded was used in this analysis.

SOURCE: CDC/NCHS, National Hospital Ambulatory Medical Care Survey.



**Data table for Figure 23. Dental visits for teeth cleaning by a dentist or dental hygienist in the past year among persons 2 years of age and over, by selected characteristics: United States, 2003–2004**

<i>Characteristic</i>	<i>Percent</i>	<i>SE</i>
Total . . . . .	61.0	1.4
Sex		
Male . . . . .	57.1	1.6
Female . . . . .	64.6	1.4
Age		
2–17 years . . . . .	78.6	2.0
18–29 years . . . . .	50.5	2.5
30–44 years . . . . .	54.0	2.0
45–64 years . . . . .	58.6	2.5
65–74 years . . . . .	62.9	3.5
75 years and over . . . . .	65.4	2.8
Race and Hispanic origin		
Not Hispanic or Latino:		
White only . . . . .	64.7	1.8
Black only . . . . .	54.1	1.6
Mexican . . . . .	50.8	3.3
Percent of poverty level		
Below 100% . . . . .	49.7	1.8
100%–less than 200% . . . . .	46.5	1.6
200% or more . . . . .	68.3	1.7

SE is standard error

NOTES: Data are for the civilian noninstitutionalized population. Respondents were asked about how long it has been since they had their teeth cleaned by a dentist or dental hygienist. Included in this analysis are those who reported at least one dental cleaning visit within the past year. This analysis excludes those without the need for teeth cleaning (without any natural teeth or implants). Less than 1% of persons 2–44 years of age, 8% of 45–64 years of age, 24% of 65–74 years of age, and 33% of 75 years of age and over were without any natural teeth or implants. Persons of Mexican origin may be of any race. Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Family income data were missing for 5.7% of persons 2 years old and over.

**SOURCE:** CDC/NCHS, National Health and Nutrition Examination Survey.

**Data table for Figure 24. Influenza and pneumococcal vaccination among middle-age and older adults, by age: United States, 1989–2006**

Type of vaccination and age	1989		1991		1993		1994		1995		1997		1998	
	Percent	SE	Percent	SE	Percent	SE	Percent	SE	Percent	SE	Percent	SE	Percent	SE
Influenza vaccination in the past 12 months														
50–64 years . . . . .	10.6	0.3	15.0	0.5	23.0	0.8	25.6	0.9	27.0	0.9	31.9	0.7	33.1	0.7
65–74 years . . . . .	28.0	0.6	38.7	0.8	50.4	1.1	53.5	1.2	54.9	1.2	60.9	0.9	60.1	1.0
75–84 years . . . . .	34.8	0.8	46.3	1.2	54.8	1.5	58.6	1.5	64.3	1.7	66.0	1.1	67.3	1.2
85 years and over . . . . .	32.0	1.9	46.3	2.3	52.1	3.1	55.0	3.0	58.0	3.1	67.4	2.1	67.4	2.1
Pneumococcal vaccination ever														
65 years and over . . . . .	14.1	0.4	21.2	0.6	28.2	0.8	29.7	0.8	34.0	0.9	42.4	0.7	46.0	0.8
65–74 years . . . . .	13.1	0.5	19.7	0.7	26.2	1.0	28.4	1.1	31.4	1.2	40.1	1.0	42.1	1.0
75–84 years . . . . .	16.5	0.7	23.5	0.9	31.9	1.4	31.8	1.4	39.1	1.8	46.2	1.1	51.7	1.2
85 years and over . . . . .	12.5	1.1	23.8	2.0	27.1	3.1	30.9	2.7	33.2	2.9	42.1	2.2	47.1	2.3

Type of vaccination and age	1999		2000		2001		2002		2003		2004		2005		2006	
	Percent	SE	Percent	SE	Percent	SE	Percent	SE	Percent	SE	Percent	SE	Percent	SE	Percent	SE
Influenza vaccination in the past 12 months																
50–64 years . . . . .	34.1	0.7	34.6	0.7	32.2	0.7	34.0	0.7	36.8	0.7	35.9	0.7	22.9	0.6	33.2	0.8
65–74 years . . . . .	61.9	1.0	61.1	1.0	60.7	1.0	60.9	1.0	60.5	1.0	60.1	1.0	53.7	1.0	60.1	1.3
75–84 years . . . . .	70.9	1.2	68.6	1.1	65.7	1.1	71.6	1.1	72.4	1.1	69.3	1.1	65.2	1.2	68.5	1.3
85 years and over . . . . .	68.6	2.1	67.7	2.2	66.4	2.1	70.3	2.0	66.6	2.1	71.0	2.0	69.9	1.9	70.6	2.3
Pneumococcal vaccination ever																
65 years and over . . . . .	49.7	0.8	53.1	0.8	54.0	0.8	56.0	0.8	55.6	0.8	56.8	0.8	56.2	0.7	57.1	0.9
65–74 years . . . . .	46.6	1.0	48.2	1.0	50.3	1.1	50.2	1.0	49.8	1.1	50.4	1.1	49.4	1.0	52.0	1.3
75–84 years . . . . .	54.8	1.3	59.7	1.2	58.5	1.2	62.7	1.2	63.3	1.2	64.3	1.2	64.5	1.1	63.8	1.5
85 years and over . . . . .	49.1	2.3	56.6	2.3	58.4	2.3	63.1	2.3	58.1	2.2	64.0	2.3	61.8	2.0	60.6	2.6

SE is standard error.

NOTES: Data are for the civilian noninstitutionalized population. Estimates are based on two questions: “During the past 12 months, have you had a flu shot?” A flu shot is usually given in the fall and protects against influenza for the flu season. Influenza estimates in this analysis exclude Flu Mist. “Have you ever had a pneumonia shot?” This shot is usually given only once or twice in a person’s lifetime and is different from the flu shot. It is also called pneumococcal vaccine. Annual influenza vaccination has been recommended for all adults 50 years and over since 2000 and pneumococcal vaccination has been recommended for all adults age 65 years and over since 1997. Due to the shortfall in the 2000–2001 and 2004–2005 influenza vaccine supply, CDC recommended vaccine be reserved for priority groups including those 65 years of age and over and those 2–64 years with chronic underlying health conditions. CDC. Prevention and control of influenza: Recommendations of the advisory committee on immunization practices (ACIP). MMWR 2000;49(RR-03):1–38. Available from: <http://www.cdc.gov/mmwr/PDF/rr/rr4903.pdf>. CDC. Prevention of pneumococcal disease: Recommendations of the advisory committee on immunization practices (ACIP). MMWR 1997;46(RR-08):1–24. Available from: <http://www.cdc.gov/mmwr/PDF/rr/rr4608.pdf>. CDC. Interim influenza vaccination recommendations, 2004–05 influenza season. MMWR 2004; 53(39):923–4. Available from: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5339a6.htm>. CDC. Notice to readers: Updated recommendations from the advisory committee on immunization practices in response to delays in supply of influenza vaccine for the 2000–01 season. MMWR 2000;49(39):888–92. Available from: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm4927a4.htm>.

SOURCE: CDC/NCHS, National Health Interview Survey.

**Data table for Figure 25. Total discharges and any-listed pneumonia discharges from nonfederal short-stay hospitals among persons 65 years of age and over, by age: United States, 1979–2006**

Year	Total discharges per 10,000 population				Any-listed pneumonia discharges per 10,000 population				Percent of all hospitalizations with any-listed pneumonia diagnosis			
	65 years and over, crude	65–74 years	75–84 years	85 years and over	65 years and over, crude	65–74 years	75–84 years	85 years and over	65 years and over, crude	65–74 years	75–84 years	85 years and over
1979–1980 . . . . .	3,727.2	3,083.7	4,488.7	5,568.1	187.9	120.4	243.3	465.8	5.0	3.9	5.4	8.4
1981–1982 . . . . .	3,981.5	3,269.7	4,808.4	5,951.0	198.9	122.7	248.6	540.8	5.0	3.8	5.2	9.1
1983–1984 . . . . .	4,078.4	3,275.1	5,027.0	6,099.4	227.7	137.8	301.5	562.3	5.6	4.2	6.0	9.2
1985–1986 . . . . .	3,696.0	2,986.5	4,427.6	5,718.1	255.0	155.3	321.9	659.3	6.9	5.2	7.3	11.5
1987–1988 . . . . .	3,448.6	2,757.6	4,138.5	5,396.4	254.9	151.8	317.8	679.2	7.4	5.5	7.7	12.6
1989–1990 . . . . .	3,337.7	2,617.5	3,960.0	5,580.2	273.6	155.7	350.0	724.7	8.2	5.9	8.8	13.0
1991–1992 . . . . .	3,415.4	2,669.2	4,009.2	5,753.5	285.6	170.0	347.7	745.2	8.4	6.4	8.7	13.0
1993–1994 . . . . .	3,447.2	2,643.3	4,043.6	5,924.7	298.9	174.2	356.5	792.5	8.7	6.6	8.8	13.4
1995–1996 . . . . .	3,484.6	2,598.7	4,162.8	5,893.8	317.2	184.7	380.5	793.6	9.1	7.1	9.1	13.5
1997–1998 . . . . .	3,631.9	2,667.2	4,290.0	6,149.1	358.3	203.0	438.0	841.4	9.9	7.6	10.2	13.7
1999–2000 . . . . .	3,617.8	2,625.4	4,230.0	6,124.2	360.0	203.5	432.3	825.3	10.0	7.8	10.2	13.5
2001–2002 . . . . .	3,559.0	2,550.5	4,139.5	6,015.5	352.7	200.1	410.5	808.4	9.9	7.8	9.9	13.4
2003–2004 . . . . .	3,654.0	2,621.4	4,266.0	5,971.6	381.1	210.2	450.4	851.1	10.4	8.0	10.6	14.3
2005–2006 . . . . .	3,551.5	2,580.9	4,078.8	5,734.3	373.0	220.2	422.7	800.0	10.5	8.5	10.4	14.0

NOTES: Any-listed pneumonia discharges are counted by examining any of the seven listed discharge diagnoses. The pneumonia category is based on the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD–9–CM). See [Appendix II, Table X](#) for list of codes. Rates are average annual and based on the civilian population as of July 1. Rates for 2000 and beyond are based on the 2000 census. Rates for 1990–1999 use population estimates based on the 1990 census adjusted for net underenumeration using the 1990 National Population Adjustment Matrix from the U.S. Census Bureau. Rates for 1990–1999 are not strictly comparable with rates for 2000 and beyond because population estimates for 1990–2000 and beyond have not been revised to reflect the 2000 census. See [Appendix I, Population Census and Population Estimates](#). See related [Tables 102–104](#).

SOURCE: CDC/NCHS, National Hospital Discharge Survey.

Data table for Figure 26. Cesarean delivery rates by maternal age: United States, 1990–2005

Years	Age				
	All ages	Under 18 years	18–29 years	30–44 years	45 years and over
Cesarean deliveries per 100 live births					
1990	22.7	15.4	21.3	26.8	31.2
1991	22.6	15.2	21.1	26.8	32.6
1992	22.3	15.0	20.7	26.5	33.9
1993	21.8	14.6	20.0	26.1	36.3
1994	21.2	13.9	19.4	25.5	36.3
1995	20.8	13.7	18.9	25.2	39.6
1996	20.7	13.6	18.5	25.2	37.4
1997	20.8	13.4	18.5	25.6	42.3
1998	21.2	13.6	18.7	26.2	42.2
1999	22.0	14.0	19.3	27.3	44.7
2000	22.9	14.5	20.2	28.3	46.1
2001	24.4	15.7	21.4	30.1	49.4
2002	26.1	16.6	22.8	32.1	54.6
2003	27.5	17.6	24.0	33.8	54.5
2004	29.1	18.7	25.5	35.4	56.3
2005	30.3	19.7	26.8	36.8	57.3

NOTES: Data for 1990 excludes Oklahoma, which did not report method of delivery on the birth certificate.

SOURCE: CDC/NCHS, National Vital Statistics System.

**Data table for Figure 27. Selected characteristics of young adults 18–29 years of age, by age and race and Hispanic origin: United States, 2007**

Characteristic	Age distribution				Race and Hispanic origin			
	18–29 years	18–19 years	20–24 years	25–29 years	White only not Hispanic	Black only not Hispanic	Asian only not Hispanic	Hispanic
Total number (in thousands) . . . . .	49,070	7,873	20,532	20,666	29,741	6,523	2,286	9,297
Men . . . . .	24,862	4,013	10,409	10,440	14,951	3,124	1,133	5,051
Women . . . . .	24,208	3,859	10,123	10,226	14,790	3,399	1,153	4,246
Percent of total U.S. population . . . . .	16.5	2.7	6.9	7.0	10.0	2.2	0.8	3.1
Men . . . . .	8.4	1.4	3.5	3.5	5.0	1.1	0.4	1.7
Women . . . . .	8.2	1.3	3.4	3.4	5.0	1.1	0.4	1.4
Percent of young adults age 18–29 . . . . .	100.0	16.0	41.8	42.1	60.6	13.3	4.7	18.9
Men . . . . .	100.0	16.1	41.9	42.0	60.1	12.6	4.6	20.3
Women . . . . .	100.0	15.9	41.8	42.2	61.1	14.0	4.8	17.5
					Percent			
Foreign-born . . . . .	15.3	9.4	14.0	18.8	3.6	8.1	59.7	48.0
Men . . . . .	16.6	9.5	14.8	21.0	3.6	7.9	59.4	51.9
Women . . . . .	14.0	9.4	13.1	16.5	3.6	8.2	60.0	43.3
Employed (includes part-time) . . . . .	66.0	43.8	65.0	75.4	68.6	55.9	59.7	67.3
Men . . . . .	70.3	43.5	68.1	82.8	71.9	56.0	65.4	77.0
Women . . . . .	61.6	44.1	61.9	67.9	65.3	55.9	54.1	55.7
Employed full-time or full year in 2006 . . . . .	41.9	9.8	36.1	60.0	42.8	35.6	35.8	46.2
Men . . . . .	48.9	11.1	42.5	69.8	49.4	37.3	39.6	58.0
Women . . . . .	34.8	8.5	29.5	49.9	36.0	34.1	32.2	32.3
Not in labor force . . . . .	25.8	46.8	26.1	17.5	23.5	33.3	35.1	25.3
Men . . . . .	20.5	46.0	22.0	9.3	19.3	31.9	29.4	14.4
Women . . . . .	31.2	47.7	30.3	26.0	27.7	34.6	40.7	38.2
Married, spouse present . . . . .	23.9	2.4	14.7	41.2	25.6	10.5	19.3	29.8
Men . . . . .	19.5	1.0	10.2	36.0	21.3	8.9	11.0	23.7
Women . . . . .	28.3	3.8	19.3	46.5	29.9	11.9	27.6	37.1
Living with parent head of household (2006) . . . . .	33.5	71.9	39.0	13.2	35.6	33.9	34.6	25.1
Men . . . . .	38.0	75.6	44.9	17.0	40.1	42.4	38.9	27.9
Women . . . . .	28.9	69.9	33.0	9.3	31.2	26.4	30.4	21.8
Changed residences in 2005–2006 . . . . .	26.7	18.3	28.9	27.5	26.7	25.9	24.8	27.2
Men . . . . .	26.5	16.6	28.5	28.3	26.2	24.6	25.4	28.7
Women . . . . .	26.8	20.0	29.5	26.7	27.3	27.0	24.3	25.4
Enrolled in school in October 2005 . . . . .	31.1	67.6	36.1	11.9	33.6	29.1	43.2	20.9
Men . . . . .	29.1	66.5	33.7	9.6	31.7	27.9	44.7	18.1
Women . . . . .	33.1	68.8	38.5	14.2	35.5	30.2	41.6	24.2

NOTES: Data are for the civilian noninstitutionalized population. Because of small sample size, data on additional racial and ethnic groups are not presented. There were 0.7% non-Hispanic American Indian and Alaska Native only, less than 1% Native Hawaiian and Other Pacific Islander only, 1.5% non-Hispanic two or more races persons in the 18–29 year old population. Data for living with parent, changed residence, and enrolled in school are for black and Asian alone, and may include persons of Hispanic origin. Employed excludes those who reported they had a job but not at their job during the interview reference period (2% of young adults).

SOURCE: U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement. Table generator available from: [http://www.census.gov/hhes/www/cpstc/cps\\_table\\_creator.html](http://www.census.gov/hhes/www/cpstc/cps_table_creator.html); US Census Bureau, General Mobility, by Race, Hispanic Origin, Sex, and Age: 2005 to 2006; Available from: <http://www.census.gov/population/www/socdemo/migrate/cps2006.html>.

**Data table for Figure 28. School enrollment of young adults 18–29 years of age, by age, sex, race, and Hispanic origin: United States, 1980–2005**

Race, Hispanic origin, and year	Both Sexes				Men				Women			
	18–19 years	20–21 years	22–24 years	25–29 years	18–19 years	20–21 years	22–24 years	25–29 years	18–19 years	20–21 years	22–24 years	25–29 years
All races												
Percent enrolled in school												
1980	46.4	31.0	16.3	9.3	47.0	32.6	17.8	9.8	45.8	29.5	14.9	8.8
1985	51.6	35.3	16.9	9.2	52.2	36.5	18.8	9.4	51.0	34.1	15.1	9.1
1990	57.3	39.7	21.0	9.7	58.2	40.3	22.3	9.2	56.3	39.2	19.9	10.2
1995	59.4	44.9	23.2	11.6	59.5	44.7	22.8	11.0	59.2	45.1	23.6	12.2
2000	61.2	44.1	24.6	11.4	58.3	41.0	23.9	10.0	64.2	47.3	25.3	12.7
2001	61.0	45.5	25.1	11.7	58.9	44.0	23.8	10.3	63.2	46.9	26.5	13.0
2002	63.3	47.8	25.6	12.1	61.8	44.8	23.8	10.7	65.0	50.9	27.3	13.5
2003	64.5	48.3	27.8	11.8	62.4	43.4	26.1	10.8	66.6	52.9	29.5	12.8
2004	64.4	48.9	26.3	13.0	60.3	46.6	24.1	11.5	68.5	51.3	28.4	14.4
2005	67.6	48.7	27.3	11.9	66.5	45.3	25.2	9.6	68.8	52.3	29.2	14.2
White only												
1980	46.3	31.9	16.4	9.2	47.5	33.7	18.2	9.6	45.1	30.2	14.8	8.9
1985	52.4	36.1	17.0	9.2	51.9	37.2	19.0	9.5	52.9	35.0	15.0	9.0
1990	57.1	41.0	20.2	9.9	57.3	41.2	21.8	9.4	57.0	40.9	18.7	10.4
1995	59.3	46.2	23.1	11.5	59.4	46.3	22.7	11.3	59.2	46.0	23.6	11.7
2000	61.3	44.9	23.7	10.4	58.5	41.8	23.2	9.5	64.2	48.2	24.2	11.3
2001	60.4	45.9	23.3	10.7	58.2	43.6	21.5	9.8	62.7	48.2	25.1	11.7
2002	63.8	47.4	24.6	11.4	62.5	44.1	23.5	10.2	65.1	50.8	25.7	12.7
2003	64.4	48.2	26.7	11.0	61.7	43.2	25.6	9.9	67.3	53.1	27.8	12.1
2004	64.9	49.3	25.3	12.2	60.0	46.0	23.3	11.2	69.8	52.6	27.4	13.3
2005	68.0	49.3	26.0	11.3	66.1	45.1	24.4	8.9	70.1	53.8	27.7	13.8
Black only												
1980	45.7	23.4	13.6	8.8	42.8	23.0	13.3	10.6	48.2	23.7	13.9	7.4
1985	44.1	27.7	13.7	7.5	49.5	29.7	13.2	6.9	39.0	26.0	14.1	7.9
1990	55.2	28.4	20.0	6.1	60.7	31.1	20.0	4.6	50.0	26.0	20.1	7.3
1995	57.4	37.4	19.9	10.0	59.1	36.1	20.3	6.1	55.9	38.5	19.5	13.0
2000	57.2	36.6	24.2	14.3	52.4	30.5	21.8	11.3	61.5	41.3	26.4	16.5
2001	59.6	37.2	26.0	12.2	57.3	36.2	22.7	8.2	62.0	37.9	29.0	15.3
2002	57.7	43.5	23.5	13.6	54.9	39.5	16.6	10.1	60.6	47.1	28.8	16.3
2003	61.9	41.4	27.4	12.2	61.5	34.3	23.5	9.7	62.2	47.4	30.8	14.2
2004	59.2	40.0	25.1	14.3	58.1	37.8	20.2	8.7	60.2	41.9	29.5	19.0
2005	62.8	37.6	28.0	11.7	67.2	35.1	23.4	9.3	58.5	40.1	31.8	13.8

See footnotes at end of table.

**Data table for Figure 28. School enrollment of young adults 18–29 years of age, by age, sex, race, and Hispanic origin: United States, 1980–2005—Con.**

Race, Hispanic origin, and year	Both Sexes				Men				Women			
	18–19 years	20–21 years	22–24 years	25–29 years	18–19 years	20–21 years	22–24 years	25–29 years	18–19 years	20–21 years	22–24 years	25–29 years
Asian												
Percent enrolled in school												
1993	82.5	76.1	55.3	21.0	79.4	78.5	65.4	21.0	87.0	74.5	43.4	20.9
1994	81.8	67.4	53.5	23.8	81.5	70.9	57.0	31.3	81.9	64.2	49.3	16.9
1995	83.1	63.4	46.7	21.2	81.9	60.3	47.8	24.8	84.4	67.0	46.2	17.8
2000	78.8	66.2	45.3	18.7	75.5	67.2	49.1	16.0	82.0	65.1	41.7	20.6
2001	84.0	72.6	50.8	22.6	83.3	74.9	58.9	22.9	84.6	70.0	42.5	22.3
2002	78.9	72.8	49.5	18.3	80.0	70.2	50.1	20.6	77.9	75.8	48.9	16.1
2003	87.3	79.8	48.1	22.5	90.4	77.0	47.8	28.9	84.6	82.5	48.3	16.6
2004	82.6	79.7	46.8	21.5	85.9	84.2	49.8	24.1	79.0	74.7	43.9	19.1
2005	88.3	80.5	42.7	21.0	85.2	84.0	42.6	21.1	91.7	75.9	42.9	20.9
Hispanic												
1980	37.8	19.5	11.7	6.9	36.9	21.4	10.7	6.8	38.8	17.6	12.6	6.9
1985	41.8	24.0	11.6	8.6	38.6	20.3	12.6	8.7	44.7	27.4	10.4	8.6
1990	44.1	27.2	9.9	6.3	40.7	21.7	11.2	4.6	47.2	33.1	8.4	8.1
1995	46.1	27.1	15.6	7.1	47.4	24.8	14.8	5.6	44.8	29.2	16.6	8.7
2000	49.5	26.1	18.2	7.4	48.0	24.2	15.2	5.1	51.1	28.1	21.6	9.5
2001	45.5	27.9	15.5	7.7	40.0	24.4	14.6	6.5	51.1	31.6	16.7	9.1
2002	50.6	24.6	15.3	8.4	48.4	24.5	11.5	7.0	53.2	24.6	20.2	9.9
2003	50.5	33.7	16.1	6.2	47.0	27.2	13.3	4.9	54.4	41.1	19.4	7.9
2004	43.9	30.6	17.2	6.7	43.9	30.6	17.2	6.7	56.9	34.0	22.0	9.7
2005	54.3	30.0	19.5	7.8	51.8	25.2	17.5	5.6	57.2	35.3	21.8	10.4

NOTES: Data are for the civilian noninstitutionalized population. Starting with 2003 data, respondents could identify more than one race. Except for Asian persons, the race data in this table from 2003 onward represent those respondents who indicated only one race category. For Asian persons, data shown prior to 2003 consists of those identifying themselves as Asian or Pacific Islanders. Hispanic persons may be of any race.

SOURCE: U.S. Census Bureau, Current Population Survey. Table A-2. Percentage of the Population 3 Years Old and Over Enrolled in School, by Age, Sex, Race, and Hispanic Origin: October 1947 to 2005. Available from: <http://www.census.gov/population/socdemo/school/TableA-2.xls>.

**Data table for Figure 29. Low income among young adults 18–29 years of age, by sex, race and Hispanic origin: United States, 2004–2006**

Characteristic	Percent of poverty level			
	Below 100%	100%–less than 200%	200%–less than 400%	400% or more
Age 18–29 years				
Percent				
All races and origins . . . . .	16.1	19.8	32.3	31.7
Hispanic or Latino . . . . .	21.0	30.3	33.1	15.7
Black or African American only, not Hispanic . . . . .	26.5	23.9	29.6	20.0
Asian only, not Hispanic . . . . .	15.1	16.1	29.2	39.5
White only, not Hispanic . . . . .	12.4	15.9	32.9	38.8
Men:				
All races and origins . . . . .	13.1	19.1	33.8	34.0
Hispanic or Latino . . . . .	17.3	30.5	35.5	16.7
Black or African American only, not Hispanic . . . . .	21.2	23.2	31.6	24.0
Asian only, not Hispanic . . . . .	15.0	15.4	29.8	39.8
White only, not Hispanic . . . . .	9.8	14.6	34.0	41.5
Women:				
All races and origins . . . . .	19.2	20.6	30.7	29.5
Hispanic or Latina . . . . .	25.3	30.1	30.2	14.4
Black or African American only, not Hispanic . . . . .	31.2	24.5	27.9	16.4
Asian only, not Hispanic . . . . .	15.2	16.9	28.6	39.3
White only, not Hispanic . . . . .	14.9	17.2	31.7	36.2
Age 18–24 years				
All races and origins . . . . .	18.0	20.3	30.8	30.8
Hispanic or Latino . . . . .	22.3	31.0	32.4	14.3
Black or African American only, not Hispanic . . . . .	27.9	24.2	29.0	18.9
Asian only, not Hispanic . . . . .	18.4	18.8	29.4	33.4
White only, not Hispanic . . . . .	14.5	16.5	30.9	38.1
Men:				
All races and origins . . . . .	15.0	19.8	32.1	33.2
Hispanic or Latino . . . . .	18.8	31.5	34.5	15.2
Black or African American only, not Hispanic . . . . .	22.7	24.1	30.7	22.5
Asian only, not Hispanic . . . . .	18.0	18.6	30.2	33.2
White only, not Hispanic . . . . .	11.9	15.3	31.8	41.0
Women:				
All races and origins . . . . .	21.2	20.9	29.5	28.4
Hispanic or Latina . . . . .	26.2	30.4	30.1	13.3
Black or African American only, not Hispanic . . . . .	32.7	24.2	27.5	15.6
Asian only, not Hispanic . . . . .	18.8	18.9	28.6	33.6
White only, not Hispanic . . . . .	17.2	17.7	30.0	35.1
Age 25–29 years				
All races and origins . . . . .	13.5	19.1	34.3	33.0
Hispanic or Latino . . . . .	19.4	29.4	33.9	17.3
Black or African American only, not Hispanic . . . . .	24.4	23.5	30.5	21.7
Asian only, not Hispanic . . . . .	11.5	13.3	29.0	46.2
White only, not Hispanic . . . . .	9.2	15.0	35.8	39.9

See footnotes at end of table.



**Data table for Figure 29. Low income among young adults 18–29 years of age, by sex, race and Hispanic origin: United States, 2004–2006—Con.**

Characteristic	Percent of poverty level			
	Below 100%	100%–less than 200%	200%–less than 400%	400% or more
Age 25–29 years—Con.	Percent			
Men:				
All races and origins . . . . .	10.6	18.1	36.3	35.0
Hispanic or Latino . . . . .	15.6	29.3	36.7	18.4
Black or African American only, not Hispanic . . . . .	18.9	21.8	33.0	26.4
Asian only, not Hispanic . . . . .	11.6	11.8	29.4	47.2
White only, not Hispanic . . . . .	6.8	13.6	37.3	42.2
Women:				
All races and origins . . . . .	16.5	20.1	32.4	31.0
Hispanic or Latina . . . . .	24.1	29.7	30.3	15.9
Black or African American only, not Hispanic . . . . .	29.1	24.9	28.4	17.6
Asian only, not Hispanic . . . . .	11.4	14.8	28.6	45.2
White only, not Hispanic . . . . .	11.6	16.4	34.3	37.7

NOTES: Data are for the civilian noninstitutionalized population. Persons of Hispanic origin may be of any race. White, black, and Asian races exclude persons of Hispanic origin. Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. See related [Table 3](#). See [Appendix II, Hispanic origin; Poverty; Race](#).

SOURCE: U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement. Available from: [http://www.census.gov/hhes/www/cpstc/cps\\_table\\_creator.html](http://www.census.gov/hhes/www/cpstc/cps_table_creator.html).

**Data table for Figure 30. Live births for unmarried women 18–29 years of age, by age, race and Hispanic origin: United States 1990–2005**

<i>Age, race and Hispanic origin</i>	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
18–19 years <span style="float: right;">Live births per 1,000 unmarried women in specified group</span>																
All races . . . . .	60.7	65.4	66.7	66.2	69.1	66.5	64.9	63.9	63.6	62.3	62.2	60.6	58.6	57.6	57.7	58.4
Hispanic . . . . .	98.9	107.5	106.6	108.8	115.4	108.6	102.3	100.6	101.2	99.9	102.2	104.3	105.3	107.0	110.1	112.4
Black . . . . .	143.7	147.7	146.4	140.0	139.6	129.2	127.2	124.8	121.5	115.8	115.0	110.2	104.1	100.4	100.9	101.6
White, not Hispanic . . .	37.0	---	---	---	45.0	44.6	43.9	43.3	43.1	42.7	42.1	40.3	38.8	37.9	37.5	37.4
20–24 years																
All races . . . . .	65.1	67.8	67.9	68.5	70.9	68.7	68.9	68.9	70.4	70.8	72.2	71.3	70.5	71.2	72.5	74.9
Hispanic . . . . .	129.8	134.2	138.2	134.3	144.5	135.8	131.6	122.8	120.6	126.1	130.5	132.3	131.4	133.7	138.6	150.4
Black . . . . .	144.8	146.4	142.6	139.9	135.2	124.6	122.6	124.2	127.8	126.8	129.0	122.8	119.2	118.0	119.8	120.7
White, not Hispanic . . .	36.4	---	---	---	43.8	43.9	44.5	44.8	46.3	46.3	47.0	46.4	46.1	47.2	48.0	49.1
25–29 years																
All races . . . . .	56.0	56.0	55.6	55.9	57.4	54.3	54.5	53.4	55.4	56.9	58.5	59.5	61.5	65.7	68.6	71.1
Hispanic . . . . .	131.7	135.1	133.4	130.4	131.7	122.3	122.0	114.8	115.9	119.6	121.6	120.7	123.1	136.0	143.4	153.5
Black . . . . .	105.3	100.0	96.8	92.8	91.3	82.3	81.2	81.4	86.5	85.5	85.9	84.1	85.9	90.4	91.8	93.8
White, not Hispanic . . .	30.3	---	---	---	34.7	34.4	35.0	34.4	35.4	36.2	36.9	37.5	38.5	40.8	43.3	45.0
18 years of age <span style="float: right;">Percent of births to unmarried women</span>																
All races . . . . .	66.2	68.1	69.2	70.5	74.8	74.6	75.3	77.5	78.2	78.6	78.9	79.2	80.3	81.6	82.7	83.6
Hispanic . . . . .	57.5	59.4	60.6	61.3	68.4	65.9	66.2	69.8	71.1	71.0	71.2	70.9	72.7	75.0	76.4	78.4
Black . . . . .	91.8	92.2	92.3	92.7	95.3	94.8	95.5	95.7	95.7	95.9	95.8	95.9	96.0	96.5	96.5	96.5
White, not Hispanic . . .	55.6	58.1	59.7	62.3	66.7	68.0	69.3	71.5	72.5	73.7	74.4	75.4	76.9	78.3	79.6	80.2
19 years of age																
All races . . . . .	57.7	59.4	61.0	62.6	66.3	65.9	67.2	68.6	69.9	70.5	70.8	71.4	72.7	74.2	75.8	77.0
Hispanic . . . . .	52.0	53.7	54.4	55.9	61.5	58.9	59.9	62.1	63.9	64.4	64.2	64.0	65.7	68.3	70.3	72.1
Black . . . . .	87.5	87.8	88.9	89.1	91.7	91.6	92.0	92.1	92.5	92.2	92.5	92.4	92.7	93.1	93.4	93.5
White, not Hispanic . . .	45.9	47.8	49.9	52.6	56.4	57.4	59.1	60.4	61.9	63.2	64.0	65.6	67.4	68.9	70.6	71.8
20–24 years																
All races . . . . .	36.9	39.4	40.7	42.2	44.9	44.7	45.6	46.6	47.7	48.5	49.5	50.4	51.6	53.2	54.8	56.2
Hispanic . . . . .	39.6	41.5	42.3	43.4	47.0	45.0	45.2	46.1	47.5	48.6	49.6	49.9	51.4	53.7	55.4	57.5
Black . . . . .	72.6	74.7	75.2	76.7	79.0	79.1	79.7	79.8	80.3	80.5	80.6	80.7	81.3	81.7	82.2	82.6
White, not Hispanic . . .	24.5	26.8	28.3	30.0	32.5	33.3	34.4	35.3	36.4	37.2	38.2	39.8	41.3	43.1	44.7	46.1
25–29 years																
All races . . . . .	18.0	19.2	19.8	20.7	21.8	21.5	22.0	22.0	22.5	22.9	23.5	24.4	25.3	26.4	27.8	29.3
Hispanic . . . . .	28.6	30.3	30.8	31.7	33.2	31.1	31.2	30.4	31.2	32.1	33.2	33.5	35.2	37.2	38.8	40.6
Black . . . . .	53.3	54.7	55.0	55.8	57.3	56.8	57.4	56.8	57.0	56.9	57.0	57.6	58.5	59.6	60.6	61.8
White, not Hispanic . . .	9.7	10.4	10.7	11.4	12.4	12.7	13.2	13.3	13.6	13.8	14.0	14.8	15.3	16.2	17.3	18.4

--- Data not available

NOTES: Data for states in which marital status was not reported have been inferred from other items on the birth certificate and included with data from states reporting marital status. Persons of Hispanic origin may be of any race.

SOURCE: CDC/NCHS, National Vital Statistics System.

**Data table for Figure 31. Cigarette smoking and alcohol use among young adults 18–29 years of age, by sex and age: United States, 1997–2006**

	Men						Women					
	18–29 years		18–24 years		25–29 years		18–29 years		18–24 years		25–29 years	
	Percent	SE	Percent	SE	Percent	SE	Percent	SE	Percent	SE	Percent	SE
<b>Current cigarette smoking</b>												
1997.....	31.1	1.0	31.7	1.5	30.3	1.3	25.7	0.9	25.7	1.2	25.7	1.2
1998.....	30.6	1.0	31.3	1.4	29.7	1.3	24.2	0.9	24.5	1.3	23.9	1.2
1999.....	29.6	1.1	29.5	1.5	29.7	1.5	25.4	0.9	26.3	1.3	24.1	1.2
2000.....	28.7	1.0	28.1	1.3	29.6	1.5	23.7	0.9	24.9	1.2	21.9	1.2
2001.....	29.4	1.0	30.2	1.4	28.3	1.4	23.5	0.9	23.2	1.3	23.9	1.2
2002.....	29.6	1.1	32.1	1.4	25.8	1.5	23.6	0.9	24.5	1.2	22.4	1.3
2003.....	28.6	1.1	26.3	1.4	32.1	1.6	22.5	0.9	21.5	1.2	24.0	1.3
2004.....	26.1	1.1	25.6	1.5	26.8	1.5	22.2	0.9	21.5	1.2	23.1	1.3
2005.....	29.2	1.2	28.0	1.5	30.9	1.7	21.2	0.9	20.7	1.2	21.9	1.2
2006.....	28.7	1.3	28.5	1.9	28.9	1.8	20.9	1.0	19.3	1.4	23.3	1.6
<b>Heavy drinking</b>												
1997.....	6.3	0.5	6.0	0.8	6.7	0.7	4.2	0.4	4.5	0.5	3.9	0.5
1998.....	6.0	0.5	6.2	0.7	5.8	0.7	3.4	0.4	4.0	0.6	2.6	0.4
1999.....	6.2	0.5	6.1	0.7	6.3	0.8	3.7	0.4	3.6	0.5	3.9	0.6
2000.....	6.4	0.5	6.3	0.7	6.4	0.8	4.4	0.4	5.2	0.6	3.3	0.5
2001.....	7.5	0.6	8.3	0.8	6.4	0.7	4.2	0.4	4.7	0.6	3.5	0.5
2002.....	6.8	0.6	7.4	0.9	5.8	0.8	5.3	0.5	6.1	0.7	4.2	0.6
2003.....	6.9	0.6	7.2	0.9	6.5	0.8	4.7	0.5	5.5	0.7	3.5	0.5
2004.....	7.3	0.7	8.4	1.0	5.5	0.7	4.3	0.4	4.8	0.6	3.6	0.6
2005.....	7.6	0.6	8.1	0.9	6.9	0.8	5.0	0.5	5.0	0.7	5.1	0.6
2006.....	6.5	0.7	6.4	1.0	6.6	0.9	5.1	0.5	5.6	0.8	4.4	0.7
<b>Having 5 or more drinks in 1 day on at least 12 days in the past year</b>												
1997.....	24.2	1.0	22.9	1.4	26.1	1.3	7.1	0.5	7.6	0.6	6.6	0.6
1998.....	22.2	0.9	23.2	1.3	20.8	1.2	6.5	0.5	7.6	0.8	5.0	0.6
1999.....	24.8	1.0	25.2	1.4	24.3	1.4	8.6	0.6	9.6	0.9	7.3	0.7
2000.....	22.9	1.0	22.9	1.3	23.0	1.4	7.3	0.5	8.3	0.8	5.9	0.6
2001.....	25.6	1.0	24.7	1.4	27.0	1.4	8.0	0.6	8.8	0.9	6.9	0.7
2002.....	26.4	1.1	27.5	1.5	24.8	1.5	8.9	0.6	9.9	0.9	7.3	0.8
2003.....	24.8	1.1	24.0	1.5	26.0	1.5	7.6	0.6	9.2	0.9	5.3	0.7
2004.....	23.2	1.1	23.9	1.6	22.1	1.5	7.4	0.6	8.8	0.8	5.1	0.7
2005.....	23.1	1.0	22.8	1.4	23.4	1.5	8.2	0.6	8.8	0.9	7.4	0.8
2006.....	22.6	1.3	21.7	1.8	23.9	1.7	9.4	0.9	10.3	1.2	8.2	1.0

SE is standard error.

NOTES: Data are for the civilian noninstitutionalized population. Current cigarette smoking is defined as having ever smoked 100 cigarettes in their lifetime and smoking now on every day or some days. Heavy drinking is defined as having more than 14 drinks per week for men and more than 7 drinks per week for women, on average. See [Appendix II, Alcohol consumption; Cigarette smoking](#). See related [Tables 63–65](#) and [68](#).

SOURCE: CDC/NCHS, National Health Interview Survey.

**Data table for Figure 32. Illicit drug use among young adults 18–29 years of age, by age: United States, 2006**

<i>Illicit drug use</i>	<i>18–20 years</i>		<i>21–25 years</i>		<i>26–29 years</i>	
	<i>Percent</i>	<i>SE</i>	<i>Percent</i>	<i>SE</i>	<i>Percent</i>	<i>SE</i>
<b>Use in past month</b>						
Any illicit drug . . . . .	22.2	0.6	18.3	0.4	14.1	0.9
Marijuana or hashish . . . . .	18.6	0.6	14.8	0.4	10.1	0.7
Nonmedical use of prescription drug . . . . .	7.1	0.4	5.9	0.3	4.9	0.6
<b>Use in past year</b>						
Any illicit drug . . . . .	37.6	0.8	32.3	0.6	24.7	1.0
Marijuana or hashish . . . . .	31.6	0.7	25.7	0.5	17.2	0.9
Nonmedical use of prescription drug . . . . .	16.9	0.6	14.6	0.4	11.2	0.8

SE is standard error.

NOTES: Data are for the civilian noninstitutionalized population. Any illicit drug includes marijuana or hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription psychotherapeutics used nonmedically. Nonmedical use of prescription psychotherapeutics includes the nonmedical use of pain relievers, tranquilizers, stimulants, or sedatives, but does not include over-the-counter drugs.

SOURCE: Substance Abuse and Mental Health Services Administration, Office of Applied Studies, National Survey on Drug Use and Health, 2006.

**Data table for Figure 33. Prevalence of human papillomavirus (HPV) infection among women 20–29 years of age, by selected characteristics: United States, 2003–2004**

<i>Characteristic</i>	<i>Percent</i>	<i>SE</i>
Total . . . . .	36.4	2.6
<b>Age</b>		
20–24 years . . . . .	44.8	4.4
25–29 years . . . . .	27.4	2.8
<b>Race and Hispanic origin</b>		
White, not Hispanic . . . . .	33.0	3.3
Black, not Hispanic . . . . .	46.9	5.1
Mexican . . . . .	30.2	6.5
<b>Education</b>		
No high school diploma or GED . . . . .	37.7	5.5
High school diploma or GED . . . . .	41.8	7.1
Some college or more . . . . .	34.2	3.1
<b>Percent of poverty level</b>		
Below 100% . . . . .	46.3	8.6
100%–less than 200% . . . . .	37.7	6.3
200% or more . . . . .	31.4	3.5
<b>Number of sexual partners in past 12 months</b>		
One . . . . .	32.4	3.1
Two . . . . .	42.3	9.6
Three or more . . . . .	61.5	10.7

SE is standard error.

NOTES: Data are for the civilian noninstitutionalized population. Infection determined by DNA extraction from self-collected cervicovaginal swabs.

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey.

**Data table for Figure 34. Any report of forced sexual intercourse before age 30 among women 18–44 years of age at interview, by type of force, race and Hispanic origin, and percent of poverty level: United States, 2002**

Selected characteristics	Type of force					
	Any force		Physical threat or force		Nonphysical or unknown	
	Percent	SE	Percent	SE	Percent	SE
Total . . . . .	21.2	0.8	15.0	0.6	6.2	0.4
Race and Hispanic origin						
Hispanic or Latina . . . . .	16.7	1.3	11.0	1.0	5.7	0.7
Not Hispanic or Latina: . . . . .						
White only . . . . .	21.8	1.0	15.9	0.8	5.9	0.5
Black or African American only. . . . .	22.5	1.5	14.8	1.2	7.6	0.9
Percent of poverty level						
Below 100% . . . . .	24.8	1.7	16.9	1.5	7.9	0.9
100%–200% . . . . .	24.1	1.6	17.9	1.4	6.1	0.7
200% or more . . . . .	19.2	0.9	13.4	0.7	5.8	0.4

SE is standard error.

NOTES: Based on questions asked of women age 18–44 years at time of interview. Rates are for the civilian noninstitutionalized population. Women were asked if their first sexual intercourse was voluntary. Women were subsequently asked, “(Besides the time you already reported,) have you ever been forced by a male to have vaginal intercourse against your will?” Women who reported involuntary or forced sexual intercourse were asked their age when first forced intercourse occurred and the type of force used. Physical threat or force includes threats of physical harm, physical harm, or being physically held down. Women not reporting physical threat or force were classified as having forced sexual intercourse using nonphysical force if they indicated that they were given alcohol or drugs; did what he said because he was bigger than them or a grownup, and they were young; were told that the relationship would end if they didn't have sex; or were pressured into it by his words or actions, but without threats of harm. Women reporting forced sexual intercourse but not reporting the type of force used (about 1% of women 18–44 years) were classified as nonphysical force. For more information, see the Technical Notes and the report, Chandra A, Martinez GM, Mosher WD, Abma JC, Jones J. Fertility, family planning, and reproductive health of U.S. women: Data from the 2002 National Survey of Family Growth. NCHS. Vital Health Stat 2005;23(25). Available from: [http://www.cdc.gov/nchs/data/series/sr\\_23/sr23\\_025.pdf](http://www.cdc.gov/nchs/data/series/sr_23/sr23_025.pdf).

SOURCE: CDC/NCHS, National Survey of Family Growth.

**Data table for Figure 35. Selected physician-diagnosed health conditions, respondent-assessed fair or poor health, or activity limitation due to a chronic condition among young adults 18–29 years of age, by sex: United States, 2004–2006.**

Health status indicator	Both sexes		Men		Women	
	Percent	SE	Percent	SE	Percent	SE
At least one of the following six physician-diagnosed conditions . . . . .	14.8	0.4	11.9	0.5	17.8	0.5
Arthritis . . . . .	3.9	0.2	2.8	0.2	5.0	0.3
Asthma (current) . . . . .	7.2	0.3	5.4	0.3	9.1	0.4
Cancer . . . . .	1.1	0.1	0.4	0.1	1.8	0.2
Diabetes . . . . .	1.1	0.1	0.9	0.1	1.3	0.2
Heart disease. . . . .	0.4	0.1	0.5	0.1	*0.4	0.1
Hypertension (told at least twice) . . . . .	3.3	0.2	3.2	0.2	3.3	0.2
Respondent-assessed overall health as fair or poor . . . . .	4.2	0.2	3.5	0.2	4.8	0.3
Activity limitation due to chronic condition . . . . .	4.7	0.2	4.7	0.3	4.6	0.3

SE is standard error.

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error of 20%–30%.

NOTES: Data are for the civilian noninstitutionalized population. Young adults who reported more than one condition were counted in each category. Conditions refer to response categories in the National Health Interview Survey; some conditions include several response categories. Conditions, except for current asthma, were determined by asking if a doctor or other health professional ever told the respondent that they had a specified condition. Current asthma prevalence estimates are based on the questions “Have you ever been told by a doctor or other health professional that you had asthma?” and “Do you still have asthma?” Arthritis includes arthritis, rheumatoid arthritis, gout, lupus, and fibromyalgia. Diabetes includes all types with the exception of diabetic conditions related to pregnancy. Heart disease includes coronary heart disease, angina or angina pectoris, or heart attack or myocardial infarction. Cancer excludes nonmelanoma skin cancer or skin cancer of unknown type. Hypertension is told on two or more different visits. See [Appendix II, Condition; Health status, respondent-assessed; Limitation of activity](#). Condition questions were asked of the young adult during the sample adult questionnaire. Health status and activity limitation questions were asked during the family questionnaire.

SOURCE: CDC/NCHS, National Health Interview Survey.

**Data table for Figure 36. Selected mental disorders in the past 12 months among young adults 20–29 years of age, by sex and age: United States, 1999–2004**

Characteristic	Selected mental disorders		Major depression	
	Percent	SE	Percent	SE
Sex				
Both sexes . . . . .	8.6	1.1	6.6	1.1
Men . . . . .	6.2	1.1	*4.4	1.1
Women . . . . .	11.0	1.6	8.8	1.6
Age				
20–24 years. . . . .	7.8	1.4	*6.5	1.4
25–29 years. . . . .	9.6	1.7	*6.7	1.5

SE is standard error.

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%.

NOTES: Data are for the civilian noninstitutionalized population. Data for persons under 20 years of age are not available. The category selected mental disorders includes major depression, generalized anxiety disorder, and panic disorder from the Composite International Diagnostic Interview (CIDI) in the National Health and Nutrition Examination Survey. The modules from the CIDI are comprehensive and fully standardized diagnostic interviews and the diagnoses are made by means of computer algorithms. For more information, see [http://www.cdc.gov/nchs/data/nhanes/cidi\\_quex.pdf](http://www.cdc.gov/nchs/data/nhanes/cidi_quex.pdf).

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey.

**Data table for Figure 37. Death rates for leading causes of death among young adults 18–29 years of age, by sex: United States, 1980–2005**

Sex and year	Leading causes of death							Selected mechanisms of injury death		
	All causes	Unintentional injury	Homicide	Suicide	Cancer	Heart disease	Motor vehicle-related injury	Firearm-related injury	Poisoning	
Both sexes	Number of deaths	Deaths per 100,000 population								
1980	64,882	131.0	61.2	19.5	15.6	8.2	4.2	42.9	25.2	6.3
1990	55,824	115.6	43.1	20.9	14.8	6.9	3.8	32.0	26.4	4.7
1991	54,535	115.2	40.5	22.6	14.6	6.8	4.2	29.5	28.2	5.0
1992	51,533	110.5	36.7	22.1	14.2	6.7	4.1	26.0	28.2	5.1
1993	52,011	113.0	37.2	22.6	15.0	6.6	4.2	26.4	29.9	5.3
1994	50,808	111.8	36.6	21.8	15.4	6.6	4.3	26.2	29.4	5.3
1995	49,155	108.9	36.9	19.6	14.9	6.3	4.2	26.7	26.3	5.4
1996	45,672	101.2	36.3	17.7	13.9	6.3	4.1	26.3	24.2	5.2
1997	43,624	96.1	35.2	16.9	13.2	6.3	4.4	25.2	22.6	5.4
1998	42,004	91.6	34.5	15.3	12.9	6.0	4.2	24.4	20.7	5.6
1999	41,592	89.9	35.1	14.0	12.0	5.9	3.9	24.2	18.9	6.2
2000	42,484	91.3	36.1	14.0	11.9	5.7	3.9	25.3	18.6	6.4
2001	44,049	94.2	36.8	15.8	12.0	5.8	4.0	25.6	19.3	7.1
2002	44,475	94.0	38.3	14.8	12.1	5.5	4.0	26.3	19.3	8.4
2003	45,533	94.7	38.3	15.0	11.6	5.3	4.2	25.2	19.2	9.5
2004	45,743	93.7	38.9	14.1	12.3	5.3	4.0	25.2	18.1	10.3
2005	47,422	96.0	40.4	14.9	11.8	5.4	4.3	25.4	18.6	11.3
Men										
1980	48,948	197.7	99.0	31.3	25.5	9.6	5.4	67.9	43.0	9.0
1990	42,344	173.3	66.9	34.3	25.0	7.7	4.8	48.2	45.7	6.7
1991	41,245	172.0	62.3	37.1	24.6	7.6	5.4	43.9	49.3	7.4
1992	38,955	164.8	56.1	36.5	24.2	7.2	5.1	38.3	49.2	7.4
1993	39,196	168.0	57.1	37.1	25.1	7.1	5.4	39.1	51.7	7.7
1994	38,221	166.0	55.7	36.4	26.3	7.5	5.3	38.4	51.5	7.8
1995	36,864	161.0	56.4	32.5	25.3	7.1	5.2	39.5	46.1	8.0
1996	33,949	148.3	55.0	29.7	23.5	6.7	5.2	38.5	42.6	7.8
1997	32,111	139.5	52.8	28.4	22.2	7.1	5.3	36.3	39.8	8.0
1998	30,978	133.1	52.4	25.3	21.7	6.7	5.2	35.8	36.1	8.3
1999	30,377	129.2	53.0	23.0	20.1	6.6	4.7	35.1	33.1	9.1
2000	31,226	131.9	54.5	23.2	20.1	6.1	4.8	36.9	32.6	9.6
2001	32,644	136.9	56.0	26.1	20.2	6.3	5.1	38.0	34.1	10.4
2002	32,991	136.4	57.8	24.8	20.2	6.1	5.3	38.6	34.0	12.2
2003	33,416	135.6	57.0	25.2	19.3	5.6	5.1	36.5	33.9	13.7
2004	33,786	134.9	57.9	23.8	20.2	5.9	5.2	36.5	31.9	15.1
2005	35,344	139.3	60.8	25.2	19.3	6.1	5.7	37.4	32.8	16.3

See footnotes at end of table.

**Data table for Figure 37. Death rates for leading causes of death among young adults 18–29 years of age, by sex: United States, 1980–2005—Con.**

Sex and year	Leading causes of death							Selected mechanisms of injury death		
	All causes	Unintentional injury	Homicide	Suicide	Cancer	Heart disease	Motor vehicle-related injury	Firearm-related injury	Poisoning	
	Number of deaths	Deaths per 100,000 population								
Women										
1980	15,934	64.3	23.3	7.8	5.7	6.9	2.9	17.9	7.5	3.6
1990	13,480	56.6	18.7	7.1	4.4	6.0	2.8	15.3	6.5	2.6
1991	13,290	56.8	18.1	7.7	4.4	5.9	2.9	14.7	6.6	2.6
1992	12,578	54.7	16.8	7.3	4.0	6.3	3.1	13.3	6.5	2.7
1993	12,815	56.4	16.8	7.8	4.5	6.0	3.0	13.4	7.5	2.8
1994	12,587	56.2	17.1	6.9	4.2	5.7	3.3	13.7	6.6	2.7
1995	12,291	55.2	17.0	6.3	4.2	5.5	3.1	13.6	5.9	2.7
1996	11,723	52.7	17.1	5.4	4.0	5.9	2.9	13.7	5.3	2.6
1997	11,513	51.5	17.1	5.1	4.0	5.6	3.4	13.6	4.9	2.7
1998	11,026	48.8	16.0	5.0	3.8	5.3	3.1	12.8	4.9	2.7
1999	11,215	49.3	16.7	4.8	3.6	5.2	3.0	12.8	4.3	3.1
2000	11,258	49.3	17.0	4.4	3.5	5.2	3.0	13.3	4.0	3.2
2001	11,405	49.8	16.8	5.0	3.4	5.3	2.9	12.7	3.9	3.6
2002	11,484	49.6	18.0	4.3	3.7	4.9	2.7	13.5	4.0	4.4
2003	12,117	51.7	18.6	4.3	3.6	5.0	3.2	13.3	3.8	5.1
2004	11,957	50.3	18.9	3.9	3.9	4.7	2.8	13.3	3.4	5.3
2005	12,078	50.3	18.8	4.1	3.9	4.6	2.7	12.7	3.6	6.0

NOTES: The five causes of death shown in this table are the leading causes of death among young adults 18–29 years of age in 2005. Death rates for 1980–1998 are based on the *International Classification of Diseases, Ninth Revision (ICD–9)*, and death rates for 1999 and later are based on the Tenth Revision (ICD–10). Unintentional injury is preferred to the term accidents in the public health community. Homicide refers to deaths due to assault. Suicide refers to death from intentional self-harm. Cancer refers to malignant neoplasms. Motor vehicle-related death is a subcategory of unintentional death. Firearm-related injury deaths and poisoning deaths include unintentional, intentional (homicide and suicide), undetermined intent, and legal intervention/war. ICD–9 codes for poisoning include E850–E869, E950–E952, E962, E972, E980–E982, and for ICD–10 include \*U01 (.6–.7), X40–X49, X60–X69, X85–X90, Y10–Y19, Y35.2. Rates for 1980, 1990, and 2000 were computed using census counts. Rates for 1991–1999 were computed using intercensal population estimates based on the 2000 census. Rates for 2001 and later years were computed using 2000-based postcensal estimates. See [Appendix II, Cause of death; Cause-of-death ranking; Comparability ratio; Table V](#) (for ICD–9 and ICD–10 codes). See related [Tables 34, 35, 37, 44, 45](#).

SOURCE: CDC/NCHS, National Vital Statistics System.



**Data table for Figure 38. Health insurance coverage at the time of interview among young adults 18–29 years of age, by age: United States, 2006**

<i>Sex and age</i>	<i>Health insurance coverage at the time of interview</i>					
	<i>Private</i>		<i>Medicaid</i>		<i>Uninsured</i>	
	<i>Percent</i>	<i>SE</i>	<i>Percent</i>	<i>SE</i>	<i>Percent</i>	<i>SE</i>
<i>Both sexes</i>						
18–29 years . . . . .	58.2	0.8	10.4	0.4	29.6	0.7
18–19 years . . . . .	62.1	1.5	15.6	1.0	20.5	1.1
20–24 years . . . . .	54.9	1.1	9.6	0.5	33.6	1.0
25–29 years . . . . .	60.0	1.0	9.0	0.5	29.3	0.9
<i>Men</i>						
18–29 years . . . . .	58.2	0.9	6.0	0.4	34.3	0.9
18–19 years . . . . .	63.9	1.9	11.9	1.1	23.1	1.6
20–24 years . . . . .	54.4	1.4	5.4	0.6	38.8	1.3
25–29 years . . . . .	59.7	1.2	4.3	0.4	34.1	1.2
<i>Women</i>						
18–29 years . . . . .	58.3	0.9	14.8	0.6	25.0	0.7
18–19 years . . . . .	60.2	2.0	19.5	1.6	17.8	1.3
20–24 years . . . . .	55.5	1.4	13.9	0.8	28.3	1.2
25–29 years . . . . .	60.3	1.2	13.8	0.9	24.5	1.0

SE is standard error.

NOTES: Data are for the civilian noninstitutionalized population. Medicaid includes State Children’s Health Insurance Program (SCHIP) and state-sponsored health plans. Uninsured persons are not covered by private insurance, Medicaid, SCHIP, state-sponsored or other government-sponsored health plans, Medicare, or military plans. Persons with Indian Health Service only are considered to have no coverage. Percents do not add to 100 because the percentage of persons with Medicare, military plans, and other government-sponsored plans is not shown and because persons with both private insurance and Medicaid appear in both categories. See [Appendix II, Health insurance coverage](#). See related [Tables 137, 139, and 140](#).

SOURCE: CDC/NCHS, National Health Interview Survey.

**Data table for Figure 39. Young adults 18–29 years of age reporting they did not receive needed health-related services in the past 12 months because they could not afford them, by sex and health insurance status: United States, 2004–2006**

Sex and type of health-related service not received	Health insurance status					
	Total		Insured		Uninsured	
	Percent	SE	Percent	SE	Percent	SE
Both sexes						
Dental care . . . . .	15.1	0.4	...	...	...	...
One or more of these services (excluding dental) . . . . .	17.4	0.4	11.0	0.4	32.7	0.9
Prescription medicines . . . . .	9.9	0.3	5.9	0.3	19.4	0.7
Medical care . . . . .	8.6	0.3	4.3	0.2	19.1	0.7
Eyeglasses . . . . .	6.5	0.3	4.4	0.2	11.7	0.6
Mental health care . . . . .	3.0	0.2	1.8	0.2	5.9	0.4
Men						
Dental care . . . . .	12.7	0.5	...	...	...	...
One or more of these services (excluding dental) . . . . .	14.4	0.5	7.7	0.5	27.5	1.1
Prescription medicines . . . . .	7.7	0.4	3.9	0.3	14.9	0.9
Medical care . . . . .	7.5	0.4	3.1	0.3	16.0	0.8
Eyeglasses . . . . .	5.1	0.3	2.8	0.3	9.6	0.8
Mental health care . . . . .	2.0	0.2	0.9	0.2	4.2	0.5
Women						
Dental care . . . . .	17.4	0.5	...	...	...	...
One or more of these services (excluding dental) . . . . .	20.3	0.5	13.9	0.5	39.7	1.3
Prescription medicines . . . . .	12.1	0.4	7.7	0.4	25.5	1.1
Medical care . . . . .	9.8	0.4	5.3	0.3	23.3	1.1
Eyeglasses . . . . .	8.0	0.3	5.8	0.4	14.7	0.9
Mental health care . . . . .	4.0	0.3	2.6	0.3	8.1	0.7

SE is standard error.  
 ... Category not applicable.

NOTES: Data are for the civilian noninstitutionalized population. Based on persons responding yes to the question, “During the past 12 months was there any time when [person] needed [service] but did not get it because [person] couldn’t afford it?” Estimates were calculated using the sample adult weight, see [Technical Notes](#). Health insurance status is at the time of interview. See [Appendix II, Health insurance coverage](#).

SOURCE: CDC/NCHS, National Health Interview Survey.

**Data table for Figure 40. Selected types of health care utilization among young adults 18–29 years of age, by sex: United States, 1999–2004 and 2006**

<i>Type of health care and sex</i>	<i>At least one encounter in the past 12 months, 2006</i>	
	<i>Percent</i>	<i>SE</i>
Doctor visit		
Total . . . . .	70.2	0.9
Men . . . . .	56.5	1.4
Women . . . . .	84.2	0.9
Dental visit		
Total . . . . .	58.2	0.9
Men . . . . .	54.0	1.4
Women . . . . .	62.5	1.2
Emergency room visit		
Total . . . . .	23.5	0.8
Men . . . . .	19.6	1.1
Women . . . . .	27.5	1.0
Hospital stay		
Total . . . . .	7.0	0.3
Men . . . . .	2.9	0.3
Women . . . . .	11.2	0.5
Mental health provider visit		
Total . . . . .	6.7	0.5
Men . . . . .	5.0	0.6
Women . . . . .	8.5	0.7
At least one prescription drug used in the past month, 1999–2004		
Total . . . . .	28.9	1.2
Men . . . . .	18.9	1.2
Women . . . . .	38.9	1.9

SE is standard error.

NOTES: Data are for the civilian noninstitutionalized population. Data are limited to adults 18–29 years of age. Doctor visits include visits to other health care professionals. Respondents were asked, “During the past 12 months, how many times have you seen a doctor or other health care professional about your own health at a doctor’s office, a clinic, or some other place?” Data on health care visits are from the NHIS sample adult questionnaire. Data on hospital stays are from the NHIS family core questionnaire. Data on prescription drug use are from the National Health and Nutrition Examination Survey. See related [Tables 83, 92, 96, 98, and 101](#). See [Appendix II, Dental visit; Drug; Emergency department or emergency room visit; Health care contact; Hospital utilization](#).

SOURCES: CDC/NCHS, National Health Interview Survey and National Health and Nutrition Examination Survey.

**Data table for Figure 41. Injury-related visits to hospital emergency departments among young adults 18–29 years of age, by sex and mechanism of injury: United States, 2005–2006**

<i>Sex and mechanism of injury</i>	<i>ED visits per 10,000 population</i>	
	<i>Rate</i>	<i>SE</i>
Total injury visits . . . . .	1,453.4	62.1
Struck by or against objects or persons . . . . .	215.4	14.8
Motor vehicle traffic . . . . .	252.2	19.4
Falls . . . . .	209.0	13.0
Cut or pierce . . . . .	146.2	10.7
Overexertion . . . . .	87.5	8.0
Men . . . . .	1,614.7	72.5
Struck by or against objects or persons . . . . .	289.4	20.8
Motor vehicle traffic . . . . .	232.9	21.3
Falls . . . . .	205.9	16.3
Cut or pierce . . . . .	189.2	15.6
Overexertion . . . . .	101.3	10.9
Women . . . . .	1,286.2	65.9
Struck by or against objects or persons . . . . .	138.7	17.1
Motor vehicle traffic . . . . .	272.1	23.8
Falls . . . . .	212.1	17.7
Cut or pierce . . . . .	101.7	11.8
Overexertion . . . . .	73.1	10.4

SE is standard error.

NOTES: ED is emergency department. Rates are for the civilian population. Data are limited to ED visits by adults 18–29 years of age. External cause of injury codes were reclassified into mechanism of injury categories. Mechanism of injury is based on the first-listed external cause of injury code (E code). See [Appendix II, External cause of injury; Injury; Injury-related visit](#); and [Appendix II, Table VII](#) for a listing of E codes. For more information on classifying injury-related data, see <http://www.cdc.gov/nchs/about/otheract/injury/tools.htm>. See related [Table 93](#).

SOURCE: CDC/NCHS, National Hospital Ambulatory Medical Care Survey.

## Trend Tables

**Table 1 (page 1 of 3). Resident population, by age, sex, race, and Hispanic origin: United States, selected years 1950–2006**

[Data are based on decennial census updated with data from multiple sources]

Sex, race, Hispanic origin, and year	Total resident population	Under 1 year	1–4 years	5–14 years	15–24 years	25–34 years	35–44 years	45–54 years	55–64 years	65–74 years	75–84 years	85 years and over
All persons												
Number in thousands												
1950	150,697	3,147	13,017	24,319	22,098	23,759	21,450	17,343	13,370	8,340	3,278	577
1960	179,323	4,112	16,209	35,465	24,020	22,818	24,081	20,485	15,572	10,997	4,633	929
1970	203,212	3,485	13,669	40,746	35,441	24,907	23,088	23,220	18,590	12,435	6,119	1,511
1980	226,546	3,534	12,815	34,942	42,487	37,082	25,635	22,800	21,703	15,581	7,729	2,240
1990	248,710	3,946	14,812	35,095	37,013	43,161	37,435	25,057	21,113	18,045	10,012	3,021
2000	281,422	3,806	15,370	41,078	39,184	39,892	45,149	37,678	24,275	18,391	12,361	4,240
2004	293,655	4,077	15,994	40,751	41,701	40,032	44,109	41,619	29,079	18,463	12,971	4,860
2005	296,410	4,107	16,197	40,397	42,077	40,143	43,862	42,482	30,356	18,640	13,054	5,096
2006	299,398	4,130	16,287	40,337	42,435	40,416	43,667	43,278	31,587	18,917	13,047	5,297
Male												
1950	74,833	1,602	6,634	12,375	10,918	11,597	10,588	8,655	6,697	4,024	1,507	237
1960	88,331	2,090	8,240	18,029	11,906	11,179	11,755	10,093	7,537	5,116	2,025	362
1970	98,912	1,778	6,968	20,759	17,551	12,217	11,231	11,199	8,793	5,437	2,436	542
1980	110,053	1,806	6,556	17,855	21,419	18,382	12,570	11,009	10,152	6,757	2,867	682
1990	121,239	2,018	7,581	17,971	18,915	21,564	18,510	12,232	9,955	7,907	3,745	841
2000	138,054	1,949	7,862	21,043	20,079	20,121	22,448	18,497	11,645	8,303	4,879	1,227
2004	144,537	2,085	8,178	20,860	21,438	20,336	22,034	20,453	13,999	8,428	5,218	1,508
2005	146,000	2,101	8,280	20,675	21,647	20,421	21,940	20,895	14,627	8,529	5,279	1,604
2006	147,512	2,113	8,329	20,640	21,845	20,565	21,850	21,290	15,224	8,670	5,298	1,688
Female												
1950	75,864	1,545	6,383	11,944	11,181	12,162	10,863	8,688	6,672	4,316	1,771	340
1960	90,992	2,022	7,969	17,437	12,114	11,639	12,326	10,393	8,036	5,881	2,609	567
1970	104,300	1,707	6,701	19,986	17,890	12,690	11,857	12,021	9,797	6,998	3,683	969
1980	116,493	1,727	6,259	17,087	21,068	18,700	13,065	11,791	11,551	8,824	4,862	1,559
1990	127,471	1,928	7,231	17,124	18,098	21,596	18,925	12,824	11,158	10,139	6,267	2,180
2000	143,368	1,857	7,508	20,034	19,105	19,771	22,701	19,181	12,629	10,088	7,482	3,013
2004	149,118	1,992	7,817	19,890	20,263	19,696	22,075	21,166	15,079	10,036	7,753	3,352
2005	150,411	2,005	7,917	19,721	20,430	19,722	21,922	21,587	15,729	10,110	7,775	3,492
2006	151,886	2,017	7,959	19,697	20,590	19,851	21,817	21,989	16,363	10,247	7,748	3,609
White male												
1950	67,129	1,400	5,845	10,860	9,689	10,430	9,529	7,836	6,180	3,736	1,406	218
1960	78,367	1,784	7,065	15,659	10,483	9,940	10,564	9,114	6,850	4,702	1,875	331
1970	86,721	1,501	5,873	17,667	15,232	10,775	9,979	10,090	7,958	4,916	2,243	487
1980	94,976	1,487	5,402	14,773	18,123	15,940	11,010	9,774	9,151	6,096	2,600	621
1990	102,143	1,604	6,071	14,467	15,389	18,071	15,819	10,624	8,813	7,127	3,397	760
2000	113,445	1,524	6,143	16,428	15,942	16,232	18,568	15,670	10,067	7,343	4,419	1,109
2004	117,916	1,625	6,381	16,229	16,896	16,205	17,994	17,116	12,062	7,358	4,688	1,361
2005	118,932	1,636	6,456	16,090	17,027	16,230	17,866	17,453	12,571	7,425	4,733	1,445
2006	119,950	1,635	6,479	16,064	17,146	16,307	17,723	17,751	13,055	7,530	4,740	1,520
White female												
1950	67,813	1,341	5,599	10,431	9,821	10,851	9,719	7,868	6,168	4,031	1,669	314
1960	80,465	1,714	6,795	15,068	10,596	10,204	11,000	9,364	7,327	5,428	2,441	527
1970	91,028	1,434	5,615	16,912	15,420	11,004	10,349	10,756	8,853	6,366	3,429	890
1980	99,835	1,412	5,127	14,057	17,653	15,896	11,232	10,285	10,325	7,951	4,457	1,440
1990	106,561	1,524	5,762	13,706	14,599	17,757	15,834	10,946	9,698	9,048	5,687	2,001
2000	116,641	1,447	5,839	15,576	14,966	15,574	18,386	15,921	10,731	8,757	6,715	2,729
2004	120,353	1,551	6,081	15,405	15,831	15,302	17,625	17,329	12,741	8,595	6,874	3,020
2005	121,203	1,561	6,158	15,278	15,942	15,288	17,447	17,637	13,248	8,634	6,872	3,138
2006	122,147	1,560	6,178	15,261	16,042	15,358	17,285	17,929	13,741	8,727	6,826	3,239
Black or African American male												
1950	7,300	---	1,944	1,442	1,162	1,105	1,003	772	459	299	<sup>2</sup> 113	---
1960	9,114	281	1,082	2,185	1,305	1,120	1,086	891	617	382	137	29
1970	10,748	245	975	2,784	2,041	1,226	1,084	979	739	461	169	46
1980	12,585	269	967	2,614	2,807	1,967	1,235	1,024	854	567	228	53
1990	14,420	322	1,164	2,700	2,669	2,592	1,962	1,175	878	614	277	66
2000	17,407	313	1,271	3,454	2,932	2,586	2,705	1,957	1,090	683	330	87
2004	18,417	337	1,320	3,414	3,248	2,650	2,695	2,278	1,293	722	359	101
2005	18,658	339	1,334	3,367	3,318	2,691	2,687	2,345	1,367	737	366	108
2006	18,890	347	1,343	3,345	3,381	2,722	2,682	2,399	1,438	752	370	112

See footnotes at end of table.

**Table 1 (page 2 of 3). Resident population, by age, sex, race, and Hispanic origin: United States, selected years 1950–2006**

[Data are based on decennial census updated with data from multiple sources]

Sex, race, Hispanic origin, and year	Total resident population	Under 1 year	1–4 years	5–14 years	15–24 years	25–34 years	35–44 years	45–54 years	55–64 years	65–74 years	75–84 years	85 years and over
Number in thousands												
<b>Black or African American female</b>												
1950 .....	7,745	---	<sup>1</sup> 941	1,446	1,300	1,260	1,112	796	443	322	<sup>2</sup> 125	---
1960 .....	9,758	283	1,085	2,191	1,404	1,300	1,229	974	663	430	160	38
1970 .....	11,832	243	970	2,773	2,196	1,456	1,309	1,134	868	582	230	71
1980 .....	14,046	266	951	2,578	2,937	2,267	1,488	1,258	1,059	776	360	106
1990 .....	16,063	316	1,137	2,641	2,700	2,905	2,279	1,416	1,135	884	495	156
2000 .....	19,187	302	1,228	3,348	2,971	2,866	3,055	2,274	1,353	971	587	233
2004 .....	20,184	324	1,279	3,306	3,193	2,886	3,037	2,651	1,607	1,011	636	254
2005 .....	20,416	324	1,292	3,260	3,244	2,909	3,024	2,727	1,695	1,029	645	267
2006 .....	20,669	333	1,298	3,240	3,293	2,932	3,024	2,793	1,784	1,051	650	274
<b>American Indian or Alaska Native male</b>												
1980 .....	702	17	59	153	161	114	75	53	37	22	9	2
1990 .....	1,024	24	88	206	192	183	140	86	55	32	13	3
2000 .....	1,488	28	109	301	271	229	229	165	88	45	18	5
2004 .....	1,572	22	90	290	300	244	233	192	114	56	25	7
2005 .....	1,579	22	86	282	303	248	231	197	119	58	26	7
2006 .....	1,599	23	88	273	306	254	232	203	126	60	28	8
<b>American Indian or Alaska Native female</b>												
1980 .....	718	16	57	149	158	118	79	57	41	27	12	4
1990 .....	1,041	24	85	200	178	186	148	92	61	41	21	6
2000 .....	1,496	26	106	293	254	219	236	174	95	54	28	10
2004 .....	1,576	21	88	282	285	227	233	204	122	65	35	14
2005 .....	1,582	21	83	274	289	229	230	209	129	67	36	15
2006 .....	1,602	22	85	265	293	234	229	216	136	70	37	16
<b>Asian or Pacific Islander male</b>												
1980 .....	1,814	35	130	321	334	366	252	159	110	72	30	6
1990 .....	3,652	68	258	598	665	718	588	347	208	133	57	12
2000 .....	5,713	84	339	861	934	1,073	947	705	399	231	112	27
2004 .....	6,633	101	387	927	994	1,238	1,112	866	531	292	146	39
2005 .....	6,831	104	404	937	1,000	1,252	1,156	900	569	309	154	44
2006 .....	7,073	108	419	958	1,012	1,281	1,214	938	605	328	162	48
<b>Asian or Pacific Islander female</b>												
1980 .....	1,915	34	127	307	325	423	269	192	126	71	33	9
1990 .....	3,805	65	247	578	621	749	664	371	264	166	65	17
2000 .....	6,044	81	336	817	914	1,112	1,024	812	451	305	152	41
2004 .....	7,005	96	368	898	954	1,281	1,179	983	609	365	208	64
2005 .....	7,209	99	384	909	955	1,295	1,221	1,014	657	380	222	73
2006 .....	7,468	103	398	931	963	1,327	1,279	1,051	702	399	235	80

See footnotes at end of table.

**Table 1 (page 3 of 3). Resident population, by age, sex, race, and Hispanic origin: United States, selected years 1950–2006**

[Data are based on decennial census updated with data from multiple sources]

Sex, race, Hispanic origin, and year	Total resident population	Under 1 year	1–4 years	5–14 years	15–24 years	25–34 years	35–44 years	45–54 years	55–64 years	65–74 years	75–84 years	85 years and over
Number in thousands												
Hispanic or Latino male												
1980	7,280	187	661	1,530	1,646	1,256	761	570	364	200	86	19
1990	11,388	279	980	2,128	2,376	2,310	1,471	818	551	312	131	32
2000	18,162	395	1,506	3,469	3,564	3,494	2,653	1,551	804	474	203	50
2004	21,347	463	1,769	3,919	3,794	4,163	3,242	2,023	1,058	566	280	71
2005	22,065	476	1,837	3,996	3,823	4,295	3,376	2,155	1,137	591	299	80
2006	22,925	496	1,906	4,109	3,905	4,456	3,526	2,287	1,218	617	316	89
Hispanic or Latino female												
1980	7,329	181	634	1,482	1,546	1,249	805	615	411	257	117	30
1990	10,966	268	939	2,039	2,028	2,073	1,448	868	632	403	209	59
2000	17,144	376	1,441	3,318	3,017	3,016	2,476	1,585	907	603	303	101
2004	19,975	443	1,694	3,744	3,303	3,454	2,919	2,006	1,164	705	405	139
2005	20,622	456	1,763	3,815	3,370	3,532	3,015	2,115	1,242	731	430	153
2006	21,396	475	1,828	3,923	3,470	3,636	3,134	2,230	1,323	759	452	167
White, not Hispanic or Latino male												
1980	88,035	1,308	4,772	13,317	16,554	14,739	10,284	9,229	8,803	5,906	2,519	603
1990	91,743	1,351	5,181	12,525	13,219	15,967	14,481	9,875	8,303	6,837	3,275	729
2000	96,551	1,163	4,761	13,238	12,628	12,958	16,088	14,223	9,312	6,894	4,225	1,062
2004	97,986	1,184	4,706	12,623	13,376	12,301	14,957	15,228	11,071	6,824	4,422	1,294
2005	98,327	1,186	4,710	12,409	13,482	12,203	14,703	15,441	11,507	6,868	4,448	1,369
2006	98,540	1,171	4,679	12,263	13,526	12,128	14,418	15,615	11,915	6,949	4,439	1,436
White, not Hispanic or Latino female												
1980	92,872	1,240	4,522	12,647	16,185	14,711	10,468	9,700	9,935	7,707	4,345	1,411
1990	96,557	1,280	4,909	11,846	12,749	15,872	14,520	10,153	9,116	8,674	5,491	1,945
2000	100,774	1,102	4,517	12,529	12,183	12,778	16,089	14,446	9,879	8,188	6,429	2,633
2004	101,789	1,128	4,477	11,964	12,783	12,095	14,916	15,466	11,652	7,932	6,491	2,888
2005	102,031	1,130	4,483	11,767	12,833	12,008	14,647	15,673	12,087	7,946	6,466	2,992
2006	102,252	1,116	4,451	11,635	12,839	11,981	14,375	15,857	12,506	8,013	6,399	3,080

--- Data not available.

<sup>1</sup>Population for age group under 5 years.

<sup>2</sup>Population for age group 75 years and over.

NOTES: The race groups, white, black, American Indian or Alaska Native, and Asian or Pacific Islander, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with *Health, United States, 2003*, intercensal population estimates for the 1990s and 2000 are based on the 2000 census. Population estimates for 2001 and later years are 2000-based postcensal estimates. Population figures are census counts as of April 1 for 1950, 1960, 1970, 1980, 1990, and 2000; estimates as of July 1 for other years. See [Appendix I, Population Census and Population Estimates](#). Populations for age groups may not sum to the total due to rounding. Unrounded population figures are available in the spreadsheet version of this table. Available from: [www.cdc.gov/nchs/hus.htm](http://www.cdc.gov/nchs/hus.htm). Data for additional years are available. See [Appendix III](#).

**SOURCES:** U.S. Census Bureau: 1950 Nonwhite Population by Race. Special Report P-E, No. 3B. Washington, DC: U.S. Government Printing Office, 1951; U.S. Census of Population: 1960, Number of Inhabitants, PC(1)-A1, United States Summary, 1964; 1970, Number of Inhabitants, Final Report PC(1)-A1, United States Summary, 1971; U.S. population estimates, by age, sex, race, and Hispanic origin: 1980 to 1991. Current population reports, series P-25, no 1095. Washington, DC: U.S. Government Printing Office, Feb. 1993; NCHS. Estimates of the July 1, 1991-July 1, 1999, April 1, 2000, and July 1, 2001-July 1, 2006 United States resident population by age, sex, race, and Hispanic origin, prepared under a collaborative arrangement with the U.S. Census Bureau, Population Estimates Program. Available from: <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>.



**Table 2 (page 1 of 2). Inmates in state or federal prisons and local jails, by sex, race, Hispanic origin, and age: United States, selected years 1999–2006**

[Data are based on reporting by a census of departments of correction and the Federal Bureau of Prisons and a sample of jails]

Sex, race, Hispanic origin, and age	1999	2000	2004	2005	2006	1999	2000	2004	2005	2006
	Number of inmates in thousands <sup>1</sup>					Inmates per 100,000 population <sup>2</sup>				
Total <sup>3,4</sup>	1,861	1,936	2,135	2,183	2,245	---	686	726	744	750
Male <sup>3,4</sup>	1,711	1,776	1,948	1,993	2,042	1,261	1,297	1,348	1,371	1,384
Female <sup>3,4</sup>	149	156	183	194	203	106	110	123	129	134
White, not Hispanic: <sup>4</sup>										
Male	610	664	696	689	718	630	683	717	709	736
Female	54	64	82	89	95	53	63	81	88	94
Black, not Hispanic: <sup>4</sup>										
Male	757	792	843	806	837	4,617	4,777	4,919	4,682	4,789
Female	68	70	68	66	69	375	380	359	347	358
Hispanic: <sup>4</sup>										
Male	296	291	367	403	427	1,802	1,715	1,717	1,856	1,862
Female	23	20	29	29	32	142	117	143	144	152
Male										
18–19	79	81	73	74	76	1,868	1,917	1,727	1,739	1,766
20–24	299	310	352	357	366	3,130	3,177	3,255	3,291	3,352
25–29	317	330	340	351	359	3,363	3,580	3,390	3,462	3,395
30–34	321	334	316	320	328	3,193	3,362	3,060	3,122	3,289
35–39	282	294	292	291	299	2,474	2,613	2,755	2,765	2,805
40–44	190	198	250	256	263	1,699	1,747	2,187	2,240	2,344
45–54	157	165	238	251	257	896	903	1,162	1,214	1,209
55 and over	49	51	72	77	79	193	199	247	260	256
Female										
18–19	4	4	5	5	5	92	96	112	116	120
20–24	19	20	27	28	30	205	210	264	277	290
25–29	29	30	27	29	30	303	324	283	299	300
30–34	37	39	34	34	36	370	391	330	342	370
35–39	29	31	36	38	40	257	272	346	364	378
40–44	16	17	29	31	32	144	149	247	264	284
45–54	12	12	22	23	25	63	64	101	110	112
55 and over	3	3	4	4	5	8	8	11	12	12
White, not Hispanic male										
18–19	24	26	24	24	25	885	942	911	905	935
20–24	91	100	107	107	111	1,462	1,560	1,641	1,627	1,675
25–29	96	105	98	99	104	1,535	1,732	1,666	1,682	1,685
30–34	114	125	107	105	110	1,674	1,861	1,691	1,693	1,874
35–39	106	116	111	106	111	1,302	1,460	1,607	1,562	1,641
40–44	74	81	105	103	107	897	972	1,314	1,299	1,419
45–54	71	78	101	100	105	522	553	664	658	677
55 and over	27	30	40	40	42	129	139	170	167	170
Black, not Hispanic male										
18–19	35	37	33	32	33	5,787	6,027	5,473	5,306	5,336
20–24	136	143	162	154	160	10,407	10,593	11,054	10,486	10,698
25–29	152	160	156	150	156	12,334	13,118	12,603	11,955	11,695
30–34	142	150	135	127	132	11,225	11,892	10,979	10,472	11,211
35–39	130	136	125	116	121	9,548	10,054	10,036	9,425	9,804
40–44	79	83	105	99	103	6,224	6,399	7,993	7,575	7,976
45–54	59	62	99	97	101	3,399	3,409	4,546	4,401	4,421
55 and over	13	13	21	21	22	611	635	898	879	869

See footnotes at end of table.

**Table 2 (page 2 of 2). Inmates in state or federal prisons and local jails, by sex, race, Hispanic origin, and age: United States, selected years 1999–2006**

[Data are based on reporting by a census of departments of correction and the Federal Bureau of Prisons and a sample of jails]

Sex, race, Hispanic origin, and age	1999	2000	2004	2005	2006	1999	2000	2004	2005	2006
Hispanic male	Number of inmates in thousands <sup>1</sup>					Inmates per 100,000 population <sup>2</sup>				
18–19 . . . . .	16	16	14	14	15	2,524	2,419	1,957	2,072	2,112
20–24 . . . . .	62	60	75	80	85	4,141	3,885	3,577	3,878	4,168
25–29 . . . . .	60	58	79	86	91	4,220	4,084	3,606	3,884	3,912
30–34 . . . . .	56	55	69	74	78	3,844	3,756	3,438	3,640	3,652
35–39 . . . . .	40	40	50	55	58	2,898	2,781	2,866	3,111	3,094
40–44 . . . . .	31	31	36	41	43	2,746	2,621	2,403	2,649	2,630
45–54 . . . . .	22	22	34	39	42	1,521	1,426	1,652	1,873	1,813
55 and over . . . . .	7	8	9	11	12	460	468	473	562	543
White, not Hispanic female										
18–19 . . . . .	2	2	2	2	2	63	71	71	76	81
20–24 . . . . .	7	8	12	13	14	121	137	191	206	221
25–29 . . . . .	10	11	12	13	14	154	187	203	220	226
30–34 . . . . .	13	15	15	16	17	185	224	237	255	292
35–39 . . . . .	10	13	16	18	19	128	159	238	260	282
40–44 . . . . .	6	7	13	14	15	73	87	162	177	200
45–54 . . . . .	5	6	10	11	12	33	39	63	70	75
55 and over . . . . .	1	2	2	3	3	5	7	8	9	9
Black, not Hispanic female										
18–19 . . . . .	1	1	2	2	2	224	231	262	257	262
20–24 . . . . .	7	7	9	9	9	524	525	625	611	637
25–29 . . . . .	13	14	10	10	10	956	993	746	720	716
30–34 . . . . .	19	19	12	12	12	1,362	1,409	905	855	924
35–39 . . . . .	14	14	14	13	14	940	962	993	957	999
40–44 . . . . .	7	8	11	11	12	512	513	764	751	798
45–54 . . . . .	4	5	8	8	9	214	209	327	323	326
55 and over . . . . .	1	1	1	1	1	27	28	29	26	28
Hispanic female										
18–19 . . . . .	1	1	1	1	1	94	87	162	168	175
20–24 . . . . .	4	4	5	5	6	284	246	304	317	346
25–29 . . . . .	5	4	5	5	6	357	296	268	287	305
30–34 . . . . .	5	4	5	5	6	372	301	313	312	333
35–39 . . . . .	4	3	5	5	6	308	247	331	322	337
40–44 . . . . .	2	2	4	4	4	203	168	271	264	279
45–54 . . . . .	2	2	3	3	3	133	106	136	138	141
55 and over . . . . .	0	0	1	1	1	11	9	25	26	26

--- Data not available.

0 is greater than 0 but less than 500.

<sup>1</sup>Estimates as of June 30 of year shown.

<sup>2</sup>Inmate estimates as of June 30 of year shown. Population is U.S. resident population for July 1 of year shown, except for 2005 data. For 2005 data, population is U.S. resident population for January 1, 2005.

<sup>3</sup>Includes all other races not shown separately. See [Appendix II, Hispanic origin; Race](#).

<sup>4</sup>Includes all other ages not shown separately. A small number of inmates are under age 18.

NOTES: Data are for inmates in custody. See [Appendix I, The Annual Survey and Census of Jails; National Prisoner Statistics](#). Starting with 2004 data, inmates reporting more than one race are excluded. Some estimates of the total number of inmates have been revised and differ from previous editions of *Health, United States*. Because of revisions, some categories may not sum to the total. Data for additional years are available. See [Appendix III](#).

SOURCES: Sabol WJ, Minton TD, Harrison PM. Prison and jail inmates at midyear 2006. Bureau of Justice Statistics Bulletin. Washington, DC: U.S. Department of Justice, 2007. Reports for earlier years are available from: [www.ojp.usdoj.gov/bjs/prisons.htm](http://www.ojp.usdoj.gov/bjs/prisons.htm).

**Table 3 (page 1 of 2). Persons and families below poverty level, by selected characteristics, race, and Hispanic origin: United States, selected years 1973–2006**

[Data are based on household interviews of the civilian noninstitutionalized population]

<i>Selected characteristics, race, and Hispanic origin</i> <sup>1</sup>	1973	1980	1985	1990	1995	2000 <sup>2</sup>	2004 <sup>3</sup>	2005	2006
All persons									
Percent below poverty									
All races . . . . .	11.1	13.0	14.0	13.5	13.8	11.3	12.7	12.6	12.3
White only . . . . .	8.4	10.2	11.4	10.7	11.2	9.5	10.8	10.6	10.3
Black or African American only . . . . .	31.4	32.5	31.3	31.9	29.3	22.5	24.7	24.9	24.3
Asian only . . . . .	---	---	---	12.2	14.6	9.9	9.8	11.1	10.3
Hispanic or Latino . . . . .	21.9	25.7	29.0	28.1	30.3	21.5	21.9	21.8	20.6
Mexican . . . . .	---	---	28.8	28.1	31.2	22.9	---	---	---
Puerto Rican . . . . .	---	---	43.3	40.6	38.1	25.6	---	---	---
White only, not Hispanic or Latino . . . . .	7.5	9.1	9.7	8.8	8.5	7.4	8.7	8.3	8.2
Related children under 18 years of age in families									
All races . . . . .	14.2	17.9	20.1	19.9	20.2	15.6	17.3	17.1	16.9
White only . . . . .	9.7	13.4	15.6	15.1	15.5	12.4	14.3	13.9	13.6
Black or African American only . . . . .	40.6	42.1	43.1	44.2	41.5	30.9	33.4	34.2	33.0
Asian only . . . . .	---	---	---	17.0	18.6	12.5	9.4	11.0	12.0
Hispanic or Latino . . . . .	27.8	33.0	39.6	37.7	39.3	27.6	28.6	27.7	26.6
Mexican . . . . .	---	---	37.4	35.5	39.3	29.5	---	---	---
Puerto Rican . . . . .	---	---	58.6	56.7	53.2	32.1	---	---	---
White only, not Hispanic or Latino . . . . .	---	11.3	12.3	11.6	10.6	8.5	9.9	9.5	9.5
Related children under 18 years of age in families with female householder and no spouse present									
All races . . . . .	---	50.8	53.6	53.4	50.3	40.1	41.9	42.8	42.1
White only . . . . .	---	41.6	45.2	45.9	42.5	33.9	38.2	38.8	37.8
Black or African American only . . . . .	---	64.8	66.9	64.7	61.6	49.3	49.2	50.2	49.7
Asian only . . . . .	---	---	---	32.2	42.4	38.0	18.7	25.6	36.2
Hispanic or Latino . . . . .	---	65.0	72.4	68.4	65.7	49.8	51.9	50.2	47.2
Mexican . . . . .	---	---	64.4	62.4	65.9	51.4	---	---	---
Puerto Rican . . . . .	---	---	85.4	82.7	79.6	55.3	---	---	---
White only, not Hispanic or Latino . . . . .	---	---	---	39.6	33.5	28.0	31.5	33.1	32.9
All persons									
Number below poverty in thousands									
All races . . . . .	22,973	29,272	33,064	33,585	36,425	31,581	37,040	36,950	36,460
White only . . . . .	15,142	19,699	22,860	22,326	24,423	21,645	25,327	24,872	24,416
Black or African American only . . . . .	7,388	8,579	8,926	9,837	9,872	7,982	9,014	9,168	9,048
Asian only . . . . .	---	---	---	858	1,411	1,258	1,201	1,402	1,353
Hispanic or Latino . . . . .	2,366	3,491	5,236	6,006	8,574	7,747	9,122	9,368	9,243
Mexican . . . . .	---	---	3,220	3,764	5,608	5,460	---	---	---
Puerto Rican . . . . .	---	---	1,011	966	1,183	814	---	---	---
White only, not Hispanic or Latino . . . . .	12,864	16,365	17,839	16,622	16,267	14,366	16,908	16,227	16,013
Related children under 18 years of age in families									
All races . . . . .	9,453	11,114	12,483	12,715	13,999	11,005	12,473	12,335	12,299
White only . . . . .	5,462	6,817	7,838	7,696	8,474	6,834	7,876	7,652	7,522
Black or African American only . . . . .	3,822	3,906	4,057	4,412	4,644	3,495	3,702	3,743	3,690
Asian only . . . . .	---	---	---	356	532	407	265	312	351
Hispanic or Latino . . . . .	1,364	1,718	2,512	2,750	3,938	3,342	3,985	3,977	3,959
Mexican . . . . .	---	---	1,589	1,733	2,655	2,537	---	---	---
Puerto Rican . . . . .	---	---	535	490	610	329	---	---	---
White only, not Hispanic or Latino . . . . .	---	5,174	5,421	5,106	4,745	3,715	4,190	3,973	3,930

See footnotes at end of table.

**Table 3 (page 2 of 2). Persons and families below poverty level, by selected characteristics, race, and Hispanic origin: United States, selected years 1973–2006**

[Data are based on household interviews of the civilian noninstitutionalized population]

<i>Selected characteristics, race, and Hispanic origin</i> <sup>1</sup>	1973	1980	1985	1990	1995	2000 <sup>2</sup>	2004 <sup>3</sup>	2005	2006
Related children under 18 years of age in families with female householder and no spouse present	Number below poverty in thousands								
All races . . . . .	---	5,866	6,716	7,363	8,364	6,300	7,152	7,210	7,341
White only . . . . .	---	2,813	3,372	3,597	4,051	3,090	3,782	3,747	3,840
Black or African American only . . . . .	---	2,944	3,181	3,543	3,954	2,908	2,963	2,993	2,971
Asian only . . . . .	---	---	---	80	145	162	55	68	91
Hispanic or Latino . . . . .	---	809	1,247	1,314	1,872	1,407	1,840	1,774	1,848
Mexican . . . . .	---	---	553	615	1,056	938	---	---	---
Puerto Rican . . . . .	---	---	449	382	459	242	---	---	---
White only, not Hispanic or Latino . . . . .	---	---	---	2,411	2,299	1,832	2,114	2,158	2,206

--- Data not available.

<sup>1</sup>The race groups, white, black, and Asian, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 2002 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The three single-race categories shown in the table conform to the 1997 Standards. For 2002 and subsequent years, race-specific estimates are for persons who reported only one racial group. Estimates for single-race categories prior to 2002 are based on answers to the Current Population Survey question which asked respondents to choose only a single race. Prior to data year 2002, data were tabulated according to the 1977 Standards in which the Asian only category included Native Hawaiian and Other Pacific Islander. See [Appendix II, Hispanic origin; Race](#).

<sup>2</sup>Estimates are consistent with 2001 data through implementation of the 2000 census-based population controls and a 28,000 household sample expansion.

<sup>3</sup>The 2004 data have been revised to reflect a correction to the weights in the 2005 Annual Social and Economic Supplements (ASEC) of the Current Population Survey.

NOTES: Estimates of poverty for 1991–1998 are based on 1990 postcensal population estimates. Estimates for 1999 and subsequent years are based on 2000 census population controls. Poverty level is based on family income and family size using U.S. Census Bureau poverty thresholds. See [Appendix II, Poverty](#). The Current Population Survey is not large enough to produce reliable annual estimates for American Indian or Alaska Native persons, or for Native Hawaiians. The 2004–2006 average poverty rate for American Indian or Alaska Natives only was 27.2%, representing 644,000 persons. Data for additional years are available. See [Appendix III](#).

**SOURCES:** U.S. Census Bureau, Current Population Survey Annual Social and Economic Supplements; DeNavas-Walt C, Proctor BD, Smith J. Income, poverty, and health insurance coverage in the United States: 2006. Current population reports, series P–60, no 233. Washington, DC: U.S. Government Printing Office. 2007.

**Table 4 (page 1 of 3). Crude birth rates, fertility rates, and birth rates by age, race, and Hispanic origin of mother: United States, selected years 1950–2005**

[Data are based on birth certificates]

Race, Hispanic origin, and year	Crude birth rate <sup>1</sup>	Fertility rate <sup>2</sup>	Age of mother											
			10–14 years	15–19 years					20–24 years	25–29 years	30–34 years	35–39 years	40–44 years	45–54 years <sup>3</sup>
				Total	15–17 years	18–19 years								
All races														
Live births per 1,000 women														
1950	24.1	106.2	1.0	81.6	40.7	132.7	196.6	166.1	103.7	52.9	15.1	1.2		
1960	23.7	118.0	0.8	89.1	43.9	166.7	258.1	197.4	112.7	56.2	15.5	0.9		
1970	18.4	87.9	1.2	68.3	38.8	114.7	167.8	145.1	73.3	31.7	8.1	0.5		
1980	15.9	68.4	1.1	53.0	32.5	82.1	115.1	112.9	61.9	19.8	3.9	0.2		
1985	15.8	66.3	1.2	51.0	31.0	79.6	108.3	111.0	69.1	24.0	4.0	0.2		
1990	16.7	70.9	1.4	59.9	37.5	88.6	116.5	120.2	80.8	31.7	5.5	0.2		
1995	14.6	64.6	1.3	56.0	35.5	87.7	107.5	108.8	81.1	34.0	6.6	0.3		
2000	14.4	65.9	0.9	47.7	26.9	78.1	109.7	113.5	91.2	39.7	8.0	0.5		
2003	14.1	66.1	0.6	41.6	22.4	70.7	102.6	115.6	95.1	43.8	8.7	0.5		
2004	14.0	66.3	0.7	41.1	22.1	70.0	101.7	115.5	95.3	45.4	8.9	0.5		
2005	14.0	66.7	0.7	40.5	21.4	69.9	102.2	115.5	95.8	46.3	9.1	0.6		
Race of child: <sup>4</sup> White														
1950	23.0	102.3	0.4	70.0	31.3	120.5	190.4	165.1	102.6	51.4	14.5	1.0		
1960	22.7	113.2	0.4	79.4	35.5	154.6	252.8	194.9	109.6	54.0	14.7	0.8		
1970	17.4	84.1	0.5	57.4	29.2	101.5	163.4	145.9	71.9	30.0	7.5	0.4		
1980	14.9	64.7	0.6	44.7	25.2	72.1	109.5	112.4	60.4	18.5	3.4	0.2		
Race of mother: <sup>5</sup> White														
1980	15.1	65.6	0.6	45.4	25.5	73.2	111.1	113.8	61.2	18.8	3.5	0.2		
1985	15.0	64.1	0.6	43.3	24.4	70.4	104.1	112.3	69.9	23.3	3.7	0.2		
1990	15.8	68.3	0.7	50.8	29.5	78.0	109.8	120.7	81.7	31.5	5.2	0.2		
1995	14.1	63.6	0.8	49.5	29.6	80.2	104.7	111.7	83.3	34.2	6.4	0.3		
2000	13.9	65.3	0.6	43.2	23.3	72.3	106.6	116.7	94.6	40.2	7.9	0.4		
2003	13.6	66.1	0.5	38.3	19.8	66.2	100.6	119.5	99.3	44.8	8.7	0.5		
2004	13.5	66.1	0.5	37.7	19.5	65.0	99.2	118.6	99.1	46.4	8.9	0.5		
2005	13.4	66.3	0.5	37.0	18.9	64.7	99.2	118.3	99.3	47.3	9.0	0.6		
Race of child: <sup>4</sup> Black or African American														
1960	31.9	153.5	4.3	156.1	---	---	295.4	218.6	137.1	73.9	21.9	1.1		
1970	25.3	115.4	5.2	140.7	101.4	204.9	202.7	136.3	79.6	41.9	12.5	1.0		
1980	22.1	88.1	4.3	100.0	73.6	138.8	146.3	109.1	62.9	24.5	5.8	0.3		
Race of mother: <sup>5</sup> Black or African American														
1980	21.3	84.9	4.3	97.8	72.5	135.1	140.0	103.9	59.9	23.5	5.6	0.3		
1985	20.4	78.8	4.5	95.4	69.3	132.4	135.0	100.2	57.9	23.9	4.6	0.3		
1990	22.4	86.8	4.9	112.8	82.3	152.9	160.2	115.5	68.7	28.1	5.5	0.3		
1995	17.8	71.0	4.1	94.4	68.5	135.0	133.7	95.6	63.0	28.4	6.0	0.3		
2000	17.0	70.0	2.3	77.4	49.0	118.8	141.3	100.3	65.4	31.5	7.2	0.4		
2003	15.7	66.3	1.6	63.8	38.2	103.7	126.1	100.4	66.5	33.2	7.7	0.5		
2004	16.0	67.6	1.6	63.3	37.2	104.4	127.7	103.6	67.9	34.0	7.9	0.5		
2005	16.2	69.0	1.7	62.0	35.5	104.9	129.9	105.9	70.3	35.3	8.5	0.5		
American Indian or Alaska Native mothers <sup>5</sup>														
1980	20.7	82.7	1.9	82.2	51.5	129.5	143.7	106.6	61.8	28.1	8.2	*		
1985	19.8	78.6	1.7	79.2	47.7	124.1	139.1	109.6	62.6	27.4	6.0	*		
1990	18.9	76.2	1.6	81.1	48.5	129.3	148.7	110.3	61.5	27.5	5.9	*		
1995	15.3	63.0	1.6	72.9	44.6	122.2	123.1	91.6	56.5	24.3	5.5	*		
2000	14.0	58.7	1.1	58.3	34.1	97.1	117.2	91.8	55.5	24.6	5.7	0.3		
2003	13.8	58.4	1.0	53.1	30.6	87.3	110.0	93.5	57.4	25.4	5.5	0.4		
2004	14.0	58.9	0.9	52.5	30.0	87.0	109.7	92.8	58.0	26.8	6.0	0.2		
2005	14.2	59.9	0.9	52.7	30.5	87.6	109.2	93.8	60.1	27.0	6.0	0.3		

See footnotes at end of table.

**Table 4 (page 2 of 3). Crude birth rates, fertility rates, and birth rates by age, race, and Hispanic origin of mother: United States, selected years 1950–2005**

[Data are based on birth certificates]

Race, Hispanic origin, and year	Crude birth rate <sup>1</sup>	Fertility rate <sup>2</sup>	Age of mother											
			10–14 years	15–19 years					20–24 years	25–29 years	30–34 years	35–39 years	40–44 years	45–54 years <sup>3</sup>
				Total	15–17 years	18–19 years								
Live births per 1,000 women														
Asian or Pacific Islander mothers <sup>5</sup>														
1980	19.9	73.2	0.3	26.2	12.0	46.2	93.3	127.4	96.0	38.3	8.5	0.7		
1985	18.7	68.4	0.4	23.8	12.5	40.8	83.6	123.0	93.6	42.7	8.7	1.2		
1990	19.0	69.6	0.7	26.4	16.0	40.2	79.2	126.3	106.5	49.6	10.7	1.1		
1995	16.7	62.6	0.7	25.5	15.6	40.1	64.2	103.7	102.3	50.1	11.8	0.8		
2000	17.1	65.8	0.3	20.5	11.6	32.6	60.3	108.4	116.5	59.0	12.6	0.8		
2003	16.8	66.3	0.2	17.4	8.8	29.8	59.6	108.5	114.6	59.9	13.5	0.9		
2004	16.8	67.1	0.2	17.3	8.9	29.6	59.8	108.6	116.9	62.1	13.6	1.0		
2005	16.5	66.6	0.2	17.0	8.2	30.1	61.1	107.9	115.0	61.8	13.8	1.0		
Hispanic or Latina mothers <sup>5,6</sup>														
1980	23.5	95.4	1.7	82.2	52.1	126.9	156.4	132.1	83.2	39.9	10.6	0.7		
1990	26.7	107.7	2.4	100.3	65.9	147.7	181.0	153.0	98.3	45.3	10.9	0.7		
1995	24.1	98.8	2.6	99.3	68.3	145.4	171.9	140.4	90.5	43.7	10.7	0.6		
2000	23.1	95.9	1.7	87.3	55.5	132.6	161.3	139.9	97.1	46.6	11.5	0.6		
2003	22.9	96.9	1.3	82.3	49.7	132.0	163.4	144.4	102.0	50.8	12.2	0.7		
2004	22.9	97.8	1.3	82.6	49.7	133.5	165.3	145.6	104.1	52.9	12.4	0.7		
2005	23.1	99.4	1.3	81.7	48.5	134.6	170.0	149.2	106.8	54.2	13.0	0.8		
White, not Hispanic or Latina mothers <sup>5,6</sup>														
1980	14.2	62.4	0.4	41.2	22.4	67.7	105.5	110.6	59.9	17.7	3.0	0.1		
1990	14.4	62.8	0.5	42.5	23.2	66.6	97.5	115.3	79.4	30.0	4.7	0.2		
1995	12.5	57.5	0.4	39.3	22.0	66.2	90.2	105.1	81.5	32.8	5.9	0.3		
2000	12.2	58.5	0.3	32.6	15.8	57.5	91.2	109.4	93.2	38.8	7.3	0.4		
2003	11.8	58.5	0.2	27.4	12.4	50.0	83.5	110.8	97.6	43.2	8.1	0.5		
2004	11.6	58.4	0.2	26.7	12.0	48.7	81.9	110.0	97.1	44.8	8.2	0.5		
2005	11.5	58.3	0.2	25.9	11.5	48.0	81.4	109.1	96.9	45.6	8.3	0.5		
Black or African American, not Hispanic or Latina mothers <sup>5,6</sup>														
1980	22.9	90.7	4.6	105.1	77.2	146.5	152.2	111.7	65.2	25.8	5.8	0.3		
1990	23.0	89.0	5.0	116.2	84.9	157.5	165.1	118.4	70.2	28.7	5.6	0.3		
1995	18.2	72.8	4.2	97.2	70.4	139.2	137.8	98.5	64.4	28.8	6.1	0.3		
2000	17.3	71.4	2.4	79.2	50.1	121.9	145.4	102.8	66.5	31.8	7.2	0.4		
2003	15.9	67.1	1.6	64.7	38.7	105.3	128.1	102.1	67.4	33.4	7.7	0.5		
2004	15.8	67.0	1.6	63.1	37.1	103.9	126.9	103.0	67.4	33.7	7.8	0.5		
2005	15.7	67.2	1.7	60.9	34.9	103.0	126.8	103.0	68.4	34.3	8.2	0.5		

See footnotes at end of table.

## Table 4 (page 3 of 3). Crude birth rates, fertility rates, and birth rates by age, race, and Hispanic origin of mother: United States, selected years 1950–2005

[Data are based on birth certificates]

-- Data not available.

\* Rates based on fewer than 20 births are considered unreliable and are not shown.

<sup>1</sup> Live births per 1,000 population.

<sup>2</sup> Total number of live births regardless of age of mother per 1,000 women 15–44 years of age.

<sup>3</sup> Prior to 1997, data are for live births to mothers 45–49 years of age per 1,000 women 45–49 years of age. Starting with 1997 data, rates are for live births to mothers 45–54 years of age per 1,000 women 45–49 years of age. See [Appendix II, Age](#).

<sup>4</sup> Live births are tabulated by race of child. See [Appendix II, Race, Birth File](#).

<sup>5</sup> Live births are tabulated by race and/or Hispanic origin of mother. See [Appendix II, Race, Birth File](#).

<sup>6</sup> Prior to 1993, data from states lacking an Hispanic-origin item on the birth certificate were excluded. See [Appendix II, Hispanic origin](#). Rates in 1985 were not calculated because estimates for the Hispanic and non-Hispanic populations were not available.

NOTES: Data are based on births adjusted for underregistration for 1950 and on registered births for all other years. Starting with 1970 data, births to persons who were not residents of the 50 states and the District of Columbia are excluded. Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were computed using the 2000 census counts and starting in 2001 rates were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#). The race groups, white, black, American Indian or Alaska Native, and Asian or Pacific Islander, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 2003 data, some states reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Interpretation of trend data should take into consideration expansion of reporting areas and immigration. Data for additional years are available. See [Appendix III](#).

**SOURCES:** CDC/NCHS, National Vital Statistics System, Birth File. Martin JA, Hamilton BE, Sutton PD, Ventura SJ, Menacker F, Kirmeyer S, Munson ML. Births: Final data for 2005. National vital statistics reports. vol 56 no 6. Hyattsville, MD: NCHS. 2007; Hamilton BE, Sutton PD, Ventura SJ. Revised birth and fertility rates for the 1990s and new rates for Hispanic populations, 2000 and 2001: United States. National vital statistics reports. vol 51 no 12. Hyattsville, MD: NCHS. 2003; Ventura SJ. Births of Hispanic parentage, 1980 and 1985. Monthly vital statistics report. vol 32 no 6 and vol 36 no 11, suppl. Public Health Service. Hyattsville, MD. 1983 and 1988; Internet release of *Vital statistics of the United States, 2000, vol 1, natality*, tables 1–1 and 1–7; available from: [www.cdc.gov/nchs/dataawh/statab/unpubd/natality/natab2000.htm](http://www.cdc.gov/nchs/dataawh/statab/unpubd/natality/natab2000.htm).

**Table 5. Live births, by plurality, and detailed race and Hispanic origin of mother: United States, selected years 1970–2005**

[Data are based on birth certificates]

<i>Plurality of birth and race and Hispanic origin of mother</i>	1970	1971	1975	1980	1985	1990	1995	2000	2004	2005
All births	Number of live births									
All races . . . . .	3,731,386	3,555,970	3,144,198	3,612,258	3,760,561	4,158,212	3,899,589	4,058,814	4,112,052	4,138,349
White . . . . .	3,109,956	2,939,568	2,576,818	2,936,351	3,037,913	3,290,273	3,098,885	3,194,005	3,222,928	3,229,294
Black or African American . . . . .	561,992	553,750	496,829	568,080	581,824	684,336	603,139	622,598	616,074	633,134
American Indian or Alaska Native . . . . .	22,264	23,254	22,690	29,389	34,037	39,051	37,278	41,668	43,927	44,813
Asian or Pacific Islander <sup>1</sup> . . . . .	---	27,004	28,884	74,355	104,606	141,635	160,287	200,543	229,123	231,108
Hispanic or Latina <sup>2</sup> . . . . .	---	---	---	307,163	372,814	595,073	679,768	815,868	946,349	985,505
Mexican . . . . .	---	---	---	215,439	242,976	385,640	469,615	581,915	677,621	693,197
Puerto Rican . . . . .	---	---	---	33,671	35,147	58,807	54,824	58,124	61,221	63,340
Cuban . . . . .	---	---	---	7,163	10,024	11,311	12,473	13,429	14,943	16,064
Central and South American . . . . .	---	---	---	21,268	40,985	83,008	94,996	113,344	143,520	151,201
Other and unknown Hispanic or Latina . . . . .	---	---	---	29,622	43,682	56,307	47,860	49,056	49,044	61,703
Not Hispanic or Latina: <sup>2</sup>	---	---	---	---	---	---	---	---	---	---
White . . . . .	---	---	---	1,256,777	1,407,460	2,626,500	2,382,638	2,362,968	2,296,683	2,279,768
Black or African American . . . . .	---	---	---	300,480	337,448	661,701	587,781	604,346	578,772	583,759
Twin births	---	63,298	59,192	68,339	77,102	93,865	96,736	118,916	132,219	133,122
White . . . . .	---	49,972	46,715	53,104	60,351	72,617	76,196	93,235	103,438	103,367
Black or African American . . . . .	---	12,452	11,375	13,638	14,646	18,164	17,000	20,626	21,618	22,580
American Indian or Alaska Native . . . . .	---	362	348	491	537	699	769	900	1,086	1,086
Asian or Pacific Islander <sup>1</sup> . . . . .	---	320	505	1,045	1,536	2,320	2,771	4,155	6,077	6,089
Hispanic or Latina <sup>2</sup> . . . . .	---	---	---	5,154	6,550	10,713	12,685	16,470	20,351	21,723
Mexican . . . . .	---	---	---	3,599	4,292	6,701	8,341	11,130	13,485	14,080
Puerto Rican . . . . .	---	---	---	631	705	1,226	1,248	1,461	1,759	1,973
Cuban . . . . .	---	---	---	102	201	228	312	371	562	517
Central and South American . . . . .	---	---	---	371	665	1,463	1,769	2,361	3,393	3,540
Other and unknown Hispanic or Latina . . . . .	---	---	---	451	687	1,095	1,015	1,147	1,152	1,613
Not Hispanic or Latina: <sup>2</sup>	---	---	---	---	---	---	---	---	---	---
White . . . . .	---	---	---	23,004	28,402	60,210	62,370	76,018	83,346	82,223
Black or African American . . . . .	---	---	---	7,278	8,400	17,646	16,622	20,173	20,605	21,254
Triplet and higher order multiple births	---	1,034	1,066	1,337	1,925	3,028	4,973	7,325	7,275	6,694
White . . . . .	---	834	909	1,104	1,648	2,639	4,505	6,551	6,326	5,753
Black or African American . . . . .	---	196	151	211	240	321	352	521	605	646
American Indian or Alaska Native . . . . .	---	0	2	9	13	4	20	18	22	25
Asian or Pacific Islander <sup>1</sup> . . . . .	---	0	4	9	23	61	96	235	322	270
Hispanic or Latina <sup>2</sup> . . . . .	---	---	---	78	106	235	355	659	723	761
Mexican . . . . .	---	---	---	43	82	121	202	391	483	444
Puerto Rican . . . . .	---	---	---	12	14	28	35	73	103	79
Cuban . . . . .	---	---	---	0	3	9	24	15	*	29
Central and South American . . . . .	---	---	---	8	4	59	59	122	95	152
Other and unknown Hispanic or Latina . . . . .	---	---	---	15	3	18	35	58	24	57
Not Hispanic or Latina: <sup>2</sup>	---	---	---	---	---	---	---	---	---	---
White . . . . .	---	---	---	490	779	2,358	4,050	5,821	5,590	4,966
Black or African American . . . . .	---	---	---	128	132	306	340	506	577	616

--- Data not available.

<sup>1</sup>Starting with 2003 data, estimates are not available for Asian or Pacific Islander subgroups during the transition from single-race to multiple-race reporting. See [Appendix II, Race, Birth File](#).

<sup>2</sup>Prior to 1993, data from states lacking an Hispanic-origin item on the birth certificate were excluded. See [Appendix II, Hispanic origin](#). Data for non-Hispanic white and non-Hispanic black women for years prior to 1989 are not nationally representative and are provided for comparison with Hispanic data.

NOTES: The race groups, white, black, American Indian or Alaska Native, and Asian or Pacific Islander, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 2003 data, some states reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Interpretation of trend data should take into consideration expansion of reporting areas and immigration. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System, Birth File. Martin JA, Hamilton BE, Sutton PD, Ventura SJ, Menacker F, Kirmeyer S, Munson ML. Births: Final data for 2005. National vital statistics reports. vol 56 no 6. Hyattsville, MD: NCHS. 2007; Births: Final data for each data year 1997–2004. National vital statistics reports. Hyattsville, MD; Final natality statistics for each data year 1970–1996. Monthly vital statistics report. Hyattsville, MD.



**Table 6. Twin and higher order multiple births, by race, Hispanic origin, and age of mother: United States, selected years 1971–2005**

[Data are based on birth certificates]

<i>Plurality of birth and race, Hispanic origin, and age of mother</i>	1971	1975	1980	1985	1990	1995	1997	2000	2003	2004	2005
<b>Twin births</b>											
	Number per 1,000 live births										
All races . . . . .	17.8	18.8	18.9	20.5	22.6	24.8	26.8	29.3	31.5	32.2	32.2
White . . . . .	17.0	18.1	18.1	19.9	22.1	24.6	26.7	29.2	31.4	32.1	32.0
Black or African American . . . . .	22.5	22.9	24.0	25.2	26.5	28.2	30.0	33.1	34.4	35.1	35.7
American Indian or Alaska Native . . . . .	15.6	15.3	16.7	15.8	17.9	20.6	20.6	21.6	24.3	24.7	24.2
Asian or Pacific Islander <sup>1</sup> . . . . .	11.9	17.5	14.1	14.7	16.4	17.3	19.2	20.7	25.7	26.5	26.3
Hispanic or Latina <sup>2</sup> . . . . .	---	---	16.8	17.6	18.0	18.7	19.5	20.2	21.3	21.5	22.0
Mexican . . . . .	---	---	16.7	17.7	17.4	17.8	18.5	19.1	19.8	19.9	20.3
Puerto Rican . . . . .	---	---	18.7	20.1	20.8	22.8	23.0	25.1	28.5	28.7	31.1
Cuban . . . . .	---	---	14.2	20.1	20.2	25.0	28.6	27.6	31.3	37.6	32.2
Central and South American . . . . .	---	---	17.4	16.2	17.6	18.6	20.6	20.8	23.2	23.6	23.4
Other and unknown Hispanic or Latina . . . . .	---	---	15.2	15.7	19.4	21.2	21.1	23.4	25.4	23.5	26.1
Not Hispanic or Latina: <sup>2</sup>											
White . . . . .	---	---	18.3	20.2	22.9	26.2	28.8	32.2	35.2	36.3	36.1
Black or African American . . . . .	---	---	24.2	24.9	26.7	28.3	30.0	33.4	34.7	35.6	36.4
<b>Age of mother:</b>											
Under 20 years . . . . .	11.6	12.7	12.8	13.0	14.3	14.2	15.0	15.8	15.3	15.7	16.6
20–24 years . . . . .	16.2	17.6	17.4	18.3	19.2	19.9	20.4	22.0	22.4	22.8	22.4
25–29 years . . . . .	19.8	20.9	20.5	21.6	23.5	24.8	26.3	28.2	29.6	30.2	30.6
30–34 years . . . . .	23.7	24.5	23.5	25.5	27.6	30.6	33.7	36.5	39.2	40.1	40.0
35–39 years . . . . .	27.3	25.8	25.3	26.3	30.2	35.7	39.3	43.5	47.8	48.5	48.0
40–44 years . . . . .	22.3	23.3	23.0	20.5	24.7	32.3	38.6	45.2	51.3	53.7	54.4
45–49 years . . . . .	*18.1	*	*	*18.9	*23.8	101.9	133.2	153.1	189.2	195.4	182.9
50–54 years . . . . .	---	---	---	---	---	---	347.2	313.7	374.6	379.7	407.7
<b>Triplet and higher order multiple births</b>											
	Number per 100,000 live births										
All races . . . . .	29.1	33.9	37.0	51.2	72.8	127.5	173.6	180.5	187.4	176.9	161.8
White . . . . .	28.4	35.3	37.6	54.2	80.2	145.4	195.9	205.1	208.7	196.3	178.2
Black or African American . . . . .	35.4	30.4	37.1	41.2	46.9	58.4	88.3	83.7	108.4	98.2	102.0
American Indian or Alaska Native . . . . .	*	*	*	*	*	*53.7	*	*	*76.7	*50.1	*55.8
Asian or Pacific Islander . . . . .	*	*	*	*22.0	43.1	59.9	103.1	117.2	111.7	140.5	116.8
Hispanic or Latina <sup>2</sup> . . . . .	---	---	25.4	28.4	39.5	52.2	72.7	80.8	85.9	76.4	77.2
Not Hispanic or Latina: <sup>2</sup>											
White . . . . .	---	---	39.0	55.3	89.8	170.0	230.8	246.3	255.0	243.4	217.8
Black or African American . . . . .	---	---	42.6	39.1	46.2	57.8	90.0	83.7	109.5	99.7	105.5
<b>Age of mother:</b>											
Under 20 years . . . . .	9.1	10.9	14.8	13.8	15.9	17.6	20.7	23.2	12.8	20.6	19.7
20–24 years . . . . .	25.4	28.1	31.4	35.0	32.4	35.3	46.8	44.2	48.4	41.7	44.7
25–29 years . . . . .	43.7	45.4	42.8	66.3	73.9	118.3	151.0	163.3	158.9	158.7	144.5
30–34 years . . . . .	36.4	53.5	58.3	71.2	126.3	217.2	293.6	307.3	309.1	285.0	257.0
35–39 years . . . . .	35.7	45.1	47.6	70.0	156.8	285.3	403.2	368.5	409.5	375.3	332.0
40–44 years . . . . .	*	*	*	*	*57.6	273.6	315.4	415.5	330.7	364.6	328.7
45–49 years . . . . .	*	*	*	*	*	*1,466.8	2,100.2	1,586.6	1,919.6	1,235.2	1,699.6
50–54 years . . . . .	---	---	---	---	---	---	*	*9,019.6	*	*	*

--- Data not available.

\* Rates preceded by an asterisk are based on fewer than 50 births. Rates based on fewer than 20 births are considered unreliable and are not shown.

<sup>1</sup>Starting with 2003 data, estimates are not available for Asian or Pacific Islander subgroups during the transition from single-race to multiple-race reporting. See [Appendix II, Race, Birth File](#).

<sup>2</sup>Prior to 1993, data from states lacking an Hispanic-origin item on the birth certificate were excluded. See [Appendix II, Hispanic origin](#). Data for non-Hispanic white and non-Hispanic black women for years prior to 1989 are not nationally representative and are provided for comparison with Hispanic data.

NOTES: The race groups, white, black, American Indian or Alaska Native, and Asian or Pacific Islander, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 2003 data, some states reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Interpretation of trend data should take into consideration expansion of reporting areas and immigration. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System, Birth File; Martin JA, Park MM. Trends in twin and triplet births: 1980–97. National vital statistics reports. vol 47 no 24. Hyattsville, MD: NCHS. 1999.

**Table 7. Prenatal care for live births, by detailed race and Hispanic origin of mother: United States, selected years 1970–2000, and selected states, 2004–2005**

[Data are based on birth certificates]

Prenatal care, race, and Hispanic origin of mother	1970	1980	1990	2000	37 states, DC, and NYC		7 states	
					2004 <sup>1</sup>	2005 <sup>1</sup>	2004 <sup>2</sup>	2005 <sup>2</sup>
Prenatal care began during 1st trimester	Percent of live births <sup>3</sup>							
All races . . . . .	68.0	76.3	75.8	83.2	84.2	83.9	72.9	72.8
White . . . . .	72.3	79.2	79.2	85.0	85.9	85.5	75.9	75.6
Black or African American . . . . .	44.2	62.4	60.6	74.3	76.2	76.3	57.8	58.1
American Indian or Alaska Native . . . . .	38.2	55.8	57.9	69.3	69.5	69.6	58.7	59.5
Asian or Pacific Islander <sup>4</sup> . . . . .	---	73.7	75.1	84.0	85.3	85.3	69.1	70.0
Hispanic or Latina <sup>5</sup> . . . . .	---	60.2	60.2	74.4	77.7	77.6	56.5	57.0
Mexican . . . . .	---	59.6	57.8	72.9	77.5	77.6	53.2	53.3
Puerto Rican . . . . .	---	55.1	63.5	78.5	79.7	80.1	62.6	63.3
Cuban . . . . .	---	82.7	84.8	91.7	86.4	86.2	71.2	72.5
Central and South American . . . . .	---	58.8	61.5	77.6	77.5	76.6	56.6	58.2
Other and unknown Hispanic or Latina . . . . .	---	66.4	66.4	75.8	76.7	76.9	58.8	59.0
Not Hispanic or Latina: <sup>5</sup>								
White . . . . .	---	81.2	83.3	88.5	89.0	88.7	78.0	77.8
Black or African American . . . . .	---	60.8	60.7	74.3	76.3	76.5	58.9	59.3
Prenatal care began during 3rd trimester or no prenatal care								
All races . . . . .	7.9	5.1	6.1	3.9	3.5	3.5	6.2	6.0
White . . . . .	6.3	4.3	4.9	3.3	3.0	3.0	5.1	5.0
Black or African American . . . . .	16.6	8.9	11.3	6.7	5.7	5.7	11.9	11.3
American Indian or Alaska Native . . . . .	28.9	15.2	12.9	8.6	8.1	8.2	11.2	11.8
Asian or Pacific Islander <sup>4</sup> . . . . .	---	6.5	5.8	3.3	3.0	3.0	6.8	6.8
Hispanic or Latina <sup>5</sup> . . . . .	---	12.0	12.0	6.3	5.2	5.1	11.0	10.8
Mexican . . . . .	---	11.8	13.2	6.9	5.3	5.0	12.7	12.4
Puerto Rican . . . . .	---	16.2	10.6	4.5	4.0	4.1	8.5	7.8
Cuban . . . . .	---	3.9	2.8	1.4	2.8	2.5	*6.5	*5.2
Central and South American . . . . .	---	13.1	10.9	5.4	5.1	5.6	9.4	9.7
Other and unknown Hispanic or Latina . . . . .	---	9.2	8.5	5.9	6.0	5.6	11.4	11.3
Not Hispanic or Latina: <sup>5</sup>								
White . . . . .	---	3.5	3.4	2.3	2.1	2.2	4.5	4.4
Black or African American . . . . .	---	9.7	11.2	6.7	5.7	5.6	11.4	10.8

--- Data not available.

<sup>1</sup>Data for 2004 and 2005 include the 39 reporting areas (37 states, DC, and NYC) that used the 1989 revision of the U.S. Standard Certificate of Live Birth in 2005. Reporting areas that have adopted the 2003 revision of the U.S. Standard Certificate of Live Birth are excluded because prenatal care data based on the 2003 revision are not comparable with data based on the 1989 and earlier revisions of the U.S. Standard Certificate of Live Birth. See [Appendix II, Prenatal care](#).

<sup>2</sup>Data for 2004 and 2005 include the 7 reporting areas that adopted the 2003 revision of the U.S. Standard Certificate of Live Birth in 2004. Reporting areas that used the 1989 revision of the U.S. Standard Certificate of Live Birth are excluded because prenatal care data based on the 2003 revision are not comparable with data based on the 1989 or earlier revisions.

<sup>3</sup>Excludes live births where trimester when prenatal care began is unknown.

<sup>4</sup>Starting with 2003 data, estimates are not available for Asian or Pacific Islander subgroups during the transition from single-race to multiple-race reporting. See [Appendix II, Race; Birth File](#).

<sup>5</sup>Prior to 1993, data from states lacking an Hispanic-origin item on the birth certificate were excluded. See [Appendix II, Hispanic origin](#). Data for non-Hispanic white and non-Hispanic black women for years prior to 1989 are not nationally representative and are provided for comparison with Hispanic data.

NOTES: Prior to 2003, all data are based on the 1989 and earlier revisions of the U.S. Standard Certificate of Live Birth. See [Appendix II, Prenatal care](#). Data for 1970 and 1975 exclude births that occurred in states not reporting prenatal care. Starting with 2004 data, data for states adopting the 2003 revision of the U. S. Standard Certificate of Live Birth are shown separately. See [Appendix II, Prenatal care](#). The race groups, white, black, American Indian or Alaska Native, and Asian or Pacific Islander, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 2003 data, some states reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Interpretation of trend data should take into consideration changes in reporting areas and immigration. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System, Birth File. Martin JA, Hamilton BE, Sutton PD, Ventura SJ, Menacker F, Kirmeyer S, Munson ML. Births: Final data for 2005. National vital statistics reports. vol 56 no 6. Hyattsville, MD: NCHS. 2007; Births: Final data for each data year 1997–2004. National vital statistics reports. Hyattsville, MD; Final natality statistics for each data year 1970–1996. Monthly vital statistics report. Hyattsville, MD.

**Table 8 (page 1 of 3). Early prenatal care by race and Hispanic origin of mother, geographic division, and state: United States, average annual 1997–1999, 2000–2002, and 2003–2005**

[Data are based on birth certificates]

Geographic division and state	Not Hispanic or Latina								
	All races			White			Black or African American		
	1997–1999	2000–2002	2003–2005	1997–1999	2000–2002	2003–2005	1997–1999	2000–2002	2003–2005
	Percent of live births with early prenatal care (beginning in the 1st trimester)								
United States . . . . .	82.9	83.4	84.1	88.1	88.6	88.9	73.2	74.6	76.3
New England:									
Connecticut . . . . .	88.8	88.8	87.6	92.4	92.5	92.4	80.6	82.3	78.1
Maine . . . . .	89.0	88.3	88.0	89.5	88.6	88.4	82.7	76.8	78.5
Massachusetts . . . . .	89.3	89.6	89.6	92.1	92.5	92.2	79.4	78.9	80.4
New Hampshire <sup>1</sup> . . . . .	90.0	91.1	---	90.5	91.9	---	75.8	78.4	---
Rhode Island . . . . .	90.1	90.6	90.1	92.6	93.1	92.8	81.2	83.2	82.6
Vermont <sup>1</sup> . . . . .	87.8	88.9	---	87.9	89.2	---	78.1	73.2	---
Middle Atlantic: <sup>2</sup>									
New Jersey . . . . .	81.4	80.2	79.3	89.5	89.1	88.6	64.2	63.6	63.2
New York <sup>1</sup> . . . . .	85.7	84.7	---	89.3	88.7	---	71.1	70.2	---
New York City . . . . .	80.4	76.6	79.9	87.2	86.0	88.4	70.3	71.5	74.4
East North Central:									
Illinois . . . . .	82.6	83.7	85.6	89.7	90.2	90.9	69.9	72.8	74.7
Indiana . . . . .	80.2	80.9	80.7	82.8	84.0	84.3	66.2	69.0	67.9
Michigan . . . . .	84.1	84.8	85.9	88.4	89.1	89.7	70.5	70.1	72.1
Ohio . . . . .	85.7	87.2	87.6	88.1	89.4	89.6	74.0	77.1	78.6
Wisconsin . . . . .	84.3	84.1	85.2	88.0	88.0	88.7	68.5	70.3	75.8
West North Central:									
Iowa . . . . .	87.5	88.5	88.3	88.9	90.0	90.1	74.4	78.2	76.3
Kansas . . . . .	85.7	86.8	---	89.2	90.3	---	76.3	79.4	---
Minnesota . . . . .	84.4	84.9	86.4	87.8	89.2	90.3	65.6	68.1	73.9
Missouri . . . . .	86.4	87.8	88.1	88.9	89.8	90.1	74.8	79.1	80.5
Nebraska . . . . .	84.1	83.3	---	87.1	86.9	---	72.3	68.8	---
North Dakota . . . . .	85.6	86.1	86.3	87.8	89.0	89.2	75.0	79.8	83.1
South Dakota . . . . .	82.7	78.2	78.6	86.6	82.6	84.0	73.4	63.6	62.2
South Atlantic:									
Delaware . . . . .	83.2	86.5	83.8	88.0	90.9	89.0	73.9	80.5	79.7
District of Columbia . . . . .	70.1	75.4	77.2	90.4	90.7	91.2	65.0	69.8	72.5
Florida <sup>1</sup> . . . . .	83.8	84.4	---	88.8	89.4	---	73.0	75.1	---
Georgia . . . . .	86.5	85.9	83.8	91.4	91.2	90.1	79.6	80.1	79.2
Maryland . . . . .	87.8	84.7	82.5	92.7	90.8	90.2	79.5	76.9	75.0
North Carolina . . . . .	84.5	84.4	84.0	90.5	90.9	90.5	74.8	75.7	76.6
South Carolina <sup>1</sup> . . . . .	80.9	79.0	---	87.6	85.6	---	70.3	70.2	---
Virginia . . . . .	85.2	85.2	85.3	90.2	90.4	90.5	74.1	76.4	78.7
West Virginia . . . . .	83.6	86.1	85.4	84.2	86.7	85.9	68.7	74.0	73.7
East South Central:									
Alabama . . . . .	82.6	82.8	83.6	89.3	89.7	89.8	70.6	72.4	76.7
Kentucky <sup>1</sup> . . . . .	86.3	86.8	---	87.4	88.0	---	77.3	79.5	---
Mississippi . . . . .	80.7	82.6	84.5	89.4	89.9	90.7	70.8	74.4	77.7
Tennessee <sup>1</sup> . . . . .	84.0	82.9	---	88.0	87.7	---	73.0	72.2	---
West South Central:									
Arkansas . . . . .	77.5	79.7	81.4	81.8	83.8	84.8	66.5	69.8	74.7
Louisiana . . . . .	82.1	83.5	85.5	89.4	90.7	91.5	72.1	73.9	77.3
Oklahoma . . . . .	79.2	77.7	77.7	82.6	81.7	81.9	70.0	69.8	71.3
Texas . . . . .	79.0	79.9	---	87.0	87.8	---	75.7	76.7	---
Mountain:									
Arizona . . . . .	75.5	76.6	76.9	85.3	87.2	87.6	73.1	75.7	78.2
Colorado . . . . .	82.2	79.8	79.9	88.1	87.1	86.0	76.2	72.9	72.8
Idaho <sup>1</sup> . . . . .	79.3	81.6	---	82.0	83.9	---	70.8	78.8	---
Montana . . . . .	82.9	83.2	83.9	85.3	86.2	87.0	79.5	80.8	87.0
Nevada . . . . .	75.3	75.4	74.9	83.0	85.2	83.6	67.7	68.0	69.4
New Mexico . . . . .	68.2	68.9	69.8	76.0	76.7	77.5	62.3	66.8	69.0
Utah . . . . .	82.1	79.4	80.2	85.4	83.5	83.9	65.2	58.9	58.8
Wyoming . . . . .	82.3	83.5	85.5	83.9	85.0	87.3	74.0	79.1	89.8
Pacific: <sup>2</sup>									
Alaska . . . . .	80.4	80.3	80.2	82.9	84.1	84.7	82.7	83.3	82.8
California . . . . .	82.6	85.4	87.0	88.4	90.1	90.5	79.7	82.5	83.5
Hawaii . . . . .	84.8	84.5	81.9	90.8	89.4	85.6	90.7	92.5	86.5
Oregon . . . . .	80.7	81.5	80.9	83.5	84.5	84.3	78.4	76.3	74.2

See footnotes at end of table.

**Table 8 (page 2 of 3). Early prenatal care by race and Hispanic origin of mother, geographic division, and state: United states, average annual 1997–1999, 2000–2002, and 2003–2005**

[Data are based on birth certificates]

Geographic division and state	Hispanic or Latina <sup>3</sup>			American Indian or Alaska Native <sup>4</sup>			Asian or Pacific Islander <sup>4</sup>		
	1997–1999	2000–2002	2003–2005	1997–1999	2000–2002	2003–2005	1997–1999	2000–2002	2003–2005
Percent of live births with early prenatal care (beginning in the 1st trimester)									
United States . . . . .	74.1	75.7	77.7	68.8	69.5	69.8	83.0	84.3	85.2
New England:	79.1	80.9	80.8	78.4	82.9	83.8	84.2	85.6	86.3
Connecticut . . . . .	78.5	78.3	76.6	78.5	83.8	85.1	86.3	88.0	87.7
Maine . . . . .	82.0	80.4	81.1	71.0	81.3	77.3	82.2	85.2	84.9
Massachusetts . . . . .	78.7	81.4	82.9	78.1	84.5	88.5	83.9	84.8	86.3
New Hampshire <sup>1</sup> . . . . .	79.2	81.9	---	84.5	85.2	---	84.5	86.7	---
Rhode Island . . . . .	83.4	86.7	86.6	82.7	80.9	81.1	81.9	84.0	80.6
Vermont <sup>1</sup> . . . . .	79.1	82.5	---	*82.8	*80.0	---	77.5	85.9	---
Middle Atlantic:	71.5	72.1	73.4	76.0	77.4	71.7	78.6	79.0	80.8
New Jersey . . . . .	70.7	68.2	67.2	71.9	72.9	66.9	83.6	83.6	84.9
New York <sup>1</sup> . . . . .	74.6	73.7	---	74.9	75.0	---	83.6	82.6	---
New York City . . . . .	70.9	74.0	77.7	79.4	78.7	85.1	74.7	74.2	77.8
East North Central:	72.6	74.1	77.8	73.5	75.5	76.6	82.9	84.2	86.4
Illinois . . . . .	73.0	76.0	80.9	72.8	80.9	83.1	85.9	85.6	88.8
Indiana . . . . .	65.2	63.5	64.0	70.7	72.6	71.1	81.7	81.3	83.8
Michigan . . . . .	72.8	73.5	78.4	74.7	77.4	79.6	85.9	88.0	88.4
Ohio . . . . .	77.3	76.9	78.7	80.2	80.7	80.7	86.5	89.5	90.4
Wisconsin . . . . .	71.6	69.3	71.8	70.9	71.8	72.8	63.6	67.2	71.4
West North Central:	68.5	70.8	74.3	67.2	65.4	64.4	75.0	79.3	80.7
Iowa . . . . .	71.7	74.4	75.2	73.0	73.6	76.4	82.7	85.5	86.8
Kansas . . . . .	67.0	70.7	---	77.0	80.9	---	83.3	85.6	---
Minnesota . . . . .	62.4	65.2	70.6	61.6	62.3	64.6	64.2	71.2	75.7
Missouri . . . . .	76.8	78.4	79.4	77.1	78.4	81.0	85.3	87.9	88.7
Nebraska . . . . .	68.3	68.3	---	67.1	67.1	---	82.9	81.4	---
North Dakota . . . . .	76.7	78.4	79.1	69.9	65.3	67.6	81.9	87.9	87.9
South Dakota . . . . .	71.1	67.0	63.2	65.0	59.7	57.6	77.3	78.0	73.3
South Atlantic:	78.3	77.1	69.6	73.6	74.9	81.0	86.4	86.2	85.8
Delaware . . . . .	70.3	73.6	67.7	73.1	84.9	86.1	85.5	91.0	88.8
District of Columbia . . . . .	65.6	73.4	66.7	*	*	*	75.1	81.1	78.1
Florida <sup>1</sup> . . . . .	81.6	82.2	---	67.0	66.0	---	87.8	88.3	---
Georgia . . . . .	78.1	75.8	71.0	83.6	79.8	84.4	88.8	89.9	88.6
Maryland . . . . .	81.5	73.8	65.6	81.8	82.5	78.1	89.8	84.8	84.6
North Carolina . . . . .	68.8	69.6	69.4	73.6	77.9	80.7	82.4	83.8	85.5
South Carolina <sup>1</sup> . . . . .	64.3	61.3	---	77.8	77.9	---	77.7	77.4	---
Virginia . . . . .	73.3	70.5	70.4	79.4	84.1	80.4	85.1	85.3	85.0
West Virginia . . . . .	74.9	69.7	74.5	*82.9	*66.7	*71.4	81.6	83.3	83.0
East South Central:	65.9	60.0	56.8	77.7	77.9	77.3	84.4	84.5	87.4
Alabama . . . . .	61.8	53.9	52.3	78.6	80.4	82.7	84.3	87.6	87.5
Kentucky <sup>1</sup> . . . . .	72.5	69.6	---	81.1	85.5	---	86.3	86.0	---
Mississippi . . . . .	75.4	73.7	76.4	76.3	74.6	74.2	80.9	84.5	87.1
Tennessee <sup>1</sup> . . . . .	64.0	57.4	---	76.8	76.4	---	84.6	82.6	---
West South Central:	72.0	73.3	70.0	70.7	70.9	71.1	86.3	87.4	84.2
Arkansas . . . . .	61.9	67.6	70.3	69.8	74.3	73.5	74.6	79.0	83.1
Louisiana . . . . .	85.0	84.2	84.4	77.9	82.0	85.9	84.4	86.0	89.5
Oklahoma . . . . .	68.2	65.1	65.2	69.5	69.1	69.9	81.8	80.3	79.7
Texas . . . . .	72.0	73.6	---	74.8	75.3	---	87.3	88.4	---
Mountain:	65.4	65.4	67.5	62.1	63.8	65.5	78.7	78.9	79.4
Arizona . . . . .	64.9	66.3	67.8	62.9	65.8	68.9	83.3	85.0	84.3
Colorado . . . . .	67.9	65.5	68.9	72.2	66.4	68.0	81.5	82.0	81.3
Idaho <sup>1</sup> . . . . .	62.8	68.6	---	61.6	69.1	---	80.0	80.6	---
Montana . . . . .	77.5	80.2	79.3	66.2	65.1	65.7	84.1	79.3	85.0
Nevada . . . . .	62.8	62.3	64.2	68.3	68.6	67.9	78.9	79.4	79.8
New Mexico . . . . .	65.6	66.2	67.7	56.7	59.2	59.4	75.7	75.5	77.3
Utah . . . . .	63.9	61.2	65.0	57.8	56.1	58.3	68.1	64.4	66.1
Wyoming . . . . .	72.9	75.2	78.8	68.0	71.7	69.3	83.6	83.8	79.8
Pacific:	77.9	81.7	84.4	72.9	72.8	72.7	84.1	86.1	87.2
Alaska . . . . .	79.5	79.7	78.7	74.9	70.6	70.6	74.6	77.2	72.6
California . . . . .	78.4	82.4	84.9	72.5	75.0	75.2	84.9	87.2	88.8
Hawaii . . . . .	83.1	83.2	80.8	83.2	82.5	83.5	82.8	82.9	80.4
Oregon . . . . .	67.5	70.1	69.8	67.6	70.0	68.9	81.2	82.0	81.8

See footnotes at end of table.

**Table 8 (page 3 of 3). Early prenatal care by race and Hispanic origin of mother, geographic division, and state: United states, average annual 1997–1999, 2000–2002, and 2003–2005**

[Data are based on birth certificates]

Geographic division and state	Not Hispanic or Latina								
	All races			White			Black or African American		
	1997–1999	2000–2002	2003–2005	1997–1999	2000–2002	2003–2005	1997–1999	2000–2002	2003–2005
Middle Atlantic: Pennsylvania <sup>2</sup> . . . . .	---	---	74.0	---	---	79.0	---	---	56.6
Pacific: Washington <sup>2</sup> . . . . .	---	---	72.1	---	---	75.8	---	---	66.6

Geographic division and state	Hispanic or Latina <sup>3</sup>			American Indian or Alaska Native <sup>4</sup>			Asian or Pacific Islander <sup>4</sup>		
	1997–1999	2000–2002	2003–2005	1997–1999	2000–2002	2003–2005	1997–1999	2000–2002	2003–2005
	Middle Atlantic: Pennsylvania <sup>2</sup> . . . . .	---	---	57.6	---	---	64.2	---	---
Pacific: Washington <sup>2</sup> . . . . .	---	---	61.6	---	---	57.9	---	---	69.7

--- Data not available.

\* Percents preceded by an asterisk are based on fewer than 50 births in the numerator. Percents not shown are based on fewer than 20 births.

<sup>1</sup>Reporting areas that adopted the 2003 revision of the U.S. Standard Certificate of Live Birth in 2004 and 2005 are excluded for 2003–2005 because prenatal care data based on the 2003 revision are not comparable with data based on the 1989 revision of the U.S. Standard Certificate of Live Birth. See [Appendix II, Prenatal Care](#).

<sup>2</sup>In 2003, Pennsylvania and Washington adopted the 2003 revision; data are shown separately for 2003–2005 for these two states and are based on the 2003 revision of the U.S. Standard Certificate of Live Birth, and are not comparable with data in this table based on the 1989 revision. See [Appendix II, Prenatal Care](#).

<sup>3</sup>Persons of Hispanic origin may be of any race. See [Appendix II, Hispanic origin](#).

<sup>4</sup>Includes persons of Hispanic and non-Hispanic origin.

NOTES: Data are based on the 1989 revision of the U.S. Standard Certificate of Live Birth (except for 2003–2005 data for Pennsylvania and Washington). Starting with 2003 data, some states reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Some data have changed from previous editions of *Health, United States*.

SOURCE: CDC/NCHS, National Vital Statistics System, Birth File.

**Table 9. Teenage childbearing, by detailed race and Hispanic origin of mother: United States, selected years 1970–2005**

[Data are based on birth certificates]

<i>Maternal age, race, and Hispanic origin of mother</i>	1970	1975	1980	1985	1990	1995	2000	2002	2003	2004	2005
Age of mother under 18 years						Percent of live births					
All races . . . . .	6.3	7.6	5.8	4.7	4.7	5.3	4.1	3.6	3.4	3.4	3.4
White . . . . .	4.8	6.0	4.5	3.7	3.6	4.3	3.5	3.1	3.0	3.0	2.9
Black or African American . . . . .	14.8	16.3	12.5	10.6	10.1	10.8	7.8	6.9	6.6	6.4	6.2
American Indian or Alaska Native . . . . .	7.5	11.2	9.4	7.6	7.2	8.7	7.3	6.6	6.6	6.4	6.5
Asian or Pacific Islander <sup>1</sup> . . . . .	---	---	1.5	1.6	2.1	2.2	1.5	1.1	1.1	1.1	1.0
Hispanic or Latina <sup>2</sup> . . . . .	---	---	7.4	6.4	6.6	7.6	6.3	5.6	5.4	5.4	5.3
Mexican . . . . .	---	---	7.7	6.9	6.9	8.0	6.6	6.0	5.8	5.8	5.7
Puerto Rican . . . . .	---	---	10.0	8.5	9.1	10.8	7.8	6.9	6.9	6.8	6.5
Cuban . . . . .	---	---	3.8	2.2	2.7	2.8	3.1	2.7	2.4	2.4	2.4
Central and South American . . . . .	---	---	2.4	2.4	3.2	4.1	3.3	2.8	2.8	2.8	2.9
Other and unknown Hispanic or Latina . . . . .	---	---	6.5	7.0	8.0	9.0	7.6	6.5	6.3	6.3	6.6
Not Hispanic or Latina: <sup>2</sup>											
White . . . . .	---	---	4.0	3.2	3.0	3.4	2.6	2.2	2.1	2.0	2.0
Black or African American . . . . .	---	---	12.7	10.7	10.2	10.8	7.8	6.9	6.6	6.5	6.3
Age of mother 18–19 years											
All races . . . . .	11.3	11.3	9.8	8.0	8.1	7.9	7.7	7.1	6.9	6.8	6.8
White . . . . .	10.4	10.3	9.0	7.1	7.3	7.2	7.1	6.6	6.4	6.4	6.3
Black or African American . . . . .	16.6	16.9	14.5	12.9	13.0	12.4	11.9	11.1	10.7	10.7	10.6
American Indian or Alaska Native . . . . .	12.8	15.2	14.6	12.4	12.3	12.7	12.4	11.9	11.6	11.5	11.3
Asian or Pacific Islander <sup>1</sup> . . . . .	---	---	3.9	3.4	3.7	3.5	3.0	2.7	2.4	2.3	2.3
Hispanic or Latina <sup>2</sup> . . . . .	---	---	11.6	10.1	10.2	10.3	9.9	9.3	8.9	8.9	8.8
Mexican . . . . .	---	---	12.0	10.6	10.7	10.8	10.4	9.8	9.5	9.4	9.2
Puerto Rican . . . . .	---	---	13.3	12.4	12.6	12.7	12.2	10.9	11.0	10.8	10.9
Cuban . . . . .	---	---	9.2	4.9	5.0	4.9	4.4	5.5	5.5	5.4	5.3
Central and South American . . . . .	---	---	6.0	5.8	5.9	6.5	6.5	5.7	5.6	5.6	5.7
Other and unknown Hispanic or Latina . . . . .	---	---	10.8	10.5	11.1	11.1	11.3	10.2	9.6	9.9	10.5
Not Hispanic or Latina: <sup>2</sup>											
White . . . . .	---	---	8.5	6.5	6.6	6.4	6.1	5.6	5.4	5.4	5.3
Black or African American . . . . .	---	---	14.7	12.9	13.0	12.4	12.0	11.1	10.8	10.8	10.7

--- Data not available.

\* Percents preceded by an asterisk are based on fewer than 50 births in the numerator.

<sup>1</sup>Starting with 2003 data, estimates are not available for Asian or Pacific Islander subgroups during the transition from single-race to multiple-race reporting. See [Appendix II, Race, Birth File](#).

<sup>2</sup>Prior to 1993, data from states lacking an Hispanic-origin item on the birth certificate were excluded. See [Appendix II, Hispanic origin](#). Data for non-Hispanic white and non-Hispanic black women for years prior to 1989 are not nationally representative and are provided for comparison with Hispanic data.

NOTES: The race groups, white, black, American Indian or Alaska Native, and Asian or Pacific Islander, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 2003 data, some states reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Interpretation of trend data should take into consideration expansion of reporting areas and immigration. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Vital Statistics System, Birth File.



**Table 10. Nonmarital childbearing by detailed race and Hispanic origin of mother, and maternal age: United States, selected years 1970–2005**

[Data are based on birth certificates]

<i>Race, Hispanic origin of mother, and maternal age</i>	1970	1975	1980	1985	1990	1995	2000	2002	2003	2004	2005
Live births per 1,000 unmarried women 15–44 years of age <sup>1</sup>											
All races and origins . . . . .	26.4	24.5	29.4	32.8	43.8	44.3	44.0	43.7	44.9	46.1	47.5
White <sup>2</sup> . . . . .	13.9	12.4	18.1	22.5	32.9	37.0	38.2	38.9	40.4	41.6	43.0
Black or African American <sup>2</sup> . . . . .	95.5	84.2	81.1	77.0	90.5	74.5	70.5	66.2	66.3	67.2	67.8
Asian or Pacific Islander . . . . .	---	---	---	---	---	---	20.9	21.3	22.2	23.6	24.9
Hispanic or Latina <sup>3</sup> . . . . .	---	---	---	---	89.6	88.7	87.2	87.9	92.2	95.7	100.3
White, not Hispanic or Latina . . . . .	---	---	---	---	24.4	28.1	28.0	27.8	28.6	29.4	30.1
Percent of live births to unmarried mothers											
All races and origins . . . . .	10.7	14.3	18.4	22.0	28.0	32.2	33.2	34.0	34.6	35.8	36.9
White. . . . .	5.5	7.1	11.2	14.7	20.4	25.3	27.1	28.5	29.4	30.5	31.7
Black or African American . . . . .	37.5	49.5	56.1	61.2	66.5	69.9	68.5	68.2	68.2	68.8	69.3
American Indian or Alaska Native . . . . .	22.4	32.7	39.2	46.8	53.6	57.2	58.4	59.7	61.3	62.3	63.5
Asian or Pacific Islander <sup>4</sup> . . . . .	---	---	7.3	9.5	13.2	16.3	14.8	14.9	15.0	15.5	16.2
Hispanic or Latina <sup>3</sup> . . . . .	---	---	23.6	29.5	36.7	40.8	42.7	43.5	45.0	46.4	48.0
Mexican . . . . .	---	---	20.3	25.7	33.3	38.1	40.7	42.1	43.7	45.2	46.7
Puerto Rican . . . . .	---	---	46.3	51.1	55.9	60.0	59.6	59.1	59.8	61.0	61.7
Cuban . . . . .	---	---	10.0	16.1	18.2	23.8	27.3	29.8	31.4	33.2	36.4
Central and South American . . . . .	---	---	27.1	34.9	41.2	44.1	44.7	44.8	46.0	47.6	49.2
Other and unknown Hispanic or Latina . . . . .	---	---	22.4	31.1	37.2	44.0	46.2	44.4	46.7	46.6	48.6
Not Hispanic or Latina: <sup>3</sup>											
White . . . . .	---	---	9.5	12.4	16.9	21.2	22.1	23.0	23.6	24.5	25.3
Black or African American. . . . .	---	---	57.2	62.0	66.7	70.0	68.7	68.4	68.5	69.3	69.9
Number of live births, in thousands											
Live births to unmarried mothers . . . . .	399	448	666	828	1,165	1,254	1,347	1,366	1,416	1,470	1,527
Maternal age											
Percent distribution of live births to unmarried mothers											
Under 20 years. . . . .	50.1	52.1	40.8	33.8	30.9	30.9	28.0	25.4	24.3	23.7	23.1
20–24 years. . . . .	31.8	29.9	35.6	36.3	34.7	34.5	37.4	38.6	38.8	38.5	38.3
25 years and over. . . . .	18.1	18.0	23.5	29.9	34.4	34.7	34.6	35.9	36.9	37.8	38.7

--- Data not available.

<sup>1</sup>Rates computed by relating births to unmarried mothers, regardless of age of mother, to unmarried women 15–44 years of age. Population data for unmarried American Indian or Alaska Native women are not available for rate calculations. Prior to 2000, population data for unmarried Asian or Pacific Islander women were not available for rate calculations.

<sup>2</sup>For 1970 and 1975, birth rates are by race of child.

<sup>3</sup>Prior to 1993, data from states lacking an Hispanic-origin item on the birth certificate were excluded. See [Appendix II, Hispanic origin](#). Data for non-Hispanic white and non-Hispanic black women for years prior to 1989 are not nationally representative and are provided for comparison with Hispanic data.

<sup>4</sup>Starting with 2003 data, estimates are not available for Asian or Pacific Islander subgroups during the transition from single-race to multiple-race reporting. See [Appendix II, Race, Birth File](#).

NOTES: National estimates for 1970 and 1975 for unmarried mothers are based on births occurring in states reporting marital status of mother. Changes in reporting procedures for marital status occurred in some states during the 1990s. Interpretation of trend data should also take into consideration expansion of reporting areas and immigration. See [Appendix II, Marital status](#). The race groups, white, black, American Indian or Alaska Native, and Asian or Pacific Islander, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 2003 data, some states reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were computed using the 2000 census counts and starting with 2001, rates were computed using 2000-based postcensal estimates. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System, Birth File. Martin JA, Hamilton BE, Sutton PD, Ventura SJ, Menacker F, Kirmeyer S, Munson ML. Births: Final data for 2005. National vital statistics reports. vol 56 no 6. Hyattsville, MD: NCHS. 2007; Hamilton BE, Sutton PD, Ventura SJ. Revised birth and fertility rates for the 1990s and new rates for Hispanic populations, 2000 and 2001: United States. National vital statistics reports. vol 51 no 12. Hyattsville, MD: NCHS. 2003; Births: Final data for each data year 1997–2004. National vital statistics reports. Hyattsville, MD; Final natality statistics for each data year 1993–1996. Monthly vital statistics report. Hyattsville, MD; Ventura SJ. Births to unmarried mothers: United States, 1980–1992. Vital Health Stat 21(53). 1995.

**Table 11. Mothers who smoked cigarettes during pregnancy, by detailed race and Hispanic origin of mother: United States, selected years 1990–2000 and selected states, 2004–2005**

[Data are based on birth certificates]

Characteristic of mother	1990	2000	36 states, DC, and NYC		7 states	
			2004 <sup>1,2</sup>	2005 <sup>1,2</sup>	2004 <sup>1,3</sup>	2005 <sup>1,3</sup>
Race of mother						
Percent of mothers who smoked <sup>1,4,5</sup>						
All races . . . . .	18.4	12.2	10.9	10.7	16.3	16.2
White . . . . .	19.4	13.2	11.9	11.7	17.6	17.6
Black or African American . . . . .	15.9	9.1	8.4	8.1	12.5	11.9
American Indian or Alaska Native . . . . .	22.4	20.0	18.2	17.8	21.2	21.9
Asian or Pacific Islander <sup>6,7</sup> . . . . .	5.5	2.8	2.3	2.2	2.9	3.1
Hispanic origin and race of mother <sup>8</sup>						
Hispanic or Latina <sup>6</sup> . . . . .	6.7	3.5	3.1	2.9	5.7	5.4
Mexican . . . . .	5.3	2.4	2.2	2.1	2.8	2.9
Puerto Rican . . . . .	13.6	10.3	8.5	8.3	16.8	16.0
Cuban . . . . .	6.4	3.3	6.4	5.3	11.4	8.4
Central and South American . . . . .	3.0	1.5	1.3	1.1	1.5	1.2
Other and unknown Hispanic or Latina . . . . .	10.8	7.4	7.7	7.5	7.6	7.3
Not Hispanic or Latina:						
White . . . . .	21.0	15.6	14.0	13.9	19.0	19.2
Black or African American . . . . .	15.9	9.2	8.7	8.5	13.0	12.5
Age of mother <sup>5</sup>						
Under 15 years . . . . .	7.5	7.1	4.8	4.8	9.5	8.2
15–19 years . . . . .	20.8	17.8	15.8	15.2	25.5	24.3
15–17 years . . . . .	17.6	15.0	11.9	11.7	20.5	19.1
18–19 years . . . . .	22.5	19.2	17.6	16.9	27.8	26.6
20–24 years . . . . .	22.1	16.8	16.7	16.4	25.2	24.9
25–29 years . . . . .	18.0	10.5	9.8	9.9	14.7	15.1
30–34 years . . . . .	15.3	8.0	6.4	6.1	9.3	9.2
35–39 years . . . . .	13.3	9.1	6.6	6.2	9.0	8.8
40–54 years <sup>6</sup> . . . . .	12.3	9.5	7.5	6.9	10.3	9.5
Education of mother <sup>10</sup>						
Percent of mothers 20 years of age and over who smoked <sup>1,5</sup>						
0–8 years <sup>2</sup> . . . . .	17.5	7.9	6.6	6.2	---	---
9–11 years <sup>2</sup> . . . . .	40.5	28.2	27.3	26.7	---	---
12 years <sup>2</sup> . . . . .	21.9	16.6	15.9	15.7	---	---
13–15 years <sup>2</sup> . . . . .	12.8	9.1	8.8	8.8	---	---
16 years or more <sup>2</sup> . . . . .	4.5	2.0	1.5	1.5	---	---
No high school diploma or GED <sup>3</sup> . . . . .	---	---	---	---	28.7	27.4
High school diploma or GED <sup>3</sup> . . . . .	---	---	---	---	24.9	25.3
Some college, no Bachelor's degree <sup>3</sup> . . . . .	---	---	---	---	13.6	13.9
Bachelor's degree or more <sup>3</sup> . . . . .	---	---	---	---	2.1	2.1

--- Data not available.

<sup>1</sup>Maternal tobacco use during pregnancy was not reported on the birth certificates of California.

<sup>2</sup>Data for 2004 and 2005 include the 38 reporting areas (36 states, DC, and NYC) that used the 1989 revision of the U.S. Standard Certificate of Live Birth in 2005. Reporting areas that have adopted the 2003 revision of the U.S. Standard Certificate of Live Birth are excluded because maternal tobacco use and education data based on the 2003 revision are not comparable with data based on the 1989 revisions. See [Appendix II, Cigarette smoking](#).

<sup>3</sup>Data for 2004 and 2005 include the 7 reporting areas that adopted the 2003 revision of the U.S. Standard Certificate of Live Birth. Reporting areas that used the 1989 revision of the U.S. Standard Certificate of Live Birth are excluded because smoking and education data based on the 2003 revision are not comparable with data based on the 1989 revision.

<sup>4</sup>Data from states that did not require the reporting of mother's tobacco use during pregnancy on the birth certificate are not included. Reporting area for tobacco use increased from 43 states and the District of Columbia (DC) in 1989 to 49 states and DC in 2000–2002. See [Appendix II, Cigarette smoking](#).

<sup>5</sup>Excludes live births for whom smoking status of mother is unknown.

<sup>6</sup>Data from California are excluded because mother's tobacco use is unknown. In 2005, California accounted for 30% of the births to Asian or Pacific Islander mothers and 29% of the births to Hispanic mothers.

<sup>7</sup>Starting with 2003 data, estimates are not available for Asian or Pacific Islander subgroups during the transition from single-race to multiple-race reporting. See [Appendix II, Race, Birth File](#).

<sup>8</sup>Data from states that did not require the reporting of Hispanic origin of mother on the birth certificate are not included. Reporting of Hispanic origin increased from 47 states in 1989 to include all 50 states and DC by 1993. See [Appendix II, Hispanic origin](#).

<sup>9</sup>Prior to 1997, data are for live births to mothers 45–49 years of age.

<sup>10</sup>Data from states that did not require the reporting of mother's education on the birth certificate are not included. See [Appendix II, Education](#).

NOTES: Data are based on the 1989 revision of the U.S. Standard Certificate of Live Birth. Data for 2003 are not comparable and are not shown. See [Appendix II, Cigarette Smoking](#). The race groups, white, black, American Indian or Alaska Native, and Asian or Pacific Islander, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 2003 data, some states reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Interpretation of trend data should take into consideration changes in reporting areas and immigration. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Vital Statistics System, Birth File.



**Table 12. Low birthweight live births, by detailed race, Hispanic origin, and smoking status of mother: United States, selected years 1970–2005**

[Data are based on birth certificates]

<i>Birthweight, race and Hispanic origin of mother, and smoking status of mother</i>	1970	1975	1980	1985	1990	1995	2000	2002	2003	2004	2005
Low birthweight (less than 2,500 grams)											
	Percent of live births <sup>1</sup>										
All races . . . . .	7.93	7.38	6.84	6.75	6.97	7.32	7.57	7.82	7.93	8.08	8.19
White . . . . .	6.85	6.27	5.72	5.65	5.70	6.22	6.55	6.80	6.94	7.07	7.16
Black or African American . . . . .	13.90	13.19	12.69	12.65	13.25	13.13	12.99	13.29	13.37	13.44	13.59
American Indian or Alaska Native . . . . .	7.97	6.41	6.44	5.86	6.11	6.61	6.76	7.23	7.37	7.45	7.36
Asian or Pacific Islander <sup>2</sup> . . . . .	---	---	6.68	6.16	6.45	6.90	7.31	7.78	7.78	7.89	7.98
Hispanic or Latina <sup>3</sup> . . . . .	---	---	6.12	6.16	6.06	6.29	6.41	6.55	6.69	6.79	6.88
Mexican . . . . .	---	---	5.62	5.77	5.55	5.81	6.01	6.16	6.28	6.44	6.49
Puerto Rican . . . . .	---	---	8.95	8.69	8.99	9.41	9.30	9.68	10.01	9.82	9.92
Cuban . . . . .	---	---	5.62	6.02	5.67	6.50	6.49	6.50	7.04	7.72	7.64
Central and South American . . . . .	---	---	5.76	5.68	5.84	6.20	6.34	6.53	6.70	6.70	6.78
Other and unknown Hispanic or Latina . . . . .	---	---	6.96	6.83	6.87	7.55	7.84	7.87	8.01	7.78	8.27
Not Hispanic or Latina: <sup>3</sup>											
White . . . . .	---	---	5.69	5.61	5.61	6.20	6.60	6.91	7.04	7.20	7.29
Black or African American . . . . .	---	---	12.71	12.62	13.32	13.21	13.13	13.39	13.55	13.74	14.02
										7 states	
Cigarette smoker <sup>4</sup> . . . . .	---	---	---	---	A	A	A	A	A	11.87	12.19
Nonsmoker <sup>4</sup> . . . . .	---	---	---	---	A	A	A	A	A	7.20	7.34
Very low birthweight (less than 1,500 grams)											
All races . . . . .	1.17	1.16	1.15	1.21	1.27	1.35	1.43	1.46	1.45	1.48	1.49
White . . . . .	0.95	0.92	0.90	0.94	0.95	1.06	1.14	1.17	1.17	1.20	1.20
Black or African American . . . . .	2.40	2.40	2.48	2.71	2.92	2.97	3.07	3.13	3.07	3.07	3.15
American Indian or Alaska Native . . . . .	0.98	0.95	0.92	1.01	1.01	1.10	1.16	1.28	1.30	1.28	1.17
Asian or Pacific Islander <sup>2</sup> . . . . .	---	---	0.92	0.85	0.87	0.91	1.05	1.12	1.09	1.14	1.14
Hispanic or Latina <sup>3</sup> . . . . .	---	---	0.98	1.01	1.03	1.11	1.14	1.17	1.16	1.20	1.20
Mexican . . . . .	---	---	0.92	0.97	0.92	1.01	1.03	1.06	1.06	1.13	1.12
Puerto Rican . . . . .	---	---	1.29	1.30	1.62	1.79	1.93	1.96	2.01	1.96	1.87
Cuban . . . . .	---	---	1.02	1.18	1.20	1.19	1.21	1.15	1.37	1.30	1.50
Central and South American . . . . .	---	---	0.99	1.01	1.05	1.13	1.20	1.20	1.17	1.19	1.19
Other and unknown Hispanic or Latina . . . . .	---	---	1.01	0.96	1.09	1.28	1.42	1.44	1.28	1.27	1.36
Not Hispanic or Latina: <sup>3</sup>											
White . . . . .	---	---	0.87	0.91	0.93	1.04	1.14	1.17	1.18	1.20	1.21
Black or African American . . . . .	---	---	2.47	2.67	2.93	2.98	3.10	3.15	3.12	3.15	3.27
										7 states	
Cigarette smoker <sup>4</sup> . . . . .	---	---	---	---	A	A	A	A	A	1.90	1.88
Nonsmoker <sup>4</sup> . . . . .	---	---	---	---	A	A	A	A	A	1.34	1.35

--- Data not available.

<sup>A</sup>Data not shown. Due to a change in reporting, data are not comparable to other years. See footnote 4.

\* Percents preceded by an asterisk are based on fewer than 50 births in the numerator.

<sup>1</sup>Excludes live births with unknown birthweight. Percent based on live births with known birthweight.

<sup>2</sup>Starting with 2003 data, estimates are not available for Asian or Pacific Islander subgroups during the transition from single-race to multiple-race reporting. See [Appendix II, Race, Birth File](#).

<sup>3</sup>Prior to 1993, data from states lacking an Hispanic-origin item on the birth certificate were excluded. See [Appendix II, Hispanic origin](#). Data for non-Hispanic white and non-Hispanic black women for years prior to 1989 are not nationally representative and are provided for comparison with Hispanic data.

<sup>4</sup>Percent based on live births with known smoking status of mother and known birthweight. Only reporting areas that have adopted the 2003 revision of the U.S. Standard Certificate of Live Birth are shown because maternal tobacco use data based on the 2003 revision are not comparable with data based on the 1989 or earlier revisions to the U.S. Standard Certificate of Live Birth. In addition, California did not require reporting of tobacco use during pregnancy. See [Appendix II, Cigarette smoking](#). Data for 2004 and 2005 include the 7 reporting areas (states) that adopted the 2003 revision of the U.S. Standard Certificate of Live Birth in 2004. For data for reporting areas that use the 1989 revision of the U.S. Standard Certificate of Live Birth, see: Births: Final data for 2005, available from <http://www.cdc.gov/nchs/births.htm>.

NOTES: The race groups, white, black, American Indian or Alaska Native, and Asian or Pacific Islander, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 2003 data, some states reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Interpretation of trend data should take into consideration expansion of reporting areas and immigration. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Vital Statistics System, Birth File.

**Table 13 (page 1 of 3). Low birthweight live births among mothers 20 years of age and over, by detailed race, Hispanic origin, and education of mother: United States, selected years and reporting areas 1989–2005**

[Data are based on birth certificates]

Education, race, and Hispanic origin of mother	1989	1990	2000	2002	37 states, DC, and NYC	
					2004 <sup>1</sup>	2005 <sup>1</sup>
Percent of live births weighing less than 2,500 grams <sup>2</sup>						
Less than 12 years of education						
All races . . . . .	9.0	8.6	8.2	8.2	8.5	8.5
White . . . . .	7.3	7.0	7.1	7.1	7.3	7.3
Black or African American . . . . .	17.0	16.5	14.8	15.0	15.3	15.4
American Indian or Alaska Native . . . . .	7.3	7.4	7.2	8.4	8.7	8.5
Asian or Pacific Islander <sup>3</sup> . . . . .	6.6	6.4	7.2	7.4	7.7	7.8
Hispanic or Latina <sup>4</sup> . . . . .	6.0	5.7	6.0	6.0	6.2	6.2
Mexican . . . . .	5.3	5.2	5.6	5.7	5.9	5.8
Puerto Rican . . . . .	11.3	10.3	10.9	10.4	10.6	11.2
Cuban . . . . .	9.4	7.9	8.4	7.5	*11.8	*10.3
Central and South American . . . . .	5.8	5.8	6.2	6.2	6.4	6.6
Other and unknown Hispanic or Latina . . . . .	8.2	8.0	8.6	7.8	8.5	9.4
Not Hispanic or Latina: <sup>4</sup>						
White . . . . .	8.4	8.3	9.0	9.3	9.6	9.7
Black or African American . . . . .	17.6	16.7	15.2	15.3	16.0	16.3
12 years of education						
All races . . . . .	7.1	7.1	7.9	8.2	8.5	8.6
White . . . . .	5.7	5.8	6.8	7.0	7.2	7.4
Black or African American . . . . .	13.4	13.1	13.0	13.4	13.7	13.9
American Indian or Alaska Native . . . . .	5.6	6.1	6.7	7.1	7.2	7.1
Asian or Pacific Islander <sup>3</sup> . . . . .	6.4	6.5	7.4	7.9	7.7	8.1
Hispanic or Latina <sup>4</sup> . . . . .	5.9	6.0	6.2	6.5	6.5	6.7
Mexican . . . . .	5.2	5.5	5.8	6.1	6.0	6.3
Puerto Rican . . . . .	8.8	8.3	8.8	9.3	9.9	10.1
Cuban . . . . .	5.3	5.2	6.5	6.0	7.7	7.0
Central and South American . . . . .	5.7	5.8	6.0	6.4	6.8	6.5
Other and unknown Hispanic or Latina . . . . .	6.1	6.6	7.3	7.7	7.9	8.6
Not Hispanic or Latina: <sup>4</sup>						
White . . . . .	5.7	5.7	6.9	7.3	7.6	7.7
Black or African American . . . . .	13.6	13.2	13.1	13.5	14.0	14.3
13 years or more of education						
All races . . . . .	5.5	5.4	6.6	7.0	7.2	7.3
White . . . . .	4.6	4.6	5.8	6.2	6.5	6.5
Black or African American . . . . .	11.2	11.1	11.6	12.0	12.2	12.4
American Indian or Alaska Native . . . . .	5.6	4.7	6.5	7.0	6.4	6.7
Asian or Pacific Islander <sup>3</sup> . . . . .	6.1	6.0	7.0	7.6	7.8	7.8
Hispanic or Latina <sup>4</sup> . . . . .	5.5	5.5	6.2	6.6	6.7	6.7
Mexican . . . . .	5.1	5.2	5.8	6.2	6.3	6.3
Puerto Rican . . . . .	7.4	7.4	7.9	8.9	8.8	8.9
Cuban . . . . .	4.9	5.0	5.9	6.4	8.1	6.6
Central and South American . . . . .	5.2	5.6	6.3	6.5	6.7	6.8
Other and unknown Hispanic or Latina . . . . .	5.4	5.2	6.6	7.0	6.8	7.4
Not Hispanic or Latina: <sup>4</sup>						
White . . . . .	4.6	4.5	5.8	6.2	6.5	6.5
Black or African American . . . . .	11.2	11.1	11.7	12.1	12.3	12.6

See footnotes at end of table.

**Table 13 (page 2 of 3). Low birthweight live births among mothers 20 years of age and over, by detailed race, Hispanic origin, and education of mother: United States, selected years and reporting areas 1989–2005**

[Data are based on birth certificates]

Education, race, and Hispanic origin of mother	1989	1990	2000	2002	7 states	
					2004 <sup>5</sup>	2005 <sup>5</sup>
Percent of live births weighing less than 2,500 grams <sup>2</sup>						
<b>No high school diploma or GED</b>						
All races . . . . .	---	---	---	---	9.4	9.6
White . . . . .	---	---	---	---	8.4	8.4
Black or African American . . . . .	---	---	---	---	13.5	14.3
American Indian or Alaska Native . . . . .	---	---	---	---	8.4	7.4
Asian or Pacific Islander <sup>3</sup> . . . . .	---	---	---	---	7.0	6.8
Hispanic or Latina <sup>4</sup> . . . . .	---	---	---	---	6.5	6.3
Mexican . . . . .	---	---	---	---	5.6	5.4
Puerto Rican . . . . .	---	---	---	---	12.5	10.8
Cuban . . . . .	---	---	---	---	*	*
Central and South American . . . . .	---	---	---	---	6.1	6.4
Other and unknown Hispanic or Latina . . . . .	---	---	---	---	6.5	7.0
Not Hispanic or Latina: <sup>4</sup>	---	---	---	---	---	---
White . . . . .	---	---	---	---	9.4	9.7
Black or African American . . . . .	---	---	---	---	15.2	16.6
<b>High school diploma or GED</b>						
All races . . . . .	---	---	---	---	8.7	8.9
White . . . . .	---	---	---	---	7.6	7.8
Black or African American . . . . .	---	---	---	---	14.0	14.1
American Indian or Alaska Native . . . . .	---	---	---	---	6.7	7.7
Asian or Pacific Islander <sup>3</sup> . . . . .	---	---	---	---	7.0	7.0
Hispanic or Latina <sup>4</sup> . . . . .	---	---	---	---	7.0	7.3
Mexican . . . . .	---	---	---	---	5.8	6.0
Puerto Rican . . . . .	---	---	---	---	10.1	10.2
Cuban . . . . .	---	---	---	---	*14.5	*
Central and South American . . . . .	---	---	---	---	6.1	6.8
Other and unknown Hispanic or Latina . . . . .	---	---	---	---	6.3	7.5
Not Hispanic or Latina: <sup>4</sup>	---	---	---	---	---	---
White . . . . .	---	---	---	---	7.7	7.9
Black or African American . . . . .	---	---	---	---	14.4	14.6
<b>Some college, no Bachelor's degree</b>						
All races . . . . .	---	---	---	---	7.3	7.6
White . . . . .	---	---	---	---	6.5	6.8
Black or African American . . . . .	---	---	---	---	12.2	12.5
American Indian or Alaska Native . . . . .	---	---	---	---	7.2	7.7
Asian or Pacific Islander <sup>3</sup> . . . . .	---	---	---	---	7.3	7.0
Hispanic or Latina <sup>4</sup> . . . . .	---	---	---	---	7.1	7.7
Mexican . . . . .	---	---	---	---	6.0	5.9
Puerto Rican . . . . .	---	---	---	---	8.9	10.0
Cuban . . . . .	---	---	---	---	*	*
Central and South American . . . . .	---	---	---	---	6.9	7.6
Other and unknown Hispanic or Latina . . . . .	---	---	---	---	6.2	7.4
Not Hispanic or Latina: <sup>4</sup>	---	---	---	---	---	---
White . . . . .	---	---	---	---	6.5	6.7
Black or African American . . . . .	---	---	---	---	12.6	12.7
<b>Bachelor's degree or more</b>						
All races . . . . .	---	---	---	---	6.4	6.3
White . . . . .	---	---	---	---	6.0	5.9
Black or African American . . . . .	---	---	---	---	11.5	11.0
American Indian or Alaska Native . . . . .	---	---	---	---	*	*
Asian or Pacific Islander <sup>3</sup> . . . . .	---	---	---	---	7.4	7.9
Hispanic or Latina <sup>4</sup> . . . . .	---	---	---	---	7.3	6.2
Mexican . . . . .	---	---	---	---	7.8	5.6
Puerto Rican . . . . .	---	---	---	---	8.8	7.5
Cuban . . . . .	---	---	---	---	*12.3	*
Central and South American . . . . .	---	---	---	---	6.2	5.8
Other and unknown Hispanic or Latina . . . . .	---	---	---	---	*5.7	6.2
Not Hispanic or Latina: <sup>4</sup>	---	---	---	---	---	---
White . . . . .	---	---	---	---	6.0	5.9
Black or African American . . . . .	---	---	---	---	11.7	11.2

See footnotes at end of table.

**Table 13 (page 3 of 3). Low birthweight live births among mothers 20 years of age and over, by detailed race, Hispanic origin, and education of mother: United States, selected years and reporting areas 1989–2005**

[Data are based on birth certificates]

-- Data not available.

\* Percents preceded by an asterisk are based on fewer than 50 births in the numerator. Percents not shown are based on fewer than 20 births.

<sup>1</sup>Data for 2004 and 2005 include the 39 reporting areas (37 states, DC, and NYC) that used the 1989 revision of the U.S. Standard Certificate of Live Birth in 2005. Reporting areas that have adopted the 2003 revision of the U.S. Standard Certificate of Live Birth are excluded because maternal education data based on the 2003 revision are not comparable with data based on the 1989 or earlier revisions See [Appendix II, Education](#).

<sup>2</sup>Excludes live births with unknown birthweight. Percent based on live births with known birthweight.

<sup>3</sup>Starting with 2004 data, estimates are not available for Asian or Pacific Islander subgroups during the transition from single-race to multiple-race reporting. See [Appendix II, Race, Birth File](#).

<sup>4</sup>Prior to 1993, data shown only for states with an Hispanic-origin item and education of mother item on the birth certificate. See [Appendix II, Education; Hispanic origin](#).

<sup>5</sup>Data for 2004 and 2005 include the 7 reporting (states) areas that adopted the 2003 revision of the U.S. Standard Certificate of Live Birth in 2004. Reporting areas that used the 1989 revision of the U.S. Standard Certificate of Live Birth are excluded because maternal education data based on the 2003 revision are not comparable with data based on the 1989 or earlier revisions See [Appendix II, Education](#).

NOTES: Prior to 2003, all data are based on the 1989 or earlier revisions of the U.S. Standard Certificate of Live Birth. In 1992–2002, education of mother was reported on the birth certificate by all 50 states and the District of Columbia. Prior to 1992, data from states lacking an education of mother item were excluded. Starting with 2004 data, data for states adopting the 2003 revision of the U. S. Standard Certificate of Live Birth are shown separately. See [Appendix II, Education](#). The race groups, white, black, American Indian or Alaska Native, and Asian or Pacific Islander, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 2004 data, some states reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Interpretation of trend data should take into consideration changes in reporting areas and immigration. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Vital Statistics System, Birth File.

**Table 14 (page 1 of 3). Low birthweight live births, by race and Hispanic origin of mother, geographic division, and state: United states, average annual 1997–1999, 2000–2002, and 2003–2005**

[Data are based on birth certificates]

Geographic division and state	Not Hispanic or Latina								
	All races			White			Black or African American		
	1997–1999	2000–2002	2003–2005	1997–1999	2000–2002	2003–2005	1997–1999	2000–2002	2003–2005
	Percent of live births weighing less than 2,500 grams <sup>1</sup>								
United States . . . . .	7.57	7.69	8.07	6.56	6.75	7.18	13.17	13.19	13.77
New England . . . . .	6.96	7.14	7.55	6.25	6.46	6.89	11.92	11.83	12.08
Connecticut . . . . .	7.56	7.52	7.74	6.31	6.48	6.60	12.94	12.28	12.88
Maine . . . . .	5.93	6.12	6.58	6.00	6.13	6.57	*12.07	*9.47	8.47
Massachusetts . . . . .	6.99	7.26	7.77	6.35	6.56	7.15	11.31	11.54	11.82
New Hampshire . . . . .	5.91	6.40	6.65	5.75	6.24	6.59	*7.81	10.58	10.85
Rhode Island . . . . .	7.43	7.47	8.12	6.65	6.75	7.39	11.23	12.32	11.22
Vermont . . . . .	6.15	6.15	6.57	6.08	6.12	6.55	*	*	*
Middle Atlantic . . . . .	7.83	7.84	8.16	6.42	6.62	6.97	13.03	12.69	13.15
New Jersey . . . . .	8.01	7.89	8.19	6.44	6.59	7.11	14.02	13.20	13.48
New York . . . . .	7.83	7.76	8.11	6.34	6.48	6.82	12.26	12.02	12.78
Pennsylvania . . . . .	7.69	7.93	8.20	6.49	6.78	7.06	13.93	13.79	13.67
East North Central . . . . .	7.72	7.79	8.19	6.54	6.71	7.18	13.80	13.78	14.21
Illinois . . . . .	7.96	8.04	8.40	6.47	6.74	7.22	14.12	14.04	14.70
Indiana . . . . .	7.84	7.54	8.10	7.20	6.95	7.54	13.33	12.89	13.46
Michigan . . . . .	7.84	7.94	8.28	6.34	6.55	7.00	13.89	14.24	14.43
Ohio . . . . .	7.78	8.07	8.51	6.75	7.08	7.53	13.47	13.45	13.83
Wisconsin . . . . .	6.53	6.58	6.93	5.71	5.83	6.18	13.43	13.25	13.59
West North Central . . . . .	6.75	6.87	7.17	6.24	6.36	6.68	12.94	12.44	12.79
Iowa . . . . .	6.31	6.39	6.92	6.05	6.19	6.72	11.99	11.77	12.22
Kansas . . . . .	7.01	6.96	7.28	6.58	6.66	6.97	12.80	12.37	13.42
Minnesota . . . . .	5.92	6.23	6.43	5.62	5.80	5.93	11.08	10.54	10.71
Missouri . . . . .	7.75	7.74	8.12	6.70	6.79	7.18	13.77	13.27	13.90
Nebraska . . . . .	6.75	6.88	6.97	6.42	6.52	6.76	12.33	13.07	12.16
North Dakota . . . . .	6.31	6.28	6.49	6.36	6.13	6.37	*9.35	*9.02	*9.43
South Dakota . . . . .	5.75	6.58	6.71	5.75	6.37	6.62	*10.81	*11.51	*7.27
South Atlantic . . . . .	8.53	8.63	8.97	6.87	7.09	7.49	13.13	13.15	13.70
Delaware . . . . .	8.57	9.29	9.31	6.53	7.80	7.62	14.32	14.08	14.32
District of Columbia . . . . .	13.21	11.85	11.06	6.05	6.35	6.28	16.05	14.60	13.96
Florida . . . . .	8.09	8.18	8.59	6.93	6.98	7.38	12.31	12.58	13.28
Georgia . . . . .	8.68	8.79	9.27	6.69	6.92	7.44	12.84	12.98	13.81
Maryland . . . . .	8.82	8.88	9.17	6.50	6.79	7.19	13.41	13.00	13.13
North Carolina . . . . .	8.84	8.90	9.07	7.22	7.49	7.73	13.77	13.83	14.33
South Carolina . . . . .	9.52	9.74	10.15	7.09	7.40	7.82	14.11	14.29	15.19
Virginia . . . . .	7.80	7.90	8.23	6.39	6.54	7.01	12.44	12.56	12.83
West Virginia . . . . .	8.12	8.60	9.16	7.97	8.39	9.03	12.88	13.81	13.15
East South Central . . . . .	9.07	9.45	9.89	7.52	7.88	8.43	13.61	14.24	14.94
Alabama . . . . .	9.28	9.75	10.35	7.37	7.77	8.46	13.34	14.10	15.02
Kentucky . . . . .	8.06	8.38	8.86	7.58	7.84	8.50	13.15	13.84	13.52
Mississippi . . . . .	10.18	10.82	11.62	7.35	7.97	8.67	13.63	14.48	15.60
Tennessee . . . . .	9.01	9.20	9.35	7.65	7.95	8.26	14.06	14.23	14.51
West South Central . . . . .	7.81	8.00	8.48	6.81	7.07	7.61	13.30	13.51	14.44
Arkansas . . . . .	8.62	8.64	9.04	7.45	7.48	7.83	13.21	13.81	14.86
Louisiana . . . . .	10.09	10.40	11.02	7.00	7.56	8.12	14.57	14.44	15.33
Oklahoma . . . . .	7.28	7.75	7.92	6.91	7.35	7.63	12.22	13.57	13.62
Texas . . . . .	7.35	7.54	8.07	6.61	6.81	7.43	12.58	12.82	13.91
Mountain . . . . .	7.36	7.36	7.67	7.11	7.09	7.44	13.45	13.65	13.77
Arizona . . . . .	6.86	6.91	7.05	6.60	6.78	7.01	12.83	13.16	12.38
Colorado . . . . .	8.60	8.60	9.04	8.18	8.24	8.81	14.12	14.59	15.20
Idaho . . . . .	6.15	6.41	6.65	6.01	6.29	6.60	*9.68	*	*7.03
Montana . . . . .	6.71	6.65	7.02	6.56	6.60	6.81	*	*	*15.58
Nevada . . . . .	7.59	7.44	8.11	7.42	7.19	7.78	13.32	13.40	13.98
New Mexico . . . . .	7.68	7.99	8.38	7.83	7.89	8.33	13.30	13.88	15.01
Utah . . . . .	6.72	6.48	6.68	6.55	6.28	6.45	14.76	13.09	12.05
Wyoming . . . . .	8.75	8.35	8.71	8.77	8.12	8.74	*16.76	*13.29	*
Pacific . . . . .	6.09	6.22	6.63	5.50	5.70	6.11	11.69	11.50	12.25
Alaska . . . . .	5.90	5.71	6.02	5.36	4.84	5.34	11.24	10.70	11.74
California . . . . .	6.17	6.29	6.71	5.61	5.86	6.30	11.87	11.66	12.46
Hawaii . . . . .	7.44	7.98	8.23	5.48	6.17	6.42	10.34	11.01	11.44
Oregon . . . . .	5.41	5.65	6.09	5.21	5.44	6.02	10.51	10.32	11.16
Washington . . . . .	5.72	5.75	6.13	5.33	5.43	5.63	10.10	10.34	10.63

See footnotes at end of table.

**Table 14 (page 2 of 3). Low birthweight live births, by race and Hispanic origin of mother, geographic division, and state: United states, average annual 1997–1999, 2000–2002, and 2003–2005**

[Data are based on birth certificates]

Geographic division and state	Hispanic or Latina <sup>2</sup>			American Indian or Alaska Native <sup>3</sup>			Asian or Pacific Islander <sup>3</sup>		
	1997–1999	2000–2002	2003–2005	1997–1999	2000–2002	2003–2005	1997–1999	2000–2002	2003–2005
	Percent of live births weighing less than 2,500 grams <sup>1</sup>								
United States . . . . .	6.41	6.48	6.79	6.90	7.11	7.39	7.37	7.54	7.89
New England . . . . .	8.33	8.08	8.37	8.59	7.93	8.28	7.39	7.64	7.87
Connecticut . . . . .	9.05	8.25	8.49	*9.63	10.06	7.45	7.59	8.07	7.83
Maine . . . . .	*	*6.03	*4.74	*	*	*	*4.79	*5.46	8.69
Massachusetts . . . . .	8.11	8.37	8.41	*7.74	*7.11	*7.62	7.26	7.57	7.63
New Hampshire . . . . .	6.80	4.84	6.55	*	*	*	*7.27	5.95	7.75
Rhode Island . . . . .	7.57	7.20	8.61	11.76	*10.32	13.66	9.19	9.31	10.11
Vermont . . . . .	*	*	*	*	*	*	*	*	*8.08
Middle Atlantic . . . . .	7.71	7.47	7.67	8.34	8.66	8.74	7.52	7.42	7.97
New Jersey . . . . .	7.33	7.15	7.27	9.87	11.09	9.83	7.71	7.57	8.10
New York . . . . .	7.66	7.38	7.59	7.56	7.81	7.31	7.43	7.33	7.89
Pennsylvania . . . . .	9.23	8.97	9.00	9.03	9.15	10.95	7.54	7.48	7.99
East North Central . . . . .	6.46	6.33	6.58	6.87	7.17	7.40	7.75	7.92	8.17
Illinois . . . . .	6.29	6.31	6.60	8.08	8.60	9.46	8.02	8.49	8.28
Indiana . . . . .	6.77	6.09	6.33	*10.65	*7.74	*10.00	7.06	7.41	7.87
Michigan . . . . .	6.67	6.26	6.46	6.75	7.26	6.98	7.94	7.46	8.33
Ohio . . . . .	7.57	7.20	7.13	7.23	8.86	10.22	7.44	7.86	8.27
Wisconsin . . . . .	6.42	6.13	6.34	6.08	6.12	6.04	7.21	6.97	7.50
West North Central . . . . .	6.07	6.10	6.06	6.33	6.99	7.07	7.32	7.29	7.53
Iowa . . . . .	6.10	6.01	6.12	8.53	7.23	9.15	7.64	7.13	7.71
Kansas . . . . .	6.01	5.93	6.09	6.42	6.20	7.09	7.87	6.69	7.34
Minnesota . . . . .	6.15	6.02	5.70	6.57	7.10	6.87	7.23	7.28	7.43
Missouri . . . . .	6.07	6.18	6.33	8.58	8.67	7.63	6.83	7.34	7.61
Nebraska . . . . .	6.19	6.30	6.20	6.89	7.27	6.78	8.03	8.05	7.61
North Dakota . . . . .	*4.98	*8.10	*5.84	6.03	6.62	6.78	*	*	*8.39
South Dakota . . . . .	*5.29	6.89	5.94	5.47	6.84	7.04	*6.86	*11.39	*9.50
South Atlantic . . . . .	6.35	6.39	6.65	9.24	9.17	9.91	7.53	7.95	8.17
Delaware . . . . .	7.52	6.81	7.03	*	*	*	7.89	9.89	9.33
District of Columbia . . . . .	6.06	8.04	7.46	*	*	*	*8.67	*7.00	8.97
Florida . . . . .	6.55	6.61	6.98	7.52	7.11	7.38	8.29	8.35	8.73
Georgia . . . . .	5.51	5.77	5.96	8.43	9.29	9.00	7.54	8.18	8.35
Maryland . . . . .	6.65	6.73	7.18	9.48	9.74	10.87	7.19	7.42	7.93
North Carolina . . . . .	6.24	6.13	6.27	10.35	10.30	11.01	7.26	8.20	7.77
South Carolina . . . . .	5.71	6.87	6.66	*8.88	10.22	10.75	7.66	8.02	8.13
Virginia . . . . .	6.23	6.07	6.28	*7.58	*10.73	*9.20	7.08	7.50	7.71
West Virginia . . . . .	*	*	*6.06	*	*	*	*7.16	*9.16	*9.51
East South Central . . . . .	6.47	6.74	6.45	7.73	7.84	7.64	7.92	7.95	7.80
Alabama . . . . .	6.57	6.95	6.92	*7.03	9.68	10.53	8.24	7.38	8.02
Kentucky . . . . .	6.76	7.73	6.85	*9.51	*7.17	*8.54	7.37	7.75	7.56
Mississippi . . . . .	5.41	6.61	6.42	*6.44	7.30	6.24	7.70	6.83	8.06
Tennessee . . . . .	6.49	6.28	6.04	*9.37	*7.11	*6.63	8.13	8.60	7.76
West South Central . . . . .	6.62	6.85	7.20	6.33	6.71	7.04	7.80	7.80	8.17
Arkansas . . . . .	6.28	5.79	6.54	*5.60	8.11	8.86	8.55	7.73	6.74
Louisiana . . . . .	6.37	6.56	7.62	8.00	9.06	10.11	8.39	7.89	8.46
Oklahoma . . . . .	5.86	6.41	6.46	6.19	6.48	6.69	6.52	7.87	6.82
Texas . . . . .	6.65	6.88	7.23	6.68	6.67	7.33	7.82	7.78	8.33
Mountain . . . . .	7.18	7.23	7.40	6.97	7.01	7.43	8.70	8.27	9.14
Arizona . . . . .	6.64	6.56	6.69	6.83	6.85	7.11	7.67	7.95	7.92
Colorado . . . . .	8.54	8.33	8.53	8.85	9.05	9.45	10.05	10.17	10.26
Idaho . . . . .	6.71	6.95	6.67	7.18	6.15	8.31	*6.47	7.38	6.67
Montana . . . . .	6.69	7.44	8.63	7.37	7.14	7.80	*7.38	*5.95	*8.70
Nevada . . . . .	6.23	6.34	6.74	6.87	6.80	7.58	9.11	7.56	10.35
New Mexico . . . . .	7.66	8.13	8.45	6.55	6.88	7.32	8.83	7.67	8.60
Utah . . . . .	7.08	7.20	7.26	7.54	6.37	7.46	7.95	7.23	8.20
Wyoming . . . . .	7.09	8.81	8.43	7.39	9.55	8.39	*16.31	*12.04	*
Pacific . . . . .	5.58	5.66	6.09	6.28	6.36	6.59	6.99	7.27	7.55
Alaska . . . . .	6.69	6.07	5.31	5.89	5.81	5.86	6.88	7.33	6.57
California . . . . .	5.57	5.66	6.10	6.06	6.21	6.49	6.86	7.15	7.42
Hawaii . . . . .	7.71	8.00	8.34	*7.65	*4.99	*	7.96	8.45	8.84
Oregon . . . . .	5.47	5.54	5.43	6.13	7.23	7.34	6.07	6.78	7.00
Washington . . . . .	5.46	5.31	5.93	7.13	7.08	7.31	6.61	6.37	6.90

See footnotes at end of table.

**Table 14 (page 3 of 3). Low birthweight live births, by race and Hispanic origin of mother, geographic division, and state: United states, average annual 1997–1999, 2000–2002, and 2003–2005**

[Data are based on birth certificates]

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\* Percents preceded by an asterisk are based on fewer than 50 births. Percents not shown are based on fewer than 20 births.

<sup>1</sup>Excludes live births with unknown birthweight.

<sup>2</sup>Persons of Hispanic origin may be of any race. See [Appendix II, Hispanic origin](#).

<sup>3</sup>Includes persons of Hispanic and non-Hispanic origin.

NOTES: For information on very low birthweight live births, see Table 37 in Martin JA, Hamilton BE, Sutton PD, Ventura SJ, Menacker F, Kirmeyer S, Munson ML. Births: Final data for 2005. National vital statistics reports. vol 56 no 6. Hyattsville, MD: National Center for Health Statistics. 2007; Starting with 2003 data, some states reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#).

**SOURCE:** CDC/NCHS, National Vital Statistics System, Birth File.

**Table 15 (page 1 of 2). Legal abortions and legal abortion ratios, by selected patient characteristics: United States, selected years 1973–2004**

[Data are based on reporting by state health departments and by hospitals and other medical facilities]

<i>Characteristic</i>	1973	1975	1980	1985	1990	1995	1999 <sup>1</sup>	2000 <sup>2</sup>	2002 <sup>2</sup>	2003 <sup>3</sup>	2004 <sup>3</sup>
Number of legal abortions reported in thousands											
Centers for Disease Control and Prevention (CDC) . . . . .	616	855	1,298	1,329	1,429	1,211	862	857	854	848	839
Guttmacher Institute <sup>4</sup> . . . . .	745	1,034	1,554	1,589	1,609	1,359	1,315	1,313	1,293	1,287	1,222
Abortions per 100 live births <sup>5</sup>											
Total CDC . . . . .	19.6	27.2	35.9	35.4	34.4	31.1	25.6	24.5	24.6	24.1	23.8
Age											
Under 15 years . . . . .	123.7	119.3	139.7	137.6	81.8	66.4	70.9	70.8	75.3	83.0	76.2
15–19 years . . . . .	53.9	54.2	71.4	68.8	51.1	39.9	37.5	36.1	36.8	37.4	36.2
20–24 years . . . . .	29.4	28.9	39.5	38.6	37.8	34.8	31.6	30.0	30.3	30.0	29.1
25–29 years . . . . .	20.7	19.2	23.7	21.7	21.8	22.0	20.8	19.8	20.0	19.5	19.1
30–34 years . . . . .	28.0	25.0	23.7	19.9	19.0	16.4	15.2	14.5	14.8	14.4	14.3
35–39 years . . . . .	45.1	42.2	41.0	33.6	27.3	22.3	19.3	18.1	18.0	17.3	17.0
40 years and over . . . . .	68.4	66.8	80.7	62.3	50.6	38.5	32.9	30.1	31.0	29.3	28.6
Race											
White <sup>6</sup> . . . . .	32.6	27.7	33.2	27.7	25.8	20.3	17.7	16.7	16.4	16.5	16.1
Black or African American <sup>7</sup> . . . . .	42.0	47.6	54.3	47.2	53.7	53.1	52.9	50.3	49.5	49.1	47.2
Hispanic origin <sup>8</sup>											
Hispanic or Latina . . . . .	---	---	---	---	---	27.1	26.1	22.5	23.3	22.8	21.1
Not Hispanic or Latina . . . . .	---	---	---	---	---	27.9	25.2	23.3	23.7	23.4	23.6
Marital status											
Married . . . . .	7.6	9.6	10.5	8.0	8.7	7.6	7.0	6.5	6.5	6.3	6.1
Unmarried . . . . .	139.8	161.0	147.6	117.4	86.3	64.5	60.4	57.0	57.0	53.8	51.0
Previous live births <sup>9</sup>											
0 . . . . .	43.7	38.4	45.7	45.1	36.0	28.6	24.3	22.6	23.3	22.7	23.0
1 . . . . .	23.5	22.0	20.2	21.6	22.7	22.0	20.6	19.4	19.4	19.0	19.0
2 . . . . .	36.8	36.8	29.5	29.9	31.5	30.6	29.0	27.4	27.9	27.1	26.4
3 . . . . .	46.9	47.7	29.8	18.2	30.1	30.7	29.8	28.5	29.1	28.3	27.4
4 or more <sup>10</sup> . . . . .	44.7	43.5	24.3	21.5	26.6	23.7	24.2	23.7	23.6	23.4	22.9
Percent distribution <sup>11</sup>											
Total . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Period of gestation											
Under 9 weeks . . . . .	36.1	44.6	51.7	50.3	51.6	54.0	57.6	58.1	60.5	60.5	61.4
9–10 weeks . . . . .	29.4	28.4	26.2	26.6	25.3	23.1	20.2	19.8	18.4	18.0	17.6
11–12 weeks . . . . .	17.9	14.9	12.2	12.5	11.7	10.9	10.2	10.2	9.6	9.7	9.3
13–15 weeks . . . . .	6.9	5.0	5.1	5.9	6.4	6.3	6.2	6.2	6.0	6.2	6.3
16–20 weeks . . . . .	8.0	6.1	3.9	3.9	4.0	4.3	4.3	4.3	4.1	4.2	4.0
21 weeks and over . . . . .	1.7	1.0	0.9	0.8	1.0	1.4	1.5	1.4	1.4	1.4	1.4
Previous induced abortions											
0 . . . . .	---	81.9	67.6	60.1	57.1	55.1	53.7	54.7	55.3	55.3	55.0
1 . . . . .	---	14.9	23.5	25.7	26.9	26.9	27.1	26.4	25.8	25.7	25.8
2 . . . . .	---	2.5	6.6	9.8	10.1	10.9	11.5	11.3	11.3	11.2	11.3
3 or more . . . . .	---	0.7	2.3	4.4	5.9	7.1	7.7	7.6	7.6	7.8	7.9

See footnotes at end of table.



## Table 15 (page 2 of 2). Legal abortions and legal abortion ratios, by selected patient characteristics: United States, selected years 1973–2004

[Data are based on reporting by state health departments and by hospitals and other medical facilities]

-- Data not available.

<sup>1</sup>In 1998 and 1999, Alaska, California, New Hampshire, and Oklahoma did not report abortion data to CDC. For comparison, in 1997, the 48 corresponding reporting areas reported about 900,000 legal abortions.

<sup>2</sup>In 2000, 2001, and 2002, Alaska, California, and New Hampshire did not report abortion data to CDC.

<sup>3</sup>In 2003 and 2004, California, New Hampshire, and West Virginia did not report abortion data to CDC.

<sup>4</sup>No surveys were conducted in 1983, 1986, 1989, 1990, 1993, 1994, 1997, 1998, 2001, 2002, or 2003. Data for these years were estimated by interpolation. See [Appendix I, Guttmacher Institute](#).

<sup>5</sup>For calculation of ratios by each characteristic, abortions with characteristic unknown were distributed in proportion to abortions with characteristic known.

<sup>6</sup>For 1989 and later years, white race includes women of Hispanic ethnicity.

<sup>7</sup>Before 1989, black race includes races other than white.

<sup>8</sup>Data from 20–22 states, the District of Columbia (DC), and New York City (NYC) were included in 1991–1993. The number of reporting areas increased to 25 states, DC, and NYC in 1994–2004. States were excluded either because they did not collect data on Hispanic origin or due to incomplete reporting of Hispanic data (greater than 15% unknown Hispanic origin). See [Appendix I, Abortion Surveillance](#).

<sup>9</sup>For 1973–1975, data indicate number of living children.

<sup>10</sup>For 1975, data refer to four previous live births, not four or more. For five or more previous live births, the ratio is 47.3.

<sup>11</sup>For calculation of percent distribution by each characteristic, abortions with characteristic unknown were excluded.

NOTES: The number of areas reporting adequate data (less than or equal to 15% missing) for each characteristic varies from year to year. See [Appendix I, Abortion Surveillance](#). For methodological differences between these two data sources, see [Appendix I, Abortion Surveillance](#); [Guttmacher Institute Abortion Provider Survey](#). Data for additional years are available. See [Appendix III](#).

**SOURCES:** CDC, National Center for Chronic Disease Prevention and Health Promotion: Abortion Surveillance, 1973, 1975, 1979–1980. Atlanta, GA: Public Health Service, 1975, 1977, 1983; CDC MMWR Surveillance Summaries. Abortion Surveillance, United States, 1984 and 1985, Vol. 38, No. SS–2, 1989; 1990, Vol. 42, No. SS–6, 1993; 1995, Vol. 47, No. SS–2, 1998; 1997, Vol. 49, No. SS–11, 2000; 1998, Vol. 51, No. SS–3, 2002; 1999, Vol. 51, No. SS–9, 2002; 2000, Vol. 52, No. SS–12, 2003; 2001, Vol. 53, No. SS–9, 2004; 2002, Vol. 54, No. SS–7, 2005; 2003, Vol. 55, No. SS–11; 2004, Vol. 56, No. SS–09. Guttmacher Institute Abortion Provider Survey. Finer LB, Henshaw SK. Abortion incidence and services in the United States in 2000. *Perspect Sex Reprod Health* 2003;35(1)6–15. Finer LB, Henshaw SK. Estimates of U.S. abortion incidence, 2001–2003. Guttmacher Institute. August 2006. Jones RK, Zolna MRS, Henshaw SK, Finer LB. Abortion in the United States: Incidence and access to services, 2005. *Perspect Sex Reprod Health* 2008;40(1)6–16. Available from: [www.guttmacher.org/journals/toc/psrh4001toc.html](http://www.guttmacher.org/journals/toc/psrh4001toc.html).

**Table 16 (page 1 of 4). Contraceptive use in the past month among women 15–44 years of age, by age, race, Hispanic origin, and method of contraception: United States, selected years 1982–2002**

[Data are based on household interviews of samples of women of childbearing age]

Race, Hispanic origin, and year <sup>1</sup>	Age in years				
	15–44	15–19	20–24	25–34	35–44
Number of women in population in thousands					
All women: <sup>2</sup>					
1982 . . . . .	54,099	9,521	10,629	19,644	14,305
1988 . . . . .	57,900	9,179	9,413	21,726	17,582
1995 . . . . .	60,201	8,961	9,041	20,758	21,440
2002 . . . . .	61,561	9,834	9,840	19,522	22,365
Not Hispanic or Latino:					
White only:					
1982 . . . . .	41,279	7,010	8,081	14,945	11,243
1988 . . . . .	42,575	6,531	6,630	15,929	13,486
1995 . . . . .	42,154	5,865	6,020	14,471	15,798
2002 . . . . .	39,498	6,069	5,938	12,073	15,418
Black or African American only:					
1982 . . . . .	6,825	1,383	1,456	2,392	1,593
1988 . . . . .	7,408	1,362	1,322	2,760	1,965
1995 . . . . .	8,060	1,334	1,305	2,780	2,641
2002 . . . . .	8,250	1,409	1,396	2,587	2,857
Hispanic or Latino: <sup>3</sup>					
1982 . . . . .	4,393	886	811	1,677	1,018
1988 . . . . .	5,557	999	1,003	2,104	1,451
1995 . . . . .	6,702	1,150	1,163	2,450	1,940
2002 . . . . .	9,107	1,521	1,632	3,249	2,705
Percent of women in population using contraception					
All women: <sup>2</sup>					
1982 . . . . .	55.7	24.2	55.8	66.7	61.6
1988 . . . . .	60.3	32.1	59.0	66.3	68.3
1995 . . . . .	64.2	29.8	63.5	71.1	72.3
2002 . . . . .	61.9	31.5	60.7	68.6	69.9
Not Hispanic or Latino:					
White only:					
1982 . . . . .	57.3	23.6	58.7	67.8	63.5
1988 . . . . .	63.0	34.0	62.6	67.7	71.5
1995 . . . . .	66.2	30.5	65.4	72.9	73.6
2002 . . . . .	64.6	35.0	66.3	69.9	71.4
Black or African American only:					
1982 . . . . .	51.6	29.8	52.3	63.5	52.0
1988 . . . . .	56.8	35.7	61.8	63.5	58.7
1995 . . . . .	62.3	36.1	67.6	66.8	68.3
2002 . . . . .	57.6	32.9	50.8	67.9	63.8
Hispanic or Latino: <sup>3</sup>					
1982 . . . . .	50.6	*	*36.8	67.2	59.0
1988 . . . . .	50.4	*18.3	40.8	67.4	54.3
1995 . . . . .	59.0	26.1	50.6	69.2	70.8
2002 . . . . .	59.0	20.4	57.4	66.2	72.9

See footnotes at end of table.

**Table 16 (page 2 of 4). Contraceptive use in the past month among women 15–44 years of age, by age, race, Hispanic origin, and method of contraception: United States, selected years 1982–2002**

[Data are based on household interviews of samples of women of childbearing age]

Method of contraception and year	Age in years				
	15–44	15–19	20–24	25–34	35–44
Female sterilization					
Percent of contracepting women					
1982	23.2	—	*4.5	22.1	43.5
1988	27.6	*	*4.6	25.0	47.6
1995	27.8	*	4.0	23.8	45.0
2002	27.0	—	3.6	21.7	45.8
Male sterilization					
1982	10.9	*	*3.6	10.1	19.9
1988	11.7	*	*	10.2	20.8
1995	10.9	—	*	7.8	19.5
2002	10.2	—	*	7.2	18.2
Implant <sup>4</sup>					
1982	...	...	...	...	...
1988	...	...	...	...	...
1995	1.3	*	3.7	*1.3	*
2002	1.2	*	*	*1.9	*
Injectable <sup>4</sup>					
1982	...	...	...	...	...
1988	...	...	...	...	...
1995	3.0	9.7	6.1	2.9	*0.8
2002	5.4	13.9	10.2	5.3	*1.8
Birth control pill					
1982	28.0	63.9	55.1	25.7	*3.7
1988	30.8	58.8	68.2	32.6	4.3
1995	27.0	43.8	52.1	33.4	8.7
2002	31.0	53.8	52.5	34.8	15.0
Intrauterine device					
1982	7.1	*	*4.2	9.7	6.9
1988	2.0	—	*	2.1	3.1
1995	0.8	—	*	*0.8	1.1
2002	2.2	*	1.8	3.7	*
Diaphragm					
1982	8.1	*6.0	10.2	10.3	4.0
1988	5.7	*	*3.7	7.3	6.0
1995	1.9	*	*	1.7	2.8
2002	0.6	—	*	*	*
Condom					
1982	12.0	20.8	10.7	11.4	11.3
1988	14.6	32.8	14.5	13.7	11.2
1995	23.4	45.8	33.7	23.7	15.3
2002	23.8	44.6	36.0	23.1	15.6
Periodic abstinence-calendar rhythm					
1982	3.3	2.0	3.1	3.3	3.7
1988	1.7	*	1.1	1.8	2.0
1995	3.3	*	*1.5	3.7	3.9
2002	2.0	*	*2.3	*1.7	*2.4
Periodic abstinence-natural family planning					
1982	0.6	—	*	0.9	*
1988	0.6	—	*	0.7	0.7
1995	*0.5	—	*	*0.7	*
2002	*0.4	—	—	*	*
Withdrawal					
1982	2.0	2.9	3.0	1.8	1.3
1988	2.2	3.0	3.4	2.8	0.8
1995	6.1	13.2	7.1	6.0	4.5
2002	8.8	15.0	11.9	10.7	4.7
Other methods <sup>5</sup>					
1982	4.9	2.6	5.4	4.8	5.3
1988	3.2	*	1.8	3.8	3.5
1995	3.2	*	3.2	3.1	3.4
2002	1.7	*	*	*1.5	*1.8

See footnotes at end of table.

**Table 16 (page 3 of 4). Contraceptive use in the past month among women 15–44 years of age, by age, race, Hispanic origin, and method of contraception: United States, selected years 1982–2002**

[Data are based on household interviews of samples of women of childbearing age]

Method of contraception and year	Not Hispanic or Latino <sup>1</sup>		
	White only	Black or African American only	Hispanic or Latino <sup>3</sup>
Female sterilization			
Percent of contracepting women			
1982	22.0	30.0	23.0
1988	25.6	37.8	31.7
1995	24.5	39.9	36.6
2002	23.9	39.2	33.8
Male sterilization			
1982	13.0	*1.5	*
1988	14.3	*0.9	*
1995	13.7	*1.8	*4.0
2002	12.9	*	4.7
Implant <sup>4</sup>			
1982	...	...	...
1988	...	...	...
1995	*1.0	*2.4	*2.0
2002	*0.8	*	*3.1
Injectable <sup>4</sup>			
1982	...	...	...
1988	...	...	...
1995	2.4	5.4	4.7
2002	4.2	9.4	7.3
Birth control pill			
1982	26.4	37.9	30.2
1988	29.5	38.2	33.4
1995	28.7	23.7	23.0
2002	34.9	23.1	22.1
Intrauterine device			
1982	5.8	9.3	19.2
1988	1.5	3.2	*5.0
1995	0.7	*	*
2002	1.7	*	5.3
Diaphragm			
1982	9.2	*3.2	*
1988	6.6	*2.0	*
1995	2.3	*	*
2002	*	*	—
Condom			
1982	13.1	6.3	*6.9
1988	15.2	10.1	13.7
1995	22.5	24.9	21.2
2002	21.7	29.6	24.1
Periodic abstinence-calendar rhythm			
1982	3.2	2.9	3.9
1988	1.6	1.9	*
1995	3.3	*1.7	3.2
2002	2.3	*	*
Periodic abstinence-natural family planning			
1982	0.7	0.3	—
1988	0.7	*	*
1995	0.7	*	*
2002	*	*	*
Withdrawal			
1982	2.1	1.3	2.6
1988	2.0	1.4	4.5
1995	6.4	3.3	5.7
2002	9.5	4.9	6.3
Other methods <sup>5</sup>			
1982	4.6	7.3	5.0
1988	3.0	4.4	2.6
1995	3.3	3.8	*2.2
2002	*1.7	*1.9	*1.2

See footnotes at end of table.

**Table 16 (page 4 of 4). Contraceptive use in the past month among women 15–44 years of age, by age, race, Hispanic origin, and method of contraception: United States, selected years 1982–2002**

[Data are based on household interviews of samples of women of childbearing age]

– Quantity zero.

- - - Data not available.

. . . Data not applicable.

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error of 20%–30%. Data not shown have an RSE greater than 30%.

<sup>1</sup>Starting with 1995 data, race-specific estimates are tabulated according to 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. Starting with 1995 data, race-specific estimates are for persons who reported only one racial group. Prior to data year 1995, data were tabulated according to the 1977 Standards. Estimates for single-race categories prior to 1995 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. See [Appendix II, Race](#).

<sup>2</sup>Includes women of other or unknown race not shown separately.

<sup>3</sup>Persons of Hispanic origin may be of any race. See [Appendix II, Hispanic origin](#).

<sup>4</sup>Data collected starting with the 1995 survey.

<sup>5</sup>In 2002, includes female condom, foam, cervical cap, Today Sponge®, suppository or insert, jelly or cream, and other methods. See [Appendix II, Contraception](#), for the list of other methods reported in previous surveys.

NOTES: Survey collects up to four methods of contraception used in the month of interview. Percents may not add to the total because more than one method could have been used in the month of interview. These data replace estimates of most effective method used and may differ from previous editions of *Health, United States*. Standard errors for selected years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>.

SOURCE: CDC/NCHS, National Survey of Family Growth.

**Table 17. Breastfeeding among mothers 15–44 years of age, by year of baby's birth, and selected characteristics of mother: United States, average annual 1986–1988 through 1999–2001**

[Data are based on household interviews of samples of women of childbearing age]

<i>Selected characteristics of mother</i>	1986–1988	1989–1991	1992–1994	1995–1998	1999–2001
Percent of babies breastfed					
Total . . . . .	54.1	53.3	57.6	64.4	66.5
Age at baby's birth					
Under 20 years . . . . .	28.4	34.7	41.0	49.5	47.3
20–24 years . . . . .	48.2	44.3	50.0	55.9	59.3
25–29 years . . . . .	58.2	56.4	57.4	68.1	63.5
30–44 years . . . . .	68.6	66.0	70.2	72.8	80.0
Race and Hispanic origin <sup>1</sup>					
Not Hispanic or Latino:					
White . . . . .	59.1	58.4	61.7	66.5	68.7
Black or African American . . . . .	22.3	22.4	26.1	47.9	45.3
Hispanic or Latino . . . . .	55.6	57.0	63.8	71.2	76.0
Education <sup>2</sup>					
No high school diploma or GED . . . . .	31.8	36.5	44.6	50.6	46.6
High school diploma or GED . . . . .	47.4	45.5	51.1	55.9	61.6
Some college, no bachelor's degree . . . . .	62.2	61.4	64.3	70.1	75.6
Bachelor's degree or higher . . . . .	78.4	80.6	82.5	82.0	81.3
Geographic region <sup>3</sup>					
Northeast . . . . .	51.3	53.5	56.5	61.6	66.9
Midwest . . . . .	52.3	49.6	51.7	61.7	61.9
South . . . . .	44.6	43.6	48.6	58.1	60.9
West . . . . .	71.4	69.5	77.3	78.1	78.9
Percent of babies who were breastfed 3 months or more					
Total . . . . .	34.6	31.8	33.6	45.8	48.4
Age at baby's birth					
Under 20 years . . . . .	18.5	*10.5	*11.7	30.0	30.0
20–24 years . . . . .	26.1	24.1	25.1	36.6	41.8
25–29 years . . . . .	36.9	32.3	35.6	46.3	43.7
30–44 years . . . . .	50.1	46.8	46.7	57.5	62.4
Race and Hispanic origin <sup>1</sup>					
Not Hispanic or Latino:					
White . . . . .	37.7	35.2	36.6	47.8	49.7
Black or African American . . . . .	11.6	11.5	13.3	29.6	33.7
Hispanic or Latino . . . . .	38.2	33.9	35.0	49.7	54.3
Education <sup>2</sup>					
No high school diploma or GED . . . . .	21.8	17.6	25.2	33.9	37.0
High school diploma or GED . . . . .	28.2	28.0	27.4	36.9	43.1
Some college, no bachelor's degree . . . . .	38.7	33.1	38.7	49.6	52.8
Bachelor's degree or higher . . . . .	55.0	56.1	59.3	64.5	64.1
Geographic region <sup>3</sup>					
Northeast . . . . .	29.9	37.2	36.4	48.2	48.8
Midwest . . . . .	30.3	31.5	30.1	42.0	42.8
South . . . . .	27.7	20.1	26.2	38.9	44.4
West . . . . .	52.4	42.9	45.3	58.2	59.2

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error of 20%–30%.

<sup>1</sup>Persons of Hispanic origin may be of any race. All race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are for persons who reported only one racial group. See [Appendix II, Race](#).

<sup>2</sup>Educational attainment is presented only for women 22–44 years of age. Education is as of year of interview. GED stands for General Educational Development high school equivalency diploma. See [Appendix II, Education](#).

<sup>3</sup>See [Appendix II, Geographic region and division](#).

NOTES: Data are based on single births to mothers 15–44 years of age at interview, including those births that occurred when the mothers were younger than 15 years of age. Data on breastfeeding during 1986–1994 are based on responses to questions in the National Survey of Family Growth (NSFG) Cycle 5, conducted in 1995. Data for 1995–2001 are based on the NSFG Cycle 6 conducted in 2002. See [Appendix I, National Survey of Family Growth](#). Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Survey of Family Growth, Cycle 5 (1995), Cycle 6 (2002).

**Table 18 (page 1 of 2). Infant, neonatal, and postneonatal mortality rates, by detailed race and Hispanic origin of mother: United States, selected years 1983–2005**

[Data are based on linked birth and death certificates for infants]

<i>Race and Hispanic origin of mother</i>	1983 <sup>1</sup>	1985 <sup>1</sup>	1990 <sup>1</sup>	1995 <sup>2</sup>	2000 <sup>2</sup>	2003 <sup>2</sup>	2004 <sup>2</sup>	2005 <sup>2</sup>
Infant <sup>3</sup> deaths per 1,000 live births								
All mothers . . . . .	10.9	10.4	8.9	7.6	6.9	6.8	6.8	6.9
White . . . . .	9.3	8.9	7.3	6.3	5.7	5.7	5.7	5.7
Black or African American . . . . .	19.2	18.6	16.9	14.6	13.5	13.5	13.2	13.3
American Indian or Alaska Native . . . . .	15.2	13.1	13.1	9.0	8.3	8.7	8.4	8.1
Asian or Pacific Islander <sup>4</sup> . . . . .	8.3	7.8	6.6	5.3	4.9	4.8	4.7	4.9
Hispanic or Latina <sup>5,6</sup> . . . . .	9.5	8.8	7.5	6.3	5.6	5.6	5.5	5.6
Mexican . . . . .	9.1	8.5	7.2	6.0	5.4	5.5	5.5	5.5
Puerto Rican . . . . .	12.9	11.2	9.9	8.9	8.2	8.2	7.8	8.3
Cuban . . . . .	7.5	8.5	7.2	5.3	4.6	4.6	4.6	4.4
Central and South American . . . . .	8.5	8.0	6.8	5.5	4.6	5.0	4.6	4.7
Other and unknown Hispanic or Latina . . . . .	10.6	9.5	8.0	7.4	6.9	6.7	6.7	6.4
Not Hispanic or Latina:								
White <sup>6</sup> . . . . .	9.2	8.6	7.2	6.3	5.7	5.7	5.7	5.8
Black or African American <sup>6</sup> . . . . .	19.1	18.3	16.9	14.7	13.6	13.6	13.6	13.6
Neonatal <sup>3</sup> deaths per 1,000 live births								
All mothers . . . . .	7.1	6.8	5.7	4.9	4.6	4.6	4.5	4.5
White . . . . .	6.1	5.8	4.6	4.1	3.8	3.9	3.8	3.8
Black or African American . . . . .	12.5	12.3	11.1	9.6	9.1	9.2	8.9	8.9
American Indian or Alaska Native . . . . .	7.5	6.1	6.1	4.0	4.4	4.5	4.3	4.0
Asian or Pacific Islander <sup>4</sup> . . . . .	5.2	4.8	3.9	3.4	3.4	3.4	3.2	3.4
Hispanic or Latina <sup>5,6</sup> . . . . .	6.2	5.7	4.8	4.1	3.8	3.9	3.8	3.9
Mexican . . . . .	5.9	5.4	4.5	3.9	3.6	3.8	3.7	3.8
Puerto Rican . . . . .	8.7	7.6	6.9	6.1	5.8	5.7	5.3	5.9
Cuban . . . . .	*5.0	6.2	5.3	*3.6	*3.2	3.4	*2.8	*3.1
Central and South American . . . . .	5.8	5.6	4.4	3.7	3.3	3.6	3.4	3.2
Other and unknown Hispanic or Latina . . . . .	6.4	5.6	5.0	4.8	4.6	4.7	4.7	4.3
Not Hispanic or Latina:								
White <sup>6</sup> . . . . .	5.9	5.6	4.5	4.0	3.8	3.8	3.7	3.7
Black or African American <sup>6</sup> . . . . .	12.0	11.9	11.0	9.6	9.2	9.3	9.1	9.1
Postneonatal <sup>3</sup> deaths per 1,000 live births								
All mothers . . . . .	3.8	3.6	3.2	2.6	2.3	2.2	2.3	2.3
White . . . . .	3.2	3.1	2.7	2.2	1.9	1.9	1.9	2.0
Black or African American . . . . .	6.7	6.3	5.9	5.0	4.3	4.3	4.3	4.3
American Indian or Alaska Native . . . . .	7.7	7.0	7.0	5.1	3.9	4.2	4.2	4.0
Asian or Pacific Islander <sup>4</sup> . . . . .	3.1	2.9	2.7	1.9	1.4	1.4	1.5	1.5
Hispanic or Latina <sup>5,6</sup> . . . . .	3.3	3.2	2.7	2.1	1.8	1.7	1.7	1.8
Mexican . . . . .	3.2	3.2	2.7	2.1	1.8	1.7	1.7	1.7
Puerto Rican . . . . .	4.2	3.5	3.0	2.8	2.4	2.5	2.5	2.4
Cuban . . . . .	*2.5	*2.3	*1.9	*1.7	*	*	*1.7	*1.4
Central and South American . . . . .	2.6	2.4	2.4	1.9	1.4	1.4	1.2	1.5
Other and unknown Hispanic or Latina . . . . .	4.2	3.9	3.0	2.6	2.3	1.9	2.0	2.1
Not Hispanic or Latina:								
White <sup>6</sup> . . . . .	3.2	3.0	2.7	2.2	1.9	1.9	2.0	2.1
Black or African American <sup>6</sup> . . . . .	7.0	6.4	5.9	5.0	4.4	4.3	4.5	4.5

See footnotes at end of table.

**Table 18 (page 2 of 2). Infant, neonatal, and postneonatal mortality rates, by detailed race and Hispanic origin of mother: United States, selected years 1983–2005**

[Data are based on linked birth and death certificates for infants]

<i>Race and Hispanic origin of mother</i>	1983–1985 <sup>1,7</sup>	1986–1988 <sup>1,7</sup>	1989–1991 <sup>1,7</sup>	1995–1997 <sup>2,7</sup>	1999–2001 <sup>2,7</sup>	2003–2005 <sup>2,7</sup>
Infant <sup>3</sup> deaths per 1,000 live births						
All mothers . . . . .	10.6	9.8	9.0	7.4	6.9	6.8
White . . . . .	9.0	8.2	7.4	6.1	5.7	5.7
Black or African American . . . . .	18.7	17.9	17.1	14.1	13.6	13.3
American Indian or Alaska Native . . . . .	13.9	13.2	12.6	9.2	9.1	8.4
Asian or Pacific Islander <sup>4</sup> . . . . .	8.3	7.3	6.6	5.1	4.8	4.8
Hispanic or Latina <sup>5,6</sup> . . . . .	9.2	8.3	7.5	6.1	5.6	5.6
Mexican . . . . .	8.8	7.9	7.2	5.9	5.4	5.5
Puerto Rican . . . . .	12.3	11.1	10.4	8.5	8.4	8.1
Cuban . . . . .	8.0	7.3	6.2	5.3	4.5	4.5
Central and South American . . . . .	8.2	7.5	6.6	5.3	4.8	4.8
Other and unknown Hispanic or Latina . . . . .	9.8	9.0	8.2	7.1	6.7	6.6
Not Hispanic or Latina:						
White <sup>6</sup> . . . . .	8.8	8.1	7.3	6.1	5.7	5.7
Black or African American <sup>6</sup> . . . . .	18.5	17.9	17.2	14.2	13.7	13.6
Neonatal <sup>3</sup> deaths per 1,000 live births						
All mothers . . . . .	6.9	6.3	5.7	4.8	4.6	4.6
White . . . . .	5.9	5.2	4.7	4.0	3.8	3.8
Black or African American . . . . .	12.2	11.7	11.1	9.4	9.2	9.0
American Indian or Alaska Native . . . . .	6.7	5.9	5.9	4.4	4.5	4.3
Asian or Pacific Islander <sup>4</sup> . . . . .	5.2	4.5	3.9	3.3	3.2	3.3
Hispanic or Latina <sup>5,6</sup> . . . . .	6.0	5.3	4.8	4.0	3.8	3.9
Mexican . . . . .	5.7	5.0	4.5	3.8	3.6	3.8
Puerto Rican . . . . .	8.3	7.2	7.0	5.7	5.9	5.7
Cuban . . . . .	5.9	5.3	4.6	3.7	3.1	3.1
Central and South American . . . . .	5.7	4.9	4.4	3.7	3.3	3.4
Other and unknown Hispanic or Latina . . . . .	6.1	5.8	5.2	4.6	4.4	4.6
Not Hispanic or Latina:						
White <sup>6</sup> . . . . .	5.7	5.1	4.6	4.0	3.8	3.7
Black or African American <sup>6</sup> . . . . .	11.8	11.4	11.1	9.4	9.2	9.2
Postneonatal <sup>3</sup> deaths per 1,000 live births						
All mothers . . . . .	3.7	3.5	3.3	2.5	2.3	2.3
White . . . . .	3.1	3.0	2.7	2.1	1.9	1.9
Black or African American . . . . .	6.4	6.2	6.0	4.7	4.4	4.3
American Indian or Alaska Native . . . . .	7.2	7.3	6.7	4.8	4.5	4.1
Asian or Pacific Islander <sup>4</sup> . . . . .	3.1	2.8	2.6	1.8	1.6	1.5
Hispanic or Latina <sup>5,6</sup> . . . . .	3.2	3.0	2.7	2.1	1.8	1.7
Mexican . . . . .	3.2	2.9	2.7	2.1	1.8	1.7
Puerto Rican . . . . .	4.0	3.9	3.4	2.8	2.5	2.4
Cuban . . . . .	2.2	2.0	1.6	1.5	1.4	1.4
Central and South American . . . . .	2.5	2.6	2.2	1.7	1.5	1.4
Other and unknown Hispanic or Latina . . . . .	3.7	3.2	3.0	2.5	2.3	2.0
Not Hispanic or Latina:						
White <sup>6</sup> . . . . .	3.1	3.0	2.7	2.2	1.9	2.0
Black or African American <sup>6</sup> . . . . .	6.7	6.5	6.1	4.8	4.5	4.4

--- Data not available.

\* Estimates are considered unreliable. Rates preceded by an asterisk are based on fewer than 50 deaths in the numerator. Rates not shown are based on fewer than 20 deaths in the numerator.

<sup>1</sup>Rates based on unweighted birth cohort data.

<sup>2</sup>Rates based on a period file using weighted data. See [Appendix I, National Vital Statistics System \(NVSS\), Linked Birth/Infant Death Data Set](#).

<sup>3</sup>Infant (under 1 year of age), neonatal (under 28 days), and postneonatal (28 days–11 months).

<sup>4</sup>Starting with 2003 data, estimates are not available for Asian or Pacific Islander subgroups during the transition from single-race to multiple-race reporting. See [Appendix II, Race, Birth file](#).

<sup>5</sup>Persons of Hispanic origin may be of any race.

<sup>6</sup>Prior to 1995, data shown only for states with an Hispanic-origin item on their birth certificates. See [Appendix II, Hispanic origin](#).

<sup>7</sup>Average annual mortality rate.

NOTES: The race groups white, black, American Indian or Alaska Native, and Asian or Pacific Islander include persons of Hispanic and non-Hispanic origin. Starting with 2003 data, some states reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). National linked files do not exist for 1992–1994. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Vital Statistics System, Linked Birth/Infant Death Data Set.



**Table 19 (page 1 of 2). Infant mortality rates among mothers 20 years of age and over, by education, detailed race, and Hispanic origin of mother: United States, selected years 1983–2005**

[Data are based on linked birth and death certificates for infants]

Education, race, and Hispanic origin of mother	1983 <sup>1</sup>	1985 <sup>1</sup>	1990 <sup>1</sup>	1995 <sup>2</sup>	2000 <sup>2</sup>	37 states, DC, and NYC	
						2004 <sup>2,3,4</sup>	2005 <sup>2,3,4</sup>
Infant deaths per 1,000 live births							
Less than 12 years of education							
All mothers . . . . .	15.0	14.3	10.8	8.9	7.9	7.8	7.6
White . . . . .	12.5	12.2	9.0	7.6	6.8	6.7	6.5
Black or African American . . . . .	23.4	21.5	19.5	17.0	14.7	14.6	13.8
American Indian or Alaska Native . . . . .	14.5	17.3	14.3	12.7	10.1	10.8	10.2
Asian or Pacific Islander <sup>5</sup> . . . . .	9.7	8.0	6.6	5.7	5.9	5.7	6.5
Hispanic or Latina <sup>6,7</sup> . . . . .	10.9	10.4	7.3	6.0	5.4	5.5	5.2
Mexican . . . . .	8.7	10.0	7.0	5.8	5.2	5.5	5.1
Puerto Rican . . . . .	15.3	11.8	10.1	10.6	9.6	7.5	10.9
Cuban . . . . .	*14.5	*	*	*	*	*	*
Central and South American . . . . .	9.8	8.7	7.0	5.1	4.9	4.8	4.3
Other and unknown Hispanic or Latina . . . . .	9.2	11.2	9.9	7.3	7.6	*7.9	*6.2
Not Hispanic or Latina: <sup>7</sup>							
White . . . . .	12.8	12.5	10.9	9.9	9.2	9.0	9.3
Black or African American . . . . .	24.7	21.6	19.7	17.3	15.0	15.4	14.8
12 years of education							
All mothers . . . . .	10.2	9.9	8.8	7.8	7.3	7.4	7.9
White . . . . .	8.7	8.5	7.1	6.4	6.0	6.1	6.6
Black or African American . . . . .	17.8	17.6	16.0	14.7	13.3	13.5	13.8
American Indian or Alaska Native . . . . .	15.5	10.9	13.4	7.9	7.8	7.9	7.7
Asian or Pacific Islander <sup>5</sup> . . . . .	10.0	8.0	7.5	5.5	5.0	5.2	6.2
Hispanic or Latina <sup>6,7</sup> . . . . .	8.4	9.1	7.0	5.9	5.0	5.3	5.4
Mexican . . . . .	6.9	9.3	6.8	5.7	4.9	5.2	5.4
Puerto Rican . . . . .	9.5	11.1	8.5	6.5	7.2	7.4	7.4
Cuban . . . . .	*6.9	*9.2	*8.0	*	*	*	*
Central and South American . . . . .	8.7	7.5	6.5	6.1	4.2	4.6	4.8
Other and unknown Hispanic or Latina . . . . .	8.8	8.3	7.4	6.5	5.8	5.8	5.3
Not Hispanic or Latina: <sup>7</sup>							
White . . . . .	8.7	8.2	7.1	6.5	6.3	6.4	7.1
Black or African American . . . . .	17.8	18.3	16.1	14.8	13.5	13.8	14.2
13 years or more of education							
All mothers . . . . .	8.1	7.7	6.4	5.4	5.0	5.0	5.0
White . . . . .	7.2	6.6	5.4	4.7	4.2	4.2	4.2
Black or African American . . . . .	15.3	15.8	13.7	11.9	11.4	11.8	11.1
American Indian or Alaska Native . . . . .	12.5	*8.5	6.8	5.9	6.7	6.1	6.4
Asian or Pacific Islander <sup>5</sup> . . . . .	6.6	6.2	5.1	4.4	3.9	3.8	3.8
Hispanic or Latina <sup>6,7</sup> . . . . .	9.0	6.4	5.7	5.0	4.5	4.8	4.6
Mexican . . . . .	*8.3	*5.8	5.5	5.2	4.5	4.7	4.5
Puerto Rican . . . . .	10.9	*7.1	7.3	6.3	6.5	6.8	5.7
Cuban . . . . .	*	*6.3	*5.3	*5.3	*4.9	*	*
Central and South American . . . . .	*7.1	*6.6	5.6	3.7	3.7	4.5	4.1
Other and unknown Hispanic or Latina . . . . .	11.6	*6.2	5.4	5.2	4.2	*3.4	4.8
Not Hispanic or Latina: <sup>7</sup>							
White . . . . .	7.0	6.6	5.4	4.6	4.2	4.1	4.1
Black or African American . . . . .	14.8	15.1	13.7	12.0	11.5	12.0	11.4

See footnotes at end of table.

**Table 19 (page 2 of 2). Infant mortality rates among mothers 20 years of age and over, by education, detailed race, and Hispanic origin of mother: United States, selected years 1983–2005**

[Data are based on linked birth and death certificates for infants]

Education, race, and Hispanic origin of mother	Average annual mortality rate					37 states, DC, and NYC
	1983–1985 <sup>1</sup>	1986–1988 <sup>1</sup>	1989–1991 <sup>1</sup>	1995–1997 <sup>2</sup>	1999–2001 <sup>2</sup>	2003–2005 <sup>2,3</sup>
Infant deaths per 1,000 live births						
Less than 12 years of education						
All mothers . . . . .	14.6	13.8	11.1	8.6	7.9	7.7
White . . . . .	12.4	11.4	9.2	7.3	6.7	6.6
Black or African American . . . . .	21.8	21.1	20.3	16.0	14.5	14.3
American Indian or Alaska Native . . . . .	15.2	16.8	13.8	11.4	11.3	10.1
Asian or Pacific Islander <sup>5</sup> . . . . .	9.5	8.2	6.9	5.8	5.6	5.9
Hispanic or Latina <sup>6,7</sup> . . . . .	10.6	9.9	7.5	5.8	5.3	5.4
Mexican . . . . .	9.5	8.3	7.1	5.6	5.2	5.3
Puerto Rican . . . . .	14.1	12.8	11.7	9.5	8.9	8.8
Cuban . . . . .	*10.5	*9.4	*8.2	*6.7	*	*
Central and South American . . . . .	8.6	9.2	6.8	5.4	4.8	4.8
Other and unknown Hispanic or Latina . . . . .	10.1	10.6	10.0	7.0	6.8	6.6
Not Hispanic or Latina: <sup>7</sup>						
White . . . . .	12.6	11.8	11.0	9.6	9.1	9.1
Black or African American . . . . .	22.6	21.6	20.6	16.3	14.8	15.1
12 years of education						
All mothers . . . . .	10.0	9.6	8.9	7.6	7.3	7.6
White . . . . .	8.5	8.0	7.2	6.3	6.0	6.3
Black or African American . . . . .	17.7	17.1	16.4	14.1	13.4	13.6
American Indian or Alaska Native . . . . .	13.4	11.6	12.3	8.5	8.8	8.2
Asian or Pacific Islander <sup>5</sup> . . . . .	9.3	7.9	7.5	5.6	5.5	5.8
Hispanic or Latina <sup>6,7</sup> . . . . .	9.1	8.3	6.8	5.8	5.1	5.4
Mexican . . . . .	7.8	8.2	6.5	5.6	4.9	5.3
Puerto Rican . . . . .	10.8	10.1	8.6	7.6	8.1	7.4
Cuban . . . . .	8.6	6.6	7.6	5.4	*3.5	*
Central and South American . . . . .	8.7	7.4	6.3	5.5	4.6	4.9
Other and unknown Hispanic or Latina . . . . .	8.8	7.7	7.0	6.6	6.0	5.6
Not Hispanic or Latina: <sup>7</sup>						
White . . . . .	8.3	7.9	7.3	6.4	6.2	6.6
Black or African American . . . . .	17.9	17.4	16.5	14.2	13.6	13.9
13 years or more of education						
All mothers . . . . .	7.8	7.2	6.4	5.3	5.1	5.0
White . . . . .	6.9	6.2	5.5	4.5	4.3	4.2
Black or African American . . . . .	15.3	14.9	13.7	11.6	11.5	11.4
American Indian or Alaska Native . . . . .	10.4	8.4	8.1	6.6	6.9	6.5
Asian or Pacific Islander <sup>5</sup> . . . . .	6.7	5.9	5.1	4.1	3.9	3.8
Hispanic or Latina <sup>6,7</sup> . . . . .	7.4	7.0	5.8	5.0	4.6	4.7
Mexican . . . . .	7.6	6.4	5.7	5.1	4.7	4.7
Puerto Rican . . . . .	8.1	6.9	7.8	6.4	6.2	6.4
Cuban . . . . .	5.5	5.9	4.2	4.3	4.4	*5.3
Central and South American . . . . .	7.2	7.6	5.4	4.0	3.9	4.2
Other and unknown Hispanic or Latina . . . . .	7.9	7.5	5.6	5.3	4.2	4.6
Not Hispanic or Latina: <sup>7</sup>						
White . . . . .	6.8	6.1	5.4	4.5	4.2	4.2
Black or African American . . . . .	14.7	14.9	13.8	11.7	11.6	11.5

\* Estimates are considered unreliable. Rates preceded by an asterisk are based on fewer than 50 deaths in the numerator. Rates not shown are based on fewer than 20 deaths in the numerator.

<sup>1</sup>Rates based on unweighted birth cohort data.

<sup>2</sup>Rates based on a period file using weighted data. See [Appendix I, National Vital Statistics System \(NVSS\), Linked Birth/Infant Death Data Set](#).

<sup>3</sup>Data are excluded for states which implemented the 2003 revision of the U.S. Standard Certificate of Live Birth. Maternal education data based on the 2003 revision are not comparable with data based on the 1989 and earlier revisions of the U.S. Standard Certificate of Live Birth. Data for 2004 and 2005 and 2003–2005 exclude Florida, Idaho, Kansas, Kentucky, Nebraska, New Hampshire, New York State (excluding New York City), Pennsylvania, South Carolina, Tennessee, Texas, Vermont, and Washington.

<sup>4</sup>Data for 2004, with 39 reporting areas continuing to use the 1989 revision of the U.S. Standard Certificate of Live Birth in 2005, are presented for comparison with data for 2005.

<sup>5</sup>Asian or Pacific Islander births occurred disproportionately in the states not reporting maternal education on the birth certificate prior to 1992. Starting with 1992 data, maternal education was reported by all 50 states and the District of Columbia. See [Appendix II, Education](#).

<sup>6</sup>Persons of Hispanic origin may be of any race.

<sup>7</sup>Prior to 1995, data shown only for states with an Hispanic-origin item and education of mother on their birth certificates. See [Appendix II, Education; Hispanic origin](#).

NOTES: Infants are under 1 year of age. Prior to 1995, data are shown only for states reporting education of mother on their birth certificates. See [Appendix II, Education](#). The race groups white, black, American Indian or Alaska Native, and Asian or Pacific Islander include persons of Hispanic and non-Hispanic origin. Starting with 2003 data, some states reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). National linked files do not exist for 1992–1994. Some data have been revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Vital Statistics System, Linked Birth/Infant Death Data Set.

**Table 20. Infant mortality rates by birthweight: United States, selected years 1983–2005**

[Data are based on linked birth and death certificates for infants]

<i>Birthweight</i>	1983 <sup>1</sup>	1985 <sup>1</sup>	1990 <sup>1</sup>	1995 <sup>2</sup>	2000 <sup>2</sup>	2003 <sup>2</sup>	2004 <sup>2</sup>	2005 <sup>2</sup>
	Infant deaths per 1,000 live births <sup>3</sup>							
All birthweights . . . . .	10.9	10.4	8.9	7.6	6.9	6.8	6.8	6.9
Less than 2,500 grams . . . . .	95.9	93.9	78.1	65.3	60.2	59.4	57.9	57.6
Less than 1,500 grams . . . . .	400.6	387.7	317.6	270.7	246.9	253.1	245.2	245.7
Less than 500 grams . . . . .	890.3	895.9	898.2	904.9	847.9	866.2	850.1	857.2
500–999 grams . . . . .	584.2	559.2	440.1	351.0	313.8	319.0	314.6	305.1
1,000–1,499 grams . . . . .	162.3	145.4	97.9	69.6	60.9	56.9	55.7	58.1
1,500–1,999 grams . . . . .	58.4	54.0	43.8	33.5	28.7	28.0	27.4	27.0
2,000–2,499 grams . . . . .	22.5	20.9	17.8	13.7	11.9	11.0	11.1	10.9
2,500 grams or more . . . . .	4.7	4.3	3.7	3.0	2.5	2.3	2.3	2.3
2,500–2,999 grams . . . . .	8.8	7.9	6.7	5.5	4.6	4.1	4.2	4.2
3,000–3,499 grams . . . . .	4.4	4.3	3.7	2.9	2.4	2.2	2.1	2.2
3,500–3,999 grams . . . . .	3.2	3.0	2.6	2.0	1.7	1.6	1.5	1.5
4,000 grams or more . . . . .	3.3	3.2	2.4	2.0	1.6	1.6	1.5	1.6
4,000–4,499 grams . . . . .	2.9	2.9	2.2	1.8	1.5	1.3	1.4	1.5
4,500–4,999 grams . . . . .	3.9	3.8	2.5	2.2	2.1	2.4	1.5	2.2
5,000 grams or more <sup>4</sup> . . . . .	14.4	14.7	9.8	8.5	*6.1	*6.4	*4.9	*4.6

\* Estimates are considered unreliable. Rates preceded by an asterisk are based on fewer than 50 deaths in the numerator.

<sup>1</sup>Rates based on unweighted birth cohort data.

<sup>2</sup>Rates based on a period file using weighted data; unknown birthweight imputed when period of gestation is known and proportionately distributed when period of gestation is unknown. See [Appendix I, National Vital Statistics System \(NVSS\), Linked Birth/Infant Death Data Set](#).

<sup>3</sup>For calculation of birthweight-specific infant mortality rates, unknown birthweight has been distributed in proportion to known birthweight separately for live births (denominator) and infant deaths (numerator).

<sup>4</sup>In 1989, a birthweight-gestational age consistency check instituted for the natality file resulted in a decrease in the number of deaths to infants coded with birthweights of 5,000 grams or more and a discontinuity in the mortality trend for infants weighing 5,000 grams or more at birth. Starting with 1989 data, the rates are believed to be more accurate.

NOTES: National linked files do not exist for 1992–1994. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Vital Statistics System, Linked Birth/Infant Death Data Set.

**Table 21. Infant mortality rates, fetal mortality rates, and perinatal mortality rates, by race: United States, selected years 1950–2005**

[Data are based on death certificates, fetal death records, and birth certificates]

Race and year	Neonatal <sup>1</sup>				Fetal mortality rate <sup>2</sup>	Late fetal mortality rate <sup>3</sup>	Perinatal mortality rate <sup>4</sup>
	Infant <sup>1</sup>	Under 28 days	Under 7 days	Postneonatal <sup>1</sup>			
All races							
Deaths per 1,000 live births							
1950 <sup>5</sup>	29.2	20.5	17.8	8.7	18.4	14.9	32.5
1960 <sup>5</sup>	26.0	18.7	16.7	7.3	15.8	12.1	28.6
1970	20.0	15.1	13.6	4.9	14.0	9.5	23.0
1980	12.6	8.5	7.1	4.1	9.1	6.2	13.2
1990	9.2	5.8	4.8	3.4	7.5	4.3	9.1
1995	7.6	4.9	4.0	2.7	7.0	3.6	7.6
1999	7.1	4.7	3.8	2.3	6.7	3.4	7.1
2000	6.9	4.6	3.7	2.3	6.6	3.3	7.0
2001	6.8	4.5	3.6	2.3	6.5	3.3	6.9
2002	7.0	4.7	3.7	2.3	6.4	3.2	6.9
2003	6.9	4.6	3.7	2.2	6.2	3.0	6.7
2004	6.8	4.5	3.6	2.3	---	---	---
2005	6.9	4.5	3.6	2.3	---	---	---
Race of child: <sup>6</sup> White							
1950 <sup>5</sup>	26.8	19.4	17.1	7.4	16.6	13.3	30.1
1960 <sup>5</sup>	22.9	17.2	15.6	5.7	13.9	10.8	26.2
1970	17.8	13.8	12.5	4.0	12.3	8.6	21.0
1980	11.0	7.5	6.2	3.5	8.1	5.7	11.9
Race of mother: <sup>7</sup> White							
1980	10.9	7.4	6.1	3.5	8.1	5.7	11.8
1990	7.6	4.8	3.9	2.8	6.4	3.8	7.7
1995	6.3	4.1	3.3	2.2	5.9	3.3	6.5
1999	5.8	3.9	3.1	1.9	5.7	3.0	6.1
2000	5.7	3.8	3.0	1.9	5.6	2.9	5.9
2001	5.7	3.8	3.0	1.9	5.5	2.9	5.9
2002	5.8	3.9	3.1	1.9	5.5	2.8	5.9
2003	5.7	3.9	3.1	1.8	5.2	2.7	5.8
2004	5.7	3.8	3.0	1.9	---	---	---
2005	5.7	3.8	3.0	1.9	---	---	---
Race of child: <sup>6</sup> Black or African American							
1950 <sup>5</sup>	43.9	27.8	23.0	16.1	32.1	---	---
1960 <sup>5</sup>	44.3	27.8	23.7	16.5	---	---	---
1970	32.6	22.8	20.3	9.9	23.2	---	34.5
1980	21.4	14.1	11.9	7.3	14.4	8.9	20.7
Race of mother: <sup>7</sup> Black or African American							
1980	22.2	14.6	12.3	7.6	14.7	9.1	21.3
1990	18.0	11.6	9.7	6.4	13.3	6.7	16.4
1995	15.1	9.8	8.2	5.3	12.7	5.7	13.8
1999	14.6	9.8	7.9	4.8	12.6	5.4	13.2
2000	14.1	9.4	7.6	4.7	12.4	5.4	13.0
2001	14.0	9.2	7.6	4.8	12.1	5.3	12.8
2002	14.4	9.5	7.8	4.8	11.9	5.2	12.8
2003	14.0	9.4	7.5	4.6	12.0	5.1	12.4
2004	13.8	9.1	7.3	4.7	---	---	---
2005	13.7	9.1	7.3	4.7	---	---	---

--- Data not available.

<sup>1</sup>Infant (under 1 year of age), neonatal (under 28 days), early neonatal (under 7 days), and postneonatal (28 days–11 months).

<sup>2</sup>Number of fetal deaths of 20 weeks or more gestation per 1,000 live births plus fetal deaths.

<sup>3</sup>Number of fetal deaths of 28 weeks or more gestation (late fetal deaths) per 1,000 live births plus late fetal deaths.

<sup>4</sup>Number of late fetal deaths plus infant deaths within 7 days of birth per 1,000 live births plus late fetal deaths.

<sup>5</sup>Includes births and deaths of persons who were not residents of the 50 states and the District of Columbia.

<sup>6</sup>Infant deaths, live births, and fetal deaths are tabulated by race of child. See [Appendix II, Race](#).

<sup>7</sup>Infant deaths are tabulated by race of decedent; fetal deaths and live births are tabulated by race of mother. See [Appendix II, Race](#).

NOTES: Infant mortality rates in this table are based on infant deaths from the mortality file (numerator) and live births from the natality file (denominator).

Inconsistencies in reporting race for the same infant between the birth and death certificate can result in underestimated infant mortality rates for races other than white or black. Infant mortality rates for minority population groups are available from the Linked Birth/Infant Death Data Set and are presented in Tables 19–20 and 23–24.

Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System: Kung H-C, Hoyert DL, Xu JQ, Murphy SL. Deaths: Final data for 2005. National vital statistics reports, vol 56 no 10. Hyattsville, MD: NCHS. 2008 and unpublished numbers.

**Table 22 (page 1 of 3). Infant mortality rates, by race and Hispanic origin of mother, geographic division, and state: United States, average annual 1989–1991, 2000–2002, and 2003–2005**

[Data are based on linked birth and death certificates for infants]

Geographic division and state	Not Hispanic or Latina								
	All races			White			Black or African American		
	1989–1991 <sup>1</sup>	2000–2002 <sup>2</sup>	2003–2005 <sup>2</sup>	1989–1991 <sup>1</sup>	2000–2002 <sup>2</sup>	2003–2005 <sup>2</sup>	1989–1991 <sup>1</sup>	2000–2002 <sup>2</sup>	2003–2005 <sup>2</sup>
	Infant <sup>3</sup> deaths per 1,000 live births								
United States . . . . .	9.0	6.9	6.8	7.3	5.7	5.7	17.2	13.6	13.6
New England <sup>4</sup> . . . . .	7.3	5.4	5.3	6.2	4.5	4.3	15.1	12.1	11.1
Connecticut . . . . .	7.9	6.4	5.5	5.9	4.9	3.9	17.0	14.3	12.7
Maine . . . . .	6.6	5.1	5.9	6.2	5.0	5.8	*	*	*
Massachusetts . . . . .	7.0	4.8	4.9	5.9	4.0	4.0	14.2	10.5	10.0
New Hampshire <sup>4</sup> . . . . .	7.1	4.9	5.0	7.2	4.5	4.8	*	*	*
Rhode Island . . . . .	8.7	6.7	6.2	7.5	5.3	4.5	*13.6	*12.6	*10.8
Vermont . . . . .	6.6	5.5	5.4	6.3	5.5	5.3	*	*	*
Middle Atlantic . . . . .	9.2	6.4	6.3	6.6	5.0	4.9	18.5	12.5	12.2
New Jersey . . . . .	8.4	6.1	5.4	6.1	4.0	3.7	17.8	13.6	11.9
New York . . . . .	9.5	6.1	6.0	6.3	4.8	4.6	18.4	11.2	11.8
Pennsylvania . . . . .	9.2	7.3	7.3	7.2	5.9	5.8	19.1	14.4	13.6
East North Central . . . . .	9.8	7.7	7.6	7.7	6.2	6.2	19.1	15.9	15.7
Illinois . . . . .	10.7	7.8	7.5	7.6	5.9	5.9	20.5	15.8	15.3
Indiana . . . . .	9.4	7.7	7.9	8.4	7.0	7.1	17.3	13.9	15.1
Michigan . . . . .	10.5	8.1	8.0	7.7	6.0	6.2	20.7	16.9	16.4
Ohio . . . . .	9.0	7.7	7.8	7.7	6.3	6.4	16.2	15.3	15.6
Wisconsin . . . . .	8.4	6.9	6.3	7.4	5.6	5.1	17.0	17.9	16.4
West North Central . . . . .	8.5	6.6	6.3	7.4	5.8	5.6	17.5	14.1	12.5
Iowa . . . . .	8.2	5.8	5.4	7.8	5.5	5.1	15.8	*11.4	*11.0
Kansas . . . . .	8.5	7.0	7.1	7.8	6.4	6.7	15.4	14.7	14.3
Minnesota . . . . .	7.3	5.5	4.8	6.4	4.7	4.3	18.5	10.8	8.9
Missouri . . . . .	9.7	7.7	7.6	8.0	6.3	6.6	18.0	15.6	13.8
Nebraska . . . . .	8.1	7.0	5.9	7.2	6.2	5.1	18.3	15.0	14.0
North Dakota . . . . .	8.0	7.8	6.4	7.3	6.8	6.0	*	*	*
South Dakota . . . . .	9.5	6.4	7.2	7.5	5.4	6.2	*	*	*
South Atlantic . . . . .	10.4	8.0	8.0	7.6	6.0	6.0	17.2	13.7	13.9
Delaware . . . . .	11.2	9.6	9.0	8.2	7.9	6.5	20.1	14.9	16.8
District of Columbia . . . . .	20.3	11.4	12.2	*8.2	*	*3.4	23.9	15.3	17.2
Florida . . . . .	9.4	7.2	7.2	7.2	5.7	5.8	16.2	13.0	12.9
Georgia . . . . .	11.9	8.7	8.4	8.4	6.3	6.1	17.9	13.4	13.3
Maryland . . . . .	9.1	7.7	8.0	6.3	5.3	5.2	15.0	12.7	13.7
North Carolina . . . . .	10.7	8.4	8.6	8.0	6.4	6.3	16.9	15.1	15.8
South Carolina . . . . .	11.8	9.0	9.0	8.4	6.0	6.4	17.2	14.9	14.2
Virginia . . . . .	9.9	7.2	7.5	7.4	5.5	6.0	18.0	13.6	13.7
West Virginia . . . . .	9.1	7.9	7.7	8.8	7.7	7.5	*15.7	*11.7	*12.0
East South Central . . . . .	10.4	8.8	8.7	8.1	6.8	6.8	16.5	15.0	14.8
Alabama . . . . .	11.4	9.3	9.0	8.6	6.8	6.8	16.8	14.7	13.6
Kentucky . . . . .	8.7	6.7	6.8	8.1	6.4	6.4	14.4	10.8	10.9
Mississippi . . . . .	11.5	10.5	10.7	7.9	7.0	7.0	15.2	14.7	15.6
Tennessee . . . . .	10.2	9.0	8.9	7.8	7.0	7.0	18.2	17.0	16.3
West South Central <sup>4</sup> . . . . .	8.4	6.8	7.1	7.2	6.2	6.5	14.2	12.3	13.0
Arkansas . . . . .	9.8	8.3	8.3	8.1	7.5	7.2	15.2	12.8	13.6
Louisiana <sup>4</sup> . . . . .	10.2	9.8	9.8	7.5	6.9	7.1	14.3	13.7	13.9
Oklahoma <sup>4</sup> . . . . .	8.0	8.0	7.9	7.3	7.4	7.5	12.7	14.5	13.0
Texas . . . . .	7.9	5.9	6.5	6.9	5.5	5.9	14.1	11.1	12.4
Mountain . . . . .	8.4	6.2	6.1	7.9	5.7	5.5	16.9	13.5	12.9
Arizona . . . . .	8.8	6.7	6.7	8.2	6.5	6.0	17.3	14.4	11.2
Colorado . . . . .	8.7	6.0	6.3	8.0	5.2	5.2	16.7	13.7	16.3
Idaho . . . . .	8.9	6.6	6.1	8.9	6.2	6.1	*	*	*
Montana . . . . .	9.0	6.9	6.3	8.0	6.4	5.7	*	*	*
Nevada . . . . .	8.6	6.0	5.9	7.8	5.1	5.6	16.9	13.7	12.2
New Mexico . . . . .	8.4	6.4	6.1	8.1	6.0	6.9	*17.2	*15.8	*
Utah . . . . .	7.0	5.3	4.9	6.8	5.0	4.5	*	*	*
Wyoming . . . . .	8.4	6.5	6.9	8.0	6.3	6.8	*	*	*
Pacific . . . . .	7.7	5.5	5.3	7.0	4.9	4.8	15.4	11.2	11.1
Alaska . . . . .	9.2	6.8	6.5	7.2	5.1	5.3	*	*	*
California . . . . .	7.6	5.4	5.2	6.9	4.7	4.6	15.4	11.4	11.4
Hawaii . . . . .	7.0	7.2	6.7	5.5	6.3	3.9	*13.6	*	*15.5
Oregon . . . . .	8.0	5.5	5.7	7.4	5.6	5.5	21.3	*10.4	*8.6
Washington . . . . .	8.0	5.5	5.4	7.4	5.2	5.0	15.1	9.5	9.0

See footnotes at end of table.

**Table 22 (page 2 of 3). Infant mortality rates, by race and Hispanic origin of mother, geographic division, and state: United States, average annual 1989–1991, 2000–2002, and 2003–2005**

[Data are based on linked birth and death certificates for infants]

Geographic division and state	Hispanic or Latina <sup>5</sup>			American Indian or Alaska Native <sup>6</sup>			Asian or Pacific Islander <sup>6</sup>		
	1989–1991 <sup>1</sup>	2000–2002 <sup>2</sup>	2003–2005 <sup>2</sup>	1989–1991 <sup>1</sup>	2000–2002 <sup>2</sup>	2003–2005 <sup>2</sup>	1989–1991 <sup>1</sup>	2000–2002 <sup>2</sup>	2003–2005 <sup>2</sup>
	Infant <sup>3</sup> deaths per 1,000 live births								
United States . . . . .	7.5	5.5	5.6	12.6	8.9	8.4	6.6	4.8	4.8
New England <sup>7</sup> . . . . .	8.1	6.5	6.9	*	*	*	5.8	3.9	4.1
Connecticut . . . . .	7.9	7.1	7.4	*	*	*	*	*3.7	*
Maine . . . . .	*	*	*	*	*	*	*	*	*
Massachusetts . . . . .	8.3	6.0	6.5	*	*	*	5.7	3.7	3.8
New Hampshire <sup>7</sup> . . . . .	---	*	*	*	*	*	*	*	*
Rhode Island . . . . .	*7.2	8.0	7.4	*	*	*	*	*	*
Vermont . . . . .	*	*	*	*	*	*	*	*	*
Middle Atlantic . . . . .	9.1	6.0	5.7	*11.6	*7.9	*9.9	6.4	3.4	4.4
New Jersey . . . . .	7.5	6.3	5.2	*	*	*	5.6	3.3	5.0
New York . . . . .	9.4	5.5	5.5	*15.2	*	*	6.4	3.4	3.9
Pennsylvania . . . . .	10.9	8.6	7.6	*	*	*	7.8	*4.0	4.9
East North Central . . . . .	8.7	6.5	6.4	11.6	9.7	7.4	6.1	5.6	4.9
Illinois . . . . .	9.2	6.4	6.2	*	*	*	6.0	6.5	4.5
Indiana . . . . .	*7.2	6.4	6.8	*	*	*	*	*	*
Michigan . . . . .	7.9	6.7	7.6	*10.7	*	*	*6.1	4.9	5.1
Ohio . . . . .	8.0	7.6	6.5	*	*	*	*4.8	*4.8	*4.5
Wisconsin . . . . .	*7.3	6.2	6.1	*11.9	*11.5	*8.2	*6.7	*5.2	*6.6
West North Central . . . . .	9.3	7.0	5.5	17.1	10.9	9.8	7.4	5.6	4.8
Iowa . . . . .	*11.9	*6.7	*5.2	*	*	*	*	*	*
Kansas . . . . .	8.7	7.1	6.2	*	*	*	*	*	*5.6
Minnesota . . . . .	*8.4	6.5	4.3	17.3	*10.3	*8.6	*5.1	6.1	3.8
Missouri . . . . .	*9.1	7.2	6.6	*	*	*	*9.1	*4.5	*6.1
Nebraska . . . . .	*8.8	7.2	5.7	*18.2	*15.8	*	*	*	*
North Dakota . . . . .	*	*	*	*13.8	*13.4	*8.6	*	*	*
South Dakota . . . . .	*	*	*	19.9	11.6	12.7	*	*	*
South Atlantic . . . . .	7.4	5.4	5.6	12.7	8.5	8.5	6.8	5.3	5.3
Delaware . . . . .	*	*7.9	*6.1	*	*	*	*	*	*
District of Columbia . . . . .	*8.8	*7.5	*7.2	*	*	*	*	*	*
Florida . . . . .	7.1	5.2	5.2	*	*5.8	*	*6.2	5.1	5.9
Georgia . . . . .	9.0	6.0	5.5	*	*	*	*8.2	6.8	5.8
Maryland . . . . .	7.2	5.7	5.8	*	*	*	7.5	*4.5	4.3
North Carolina . . . . .	*7.5	5.6	6.6	12.2	10.6	10.2	*6.3	5.9	5.9
South Carolina . . . . .	*	*4.6	7.3	*	*	*	*	*	*
Virginia . . . . .	7.6	4.8	5.4	*	*	*	6.0	4.6	4.5
West Virginia . . . . .	*	*	*	*	*	*	*	*	*
East South Central . . . . .	*5.9	6.2	6.9	*	*10.1	*13.3	*7.7	*5.4	6.4
Alabama . . . . .	*	*7.0	7.7	*	*	*	*	*	*
Kentucky . . . . .	*	*4.8	7.6	*	*	*	*	*	*
Mississippi . . . . .	*	*	*	*	*	*	*	*	*
Tennessee . . . . .	*	6.2	6.5	*	*	*	*	*	*8.1
West South Central <sup>7</sup> . . . . .	7.0	5.1	5.6	8.4	7.5	7.2	6.7	4.4	4.5
Arkansas . . . . .	*	*4.5	6.0	*	*	*	*	*	*
Louisiana <sup>7</sup> . . . . .	---	*6.0	*5.7	*	*	*	*	*8.1	*
Oklahoma <sup>7</sup> . . . . .	---	5.7	6.0	7.8	7.6	7.9	*	*	*
Texas . . . . .	7.0	5.1	5.6	*	*	*	6.8	4.0	4.3
Mountain . . . . .	7.9	6.2	6.2	11.6	8.6	8.2	8.1	5.9	6.2
Arizona . . . . .	8.0	6.0	6.7	11.4	9.4	8.3	*8.5	*5.3	6.7
Colorado . . . . .	8.5	6.2	7.0	*16.5	*11.8	*	*7.8	*6.2	*5.7
Idaho . . . . .	*7.2	8.8	6.2	*	*	*	*	*	*
Montana . . . . .	*	*	*	16.7	*9.9	*9.3	*	*	*
Nevada . . . . .	7.0	5.1	4.5	*	*	*	*	*4.7	*5.8
New Mexico . . . . .	7.8	6.3	5.3	9.8	6.8	7.6	*	*	*
Utah . . . . .	*7.0	6.5	5.8	*10.0	*	*	*10.7	*8.4	*7.7
Wyoming . . . . .	*	*	*	*	*	*	*	*	*
Pacific . . . . .	7.1	5.1	5.0	14.6	9.3	8.3	6.5	4.9	4.7
Alaska . . . . .	*	*	*	15.7	11.2	9.2	*	*	*
California . . . . .	7.0	5.1	5.0	11.0	7.6	6.2	6.4	4.5	4.2
Hawaii . . . . .	10.7	*6.0	7.9	*	*	*	7.1	7.3	7.2
Oregon . . . . .	8.5	5.1	5.5	*15.7	*	*11.0	*8.4	*3.7	*5.8
Washington . . . . .	7.6	5.1	4.9	19.6	10.6	9.5	6.2	4.8	4.8

See footnotes at end of table.

**Table 22 (page 3 of 3). Infant mortality rates, by race and Hispanic origin of mother, geographic division, and state: United States, average annual 1989–1991, 2000–2002, and 2003–2005**

[Data are based on linked birth and death certificates for infants]

\* Estimates are considered unreliable. Rates preceded by an asterisk are based on fewer than 50 deaths in the numerator. Rates not shown are based on fewer than 20 deaths in the numerator.

- - - Data not available.

<sup>1</sup>Rates based on unweighted birth cohort data.

<sup>2</sup>Rates based on period file using weighted data. See [Appendix I, National Vital Statistics System \(NVSS\), Linked Birth/Infant Death Data Set](#).

<sup>3</sup>Under 1 year of age.

<sup>4</sup>Rates for white and black are substituted for non-Hispanic white and non-Hispanic black for Louisiana for 1989, Oklahoma for 1989–1990, and New Hampshire for 1989–1991.

<sup>5</sup>Persons of Hispanic origin may be of any race. See [Appendix II, Hispanic origin](#).

<sup>6</sup>Includes persons of Hispanic origin.

<sup>7</sup>Rates for Hispanic origin exclude data from states not reporting Hispanic origin on the birth certificate for 1 or more years in a 3-year period.

NOTES: Starting with 2003 data, some states reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). National linked files do not exist for 1992–1994.

SOURCE: CDC/NCHS, National Vital Statistics System, Linked Birth/Infant Death Data Set.

**Table 23 (page 1 of 3). Neonatal mortality rates, by race and Hispanic origin of mother, geographic division, and state: United States, average annual 1989–1991, 2000–2002, and 2003–2005**

[Data are based on linked birth and death certificates for infants]

Geographic division and state	Not Hispanic or Latina								
	All races			White			Black or African American		
	1989–1991 <sup>1</sup>	2000–2002 <sup>2</sup>	2003–2005 <sup>2</sup>	1989–1991 <sup>1</sup>	2000–2002 <sup>2</sup>	2003–2005 <sup>2</sup>	1989–1991 <sup>1</sup>	2000–2002 <sup>2</sup>	2003–2005 <sup>2</sup>
	Neonatal <sup>3</sup> deaths per 1,000 live births								
United States . . . . .	5.7	4.6	4.6	4.6	3.8	3.7	11.1	9.2	9.2
New England <sup>4</sup> . . . . .	5.1	4.0	3.9	4.2	3.3	3.2	11.0	9.0	7.9
Connecticut . . . . .	5.7	4.8	4.0	4.2	3.8	2.8	12.5	10.1	8.3
Maine . . . . .	4.5	3.8	4.4	4.2	3.7	4.3	*	*	*
Massachusetts . . . . .	4.9	3.7	3.7	4.1	3.0	3.0	10.4	8.0	7.5
New Hampshire <sup>4</sup> . . . . .	4.3	3.4	3.9	4.4	3.1	3.6	*	*	*
Rhode Island . . . . .	6.4	5.1	4.8	5.3	3.8	3.5	*9.8	*10.2	*7.6
Vermont . . . . .	4.1	3.5	3.8	3.9	3.6	3.7	*	*	*
Middle Atlantic . . . . .	6.3	4.5	4.4	4.6	3.6	3.5	12.3	8.6	8.4
New Jersey . . . . .	5.8	4.3	3.8	4.5	2.9	2.6	11.4	9.3	8.2
New York . . . . .	6.5	4.3	4.2	4.3	3.4	3.4	12.6	7.8	8.0
Pennsylvania . . . . .	6.2	5.2	5.2	4.9	4.3	4.0	12.5	9.6	9.5
East North Central . . . . .	6.3	5.3	5.2	4.9	4.2	4.2	12.1	10.4	10.7
Illinois . . . . .	7.0	5.3	5.1	5.1	4.2	4.1	12.7	10.0	10.0
Indiana . . . . .	6.0	5.1	5.3	5.2	4.6	4.6	11.5	8.6	10.7
Michigan . . . . .	6.9	5.6	5.6	4.9	4.2	4.3	14.0	11.4	11.6
Ohio . . . . .	5.5	5.3	5.3	4.8	4.2	4.2	9.8	10.4	10.7
Wisconsin . . . . .	5.1	4.6	4.3	4.6	3.9	3.5	9.1	11.3	10.3
West North Central . . . . .	5.0	4.3	4.1	4.5	3.7	3.7	10.2	9.6	8.3
Iowa . . . . .	4.8	3.7	3.4	4.5	3.5	3.2	*10.5	*8.4	*6.4
Kansas . . . . .	4.9	4.6	4.6	4.6	4.0	4.4	8.3	10.3	9.6
Minnesota . . . . .	4.3	3.6	3.2	3.9	3.2	2.9	10.7	6.4	5.5
Missouri . . . . .	6.0	5.1	5.1	5.0	4.1	4.4	10.6	10.7	9.4
Nebraska . . . . .	4.5	4.8	3.7	4.2	4.3	3.3	*9.8	*10.9	*9.4
North Dakota . . . . .	5.0	5.1	4.8	4.7	4.5	4.5	*	*	*
South Dakota . . . . .	5.1	3.4	4.3	4.5	3.0	4.1	*	*	*
South Atlantic . . . . .	6.9	5.5	5.4	4.9	4.0	3.9	11.7	9.6	9.6
Delaware . . . . .	7.5	7.0	6.4	5.8	5.8	4.5	12.4	11.1	12.1
District of Columbia . . . . .	14.1	8.3	8.6	*5.2	*	*	16.7	10.9	11.9
Florida . . . . .	6.2	4.8	4.7	4.7	3.6	3.5	10.5	8.7	8.4
Georgia . . . . .	7.9	5.8	5.6	5.5	4.1	3.9	12.0	9.2	9.2
Maryland . . . . .	5.9	5.6	5.8	3.9	3.8	3.7	10.2	9.2	10.1
North Carolina . . . . .	7.3	5.9	6.0	5.3	4.4	4.2	11.9	11.0	11.4
South Carolina . . . . .	7.7	6.2	6.1	5.4	3.9	4.2	11.3	10.6	9.8
Virginia . . . . .	6.8	4.9	5.2	4.8	3.6	3.9	13.0	9.6	9.6
West Virginia . . . . .	5.8	5.1	4.8	5.6	5.0	4.7	*9.7	*9.8	*
East South Central . . . . .	6.6	5.6	5.3	5.0	4.2	3.8	10.6	9.8	9.7
Alabama . . . . .	7.5	5.9	5.4	5.7	4.2	4.0	11.1	9.4	8.5
Kentucky . . . . .	5.0	4.2	4.0	4.6	4.0	3.7	8.9	6.3	7.0
Mississippi . . . . .	7.1	6.6	6.2	4.9	4.2	3.5	9.5	9.5	9.7
Tennessee . . . . .	6.5	5.8	5.7	4.9	4.3	4.0	11.8	11.4	11.7
West South Central <sup>4</sup> . . . . .	5.0	4.2	4.5	4.2	3.7	3.9	8.4	7.7	8.3
Arkansas . . . . .	5.4	4.9	5.1	4.5	4.2	4.3	8.5	8.1	8.9
Louisiana <sup>4</sup> . . . . .	6.3	6.3	5.8	4.8	4.3	4.0	8.5	8.9	8.5
Oklahoma <sup>4</sup> . . . . .	4.4	4.8	4.6	4.1	4.6	4.3	6.3	8.5	8.8
Texas . . . . .	4.7	3.6	4.2	4.1	3.3	3.7	8.5	6.7	8.0
Mountain . . . . .	4.8	4.1	4.1	4.4	3.7	3.7	10.1	8.9	8.7
Arizona . . . . .	5.3	4.3	4.5	4.9	4.2	4.0	11.0	9.6	7.4
Colorado . . . . .	5.0	4.2	4.6	4.7	3.5	3.8	10.9	10.5	11.9
Idaho . . . . .	5.3	4.5	3.9	5.2	4.1	4.0	*	*	*
Montana . . . . .	4.6	4.5	3.5	4.2	4.3	3.4	*	*	*
Nevada . . . . .	4.3	3.6	3.7	3.8	2.9	3.6	*8.3	7.4	7.7
New Mexico . . . . .	5.0	4.0	3.6	4.8	3.5	4.1	*	*	*
Utah . . . . .	3.7	3.5	3.4	3.6	3.4	3.1	*	*	*
Wyoming . . . . .	3.9	4.3	4.6	3.8	4.3	4.6	*	*	*
Pacific . . . . .	4.6	3.6	3.6	4.0	3.2	3.1	9.2	7.2	7.1
Alaska . . . . .	4.1	3.1	3.2	3.7	*2.9	*2.6	*	*	*
California . . . . .	4.6	3.6	3.5	4.1	3.1	3.0	9.2	7.5	7.2
Hawaii . . . . .	4.3	5.0	4.7	3.5	5.3	*3.1	*	*	*
Oregon . . . . .	4.4	3.6	3.8	4.0	3.6	3.7	*11.6	*	*
Washington . . . . .	4.3	3.5	3.4	3.8	3.3	2.9	9.7	6.0	5.6

See footnotes at end of table.



**Table 23 (page 2 of 3). Neonatal mortality rates, by race and Hispanic origin of mother, geographic division, and state: United States, average annual 1989–1991, 2000–2002, and 2003–2005**

[Data are based on linked birth and death certificates for infants]

Geographic division and state	Hispanic or Latina <sup>5</sup>			American Indian or Alaska Native <sup>6</sup>			Asian or Pacific Islander <sup>6</sup>		
	1989–1991 <sup>1</sup>	2000–2002 <sup>2</sup>	2003–2005 <sup>2</sup>	1989–1991 <sup>1</sup>	2000–2002 <sup>2</sup>	2003–2005 <sup>2</sup>	1989–1991 <sup>1</sup>	2000–2002 <sup>2</sup>	2003–2005 <sup>2</sup>
	Neonatal <sup>3</sup> deaths per 1,000 live births								
United States . . . . .	4.8	3.8	3.9	5.9	4.4	4.3	3.9	3.3	3.3
New England <sup>7</sup> . . . . .	5.5	4.9	5.4	*	*	*	4.4	3.1	3.0
Connecticut . . . . .	5.3	5.3	6.1	*	*	*	*	*	*
Maine . . . . .	*	*	*	*	*	*	*	*	*
Massachusetts . . . . .	5.8	4.6	4.9	*	*	*	*3.9	*2.7	*2.8
New Hampshire <sup>7</sup> . . . . .	---	*	*	*	*	*	*	*	*
Rhode Island . . . . .	*4.9	*6.0	*5.8	*	*	*	*	*	*
Vermont . . . . .	*	*	*	*	*	*	*	*	*
Middle Atlantic . . . . .	6.2	4.2	4.0	*	*	*6.0	4.1	2.3	3.1
New Jersey . . . . .	5.1	4.3	3.7	*	*	*	*3.4	2.2	3.4
New York . . . . .	6.4	3.9	3.8	*	*	*	4.1	2.3	2.7
Pennsylvania . . . . .	7.3	5.8	5.5	*	*	*	*5.2	*2.7	3.7
East North Central . . . . .	5.9	4.5	4.5	*6.2	*5.0	*4.0	3.6	4.3	3.7
Illinois . . . . .	6.4	4.4	4.3	*	*	*	3.9	4.8	3.3
Indiana . . . . .	*4.7	4.8	4.9	*	*	*	*	*	*
Michigan . . . . .	5.2	4.7	5.1	*	*	*	*	*3.8	3.7
Ohio . . . . .	*5.4	5.3	4.8	*	*	*	*	*4.0	*3.3
Wisconsin . . . . .	*3.9	4.4	4.4	*	*	*	*	*3.8	*5.3
West North Central . . . . .	5.3	4.9	3.5	6.1	5.3	4.8	4.6	3.9	3.1
Iowa . . . . .	*	*4.9	*3.7	*	*	*	*	*	*
Kansas . . . . .	*5.4	4.9	3.4	*	*	*	*	*	*
Minnesota . . . . .	*	4.6	*2.9	*4.9	*	*	*3.2	*4.2	*2.4
Missouri . . . . .	*	*5.2	4.6	*	*	*	*	*	*4.0
Nebraska . . . . .	*	*4.6	*3.6	*	*	*	*	*	*
North Dakota . . . . .	*	*	*	*	*	*7.5	*	*	*
South Dakota . . . . .	*	*	*	*8.2	*4.7	*5.6	*	*	*
South Atlantic . . . . .	5.2	3.7	3.9	7.4	5.8	6.0	4.6	4.0	3.8
Delaware . . . . .	*	*	*4.4	*	*	*	*	*	*
District of Columbia . . . . .	*	*	*	*	*	*	*	*	*
Florida . . . . .	5.1	3.6	3.5	*	*	*	*4.4	3.8	3.9
Georgia . . . . .	*5.7	4.0	3.8	*	*	*	*5.3	5.4	4.1
Maryland . . . . .	*4.7	4.2	3.8	*	*	*	*4.5	*3.6	*3.4
North Carolina . . . . .	*5.5	3.8	4.7	*7.7	*8.1	*8.2	*	*4.4	*4.4
South Carolina . . . . .	*	*3.6	4.7	*	*	*	*	*	*
Virginia . . . . .	*4.8	3.5	4.0	*	*	*	*4.1	3.2	3.6
West Virginia . . . . .	*	*	*	*	*	*	*	*	*
East South Central . . . . .	*	3.9	4.6	*	*	*	*	*3.6	*3.9
Alabama . . . . .	*	*4.6	*4.4	*	*	*	*	*	*
Kentucky . . . . .	*	*	*5.5	*	*	*	*	*	*
Mississippi . . . . .	*	*	*	*	*	*	*	*	*
Tennessee . . . . .	*	*3.8	5.0	*	*	*	*	*	*4.7
West South Central <sup>7</sup> . . . . .	4.2	3.2	3.8	4.3	3.7	3.4	4.1	2.9	3.0
Arkansas . . . . .	*	*3.1	*3.8	*	*	*	*	*	*
Louisiana <sup>7</sup> . . . . .	---	*	*	*	*	*	*	*7.1	*
Oklahoma <sup>7</sup> . . . . .	---	*3.3	4.0	*3.7	3.9	3.6	*	*	*
Texas . . . . .	4.2	3.2	3.8	*	*	*	4.0	2.5	2.8
Mountain . . . . .	4.7	4.2	4.3	5.8	4.3	3.9	4.6	3.7	4.2
Arizona . . . . .	5.0	4.1	4.8	5.4	4.4	4.2	*	*	*4.3
Colorado . . . . .	4.4	4.6	5.3	*	*	*	*	*4.7	*4.0
Idaho . . . . .	*	6.8	*3.8	*	*	*	*	*	*
Montana . . . . .	*	*	*	*7.6	*5.9	*	*	*	*
Nevada . . . . .	*4.1	3.3	2.6	*	*	*	*	*	*4.0
New Mexico . . . . .	4.9	4.3	3.3	4.9	*3.5	*3.5	*	*	*
Utah . . . . .	*3.6	4.1	4.2	*	*	*	*	*5.0	*5.3
Wyoming . . . . .	*	*	*	*	*	*	*	*	*
Pacific . . . . .	4.5	3.5	3.5	6.5	4.1	4.0	3.7	3.3	3.2
Alaska . . . . .	*	*	*	*5.7	*3.9	*4.2	*	*	*
California . . . . .	4.4	3.5	3.5	6.3	*4.0	*3.1	3.6	3.0	2.9
Hawaii . . . . .	*6.6	*3.8	*5.7	*	*	*	4.2	4.9	4.8
Oregon . . . . .	6.5	3.6	3.8	*	*	*	*5.3	*	*3.9
Washington . . . . .	4.9	3.2	3.7	*8.5	*4.1	*4.6	*2.7	3.2	2.9

See footnotes at end of table.

**Table 23 (page 3 of 3). Neonatal mortality rates, by race and Hispanic origin of mother, geographic division, and state: United States, average annual 1989–1991, 2000–2002, and 2003–2005**

[Data are based on linked birth and death certificates for infants]

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\* Estimates are considered unreliable. Rates preceded by an asterisk are based on fewer than 50 deaths in the numerator. Rates not shown are based on fewer than 20 deaths in the numerator.

- - - Data not available.

<sup>1</sup>Rates based on unweighted birth cohort data.

<sup>2</sup>Rates based on period file using weighted data. See [Appendix I, National Vital Statistics System \(NVSS\), Linked Birth/Infant Death Data Set](#).

<sup>3</sup>Infants under 28 days of age.

<sup>4</sup>Rates for white and black are substituted for non-Hispanic white and non-Hispanic black for Louisiana for 1989, Oklahoma for 1989–1990, and New Hampshire for 1989–1991.

<sup>5</sup>Persons of Hispanic origin may be of any race. See [Appendix II, Hispanic origin](#).

<sup>6</sup>Includes persons of Hispanic origin.

<sup>7</sup>Rates for Hispanic origin exclude data from states not reporting Hispanic origin on the birth certificate for 1 or more years in a 3-year period.

NOTES: Starting with 2003 data, some states reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). National linked files do not exist for 1992–1994.

**SOURCE:** CDC/NCHS, National Vital Statistics System, Linked Birth/Infant Death Data Set.

**Table 24. Infant mortality rates and international rankings: Selected countries and territories, selected years 1960–2005**

[Data are based on reporting by countries]

Country <sup>2</sup>	1960	1970	1980	1990	2000	2004	2005	International rankings <sup>1</sup>	
								1960	2005
Infant <sup>3</sup> deaths per 1,000 live births									
Australia . . . . .	20.2	17.9	10.7	8.2	5.2	4.7	5.0	5	21
Austria . . . . .	37.5	25.9	14.3	7.8	4.8	4.5	4.2	24	15
Belgium . . . . .	23.9	21.1	12.1	6.5	4.8	4.3	3.7	11	10
Bulgaria . . . . .	45.1	27.3	20.2	14.8	13.3	11.7	---	30	---
Canada . . . . .	27.3	18.8	10.4	6.8	5.3	5.3	5.4	15	25
Chile . . . . .	120.3	82.2	33.0	16.0	8.9	8.4	7.9	36	32
Costa Rica . . . . .	80.4	67.0	19.9	15.0	10.2	9.3	9.8	35	34
Cuba . . . . .	37.3	38.7	19.6	10.7	7.2	5.8	6.2	23	26
Czech Republic . . . . .	20.0	20.2	16.9	10.8	4.1	3.7	3.4	4	7
Denmark . . . . .	21.5	14.2	8.4	7.5	5.3	4.4	4.4	8	17
England and Wales . . . . .	22.4	18.5	12.0	7.9	5.6	5.0	5.0	9	21
Finland . . . . .	21.0	13.2	7.6	5.6	3.8	3.3	3.0	6	5
France . . . . .	27.7	18.2	10.0	7.3	4.4	3.9	3.6	16	9
Germany <sup>4</sup> . . . . .	35.0	22.5	12.4	7.0	4.4	4.1	3.9	22	12
Greece . . . . .	40.1	29.6	17.9	9.7	5.4	4.1	3.8	25	11
Hong Kong . . . . .	41.5	19.2	11.2	5.9	2.9	2.5	2.4	26	2
Hungary . . . . .	47.6	35.9	23.2	14.8	9.2	6.6	6.2	31	26
Ireland . . . . .	29.3	19.5	11.1	8.2	6.2	4.6	4.0	18	13
Israel <sup>5</sup> . . . . .	31.0	18.9	15.6	9.9	5.4	4.5	4.6	20	18
Italy . . . . .	43.3	29.0	14.6	8.2	4.5	4.1	4.7	27	19
Japan . . . . .	30.7	13.1	7.5	4.6	3.2	2.8	2.8	19	4
Netherlands . . . . .	17.9	12.7	8.6	7.1	5.1	4.4	4.9	2	20
New Zealand . . . . .	22.6	16.7	13.0	8.4	6.1	5.6	5.1	10	23
Northern Ireland . . . . .	27.2	22.9	13.4	7.5	5.1	5.5	6.3	14	28
Norway . . . . .	18.9	12.7	8.1	6.9	3.8	3.2	3.1	3	6
Poland . . . . .	54.8	36.7	25.5	19.3	8.1	6.8	6.4	32	29
Portugal . . . . .	77.5	55.5	24.2	11.0	5.5	3.8	3.5	34	8
Puerto Rico . . . . .	43.3	28.6	19.0	13.4	9.9	8.1	9.3	27	33
Romania . . . . .	75.7	49.4	29.3	26.9	18.6	16.8	15.0	33	36
Russian Federation <sup>6</sup> . . . . .	---	---	22.0	17.6	15.2	11.5	11.0	---	35
Scotland . . . . .	26.4	19.6	12.1	7.7	5.7	4.9	5.2	13	24
Singapore . . . . .	34.8	21.4	11.7	6.7	2.5	2.0	2.1	21	1
Slovakia . . . . .	28.6	25.7	20.9	12.0	8.6	6.8	7.2	17	31
Spain . . . . .	43.7	28.1	12.3	7.6	4.4	4.0	4.1	29	14
Sweden . . . . .	16.6	11.0	6.9	6.0	3.4	3.1	2.4	1	2
Switzerland . . . . .	21.1	15.1	9.1	6.8	4.9	4.2	4.2	7	15
United States . . . . .	26.0	20.0	12.6	9.2	6.9	6.8	6.9	12	30

--- Data not available.

<sup>1</sup>Rankings are from lowest to highest infant mortality rates (IMR). Countries with the same IMR receive the same rank. The country with the next highest IMR is assigned the rank it would have received had the lower-ranked countries not been tied, i.e., skip a rank. Some of the variation in IMRs is due to differences among countries in distinguishing between fetal and infant deaths.

<sup>2</sup>Refers to countries, territories, cities, or geographic areas with at least 1 million population and with complete counts of live births and infant deaths according to the United Nations Demographic Yearbook.

<sup>3</sup>Under 1 year of age.

<sup>4</sup>Rates for 1990 and earlier years were calculated by combining information from the Federal Republic of Germany and the German Democratic Republic.

<sup>5</sup>Includes data for East Jerusalem and Israeli residents in certain other territories under occupation by Israeli military forces since June 1967.

<sup>6</sup>Excludes infants born alive after less than 28 weeks gestation, of less than 1,000 grams in weight and 35 centimeters in length, who die within 7 days of birth.

NOTE: Some rates for selected countries and selected years were revised and differ from previous editions of *Health, United States*. Data for additional years are available. See Appendix III.

**SOURCES:** Organisation for Economic Co-operation and Development (OECD): OECD Health Data 2007, A Comparative Analysis of 30 Countries, [www.oecd.org/els/health/](http://www.oecd.org/els/health/); United Nations: 2000 Demographic Yearbook, United Nations Publication, Sales No. E/F.02.XIII.1, New York, 2002; World Health Organization Statistical Information System (WHOSIS), [www3.who.int/whosis/](http://www3.who.int/whosis/); United States and Puerto Rico: CDC/NCHS. Vital Statistics of the United States, vol. II, mortality part A (selected years). Public Health Service, Washington, DC; Sweden: Statistics Sweden; Costa Rica: Dirección General de Estadísticas y Censos. Elaboración estimación, Centro Centroamericano de Población, Universidad de Costa Rica, <http://ccp.ucr.ac.cr/observa/index1.htm>; Russian Federation: Goskomstat, [www.gks.ru/eng/](http://www.gks.ru/eng/); Israel: Central Bureau Statistics of Israel, [www.cbs.gov.il/engindex.htm](http://www.cbs.gov.il/engindex.htm).

**Table 25 (page 1 of 2). Life expectancy at birth and at 65 years of age, by sex: Selected countries and territories, selected years 1980–2004**

[Data are based on reporting by countries]

Country	Male							Female								
	1980	1990	1995	2000	2002	2004	2004	1980	1990	1995	2000	2002	2004	2004		
At birth	Life expectancy in years							Rank	Life expectancy in years							Rank
Australia . . . . .	71.0	73.9	75.0	76.6	77.4	78.1	5	78.1	80.1	80.8	82.0	82.6	83.0	6		
Austria . . . . .	69.0	72.2	73.3	75.1	75.8	76.4	16	76.1	78.8	79.9	81.1	81.7	82.1	13		
Belgium . . . . .	70.0	72.7	73.4	74.6	75.1	75.6	20	76.8	79.4	80.7	80.9	81.7	81.5	16		
Bulgaria . . . . .	68.5	68.3	67.4	68.5	68.9	69.1	32	73.9	75.0	74.9	75.1	75.6	76.3	33		
Canada . . . . .	71.7	74.4	75.1	76.7	77.2	77.8	7	78.9	80.8	81.1	81.9	82.1	82.6	8		
Chile . . . . .	---	71.1	71.8	72.6	72.9	74.0	28	---	76.9	77.8	78.6	78.9	80.6	24		
Costa Rica . . . . .	71.9	74.7	74.0	75.4	76.2	76.4	16	77.0	79.1	78.6	80.2	81.0	80.7	23		
Cuba . . . . .	72.2	74.6	75.4	74.7	74.7	75.4	21	---	76.9	77.7	79.0	79.2	79.8	27		
Czech Republic <sup>1</sup> . . . . .	66.8	67.6	69.7	71.6	72.1	72.6	29	73.9	75.4	76.6	78.4	78.7	79.0	30		
Denmark . . . . .	71.2	72.0	72.7	74.5	74.8	75.2	23	77.3	77.7	77.8	79.3	79.5	79.9	26		
England and Wales . . . . .	70.8	73.1	74.3	75.6	76.1	76.8	13	76.8	78.6	79.5	80.3	80.7	81.1	20		
Finland . . . . .	69.2	70.9	72.8	74.2	74.9	75.3	22	77.6	78.9	80.2	81.0	81.5	82.3	9		
France . . . . .	70.2	72.8	73.9	75.3	75.8	76.7	14	78.4	80.9	81.8	82.7	83.0	83.8	3		
Germany <sup>2</sup> . . . . .	69.6	72.0	73.3	75.0	75.4	75.7	19	76.1	78.4	79.7	81.0	81.2	81.4	18		
Greece . . . . .	72.2	74.6	75.0	75.5	76.2	76.6	15	76.8	79.5	80.3	80.5	81.1	81.5	16		
Hong Kong . . . . .	71.6	74.6	76.0	78.0	78.6	79.0	1	77.9	80.3	81.5	83.9	84.5	84.7	2		
Hungary . . . . .	65.5	65.1	65.3	67.4	68.4	68.6	33	72.7	73.7	74.5	75.9	76.7	76.9	32		
Ireland . . . . .	70.1	72.1	72.9	73.9	75.2	---	---	75.6	77.6	78.4	79.1	80.3	---	---		
Israel . . . . .	72.2	75.1	75.5	76.7	77.5	77.9	6	75.8	78.5	79.5	80.9	81.5	82.2	12		
Italy . . . . .	70.6	73.6	74.9	76.6	76.8	---	---	77.4	80.1	81.3	82.5	82.9	---	---		
Japan . . . . .	73.4	75.9	76.4	77.7	78.3	78.6	2	78.8	81.9	82.9	84.6	85.2	85.6	1		
Netherlands . . . . .	72.5	73.8	74.6	75.5	76.0	76.9	12	79.2	80.9	80.4	80.5	80.7	81.4	18		
New Zealand . . . . .	70.0	72.4	74.4	76.3	76.3	77.5	8	76.3	78.3	79.7	81.1	81.1	81.7	15		
Northern Ireland . . . . .	68.3	72.1	73.5	74.8	75.6	76.0	18	75.0	78.0	78.9	79.8	80.4	80.8	22		
Norway . . . . .	72.3	73.4	74.8	76.0	76.4	77.5	8	79.2	79.8	80.8	81.4	81.5	82.3	9		
Poland . . . . .	66.0	66.2	67.6	69.7	70.4	70.7	30	74.4	75.2	76.4	78.0	78.7	79.2	29		
Portugal . . . . .	67.7	70.4	71.6	73.2	73.8	74.5	25	75.2	77.4	78.7	80.0	80.5	81.0	21		
Puerto Rico . . . . .	70.8	69.1	69.6	72.3	73.7	74.1	27	76.9	77.2	78.9	81.0	82.0	82.3	9		
Romania . . . . .	66.6	66.6	65.5	67.8	67.4	68.3	34	71.9	73.1	73.5	74.8	74.8	75.6	34		
Russian Federation . . . . .	61.4	63.8	58.3	59.2	58.9	59.1	35	73.0	74.4	71.7	72.4	72.0	72.4	35		
Scotland . . . . .	69.0	71.1	72.1	73.1	73.5	74.2	26	75.2	76.7	77.7	78.6	78.9	79.3	28		
Singapore . . . . .	69.8	73.1	74.2	76.1	76.5	77.1	11	74.7	77.6	78.6	80.1	81.1	82.0	14		
Slovakia <sup>1</sup> . . . . .	66.8	66.6	68.4	69.1	69.8	70.3	31	74.3	75.4	76.3	77.4	77.7	77.8	31		
Spain . . . . .	72.5	73.3	74.3	75.8	76.1	77.2	10	78.6	80.3	81.5	82.5	82.9	83.7	4		
Sweden . . . . .	72.8	74.8	76.2	77.4	77.7	78.4	4	78.8	80.4	81.4	82.0	82.1	82.7	7		
Switzerland . . . . .	72.8	74.0	75.3	76.9	77.8	78.6	2	79.6	80.7	81.7	82.6	83.0	83.7	4		
United States . . . . .	70.0	71.8	72.5	74.1	74.5	75.2	23	77.4	78.8	78.9	79.5	79.9	80.4	25		

See footnotes at end of table.

**Table 25 (page 2 of 2). Life expectancy at birth and at 65 years of age, by sex: Selected countries and territories, selected years 1980–2004**

[Data are based on reporting by countries]

Country	Male							Female								
	1980	1990	1995	2000	2002	2004	2004	1980	1990	1995	2000	2002	2004	2004		
At 65 years	Life expectancy in years							Rank	Life expectancy in years							Rank
Australia . . . . .	13.7	15.2	15.7	16.9	17.4	17.8	3	17.9	19.0	19.5	20.4	20.8	21.1	3		
Austria . . . . .	12.9	14.3	14.9	16.0	16.3	16.9	11	16.3	17.8	18.6	19.4	19.7	20.3	8		
Belgium . . . . .	13.0	14.3	14.8	15.5	15.9	16.1	18	16.9	18.5	19.1	19.6	19.8	19.9	12		
Bulgaria . . . . .	12.7	12.9	12.8	12.8	13.1	13.3	23	14.7	15.4	15.4	15.4	15.8	16.3	24		
Canada . . . . .	14.5	15.7	16.0	16.8	17.2	17.7	4	18.9	19.9	20.0	20.4	20.6	21.0	4		
Chile . . . . .	---	14.6	14.9	15.3	15.4	15.3	20	---	17.6	18.1	18.6	18.8	19.5	15		
Costa Rica . . . . .	16.1	17.1	16.7	17.2	17.8	17.7	4	18.1	19.3	18.6	19.6	20.5	20.0	9		
Cuba . . . . .	---	---	---	16.7	16.8	16.9	11	---	---	---	19.0	19.3	19.3	16		
Czech Republic <sup>1</sup> . . . . .	11.2	11.6	12.7	13.7	14.0	---	---	14.3	15.2	16.0	17.1	17.4	---	---		
Denmark . . . . .	13.6	14.0	14.1	15.2	15.4	---	---	17.6	17.8	17.5	18.3	18.3	---	---		
England and Wales . . . . .	12.9	14.1	14.8	15.8	16.3	16.8	13	16.9	17.9	18.3	19.0	19.2	19.6	14		
Finland . . . . .	12.5	13.7	14.5	15.6	15.9	16.7	14	16.5	17.7	18.6	19.6	19.6	20.8	5		
France . . . . .	13.6	15.5	16.1	16.7	17.0	---	---	18.2	19.8	20.6	21.2	21.4	---	---		
Germany <sup>2</sup> . . . . .	13.0	14.0	14.7	15.7	16.2	---	---	16.7	17.6	18.5	19.4	19.7	---	---		
Greece . . . . .	14.6	15.7	16.1	16.2	16.7	17.0	10	16.8	18.0	18.4	18.3	18.8	19.2	19		
Hong Kong . . . . .	13.9	15.3	16.2	17.3	17.8	18.1	2	13.9	18.8	19.5	21.5	22.0	22.2	2		
Hungary . . . . .	11.6	12.0	12.1	12.7	13.1	13.1	25	14.6	15.3	15.8	16.5	17.0	16.9	22		
Ireland . . . . .	12.6	13.3	13.6	14.6	15.3	---	---	15.7	16.9	17.3	17.8	18.6	---	---		
Israel . . . . .	14.4	15.9	16.0	16.9	17.3	17.7	4	15.8	17.8	18.0	19.3	19.7	19.3	16		
Italy . . . . .	13.3	15.1	15.8	16.5	16.6	---	---	17.1	18.8	19.6	20.4	20.6	---	---		
Japan . . . . .	14.6	16.2	16.5	17.5	18.0	18.2	1	17.7	20.0	20.9	22.4	23.0	23.3	1		
Netherlands . . . . .	13.7	14.4	14.7	15.3	15.6	16.3	17	18.0	18.9	19.0	19.2	19.3	19.8	13		
New Zealand . . . . .	13.2	14.7	15.6	16.7	16.7	17.5	7	17.0	18.3	19.1	20.0	20.0	20.4	7		
Northern Ireland . . . . .	11.9	13.7	14.4	15.3	15.9	16.4	16	15.8	17.5	18.0	18.5	18.9	19.3	16		
Norway . . . . .	14.3	14.6	15.1	16.0	16.2	---	---	18.0	18.5	19.1	19.7	19.7	---	---		
Poland . . . . .	12.0	12.7	12.9	13.6	14.0	14.2	21	15.5	16.9	16.6	17.3	17.9	18.4	20		
Portugal . . . . .	12.9	13.9	14.6	15.3	15.6	---	---	16.5	17.0	17.8	18.7	19.0	---	---		
Puerto Rico . . . . .	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
Romania . . . . .	12.6	13.3	12.9	13.5	13.0	13.4	22	14.2	15.3	15.4	15.9	15.8	16.2	25		
Russian Federation . . . . .	11.6	12.1	10.9	11.1	10.9	11.1	26	15.6	15.9	15.1	15.2	15.1	15.4	26		
Scotland . . . . .	12.3	13.1	13.8	14.7	15.1	15.5	19	16.2	16.7	17.3	17.8	18.1	18.4	20		
Singapore . . . . .	12.6	14.5	14.6	15.8	16.0	16.5	15	15.4	16.9	17.3	19.0	19.2	20.0	9		
Slovakia <sup>1</sup> . . . . .	12.3	12.2	12.7	12.9	13.3	13.3	23	15.4	15.7	16.1	16.5	17.0	16.9	22		
Spain . . . . .	14.8	15.4	16.0	16.6	16.8	---	---	17.9	19.0	19.8	20.4	20.7	---	---		
Sweden . . . . .	14.3	15.3	16.0	16.7	16.9	17.4	8	17.9	19.0	19.6	20.0	20.0	20.6	6		
Switzerland . . . . .	14.4	15.3	16.1	16.9	17.5	---	---	17.9	19.4	20.2	20.7	21.0	---	---		
United States . . . . .	14.1	15.1	15.6	16.3	16.6	17.2	9	18.3	18.9	18.9	19.2	19.5	20.0	9		

--- Data not available.

<sup>1</sup>In 1993, Czechoslovakia was divided into two nations, the Czech Republic and Slovakia. Data for years prior to 1993 are from the Czech and Slovak regions of Czechoslovakia.

<sup>2</sup>Until 1990, estimates refer to the Federal Republic of Germany; from 1995 onwards, data refer to Germany after reunification.

NOTES: Rankings are from highest to lowest life expectancy (LE) for the most recent year available. Since calculation of LE estimates varies among countries, comparisons among them and their interpretation should be made with caution. See [Appendix II, Life expectancy](#). Countries with the same LE receive the same rank. The country with the next lower LE is assigned the rank it would have received had the higher-ranked countries not been tied, i.e., skip a rank. Some estimates for selected countries and selected years were revised and differ from the previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

**SOURCES:** Organisation for Economic Co-operation and Development (OECD) Health Data 2007, A Comparative Analysis of 30 Countries, [www.oecd.org/els/health/](http://www.oecd.org/els/health/); European health for all database, World Health Organization Regional Office for Europe, [www.who.dk/hfad/](http://www.who.dk/hfad/); CDC/NCHS. Vital statistics of the United States (selected years). Public Health Service. Washington, DC. [www.cdc.gov/nchs/fastats/lifexpec.htm](http://www.cdc.gov/nchs/fastats/lifexpec.htm); Puerto Rico: Commonwealth of Puerto Rico, Department of Health, Auxiliary Secretariat for Planning, Evaluation, Statistics, and Information Systems: Unpublished data; England and Wales, Northern Ireland, and Scotland: Government Actuary's Department, London [www.gad.gov.uk](http://www.gad.gov.uk); Hong Kong: Government of Hong Kong, Special Administrative Region, Department of Health, <http://info.gov.hk/dh/index.htm>; Costa Rica: Instituto Nacional de Dirección General de Estadísticas y Censos (INEC) y Centro Centroamericano de Población (CCP) <http://ccp.ucr.ac.cr/observa/series/serie3.htm>; Chile: Instituto Nacional de Dirección General de Estadísticas, Departamento de Demografía Gobierno de Chile. Ministerio de Salud Departamento de Estadísticas e Información de Salud; Puerto Rico (1999–2001): Pan American Health Organization, Special Program for Health Analysis. Regional Initiative for Health Basic Data, Technical Information Health System, Washington, DC 2006. Cuba and Singapore (2000–2001): WHO Statistical Information System (WHOSIS) [www3.who.int/whosis/core/core\\_select.cfm](http://www3.who.int/whosis/core/core_select.cfm).

**Table 26. Life expectancy at birth, at 65 years of age, and at 75 years of age, by race and sex: United States, selected years 1900–2005**

[Data are based on death certificates]

Specified age and year	All races			White			Black or African American <sup>1</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
At birth	Remaining life expectancy in years								
1900 <sup>2,3</sup>	47.3	46.3	48.3	47.6	46.6	48.7	33.0	32.5	33.5
1950 <sup>3</sup>	68.2	65.6	71.1	69.1	66.5	72.2	60.8	59.1	62.9
1960 <sup>3</sup>	69.7	66.6	73.1	70.6	67.4	74.1	63.6	61.1	66.3
1970	70.8	67.1	74.7	71.7	68.0	75.6	64.1	60.0	68.3
1980	73.7	70.0	77.4	74.4	70.7	78.1	68.1	63.8	72.5
1990	75.4	71.8	78.8	76.1	72.7	79.4	69.1	64.5	73.6
1995	75.8	72.5	78.9	76.5	73.4	79.6	69.6	65.2	73.9
1997	76.5	73.6	79.4	77.1	74.3	79.9	71.1	67.2	74.7
1998	76.7	73.8	79.5	77.3	74.5	80.0	71.3	67.6	74.8
1999	76.7	73.9	79.4	77.3	74.6	79.9	71.4	67.8	74.7
2000	77.0	74.3	79.7	77.6	74.9	80.1	71.9	68.3	75.2
2001	77.2	74.4	79.8	77.7	75.0	80.2	72.2	68.6	75.5
2002	77.3	74.5	79.9	77.7	75.1	80.3	72.3	68.8	75.6
2003	77.4	74.7	80.0	77.9	75.3	80.4	72.6	68.9	75.9
2004	77.8	75.2	80.4	78.3	75.7	80.8	73.1	69.5	76.3
2005	77.8	75.2	80.4	78.3	75.7	80.8	73.2	69.5	76.5
At 65 years									
1950 <sup>3</sup>	13.9	12.8	15.0	---	12.8	15.1	13.9	12.9	14.9
1960 <sup>3</sup>	14.3	12.8	15.8	14.4	12.9	15.9	13.9	12.7	15.1
1970	15.2	13.1	17.0	15.2	13.1	17.1	14.2	12.5	15.7
1980	16.4	14.1	18.3	16.5	14.2	18.4	15.1	13.0	16.8
1990	17.2	15.1	18.9	17.3	15.2	19.1	15.4	13.2	17.2
1995	17.4	15.6	18.9	17.6	15.7	19.1	15.6	13.6	17.1
1997	17.7	15.9	19.2	17.8	16.0	19.3	16.1	14.2	17.6
1998	17.8	16.0	19.2	17.8	16.1	19.3	16.1	14.3	17.4
1999	17.7	16.1	19.1	17.8	16.1	19.2	16.0	14.3	17.3
2000	18.0	16.2	19.3	18.0	16.3	19.4	16.2	14.2	17.7
2001	18.1	16.4	19.4	18.2	16.5	19.5	16.4	14.4	17.9
2002	18.2	16.6	19.5	18.2	16.6	19.5	16.6	14.6	18.0
2003	18.4	16.8	19.7	18.4	16.8	19.7	16.8	14.8	18.3
2004	18.7	17.1	20.0	18.7	17.2	20.0	17.1	15.2	18.6
2005	18.7	17.2	20.0	18.8	17.2	20.0	17.2	15.2	18.7
At 75 years									
1980	10.4	8.8	11.5	10.4	8.8	11.5	9.7	8.3	10.7
1990	10.9	9.4	12.0	11.0	9.4	12.0	10.2	8.6	11.2
1995	11.0	9.7	11.9	11.1	9.7	12.0	10.2	8.8	11.1
1997	11.2	9.9	12.1	11.2	9.9	12.1	10.7	9.3	11.5
1998	11.3	10.0	12.2	11.3	10.0	12.2	10.5	9.2	11.3
1999	11.2	10.0	12.1	11.2	10.0	12.1	10.4	9.2	11.1
2000	11.4	10.1	12.3	11.4	10.1	12.3	10.7	9.2	11.6
2001	11.5	10.2	12.4	11.5	10.2	12.3	10.8	9.3	11.7
2002	11.5	10.3	12.4	11.5	10.3	12.3	10.9	9.5	11.7
2003	11.7	10.5	12.5	11.6	10.4	12.5	11.1	9.6	12.1
2004	11.9	10.7	12.8	11.9	10.7	12.8	11.4	9.9	12.2
2005	12.0	10.8	12.8	11.9	10.7	12.8	11.4	10.0	12.3

--- Data not available.

<sup>1</sup>Data shown for 1900–1960 are for the nonwhite population.

<sup>2</sup>Death registration area only. The death registration area increased from 10 states and the District of Columbia (DC) in 1900 to the coterminous United States in 1933. See [Appendix II, Registration area](#).

<sup>3</sup>Includes deaths of persons who were not residents of the 50 states and DC.

NOTES: Populations for computing life expectancy for 1991–1999 are 1990-based postcensal estimates of U.S. resident population. See [Appendix I, Population Census and Population Estimates](#). In 1997, life table methodology was revised to construct complete life tables by single years of age that extend to age 100 (Anderson RN. Method for constructing complete annual U.S. life tables. NCHS. Vital Health Stat 2(129). 1999). Previously, abridged life tables were constructed for 5-year age groups ending with 85 years and over. Life table values for 2000 and later years were computed using a slight modification of the new life table method due to a change in the age detail of populations received from the U.S. Census Bureau. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and the District of Columbia reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget Standards for comparability with other states. See [Appendix II, Race](#). Some data have been revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System; Grove RD, Hetzel AM. Vital statistics rates in the United States, 1940–1960. Washington, DC: U.S. Government Printing Office, 1968; Arias, E. United States life tables, 2005. National vital statistics reports; Hyattsville, MD: NCHS. 2008, forthcoming.

**Table 27 (page 1 of 2). Age-adjusted death rates, by race, Hispanic origin, geographic division, and state: United States, average annual 1979–1981, 1989–1991, and 2003–2005**

[Data are based on death certificates]

Geographic division and state	All persons			White	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander	Hispanic or Latino <sup>1</sup>	White, not Hispanic or Latino
	1979–1981	1989–1991	2003–2005	2003–2005	2003–2005	2003–2005	2003–2005	2003–2005	2003–2005
Age-adjusted death rate per 100,000 population <sup>2</sup>									
United States . . . . .	1,022.8	942.2	812.0	797.4	1,038.8	664.5	451.4	600.6	807.7
New England . . . . .	979.9	882.4	742.7	744.5	816.3	*	356.9	486.4	744.7
Connecticut . . . . .	961.5	857.5	708.5	703.6	813.8	*	314.7	538.1	701.7
Maine . . . . .	1,002.9	918.7	816.8	816.7	668.0	*	411.3	263.3	816.1
Massachusetts . . . . .	982.6	884.8	745.6	750.2	819.3	*	363.4	491.0	750.4
New Hampshire . . . . .	982.3	891.7	751.3	755.6	638.3	*	306.2	347.6	751.9
Rhode Island . . . . .	990.8	889.6	753.3	752.0	886.4	*	471.7	376.4	757.3
Vermont . . . . .	990.2	908.6	741.5	745.1	*	*	*	*	748.2
Middle Atlantic . . . . .	1,059.1	967.8	771.4	764.2	903.1	*	379.8	551.6	768.5
New Jersey . . . . .	1,047.5	956.0	762.7	748.1	987.1	*	349.1	478.4	765.9
New York . . . . .	1,051.8	973.7	738.5	740.4	805.9	*	395.7	577.2	738.3
Pennsylvania . . . . .	1,076.4	963.4	822.9	803.6	1,075.6	*	355.7	564.2	804.0
East North Central . . . . .	1,048.0	957.9	828.1	804.7	1,081.7	*	376.7	504.0	808.4
Illinois . . . . .	1,063.7	973.8	811.6	781.9	1,086.8	*	374.1	460.4	794.3
Indiana . . . . .	1,048.3	962.0	866.1	852.4	1,092.2	*	389.8	483.3	856.8
Michigan . . . . .	1,050.2	966.0	823.0	791.2	1,073.4	*	370.1	703.7	788.5
Ohio . . . . .	1,070.6	967.4	862.5	842.8	1,082.3	*	318.9	556.4	842.2
Wisconsin . . . . .	956.4	879.1	758.3	743.5	1,063.5	*	502.5	409.1	746.5
West North Central . . . . .	951.6	876.6	784.9	770.4	1,084.8	*	445.7	529.0	769.4
Iowa . . . . .	919.9	848.2	748.0	745.5	1,005.4	*	407.2	463.4	747.4
Kansas . . . . .	940.1	867.2	810.6	799.2	1,119.0	*	378.9	543.8	795.5
Minnesota . . . . .	892.9	825.2	697.6	690.9	848.3	1,110.0	494.9	431.7	689.7
Missouri . . . . .	1,033.7	952.4	884.8	864.5	1,129.7	*	432.0	636.1	865.6
Nebraska . . . . .	930.6	867.9	765.0	755.7	1,050.8	1,098.4	424.5	547.0	756.4
North Dakota . . . . .	922.4	818.4	723.6	704.5	*	1,338.2	*	*	682.2
South Dakota . . . . .	941.9	846.4	767.0	724.9	868.3	1,567.5	*	490.9	725.8
South Atlantic . . . . .	1,033.1	951.3	834.2	799.2	1,043.2	*	369.9	565.7	814.5
Delaware . . . . .	1,069.7	1,001.9	833.4	805.8	1,033.7	*	335.9	603.0	807.2
District of Columbia . . . . .	1,243.1	1,255.3	982.1	604.3	1,223.8	*	489.8	206.5	637.3
Florida . . . . .	960.8	870.9	765.9	746.2	987.9	*	343.1	608.2	770.0
Georgia . . . . .	1,094.3	1,037.4	932.7	897.4	1,077.3	*	321.3	337.0	908.4
Maryland . . . . .	1,063.3	985.2	818.0	773.6	997.0	*	367.3	305.2	785.3
North Carolina . . . . .	1,050.4	986.0	888.6	851.1	1,071.7	875.7	368.0	260.7	858.9
South Carolina . . . . .	1,104.6	1,030.0	916.4	866.0	1,088.1	*	396.2	415.6	869.6
Virginia . . . . .	1,054.0	963.1	823.3	794.2	1,029.1	*	430.8	411.7	799.6
West Virginia . . . . .	1,100.3	1,031.5	974.1	975.5	1,094.8	*	*	254.0	978.9
East South Central . . . . .	1,079.3	1,031.6	985.6	955.9	1,161.6	*	421.4	362.8	959.5
Alabama . . . . .	1,091.2	1,037.9	1,004.0	968.0	1,156.0	*	344.2	325.4	972.4
Kentucky . . . . .	1,088.9	1,024.5	961.3	955.9	1,112.6	*	428.1	651.0	956.3
Mississippi . . . . .	1,108.7	1,071.4	1,022.4	966.0	1,163.3	*	503.7	249.3	971.2
Tennessee . . . . .	1,045.5	1,011.8	971.1	944.1	1,184.6	*	436.0	293.6	949.0
West South Central . . . . .	1,036.8	974.9	892.9	870.0	1,140.1	*	426.1	677.2	900.2
Arkansas . . . . .	1,017.0	996.3	934.6	910.6	1,153.7	*	474.3	291.6	919.5
Louisiana . . . . .	1,132.6	1,074.6	1,007.5	941.1	1,204.6	*	499.4	423.8	950.1
Oklahoma . . . . .	1,025.6	961.4	974.8	968.9	1,177.7	*	479.4	581.8	975.8
Texas . . . . .	1,014.9	947.6	846.2	832.3	1,098.5	*	413.8	688.2	865.8
Mountain . . . . .	961.8	878.2	788.5	786.7	908.2	870.8	465.8	721.7	787.4
Arizona . . . . .	951.5	873.5	775.2	768.8	911.5	925.4	426.6	745.3	767.3
Colorado . . . . .	941.1	856.1	759.1	761.9	888.0	480.0	433.5	741.7	757.2
Idaho . . . . .	936.7	856.6	775.2	775.9	579.0	957.1	445.8	604.6	777.9
Montana . . . . .	1,013.6	890.2	804.1	785.0	*	1,236.5	518.1	672.9	785.5
Nevada . . . . .	1,077.4	1,017.4	897.8	913.8	972.3	688.7	524.2	500.9	944.0
New Mexico . . . . .	967.1	891.9	801.1	798.5	793.7	837.7	343.9	779.4	789.1
Utah . . . . .	924.9	823.2	764.8	767.6	894.2	795.8	514.1	591.5	772.6
Wyoming . . . . .	1,016.1	897.4	814.6	809.5	918.9	1,057.6	*	761.0	809.6

See footnotes at end of table.



**Table 27 (page 2 of 2). Age-adjusted death rates, by race, Hispanic origin, geographic division, and state: United States, average annual 1979–1981, 1989–1991, and 2003–2005**

[Data are based on death certificates]

Geographic division and state	All persons		White	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander	Hispanic or Latino <sup>1</sup>	White, not Hispanic or Latino	
	1979–1981	1989–1991	2003–2005	2003–2005	2003–2005	2003–2005	2003–2005	2003–2005	
	Age-adjusted death rate per 100,000 population <sup>2</sup>								
Pacific . . . . .	966.5	900.1	733.0	751.5	997.8	*	495.2	581.7	774.5
Alaska . . . . .	1,087.4	944.6	781.5	734.8	760.6	1,133.5	474.9	502.4	739.8
California . . . . .	975.5	911.0	727.2	745.9	1,013.1	*	467.7	581.7	775.5
Hawaii . . . . .	801.2	752.2	623.6	654.5	463.2	*	614.1	1,228.0	664.9
Oregon . . . . .	953.9	893.0	788.5	792.8	929.4	*	478.3	443.6	800.2
Washington . . . . .	947.7	869.4	752.7	759.4	892.1	902.0	491.3	505.7	764.1

\* Data for states with population under 10,000 in the middle year of a 3-year period or fewer than 50 deaths for the 3-year period are considered unreliable and are not shown. Data for American Indian or Alaska Native category in states with more than 10% misclassification of American Indian or Alaska Native deaths on death certificates or without information on misclassification are also not shown (Support Services International, Inc. Methodology for adjusting IHS mortality data for miscoding race-ethnicity of American Indian or Alaska Native on state death certificates. Report submitted to Indian Health Service. 1996). Division death rates for American Indians or Alaska Natives are not shown when any state within the division does not meet reliability criteria.

<sup>1</sup>Caution should be used when comparing death rates by Hispanic origin and race among states. Estimates of death rates may be affected by several factors including possible misreporting of race and Hispanic origin on the death certificate, migration patterns between United States and country of origin for persons who were born outside the United States, and possible biases in population estimates. See [Appendix I, National Vital Statistics System, Mortality File](#) and [Appendix II, Hispanic origin; Race](#).

<sup>2</sup>Average annual death rates, age-adjusted using the year 2000 standard population. Prior to 2001, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2001 data, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#). Denominators for rates are resident population estimates for the middle year of each 3-year period, multiplied by 3. See [Appendix I, Population Census and Population Estimates](#).

NOTES: The race groups, white, black, American Indian or Alaska Native, and Asian or Pacific Islander, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native and Asian or Pacific Islander populations are known to be underestimated. See [Appendix II, Race](#), for a discussion of sources of bias in death rates by race and Hispanic origin. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and the District of Columbia reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget Standards for comparability with other states. See [Appendix II, Race](#).

**SOURCES:** CDC/NCHS, National Vital Statistics System; numerator data from annual mortality files; denominator data from state population estimates prepared by the U.S. Census Bureau 1980 from April 1, 1980 MARS Census File; 1990 from April 1, 1990 MARS Census File; 2004 from bridged-race Vintage 2004 file. Estimates of the July 1, 2004, resident populations of the United States by state and county, race, age, sex, and Hispanic origin, prepared under a collaborative arrangement with the U.S. Census Bureau. Available from: [www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm](http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm). 2005.



**Table 28 (page 1 of 4). Age-adjusted death rates for selected causes of death, by sex, race, and Hispanic origin: United States, selected years 1950–2005**

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and cause of death<sup>1</sup></i>	1950 <sup>2,3</sup>	1960 <sup>2,3</sup>	1970 <sup>3</sup>	1980 <sup>3</sup>	1990	2000 <sup>4</sup>	2003	2004	2005
Age-adjusted death rate per 100,000 population <sup>5</sup>									
All persons									
All causes . . . . .	1,446.0	1,339.2	1,222.6	1,039.1	938.7	869.0	832.7	800.8	798.8
Diseases of heart . . . . .	586.8	559.0	492.7	412.1	321.8	257.6	232.3	217.0	211.1
Ischemic heart disease . . . . .	---	---	---	345.2	249.6	186.8	162.9	150.2	144.4
Cerebrovascular diseases . . . . .	180.7	177.9	147.7	96.2	65.3	60.9	53.5	50.0	46.6
Malignant neoplasms . . . . .	193.9	193.9	198.6	207.9	216.0	199.6	190.1	185.8	183.8
Trachea, bronchus, and lung . . . . .	15.0	24.1	37.1	49.9	59.3	56.1	54.1	53.2	52.6
Colon, rectum, and anus . . . . .	---	30.3	28.9	27.4	24.5	20.8	19.1	18.0	17.5
Prostate <sup>6</sup> . . . . .	28.6	28.7	28.8	32.8	38.4	30.4	26.5	25.4	24.5
Breast <sup>7</sup> . . . . .	31.9	31.7	32.1	31.9	33.3	26.8	25.3	24.4	24.1
Chronic lower respiratory diseases . . . . .	---	---	---	28.3	37.2	44.2	43.3	41.1	43.2
Influenza and pneumonia . . . . .	48.1	53.7	41.7	31.4	36.8	23.7	22.0	19.8	20.3
Chronic liver disease and cirrhosis . . . . .	11.3	13.3	17.8	15.1	11.1	9.5	9.3	9.0	9.0
Diabetes mellitus . . . . .	23.1	22.5	24.3	18.1	20.7	25.0	25.3	24.5	24.6
Human immunodeficiency virus (HIV) disease . . . . .	---	---	---	---	10.2	5.2	4.7	4.5	4.2
Unintentional injuries . . . . .	78.0	62.3	60.1	46.4	36.3	34.9	37.3	37.7	39.1
Motor vehicle-related injuries . . . . .	24.6	23.1	27.6	22.3	18.5	15.4	15.3	15.2	15.2
Suicide <sup>8</sup> . . . . .	13.2	12.5	13.1	12.2	12.5	10.4	10.8	10.9	10.9
Homicide <sup>8</sup> . . . . .	5.1	5.0	8.8	10.4	9.4	5.9	6.0	5.9	6.1
Male									
All causes . . . . .	1,674.2	1,609.0	1,542.1	1,348.1	1,202.8	1,053.8	994.3	955.7	951.1
Diseases of heart . . . . .	697.0	687.6	634.0	538.9	412.4	320.0	286.6	267.9	260.9
Ischemic heart disease . . . . .	---	---	---	459.7	328.2	241.4	209.9	194.1	187.4
Cerebrovascular diseases . . . . .	186.4	186.1	157.4	102.2	68.5	62.4	54.1	50.4	46.9
Malignant neoplasms . . . . .	208.1	225.1	247.6	271.2	280.4	248.9	233.3	227.7	225.1
Trachea, bronchus, and lung . . . . .	24.6	43.6	67.5	85.2	91.1	76.7	71.7	70.1	69.0
Colon, rectum, and anus . . . . .	---	31.8	32.3	32.8	30.4	25.1	22.9	21.5	20.9
Prostate . . . . .	28.6	28.7	28.8	32.8	38.4	30.4	26.5	25.4	24.5
Chronic lower respiratory diseases . . . . .	---	---	---	49.9	55.4	55.8	52.3	49.5	51.2
Influenza and pneumonia . . . . .	55.0	65.8	54.0	42.1	47.8	28.9	26.1	23.7	23.9
Chronic liver disease and cirrhosis . . . . .	15.0	18.5	24.8	21.3	15.9	13.4	13.0	12.5	12.4
Diabetes mellitus . . . . .	18.8	19.9	23.0	18.1	21.7	27.8	28.9	28.2	28.4
Human immunodeficiency virus (HIV) disease . . . . .	---	---	---	---	18.5	7.9	7.1	6.6	6.2
Unintentional injuries . . . . .	101.8	85.5	87.4	69.0	52.9	49.3	51.8	52.1	54.2
Motor vehicle-related injuries . . . . .	38.5	35.4	41.5	33.6	26.5	21.7	21.6	21.4	21.7
Suicide <sup>8</sup> . . . . .	21.2	20.0	19.8	19.9	21.5	17.7	18.0	18.0	18.0
Homicide <sup>8</sup> . . . . .	7.9	7.5	14.3	16.6	14.8	9.0	9.4	9.2	9.6
Female									
All causes . . . . .	1,236.0	1,105.3	971.4	817.9	750.9	731.4	706.2	679.2	677.6
Diseases of heart . . . . .	484.7	447.0	381.6	320.8	257.0	210.9	190.3	177.3	172.3
Ischemic heart disease . . . . .	---	---	---	263.1	193.9	146.5	127.2	116.7	111.7
Cerebrovascular diseases . . . . .	175.8	170.7	140.0	91.7	62.6	59.1	52.3	48.9	45.6
Malignant neoplasms . . . . .	182.3	168.7	163.2	166.7	175.7	167.6	160.9	157.4	155.6
Trachea, bronchus, and lung . . . . .	5.8	7.5	13.1	24.4	37.1	41.3	41.3	40.9	40.5
Colon, rectum, and anus . . . . .	---	29.1	26.5	23.8	20.6	17.7	16.2	15.3	14.8
Breast . . . . .	31.9	31.7	32.1	31.9	33.3	26.8	25.3	24.4	24.1
Chronic lower respiratory diseases . . . . .	---	---	---	14.9	26.6	37.4	37.8	36.0	38.1
Influenza and pneumonia . . . . .	41.9	43.8	32.7	25.1	30.5	20.7	19.4	17.3	17.9
Chronic liver disease and cirrhosis . . . . .	7.8	8.7	11.9	9.9	7.1	6.2	6.0	5.8	5.8
Diabetes mellitus . . . . .	27.0	24.7	25.1	18.0	19.9	23.0	22.5	21.7	21.6
Human immunodeficiency virus (HIV) disease . . . . .	---	---	---	---	2.2	2.5	2.4	2.4	2.3
Unintentional injuries . . . . .	54.0	40.0	35.1	26.1	21.5	22.0	24.1	24.5	25.0
Motor vehicle-related injuries . . . . .	11.5	11.7	14.9	11.8	11.0	9.5	9.3	9.3	8.9
Suicide <sup>8</sup> . . . . .	5.6	5.6	7.4	5.7	4.8	4.0	4.2	4.5	4.4
Homicide <sup>8</sup> . . . . .	2.4	2.6	3.7	4.4	4.0	2.8	2.6	2.5	2.5

See footnotes at end of table.

**Table 28 (page 2 of 4). Age-adjusted death rates for selected causes of death, by sex, race, and Hispanic origin: United States, selected years 1950–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and cause of death <sup>1</sup>	1950 <sup>2,3</sup>	1960 <sup>2,3</sup>	1970 <sup>3</sup>	1980 <sup>3</sup>	1990	2000 <sup>4</sup>	2003	2004	2005
White <sup>9</sup>									
Age-adjusted death rate per 100,000 population <sup>5</sup>									
All causes . . . . .	1,410.8	1,311.3	1,193.3	1,012.7	909.8	849.8	817.0	786.3	785.3
Diseases of heart . . . . .	584.8	559.0	492.2	409.4	317.0	253.4	228.2	213.3	207.8
Ischemic heart disease . . . . .	---	---	---	347.6	249.7	185.6	161.7	149.2	143.8
Cerebrovascular diseases . . . . .	175.5	172.7	143.5	93.2	62.8	58.8	51.4	48.0	44.7
Malignant neoplasms . . . . .	194.6	193.1	196.7	204.2	211.6	197.2	188.5	184.4	182.6
Trachea, bronchus, and lung . . . . .	15.2	24.0	36.7	49.2	58.6	56.2	54.5	53.6	53.1
Colon, rectum, and anus . . . . .	---	30.9	29.2	27.4	24.1	20.3	18.6	17.6	16.9
Prostate <sup>6</sup> . . . . .	28.4	27.7	27.4	30.5	35.5	27.8	24.4	23.4	22.6
Breast <sup>7</sup> . . . . .	32.4	32.0	32.5	32.1	33.2	26.3	24.7	23.9	23.4
Chronic lower respiratory diseases . . . . .	---	---	---	29.3	38.3	46.0	45.4	43.2	45.4
Influenza and pneumonia . . . . .	44.8	50.4	39.8	30.9	36.4	23.5	21.9	19.6	20.2
Chronic liver disease and cirrhosis . . . . .	11.5	13.2	16.6	13.9	10.5	9.6	9.5	9.2	9.2
Diabetes mellitus . . . . .	22.9	21.7	22.9	16.7	18.8	22.8	23.0	22.3	22.5
Human immunodeficiency virus (HIV) disease . . . . .	---	---	---	---	8.3	2.8	2.5	2.3	2.2
Unintentional injuries . . . . .	77.0	60.4	57.8	45.3	35.5	35.1	38.2	38.8	40.1
Motor vehicle-related injuries . . . . .	24.4	22.9	27.1	22.6	18.5	15.6	15.7	15.6	15.6
Suicide <sup>8</sup> . . . . .	13.9	13.1	13.8	13.0	13.4	11.3	11.8	12.0	12.0
Homicide <sup>8</sup> . . . . .	2.6	2.7	4.7	6.7	5.5	3.6	3.7	3.6	3.7
Black or African American <sup>9</sup>									
All causes . . . . .	1,722.1	1,577.5	1,518.1	1,314.8	1,250.3	1,121.4	1,065.9	1,027.3	1,016.5
Diseases of heart . . . . .	586.7	548.3	512.0	455.3	391.5	324.8	300.2	280.6	271.3
Ischemic heart disease . . . . .	---	---	---	334.5	267.0	218.3	195.0	179.8	171.3
Cerebrovascular diseases . . . . .	233.6	235.2	197.1	129.1	91.6	81.9	74.3	69.9	65.2
Malignant neoplasms . . . . .	176.4	199.1	225.3	256.4	279.5	248.5	233.3	227.2	222.7
Trachea, bronchus, and lung . . . . .	11.1	23.7	41.3	59.7	72.4	64.0	60.8	59.8	58.4
Colon, rectum, and anus . . . . .	---	22.8	26.1	28.3	30.6	28.2	26.4	24.7	24.8
Prostate <sup>6</sup> . . . . .	30.9	41.2	48.5	61.1	77.0	68.1	57.4	55.5	53.3
Breast <sup>7</sup> . . . . .	25.3	27.9	28.9	31.7	38.1	34.5	34.0	32.2	32.8
Chronic lower respiratory diseases . . . . .	---	---	---	19.2	28.1	31.6	30.1	28.2	30.6
Influenza and pneumonia . . . . .	76.7	81.1	57.2	34.4	39.4	25.6	23.3	22.3	21.7
Chronic liver disease and cirrhosis . . . . .	9.0	13.6	28.1	25.0	16.5	9.4	8.4	7.9	7.7
Diabetes mellitus . . . . .	23.5	30.9	38.8	32.7	40.5	49.5	49.2	48.0	46.9
Human immunodeficiency virus (HIV) disease . . . . .	---	---	---	---	26.7	23.3	21.3	20.4	19.4
Unintentional injuries . . . . .	79.9	74.0	78.3	57.6	43.8	37.7	36.1	36.3	38.7
Motor vehicle-related injuries . . . . .	26.0	24.2	31.1	20.2	18.8	15.7	14.9	14.8	14.5
Suicide <sup>8</sup> . . . . .	4.5	5.0	6.2	6.5	7.1	5.5	5.2	5.3	5.2
Homicide <sup>8</sup> . . . . .	28.3	26.0	44.0	39.0	36.3	20.5	21.0	20.1	21.1
American Indian or Alaska Native <sup>9</sup>									
All causes . . . . .	---	---	---	867.0	716.3	709.3	685.0	650.0	663.4
Diseases of heart . . . . .	---	---	---	240.6	200.6	178.2	160.2	148.0	141.8
Ischemic heart disease . . . . .	---	---	---	173.6	139.1	129.1	114.1	106.5	96.2
Cerebrovascular diseases . . . . .	---	---	---	57.8	40.7	45.0	34.6	35.3	34.8
Malignant neoplasms . . . . .	---	---	---	113.7	121.8	127.8	119.3	124.9	123.2
Trachea, bronchus, and lung . . . . .	---	---	---	20.7	30.9	32.3	31.3	36.0	34.1
Colon, rectum, and anus . . . . .	---	---	---	9.5	12.0	13.4	11.8	12.1	12.0
Prostate <sup>6</sup> . . . . .	---	---	---	20.7	17.8	19.6	17.8	16.0	17.6
Breast <sup>7</sup> . . . . .	---	---	---	10.8	13.7	13.6	14.0	14.8	15.2
Chronic lower respiratory diseases . . . . .	---	---	---	14.2	25.4	32.8	31.7	28.5	29.1
Influenza and pneumonia . . . . .	---	---	---	44.4	36.1	22.3	24.1	17.6	20.4
Chronic liver disease and cirrhosis . . . . .	---	---	---	45.3	24.1	24.3	22.6	22.7	22.6
Diabetes mellitus . . . . .	---	---	---	29.6	34.1	41.5	43.7	39.2	41.5
Human immunodeficiency virus (HIV) disease . . . . .	---	---	---	---	1.8	2.2	2.5	2.9	2.7
Unintentional injuries . . . . .	---	---	---	99.0	62.6	51.3	56.4	53.1	54.7
Motor vehicle-related injuries . . . . .	---	---	---	54.5	32.5	27.3	28.1	26.0	24.8
Suicide <sup>8</sup> . . . . .	---	---	---	11.9	11.7	9.8	10.0	12.2	11.7
Homicide <sup>8</sup> . . . . .	---	---	---	15.5	10.4	6.8	7.3	7.0	7.7

See footnotes at end of table.

**Table 28 (page 3 of 4). Age-adjusted death rates for selected causes of death, by sex, race, and Hispanic origin: United States, selected years 1950–2005**

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and cause of death<sup>1</sup></i>	1950 <sup>2,3</sup>	1960 <sup>2,3</sup>	1970 <sup>3</sup>	1980 <sup>3</sup>	1990	2000 <sup>4</sup>	2003	2004	2005
Asian or Pacific Islander <sup>9</sup>									
Age-adjusted death rate per 100,000 population <sup>5</sup>									
All causes . . . . .	---	---	---	589.9	582.0	506.4	465.7	443.9	440.2
Diseases of heart . . . . .	---	---	---	202.1	181.7	146.0	127.6	117.8	113.3
Ischemic heart disease . . . . .	---	---	---	168.2	139.6	109.6	92.8	84.1	81.0
Cerebrovascular diseases . . . . .	---	---	---	66.1	56.9	52.9	45.2	41.3	38.6
Malignant neoplasms . . . . .	---	---	---	126.1	134.2	121.9	113.5	110.5	110.5
Trachea, bronchus, and lung . . . . .	---	---	---	28.4	30.2	28.1	26.9	26.2	25.7
Colon, rectum, and anus . . . . .	---	---	---	16.4	14.4	12.7	12.1	11.3	11.2
Prostate <sup>6</sup> . . . . .	---	---	---	10.2	16.8	12.5	10.9	11.4	10.4
Breast <sup>7</sup> . . . . .	---	---	---	11.9	13.7	12.3	12.6	12.7	12.2
Chronic lower respiratory diseases . . . . .	---	---	---	12.9	19.4	18.6	16.2	14.7	14.9
Influenza and pneumonia . . . . .	---	---	---	24.0	31.4	19.7	17.3	16.0	15.5
Chronic liver disease and cirrhosis . . . . .	---	---	---	6.1	5.2	3.5	3.0	3.2	3.6
Diabetes mellitus . . . . .	---	---	---	12.6	14.6	16.4	17.3	16.6	16.6
Human immunodeficiency virus (HIV) disease . . . . .	---	---	---	---	2.2	0.6	0.7	0.7	0.6
Unintentional injuries . . . . .	---	---	---	27.0	23.9	17.9	18.0	16.7	17.9
Motor vehicle-related injuries . . . . .	---	---	---	13.9	14.0	8.6	8.4	7.8	7.6
Suicide <sup>8</sup> . . . . .	---	---	---	7.8	6.7	5.5	5.6	5.8	5.2
Homicide <sup>8</sup> . . . . .	---	---	---	5.9	5.0	3.0	2.9	2.5	2.9
Hispanic or Latino <sup>9,10</sup>									
All causes . . . . .	---	---	---	---	692.0	665.7	621.2	586.7	590.7
Diseases of heart . . . . .	---	---	---	---	217.1	196.0	173.2	158.4	157.3
Ischemic heart disease . . . . .	---	---	---	---	173.3	153.2	130.0	119.2	118.0
Cerebrovascular diseases . . . . .	---	---	---	---	45.2	46.4	40.5	38.2	35.7
Malignant neoplasms . . . . .	---	---	---	---	136.8	134.9	126.6	121.9	122.8
Trachea, bronchus, and lung . . . . .	---	---	---	---	26.5	24.8	23.2	22.4	22.4
Colon, rectum, and anus . . . . .	---	---	---	---	14.7	14.1	13.4	12.6	12.4
Prostate <sup>6</sup> . . . . .	---	---	---	---	23.3	21.6	20.2	19.1	18.5
Breast <sup>7</sup> . . . . .	---	---	---	---	19.5	16.9	16.1	15.6	15.0
Chronic lower respiratory diseases . . . . .	---	---	---	---	19.3	21.1	20.2	18.4	19.3
Influenza and pneumonia . . . . .	---	---	---	---	29.7	20.6	18.4	17.1	16.8
Chronic liver disease and cirrhosis . . . . .	---	---	---	---	18.3	16.5	14.7	14.0	13.9
Diabetes mellitus . . . . .	---	---	---	---	28.2	36.9	35.0	32.1	33.6
Human immunodeficiency virus (HIV) disease . . . . .	---	---	---	---	16.3	6.7	5.9	5.3	4.7
Unintentional injuries . . . . .	---	---	---	---	34.6	30.1	30.6	29.8	31.3
Motor vehicle-related injuries . . . . .	---	---	---	---	19.5	14.7	15.1	14.4	14.7
Suicide <sup>8</sup> . . . . .	---	---	---	---	7.8	5.9	5.6	5.9	5.6
Homicide <sup>8</sup> . . . . .	---	---	---	---	16.2	7.5	7.7	7.2	7.5

See footnotes at end of table.

**Table 28 (page 4 of 4). Age-adjusted death rates for selected causes of death, by sex, race, and Hispanic origin: United States, selected years 1950–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and cause of death <sup>1</sup>	1950 <sup>2,3</sup>	1960 <sup>2,3</sup>	1970 <sup>3</sup>	1980 <sup>3</sup>	1990	2000 <sup>4</sup>	2003	2004	2005
White, not Hispanic or Latino <sup>10</sup>	Age-adjusted death rate per 100,000 population <sup>5</sup>								
All causes . . . . .	---	---	---	---	914.5	855.5	826.1	797.1	796.6
Diseases of heart . . . . .	---	---	---	---	319.7	255.5	230.9	216.3	210.7
Ischemic heart disease . . . . .	---	---	---	---	251.9	186.6	163.3	150.9	145.2
Cerebrovascular diseases . . . . .	---	---	---	---	63.5	59.0	51.7	48.3	45.0
Malignant neoplasms . . . . .	---	---	---	---	215.4	200.6	192.4	188.6	187.0
Trachea, bronchus, and lung . . . . .	---	---	---	---	60.3	58.2	56.7	56.0	55.5
Colon, rectum, and anus . . . . .	---	---	---	---	24.6	20.5	18.8	17.9	17.2
Prostate <sup>6</sup> . . . . .	---	---	---	---	36.1	28.0	24.6	23.6	22.8
Breast <sup>7</sup> . . . . .	---	---	---	---	33.9	26.8	25.2	24.5	24.0
Chronic lower respiratory diseases . . . . .	---	---	---	---	39.2	47.2	47.0	44.9	47.2
Influenza and pneumonia . . . . .	---	---	---	---	36.5	23.5	22.0	19.6	20.4
Chronic liver disease and cirrhosis . . . . .	---	---	---	---	9.9	9.0	9.0	8.7	8.7
Diabetes mellitus . . . . .	---	---	---	---	18.3	21.8	22.1	21.5	21.5
Human immunodeficiency virus (HIV) disease . . . . .	---	---	---	---	7.4	2.2	2.0	1.9	1.8
Unintentional injuries . . . . .	---	---	---	---	35.0	35.3	38.8	39.7	41.0
Motor vehicle-related injuries . . . . .	---	---	---	---	18.2	15.6	15.5	15.6	15.5
Suicide <sup>8</sup> . . . . .	---	---	---	---	13.8	12.0	12.7	12.9	12.9
Homicide <sup>8</sup> . . . . .	---	---	---	---	4.0	2.8	2.7	2.7	2.7

--- Data not available.

<sup>1</sup>Underlying cause of death code numbers are based on the applicable revision of the *International Classification of Diseases* (ICD) for data years shown. For the period 1980–1998, causes were coded using ICD–9 codes that are most nearly comparable with the 113 cause list for ICD–10. See [Appendix II, Cause of death; Tables IV and V](#).

<sup>2</sup>Includes deaths of persons who were not residents of the 50 states and the District of Columbia.

<sup>3</sup>Underlying cause of death was coded according to the Sixth Revision of the International Classification of Diseases (ICD) in 1950, Seventh Revision in 1960, Eighth Revision in 1970, and Ninth Revision in 1980–1998. See [Appendix II, Cause of death; Tables IV and V](#).

<sup>4</sup>Starting with 1999 data, cause of death is coded according to ICD–10. See [Appendix II, Cause of death, Table V; Comparability ratio, Table VI](#).

<sup>5</sup>Age-adjusted rates are calculated using the year 2000 standard population. Prior to 2003, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2003 data, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#).

<sup>6</sup>Rate for male population only.

<sup>7</sup>Rate for female population only.

<sup>8</sup>Figures for 2001 (in excel spreadsheet on the web) include September 11-related deaths for which death certificates were filed as of October 24, 2002. See [Appendix II, Cause of death; Table V](#) for terrorism-related ICD–10 codes.

<sup>9</sup>The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native and Asian or Pacific Islander populations are known to be underestimated. See [Appendix II, Race](#), for a discussion of sources of bias in death rates by race and Hispanic origin.

<sup>10</sup>Prior to 1997, excludes data from states lacking an Hispanic-origin item on the death certificate. See [Appendix II, Hispanic origin](#).

NOTES: Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were revised based on 2000 census counts. Rates for 2001 and later years were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#). In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and the District of Columbia reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget Standards for comparability with other states. See [Appendix II, Race](#). Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System; Grove RD, Hetzel AM. Vital statistics rates in the United States, 1940–1960. Washington, DC: U.S. Government Printing Office. 1968; numerator data from National Vital Statistics System, annual mortality files; denominator data from national population estimates for race groups from Table 1 and unpublished Hispanic population estimates for 1985–1996 prepared by the Housing and Household Economic Statistics Division, U.S. Census Bureau; additional mortality tables are available from: [www.cdc.gov/nchs/datawh/statab/unpubd/mortabs.htm](http://www.cdc.gov/nchs/datawh/statab/unpubd/mortabs.htm); Kung H-C, Hoyert DL, Xu JQ, Murphy SL. Deaths: Final data for 2005. National vital statistics reports. Vol 56 no 10. Hyattsville, MD: National Center for Health Statistics. 2008.

**Table 29 (page 1 of 4). Years of potential life lost before age 75 for selected causes of death, by sex, race, and Hispanic origin: United States, selected years 1980–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and cause of death <sup>2</sup>	Crude		Age-adjusted <sup>1</sup>				
	2005	1980	1990	2000 <sup>3</sup>	2003	2004	2005
All persons							
Years lost before age 75 per 100,000 population under 75 years of age							
All causes . . . . .	7,489.8	10,448.4	9,085.5	7,578.1	7,466.9	7,270.6	7,299.8
Diseases of heart . . . . .	1,160.3	2,238.7	1,617.7	1,253.0	1,187.9	1,128.9	1,110.4
Ischemic heart disease . . . . .	739.2	1,729.3	1,153.6	841.8	765.1	720.6	701.8
Cerebrovascular diseases . . . . .	200.4	357.5	259.6	223.3	203.6	198.1	193.3
Malignant neoplasms . . . . .	1,602.7	2,108.8	2,003.8	1,674.1	1,586.9	1,543.4	1,525.2
Trachea, bronchus, and lung . . . . .	418.3	548.5	561.4	443.1	412.2	402.8	392.9
Colorectal . . . . .	131.1	190.0	164.7	141.9	133.8	127.3	124.7
Prostate <sup>4</sup> . . . . .	54.8	84.9	96.8	63.6	58.6	55.8	55.1
Breast <sup>5</sup> . . . . .	316.3	463.2	451.6	332.6	313.7	302.1	296.2
Chronic lower respiratory diseases . . . . .	189.9	169.1	187.4	188.1	183.9	173.7	181.2
Influenza and pneumonia . . . . .	85.6	160.2	141.5	87.1	90.8	79.1	83.6
Chronic liver disease and cirrhosis . . . . .	158.8	300.3	196.9	164.1	159.6	153.9	152.6
Diabetes mellitus . . . . .	188.3	134.4	155.9	178.4	184.6	178.4	179.9
Human immunodeficiency virus (HIV) disease . . . . .	132.0	---	383.8	174.6	153.3	143.4	133.6
Unintentional injuries . . . . .	1,132.4	1,543.5	1,162.1	1,026.5	1,084.6	1,098.0	1,132.7
Motor vehicle-related injuries . . . . .	565.6	912.9	716.4	574.3	569.6	567.6	564.4
Suicide <sup>6</sup> . . . . .	347.9	392.0	393.1	334.5	343.3	353.0	347.3
Homicide <sup>6</sup> . . . . .	276.5	425.5	417.4	266.5	274.3	264.8	276.8
Male							
All causes . . . . .	9,337.0	13,777.2	11,973.5	9,572.2	9,416.4	9,143.1	9,206.1
Diseases of heart . . . . .	1,589.1	3,352.1	2,356.0	1,766.0	1,664.2	1,583.4	1,561.6
Ischemic heart disease . . . . .	1,065.8	2,715.1	1,766.3	1,255.4	1,138.8	1,070.5	1,044.3
Cerebrovascular diseases . . . . .	215.7	396.7	286.6	244.6	225.9	219.6	213.7
Malignant neoplasms . . . . .	1,672.9	2,360.8	2,214.6	1,810.8	1,711.4	1,663.3	1,639.7
Trachea, bronchus, and lung . . . . .	487.3	821.1	764.8	554.9	504.6	490.3	476.3
Colorectal . . . . .	149.0	214.9	194.3	167.3	157.7	149.7	146.2
Prostate . . . . .	54.8	84.9	96.8	63.6	58.6	55.8	55.1
Chronic lower respiratory diseases . . . . .	196.2	235.1	224.8	206.0	199.5	188.4	195.8
Influenza and pneumonia . . . . .	98.5	202.5	180.0	102.8	106.4	93.6	97.8
Chronic liver disease and cirrhosis . . . . .	221.1	415.0	283.9	236.9	229.4	219.0	216.1
Diabetes mellitus . . . . .	220.3	140.4	170.4	203.8	218.2	212.6	216.5
Human immunodeficiency virus (HIV) disease . . . . .	189.1	---	686.2	258.9	223.7	205.1	192.0
Unintentional injuries . . . . .	1,623.8	2,342.7	1,715.1	1,475.6	1,537.7	1,547.4	1,608.5
Motor vehicle-related injuries . . . . .	808.4	1,359.7	1,018.4	796.4	795.0	789.1	795.9
Suicide <sup>6</sup> . . . . .	552.1	605.6	634.8	539.1	548.2	553.0	548.0
Homicide <sup>6</sup> . . . . .	447.0	675.0	658.0	410.5	430.5	414.3	439.0
Female							
All causes . . . . .	5,642.9	7,350.3	6,333.1	5,644.6	5,560.5	5,435.8	5,425.7
Diseases of heart . . . . .	731.6	1,246.0	948.5	774.6	739.5	699.9	682.6
Ischemic heart disease . . . . .	412.7	852.1	600.3	457.6	415.0	391.8	379.0
Cerebrovascular diseases . . . . .	185.1	324.0	235.9	203.9	183.0	178.1	174.4
Malignant neoplasms . . . . .	1,532.6	1,896.8	1,826.6	1,555.3	1,477.3	1,437.6	1,424.3
Trachea, bronchus, and lung . . . . .	349.2	310.4	382.2	342.1	328.1	323.2	316.9
Colorectal . . . . .	113.3	168.7	138.7	118.7	111.9	106.8	104.9
Breast . . . . .	316.3	463.2	451.6	332.6	313.7	302.1	296.2
Chronic lower respiratory diseases . . . . .	183.5	114.0	155.9	172.3	169.9	160.4	168.2
Influenza and pneumonia . . . . .	72.8	122.0	106.2	72.3	76.0	65.3	70.0
Chronic liver disease and cirrhosis . . . . .	96.4	194.5	115.1	94.5	92.6	91.3	91.6
Diabetes mellitus . . . . .	156.3	128.5	142.3	154.4	152.9	146.0	145.1
Human immunodeficiency virus (HIV) disease . . . . .	75.0	---	87.8	92.0	84.1	82.7	76.2
Unintentional injuries . . . . .	641.1	755.3	607.4	573.2	624.6	641.1	648.0
Motor vehicle-related injuries . . . . .	322.8	470.4	411.6	348.5	339.2	341.1	327.1
Suicide <sup>6</sup> . . . . .	143.8	184.2	153.3	129.1	136.6	150.9	144.1
Homicide <sup>6</sup> . . . . .	106.0	181.3	174.3	118.9	112.9	110.2	108.7

See footnotes at end of table.

**Table 29 (page 2 of 4). Years of potential life lost before age 75 for selected causes of death, by sex, race, and Hispanic origin: United States, selected years 1980–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and cause of death <sup>2</sup>	Crude		Age-adjusted <sup>1</sup>				
	2005	1980	1990	2000 <sup>3</sup>	2003	2004	2005
White <sup>7</sup>							
Years lost before age 75 per 100,000 population under 75 years of age							
All causes . . . . .	7,070.6	9,554.1	8,159.5	6,949.5	6,910.6	6,743.7	6,775.6
Diseases of heart . . . . .	1,096.1	2,100.8	1,490.3	1,149.4	1,081.3	1,031.0	1,011.7
Ischemic heart disease . . . . .	736.3	1,682.7	1,113.4	805.3	731.5	690.4	672.0
Cerebrovascular diseases . . . . .	171.8	300.7	213.1	187.1	166.7	165.4	160.4
Malignant neoplasms . . . . .	1,619.0	2,035.9	1,929.3	1,627.8	1,546.5	1,502.0	1,485.9
Trachea, bronchus, and lung . . . . .	433.8	529.9	544.2	436.3	407.9	398.3	389.4
Colorectal . . . . .	128.0	186.8	157.8	134.1	125.5	120.5	117.3
Prostate <sup>4</sup> . . . . .	49.6	74.8	86.6	54.3	50.5	48.4	47.0
Breast <sup>5</sup> . . . . .	303.5	460.2	441.7	315.6	295.0	282.1	275.1
Chronic lower respiratory diseases . . . . .	200.7	165.4	182.3	185.3	184.2	174.3	182.2
Influenza and pneumonia . . . . .	80.0	130.8	116.9	77.7	82.2	71.5	76.3
Chronic liver disease and cirrhosis . . . . .	167.6	257.3	175.8	162.7	162.3	157.2	156.7
Diabetes mellitus . . . . .	169.7	115.7	133.7	155.6	160.3	155.2	156.3
Human immunodeficiency virus (HIV) disease . . . . .	69.3	---	309.0	94.7	82.1	74.5	69.8
Unintentional injuries . . . . .	1,160.5	1,520.4	1,139.7	1,031.8	1,117.7	1,134.9	1,170.9
Motor vehicle-related injuries . . . . .	579.6	939.9	726.7	586.1	588.5	587.6	585.7
Suicide <sup>6</sup> . . . . .	380.8	414.5	417.7	362.0	375.0	386.0	381.2
Homicide <sup>6</sup> . . . . .	156.8	271.7	234.9	156.6	159.3	157.0	159.7
Black or African American <sup>7</sup>							
All causes . . . . .	11,378.1	17,873.4	16,593.0	12,897.1	12,304.0	11,922.4	11,890.7
Diseases of heart . . . . .	1,808.3	3,619.9	2,891.8	2,275.2	2,205.7	2,090.5	2,046.0
Ischemic heart disease . . . . .	930.5	2,305.1	1,676.1	1,300.1	1,182.6	1,119.0	1,080.2
Cerebrovascular diseases . . . . .	389.5	883.2	656.4	507.0	479.6	452.0	441.7
Malignant neoplasms . . . . .	1,813.0	2,946.1	2,894.8	2,294.7	2,163.9	2,107.3	2,069.7
Trachea, bronchus, and lung . . . . .	436.1	776.0	811.3	593.0	542.1	529.3	511.8
Colorectal . . . . .	172.9	232.3	241.8	222.4	214.4	196.6	199.6
Prostate <sup>4</sup> . . . . .	103.6	200.3	223.5	171.0	154.3	143.0	144.8
Breast <sup>5</sup> . . . . .	452.3	524.2	592.9	500.0	490.6	477.7	485.7
Chronic lower respiratory diseases . . . . .	187.5	203.7	240.6	232.7	212.3	201.8	211.0
Influenza and pneumonia . . . . .	135.2	384.9	330.8	161.2	157.5	141.2	145.3
Chronic liver disease and cirrhosis . . . . .	124.4	644.0	371.8	185.6	158.9	148.4	138.4
Diabetes mellitus . . . . .	331.9	305.3	361.5	383.4	396.0	378.8	379.9
Human immunodeficiency virus (HIV) disease . . . . .	550.3	---	1,014.7	763.3	670.1	637.8	594.4
Unintentional injuries . . . . .	1,153.2	1,751.5	1,392.7	1,152.8	1,082.1	1,095.5	1,134.6
Motor vehicle-related injuries . . . . .	553.2	750.2	699.5	580.8	536.2	543.8	532.3
Suicide <sup>6</sup> . . . . .	198.0	238.0	261.4	208.7	199.5	200.6	194.0
Homicide <sup>6</sup> . . . . .	1,031.5	1,580.8	1,612.9	941.6	965.0	918.7	967.8
American Indian or Alaska Native <sup>7</sup>							
All causes . . . . .	8,116.4	13,390.9	9,506.2	7,758.2	8,541.6	8,405.4	8,624.4
Diseases of heart . . . . .	865.1	1,819.9	1,391.0	1,030.1	1,099.3	975.8	1,010.2
Ischemic heart disease . . . . .	522.3	1,208.2	901.8	709.3	708.1	628.3	625.2
Cerebrovascular diseases . . . . .	174.5	269.3	223.3	198.1	190.7	171.4	209.4
Malignant neoplasms . . . . .	916.1	1,101.3	1,141.1	995.7	997.2	1,068.4	1,084.3
Trachea, bronchus, and lung . . . . .	216.8	181.1	268.1	227.8	223.9	264.1	268.2
Colorectal . . . . .	93.5	78.8	82.4	93.8	85.5	92.1	109.7
Prostate <sup>4</sup> . . . . .	26.8	66.7	42.0	44.5	34.7	37.1	37.6
Breast <sup>5</sup> . . . . .	130.7	205.5	213.4	174.1	146.8	186.0	149.2
Chronic lower respiratory diseases . . . . .	125.9	89.3	129.0	151.8	163.6	148.6	155.3
Influenza and pneumonia . . . . .	99.4	307.9	206.3	124.0	171.8	116.1	113.6
Chronic liver disease and cirrhosis . . . . .	448.3	1,190.3	535.1	519.4	504.6	480.5	498.9
Diabetes mellitus . . . . .	291.9	305.5	292.3	305.6	355.2	323.5	347.3
Human immunodeficiency virus (HIV) disease . . . . .	82.3	---	70.1	68.4	80.7	93.8	89.9
Unintentional injuries . . . . .	1,968.5	3,541.0	2,183.9	1,700.1	1,818.4	1,732.9	1,875.6
Motor vehicle-related injuries . . . . .	1,091.2	2,102.4	1,301.5	1,032.2	1,081.8	968.3	1,004.9
Suicide <sup>6</sup> . . . . .	544.0	515.0	495.9	403.1	418.2	511.6	498.6
Homicide <sup>6</sup> . . . . .	369.0	628.9	434.2	278.5	323.1	304.7	337.5

See footnotes at end of table.



**Table 29 (page 3 of 4). Years of potential life lost before age 75 for selected causes of death, by sex, race, and Hispanic origin: United States, selected years 1980–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and cause of death <sup>2</sup>	Crude	Age-adjusted <sup>1</sup>					
	2005	1980	1990	2000 <sup>3</sup>	2003	2004	2005
Asian or Pacific Islander <sup>7</sup>							
Years lost before age 75 per 100,000 population under 75 years of age							
All causes . . . . .	3,458.2	5,378.4	4,705.2	3,811.1	3,657.5	3,452.1	3,533.2
Diseases of heart . . . . .	486.1	952.8	702.2	567.9	534.3	474.9	513.8
Ischemic heart disease . . . . .	304.1	697.7	486.6	381.1	354.7	303.4	326.5
Cerebrovascular diseases . . . . .	152.9	266.9	233.5	199.4	192.9	167.5	162.8
Malignant neoplasms . . . . .	905.3	1,218.6	1,166.4	1,033.8	959.1	949.9	945.3
Trachea, bronchus, and lung . . . . .	157.0	238.2	204.7	185.8	173.9	176.0	169.2
Colorectal . . . . .	74.5	115.9	105.1	91.6	94.4	87.7	78.7
Prostate <sup>4</sup> . . . . .	16.8	17.0	32.4	18.8	14.6	15.1	20.4
Breast <sup>5</sup> . . . . .	181.3	222.2	216.5	200.8	192.3	193.4	178.4
Chronic lower respiratory diseases . . . . .	32.4	56.4	72.8	56.5	45.1	36.5	36.0
Influenza and pneumonia . . . . .	37.7	79.3	74.0	48.6	47.7	36.1	40.3
Chronic liver disease and cirrhosis . . . . .	43.1	85.6	72.4	44.8	36.8	38.3	43.6
Diabetes mellitus . . . . .	72.5	83.1	74.0	77.0	79.9	78.3	78.1
Human immunodeficiency virus (HIV) disease . . . . .	17.2	---	77.0	19.9	22.3	21.9	16.6
Unintentional injuries . . . . .	421.4	742.7	636.6	425.7	429.6	415.0	413.7
Motor vehicle-related injuries . . . . .	248.7	472.6	445.5	263.4	269.6	254.4	242.1
Suicide <sup>6</sup> . . . . .	176.8	217.1	200.6	168.6	172.1	175.5	164.6
Homicide <sup>6</sup> . . . . .	134.5	201.1	205.8	113.1	120.6	98.8	130.8
Hispanic or Latino <sup>7,8</sup>							
All causes . . . . .	5,303.3	---	7,963.3	6,037.6	5,910.0	5,654.0	5,757.9
Diseases of heart . . . . .	505.1	---	1,082.0	821.3	767.7	733.1	727.0
Ischemic heart disease . . . . .	309.8	---	756.6	564.6	501.3	483.3	483.2
Cerebrovascular diseases . . . . .	133.9	---	238.0	207.8	187.3	187.9	184.9
Malignant neoplasms . . . . .	735.3	---	1,232.2	1,098.2	1,056.5	1,013.7	1,017.5
Trachea, bronchus, and lung . . . . .	85.7	---	193.7	152.1	144.9	136.3	138.1
Colorectal . . . . .	58.7	---	100.2	101.4	100.1	91.2	86.4
Prostate <sup>4</sup> . . . . .	20.8	---	47.7	42.9	43.4	38.8	41.7
Breast <sup>5</sup> . . . . .	147.8	---	299.3	230.7	218.4	203.4	197.3
Chronic lower respiratory diseases . . . . .	42.2	---	78.8	68.5	67.1	64.1	62.2
Influenza and pneumonia . . . . .	57.8	---	130.1	76.0	76.4	67.8	69.5
Chronic liver disease and cirrhosis . . . . .	151.9	---	329.1	252.1	221.8	212.5	210.3
Diabetes mellitus . . . . .	132.3	---	177.8	215.6	214.0	192.3	202.2
Human immunodeficiency virus (HIV) disease . . . . .	119.6	---	600.1	209.4	175.4	154.9	139.3
Unintentional injuries . . . . .	1,044.1	---	1,190.6	920.1	961.5	917.6	980.1
Motor vehicle-related injuries . . . . .	625.8	---	740.8	540.2	563.6	547.7	569.2
Suicide <sup>6</sup> . . . . .	201.9	---	256.2	188.5	188.3	200.3	193.2
Homicide <sup>6</sup> . . . . .	389.7	---	720.8	335.1	345.0	328.8	343.0

See footnotes at end of table.

**Table 29 (page 4 of 4). Years of potential life lost before age 75 for selected causes of death, by sex, race, and Hispanic origin: United States, selected years 1980–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and cause of death <sup>2</sup>	Crude	Age-adjusted <sup>1</sup>					
	2005	1980	1990	2000 <sup>3</sup>	2003	2004	2005
White, not Hispanic or Latino <sup>8</sup>	Years lost before age 75 per 100,000 population under 75 years of age						
All causes . . . . .	7,380.0	---	8,022.5	6,960.5	6,961.6	6,832.9	6,853.3
Diseases of heart . . . . .	1,213.0	---	1,504.0	1,175.1	1,114.7	1,064.9	1,046.4
Ischemic heart disease . . . . .	820.8	---	1,127.2	824.7	755.8	713.8	694.4
Cerebrovascular diseases . . . . .	178.2	---	210.1	183.0	162.8	161.1	155.5
Malignant neoplasms . . . . .	1,795.3	---	1,974.1	1,668.4	1,590.6	1,549.7	1,534.3
Trachea, bronchus, and lung . . . . .	505.7	---	566.8	460.3	433.5	425.1	416.3
Colorectal . . . . .	141.9	---	162.1	136.2	127.7	123.4	120.8
Prostate <sup>4</sup> . . . . .	55.6	---	89.2	54.9	51.0	49.2	47.3
Breast <sup>5</sup> . . . . .	333.0	---	451.5	322.3	301.8	290.0	283.6
Chronic lower respiratory diseases . . . . .	233.2	---	188.1	193.8	194.2	184.1	194.0
Influenza and pneumonia . . . . .	83.9	---	112.3	76.4	82.1	71.3	76.8
Chronic liver disease and cirrhosis . . . . .	168.3	---	162.4	150.9	153.2	148.3	147.8
Diabetes mellitus . . . . .	175.8	---	131.2	150.2	154.9	152.0	151.5
Human immunodeficiency virus (HIV) disease . . . . .	57.5	---	271.2	76.0	65.4	59.7	56.6
Unintentional injuries . . . . .	1,171.6	---	1,114.7	1,041.4	1,135.8	1,170.6	1,199.6
Motor vehicle-related injuries . . . . .	562.5	---	715.7	588.8	585.3	588.6	579.9
Suicide <sup>6</sup> . . . . .	415.2	---	433.0	389.2	408.1	419.8	416.6
Homicide <sup>6</sup> . . . . .	104.2	---	162.0	113.2	109.6	110.3	109.1

--- Data not available.

<sup>1</sup>Age-adjusted rates are calculated using the year 2000 standard population. Prior to 2003, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2003 data, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#).

<sup>2</sup>Underlying cause of death code numbers are based on the applicable revision of the *International Classification of Diseases (ICD)* for data years shown. For the period 1980–1998, causes were coded using ICD–9 codes that are most nearly comparable with the 113 cause list for ICD–10. See [Appendix II, Cause of death; Tables IV and V](#).

<sup>3</sup>Starting with 1999 data, cause of death is coded according to ICD–10. See [Appendix II, Cause of death, Table V; Comparability ratio, Table VI](#).

<sup>4</sup>Rate for male population only.

<sup>5</sup>Rate for female population only.

<sup>6</sup>Figures for 2001 (in excel spreadsheet on the web) include September 11-related deaths for which death certificates were filed as of October 24, 2002. See [Appendix II, Cause of death; Table V](#) for terrorism-related ICD–10 codes.

<sup>7</sup>The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native and Asian or Pacific Islander populations are known to be underestimated. See [Appendix II, Race](#), for a discussion of sources of bias in death rates by race and Hispanic origin.

<sup>8</sup>Prior to 1997, excludes data from states lacking an Hispanic-origin item on the death certificate. See [Appendix II, Hispanic origin](#).

NOTES: Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were revised based on 2000 census counts. Rates for 2001 and later years were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#). See [Appendix II, Years of potential life lost \(YPLL\)](#) for definition and method of calculation. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and the District of Columbia reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget Standards for comparability with other states. See [Appendix II, Race](#). Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National vital statistics system; numerator data from annual mortality files; denominator data from national population estimates for race groups from Table 1 and unpublished Hispanic population estimates for 1990–1996 prepared by the Housing and Household Economic Statistics Division, U.S. Census Bureau.



**Table 30 (page 1 of 4). Leading causes of death and numbers of deaths, by sex, race, and Hispanic origin: United States, 1980 and 2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and rank order	1980		2005	
	Cause of death	Deaths	Cause of death	Deaths
<b>All persons</b>				
...	All causes	1,989,841	All causes	2,448,017
1. ....	Diseases of heart	761,085	Diseases of heart	652,091
2. ....	Malignant neoplasms	416,509	Malignant neoplasms	559,312
3. ....	Cerebrovascular diseases	170,225	Cerebrovascular diseases	143,579
4. ....	Unintentional injuries	105,718	Chronic lower respiratory diseases	130,933
5. ....	Chronic obstructive pulmonary diseases	56,050	Unintentional injuries	117,809
6. ....	Pneumonia and influenza	54,619	Diabetes mellitus	75,119
7. ....	Diabetes mellitus	34,851	Alzheimer's disease	71,599
8. ....	Chronic liver disease and cirrhosis	30,583	Influenza and pneumonia	63,001
9. ....	Atherosclerosis	29,449	Nephritis, nephrotic syndrome and nephrosis	43,901
10. ....	Suicide	26,869	Septicemia	34,136
<b>Male</b>				
...	All causes	1,075,078	All causes	1,207,675
1. ....	Diseases of heart	405,661	Diseases of heart	322,841
2. ....	Malignant neoplasms	225,948	Malignant neoplasms	290,422
3. ....	Unintentional injuries	74,180	Unintentional injuries	76,375
4. ....	Cerebrovascular diseases	69,973	Chronic lower respiratory diseases	62,435
5. ....	Chronic obstructive pulmonary diseases	38,625	Cerebrovascular diseases	56,586
6. ....	Pneumonia and influenza	27,574	Diabetes mellitus	36,538
7. ....	Suicide	20,505	Influenza and pneumonia	28,052
8. ....	Chronic liver disease and cirrhosis	19,768	Suicide	25,907
9. ....	Homicide	18,779	Nephritis, nephrotic syndrome and nephrosis	21,268
10. ....	Diabetes mellitus	14,325	Alzheimer's disease	20,559
<b>Female</b>				
...	All causes	914,763	All causes	1,240,342
1. ....	Diseases of heart	355,424	Diseases of heart	329,250
2. ....	Malignant neoplasms	190,561	Malignant neoplasms	268,890
3. ....	Cerebrovascular diseases	100,252	Cerebrovascular diseases	86,993
4. ....	Unintentional injuries	31,538	Chronic lower respiratory diseases	68,498
5. ....	Pneumonia and influenza	27,045	Alzheimer's disease	51,040
6. ....	Diabetes mellitus	20,526	Unintentional injuries	41,434
7. ....	Atherosclerosis	17,848	Diabetes mellitus	38,581
8. ....	Chronic obstructive pulmonary diseases	17,425	Influenza and pneumonia	34,949
9. ....	Chronic liver disease and cirrhosis	10,815	Nephritis, nephrotic syndrome and nephrosis	22,633
10. ....	Certain conditions originating in the perinatal period	9,815	Septicemia	18,814
<b>White</b>				
...	All causes	1,738,607	All causes	2,098,097
1. ....	Diseases of heart	683,347	Diseases of heart	564,796
2. ....	Malignant neoplasms	368,162	Malignant neoplasms	482,132
3. ....	Cerebrovascular diseases	148,734	Cerebrovascular diseases	121,868
4. ....	Unintentional injuries	90,122	Chronic lower respiratory diseases	120,884
5. ....	Chronic obstructive pulmonary diseases	52,375	Unintentional injuries	100,406
6. ....	Pneumonia and influenza	48,369	Alzheimer's disease	66,191
7. ....	Diabetes mellitus	28,868	Diabetes mellitus	59,755
8. ....	Atherosclerosis	27,069	Influenza and pneumonia	55,540
9. ....	Chronic liver disease and cirrhosis	25,240	Nephritis, nephrotic syndrome and nephrosis	34,806
10. ....	Suicide	24,829	Suicide	29,527
<b>Black or African American</b>				
...	All causes	233,135	All causes	292,808
1. ....	Diseases of heart	72,956	Diseases of heart	74,159
2. ....	Malignant neoplasms	45,037	Malignant neoplasms	63,165
3. ....	Cerebrovascular diseases	20,135	Cerebrovascular diseases	17,541
4. ....	Unintentional injuries	13,480	Unintentional injuries	13,652
5. ....	Homicide	10,172	Diabetes mellitus	12,970
6. ....	Certain conditions originating in the perinatal period	6,961	Homicide	8,669
7. ....	Pneumonia and influenza	5,648	Chronic lower respiratory diseases	8,229
8. ....	Diabetes mellitus	5,544	Nephritis, nephrotic syndrome and nephrosis	8,075
9. ....	Chronic liver disease and cirrhosis	4,790	Human immunodeficiency virus (HIV) disease	7,022
10. ....	Nephritis, nephrotic syndrome, and nephrosis	3,416	Septicemia	6,221

See footnotes at end of table.

**Table 30 (page 2 of 4). Leading causes of death and numbers of deaths, by sex, race, and Hispanic origin: United States, 1980 and 2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and rank order	1980		2005	
	Cause of death	Deaths	Cause of death	Deaths
<b>American Indian or Alaska Native</b>				
...	All causes	6,923	All causes	13,918
1. ....	Diseases of heart	1,494	Diseases of heart	2,659
2. ....	Unintentional injuries	1,290	Malignant neoplasms	2,465
3. ....	Malignant neoplasms	770	Unintentional injuries	1,626
4. ....	Chronic liver disease and cirrhosis	410	Diabetes mellitus	818
5. ....	Cerebrovascular diseases	322	Cerebrovascular diseases	627
6. ....	Pneumonia and influenza	257	Chronic liver disease and cirrhosis	596
7. ....	Homicide	217	Chronic lower respiratory diseases	518
8. ....	Diabetes mellitus	210	Suicide	392
9. ....	Certain conditions originating in the perinatal period	199	Influenza and pneumonia	354
10. ....	Suicide	181	Nephritis, nephrotic syndrome and nephrosis	265
<b>Asian or Pacific Islander</b>				
...	All causes	11,071	All causes	43,194
1. ....	Diseases of heart	3,265	Malignant neoplasms	11,550
2. ....	Malignant neoplasms	2,522	Diseases of heart	10,477
3. ....	Cerebrovascular diseases	1,028	Cerebrovascular diseases	3,543
4. ....	Unintentional injuries	810	Unintentional injuries	2,125
5. ....	Pneumonia and influenza	342	Diabetes mellitus	1,576
6. ....	Suicide	249	Influenza and pneumonia	1,327
7. ....	Certain conditions originating in the perinatal period	246	Chronic lower respiratory diseases	1,302
8. ....	Diabetes mellitus	227	Nephritis, nephrotic syndrome and nephrosis	755
9. ....	Homicide	211	Suicide	726
10. ....	Chronic obstructive pulmonary diseases	207	Alzheimer's disease	615
<b>Hispanic or Latino</b>				
...	---	---	All causes	131,161
1. ....	---	---	Diseases of heart	29,555
2. ....	---	---	Malignant neoplasms	26,156
3. ....	---	---	Unintentional injuries	11,464
4. ....	---	---	Cerebrovascular diseases	6,830
5. ....	---	---	Diabetes mellitus	6,665
6. ....	---	---	Chronic liver disease and cirrhosis	3,555
7. ....	---	---	Homicide	3,520
8. ....	---	---	Chronic lower respiratory diseases	3,457
9. ....	---	---	Influenza and pneumonia	3,085
10. ....	---	---	Certain conditions originating in the perinatal period	2,816
<b>White male</b>				
...	All causes	933,878	All causes	1,028,152
1. ....	Diseases of heart	364,679	Diseases of heart	279,324
2. ....	Malignant neoplasms	198,188	Malignant neoplasms	250,478
3. ....	Unintentional injuries	62,963	Unintentional injuries	64,600
4. ....	Cerebrovascular diseases	60,095	Chronic lower respiratory diseases	56,911
5. ....	Chronic obstructive pulmonary diseases	35,977	Cerebrovascular diseases	47,194
6. ....	Pneumonia and influenza	23,810	Diabetes mellitus	29,628
7. ....	Suicide	18,901	Influenza and pneumonia	24,425
8. ....	Chronic liver disease and cirrhosis	16,407	Suicide	23,478
9. ....	Diabetes mellitus	12,125	Alzheimer's disease	18,990
10. ....	Atherosclerosis	10,543	Nephritis, nephrotic syndrome and nephrosis	17,137
<b>Black or African American male</b>				
...	All causes	130,138	All causes	149,108
1. ....	Diseases of heart	37,877	Diseases of heart	36,343
2. ....	Malignant neoplasms	25,861	Malignant neoplasms	32,726
3. ....	Unintentional injuries	9,701	Unintentional injuries	9,329
4. ....	Cerebrovascular diseases	9,194	Cerebrovascular diseases	7,519
5. ....	Homicide	8,274	Homicide	7,412
6. ....	Certain conditions originating in the perinatal period	3,869	Diabetes mellitus	5,730
7. ....	Pneumonia and influenza	3,386	Human immunodeficiency virus (HIV) disease	4,684
8. ....	Chronic liver disease and cirrhosis	3,020	Chronic lower respiratory diseases	4,464
9. ....	Chronic obstructive pulmonary diseases	2,429	Nephritis, nephrotic syndrome and nephrosis	3,645
10. ....	Diabetes mellitus	2,010	Certain conditions originating in the perinatal period	2,828

See footnotes at end of table.

**Table 30 (page 3 of 4). Leading causes of death and numbers of deaths, by sex, race, and Hispanic origin: United States, 1980 and 2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and rank order	1980		2005	
	Cause of death	Deaths	Cause of death	Deaths
<b>American Indian or Alaska Native male</b>				
...	All causes	4,193	All causes	7,607
1. ....	Unintentional injuries	946	Diseases of heart	1,471
2. ....	Diseases of heart	917	Malignant neoplasms	1,297
3. ....	Malignant neoplasms	408	Unintentional injuries	1,118
4. ....	Chronic liver disease and cirrhosis	239	Diabetes mellitus	412
5. ....	Cerebrovascular diseases	163	Chronic liver disease and cirrhosis	348
6. ....	Homicide	162	Suicide	313
7. ....	Pneumonia and influenza	148	Chronic lower respiratory diseases	257
8. ....	Suicide	147	Cerebrovascular diseases	249
9. ....	Certain conditions originating in the perinatal period	107	Homicide	193
10. ....	Diabetes mellitus	86	Influenza and pneumonia	180
<b>Asian or Pacific Islander male</b>				
...	All causes	6,809	All causes	22,808
1. ....	Diseases of heart	2,174	Malignant neoplasms	5,921
2. ....	Malignant neoplasms	1,485	Diseases of heart	5,703
3. ....	Unintentional injuries	556	Cerebrovascular diseases	1,624
4. ....	Cerebrovascular diseases	521	Unintentional injuries	1,328
5. ....	Pneumonia and influenza	227	Chronic lower respiratory diseases	803
6. ....	Suicide	159	Diabetes mellitus	768
7. ....	Chronic obstructive pulmonary diseases	158	Influenza and pneumonia	718
8. ....	Homicide	151	Suicide	495
9. ....	Certain conditions originating in the perinatal period	128	Nephritis, nephrotic syndrome and nephrosis	381
10. ....	Diabetes mellitus	103	Homicide	314
<b>Hispanic or Latino male</b>				
...	---	---	All causes	73,788
1. ....	---	---	Diseases of heart	15,900
2. ....	---	---	Malignant neoplasms	13,896
3. ....	---	---	Unintentional injuries	8,612
4. ....	---	---	Diabetes mellitus	3,296
5. ....	---	---	Cerebrovascular diseases	3,188
6. ....	---	---	Homicide	3,008
7. ....	---	---	Chronic liver disease and cirrhosis	2,561
8. ....	---	---	Suicide	1,841
9. ....	---	---	Chronic lower respiratory diseases	1,839
10. ....	---	---	Certain conditions originating in the perinatal period	1,612
<b>White female</b>				
...	All causes	804,729	All causes	1,069,945
1. ....	Diseases of heart	318,668	Diseases of heart	285,472
2. ....	Malignant neoplasms	169,974	Malignant neoplasms	231,654
3. ....	Cerebrovascular diseases	88,639	Cerebrovascular diseases	74,674
4. ....	Unintentional injuries	27,159	Chronic lower respiratory diseases	63,973
5. ....	Pneumonia and influenza	24,559	Alzheimer's disease	47,201
6. ....	Diabetes mellitus	16,743	Unintentional injuries	35,806
7. ....	Atherosclerosis	16,526	Influenza and pneumonia	31,115
8. ....	Chronic obstructive pulmonary diseases	16,398	Diabetes mellitus	30,127
9. ....	Chronic liver disease and cirrhosis	8,833	Nephritis, nephrotic syndrome and nephrosis	17,669
10. ....	Certain conditions originating in the perinatal period	6,512	Septicemia	15,022
<b>Black or African American female</b>				
...	All causes	102,997	All causes	143,700
1. ....	Diseases of heart	35,079	Diseases of heart	37,816
2. ....	Malignant neoplasms	19,176	Malignant neoplasms	30,439
3. ....	Cerebrovascular diseases	10,941	Cerebrovascular diseases	10,022
4. ....	Unintentional injuries	3,779	Diabetes mellitus	7,240
5. ....	Diabetes mellitus	3,534	Nephritis, nephrotic syndrome and nephrosis	4,430
6. ....	Certain conditions originating in the perinatal period	3,092	Unintentional injuries	4,323
7. ....	Pneumonia and influenza	2,262	Chronic lower respiratory diseases	3,765
8. ....	Homicide	1,898	Septicemia	3,435
9. ....	Chronic liver disease and cirrhosis	1,770	Alzheimer's disease	3,328
10. ....	Nephritis, nephrotic syndrome, and nephrosis	1,722	Influenza and pneumonia	3,051

See footnotes at end of table.

**Table 30 (page 4 of 4). Leading causes of death and numbers of deaths, by sex, race, and Hispanic origin: United States, 1980 and 2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and rank order	1980		2005	
	Cause of death	Deaths	Cause of death	Deaths
<b>American Indian or Alaska Native female</b>				
...	All causes	2,730	All causes	6,311
1. ....	Diseases of heart	577	Diseases of heart	1,188
2. ....	Malignant neoplasms	362	Malignant neoplasms	1,168
3. ....	Unintentional injuries	344	Unintentional injuries	508
4. ....	Chronic liver disease and cirrhosis	171	Diabetes mellitus	406
5. ....	Cerebrovascular diseases	159	Cerebrovascular diseases	378
6. ....	Diabetes mellitus	124	Chronic lower respiratory diseases	261
7. ....	Pneumonia and influenza	109	Chronic liver disease and cirrhosis	248
8. ....	Certain conditions originating in the perinatal period	92	Influenza and pneumonia	174
9. ....	Nephritis, nephrotic syndrome, and nephrosis	56	Nephritis, nephrotic syndrome and nephrosis	160
10. ....	Homicide	55	Alzheimer's disease	125
<b>Asian or Pacific Islander female</b>				
...	All causes	4,262	All causes	20,386
1. ....	Diseases of heart	1,091	Malignant neoplasms	5,629
2. ....	Malignant neoplasms	1,037	Diseases of heart	4,774
3. ....	Cerebrovascular diseases	507	Cerebrovascular diseases	1,919
4. ....	Unintentional injuries	254	Diabetes mellitus	808
5. ....	Diabetes mellitus	124	Unintentional injuries	797
6. ....	Certain conditions originating in the perinatal period	118	Influenza and pneumonia	609
7. ....	Pneumonia and influenza	115	Chronic lower respiratory diseases	499
8. ....	Congenital anomalies	104	Alzheimer's disease	386
9. ....	Suicide	90	Nephritis, nephrotic syndrome and nephrosis	374
10. ....	Homicide	60	Essential (primary) hypertension and hypertensive renal disease	326
<b>Hispanic or Latina female</b>				
...	---	---	All causes	57,373
1. ....	---	---	Diseases of heart	13,655
2. ....	---	---	Malignant neoplasms	12,260
3. ....	---	---	Cerebrovascular diseases	3,642
4. ....	---	---	Diabetes mellitus	3,369
5. ....	---	---	Unintentional injuries	2,852
6. ....	---	---	Chronic lower respiratory diseases	1,618
7. ....	---	---	Influenza and pneumonia	1,579
8. ....	---	---	Alzheimer's disease	1,437
9. ....	---	---	Certain conditions originating in the perinatal period	1,204
10. ....	---	---	Nephritis, nephrotic syndrome and nephrosis	1,143

... Category not applicable.  
 --- Data not available.

NOTES: For cause of death codes based on the *International Classification of Diseases, 9th Revision (ICD-9)* in 1980 and *ICD-10* in 2005, see [Appendix II, Cause of death; Tables IV and V](#). In 2005, 21 states and the District of Columbia reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#).

SOURCES: CDC/NCHS, National Vital Statistics System; *Vital statistics of the United States, Vol II, mortality, part A*, 1980. Washington, DC: Public Health Service. 1985; 2005 annual mortality file.

**Table 31 (page 1 of 2). Leading causes of death and numbers of deaths, by age: United States, 1980 and 2005**

[Data are based on death certificates]

Age and rank order	1980		2005	
	Cause of death	Deaths	Cause of death	Deaths
<b>Under 1 year</b>				
...	All causes	45,526	All causes	28,440
1. ....	Congenital anomalies	9,220	Congenital malformations, deformations and chromosomal abnormalities	5,552
2. ....	Sudden infant death syndrome	5,510	Disorders related to short gestation and low birth weight, not elsewhere classified	4,714
3. ....	Respiratory distress syndrome	4,989	Sudden infant death syndrome	2,230
4. ....	Disorders relating to short gestation and unspecified low birthweight	3,648	Newborn affected by maternal complications of pregnancy	1,776
5. ....	Newborn affected by maternal complications of pregnancy	1,572	Newborn affected by complications of placenta, cord and membranes	1,110
6. ....	Intrauterine hypoxia and birth asphyxia	1,497	Unintentional injuries	1,083
7. ....	Unintentional injuries	1,166	Respiratory distress of newborn	860
8. ....	Birth trauma	1,058	Bacterial sepsis of newborn	834
9. ....	Pneumonia and influenza	1,012	Neonatal hemorrhage	665
10. ....	Newborn affected by complications of placenta, cord, and membranes	985	Necrotizing enterocolitis of newborn	546
<b>1-4 years</b>				
...	All causes	8,187	All causes	4,756
1. ....	Unintentional injuries	3,313	Unintentional injuries	1,664
2. ....	Congenital anomalies	1,026	Congenital malformations, deformations and chromosomal abnormalities	522
3. ....	Malignant neoplasms	573	Malignant neoplasms	377
4. ....	Diseases of heart	338	Homicide	375
5. ....	Homicide	319	Diseases of heart	151
6. ....	Pneumonia and influenza	267	Influenza and pneumonia	110
7. ....	Meningitis	223	Septicemia	85
8. ....	Meningococcal infection	110	Cerebrovascular diseases	62
9. ....	Certain conditions originating in the perinatal period	84	Certain conditions originating in the perinatal period	58
10. ....	Septicemia	71	Chronic lower respiratory diseases	56
<b>5-14 years</b>				
...	All causes	10,689	All causes	6,602
1. ....	Unintentional injuries	5,224	Unintentional injuries	2,415
2. ....	Malignant neoplasms	1,497	Malignant neoplasms	1,000
3. ....	Congenital anomalies	561	Congenital malformations, deformations and chromosomal abnormalities	396
4. ....	Homicide	415	Homicide	341
5. ....	Diseases of heart	330	Suicide	272
6. ....	Pneumonia and influenza	194	Diseases of heart	252
7. ....	Suicide	142	Influenza and pneumonia	106
8. ....	Benign neoplasms	104	Chronic lower respiratory diseases	104
9. ....	Cerebrovascular diseases	95	Cerebrovascular diseases	95
10. ....	Chronic obstructive pulmonary diseases	85	Septicemia	81
<b>15-24 years</b>				
...	All causes	49,027	All causes	34,234
1. ....	Unintentional injuries	26,206	Unintentional injuries	15,753
2. ....	Homicide	6,537	Homicide	5,466
3. ....	Suicide	5,239	Suicide	4,212
4. ....	Malignant neoplasms	2,683	Malignant neoplasms	1,717
5. ....	Diseases of heart	1,223	Diseases of heart	1,119
6. ....	Congenital anomalies	600	Congenital malformations, deformations and chromosomal abnormalities	504
7. ....	Cerebrovascular diseases	418	Diabetes mellitus	202
8. ....	Pneumonia and influenza	348	Cerebrovascular diseases	196
9. ....	Chronic obstructive pulmonary diseases	141	Pregnancy, childbirth and puerperium	183
10. ....	Anemias	133	Influenza and pneumonia	172

See footnotes at end of table.

**Table 31 (page 2 of 2). Leading causes of death and numbers of deaths, by age: United States, 1980 and 2005**

[Data are based on death certificates]

Age and rank order	1980		2005	
	Cause of death	Deaths	Cause of death	Deaths
<b>25–44 years</b>				
...	All causes	108,658	All causes	126,710
1. ....	Unintentional injuries	26,722	Unintentional injuries	30,916
2. ....	Malignant neoplasms	17,551	Malignant neoplasms	18,167
3. ....	Diseases of heart	14,513	Diseases of heart	15,937
4. ....	Homicide	10,983	Suicide	11,540
5. ....	Suicide	9,855	Homicide	7,861
6. ....	Chronic liver disease and cirrhosis	4,782	Human immunodeficiency virus (HIV) disease	5,681
7. ....	Cerebrovascular diseases	3,154	Chronic liver disease and cirrhosis	2,999
8. ....	Diabetes mellitus	1,472	Cerebrovascular diseases	2,806
9. ....	Pneumonia and influenza	1,467	Diabetes mellitus	2,662
10. ....	Congenital anomalies	817	Influenza and pneumonia	1,288
<b>45–64 years</b>				
...	All causes	425,338	All causes	458,831
1. ....	Diseases of heart	148,322	Malignant neoplasms	149,645
2. ....	Malignant neoplasms	135,675	Diseases of heart	103,311
3. ....	Cerebrovascular diseases	19,909	Unintentional injuries	29,192
4. ....	Unintentional injuries	18,140	Diabetes mellitus	16,992
5. ....	Chronic liver disease and cirrhosis	16,089	Chronic lower respiratory diseases	16,724
6. ....	Chronic obstructive pulmonary diseases	11,514	Cerebrovascular diseases	16,409
7. ....	Diabetes mellitus	7,977	Chronic liver disease and cirrhosis	14,643
8. ....	Suicide	7,079	Suicide	11,201
9. ....	Pneumonia and influenza	5,804	Nephritis, nephrotic syndrome and nephrosis	6,169
10. ....	Homicide	4,019	Human immunodeficiency virus (HIV) disease	6,128
<b>65 years and over</b>				
...	All causes	1,341,848	All causes	1,788,189
1. ....	Diseases of heart	595,406	Diseases of heart	530,926
2. ....	Malignant neoplasms	258,389	Malignant neoplasms	388,322
3. ....	Cerebrovascular diseases	146,417	Cerebrovascular diseases	123,881
4. ....	Pneumonia and influenza	45,512	Chronic lower respiratory diseases	112,716
5. ....	Chronic obstructive pulmonary diseases	43,587	Alzheimer's disease	70,858
6. ....	Atherosclerosis	28,081	Influenza and pneumonia	55,453
7. ....	Diabetes mellitus	25,216	Diabetes mellitus	55,222
8. ....	Unintentional injuries	24,844	Unintentional injuries	36,729
9. ....	Nephritis, nephrotic syndrome, and nephrosis	12,968	Nephritis, nephrotic syndrome and nephrosis	36,416
10. ....	Chronic liver disease and cirrhosis	9,519	Septicemia	26,243

... Category not applicable.

NOTES: For cause of death codes based on the *International Classification of Diseases, 9th Revision (ICD-9)* in 1980 and *ICD-10* in 2005, see [Appendix II, Cause of death; Tables IV and V](#).

SOURCES: CDC/NCHS, National Vital Statistics System; *Vital statistics of the United States, Vol II, mortality, part A*, 1980. Washington, DC: Public Health Service. 1985; 2005 annual mortality file.



**Table 32 (page 1 of 3). Age-adjusted death rates, by race, sex, region, and urbanization level: United States, average annual 1996–1998, 1999–2001, and 2003–2005**

[Data are based on the National Vital Statistics System]

Sex, region, and urbanization level <sup>1</sup>	All races			White			Black or African American		
	1996–1998	1999–2001	2003–2005	1996–1998	1999–2001	2003–2005	1996–1998	1999–2001	2003–2005
Both sexes	Age-adjusted death rate per 100,000 standard population <sup>2</sup>								
All regions:									
Metropolitan counties:									
Large:									
Central . . . . .	894.5	869.0	794.2	858.8	836.7	768.0	1,164.2	1,133.6	1,047.8
Fringe . . . . .	839.3	833.0	775.7	828.0	823.7	770.5	1,059.6	1,040.8	951.6
Medium . . . . .	865.6	859.0	809.7	846.5	842.2	795.9	1,152.4	1,137.3	1,054.5
Small . . . . .	887.8	887.9	840.7	866.5	868.8	823.6	1,173.1	1,164.3	1,093.4
Nonmetropolitan counties:									
Micropolitan . . . . .	913.0	907.1	866.4	892.1	890.0	851.3	1,208.2	1,174.9	1,112.8
Nonmicropolitan . . . . .	933.0	923.2	886.7	909.6	902.8	867.7	1,191.6	1,162.8	1,105.9
Northeast:									
Metropolitan counties:									
Large:									
Central . . . . .	909.6	861.7	779.9	881.4	838.6	761.5	1,052.4	1,001.1	914.0
Fringe . . . . .	827.8	814.0	753.4	823.3	810.8	754.5	1,000.0	986.6	890.7
Medium . . . . .	851.9	836.2	785.9	842.2	828.6	781.1	1,076.6	1,040.8	940.7
Small . . . . .	852.0	849.5	802.7	847.8	846.5	799.6	1,106.9	1,072.4	1,004.3
Nonmetropolitan counties:									
Micropolitan . . . . .	878.4	854.4	812.7	877.9	855.7	814.7	*	*	*
Nonmicropolitan . . . . .	893.6	877.4	826.8	892.0	876.3	827.4	*	*	*
Midwest:									
Metropolitan counties:									
Large:									
Central . . . . .	951.7	939.6	863.6	880.7	868.9	796.7	1,213.7	1,205.9	1,117.8
Fringe . . . . .	856.4	856.1	796.6	845.9	846.3	789.0	1,121.2	1,123.1	1,052.6
Medium . . . . .	876.1	873.5	822.3	857.0	856.1	806.4	1,168.9	1,151.6	1,076.1
Small . . . . .	860.8	861.5	809.2	847.4	850.8	797.6	1,178.9	1,146.9	1,103.7
Nonmetropolitan counties:									
Micropolitan . . . . .	868.8	865.2	819.1	863.9	863.0	817.7	1,222.0	1,103.5	999.8
Nonmicropolitan . . . . .	867.6	852.7	814.5	858.2	845.9	806.8	1,388.1	1,058.9	1,035.1
South:									
Metropolitan counties:									
Large:									
Central . . . . .	938.1	926.8	847.7	864.9	859.1	785.5	1,241.9	1,212.8	1,122.3
Fringe . . . . .	845.3	845.6	786.2	821.9	826.2	773.0	1,071.4	1,048.4	947.1
Medium . . . . .	891.8	892.4	839.5	852.1	855.8	807.5	1,172.6	1,164.4	1,082.0
Small . . . . .	943.6	950.5	904.7	907.5	917.9	876.7	1,183.2	1,180.0	1,106.0
Nonmetropolitan counties:									
Micropolitan . . . . .	974.1	973.3	935.1	933.5	939.3	905.0	1,218.9	1,194.3	1,137.1
Nonmicropolitan . . . . .	1,005.3	1,003.0	970.3	975.9	978.5	950.0	1,188.4	1,171.2	1,114.8
West:									
Metropolitan counties:									
Large:									
Central . . . . .	819.2	792.4	727.8	829.4	804.1	745.0	1,107.9	1,077.7	1,010.0
Fringe . . . . .	818.6	803.6	759.2	823.2	810.1	768.9	1,060.8	1,006.2	1,009.2
Medium . . . . .	814.7	800.5	761.1	826.9	815.8	778.4	1,045.4	996.3	933.7
Small . . . . .	827.6	815.7	773.8	826.6	815.7	776.1	973.5	990.7	859.8
Nonmetropolitan counties:									
Micropolitan . . . . .	861.0	851.8	815.3	860.4	854.7	819.7	*	*	*
Nonmicropolitan . . . . .	867.1	847.4	807.0	845.9	828.6	788.3	*	*	*

See footnotes at end of table.

**Table 32 (page 2 of 3). Age-adjusted death rates, by race, sex, region, and urbanization level: United States, average annual 1996–1998, 1999–2001, and 2003–2005**

[Data are based on the National Vital Statistics System]

Sex, region, and urbanization level <sup>1</sup>	All races			White			Black or African American		
	1996–1998	1999–2001	2003–2005	1996–1998	1999–2001	2003–2005	1996–1998	1999–2001	2003–2005
Male	Age-adjusted death rate per 100,000 standard population <sup>2</sup>								
All regions:									
Metropolitan counties:									
Large:									
Central . . . . .	1,108.6	1,057.6	955.5	1,060.6	1,015.2	921.0	1,503.8	1,436.1	1,312.4
Fringe . . . . .	1,025.2	998.7	910.4	1,010.9	987.3	903.8	1,329.0	1,281.1	1,147.7
Medium . . . . .	1,069.9	1,038.5	966.0	1,045.4	1,017.7	947.9	1,469.0	1,409.2	1,294.7
Small . . . . .	1,104.6	1,079.2	1,007.2	1,077.4	1,056.1	986.5	1,497.6	1,449.1	1,343.1
Nonmetropolitan counties:									
Micropolitan . . . . .	1,139.9	1,108.6	1,037.0	1,113.5	1,087.5	1,018.2	1,547.8	1,475.9	1,370.4
Nonmicropolitan . . . . .	1,172.3	1,132.9	1,067.2	1,143.3	1,108.3	1,044.6	1,529.0	1,457.3	1,367.7
Northeast:									
Metropolitan counties:									
Large:									
Central . . . . .	1,142.0	1,065.3	946.4	1,102.8	1,034.5	921.2	1,374.4	1,280.7	1,148.2
Fringe . . . . .	1,018.1	985.3	892.2	1,012.6	982.3	894.9	1,263.0	1,219.0	1,065.3
Medium . . . . .	1,061.6	1,018.1	944.4	1,049.9	1,009.7	939.6	1,351.2	1,262.4	1,129.5
Small . . . . .	1,062.7	1,034.1	967.7	1,057.9	1,032.3	965.1	1,376.8	1,280.7	1,186.6
Nonmetropolitan counties:									
Micropolitan . . . . .	1,093.5	1,042.5	979.9	1,093.7	1,045.6	984.0	*	*	*
Nonmicropolitan . . . . .	1,096.9	1,056.9	981.3	1,096.1	1,056.6	984.0	*	*	*
Midwest:									
Metropolitan counties:									
Large:									
Central . . . . .	1,192.6	1,155.5	1,046.9	1,101.0	1,064.6	961.8	1,559.8	1,525.5	1,401.8
Fringe . . . . .	1,051.7	1,030.0	933.7	1,038.7	1,018.7	924.6	1,399.4	1,372.7	1,267.5
Medium . . . . .	1,089.0	1,063.2	985.0	1,065.3	1,043.8	967.2	1,470.0	1,394.4	1,296.9
Small . . . . .	1,076.0	1,057.3	977.4	1,059.7	1,045.0	965.0	1,463.9	1,401.9	1,311.8
Nonmetropolitan counties:									
Micropolitan . . . . .	1,092.0	1,063.4	988.0	1,086.0	1,062.0	987.9	1,551.8	1,315.8	1,105.5
Nonmicropolitan . . . . .	1,094.7	1,050.5	987.6	1,083.0	1,043.3	979.7	1,788.2	1,225.3	1,156.9
South:									
Metropolitan counties:									
Large:									
Central . . . . .	1,172.0	1,130.9	1,025.5	1,074.6	1,042.9	946.3	1,616.0	1,542.6	1,415.2
Fringe . . . . .	1,030.8	1,009.7	920.4	1,000.5	984.8	903.1	1,351.1	1,297.8	1,150.4
Medium . . . . .	1,106.6	1,081.2	1,003.9	1,053.0	1,033.8	962.7	1,517.1	1,466.2	1,350.9
Small . . . . .	1,185.9	1,160.8	1,089.3	1,138.6	1,118.6	1,053.0	1,526.9	1,487.0	1,377.4
Nonmetropolitan counties:									
Micropolitan . . . . .	1,228.0	1,198.9	1,121.5	1,175.1	1,154.7	1,081.3	1,577.6	1,519.8	1,423.2
Nonmicropolitan . . . . .	1,275.7	1,240.6	1,173.5	1,239.3	1,210.2	1,147.5	1,530.4	1,478.0	1,389.2
West:									
Metropolitan counties:									
Large:									
Central . . . . .	996.3	949.8	866.4	1,006.7	962.4	884.5	1,383.8	1,323.2	1,229.0
Fringe . . . . .	981.1	947.0	883.0	988.0	954.5	893.2	1,228.8	1,171.2	1,165.5
Medium . . . . .	987.4	952.8	897.2	1,003.1	969.3	911.4	1,230.6	1,165.1	1,069.5
Small . . . . .	1,003.7	970.5	907.5	1,001.7	971.6	909.6	1,178.9	1,088.1	992.2
Nonmetropolitan counties:									
Micropolitan . . . . .	1,037.8	1,012.6	954.0	1,036.0	1,013.6	955.6	*	*	*
Nonmicropolitan . . . . .	1,048.7	1,010.9	944.0	1,023.0	986.8	919.2	*	*	*

See footnotes at end of table.



**Table 32 (page 3 of 3). Age-adjusted death rates, by race, sex, region, and urbanization level: United States, average annual 1996–1998, 1999–2001, and 2003–2005**

[Data are based on the National Vital Statistics System]

Sex, region, and urbanization level <sup>1</sup>	All races			White			Black or African American		
	1996–1998	1999–2001	2003–2005	1996–1998	1999–2001	2003–2005	1996–1998	1999–2001	2003–2005
Female	Age-adjusted death rate per 100,000 standard population <sup>2</sup>								
All regions:									
Metropolitan counties:									
Large:									
Central . . . . .	738.9	730.1	670.4	711.3	703.8	648.9	934.4	929.3	863.0
Fringe . . . . .	705.7	711.1	670.5	696.3	702.7	665.7	875.9	876.4	810.0
Medium . . . . .	716.8	724.6	686.6	701.9	710.6	675.4	932.0	945.4	879.5
Small . . . . .	731.2	745.7	710.5	713.7	729.1	695.8	951.9	966.5	912.3
Nonmetropolitan counties:									
Micropolitan . . . . .	745.9	754.8	729.0	728.8	740.2	716.0	975.6	968.3	926.9
Nonmicropolitan . . . . .	750.6	759.5	736.2	731.4	741.9	719.6	951.5	953.0	911.4
Northeast:									
Metropolitan counties:									
Large:									
Central . . . . .	748.4	719.6	658.3	725.6	699.1	642.7	848.3	823.6	758.6
Fringe . . . . .	696.3	692.6	649.7	692.4	689.3	649.6	827.2	828.1	763.2
Medium . . . . .	709.1	707.5	668.5	701.4	700.9	664.2	883.4	877.0	794.9
Small . . . . .	706.7	717.3	678.9	703.2	713.8	676.1	919.9	930.0	862.3
Nonmetropolitan counties:									
Micropolitan . . . . .	725.0	717.5	684.5	724.3	718.1	685.5	*	*	*
Nonmicropolitan . . . . .	741.8	738.5	699.4	740.1	737.4	698.7	*	*	*
Midwest:									
Metropolitan counties:									
Large:									
Central . . . . .	784.1	786.2	728.7	729.7	730.9	675.6	974.4	984.5	917.2
Fringe . . . . .	722.9	733.8	692.5	714.5	725.1	686.1	924.6	948.2	895.9
Medium . . . . .	728.9	739.6	701.2	713.6	724.3	687.3	955.1	972.7	908.6
Small . . . . .	710.8	721.4	683.8	700.0	712.2	673.4	963.1	952.5	937.2
Nonmetropolitan counties:									
Micropolitan . . . . .	711.2	721.2	689.8	707.3	718.6	687.8	998.7	948.8	900.4
Nonmicropolitan . . . . .	696.1	700.0	672.4	688.9	693.9	665.4	1,123.8	955.4	940.6
South:									
Metropolitan counties:									
Large:									
Central . . . . .	768.6	776.3	711.5	712.1	721.7	659.8	988.2	989.8	920.6
Fringe . . . . .	705.7	719.6	677.4	686.1	702.4	665.6	882.4	881.0	803.5
Medium . . . . .	731.2	746.6	705.9	700.1	716.0	678.8	938.9	958.2	893.9
Small . . . . .	771.0	795.0	760.5	740.9	767.1	736.6	956.5	974.2	917.0
Nonmetropolitan counties:									
Micropolitan . . . . .	788.4	803.8	783.7	754.8	774.5	758.5	977.3	975.7	937.0
Nonmicropolitan . . . . .	803.4	821.3	803.5	778.3	799.5	785.5	946.7	955.0	913.7
West:									
Metropolitan counties:									
Large:									
Central . . . . .	682.6	670.1	615.9	691.8	679.9	631.1	906.0	899.3	838.8
Fringe . . . . .	696.3	693.8	659.9	699.2	699.1	668.5	920.1	876.5	877.2
Medium . . . . .	680.5	681.3	649.8	691.6	696.1	668.6	890.3	855.7	809.5
Small . . . . .	687.3	691.3	660.8	687.2	690.7	663.3	789.8	886.6	722.0
Nonmetropolitan counties:									
Micropolitan . . . . .	712.6	715.1	691.0	713.8	720.0	697.0	*	*	*
Nonmicropolitan . . . . .	710.4	704.0	679.2	694.2	690.7	666.3	*	*	*

\* Estimates of death rates for the black population in nonmetropolitan counties in the Northeast and West may be unreliable, possibly due to anomalies in population estimates for the black population in nonmetropolitan counties in these regions.

<sup>1</sup>Urbanization levels are for county of residence of decedent. The levels were developed by NCHS using information from the Office of Management and Budget, Department of Agriculture, and Census Bureau. More information on this six-level urban-rural classification scheme is available from: [www.cdc.gov/nchs/r&d/rdc\\_urbanrural.htm](http://www.cdc.gov/nchs/r&d/rdc_urbanrural.htm). See [Appendix II, Urbanization](#).

<sup>2</sup>Average annual death rates are age-adjusted using the year 2000 standard population. In earlier editions of *Health, United States*, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with *Health, United States 2006*, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#). Denominators for rates are population estimates for the middle year of each 3-year period multiplied by 3. The 1997 population estimates used to compute rates for 1996–1998 are intercensal population estimates based on the 2000 census. The 2000 population estimates used to compute rates for 1999–2001 are based on the 2000 census. The 2004 population estimates used to compute rates for 2003–2005 are postcensal population estimates based on the 2000 census. See [Appendix I, Population Census and Population Estimates](#).

NOTES: The race groups, white and black, include persons of Hispanic and non-Hispanic origin. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and the District of Columbia reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Data have been revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Vital Statistics System, Compressed Mortality File.

**Table 33 (page 1 of 2). Age-adjusted death rates among persons 25–64 years of age for selected causes of death, by sex and educational attainment: Selected states, 1994–2005**

[Data are based on death certificates]

Cause of death <sup>2</sup> and year	Years of educational attainment <sup>1</sup>								
	Both sexes			Male			Female		
	Less than 12	12	13 or more	Less than 12	12	13 or more	Less than 12	12	13 or more
Age-adjusted death rate per 100,000 population <sup>3</sup>									
All causes									
1994	594.6	506.4	254.8	793.6	707.1	323.5	397.3	342.9	182.1
1995	604.7	512.5	251.9	801.1	713.2	316.8	408.6	348.1	183.5
1996	579.6	492.5	241.8	763.9	669.6	300.7	396.6	344.2	180.3
1997	554.1	473.4	232.7	719.7	634.4	283.4	387.2	337.5	180.2
1998	561.6	465.8	223.9	727.6	627.1	271.9	395.6	330.9	174.3
1999	585.3	474.5	219.1	763.7	636.7	264.2	409.9	337.3	172.6
2000	591.0	484.5	216.7	780.2	641.8	260.8	409.0	347.7	171.9
2001	576.6	480.9	214.6	745.8	631.2	257.3	407.1	348.6	171.5
2002	575.1	490.9	211.3	726.1	650.2	253.5	416.6	350.7	168.8
2003 <sup>4</sup>	669.9	490.9	211.7	826.8	650.9	252.5	496.8	349.4	171.0
2004 <sup>4</sup>	667.2	477.1	208.3	838.7	618.8	250.7	486.2	344.9	166.7
2005 <sup>4</sup>	650.4	477.6	206.3	821.4	605.8	249.4	471.7	352.3	164.9
Chronic and noncommunicable diseases									
1994	440.5	380.7	193.7	561.9	504.4	228.4	325.0	286.8	155.5
1995	445.1	384.0	192.1	563.4	507.3	224.4	332.1	290.0	156.3
1996	432.7	375.3	189.0	550.6	486.9	222.1	321.2	287.7	153.4
1997	419.0	368.8	187.4	527.0	474.1	219.0	316.0	284.6	153.8
1998	425.2	362.9	180.9	534.4	470.2	211.3	321.3	277.9	148.6
1998 comparability-modified <sup>5</sup>	429.5	366.5	182.7	539.7	474.9	213.4	324.5	280.7	150.1
1999 <sup>6</sup>	447.0	369.8	177.2	563.0	477.6	205.5	337.2	283.6	147.4
2000	446.2	377.6	175.7	567.2	481.5	202.9	334.3	292.3	147.2
2001	436.5	370.7	171.1	545.1	468.2	195.7	331.7	290.3	145.5
2002	432.0	374.4	168.6	528.9	478.2	193.9	334.9	288.5	142.6
2003 <sup>4</sup>	502.7	373.4	167.6	603.6	478.5	191.8	396.7	286.4	142.7
2004 <sup>4</sup>	498.4	358.6	162.9	611.0	449.3	188.0	385.7	279.1	137.6
2005 <sup>4</sup>	484.4	358.8	162.0	594.4	438.0	187.6	375.3	286.1	136.7
Injuries									
1994	95.8	73.4	31.9	149.4	119.2	45.7	38.9	31.7	17.9
1995	96.6	74.3	31.6	149.4	120.3	45.3	40.0	32.1	17.8
1996	92.3	73.0	32.0	139.8	116.2	45.7	40.6	32.7	18.4
1997	92.7	73.5	31.9	138.8	116.4	45.5	41.1	33.4	18.4
1998	93.9	73.8	31.2	139.4	116.6	44.4	43.8	33.7	18.3
1998 comparability-modified <sup>5</sup>	95.4	75.0	31.7	141.6	118.4	45.1	44.5	34.2	18.6
1999 <sup>6</sup>	95.5	75.5	30.6	145.1	118.9	43.3	42.6	34.4	18.1
2000	100.4	76.7	30.3	155.1	119.2	43.1	43.7	35.3	17.9
2001 <sup>7</sup>	97.9	80.7	33.2	147.0	122.7	47.6	44.8	38.6	19.3
2002	99.6	85.2	32.2	143.3	129.6	45.5	49.2	41.0	19.2
2003 <sup>4</sup>	116.6	88.3	33.5	162.9	133.7	46.8	60.5	42.6	20.6
2004 <sup>4</sup>	120.5	90.1	35.0	170.5	132.4	48.9	61.5	45.7	22.0
2005 <sup>4</sup>	121.0	91.9	34.6	171.9	133.5	49.2	61.9	46.9	21.1
Communicable diseases									
1994	57.5	51.6	28.9	81.5	82.8	49.1	32.5	23.7	8.4
1995	62.1	53.4	27.9	87.3	84.7	46.7	35.8	25.2	8.9
1996	53.7	43.3	20.2	72.5	65.6	32.6	33.8	23.0	8.0
1997	41.6	30.1	12.9	53.1	42.9	18.4	29.3	18.7	7.6
1998	41.5	28.2	11.4	52.8	39.4	15.7	29.6	18.4	7.0
1998 comparability-modified <sup>5</sup>	35.6	24.2	9.8	45.3	33.8	13.5	25.4	15.8	6.0
1999 <sup>6</sup>	42.1	28.5	10.8	54.8	39.5	15.1	29.4	18.8	6.6
2000	43.5	29.4	10.3	56.9	40.4	14.3	30.3	19.5	6.4
2001	41.4	28.7	9.9	52.9	39.4	13.6	29.7	19.0	6.3
2002	42.7	30.5	10.2	53.0	41.6	13.8	31.8	20.4	6.7
2003 <sup>4</sup>	49.6	28.3	10.2	59.3	37.8	13.5	38.7	19.8	7.2
2004 <sup>4</sup>	47.4	27.6	10.0	56.2	36.4	13.3	38.0	19.3	6.8
2005 <sup>4</sup>	44.1	26.0	9.4	54.2	33.5	12.2	33.5	18.5	6.7

See footnotes at end of table.

**Table 33 (page 2 of 2). Age-adjusted death rates among persons 25–64 years of age for selected causes of death, by sex and educational attainment: Selected states, 1994–2005**

[Data are based on death certificates]

Cause of death <sup>2</sup> and year	Years of educational attainment <sup>1</sup>								
	Both sexes			Male			Female		
	Less than 12	12	13 or more	Less than 12	12	13 or more	Less than 12	12	13 or more
Age-adjusted death rate per 100,000 population <sup>3</sup>									
HIV disease:									
1994	36.2	36.5	21.4	54.7	63.0	39.7	16.8	12.3	2.9
1995	39.7	38.0	20.6	59.0	64.4	37.8	19.0	13.7	3.5
1996	31.9	27.7	13.1	45.4	45.4	23.8	17.2	11.2	2.4
1997	19.4	14.3	5.8	26.3	23.0	10.1	11.8	6.2	1.6
1998	17.3	11.7	4.3	23.4	18.3	7.5	10.6	5.6	1.1
1998 comparability-modified <sup>5</sup>	18.7	12.7	4.7	25.3	19.8	8.1	11.5	6.1	1.2
1999 <sup>6</sup>	19.0	13.1	4.6	26.1	20.1	7.9	11.7	6.6	1.4
2000	19.8	13.2	4.1	26.9	19.8	7.1	12.6	7.1	1.2
2001	18.4	12.5	3.8	25.0	18.6	6.4	11.6	6.8	1.2
2002	18.2	12.6	3.8	23.4	18.6	6.3	12.6	6.9	1.3
2003 <sup>4</sup>	19.6	10.6	3.4	23.9	15.5	5.8	14.5	5.8	1.2
2004 <sup>4</sup>	17.9	10.0	3.3	21.6	14.6	5.5	13.9	5.5	1.2
2005 <sup>4</sup>	13.9	7.9	2.7	17.5	11.4	4.6	10.0	4.1	1.0
Other communicable diseases:									
1994	21.2	15.1	7.5	26.8	19.7	9.4	15.7	11.4	5.5
1995	22.4	15.5	7.2	28.2	20.3	8.8	16.8	11.5	5.5
1996	21.8	15.7	7.2	27.2	20.2	8.8	16.7	11.9	5.6
1997	22.2	15.9	7.1	26.8	19.9	8.2	17.6	12.5	6.0
1998	24.2	16.5	7.1	29.4	21.1	8.2	19.0	12.8	5.9
1998 comparability-modified <sup>5</sup>	19.4	13.2	5.7	23.5	16.9	6.6	15.2	10.2	4.7
1999 <sup>6</sup>	23.1	15.4	6.2	28.8	19.4	7.2	17.6	12.2	5.3
2000	23.7	16.2	6.2	30.0	20.6	7.2	17.7	12.4	5.1
2001	22.9	16.2	6.1	27.9	20.8	7.1	18.1	12.2	5.1
2002	24.5	17.9	6.4	29.6	23.0	7.5	19.1	13.5	5.4
2003 <sup>4</sup>	30.1	17.8	6.8	35.4	22.3	7.7	24.2	13.9	6.0
2004 <sup>4</sup>	29.4	17.6	6.7	34.6	21.8	7.8	24.1	13.8	5.6
2005 <sup>4</sup>	30.2	18.1	6.6	36.7	22.1	7.7	23.4	14.4	5.7

<sup>1</sup>Educational attainment for the numerator is based on the death certificate item highest grade completed. Educational attainment for the denominator is based on answers to the Current Population Survey question, "What is the highest level of school completed or highest degree received?" (Kominski R, Adams A. Educational Attainment in the United States: March 1993 and 1992, U.S. Census Bureau, Current Population Reports, P20-476, Washington, DC, 1994.)

<sup>2</sup>Underlying cause of death was coded according to the Ninth Revision of the *International Classification of Diseases (ICD)* in 1994–1998 and the Tenth Revision starting in 1999. See [Appendix II, Cause of death; Tables IV and V](#).

<sup>3</sup>Age-adjusted to the 2000 standard population using four age groups: 25–34, 35–44, 45–54, and 55–64 years. Prior to 2003, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2003 data, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment, Table I](#). Death records that are missing information about decedent's education are not included. Percent with no stated education averages 2–9% for causes of death in this table. Age-adjusted death rates for 1994–2000 were calculated using 1990-based postcensal population estimates in the denominator. Starting with 2001 data, rates were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#).

<sup>4</sup>Reporting areas that have adopted the 2003 revision of the U.S. Standard Certificate of Death are excluded because educational attainment data based on the 2003 revision are not comparable with data based on the 1989 revision of the U.S. Standard Certificate of Death. Starting with 2003 data, data from California, Idaho, Montana, and New York are excluded. In addition to these four states, starting with 2004 data, Connecticut, Michigan, New Hampshire, New Jersey, Oklahoma, South Dakota, Washington, and Wyoming have adopted the 2003 revision and therefore are excluded. Starting with 2005 data, the District of Columbia, Florida, Kansas, Nebraska, South Carolina, and Utah are excluded, in addition to the twelve states already listed. Data for Georgia and Rhode Island are excluded because the educational attainment item was not on their certificates. Data for South Dakota were excluded prior to its adoption of the 2003 revision because the educational attainment item was not on its 1989 revision certificates. Because of different education profiles of the excluded states compared with the remaining reporting areas, 2003 and subsequent years are not directly comparable to earlier years. See [Appendix II, Education](#).

<sup>5</sup>Calculated by multiplying the 1998 rate by its comparability ratio to adjust for differences between ICD–9 and ICD–10. See [Appendix II, Cause of death; Comparability ratio, Table VI](#).

<sup>6</sup>Starting with 1999 data, cause of death is coded according to ICD–10. To estimate change between 1998 and 1999, compare the 1999 rate with the comparability-modified rate for 1998. See [Appendix II, Cause of death, Table V; Comparability ratio, Table VI](#).

<sup>7</sup>Figures include September 11, 2001-related deaths for which death certificates were filed as of October 24, 2002. See [Appendix II, Cause of death, Table V](#) for terrorism-related ICD–10 codes.

NOTES: Based on data from 31–47 states and the District of Columbia. Death rates for age groups 65 years and over are not shown because reporting quality of educational attainment on the death certificate is poorer among older decedents. See [Appendix II, Education](#), for information about reporting states and sources of bias in death rates by educational attainment. Injury data for 1999–2003 were revised and may differ from previous editions of *Health, United States*.

SOURCES: CDC/NCHS, National Vital Statistics System; numerator data from annual mortality files; denominator data from unpublished population estimates prepared by the Housing and Household Economic Statistics Division, U.S. Census Bureau.

**Table 34 (page 1 of 4). Death rates for all causes, by sex, race, Hispanic origin, and age: United States, selected years 1950–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 <sup>1</sup>	1960 <sup>1</sup>	1970	1980	1990	2000	2004	2005
All persons								
Deaths per 100,000 resident population								
All ages, age-adjusted <sup>2</sup>	1,446.0	1,339.2	1,222.6	1,039.1	938.7	869.0	800.8	798.8
All ages, crude	963.8	954.7	945.3	878.3	863.8	854.0	816.5	825.9
Under 1 year	3,299.2	2,696.4	2,142.4	1,288.3	971.9	736.7	685.2	692.5
1–4 years	139.4	109.1	84.5	63.9	46.8	32.4	29.9	29.4
5–14 years	60.1	46.6	41.3	30.6	24.0	18.0	16.8	16.3
15–24 years	128.1	106.3	127.7	115.4	99.2	79.9	80.1	81.4
25–34 years	178.7	146.4	157.4	135.5	139.2	101.4	102.1	104.4
35–44 years	358.7	299.4	314.5	227.9	223.2	198.9	193.5	193.3
45–54 years	853.9	756.0	730.0	584.0	473.4	425.6	427.0	432.0
55–64 years	1,901.0	1,735.1	1,658.8	1,346.3	1,196.9	992.2	910.3	906.9
65–74 years	4,104.3	3,822.1	3,582.7	2,994.9	2,648.6	2,399.1	2,164.6	2,137.1
75–84 years	9,331.1	8,745.2	8,004.4	6,692.6	6,007.2	5,666.5	5,275.1	5,260.0
85 years and over	20,196.9	19,857.5	16,344.9	15,980.3	15,327.4	15,524.4	13,823.5	13,798.6
Male								
All ages, age-adjusted <sup>2</sup>	1,674.2	1,609.0	1,542.1	1,348.1	1,202.8	1,053.8	955.7	951.1
All ages, crude	1,106.1	1,104.5	1,090.3	976.9	918.4	853.0	817.6	827.2
Under 1 year	3,728.0	3,059.3	2,410.0	1,428.5	1,082.8	806.5	753.7	762.3
1–4 years	151.7	119.5	93.2	72.6	52.4	35.9	32.4	33.4
5–14 years	70.9	55.7	50.5	36.7	28.5	20.9	19.2	18.6
15–24 years	167.9	152.1	188.5	172.3	147.4	114.9	114.7	117.8
25–34 years	216.5	187.9	215.3	196.1	204.3	138.6	139.5	143.4
35–44 years	428.8	372.8	402.6	299.2	310.4	255.2	243.6	243.0
45–54 years	1,067.1	992.2	958.5	767.3	610.3	542.8	543.5	547.8
55–64 years	2,395.3	2,309.5	2,282.7	1,815.1	1,553.4	1,230.7	1,128.8	1,131.0
65–74 years	4,931.4	4,914.4	4,873.8	4,105.2	3,491.5	2,979.6	2,644.8	2,612.2
75–84 years	10,426.0	10,178.4	10,010.2	8,816.7	7,888.6	6,972.6	6,394.3	6,349.8
85 years and over	21,636.0	21,186.3	17,821.5	18,801.1	18,056.6	17,501.4	15,031.1	14,889.4
Female								
All ages, age-adjusted <sup>2</sup>	1,236.0	1,105.3	971.4	817.9	750.9	731.4	679.2	677.6
All ages, crude	823.5	809.2	807.8	785.3	812.0	855.0	815.4	824.6
Under 1 year	2,854.6	2,321.3	1,863.7	1,141.7	855.7	663.4	613.4	619.4
1–4 years	126.7	98.4	75.4	54.7	41.0	28.7	27.3	25.1
5–14 years	48.9	37.3	31.8	24.2	19.3	15.0	14.3	13.9
15–24 years	89.1	61.3	68.1	57.5	49.0	43.1	43.6	42.7
25–34 years	142.7	106.6	101.6	75.9	74.2	63.5	63.5	64.1
35–44 years	290.3	229.4	231.1	159.3	137.9	143.2	143.5	143.6
45–54 years	641.5	526.7	517.2	412.9	342.7	312.5	314.3	319.9
55–64 years	1,404.8	1,196.4	1,098.9	934.3	878.8	772.2	707.4	698.5
65–74 years	3,333.2	2,871.8	2,579.7	2,144.7	1,991.2	1,921.2	1,761.4	1,736.3
75–84 years	8,399.6	7,633.1	6,677.6	5,440.1	4,883.1	4,814.7	4,521.8	4,520.0
85 years and over	19,194.7	19,008.4	15,518.0	14,746.9	14,274.3	14,719.2	13,280.3	13,297.7
White male <sup>3</sup>								
All ages, age-adjusted <sup>2</sup>	1,642.5	1,586.0	1,513.7	1,317.6	1,165.9	1,029.4	936.9	933.2
All ages, crude	1,089.5	1,098.5	1,086.7	983.3	930.9	887.8	854.2	864.5
Under 1 year	3,400.5	2,694.1	2,113.2	1,230.3	896.1	667.6	631.6	640.0
1–4 years	135.5	104.9	83.6	66.1	45.9	32.6	29.4	30.9
5–14 years	67.2	52.7	48.0	35.0	26.4	19.8	17.9	17.1
15–24 years	152.4	143.7	170.8	167.0	131.3	105.8	108.3	110.4
25–34 years	185.3	163.2	176.6	171.3	176.1	124.1	127.0	130.8
35–44 years	380.9	332.6	343.5	257.4	268.2	233.6	229.1	228.5
45–54 years	984.5	932.2	882.9	698.9	548.7	496.9	504.0	509.3
55–64 years	2,304.4	2,225.2	2,202.6	1,728.5	1,467.2	1,163.3	1,065.9	1,068.1
65–74 years	4,864.9	4,848.4	4,810.1	4,035.7	3,397.7	2,905.7	2,584.0	2,552.7
75–84 years	10,526.3	10,299.6	10,098.8	8,829.8	7,844.9	6,933.1	6,384.8	6,343.2
85 years and over	22,116.3	21,750.0	18,551.7	19,097.3	18,268.3	17,716.4	15,250.7	15,156.5

See footnotes at end of table.

**Table 34 (page 2 of 4). Death rates for all causes, by sex, race, Hispanic origin, and age: United States, selected years 1950–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 <sup>1</sup>	1960 <sup>1</sup>	1970	1980	1990	2000	2004	2005
Deaths per 100,000 resident population								
<b>Black or African American male<sup>3</sup></b>								
All ages, age-adjusted <sup>2</sup> . . . . .	1,909.1	1,811.1	1,873.9	1,697.8	1,644.5	1,403.5	1,269.4	1,252.9
All ages, crude . . . . .	1,257.7	1,181.7	1,186.6	1,034.1	1,008.0	834.1	792.6	799.2
Under 1 year . . . . .	---	5,306.8	4,298.9	2,586.7	2,112.4	1,567.6	1,414.2	1,437.2
1–4 years <sup>4</sup> . . . . .	1,412.6	208.5	150.5	110.5	85.8	54.5	48.6	46.7
5–14 years . . . . .	95.1	75.1	67.1	47.4	41.2	28.2	26.0	27.0
15–24 years . . . . .	289.7	212.0	320.6	209.1	252.2	181.4	164.3	172.1
25–34 years . . . . .	503.5	402.5	559.5	407.3	430.8	261.0	252.3	254.3
35–44 years . . . . .	878.1	762.0	956.6	689.8	699.6	453.0	397.0	395.5
45–54 years . . . . .	1,905.0	1,624.8	1,777.5	1,479.9	1,261.0	1,017.7	954.9	948.6
55–64 years . . . . .	3,773.2	3,316.4	3,256.9	2,873.0	2,618.4	2,080.1	1,960.8	1,954.3
65–74 years . . . . .	5,310.3	5,798.7	5,803.2	5,131.1	4,946.1	4,253.5	3,818.3	3,747.3
75–84 years <sup>5</sup> . . . . .	10,101.9	8,605.1	9,454.9	9,231.6	9,129.5	8,486.0	7,710.3	7,667.1
85 years and over . . . . .	---	14,844.8	12,222.3	16,098.8	16,954.9	16,791.0	14,452.5	13,809.8
<b>American Indian or Alaska Native male<sup>3</sup></b>								
All ages, age-adjusted <sup>2</sup> . . . . .	---	---	---	1,111.5	916.2	841.5	758.1	775.3
All ages, crude . . . . .	---	---	---	597.1	476.4	415.6	453.8	481.9
Under 1 year . . . . .	---	---	---	1,598.1	1,056.6	700.2	1,076.0	882.4
1–4 years . . . . .	---	---	---	82.7	77.4	44.9	55.3	72.4
5–14 years . . . . .	---	---	---	43.7	33.4	20.2	24.1	22.7
15–24 years . . . . .	---	---	---	311.1	219.8	136.2	136.5	145.1
25–34 years . . . . .	---	---	---	360.6	256.1	179.1	188.8	206.3
35–44 years . . . . .	---	---	---	556.8	365.4	295.2	321.2	336.6
45–54 years . . . . .	---	---	---	871.3	619.9	520.0	543.5	588.9
55–64 years . . . . .	---	---	---	1,547.5	1,211.3	1,090.4	1,067.3	1,124.1
65–74 years . . . . .	---	---	---	2,968.4	2,461.7	2,478.3	2,196.8	2,254.1
75–84 years . . . . .	---	---	---	5,607.0	5,389.2	5,351.2	4,584.2	4,373.3
85 years and over . . . . .	---	---	---	12,635.2	11,243.9	10,725.8	7,923.8	8,419.0
<b>Asian or Pacific Islander male<sup>3</sup></b>								
All ages, age-adjusted <sup>2</sup> . . . . .	---	---	---	786.5	716.4	624.2	534.7	534.4
All ages, crude . . . . .	---	---	---	375.3	334.3	332.9	321.1	333.9
Under 1 year . . . . .	---	---	---	816.5	605.3	529.4	443.1	464.5
1–4 years . . . . .	---	---	---	50.9	45.0	23.3	20.7	20.8
5–14 years . . . . .	---	---	---	23.4	20.7	12.9	14.7	14.0
15–24 years . . . . .	---	---	---	80.8	76.0	55.2	53.9	56.9
25–34 years . . . . .	---	---	---	83.5	79.6	55.0	50.9	55.6
35–44 years . . . . .	---	---	---	128.3	130.8	104.9	91.3	93.6
45–54 years . . . . .	---	---	---	342.3	287.1	249.7	241.9	242.4
55–64 years . . . . .	---	---	---	881.1	789.1	642.4	545.3	545.4
65–74 years . . . . .	---	---	---	2,236.1	2,041.4	1,661.0	1,363.4	1,403.8
75–84 years . . . . .	---	---	---	5,389.5	5,008.6	4,328.2	3,766.3	3,759.2
85 years and over . . . . .	---	---	---	13,753.6	12,446.3	12,125.3	10,118.2	9,839.1
<b>Hispanic or Latino male<sup>3,6</sup></b>								
All ages, age-adjusted <sup>2</sup> . . . . .	---	---	---	---	886.4	818.1	706.8	717.0
All ages, crude . . . . .	---	---	---	---	411.6	331.3	321.1	334.4
Under 1 year . . . . .	---	---	---	---	921.8	637.1	636.5	670.2
1–4 years . . . . .	---	---	---	---	53.8	31.5	30.2	33.2
5–14 years . . . . .	---	---	---	---	26.0	17.9	16.7	15.3
15–24 years . . . . .	---	---	---	---	159.3	107.7	115.3	120.4
25–34 years . . . . .	---	---	---	---	234.0	120.2	109.2	115.5
35–44 years . . . . .	---	---	---	---	341.8	211.0	184.2	182.0
45–54 years . . . . .	---	---	---	---	533.9	439.0	417.8	417.4
55–64 years . . . . .	---	---	---	---	1,123.7	965.7	874.0	875.8
65–74 years . . . . .	---	---	---	---	2,368.2	2,287.9	1,994.3	2,029.4
75–84 years . . . . .	---	---	---	---	5,369.1	5,395.3	4,791.6	4,856.8
85 years and over . . . . .	---	---	---	---	12,272.1	13,086.2	9,932.8	10,140.5

See footnotes at end of table.

**Table 34 (page 3 of 4). Death rates for all causes, by sex, race, Hispanic origin, and age: United States, selected years 1950–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 <sup>1</sup>	1960 <sup>1</sup>	1970	1980	1990	2000	2004	2005
Deaths per 100,000 resident population								
White, not Hispanic or Latino male <sup>6</sup>								
All ages, age-adjusted <sup>2</sup>	---	---	---	---	1,170.9	1,035.4	949.0	945.4
All ages, crude	---	---	---	---	985.9	978.5	957.4	970.6
Under 1 year	---	---	---	---	865.4	658.7	625.2	625.7
1–4 years	---	---	---	---	43.8	32.4	29.0	29.9
5–14 years	---	---	---	---	25.7	20.0	17.9	17.4
15–24 years	---	---	---	---	123.4	103.5	104.8	105.8
25–34 years	---	---	---	---	165.3	123.0	130.9	134.1
35–44 years	---	---	---	---	257.1	233.9	235.7	236.1
45–54 years	---	---	---	---	544.5	497.7	510.5	517.2
55–64 years	---	---	---	---	1,479.7	1,170.9	1,076.4	1,079.6
65–74 years	---	---	---	---	3,434.5	2,930.5	2,617.9	2,584.5
75–84 years	---	---	---	---	7,920.4	6,977.8	6,461.5	6,420.4
85 years and over	---	---	---	---	18,505.4	17,853.2	15,489.2	15,401.3
White female <sup>3</sup>								
All ages, age-adjusted <sup>2</sup>	1,198.0	1,074.4	944.0	796.1	728.8	715.3	666.9	666.5
All ages, crude	803.3	800.9	812.6	806.1	846.9	912.3	871.9	882.8
Under 1 year	2,566.8	2,007.7	1,614.6	962.5	690.0	550.5	513.6	515.3
1–4 years	112.2	85.2	66.1	49.3	36.1	25.5	24.4	22.9
5–14 years	45.1	34.7	29.9	22.9	17.9	14.1	13.0	12.8
15–24 years	71.5	54.9	61.6	55.5	45.9	41.1	42.4	41.5
25–34 years	112.8	85.0	84.1	65.4	61.5	55.1	56.8	58.0
35–44 years	235.8	191.1	193.3	138.2	117.4	125.7	129.5	130.4
45–54 years	546.4	458.8	462.9	372.7	309.3	281.4	285.4	291.1
55–64 years	1,293.8	1,078.9	1,014.9	876.2	822.7	730.9	671.8	663.9
65–74 years	3,242.8	2,779.3	2,470.7	2,066.6	1,923.5	1,868.3	1,723.6	1,700.4
75–84 years	8,481.5	7,696.6	6,698.7	5,401.7	4,839.1	4,785.3	4,514.4	4,519.4
85 years and over	19,679.5	19,477.7	15,980.2	14,979.6	14,400.6	14,890.7	13,450.9	13,498.3
Black or African American female <sup>3</sup>								
All ages, age-adjusted <sup>2</sup>	1,545.5	1,369.7	1,228.7	1,033.3	975.1	927.6	855.3	845.7
All ages, crude	1,002.0	905.0	829.2	733.3	747.9	733.0	700.3	703.9
Under 1 year	---	4,162.2	3,368.8	2,123.7	1,735.5	1,279.8	1,149.9	1,179.7
1–4 years <sup>4</sup>	1,139.3	173.3	129.4	84.4	67.6	45.3	40.9	36.7
5–14 years	72.8	53.8	43.8	30.5	27.5	20.0	21.1	19.4
15–24 years	213.1	107.5	111.9	70.5	68.7	58.3	53.7	51.2
25–34 years	393.3	273.2	231.0	150.0	159.5	121.8	112.3	109.8
35–44 years	758.1	568.5	533.0	323.9	298.6	271.9	256.0	250.0
45–54 years	1,576.4	1,177.0	1,043.9	768.2	639.4	588.3	564.1	568.4
55–64 years	3,089.4	2,510.9	1,986.2	1,561.0	1,452.6	1,227.2	1,128.6	1,103.6
65–74 years	4,000.2	4,064.2	3,860.9	3,057.4	2,865.7	2,689.6	2,386.1	2,341.5
75–84 years <sup>5</sup>	8,347.0	6,730.0	6,691.5	6,212.1	5,688.3	5,696.5	5,300.0	5,263.7
85 years and over	---	13,052.6	10,706.6	12,367.2	13,309.5	13,941.3	12,896.9	12,789.9
American Indian or Alaska Native female <sup>3</sup>								
All ages, age-adjusted <sup>2</sup>	---	---	---	662.4	561.8	604.5	557.9	567.7
All ages, crude	---	---	---	380.1	330.4	346.1	380.0	398.8
Under 1 year	---	---	---	1,352.6	688.7	492.2	715.4	752.9
1–4 years	---	---	---	87.5	37.8	39.8	53.4	45.6
5–14 years	---	---	---	33.5	25.5	17.7	20.2	16.8
15–24 years	---	---	---	90.3	69.0	58.9	64.6	67.9
25–34 years	---	---	---	178.5	102.3	84.8	102.9	90.6
35–44 years	---	---	---	286.0	156.4	171.9	191.6	194.1
45–54 years	---	---	---	491.4	380.9	284.9	340.0	366.2
55–64 years	---	---	---	837.1	805.9	772.1	704.0	699.4
65–74 years	---	---	---	1,765.5	1,679.4	1,899.8	1,700.9	1,780.5
75–84 years	---	---	---	3,612.9	3,073.2	3,850.0	3,533.4	3,602.6
85 years and over	---	---	---	8,567.4	8,201.1	9,118.2	7,093.7	7,065.0

See footnotes at end of table.



**Table 34 (page 4 of 4). Death rates for all causes, by sex, race, Hispanic origin, and age: United States, selected years 1950–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 <sup>1</sup>	1960 <sup>1</sup>	1970	1980	1990	2000	2004	2005
Asian or Pacific Islander female <sup>3</sup>								
Deaths per 100,000 resident population								
All ages, age-adjusted <sup>2</sup>	---	---	---	425.9	469.3	416.8	375.5	369.3
All ages, crude	---	---	---	222.5	234.3	262.3	274.6	282.8
Under 1 year	---	---	---	755.8	518.2	434.3	392.2	395.3
1–4 years	---	---	---	35.4	32.0	20.0	22.0	17.5
5–14 years	---	---	---	21.5	13.0	11.7	9.7	11.9
15–24 years	---	---	---	32.3	28.8	22.4	24.1	26.1
25–34 years	---	---	---	45.4	37.5	27.6	26.8	28.6
35–44 years	---	---	---	89.7	69.9	65.6	54.2	58.1
45–54 years	---	---	---	214.1	182.7	155.5	145.8	142.8
55–64 years	---	---	---	440.8	483.4	390.9	339.9	353.2
65–74 years	---	---	---	1,027.7	1,089.2	996.4	933.2	905.5
75–84 years	---	---	---	2,833.6	3,127.9	2,882.4	2,558.2	2,529.8
85 years and over	---	---	---	7,923.3	10,254.0	9,052.2	8,125.8	7,792.5
Hispanic or Latina female <sup>3,6</sup>								
All ages, age-adjusted <sup>2</sup>	---	---	---	---	537.1	546.0	485.9	485.3
All ages, crude	---	---	---	---	285.4	274.6	269.7	278.2
Under 1 year	---	---	---	---	746.6	553.6	535.1	555.4
1–4 years	---	---	---	---	42.1	27.5	24.3	24.5
5–14 years	---	---	---	---	17.3	13.4	12.0	12.0
15–24 years	---	---	---	---	40.6	31.7	31.8	36.6
25–34 years	---	---	---	---	62.9	43.4	40.9	41.1
35–44 years	---	---	---	---	109.3	100.5	88.2	90.6
45–54 years	---	---	---	---	253.3	223.8	208.3	216.4
55–64 years	---	---	---	---	607.5	548.4	511.3	493.9
65–74 years	---	---	---	---	1,453.8	1,423.2	1,297.2	1,291.6
75–84 years	---	---	---	---	3,351.3	3,624.5	3,329.6	3,365.8
85 years and over	---	---	---	---	10,098.7	11,202.8	9,253.0	9,068.4
White, not Hispanic or Latina female <sup>6</sup>								
All ages, age-adjusted <sup>2</sup>	---	---	---	---	734.6	721.5	677.5	677.7
All ages, crude	---	---	---	---	903.6	1,007.3	977.7	992.6
Under 1 year	---	---	---	---	655.3	530.9	500.7	496.5
1–4 years	---	---	---	---	34.0	24.4	24.4	22.2
5–14 years	---	---	---	---	17.6	13.9	13.0	12.9
15–24 years	---	---	---	---	46.0	42.6	44.3	42.2
25–34 years	---	---	---	---	60.6	56.8	60.3	62.1
35–44 years	---	---	---	---	116.8	128.1	136.0	137.0
45–54 years	---	---	---	---	312.1	285.0	292.9	298.7
55–64 years	---	---	---	---	834.5	742.1	683.8	677.2
65–74 years	---	---	---	---	1,940.2	1,891.0	1,752.0	1,729.6
75–84 years	---	---	---	---	4,887.3	4,819.3	4,571.1	4,579.7
85 years and over	---	---	---	---	14,533.1	14,971.7	13,609.6	13,683.1

--- Data not available.

<sup>1</sup>Includes deaths of persons who were not residents of the 50 states and the District of Columbia.

<sup>2</sup>Age-adjusted rates are calculated using the year 2000 standard population. Prior to 2003, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2003 data, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#).

<sup>3</sup>The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native and Asian or Pacific Islander populations are known to be underestimated.

See [Appendix II, Race](#), for a discussion of sources of bias in death rates by race and Hispanic origin.

<sup>4</sup>In 1950, rate is for the age group under 5 years.

<sup>5</sup>In 1950, rate is for the age group 75 years and over.

<sup>6</sup>Prior to 1997, excludes data from states lacking an Hispanic-origin item on the death certificate. See [Appendix II, Hispanic origin](#).

NOTES: Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were revised based on 2000 census counts. Rates for 2001 and later years were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#). In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and the District of Columbia reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Data for additional years are available. See [Appendix III](#).

**SOURCES:** CDC/NCHS, National Vital Statistics System; Grove RD, Hetzel AM. Vital statistics rates in the United States, 1940–1960. Washington, DC: U.S. Government Printing Office, 1968; numerator data from National Vital Statistics System, annual mortality files; denominator data from national population estimates for race groups from Table 1 and unpublished Hispanic population estimates for 1985–1996 prepared by the Housing and Household Economic Statistics Division, U.S. Census Bureau; additional mortality tables are available from: [www.cdc.gov/nchs/datawh/statab/unpubd/mortabs.htm](http://www.cdc.gov/nchs/datawh/statab/unpubd/mortabs.htm); Kung H-C, Hoyert DL, Xu JQ, Murphy SL. Deaths: Final data for 2005. National vital statistics reports. Vol 56 no 10. Hyattsville, MD: NCHS. 2008.

**Table 35 (page 1 of 3). Death rates for diseases of heart, by sex, race, Hispanic origin, and age: United States, selected years 1950–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 <sup>1,2</sup>	1960 <sup>1,2</sup>	1970 <sup>2</sup>	1980 <sup>2</sup>	1990 <sup>2</sup>	2000 <sup>3</sup>	2004	2005
All persons								
Deaths per 100,000 resident population								
All ages, age-adjusted <sup>4</sup>	586.8	559.0	492.7	412.1	321.8	257.6	217.0	211.1
All ages, crude	355.5	369.0	362.0	336.0	289.5	252.6	222.2	220.0
Under 1 year	3.5	6.6	13.1	22.8	20.1	13.0	10.3	8.7
1–4 years	1.3	1.3	1.7	2.6	1.9	1.2	1.2	0.9
5–14 years	2.1	1.3	0.8	0.9	0.9	0.7	0.6	0.6
15–24 years	6.8	4.0	3.0	2.9	2.5	2.6	2.5	2.7
25–34 years	19.4	15.6	11.4	8.3	7.6	7.4	7.9	8.1
35–44 years	86.4	74.6	66.7	44.6	31.4	29.2	29.3	28.9
45–54 years	308.6	271.8	238.4	180.2	120.5	94.2	90.2	89.7
55–64 years	808.1	737.9	652.3	494.1	367.3	261.2	218.8	214.8
65–74 years	1,839.8	1,740.5	1,558.2	1,218.6	894.3	665.6	541.6	518.9
75–84 years	4,310.1	4,089.4	3,683.8	2,993.1	2,295.7	1,780.3	1,506.3	1,460.8
85 years and over	9,150.6	9,317.8	7,891.3	7,777.1	6,739.9	5,926.1	4,895.9	4,778.4
Male								
All ages, age-adjusted <sup>4</sup>	697.0	687.6	634.0	538.9	412.4	320.0	267.9	260.9
All ages, crude	423.4	439.5	422.5	368.6	297.6	249.8	222.8	221.1
Under 1 year	4.0	7.8	15.1	25.5	21.9	13.3	10.9	9.4
1–4 years	1.4	1.4	1.9	2.8	1.9	1.4	1.1	1.0
5–14 years	2.0	1.4	0.9	1.0	0.9	0.8	0.6	0.6
15–24 years	6.8	4.2	3.7	3.7	3.1	3.2	3.2	3.6
25–34 years	22.9	20.1	15.2	11.4	10.3	9.6	10.5	10.8
35–44 years	118.4	112.7	103.2	68.7	48.1	41.4	40.9	40.7
45–54 years	440.5	420.4	376.4	282.6	183.0	140.2	132.3	131.5
55–64 years	1,104.5	1,066.9	987.2	746.8	537.3	371.7	312.8	306.9
65–74 years	2,292.3	2,291.3	2,170.3	1,728.0	1,250.0	898.3	723.8	692.3
75–84 years	4,825.0	4,742.4	4,534.8	3,834.3	2,968.2	2,248.1	1,893.6	1,829.4
85 years and over	9,659.8	9,788.9	8,426.2	8,752.7	7,418.4	6,430.0	5,239.3	5,143.4
Female								
All ages, age-adjusted <sup>4</sup>	484.7	447.0	381.6	320.8	257.0	210.9	177.3	172.3
All ages, crude	288.4	300.6	304.5	305.1	281.8	255.3	221.6	218.9
Under 1 year	2.9	5.4	10.9	20.0	18.3	12.5	9.7	8.0
1–4 years	1.2	1.1	1.6	2.5	1.9	1.0	1.2	0.9
5–14 years	2.2	1.2	0.8	0.9	0.8	0.5	0.6	0.6
15–24 years	6.7	3.7	2.3	2.1	1.8	2.1	1.7	1.7
25–34 years	16.2	11.3	7.7	5.3	5.0	5.2	5.2	5.3
35–44 years	55.1	38.2	32.2	21.4	15.1	17.2	17.7	17.1
45–54 years	177.2	127.5	109.9	84.5	61.0	49.8	49.6	49.2
55–64 years	510.0	429.4	351.6	272.1	215.7	159.3	131.5	129.1
65–74 years	1,419.3	1,261.3	1,082.7	828.6	616.8	474.0	388.6	372.7
75–84 years	3,872.0	3,582.7	3,120.8	2,497.0	1,893.8	1,475.1	1,245.6	1,210.5
85 years and over	8,796.1	9,016.8	7,591.8	7,350.5	6,478.1	5,720.9	4,741.5	4,610.8
White male <sup>5</sup>								
All ages, age-adjusted <sup>4</sup>	700.2	694.5	640.2	539.6	409.2	316.7	264.6	258.0
All ages, crude	433.0	454.6	438.3	384.0	312.7	265.8	236.5	234.9
45–54 years	423.6	413.2	365.7	269.8	170.6	130.7	122.2	121.3
55–64 years	1,081.7	1,056.0	979.3	730.6	516.7	351.8	294.4	288.2
65–74 years	2,308.3	2,297.9	2,177.2	1,729.7	1,230.5	877.8	703.2	671.9
75–84 years	4,907.3	4,839.9	4,617.6	3,883.2	2,983.4	2,247.0	1,897.1	1,831.8
85 years and over	9,950.5	10,135.8	8,818.0	8,958.0	7,558.7	6,560.8	5,348.4	5,288.4
Black or African American male <sup>5</sup>								
All ages, age-adjusted <sup>4</sup>	639.4	615.2	607.3	561.4	485.4	392.5	342.1	329.8
All ages, crude	346.2	330.6	330.3	301.0	256.8	211.1	196.7	194.8
45–54 years	622.5	514.0	512.8	433.4	328.9	247.2	240.0	237.4
55–64 years	1,433.1	1,236.8	1,135.4	987.2	824.0	631.2	560.2	549.1
65–74 years	2,139.1	2,281.4	2,237.8	1,847.2	1,632.9	1,268.8	1,096.6	1,041.6
75–84 years <sup>6</sup>	4,106.1	3,533.6	3,783.4	3,578.8	3,107.1	2,597.6	2,235.5	2,204.1
85 years and over	---	6,037.9	5,367.6	6,819.5	6,479.6	5,633.5	4,637.3	4,230.5

See footnotes at end of table.



**Table 35 (page 2 of 3). Death rates for diseases of heart, by sex, race, Hispanic origin, and age: United States, selected years 1950–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 <sup>1,2</sup>	1960 <sup>1,2</sup>	1970 <sup>2</sup>	1980 <sup>2</sup>	1990 <sup>2</sup>	2000 <sup>3</sup>	2004	2005
Deaths per 100,000 resident population								
<b>American Indian or Alaska Native male<sup>5</sup></b>								
All ages, age-adjusted <sup>4</sup> . . . . .	---	---	---	320.5	264.1	222.2	182.7	173.2
All ages, crude . . . . .	---	---	---	130.6	108.0	90.1	91.4	93.2
45–54 years . . . . .	---	---	---	238.1	173.8	108.5	94.1	112.2
55–64 years . . . . .	---	---	---	496.3	411.0	285.0	260.7	275.0
65–74 years . . . . .	---	---	---	1,009.4	839.1	748.2	590.0	554.4
75–84 years . . . . .	---	---	---	2,062.2	1,788.8	1,655.7	1,252.1	1,123.9
85 years and over . . . . .	---	---	---	4,413.7	3,860.3	3,318.3	2,812.6	2,509.3
<b>Asian or Pacific Islander male<sup>5</sup></b>								
All ages, age-adjusted <sup>4</sup> . . . . .	---	---	---	286.9	220.7	185.5	146.5	141.1
All ages, crude . . . . .	---	---	---	119.8	88.7	90.6	81.4	83.5
45–54 years . . . . .	---	---	---	112.0	70.4	61.1	56.6	58.1
55–64 years . . . . .	---	---	---	306.7	226.1	182.6	138.9	145.3
65–74 years . . . . .	---	---	---	852.4	623.5	482.5	347.7	374.9
75–84 years . . . . .	---	---	---	2,010.9	1,642.2	1,354.7	1,047.0	984.3
85 years and over . . . . .	---	---	---	5,923.0	4,617.8	4,154.2	3,416.7	3,052.0
<b>Hispanic or Latino male<sup>5,7</sup></b>								
All ages, age-adjusted <sup>4</sup> . . . . .	---	---	---	---	270.0	238.2	193.9	192.4
All ages, crude . . . . .	---	---	---	---	91.0	74.7	70.2	72.1
45–54 years . . . . .	---	---	---	---	116.4	84.3	77.6	77.9
55–64 years . . . . .	---	---	---	---	363.0	264.8	224.6	219.3
65–74 years . . . . .	---	---	---	---	829.9	684.8	572.2	561.5
75–84 years . . . . .	---	---	---	---	1,971.3	1,733.2	1,489.0	1,469.2
85 years and over . . . . .	---	---	---	---	4,711.9	4,897.5	3,496.8	3,534.2
<b>White, not Hispanic or Latino male<sup>7</sup></b>								
All ages, age-adjusted <sup>4</sup> . . . . .	---	---	---	---	413.6	319.9	268.7	262.2
All ages, crude . . . . .	---	---	---	---	336.5	297.5	269.1	267.8
45–54 years . . . . .	---	---	---	---	172.8	134.3	126.9	126.2
55–64 years . . . . .	---	---	---	---	521.3	356.3	298.8	293.0
65–74 years . . . . .	---	---	---	---	1,243.4	885.1	709.5	677.6
75–84 years . . . . .	---	---	---	---	3,007.7	2,261.9	1,915.1	1,849.3
85 years and over . . . . .	---	---	---	---	7,663.4	6,606.6	5,430.9	5,374.1
<b>White female<sup>5</sup></b>								
All ages, age-adjusted <sup>4</sup> . . . . .	478.0	441.7	376.7	315.9	250.9	205.6	172.9	168.2
All ages, crude . . . . .	289.4	306.5	313.8	319.2	298.4	274.5	238.3	235.5
45–54 years . . . . .	141.9	103.4	91.4	71.2	50.2	40.9	40.7	40.8
55–64 years . . . . .	460.2	383.0	317.7	248.1	192.4	141.3	117.2	114.5
65–74 years . . . . .	1,400.9	1,229.8	1,044.0	796.7	583.6	445.2	365.4	351.8
75–84 years . . . . .	3,925.2	3,629.7	3,143.5	2,493.6	1,874.3	1,452.4	1,229.1	1,193.3
85 years and over . . . . .	9,084.7	9,280.8	7,839.9	7,501.6	6,563.4	5,801.4	4,810.4	4,691.0
<b>Black or African American female<sup>5</sup></b>								
All ages, age-adjusted <sup>4</sup> . . . . .	536.9	488.9	435.6	378.6	327.5	277.6	236.5	228.3
All ages, crude . . . . .	287.6	268.5	261.0	249.7	237.0	212.6	188.3	185.2
45–54 years . . . . .	525.3	360.7	290.9	202.4	155.3	125.0	121.2	115.4
55–64 years . . . . .	1,210.2	952.3	710.5	530.1	442.0	332.8	276.0	272.0
65–74 years . . . . .	1,659.4	1,680.5	1,553.2	1,210.3	1,017.5	815.2	656.5	614.9
75–84 years <sup>6</sup> . . . . .	3,499.3	2,926.9	2,964.1	2,707.2	2,250.9	1,913.1	1,622.9	1,595.1
85 years and over . . . . .	---	5,650.0	5,003.8	5,796.5	5,766.1	5,298.7	4,534.7	4,365.6

See footnotes at end of table.

**Table 35 (page 3 of 3). Death rates for diseases of heart, by sex, race, Hispanic origin, and age: United States, selected years 1950–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 <sup>1,2</sup>	1960 <sup>1,2</sup>	1970 <sup>2</sup>	1980 <sup>2</sup>	1990 <sup>2</sup>	2000 <sup>3</sup>	2004	2005
Deaths per 100,000 resident population								
<b>American Indian or Alaska Native female<sup>5</sup></b>								
All ages, age-adjusted <sup>4</sup>	---	---	---	175.4	153.1	143.6	119.9	115.9
All ages, crude	---	---	---	80.3	77.5	71.9	73.6	75.1
45–54 years	---	---	---	65.2	62.0	40.2	49.5	52.0
55–64 years	---	---	---	193.5	197.0	149.4	116.9	122.1
65–74 years	---	---	---	577.2	492.8	391.8	317.4	348.6
75–84 years	---	---	---	1,364.3	1,050.3	1,044.1	894.1	846.8
85 years and over	---	---	---	2,893.3	2,868.7	3,146.3	2,449.1	2,145.9
<b>Asian or Pacific Islander female<sup>5</sup></b>								
All ages, age-adjusted <sup>4</sup>	---	---	---	132.3	149.2	115.7	96.1	91.9
All ages, crude	---	---	---	57.0	62.0	65.0	65.1	66.2
45–54 years	---	---	---	28.6	17.5	15.9	13.7	15.8
55–64 years	---	---	---	92.9	99.0	68.8	50.7	56.9
65–74 years	---	---	---	313.3	323.9	229.6	205.6	194.3
75–84 years	---	---	---	1,053.2	1,130.9	866.2	697.4	682.9
85 years and over	---	---	---	3,211.0	4,161.2	3,367.2	2,817.1	2,560.3
<b>Hispanic or Latina female<sup>5,7</sup></b>								
All ages, age-adjusted <sup>4</sup>	---	---	---	---	177.2	163.7	130.0	129.1
All ages, crude	---	---	---	---	79.4	71.5	64.1	66.2
45–54 years	---	---	---	---	43.5	28.2	27.0	26.2
55–64 years	---	---	---	---	153.2	111.2	93.1	92.6
65–74 years	---	---	---	---	460.4	366.3	305.5	305.9
75–84 years	---	---	---	---	1,259.7	1,169.4	962.7	973.4
85 years and over	---	---	---	---	4,440.3	4,605.8	3,421.2	3,341.3
<b>White, not Hispanic or Latina female<sup>7</sup></b>								
All ages, age-adjusted <sup>4</sup>	---	---	---	---	252.6	206.8	175.1	170.3
All ages, crude	---	---	---	---	320.0	304.9	269.1	266.4
45–54 years	---	---	---	---	50.2	41.9	42.2	42.4
55–64 years	---	---	---	---	193.6	142.9	118.9	116.1
65–74 years	---	---	---	---	584.7	448.5	368.6	354.6
75–84 years	---	---	---	---	1,890.2	1,458.9	1,241.2	1,203.6
85 years and over	---	---	---	---	6,615.2	5,822.7	4,862.4	4,745.1

--- Data not available.

<sup>1</sup>Includes deaths of persons who were not residents of the 50 states and the District of Columbia.

<sup>2</sup>Underlying cause of death was coded according to the Sixth Revision of the International Classification of Diseases (ICD) in 1950, Seventh Revision in 1960, Eighth Revision in 1970, and Ninth Revision in 1980–1998. See [Appendix II, Cause of death; Tables IV and V](#).

<sup>3</sup>Starting with 1999 data, cause of death is coded according to ICD–10. See [Appendix II, Cause of death, Table V; Comparability ratio, Table VI](#).

<sup>4</sup>Age-adjusted rates are calculated using the year 2000 standard population. Prior to 2003, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2003 data, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#).

<sup>5</sup>The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native and Asian or Pacific Islander populations are known to be underestimated. See [Appendix II, Race](#), for a discussion of sources of bias in death rates by race and Hispanic origin.

<sup>6</sup>In 1950, rate is for the age group 75 years and over.

<sup>7</sup>Prior to 1997, excludes data from states lacking an Hispanic-origin item on the death certificate. See [Appendix II, Hispanic origin](#).

NOTES: Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were revised based on 2000 census counts. Rates for 2001 and later years were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#). For the period 1980–1998, diseases of heart was coded using ICD–9 codes that are most nearly comparable with diseases of heart codes in the 113 cause list for ICD–10. See [Appendix II, Cause of death; Table V](#). Age groups were selected to minimize the presentation of unstable age-specific death rates based on small numbers of deaths and for consistency among comparison groups. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and the District of Columbia reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System; numerator data from annual mortality files; denominator data from national population estimates for race groups from Table 1 and unpublished Hispanic population estimates for 1985–1996 prepared by the Housing and Household Economic Statistics Division, U.S. Census Bureau; additional mortality tables are available from: [www.cdc.gov/nchs/datawh/statab/unpubd/mortabs.htm](http://www.cdc.gov/nchs/datawh/statab/unpubd/mortabs.htm); Kung H-C, Hoyert DL, Xu JQ, Murphy SL. Deaths: Final data for 2005. National vital statistics reports. Vol 56 no 10. Hyattsville, MD: NCHS. 2008.

**Table 36 (page 1 of 3). Death rates for cerebrovascular diseases, by sex, race, Hispanic origin, and age: United States, selected years 1950–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 <sup>1,2</sup>	1960 <sup>1,2</sup>	1970 <sup>2</sup>	1980 <sup>2</sup>	1990 <sup>2</sup>	2000 <sup>3</sup>	2004	2005
Deaths per 100,000 resident population								
All persons								
All ages, age-adjusted <sup>4</sup> . . . . .	180.7	177.9	147.7	96.2	65.3	60.9	50.0	46.6
All ages, crude . . . . .	104.0	108.0	101.9	75.0	57.8	59.6	51.1	48.4
Under 1 year . . . . .	5.1	4.1	5.0	4.4	3.8	3.3	3.1	3.1
1–4 years . . . . .	0.9	0.8	1.0	0.5	0.3	0.3	0.3	0.4
5–14 years . . . . .	0.5	0.7	0.7	0.3	0.2	0.2	0.2	0.2
15–24 years . . . . .	1.6	1.8	1.6	1.0	0.6	0.5	0.5	0.5
25–34 years . . . . .	4.2	4.7	4.5	2.6	2.2	1.5	1.4	1.4
35–44 years . . . . .	18.7	14.7	15.6	8.5	6.4	5.8	5.4	5.2
45–54 years . . . . .	70.4	49.2	41.6	25.2	18.7	16.0	14.9	15.0
55–64 years . . . . .	194.2	147.3	115.8	65.1	47.9	41.0	34.3	33.0
65–74 years . . . . .	554.7	469.2	384.1	219.0	144.2	128.6	107.8	101.1
75–84 years . . . . .	1,499.6	1,491.3	1,254.2	786.9	498.0	461.3	386.2	359.0
85 years and over . . . . .	2,990.1	3,680.5	3,014.3	2,283.7	1,628.9	1,589.2	1,245.9	1,141.8
Male								
All ages, age-adjusted <sup>4</sup> . . . . .	186.4	186.1	157.4	102.2	68.5	62.4	50.4	46.9
All ages, crude . . . . .	102.5	104.5	94.5	63.4	46.7	46.9	40.7	38.8
Under 1 year . . . . .	6.4	5.0	5.8	5.0	4.4	3.8	3.4	3.5
1–4 years . . . . .	1.1	0.9	1.2	0.4	0.3	*	0.3	0.5
5–14 years . . . . .	0.5	0.7	0.8	0.3	0.2	0.2	0.2	0.3
15–24 years . . . . .	1.8	1.9	1.8	1.1	0.7	0.5	0.5	0.4
25–34 years . . . . .	4.2	4.5	4.4	2.6	2.1	1.5	1.4	1.5
35–44 years . . . . .	17.5	14.6	15.7	8.7	6.8	5.8	5.6	5.2
45–54 years . . . . .	67.9	52.2	44.4	27.2	20.5	17.5	16.7	16.5
55–64 years . . . . .	205.2	163.8	138.7	74.6	54.3	47.2	39.5	38.5
65–74 years . . . . .	589.6	530.7	449.5	258.6	166.6	145.0	121.1	113.6
75–84 years . . . . .	1,543.6	1,555.9	1,361.6	866.3	551.1	490.8	402.9	372.9
85 years and over . . . . .	3,048.6	3,643.1	2,895.2	2,193.6	1,528.5	1,484.3	1,118.1	1,023.3
Female								
All ages, age-adjusted <sup>4</sup> . . . . .	175.8	170.7	140.0	91.7	62.6	59.1	48.9	45.6
All ages, crude . . . . .	105.6	111.4	109.0	85.9	68.4	71.8	61.2	57.8
Under 1 year . . . . .	3.7	3.2	4.0	3.8	3.1	2.7	2.8	2.6
1–4 years . . . . .	0.7	0.7	0.7	0.5	0.3	0.4	*	0.3
5–14 years . . . . .	0.4	0.6	0.6	0.3	0.2	0.2	0.2	0.2
15–24 years . . . . .	1.5	1.6	1.4	0.8	0.6	0.5	0.5	0.5
25–34 years . . . . .	4.3	4.9	4.7	2.6	2.2	1.5	1.4	1.2
35–44 years . . . . .	19.9	14.8	15.6	8.4	6.1	5.7	5.1	5.1
45–54 years . . . . .	72.9	46.3	39.0	23.3	17.0	14.5	13.1	13.6
55–64 years . . . . .	183.1	131.8	95.3	56.8	42.2	35.3	29.5	27.9
65–74 years . . . . .	522.1	415.7	333.3	188.7	126.7	115.1	96.6	90.5
75–84 years . . . . .	1,462.2	1,441.1	1,183.1	740.1	466.2	442.1	374.9	349.5
85 years and over . . . . .	2,949.4	3,704.4	3,081.0	2,323.1	1,667.6	1,632.0	1,303.4	1,196.1
White male <sup>5</sup>								
All ages, age-adjusted <sup>4</sup> . . . . .	182.1	181.6	153.7	98.7	65.5	59.8	48.1	44.7
All ages, crude . . . . .	100.5	102.7	93.5	63.1	46.9	48.4	41.8	39.7
45–54 years . . . . .	53.7	40.9	35.6	21.7	15.4	13.6	12.8	12.8
55–64 years . . . . .	182.2	139.0	119.9	64.0	45.7	39.7	32.4	31.7
65–74 years . . . . .	569.7	501.0	420.0	239.8	152.9	133.8	110.8	103.0
75–84 years . . . . .	1,556.3	1,564.8	1,361.6	852.7	539.2	480.0	393.7	364.8
85 years and over . . . . .	3,127.1	3,734.8	3,018.1	2,230.8	1,545.4	1,490.7	1,129.3	1,033.7
Black or African American male <sup>5</sup>								
All ages, age-adjusted <sup>4</sup> . . . . .	228.8	238.5	206.4	142.0	102.2	89.6	74.9	70.5
All ages, crude . . . . .	122.0	122.9	108.8	73.0	53.0	46.1	41.5	40.3
45–54 years . . . . .	211.9	166.1	136.1	82.1	68.4	49.5	44.8	44.8
55–64 years . . . . .	522.8	439.9	343.4	189.7	141.7	115.4	107.4	103.7
65–74 years . . . . .	783.6	899.2	780.1	472.3	326.9	268.5	235.2	224.3
75–84 years <sup>6</sup> . . . . .	1,504.9	1,475.2	1,445.7	1,066.3	721.5	659.2	551.0	503.7
85 years and over . . . . .	---	2,700.0	1,963.1	1,873.2	1,421.5	1,458.8	1,061.0	983.5

See footnotes at end of table.

**Table 36 (page 2 of 3). Death rates for cerebrovascular diseases, by sex, race, Hispanic origin, and age: United States, selected years 1950–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 <sup>1,2</sup>	1960 <sup>1,2</sup>	1970 <sup>2</sup>	1980 <sup>2</sup>	1990 <sup>2</sup>	2000 <sup>3</sup>	2004	2005
Deaths per 100,000 resident population								
<b>American Indian or Alaska Native male<sup>5</sup></b>								
All ages, age-adjusted <sup>4</sup>	---	---	---	66.4	44.3	46.1	35.0	31.3
All ages, crude	---	---	---	23.1	16.0	16.8	15.6	15.8
45–54 years	---	---	---	*	*	13.3	14.0	13.7
55–64 years	---	---	---	72.0	39.8	48.6	29.9	36.0
65–74 years	---	---	---	170.5	120.3	144.7	109.4	113.0
75–84 years	---	---	---	523.9	325.9	373.3	312.0	229.4
85 years and over	---	---	---	1,384.7	949.8	834.9	559.5	466.2
<b>Asian or Pacific Islander male<sup>5</sup></b>								
All ages, age-adjusted <sup>4</sup>	---	---	---	71.4	59.1	58.0	44.2	41.5
All ages, crude	---	---	---	28.7	23.3	27.2	24.3	23.8
45–54 years	---	---	---	17.0	15.6	15.0	19.2	14.4
55–64 years	---	---	---	59.9	51.8	49.3	36.8	33.4
65–74 years	---	---	---	197.9	167.9	135.6	102.6	105.0
75–84 years	---	---	---	619.5	483.9	438.7	350.8	337.4
85 years and over	---	---	---	1,399.0	1,196.6	1,415.6	969.0	873.6
<b>Hispanic or Latino male<sup>5,7</sup></b>								
All ages, age-adjusted <sup>4</sup>	---	---	---	---	46.5	50.5	41.5	38.0
All ages, crude	---	---	---	---	15.6	15.8	15.0	14.4
45–54 years	---	---	---	---	20.0	18.1	17.5	17.8
55–64 years	---	---	---	---	49.2	48.8	42.9	40.3
65–74 years	---	---	---	---	126.4	136.1	114.4	106.2
75–84 years	---	---	---	---	356.6	392.9	323.3	294.0
85 years and over	---	---	---	---	866.3	1,029.9	778.9	692.4
<b>White, not Hispanic or Latino male<sup>7</sup></b>								
All ages, age-adjusted <sup>4</sup>	---	---	---	---	66.3	59.9	48.2	44.8
All ages, crude	---	---	---	---	50.6	53.9	47.0	44.8
45–54 years	---	---	---	---	14.9	13.0	12.1	12.1
55–64 years	---	---	---	---	45.1	38.7	31.1	30.7
65–74 years	---	---	---	---	154.5	133.1	110.0	102.4
75–84 years	---	---	---	---	547.3	482.3	396.9	368.2
85 years and over	---	---	---	---	1,578.7	1,505.9	1,145.3	1,050.5
<b>White female<sup>5</sup></b>								
All ages, age-adjusted <sup>4</sup>	169.7	165.0	135.5	89.0	60.3	57.3	47.2	44.0
All ages, crude	103.3	110.1	109.8	88.6	71.6	76.9	65.3	61.6
45–54 years	55.0	33.8	30.5	18.6	13.5	11.2	10.1	10.5
55–64 years	156.9	103.0	78.1	48.6	35.8	30.2	25.1	23.8
65–74 years	498.1	383.3	303.2	172.5	116.1	107.3	89.0	83.2
75–84 years	1,471.3	1,444.7	1,176.8	728.8	456.5	434.2	366.8	342.9
85 years and over	3,017.9	3,795.7	3,167.6	2,362.7	1,685.9	1,646.7	1,315.7	1,208.5
<b>Black or African American female<sup>5</sup></b>								
All ages, age-adjusted <sup>4</sup>	238.4	232.5	189.3	119.6	84.0	76.2	65.5	60.7
All ages, crude	128.3	127.7	112.2	77.8	60.7	58.3	51.9	49.1
45–54 years	248.9	166.2	119.4	61.8	44.1	38.1	33.9	35.0
55–64 years	567.7	452.0	272.4	138.4	96.9	76.4	65.0	59.8
65–74 years	754.4	830.5	673.5	361.7	236.7	190.9	166.8	153.7
75–84 years <sup>6</sup>	1,496.7	1,413.1	1,338.3	917.5	595.0	549.2	489.5	450.2
85 years and over	---	2,578.9	2,210.5	1,891.6	1,495.2	1,556.5	1,270.7	1,156.5

See footnotes at end of table.

**Table 36 (page 3 of 3). Death rates for cerebrovascular diseases, by sex, race, Hispanic origin, and age: United States, selected years 1950–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 <sup>1,2</sup>	1960 <sup>1,2</sup>	1970 <sup>2</sup>	1980 <sup>2</sup>	1990 <sup>2</sup>	2000 <sup>3</sup>	2004	2005
Deaths per 100,000 resident population								
<b>American Indian or Alaska Native female<sup>5</sup></b>								
All ages, age-adjusted <sup>4</sup>	---	---	---	51.2	38.4	43.7	35.1	37.1
All ages, crude	---	---	---	22.0	19.3	21.5	21.3	23.9
45–54 years	---	---	---	*	*	14.4	10.8	17.7
55–64 years	---	---	---	*	40.7	37.9	24.5	35.8
65–74 years	---	---	---	128.3	100.5	79.5	110.9	115.2
75–84 years	---	---	---	404.2	282.0	391.1	258.8	287.9
85 years and over	---	---	---	1,095.5	776.2	931.5	710.1	627.3
<b>Asian or Pacific Islander female<sup>5</sup></b>								
All ages, age-adjusted <sup>4</sup>	---	---	---	60.8	54.9	49.1	38.9	36.3
All ages, crude	---	---	---	26.4	24.3	28.7	27.0	26.6
45–54 years	---	---	---	20.3	19.7	13.3	10.5	9.9
55–64 years	---	---	---	43.7	42.1	33.3	28.1	27.2
65–74 years	---	---	---	136.1	124.0	102.8	78.1	81.0
75–84 years	---	---	---	446.6	396.6	386.0	312.5	269.2
85 years and over	---	---	---	1,545.2	1,395.0	1,246.6	979.9	928.3
<b>Hispanic or Latina female<sup>5,7</sup></b>								
All ages, age-adjusted <sup>4</sup>	---	---	---	---	43.7	43.0	35.4	33.5
All ages, crude	---	---	---	---	20.1	19.4	17.9	17.7
45–54 years	---	---	---	---	15.2	12.4	11.8	12.1
55–64 years	---	---	---	---	38.5	31.9	27.7	27.1
65–74 years	---	---	---	---	102.6	95.2	83.0	75.8
75–84 years	---	---	---	---	308.5	311.3	272.2	262.6
85 years and over	---	---	---	---	1,055.3	1,108.9	830.4	762.5
<b>White, not Hispanic or Latina female<sup>7</sup></b>								
All ages, age-adjusted <sup>4</sup>	---	---	---	---	61.0	57.6	47.7	44.4
All ages, crude	---	---	---	---	77.2	85.5	73.7	69.6
45–54 years	---	---	---	---	13.2	10.9	9.8	10.2
55–64 years	---	---	---	---	35.7	29.9	24.7	23.3
65–74 years	---	---	---	---	116.9	107.6	89.0	83.6
75–84 years	---	---	---	---	461.9	438.3	371.6	347.2
85 years and over	---	---	---	---	1,714.7	1,661.6	1,335.1	1,227.3

--- Data not available.

\* Rates based on fewer than 20 deaths are considered unreliable and are not shown.

<sup>1</sup>Includes deaths of persons who were not residents of the 50 states and the District of Columbia.

<sup>2</sup>Underlying cause of death was coded according to the Sixth Revision of the International Classification of Diseases (ICD) in 1950, Seventh Revision in 1960, Eighth Revision in 1970, and Ninth Revision in 1980–1998. See [Appendix II, Cause of death; Tables IV and V](#).

<sup>3</sup>Starting with 1999 data, cause of death is coded according to ICD–10. See [Appendix II, Cause of death, Table V; Comparability ratio, Table VI](#).

<sup>4</sup>Age-adjusted rates are calculated using the year 2000 standard population. Prior to 2003, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2003 data, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#).

<sup>5</sup>The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native and Asian or Pacific Islander populations are known to be underestimated. See [Appendix II, Race](#), for a discussion of sources of bias in death rates by race and Hispanic origin.

<sup>6</sup>In 1950, rate is for the age group 75 years and over.

<sup>7</sup>Prior to 1997, excludes data from states lacking an Hispanic-origin item on the death certificate. See [Appendix II, Hispanic origin](#).

NOTES: Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were revised based on 2000 census counts. Rates for 2001 and later years were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#). For the period 1980–1998, cerebrovascular diseases was coded using ICD–9 codes that are most nearly comparable with cerebrovascular diseases codes in the 113 cause list for ICD–10. See [Appendix II, Cause of death; Table V](#). Age groups were selected to minimize the presentation of unstable age-specific death rates based on small numbers of deaths and for consistency among comparison groups. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and the District of Columbia reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System; Grove RD, Hetzel AM. Vital statistics rates in the United States, 1940–1960. Washington, DC: U.S. Government Printing Office. 1968; numerator data from National Vital Statistics System, annual mortality files; denominator data from national population estimates for race groups from Table 1 and unpublished Hispanic population estimates for 1985–1996 prepared by the Housing and Household Economic Statistics Division, U.S. Census Bureau; additional mortality tables are available from: [www.cdc.gov/nchs/data/wh/statab/unpubd/mortabs.htm](http://www.cdc.gov/nchs/data/wh/statab/unpubd/mortabs.htm); Kung H-C, Hoyert DL, Xu JQ, Murphy SL. Deaths: Final data for 2005. National vital statistics reports. Vol 56 no 10. Hyattsville, MD: NCHS. 2008.

**Table 37 (page 1 of 4). Death rates for malignant neoplasms, by sex, race, Hispanic origin, and age: United States, selected years 1950–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 <sup>1,2</sup>	1960 <sup>1,2</sup>	1970 <sup>2</sup>	1980 <sup>2</sup>	1990 <sup>2</sup>	2000 <sup>3</sup>	2004	2005
All persons								
Deaths per 100,000 resident population								
All ages, age-adjusted <sup>4</sup>	193.9	193.9	198.6	207.9	216.0	199.6	185.8	183.8
All ages, crude	139.8	149.2	162.8	183.9	203.2	196.5	188.6	188.7
Under 1 year	8.7	7.2	4.7	3.2	2.3	2.4	1.8	1.8
1–4 years	11.7	10.9	7.5	4.5	3.5	2.7	2.5	2.3
5–14 years	6.7	6.8	6.0	4.3	3.1	2.5	2.5	2.5
15–24 years	8.6	8.3	8.3	6.3	4.9	4.4	4.1	4.1
25–34 years	20.0	19.5	16.5	13.7	12.6	9.8	9.1	9.0
35–44 years	62.7	59.7	59.5	48.6	43.3	36.6	33.4	33.2
45–54 years	175.1	177.0	182.5	180.0	158.9	127.5	119.0	118.6
55–64 years	390.7	396.8	423.0	436.1	449.6	366.7	333.4	326.9
65–74 years	698.8	713.9	754.2	817.9	872.3	816.3	755.1	742.7
75–84 years	1,153.3	1,127.4	1,169.2	1,232.3	1,348.5	1,335.6	1,280.4	1,274.8
85 years and over	1,451.0	1,450.0	1,320.7	1,594.6	1,752.9	1,819.4	1,653.3	1,637.7
Male								
All ages, age-adjusted <sup>4</sup>	208.1	225.1	247.6	271.2	280.4	248.9	227.7	225.1
All ages, crude	142.9	162.5	182.1	205.3	221.3	207.2	198.4	198.9
Under 1 year	9.7	7.7	4.4	3.7	2.4	2.6	1.8	2.1
1–4 years	12.5	12.4	8.3	5.2	3.7	3.0	2.6	2.6
5–14 years	7.4	7.6	6.7	4.9	3.5	2.7	2.7	2.7
15–24 years	9.7	10.2	10.4	7.8	5.7	5.1	4.8	4.8
25–34 years	17.7	18.8	16.3	13.4	12.6	9.2	8.6	8.8
35–44 years	45.6	48.9	53.0	44.0	38.5	32.7	29.1	28.9
45–54 years	156.2	170.8	183.5	188.7	162.5	130.9	124.3	121.6
55–64 years	413.1	459.9	511.8	520.8	532.9	415.8	376.7	369.5
65–74 years	791.5	890.5	1,006.8	1,093.2	1,122.2	1,001.9	907.6	899.1
75–84 years	1,332.6	1,389.4	1,588.3	1,790.5	1,914.4	1,760.6	1,662.1	1,649.7
85 years and over	1,668.3	1,741.2	1,720.8	2,369.5	2,739.9	2,710.7	2,349.5	2,319.3
Female								
All ages, age-adjusted <sup>4</sup>	182.3	168.7	163.2	166.7	175.7	167.6	157.4	155.6
All ages, crude	136.8	136.4	144.4	163.6	186.0	186.2	179.1	178.8
Under 1 year	7.6	6.8	5.0	2.7	2.2	2.3	1.9	1.5
1–4 years	10.8	9.3	6.7	3.7	3.2	2.5	2.4	2.0
5–14 years	6.0	6.0	5.2	3.6	2.8	2.2	2.2	2.2
15–24 years	7.6	6.5	6.2	4.8	4.1	3.6	3.4	3.3
25–34 years	22.2	20.1	16.7	14.0	12.6	10.4	9.6	9.1
35–44 years	79.3	70.0	65.6	53.1	48.1	40.4	37.7	37.5
45–54 years	194.0	183.0	181.5	171.8	155.5	124.2	113.8	115.8
55–64 years	368.2	337.7	343.2	361.7	375.2	321.3	293.2	287.4
65–74 years	612.3	560.2	557.9	607.1	677.4	663.6	627.1	610.9
75–84 years	1,000.7	924.1	891.9	903.1	1,010.3	1,058.5	1,023.5	1,020.3
85 years and over	1,299.7	1,263.9	1,096.7	1,255.7	1,372.1	1,456.4	1,340.1	1,324.6
White male <sup>5</sup>								
All ages, age-adjusted <sup>4</sup>	210.0	224.7	244.8	265.1	272.2	243.9	224.4	222.3
All ages, crude	147.2	166.1	185.1	208.7	227.7	218.1	209.9	210.6
25–34 years	17.7	18.8	16.2	13.6	12.3	9.2	8.6	8.5
35–44 years	44.5	46.3	50.1	41.1	35.8	30.9	28.2	28.4
45–54 years	150.8	164.1	172.0	175.4	149.9	123.5	117.5	115.7
55–64 years	409.4	450.9	498.1	497.4	508.2	401.9	364.9	356.5
65–74 years	798.7	887.3	997.0	1,070.7	1,090.7	984.3	896.3	889.9
75–84 years	1,367.6	1,413.7	1,592.7	1,779.7	1,883.2	1,736.0	1,652.7	1,646.2
85 years and over	1,732.7	1,791.4	1,772.2	2,375.6	2,715.1	2,693.7	2,348.9	2,322.7
Black or African American male <sup>5</sup>								
All ages, age-adjusted <sup>4</sup>	178.9	227.6	291.9	353.4	397.9	340.3	301.2	293.7
All ages, crude	106.6	136.7	171.6	205.5	221.9	188.5	176.2	175.4
25–34 years	18.0	18.4	18.8	14.1	15.7	10.1	10.0	11.9
35–44 years	55.7	72.9	81.3	73.8	64.3	48.4	38.4	36.2
45–54 years	211.7	244.7	311.2	333.0	302.6	214.2	197.0	186.1
55–64 years	490.8	579.7	689.2	812.5	859.2	626.4	569.2	568.3
65–74 years	636.5	938.5	1,168.9	1,417.2	1,613.9	1,363.8	1,209.7	1,183.8
75–84 years <sup>6</sup>	853.5	1,053.3	1,624.8	2,029.6	2,478.3	2,351.8	2,087.2	2,017.5
85 years and over	---	1,155.2	1,387.0	2,393.9	3,238.3	3,264.8	2,748.8	2,683.7

See footnotes at end of table.



**Table 37 (page 2 of 4). Death rates for malignant neoplasms, by sex, race, Hispanic origin, and age: United States, selected years 1950–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 <sup>1,2</sup>	1960 <sup>1,2</sup>	1970 <sup>2</sup>	1980 <sup>2</sup>	1990 <sup>2</sup>	2000 <sup>3</sup>	2004	2005
Deaths per 100,000 resident population								
<b>American Indian or Alaska Native male<sup>5</sup></b>								
All ages, age-adjusted <sup>4</sup>	---	---	---	140.5	145.8	155.8	147.1	147.6
All ages, crude	---	---	---	58.1	61.4	67.0	78.9	82.2
25–34 years	---	---	---	*	*	*	*	*
35–44 years	---	---	---	*	22.8	21.4	18.1	26.9
45–54 years	---	---	---	86.9	86.9	70.3	86.3	81.7
55–64 years	---	---	---	213.4	246.2	255.6	268.6	269.1
65–74 years	---	---	---	613.0	530.6	648.0	642.0	622.2
75–84 years	---	---	---	936.4	1,038.4	1,152.5	1,060.0	1,020.7
85 years and over	---	---	---	1,471.2	1,654.4	1,584.2	1,134.1	1,302.6
<b>Asian or Pacific Islander male<sup>5</sup></b>								
All ages, age-adjusted <sup>4</sup>	---	---	---	165.2	172.5	150.8	136.3	133.0
All ages, crude	---	---	---	81.9	82.7	85.2	85.9	86.7
25–34 years	---	---	---	6.3	9.2	7.4	5.9	7.2
35–44 years	---	---	---	29.4	27.7	26.1	23.6	20.0
45–54 years	---	---	---	108.2	92.6	78.5	77.2	75.9
55–64 years	---	---	---	298.5	274.6	229.2	198.7	199.4
65–74 years	---	---	---	581.2	687.2	559.4	496.8	492.2
75–84 years	---	---	---	1,147.6	1,229.9	1,086.1	1,021.6	991.4
85 years and over	---	---	---	1,798.7	1,837.0	1,823.2	1,552.4	1,488.6
<b>Hispanic or Latino male<sup>5,7</sup></b>								
All ages, age-adjusted <sup>4</sup>	---	---	---	---	174.7	171.7	151.2	152.7
All ages, crude	---	---	---	---	65.5	61.3	60.9	63.0
25–34 years	---	---	---	---	8.0	6.9	6.4	6.5
35–44 years	---	---	---	---	22.5	20.1	18.6	17.8
45–54 years	---	---	---	---	96.6	79.4	77.4	75.9
55–64 years	---	---	---	---	294.0	253.1	239.0	236.9
65–74 years	---	---	---	---	655.5	651.2	585.8	603.5
75–84 years	---	---	---	---	1,233.4	1,306.4	1,174.2	1,161.8
85 years and over	---	---	---	---	2,019.4	2,049.7	1,508.8	1,601.5
<b>White, not Hispanic or Latino male<sup>7</sup></b>								
All ages, age-adjusted <sup>4</sup>	---	---	---	---	276.7	247.7	229.2	227.3
All ages, crude	---	---	---	---	246.2	244.4	239.2	240.7
25–34 years	---	---	---	---	12.8	9.7	9.3	9.0
35–44 years	---	---	---	---	36.8	32.3	29.9	30.5
45–54 years	---	---	---	---	153.9	127.2	121.9	120.3
55–64 years	---	---	---	---	520.6	412.0	374.6	366.1
65–74 years	---	---	---	---	1,109.0	1,002.1	917.5	910.4
75–84 years	---	---	---	---	1,906.6	1,750.2	1,677.3	1,673.7
85 years and over	---	---	---	---	2,744.4	2,714.1	2,387.1	2,358.3
<b>White female<sup>5</sup></b>								
All ages, age-adjusted <sup>4</sup>	182.0	167.7	162.5	165.2	174.0	166.9	157.0	155.2
All ages, crude	139.9	139.8	149.4	170.3	196.1	199.4	191.7	191.1
25–34 years	20.9	18.8	16.3	13.5	11.9	10.1	9.0	8.6
35–44 years	74.5	66.6	62.4	50.9	46.2	38.2	35.8	36.0
45–54 years	185.8	175.7	177.3	166.4	150.9	120.1	109.2	110.7
55–64 years	362.5	329.0	338.6	355.5	368.5	319.7	290.8	284.0
65–74 years	616.5	562.1	554.7	605.2	675.1	665.6	630.8	616.2
75–84 years	1,026.6	939.3	903.5	905.4	1,011.8	1,063.4	1,033.1	1,030.5
85 years and over	1,348.3	1,304.9	1,126.6	1,266.8	1,372.3	1,459.1	1,348.9	1,333.6

See footnotes at end of table.

**Table 37 (page 3 of 4). Death rates for malignant neoplasms, by sex, race, Hispanic origin, and age: United States, selected years 1950–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 <sup>1,2</sup>	1960 <sup>1,2</sup>	1970 <sup>2</sup>	1980 <sup>2</sup>	1990 <sup>2</sup>	2000 <sup>3</sup>	2004	2005
Deaths per 100,000 resident population								
<b>Black or African American female<sup>5</sup></b>								
All ages, age-adjusted <sup>4</sup> . . . . .	174.1	174.3	173.4	189.5	205.9	193.8	182.5	179.6
All ages, crude . . . . .	111.8	113.8	117.3	136.5	156.1	151.8	148.9	149.1
25–34 years . . . . .	34.3	31.0	20.9	18.3	18.7	13.5	13.9	12.6
35–44 years . . . . .	119.8	102.4	94.6	73.5	67.4	58.9	54.2	52.5
45–54 years . . . . .	277.0	254.8	228.6	230.2	209.9	173.9	160.9	166.3
55–64 years . . . . .	484.6	442.7	404.8	450.4	482.4	391.0	369.4	365.4
65–74 years . . . . .	477.3	541.6	615.8	662.4	773.2	753.1	706.2	679.6
75–84 years <sup>6</sup> . . . . .	605.3	696.3	763.3	923.9	1,059.9	1,124.0	1,083.6	1,071.9
85 years and over . . . . .	---	728.9	791.5	1,159.9	1,431.3	1,527.7	1,387.7	1,365.8
<b>American Indian or Alaska Native female<sup>5</sup></b>								
All ages, age-adjusted <sup>4</sup> . . . . .	---	---	---	94.0	106.9	108.3	108.6	105.9
All ages, crude . . . . .	---	---	---	50.4	62.1	61.3	73.0	73.8
25–34 years . . . . .	---	---	---	*	*	*	*	*
35–44 years . . . . .	---	---	---	36.9	31.0	23.7	27.4	23.5
45–54 years . . . . .	---	---	---	96.9	104.5	59.7	72.0	85.5
55–64 years . . . . .	---	---	---	198.4	213.3	200.9	211.8	201.5
65–74 years . . . . .	---	---	---	350.8	438.9	458.3	480.7	475.8
75–84 years . . . . .	---	---	---	446.4	554.3	714.0	707.3	701.5
85 years and over . . . . .	---	---	---	786.5	843.7	983.2	724.6	581.0
<b>Asian or Pacific Islander female<sup>5</sup></b>								
All ages, age-adjusted <sup>4</sup> . . . . .	---	---	---	93.0	103.0	100.7	92.0	94.5
All ages, crude . . . . .	---	---	---	54.1	60.5	72.1	73.8	78.1
25–34 years . . . . .	---	---	---	9.5	7.3	8.1	6.6	7.7
35–44 years . . . . .	---	---	---	38.7	29.8	28.9	24.2	25.1
45–54 years . . . . .	---	---	---	99.8	93.9	78.2	77.0	75.4
55–64 years . . . . .	---	---	---	174.7	196.2	176.5	159.1	171.3
65–74 years . . . . .	---	---	---	301.9	346.2	357.4	344.2	328.1
75–84 years . . . . .	---	---	---	522.1	641.4	650.1	578.4	606.8
85 years and over . . . . .	---	---	---	800.0	971.7	988.5	872.9	942.0
<b>Hispanic or Latina female<sup>5,7</sup></b>								
All ages, age-adjusted <sup>4</sup> . . . . .	---	---	---	---	111.9	110.8	101.4	101.9
All ages, crude . . . . .	---	---	---	---	60.7	58.5	57.7	59.5
25–34 years . . . . .	---	---	---	---	9.7	7.8	7.5	7.1
35–44 years . . . . .	---	---	---	---	34.8	30.7	25.4	27.0
45–54 years . . . . .	---	---	---	---	100.5	84.7	73.5	79.9
55–64 years . . . . .	---	---	---	---	205.4	192.5	183.0	172.5
65–74 years . . . . .	---	---	---	---	404.8	410.0	380.7	382.5
75–84 years . . . . .	---	---	---	---	663.0	716.5	663.6	688.5
85 years and over . . . . .	---	---	---	---	1,022.7	1,056.5	937.0	880.4

See footnotes at end of table.



**Table 37 (page 4 of 4). Death rates for malignant neoplasms, by sex, race, Hispanic origin, and age: United States, selected years 1950–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 <sup>1,2</sup>	1960 <sup>1,2</sup>	1970 <sup>2</sup>	1980 <sup>2</sup>	1990 <sup>2</sup>	2000 <sup>3</sup>	2004	2005
White, not Hispanic or Latina female <sup>7</sup>	Deaths per 100,000 resident population							
All ages, age-adjusted <sup>4</sup> . . . . .	---	---	---	---	177.5	170.0	160.9	159.1
All ages, crude . . . . .	---	---	---	---	210.6	220.6	215.3	215.1
25–34 years . . . . .	---	---	---	---	11.9	10.5	9.3	8.9
35–44 years . . . . .	---	---	---	---	47.0	38.9	37.5	37.5
45–54 years . . . . .	---	---	---	---	154.9	123.0	112.9	113.9
55–64 years . . . . .	---	---	---	---	379.5	328.9	299.8	293.6
65–74 years . . . . .	---	---	---	---	688.5	681.0	649.8	634.4
75–84 years . . . . .	---	---	---	---	1,027.2	1,075.3	1,052.0	1,049.5
85 years and over . . . . .	---	---	---	---	1,385.7	1,468.7	1,364.5	1,353.2

--- Data not available.

\* Rates based on fewer than 20 deaths are considered unreliable and are not shown.

<sup>1</sup>Includes deaths of persons who were not residents of the 50 states and the District of Columbia.

<sup>2</sup>Underlying cause of death was coded according to the Sixth Revision of the International Classification of Diseases (ICD) in 1950, Seventh Revision in 1960, Eighth Revision in 1970, and Ninth Revision in 1980–1998. See [Appendix II, Cause of death; Tables IV and V](#).

<sup>3</sup>Starting with 1999 data, cause of death is coded according to ICD–10. See [Appendix II, Cause of death, Table V; Comparability ratio, Table VI](#).

<sup>4</sup>Age-adjusted rates are calculated using the year 2000 standard population. Prior to 2003, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2003 data, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#).

<sup>5</sup>The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native and Asian or Pacific Islander populations are known to be underestimated. See [Appendix II, Race](#), for a discussion of sources of bias in death rates by race and Hispanic origin.

<sup>6</sup>In 1950, rate is for the age group 75 years and over.

<sup>7</sup>Prior to 1997, excludes data from states lacking an Hispanic-origin item on the death certificate. See [Appendix II, Hispanic origin](#).

NOTES: Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were revised based on 2000 census counts. Rates for 2001 and later years were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#). See [Appendix II, Cause of death; Tables IV and V](#). Age groups were selected to minimize the presentation of unstable age-specific death rates based on small numbers of deaths and for consistency among comparison groups. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and the District of Columbia reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System; Grove RD, Hetzel AM. Vital statistics rates in the United States, 1940–1960. Washington, DC: U.S. Government Printing Office. 1968; numerator data from National Vital Statistics System, annual mortality files; denominator data from national population estimates for race groups from Table 1 and unpublished Hispanic population estimates for 1985–1996 prepared by the Housing and Household Economic Statistics Division, U.S. Census Bureau; additional mortality tables are available from: [www.cdc.gov/nchs/datawh/statab/unpubd/mortabs.htm](http://www.cdc.gov/nchs/datawh/statab/unpubd/mortabs.htm); Kung H-C, Hoyert DL, Xu JQ, Murphy SL. Deaths: Final data for 2005. National vital statistics reports. Vol 56 no 10. Hyattsville, MD: NCHS. 2008.

**Table 38 (page 1 of 3). Death rates for malignant neoplasms of trachea, bronchus, and lung, by sex, race, Hispanic origin, and age: United States, selected years 1950–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 <sup>1,2</sup>	1960 <sup>1,2</sup>	1970 <sup>2</sup>	1980 <sup>2</sup>	1990 <sup>2</sup>	2000 <sup>3</sup>	2004	2005
Deaths per 100,000 resident population								
All persons								
All ages, age-adjusted <sup>4</sup> . . . . .	15.0	24.1	37.1	49.9	59.3	56.1	53.2	52.6
All ages, crude . . . . .	12.2	20.3	32.1	45.8	56.8	55.3	53.8	53.7
Under 25 years . . . . .	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0
25–34 years . . . . .	0.8	1.0	0.9	0.6	0.7	0.5	0.4	0.3
35–44 years . . . . .	4.5	6.8	11.0	9.2	6.8	6.1	5.5	5.3
45–54 years . . . . .	20.4	29.6	43.4	54.1	46.8	31.6	29.9	29.7
55–64 years . . . . .	48.7	75.3	109.1	138.2	160.6	122.4	106.9	103.3
65–74 years . . . . .	59.7	108.1	164.5	233.3	288.4	284.2	265.5	259.6
75–84 years . . . . .	55.8	91.5	163.2	240.5	333.3	370.8	373.6	375.6
85 years and over . . . . .	42.3	65.6	101.7	176.0	242.5	302.1	297.5	302.3
Male								
All ages, age-adjusted <sup>4</sup> . . . . .	24.6	43.6	67.5	85.2	91.1	76.7	70.1	69.0
All ages, crude . . . . .	19.9	35.4	53.4	68.6	75.1	65.5	62.0	61.8
Under 25 years . . . . .	0.0	0.0	0.1	0.1	0.0	*	*	*
25–34 years . . . . .	1.1	1.4	1.3	0.8	0.9	0.5	0.4	0.4
35–44 years . . . . .	7.1	10.5	16.1	11.9	8.5	6.9	5.8	5.5
45–54 years . . . . .	35.0	50.6	67.5	76.0	59.7	38.5	35.8	35.1
55–64 years . . . . .	83.8	139.3	189.7	213.6	222.9	154.0	131.7	127.6
65–74 years . . . . .	98.7	204.3	320.8	403.9	430.4	377.9	337.6	330.7
75–84 years . . . . .	82.6	167.1	330.8	488.8	572.9	532.2	517.3	515.1
85 years and over . . . . .	62.5	107.7	194.0	368.1	513.2	521.2	466.8	468.0
Female								
All ages, age-adjusted <sup>4</sup> . . . . .	5.8	7.5	13.1	24.4	37.1	41.3	40.9	40.5
All ages, crude . . . . .	4.5	6.4	11.9	24.3	39.4	45.4	45.9	45.9
Under 25 years . . . . .	0.1	0.0	0.0	*	*	*	*	*
25–34 years . . . . .	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.3
35–44 years . . . . .	1.9	3.2	6.1	6.5	5.2	5.3	5.2	5.1
45–54 years . . . . .	5.8	9.2	21.0	33.7	34.5	25.0	24.2	24.5
55–64 years . . . . .	13.6	15.4	36.8	72.0	105.0	93.3	83.9	80.7
65–74 years . . . . .	23.3	24.4	43.1	102.7	177.6	206.9	205.0	199.6
75–84 years . . . . .	32.9	32.8	52.4	94.1	190.1	265.6	277.0	280.9
85 years and over . . . . .	28.2	38.8	50.0	91.9	138.1	212.8	221.3	226.2
White male <sup>5</sup>								
All ages, age-adjusted <sup>4</sup> . . . . .	25.1	43.6	67.1	83.8	89.0	75.7	69.4	68.7
All ages, crude . . . . .	20.8	36.4	54.6	70.2	77.8	69.4	65.9	65.9
45–54 years . . . . .	35.1	49.2	63.3	70.9	55.2	35.7	33.3	33.3
55–64 years . . . . .	85.4	139.2	186.8	205.6	213.7	150.8	127.6	123.4
65–74 years . . . . .	101.5	207.5	325.0	401.0	422.1	374.9	338.1	331.8
75–84 years . . . . .	85.5	170.4	336.7	493.5	572.2	529.9	517.5	519.9
85 years and over . . . . .	67.4	109.4	199.6	374.1	516.3	522.4	472.2	469.9
Black or African American male <sup>5</sup>								
All ages, age-adjusted <sup>4</sup> . . . . .	17.8	42.6	75.4	107.6	125.4	101.1	90.0	86.4
All ages, crude . . . . .	12.1	28.1	47.7	66.6	73.7	58.3	54.3	53.0
45–54 years . . . . .	34.4	68.4	115.4	133.8	114.9	70.7	62.5	56.9
55–64 years . . . . .	68.3	146.8	234.3	321.1	358.6	223.5	206.9	199.1
65–74 years . . . . .	53.8	168.3	300.5	472.3	585.4	488.8	410.4	408.8
75–84 years <sup>6</sup> . . . . .	36.2	107.3	271.6	472.9	645.4	642.5	611.1	565.2
85 years and over . . . . .	---	82.8	137.0	311.3	499.5	562.8	481.8	495.5
American Indian or Alaska Native male <sup>5</sup>								
All ages, age-adjusted <sup>4</sup> . . . . .	---	---	---	31.7	47.5	42.9	44.1	40.4
All ages, crude . . . . .	---	---	---	14.2	20.0	18.1	23.7	22.6
45–54 years . . . . .	---	---	---	*	26.6	14.5	19.8	19.8
55–64 years . . . . .	---	---	---	72.0	97.8	86.0	88.1	83.0
65–74 years . . . . .	---	---	---	202.8	194.3	184.8	236.7	191.2
75–84 years . . . . .	---	---	---	*	356.2	367.9	320.0	305.8
85 years and over . . . . .	---	---	---	*	*	*	*	*

See footnotes at end of table.

**Table 38 (page 2 of 3). Death rates for malignant neoplasms of trachea, bronchus, and lung, by sex, race, Hispanic origin, and age: United States, selected years 1950–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 <sup>1,2</sup>	1960 <sup>1,2</sup>	1970 <sup>2</sup>	1980 <sup>2</sup>	1990 <sup>2</sup>	2000 <sup>3</sup>	2004	2005
Deaths per 100,000 resident population								
<b>Asian or Pacific Islander male<sup>5</sup></b>								
All ages, age-adjusted <sup>4</sup>	---	---	---	43.3	44.2	40.9	37.1	35.9
All ages, crude	---	---	---	22.1	20.7	22.7	23.1	22.9
45–54 years	---	---	---	33.3	18.8	17.2	17.3	15.6
55–64 years	---	---	---	94.4	74.4	61.4	51.1	57.3
65–74 years	---	---	---	174.3	215.8	183.2	166.2	144.1
75–84 years	---	---	---	301.3	307.5	323.2	313.1	286.1
85 years and over	---	---	---	*	421.3	378.0	289.2	381.2
<b>Hispanic or Latino male<sup>5,7</sup></b>								
All ages, age-adjusted <sup>4</sup>	---	---	---	---	44.1	39.0	33.4	33.3
All ages, crude	---	---	---	---	16.2	13.3	12.7	13.0
45–54 years	---	---	---	---	21.5	14.8	12.6	11.9
55–64 years	---	---	---	---	80.7	58.6	50.0	52.3
65–74 years	---	---	---	---	195.5	167.3	151.7	151.4
75–84 years	---	---	---	---	313.4	327.5	279.7	281.6
85 years and over	---	---	---	---	420.7	368.8	287.2	269.0
<b>White, not Hispanic or Latino male<sup>7</sup></b>								
All ages, age-adjusted <sup>4</sup>	---	---	---	---	91.1	77.9	72.1	71.4
All ages, crude	---	---	---	---	84.7	78.9	76.5	76.8
45–54 years	---	---	---	---	57.8	37.7	35.8	36.0
55–64 years	---	---	---	---	221.0	157.7	134.2	129.7
65–74 years	---	---	---	---	431.4	387.3	351.4	345.6
75–84 years	---	---	---	---	580.4	537.7	530.6	534.1
85 years and over	---	---	---	---	520.9	527.3	480.3	480.2
<b>White female<sup>5</sup></b>								
All ages, age-adjusted <sup>4</sup>	5.9	6.8	13.1	24.5	37.6	42.3	41.9	41.5
All ages, crude	4.7	5.9	12.3	25.6	42.4	49.9	50.4	50.4
45–54 years	5.7	9.0	20.9	33.0	34.6	24.8	24.1	24.0
55–64 years	13.7	15.1	37.2	71.9	105.7	96.1	86.1	82.7
65–74 years	23.7	24.8	42.9	104.6	181.3	213.2	212.5	207.2
75–84 years	34.0	32.7	52.6	95.2	194.6	272.7	283.8	288.4
85 years and over	29.3	39.1	50.6	92.4	138.3	215.9	225.3	229.9
<b>Black or African American female<sup>5</sup></b>								
All ages, age-adjusted <sup>4</sup>	4.5	6.8	13.7	24.8	36.8	39.8	39.9	40.0
All ages, crude	2.8	4.3	9.4	18.3	28.1	30.8	32.1	32.7
45–54 years	7.5	11.3	23.9	43.4	41.3	32.9	30.7	33.6
55–64 years	12.9	17.9	33.5	79.9	117.9	95.3	89.0	87.9
65–74 years	14.0	18.1	46.1	88.0	164.3	194.1	186.2	184.5
75–84 years <sup>6</sup>	*	31.3	49.1	79.4	148.1	224.3	256.3	253.5
85 years and over	---	34.2	44.8	85.8	134.9	185.9	196.5	205.9
<b>American Indian or Alaska Native female<sup>5</sup></b>								
All ages, age-adjusted <sup>4</sup>	---	---	---	11.7	19.3	24.8	29.7	29.4
All ages, crude	---	---	---	6.0	11.2	14.0	19.3	20.0
45–54 years	---	---	---	*	22.9	12.1	13.2	18.6
55–64 years	---	---	---	*	53.7	52.6	54.8	56.8
65–74 years	---	---	---	*	78.5	151.5	186.4	166.1
75–84 years	---	---	---	*	111.8	136.3	181.1	192.8
85 years and over	---	---	---	*	*	*	144.9	*

See footnotes at end of table.

**Table 38 (page 3 of 3). Death rates for malignant neoplasms of trachea, bronchus, and lung, by sex, race, Hispanic origin, and age: United States, selected years 1950–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 <sup>1,2</sup>	1960 <sup>1,2</sup>	1970 <sup>2</sup>	1980 <sup>2</sup>	1990 <sup>2</sup>	2000 <sup>3</sup>	2004	2005
Deaths per 100,000 resident population								
Asian or Pacific Islander female <sup>5</sup>								
All ages, age-adjusted <sup>4</sup>	---	---	---	15.4	18.9	18.4	18.0	18.1
All ages, crude	---	---	---	8.4	10.5	12.6	14.1	14.5
45–54 years	---	---	---	13.5	11.3	9.9	11.1	10.9
55–64 years	---	---	---	24.6	38.3	30.4	29.2	28.1
65–74 years	---	---	---	62.4	71.6	77.0	84.7	74.7
75–84 years	---	---	---	117.7	137.9	135.0	130.1	140.0
85 years and over	---	---	---	*	172.9	175.3	145.7	163.9
Hispanic or Latina female <sup>5,7</sup>								
All ages, age-adjusted <sup>4</sup>	---	---	---	---	14.1	14.7	14.3	14.4
All ages, crude	---	---	---	---	7.2	7.2	7.6	7.8
45–54 years	---	---	---	---	8.7	7.1	6.2	7.1
55–64 years	---	---	---	---	25.1	22.2	22.1	20.4
65–74 years	---	---	---	---	66.8	66.0	63.1	63.1
75–84 years	---	---	---	---	94.3	112.3	108.9	114.9
85 years and over	---	---	---	---	118.2	137.5	144.8	129.0
White, not Hispanic or Latina female <sup>7</sup>								
All ages, age-adjusted <sup>4</sup>	---	---	---	---	39.0	44.1	44.1	43.7
All ages, crude	---	---	---	---	46.2	56.4	58.1	58.2
45–54 years	---	---	---	---	36.6	26.4	26.2	26.0
55–64 years	---	---	---	---	111.3	102.2	92.0	88.5
65–74 years	---	---	---	---	186.4	222.9	224.6	219.3
75–84 years	---	---	---	---	199.1	279.2	293.5	298.7
85 years and over	---	---	---	---	139.0	218.0	228.4	234.1

0.0 Quantity more than zero but less than 0.05.

\* Rates based on fewer than 20 deaths are considered unreliable and are not shown.

--- Data not available.

<sup>1</sup>Includes deaths of persons who were not residents of the 50 states and the District of Columbia.

<sup>2</sup>Underlying cause of death was coded according to the Sixth Revision of the International Classification of Diseases (ICD) in 1950, Seventh Revision in 1960, Eighth Revision in 1970, and Ninth Revision in 1980–1998. See [Appendix II, Cause of death; Tables IV and V](#).

<sup>3</sup>Starting with 1999 data, cause of death is coded according to ICD–10. See [Appendix II, Cause of death, Table V; Comparability ratio, Table VI](#).

<sup>4</sup>Age-adjusted rates are calculated using the year 2000 standard population. Prior to 2003, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2003 data, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#).

<sup>5</sup>The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native and Asian or Pacific Islander populations are known to be underestimated. See [Appendix II, Race](#), for a discussion of sources of bias in death rates by race and Hispanic origin.

<sup>6</sup>In 1950, rate is for the age group 75 years and over.

<sup>7</sup>Prior to 1997, excludes data from states lacking an Hispanic-origin item on the death certificate. See [Appendix II, Hispanic origin](#).

NOTES: Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were revised based on 2000 census counts. Rates for 2001 and later years were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#). For the period 1980–1998, lung cancer was coded using ICD–9 codes that are most comparable with lung cancer codes in the 113 cause list for ICD–10. See [Appendix II, Cause of death; Table V](#). Age groups were selected to minimize the presentation of unstable age-specific death rates based on small numbers of deaths and for consistency among comparison groups. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and the District of Columbia reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System; Grove RD, Hetzel AM. Vital statistics rates in the United States, 1940–1960. Washington, DC: U.S. Government Printing Office. 1968; numerator data from National Vital Statistics System, annual mortality files; denominator data from national population estimates for race groups from Table 1 and unpublished Hispanic population estimates for 1985–1996 prepared by the Housing and Household Economic Statistics Division, U.S. Census Bureau; additional mortality tables are available from: [www.cdc.gov/nchs/data/wh/statab/unpubd/mortabs.htm](http://www.cdc.gov/nchs/data/wh/statab/unpubd/mortabs.htm); Kung H-C, Hoyert DL, Xu JQ, Murphy SL. Deaths: Final data for 2005. National vital statistics reports. Vol 56 no 10. Hyattsville, MD: NCHS. 2008.

**Table 39 (page 1 of 2). Death rates for malignant neoplasm of breast among females, by race, Hispanic origin, and age: United States, selected years 1950–2005**

[Data are based on death certificates]

<i>Race, Hispanic origin, and age</i>	1950 <sup>1,2</sup>	1960 <sup>1,2</sup>	1970 <sup>2</sup>	1980 <sup>2</sup>	1990 <sup>2</sup>	2000 <sup>3</sup>	2004	2005
Deaths per 100,000 resident population								
All females								
All ages, age-adjusted <sup>4</sup> . . . . .	31.9	31.7	32.1	31.9	33.3	26.8	24.4	24.1
All ages, crude . . . . .	24.7	26.1	28.4	30.6	34.0	29.2	27.5	27.3
Under 25 years . . . . .	*	*	*	*	*	*	*	*
25–34 years . . . . .	3.8	3.8	3.9	3.3	2.9	2.3	2.0	1.8
35–44 years . . . . .	20.8	20.2	20.4	17.9	17.8	12.4	11.3	11.3
45–54 years . . . . .	46.9	51.4	52.6	48.1	45.4	33.0	29.3	28.7
55–64 years . . . . .	69.9	70.8	77.6	80.5	78.6	59.3	55.8	54.5
65–74 years . . . . .	95.0	90.0	93.8	101.1	111.7	88.3	81.6	79.2
75–84 years . . . . .	139.8	129.9	127.4	126.4	146.3	128.9	119.5	119.2
85 years and over . . . . .	195.5	191.9	157.1	169.3	196.8	205.7	178.6	177.9
White <sup>5</sup>								
All ages, age-adjusted <sup>4</sup> . . . . .	32.4	32.0	32.5	32.1	33.2	26.3	23.9	23.4
All ages, crude . . . . .	25.7	27.2	29.9	32.3	35.9	30.7	28.6	28.3
35–44 years . . . . .	20.8	19.7	20.2	17.3	17.1	11.3	10.1	10.2
45–54 years . . . . .	47.1	51.2	53.0	48.1	44.3	31.2	27.0	26.2
55–64 years . . . . .	70.9	71.8	79.3	81.3	78.5	57.9	54.3	52.4
65–74 years . . . . .	96.3	91.6	95.9	103.7	113.3	89.3	82.2	79.3
75–84 years . . . . .	143.6	132.8	129.6	128.4	148.2	130.2	121.3	120.7
85 years and over . . . . .	204.2	199.7	161.9	171.7	198.0	205.5	179.7	179.1
Black or African American <sup>5</sup>								
All ages, age-adjusted <sup>4</sup> . . . . .	25.3	27.9	28.9	31.7	38.1	34.5	32.2	32.8
All ages, crude . . . . .	16.4	18.7	19.7	22.9	29.0	27.9	27.5	28.4
35–44 years . . . . .	21.0	24.8	24.4	24.1	25.8	20.9	20.5	20.2
45–54 years . . . . .	46.5	54.4	52.0	52.7	60.5	51.5	48.0	50.0
55–64 years . . . . .	64.3	63.2	64.7	79.9	93.1	80.9	78.2	81.1
65–74 years . . . . .	67.0	72.3	77.3	84.3	112.2	98.6	95.1	96.2
75–84 years <sup>6</sup> . . . . .	81.0	87.5	101.8	114.1	140.5	139.8	127.4	126.6
85 years and over . . . . .	---	92.1	112.1	149.9	201.5	238.7	196.9	201.8
American Indian or Alaska Native <sup>5</sup>								
All ages, age-adjusted <sup>4</sup> . . . . .	---	---	---	10.8	13.7	13.6	14.8	15.2
All ages, crude . . . . .	---	---	---	6.1	8.6	8.7	10.7	10.5
35–44 years . . . . .	---	---	---	*	*	*	*	*
45–54 years . . . . .	---	---	---	*	23.9	14.4	20.6	12.9
55–64 years . . . . .	---	---	---	*	*	40.0	31.9	21.0
65–74 years . . . . .	---	---	---	*	*	42.5	43.1	65.8
75–84 years . . . . .	---	---	---	*	*	71.8	83.4	117.4
85 years and over . . . . .	---	---	---	*	*	*	*	*
Asian or Pacific Islander <sup>5</sup>								
All ages, age-adjusted <sup>4</sup> . . . . .	---	---	---	11.9	13.7	12.3	12.7	12.2
All ages, crude . . . . .	---	---	---	8.2	9.3	10.2	11.2	11.0
35–44 years . . . . .	---	---	---	10.4	8.4	8.1	7.4	6.7
45–54 years . . . . .	---	---	---	23.4	26.4	22.3	21.4	18.5
55–64 years . . . . .	---	---	---	35.7	33.8	31.3	32.7	35.0
65–74 years . . . . .	---	---	---	*	38.5	34.7	38.4	32.1
75–84 years . . . . .	---	---	---	*	48.0	37.5	41.8	52.2
85 years and over . . . . .	---	---	---	*	*	68.2	74.4	62.0
Hispanic or Latina <sup>5,7</sup>								
All ages, age-adjusted <sup>4</sup> . . . . .	---	---	---	---	19.5	16.9	15.6	15.0
All ages, crude . . . . .	---	---	---	---	11.5	9.7	9.6	9.4
35–44 years . . . . .	---	---	---	---	11.7	8.7	7.7	8.0
45–54 years . . . . .	---	---	---	---	32.8	23.9	19.5	20.0
55–64 years . . . . .	---	---	---	---	45.8	39.1	38.2	34.7
65–74 years . . . . .	---	---	---	---	64.8	54.9	52.1	46.9
75–84 years . . . . .	---	---	---	---	67.2	74.9	69.1	73.3
85 years and over . . . . .	---	---	---	---	102.8	105.8	108.8	95.1

See footnotes at end of table.

**Table 39 (page 2 of 2). Death rates for malignant neoplasm of breast among females, by race, Hispanic origin, and age: United States, selected years 1950–2005**

[Data are based on death certificates]

<i>Race, Hispanic origin, and age</i>	1950 <sup>1,2</sup>	1960 <sup>1,2</sup>	1970 <sup>2</sup>	1980 <sup>2</sup>	1990 <sup>2</sup>	2000 <sup>3</sup>	2004	2005
White, not Hispanic or Latina <sup>7</sup>	Deaths per 100,000 resident population							
All ages, age-adjusted <sup>4</sup> . . . . .	---	---	---	---	33.9	26.8	24.5	24.0
All ages, crude . . . . .	---	---	---	---	38.5	33.8	32.0	31.8
35–44 years . . . . .	---	---	---	---	17.5	11.6	10.4	10.6
45–54 years . . . . .	---	---	---	---	45.2	31.7	27.7	26.8
55–64 years . . . . .	---	---	---	---	80.6	59.2	55.6	53.9
65–74 years . . . . .	---	---	---	---	115.7	91.4	84.4	81.9
75–84 years . . . . .	---	---	---	---	151.4	132.2	124.2	123.4
85 years and over . . . . .	---	---	---	---	201.5	208.3	182.4	182.9

\* Rates based on fewer than 20 deaths are considered unreliable and are not shown.

0.0 Quantity more than zero but less than 0.05.

--- Data not available.

<sup>1</sup>Includes deaths of persons who were not residents of the 50 states and the District of Columbia.

<sup>2</sup>Underlying cause of death was coded according to the Sixth Revision of the International Classification of Diseases (ICD) in 1950, Seventh Revision in 1960, Eighth Revision in 1970, and Ninth Revision in 1980–1998. See [Appendix II, Cause of death; Tables IV and V](#).

<sup>3</sup>Starting with 1999 data, cause of death is coded according to ICD–10. See [Appendix II, Cause of death, Table V; Comparability ratio, Table VI](#).

<sup>4</sup>Age-adjusted rates are calculated using the year 2000 standard population. Prior to 2003, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2003 data, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#).

<sup>5</sup>The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native and Asian or Pacific Islander populations are known to be underestimated. See [Appendix II, Race](#), for a discussion of sources of bias in death rates by race and Hispanic origin.

<sup>6</sup>In 1950, rate is for the age group 75 years and over.

<sup>7</sup>Prior to 1997, excludes data from states lacking an Hispanic-origin item on the death certificate. See [Appendix II, Hispanic origin](#).

NOTES: Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were revised based on 2000 census counts. Rates for 2001 and 2002 were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#). Age groups were selected to minimize the presentation of unstable age-specific death rates based on small numbers of deaths and for consistency among comparison groups. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and the District of Columbia reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System; numerator data from annual mortality files; denominator data from national population estimates for race groups from Table 1 and unpublished Hispanic population estimates for 1985–1996 prepared by the Housing and Household Economic Statistics Division, U.S. Census Bureau; additional mortality tables are available from: [www.cdc.gov/nchs/datawh/statab/unpubd/mortabs.htm](http://www.cdc.gov/nchs/datawh/statab/unpubd/mortabs.htm); Kung H-C, Hoyert DL, Xu JQ, Murphy SL. Deaths: Final data for 2005. National vital statistics reports. Vol 56 no 10. Hyattsville, MD: NCHS. 2008.

**Table 40 (page 1 of 3). Death rates for chronic lower respiratory diseases, by sex, race, Hispanic origin, and age: United States, selected years 1980–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1980 <sup>1</sup>	1990 <sup>1</sup>	1995 <sup>1</sup>	2000 <sup>2</sup>	2001	2002	2003	2004	2005
Deaths per 100,000 resident population									
All persons									
All ages, age-adjusted <sup>3</sup>	28.3	37.2	40.1	44.2	43.7	43.5	43.3	41.1	43.2
All ages, crude	24.7	34.9	38.6	43.4	43.2	43.3	43.5	41.5	44.2
Under 1 year	1.6	1.4	1.1	0.9	1.0	1.0	0.8	0.9	0.8
1–4 years	0.4	0.4	0.2	0.3	0.3	0.4	0.3	0.3	0.3
5–14 years	0.2	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3
15–24 years	0.3	0.5	0.7	0.5	0.4	0.5	0.5	0.4	0.4
25–34 years	0.5	0.7	0.9	0.7	0.7	0.8	0.7	0.6	0.6
35–44 years	1.6	1.6	1.9	2.1	2.2	2.2	2.1	2.0	2.0
45–54 years	9.8	9.1	8.7	8.6	8.5	8.7	8.7	8.4	9.4
55–64 years	42.7	48.9	46.8	44.2	44.1	42.4	43.3	40.4	42.0
65–74 years	129.1	152.5	159.6	169.4	167.9	163.0	163.2	153.8	160.5
75–84 years	224.4	321.1	349.3	386.1	379.8	386.7	383.0	366.7	385.6
85 years and over	274.0	433.3	520.1	648.6	644.7	637.6	635.1	601.7	637.2
Male									
All ages, age-adjusted <sup>3</sup>	49.9	55.5	54.8	55.8	54.0	53.5	52.3	49.5	51.2
All ages, crude	35.1	40.8	41.4	43.5	42.7	42.9	42.4	40.6	42.8
Under 1 year	1.9	1.6	1.4	1.2	1.1	1.1	1.1	1.2	*
1–4 years	0.5	0.5	0.2	0.4	0.4	0.6	0.5	0.4	0.4
5–14 years	0.2	0.4	0.5	0.4	0.3	0.4	0.4	0.4	0.3
15–24 years	0.4	0.5	0.7	0.6	0.5	0.6	0.5	0.5	0.4
25–34 years	0.6	0.7	0.9	0.8	0.7	0.8	0.8	0.7	0.6
35–44 years	1.7	1.7	1.7	1.9	2.0	2.2	1.9	2.0	1.9
45–54 years	12.1	9.4	8.8	9.0	8.8	9.1	9.1	8.8	9.7
55–64 years	59.9	58.6	52.3	47.8	46.9	45.2	46.5	43.1	45.0
65–74 years	210.0	204.0	195.6	195.2	191.3	184.8	183.6	172.1	180.7
75–84 years	437.4	500.0	483.8	488.5	475.1	480.8	464.9	445.6	463.7
85 years and over	583.4	815.1	889.8	967.9	916.9	894.8	865.9	811.1	819.9
Female									
All ages, age-adjusted <sup>3</sup>	14.9	26.6	31.8	37.4	37.6	37.4	37.8	36.0	38.1
All ages, crude	15.0	29.2	36.0	43.2	43.7	43.7	44.4	42.5	45.5
Under 1 year	1.3	1.2	*	*	*	*	*	*	*
1–4 years	*	*	*	0.3	*	0.3	*	*	0.3
5–14 years	0.3	0.3	0.2	0.3	0.2	0.3	0.2	0.2	0.2
15–24 years	0.3	0.5	0.6	0.4	0.4	0.4	0.4	0.3	0.3
25–34 years	0.5	0.7	0.9	0.7	0.7	0.7	0.6	0.5	0.6
35–44 years	1.5	1.5	2.2	2.2	2.3	2.3	2.3	2.1	2.1
45–54 years	7.7	8.8	8.7	8.3	8.1	8.2	8.2	8.1	9.0
55–64 years	27.6	40.3	41.9	41.0	41.5	39.8	40.3	38.0	39.2
65–74 years	67.1	112.3	130.8	148.2	148.5	144.9	146.0	138.4	143.4
75–84 years	98.7	214.2	265.3	319.2	317.3	324.1	328.3	313.6	332.5
85 years and over	138.7	286.0	377.7	518.5	530.8	526.0	533.0	507.4	553.3
White male <sup>4</sup>									
All ages, age-adjusted <sup>3</sup>	51.6	56.6	55.9	57.2	55.5	54.9	53.8	51.1	52.8
All ages, crude	37.9	44.3	45.5	48.3	47.6	47.8	47.4	45.5	47.9
35–44 years	1.2	1.3	1.4	1.6	1.7	1.8	1.7	1.7	1.7
45–54 years	11.4	8.6	8.1	8.4	8.6	8.8	8.9	8.5	9.4
55–64 years	60.0	58.7	52.7	48.6	48.0	46.0	47.6	43.8	46.3
65–74 years	218.4	208.1	200.0	201.4	198.3	192.3	191.6	180.6	189.2
75–84 years	459.8	513.5	497.9	503.6	489.4	495.2	478.5	462.4	479.5
85 years and over	611.2	847.0	918.3	997.4	943.6	923.4	894.4	837.7	846.1
Black or African American male <sup>4</sup>									
All ages, age-adjusted <sup>3</sup>	34.0	47.6	47.4	47.5	46.3	46.3	44.4	40.9	44.1
All ages, crude	19.3	25.2	24.4	24.3	23.6	24.1	23.3	22.0	23.9
35–44 years	5.8	5.3	4.3	4.8	4.7	5.7	4.0	4.0	3.8
45–54 years	19.7	18.8	16.9	15.0	13.3	14.4	13.3	13.9	15.1
55–64 years	66.6	67.4	60.5	54.6	49.8	52.3	50.5	50.1	48.9
65–74 years	142.0	184.5	178.7	176.9	168.0	158.0	155.1	140.4	157.3
75–84 years	229.8	390.9	370.0	370.3	380.8	392.2	382.2	336.3	375.6
85 years and over	271.6	498.0	624.1	693.1	671.7	645.4	601.6	566.3	594.9

See footnotes at end of table.



**Table 40 (page 2 of 3). Death rates for chronic lower respiratory diseases, by sex, race, Hispanic origin, and age: United States, selected years 1980–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1980 <sup>1</sup>	1990 <sup>1</sup>	1995 <sup>1</sup>	2000 <sup>2</sup>	2001	2002	2003	2004	2005
Deaths per 100,000 resident population									
<b>American Indian or Alaska Native male<sup>4</sup></b>									
All ages, age-adjusted <sup>3</sup>	23.0	38.3	35.6	43.7	35.0	35.9	40.3	32.2	34.9
All ages, crude	8.4	13.8	12.3	15.3	13.1	14.3	17.3	14.9	16.3
35–44 years	*	*	*	*	*	*	*	*	*
45–54 years	*	*	*	*	*	*	*	*	*
55–64 years	*	*	36.5	46.4	35.7	34.5	43.8	40.5	37.7
65–74 years	*	135.7	132.1	111.3	115.1	126.1	125.9	121.9	113.0
75–84 years	*	363.8	307.3	416.6	306.0	348.9	387.0	300.0	351.7
85 years and over	*	*	*	770.7	614.8	500.3	563.8	362.9	438.8
<b>Asian or Pacific Islander male<sup>4</sup></b>									
All ages, age-adjusted <sup>3</sup>	21.5	29.8	28.9	28.3	27.0	25.0	25.2	22.6	22.5
All ages, crude	8.7	11.3	11.8	12.6	12.7	12.0	12.5	11.2	11.8
35–44 years	*	*	*	*	*	*	*	*	*
45–54 years	*	*	*	4.8	3.6	2.6	*	*	2.3
55–64 years	*	22.1	15.7	8.8	14.4	11.5	12.7	9.6	9.5
65–74 years	70.6	91.4	87.9	71.3	65.5	58.5	58.4	46.8	45.2
75–84 years	155.7	258.6	240.6	254.3	239.3	235.9	234.9	199.8	207.0
85 years and over	472.4	615.2	650.4	670.7	640.4	582.5	590.7	596.1	574.1
<b>Hispanic or Latino male<sup>4,5</sup></b>									
All ages, age-adjusted <sup>3</sup>	---	28.6	31.8	28.8	27.6	27.2	27.1	23.8	25.1
All ages, crude	---	8.4	8.9	8.0	7.8	8.1	8.2	7.6	8.3
35–44 years	---	*	1.1	0.9	0.7	1.0	1.0	1.4	1.0
45–54 years	---	4.1	3.9	3.4	3.2	3.8	3.2	2.8	3.6
55–64 years	---	17.2	19.1	18.2	16.1	17.5	16.6	13.7	15.8
65–74 years	---	81.0	82.4	72.4	75.5	69.2	68.1	68.4	64.5
75–84 years	---	252.4	292.0	250.3	224.0	243.3	231.2	206.4	234.2
85 years and over	---	613.9	689.0	671.1	676.1	602.4	646.5	518.4	526.8
<b>White, not Hispanic or Latino male<sup>5</sup></b>									
All ages, age-adjusted <sup>3</sup>	---	57.9	56.6	58.5	56.9	56.5	55.4	52.8	54.7
All ages, crude	---	48.5	50.2	55.1	54.6	55.1	54.9	53.0	56.0
35–44 years	---	1.4	1.4	1.7	1.9	2.0	1.8	1.8	1.9
45–54 years	---	9.0	8.4	8.9	9.1	9.3	9.5	9.2	10.1
55–64 years	---	61.3	54.6	50.8	50.5	48.3	50.0	46.3	48.9
65–74 years	---	213.4	204.3	208.8	206.1	200.4	200.2	188.5	198.7
75–84 years	---	523.7	501.7	513.6	500.9	506.7	491.0	476.6	493.9
85 years and over	---	860.6	922.6	1,008.6	951.5	935.4	903.6	852.5	861.9
<b>White female<sup>4</sup></b>									
All ages, age-adjusted <sup>3</sup>	15.5	27.8	33.3	39.5	39.8	39.7	40.3	38.4	40.7
All ages, crude	16.4	32.8	40.8	49.7	50.3	50.5	51.5	49.3	52.8
35–44 years	1.3	1.2	1.7	1.8	1.9	2.0	2.1	1.9	1.9
45–54 years	7.6	8.3	8.4	7.9	8.0	8.1	8.1	7.9	8.9
55–64 years	28.7	41.9	44.0	43.2	44.1	42.4	42.9	40.8	41.9
65–74 years	71.0	118.8	139.0	159.6	160.4	157.0	158.6	151.1	156.0
75–84 years	104.0	226.3	279.5	339.1	338.3	345.4	352.0	335.5	357.1
85 years and over	144.2	298.4	395.5	544.8	557.9	554.5	562.8	536.5	585.4
<b>Black or African American female<sup>4</sup></b>									
All ages, age-adjusted <sup>3</sup>	9.1	16.6	20.2	22.7	22.4	22.6	22.0	20.9	22.8
All ages, crude	6.8	12.6	15.5	17.6	17.5	17.7	17.3	16.6	18.4
35–44 years	3.4	3.8	5.4	4.7	4.9	4.6	4.6	3.9	3.8
45–54 years	9.3	14.0	12.8	13.4	11.7	11.6	11.9	11.5	12.8
55–64 years	20.8	33.4	34.7	35.3	33.3	31.5	32.4	28.5	31.7
65–74 years	32.7	64.7	78.7	82.9	84.3	82.0	83.3	74.9	83.6
75–84 years	41.1	96.0	132.7	158.4	151.7	167.4	153.2	158.6	165.1
85 years and over	63.2	133.0	185.8	255.0	266.1	262.0	256.4	241.8	274.6

See footnotes at end of table.



**Table 40 (page 3 of 3). Death rates for chronic lower respiratory diseases, by sex, race, Hispanic origin, and age: United States, selected years 1980–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1980 <sup>1</sup>	1990 <sup>1</sup>	1995 <sup>1</sup>	2000 <sup>2</sup>	2001	2002	2003	2004	2005
Deaths per 100,000 resident population									
<b>American Indian or Alaska Native female<sup>4</sup></b>									
All ages, age-adjusted <sup>3</sup>	7.7	16.8	22.8	26.2	27.3	26.4	26.1	26.1	25.5
All ages, crude	3.8	8.7	11.5	13.4	14.8	15.1	15.6	15.9	16.5
35–44 years	*	*	*	*	*	*	*	*	*
45–54 years	*	*	*	*	*	*	*	*	*
55–64 years	*	*	38.8	31.6	37.3	34.1	39.0	35.2	35.8
65–74 years	*	56.4	79.5	136.8	114.2	119.1	101.2	104.8	115.2
75–84 years	*	116.7	191.3	175.8	217.9	194.8	217.2	247.3	201.2
85 years and over	*	*	*	362.2	345.3	353.4	296.2	224.6	244.3
<b>Asian or Pacific Islander female<sup>4</sup></b>									
All ages, age-adjusted <sup>3</sup>	5.8	11.0	12.1	11.7	11.1	9.3	9.9	9.3	9.7
All ages, crude	2.6	5.2	6.3	6.8	6.8	6.0	6.5	6.3	6.9
35–44 years	*	*	*	*	*	*	*	*	*
45–54 years	*	*	3.6	*	*	*	*	*	*
55–64 years	*	15.2	9.6	6.2	7.0	4.9	6.0	4.1	3.5
65–74 years	*	26.5	29.2	29.2	30.2	24.6	24.8	20.3	23.9
75–84 years	*	80.6	113.2	88.9	79.4	77.0	77.2	75.8	80.6
85 years and over	*	232.5	227.8	299.5	288.5	219.1	253.8	252.7	256.2
<b>Hispanic or Latina female<sup>4,5</sup></b>									
All ages, age-adjusted <sup>3</sup>	---	13.4	16.9	16.3	16.5	16.2	15.8	14.9	15.4
All ages, crude	---	6.3	7.7	7.2	7.5	7.6	7.7	7.4	7.8
35–44 years	---	*	1.4	1.3	1.2	1.4	1.0	0.7	*
45–54 years	---	4.9	4.6	3.3	4.1	3.1	3.8	3.4	3.5
55–64 years	---	14.4	12.9	10.8	12.1	10.6	9.3	10.9	9.5
65–74 years	---	36.6	43.1	38.0	40.3	41.5	41.5	38.3	39.3
75–84 years	---	101.1	125.0	136.0	132.7	129.8	129.6	125.7	128.6
85 years and over	---	269.0	402.6	387.8	384.4	385.5	365.6	326.3	355.8
<b>White, not Hispanic or Latina female<sup>5</sup></b>									
All ages, age-adjusted <sup>3</sup>	---	28.5	34.0	40.7	41.1	41.2	41.8	40.0	42.5
All ages, crude	---	35.7	44.7	56.2	57.2	57.7	59.0	56.7	61.1
35–44 years	---	1.2	1.7	1.9	2.0	2.1	2.2	2.1	2.2
45–54 years	---	8.5	8.5	8.3	8.3	8.6	8.5	8.4	9.5
55–64 years	---	43.7	46.2	45.8	46.8	45.1	45.7	43.5	44.9
65–74 years	---	122.8	143.0	167.6	168.8	165.5	167.6	160.1	165.8
75–84 years	---	231.9	284.5	347.2	347.3	355.7	363.5	347.2	370.7
85 years and over	---	302.1	393.7	548.7	562.7	559.8	569.5	544.8	595.3

\* Rates based on fewer than 20 deaths are considered unreliable and are not shown.

--- Data not available.

<sup>1</sup>For the period 1980–1998, underlying cause of death was coded according to the Ninth Revision of the International Classification of Diseases (ICD), using ICD–9 codes for chronic lower respiratory diseases (CLRD) that are most nearly comparable with CLRD codes in the 113 cause list for ICD–10. See [Appendix II, Cause of death; Tables IV and V](#).

<sup>2</sup>Starting with 1999 data, cause of death is coded according to ICD–10. See [Appendix II, Cause of death, Table V; Comparability ratio, Table VI](#).

<sup>3</sup>Age-adjusted rates are calculated using the year 2000 standard population. Prior to 2003, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2003 data, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#).

<sup>4</sup>The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native and Asian or Pacific Islander populations are known to be underestimated. See [Appendix II, Race](#), for a discussion of sources of bias in death rates by race and Hispanic origin.

<sup>5</sup>Prior to 1997, excludes data from states lacking an Hispanic-origin item on the death certificate. See [Appendix II, Hispanic origin](#).

NOTES: Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were revised based on 2000 census counts. Rates for 2001 and later years were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#). Age groups were selected to minimize the presentation of unstable age-specific death rates based on small numbers of deaths and for consistency among comparison groups. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and the District of Columbia reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System; numerator data from annual mortality files; denominator data from national population estimates for race groups from Table 1 and unpublished Hispanic population estimates for 1985–1996 prepared by the Housing and Household Economic Statistics Division, U.S. Census Bureau; additional mortality tables are available from: <http://www.cdc.gov/nchs/data/wh/statab/unpubd/mortabs.htm>; Kung H-C, Hoyert DL, Xu JQ, Murphy SL. Deaths: Final data for 2005. National vital statistics reports. Vol 56 no 10. Hyattsville, MD: NCHS. 2008.

**Table 41 (page 1 of 2). Death rates for human immunodeficiency virus (HIV) disease, by sex, race, Hispanic origin, and age: United States, selected years 1987–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age <sup>1</sup>	1987 <sup>2</sup>	1990 <sup>2</sup>	1995 <sup>2</sup>	2000 <sup>3</sup>	2001	2002	2003	2004	2005
All persons									
Deaths per 100,000 resident population									
All ages, age-adjusted <sup>4</sup>	5.6	10.2	16.2	5.2	5.0	4.9	4.7	4.5	4.2
All ages, crude	5.6	10.1	16.2	5.1	5.0	4.9	4.7	4.4	4.2
Under 1 year	2.3	2.7	1.5	*	*	*	*	*	*
1–4 years	0.7	0.8	1.3	*	*	*	*	*	*
5–14 years	0.1	0.2	0.5	0.1	0.1	0.1	0.1	0.1	*
15–24 years	1.3	1.5	1.7	0.5	0.6	0.4	0.4	0.5	0.4
25–34 years	11.7	19.7	28.3	6.1	5.3	4.6	4.0	3.7	3.3
35–44 years	14.0	27.4	44.2	13.1	13.0	12.7	12.0	10.9	9.9
45–54 years	8.0	15.2	26.0	11.0	10.5	11.2	10.9	10.6	10.6
55–64 years	3.5	6.2	10.9	5.1	5.2	5.1	5.4	5.4	5.3
65–74 years	1.3	2.0	3.6	2.2	2.1	2.2	2.4	2.4	2.3
75–84 years	0.8	0.7	0.7	0.7	0.7	0.8	0.7	0.8	0.8
85 years and over	*	*	*	*	*	*	*	*	*
Male									
All ages, age-adjusted <sup>4</sup>	10.4	18.5	27.3	7.9	7.5	7.4	7.1	6.6	6.2
All ages, crude	10.2	18.5	27.6	7.9	7.6	7.4	7.1	6.6	6.3
Under 1 year	2.2	2.4	1.7	*	*	*	*	*	*
1–4 years	0.7	0.8	1.2	*	*	*	*	*	*
5–14 years	0.2	0.3	0.5	0.1	0.1	*	*	*	*
15–24 years	2.2	2.2	2.0	0.5	0.5	0.4	0.4	0.5	0.4
25–34 years	20.7	34.5	45.5	8.0	7.1	5.9	5.1	4.5	4.0
35–44 years	26.3	50.2	75.5	19.8	19.5	18.8	17.5	15.7	14.3
45–54 years	15.5	29.1	46.2	17.8	16.8	17.7	17.2	16.3	16.4
55–64 years	6.8	12.0	19.7	8.7	8.6	8.5	9.1	9.0	8.8
65–74 years	2.4	3.7	6.4	3.8	3.5	3.9	4.0	4.0	4.1
75–84 years	1.2	1.1	1.3	1.3	1.5	1.4	1.5	1.4	1.4
85 years and over	*	*	*	*	*	*	*	*	*
Female									
All ages, age-adjusted <sup>4</sup>	1.1	2.2	5.3	2.5	2.5	2.5	2.4	2.4	2.3
All ages, crude	1.1	2.2	5.3	2.5	2.5	2.5	2.4	2.4	2.2
Under 1 year	2.5	3.0	1.2	*	*	*	*	*	*
1–4 years	0.7	0.8	1.5	*	*	*	*	*	*
5–14 years	*	0.2	0.5	0.1	*	*	*	*	*
15–24 years	0.3	0.7	1.4	0.4	0.6	0.4	0.4	0.4	0.3
25–34 years	2.8	4.9	10.9	4.2	3.5	3.3	2.8	2.8	2.6
35–44 years	2.1	5.2	13.3	6.5	6.7	6.7	6.5	6.2	5.6
45–54 years	0.8	1.9	6.6	4.4	4.4	4.8	4.8	5.2	5.1
55–64 years	0.5	1.1	2.8	1.8	2.0	1.9	2.1	2.0	2.0
65–74 years	0.5	0.8	1.4	0.8	0.9	0.8	1.0	1.0	0.9
75–84 years	0.5	0.4	0.3	0.3	*	0.3	0.3	0.5	0.4
85 years and over	*	*	*	*	*	*	*	*	*
All ages, age-adjusted <sup>4</sup>									
White male	8.7	15.7	20.4	4.6	4.4	4.3	4.2	3.8	3.6
Black or African American male	26.2	46.3	89.0	35.1	33.8	33.3	31.3	29.2	28.2
American Indian or Alaska Native male	*	3.3	10.5	3.5	4.2	3.4	3.5	4.3	4.0
Asian or Pacific Islander male	2.5	4.3	6.0	1.2	1.2	1.5	1.1	1.2	1.0
Hispanic or Latino male <sup>5</sup>	18.8	28.8	40.8	10.6	9.7	9.1	9.2	8.2	7.5
White, not Hispanic or Latino male <sup>5</sup>	10.7	14.1	17.9	3.8	3.6	3.5	3.4	3.1	3.0
White female	0.6	1.1	2.5	1.0	0.9	0.9	0.9	0.9	0.8
Black or African American female	4.6	10.1	24.4	13.2	13.4	13.4	12.8	13.0	12.0
American Indian or Alaska Native female	*	*	2.5	1.0	*	*	1.5	1.5	1.5
Asian or Pacific Islander female	*	*	0.6	0.2	*	*	*	*	*
Hispanic or Latina female <sup>5</sup>	2.1	3.8	8.8	2.9	2.7	2.6	2.7	2.4	1.9
White, not Hispanic or Latina female <sup>5</sup>	0.5	0.7	1.7	0.7	0.6	0.6	0.6	0.6	0.6

See footnotes at end of table.

**Table 41 (page 2 of 2). Death rates for human immunodeficiency virus (HIV) disease, by sex, race, Hispanic origin, and age: United States, selected years 1987–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age <sup>1</sup>	1987 <sup>2</sup>	1990 <sup>2</sup>	1995 <sup>2</sup>	2000 <sup>3</sup>	2001	2002	2003	2004	2005
Deaths per 100,000 resident population									
Age 25–44 years									
All persons . . . . .	12.7	23.2	36.3	9.8	9.4	8.9	8.2	7.5	6.8
White male . . . . .	19.2	35.0	46.1	8.8	8.3	7.7	7.2	6.3	5.7
Black or African American male . . . . .	60.2	102.0	179.4	55.4	53.5	49.9	44.8	39.9	36.2
American Indian or Alaska Native male . . . . .	*	7.7	28.5	5.5	7.3	8.3	6.4	8.6	6.1
Asian or Pacific Islander male . . . . .	4.1	8.1	12.1	1.9	2.1	1.8	1.9	1.7	1.4
Hispanic or Latino male <sup>5</sup> . . . . .	36.8	59.3	73.9	14.3	12.4	11.5	10.3	9.3	8.3
White, not Hispanic or Latino male <sup>5</sup> . . . . .	23.3	31.6	41.2	7.4	7.2	6.6	6.2	5.5	4.9
White female . . . . .	1.2	2.3	5.9	2.1	1.9	1.8	1.8	1.6	1.5
Black or African American female . . . . .	11.6	23.6	53.6	26.7	26.0	25.9	23.6	23.1	20.7
American Indian or Alaska Native female . . . . .	*	*	*	*	*	*	*	*	*
Asian or Pacific Islander female . . . . .	*	*	1.2	*	*	*	*	*	*
Hispanic or Latina female <sup>5</sup> . . . . .	4.9	8.9	17.2	4.6	4.3	3.8	3.8	3.1	2.6
White, not Hispanic or Latina female <sup>5</sup> . . . . .	1.0	1.5	4.2	1.6	1.3	1.3	1.3	1.3	1.2
Age 45–64 years									
All persons . . . . .	5.8	11.1	19.9	8.7	8.4	8.7	8.7	8.5	8.4
White male . . . . .	9.9	18.6	26.0	8.1	7.7	7.8	7.9	7.5	7.3
Black or African American male . . . . .	27.3	53.0	133.2	71.6	68.8	70.7	68.1	66.0	66.2
American Indian or Alaska Native male . . . . .	*	*	*	*	7.8	*	*	7.2	8.9
Asian or Pacific Islander male . . . . .	*	6.5	9.1	2.1	1.9	3.4	2.1	2.4	2.0
Hispanic or Latino male <sup>5</sup> . . . . .	25.8	37.9	67.1	23.3	21.5	20.3	22.5	19.4	18.0
White, not Hispanic or Latino male <sup>5</sup> . . . . .	12.6	16.9	22.4	6.5	6.1	6.4	6.2	6.0	6.0
White female . . . . .	0.5	0.9	2.4	1.3	1.2	1.4	1.4	1.4	1.4
Black or African American female . . . . .	2.6	7.5	27.0	19.6	20.8	21.4	21.8	22.7	22.0
American Indian or Alaska Native female . . . . .	*	*	*	*	*	*	*	*	*
Asian or Pacific Islander female . . . . .	*	*	*	*	*	*	*	*	*
Hispanic or Latina female <sup>5</sup> . . . . .	*	3.1	12.6	5.8	5.4	5.7	5.3	5.0	4.1
White, not Hispanic or Latina female <sup>5</sup> . . . . .	0.5	0.7	1.5	0.9	0.8	0.9	0.9	0.9	1.1

\* Rates based on fewer than 20 deaths are considered unreliable and are not shown.

<sup>1</sup>The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native and Asian or Pacific Islander populations are known to be underestimated. See [Appendix II, Race](#), for a discussion of sources of bias in death rates by race and Hispanic origin.

<sup>2</sup>Categories for the coding and classification of human immunodeficiency virus (HIV) disease were introduced in the United States in 1987. For the period 1987–1998, underlying cause of death was coded according to the Ninth Revision of the International Classification of Diseases (ICD). See [Appendix II, Cause of death; Human immunodeficiency virus \(HIV\) disease; Tables IV and V](#).

<sup>3</sup>Starting with 1999 data, cause of death is coded according to ICD–10. To estimate change between 1998 and 1999, compare the 1999 rate with the comparability-modified rate for 1998. Additional years of data available in spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>; See [Appendix II, Cause of death, Table V; Comparability ratio, Table VI](#).

<sup>4</sup>Age-adjusted rates are calculated using the year 2000 standard population. Prior to 2003, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2003 data, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#).

<sup>5</sup>Prior to 1997, excludes data from states lacking an Hispanic-origin item on the death certificate. See [Appendix II, Hispanic origin](#).

NOTES: Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were revised based on 2000 census counts. Rates for 2001 and 2002 were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#). In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and the District of Columbia reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System; numerator data from annual mortality files; denominator data from national population estimates for race groups from Table 1 and unpublished Hispanic population estimates for 1987–1996 prepared by the Housing and Household Economic Statistics Division, U.S. Census Bureau; additional mortality tables are available from: <http://www.cdc.gov/nchs/datawh/statab/unpubd/mortabs.htm>; Kung H-C, Hoyert DL, Xu JQ, Murphy SL. Deaths: Final data for 2005. National vital statistics reports. Vol 56 no 10. Hyattsville, MD: NCHS. 2008.

**Table 42. Maternal mortality for complications of pregnancy, childbirth, and the puerperium, by race, Hispanic origin, and age: United States, selected years 1950–2005**

[Data are based on death certificates]

<i>Race, Hispanic origin, and age</i>	1950 <sup>1,2</sup>	1960 <sup>1,2</sup>	1970 <sup>2</sup>	1980 <sup>2</sup>	1990 <sup>2</sup>	2000 <sup>3</sup>	2003 <sup>4</sup>	2004 <sup>4</sup>	2005 <sup>4</sup>
Number of deaths									
All persons . . . . .	2,960	1,579	803	334	343	396	495	540	623
White . . . . .	1,873	936	445	193	177	240	280	300	360
Black or African American . . . . .	1,041	624	342	127	153	137	183	214	231
American Indian or Alaska Native . . . . .	---	---	---	3	4	6	7	4	5
Asian or Pacific Islander . . . . .	---	---	---	11	9	13	25	22	27
Hispanic or Latina <sup>5</sup> . . . . .	---	---	---	---	47	81	92	80	95
White, not Hispanic or Latina <sup>5</sup> . . . . .	---	---	---	---	125	160	188	225	267
Deaths per 100,000 live births									
All persons . . . . .	73.7	32.1	21.5	9.4	7.6	8.2	9.7	11.3	12.4
All ages, crude . . . . .	83.3	37.1	21.5	9.2	8.2	9.8	12.1	13.1	15.1
Under 20 years . . . . .	70.7	22.7	18.9	7.6	7.5	*	6.2	6.6	7.4
20–24 years . . . . .	47.6	20.7	13.0	5.8	6.1	7.4	7.7	10.8	10.7
25–29 years . . . . .	63.5	29.8	17.0	7.7	6.0	7.9	8.7	11.0	11.8
30–34 years . . . . .	107.7	50.3	31.6	13.6	9.5	10.0	10.9	11.8	12.8
35 years and over <sup>7</sup> . . . . .	222.0	104.3	81.9	36.3	20.7	22.7	33.1	28.2	38.0
White									
All ages, age-adjusted <sup>6</sup> . . . . .	53.1	22.4	14.4	6.7	5.1	6.2	6.9	7.5	9.1
All ages, crude . . . . .	61.1	26.0	14.3	6.6	5.4	7.5	8.7	9.3	11.1
Under 20 years . . . . .	44.9	14.8	13.8	5.8	*	*	*	*	*
20–24 years . . . . .	35.7	15.3	8.4	4.2	3.9	5.6	5.3	6.5	9.0
25–29 years . . . . .	45.0	20.3	11.1	5.4	4.8	5.9	6.9	6.9	7.2
30–34 years . . . . .	75.9	34.3	18.7	9.3	5.0	7.1	6.8	9.0	9.3
35 years and over <sup>7</sup> . . . . .	174.1	73.9	59.3	25.5	12.6	18.0	23.8	22.0	28.9
Black or African American									
All ages, age-adjusted <sup>6</sup> . . . . .	---	92.0	65.5	24.9	21.7	20.1	25.5	32.3	31.7
All ages, crude . . . . .	---	103.6	60.9	22.4	22.4	22.0	30.5	34.7	36.5
Under 20 years . . . . .	---	54.8	32.3	13.1	*	*	*	*	*
20–24 years . . . . .	---	56.9	41.9	13.9	14.7	15.3	15.8	27.9	18.2
25–29 years . . . . .	---	92.8	65.2	22.4	14.9	21.8	20.7	38.6	37.1
30–34 years . . . . .	---	150.6	117.8	44.0	44.2	34.8	46.1	40.4	46.6
35 years and over <sup>7</sup> . . . . .	---	299.5	207.5	100.6	79.7	62.8	104.1	79.2	112.8
Hispanic or Latina <sup>5,8</sup>									
All ages, age-adjusted <sup>6</sup> . . . . .	---	---	---	---	7.4	9.0	8.6	7.3	8.2
All ages, crude . . . . .	---	---	---	---	7.9	9.9	10.1	8.5	9.6
White, not Hispanic or Latina <sup>5</sup>									
All ages, age-adjusted <sup>6</sup> . . . . .	---	---	---	---	4.4	5.5	6.3	7.8	9.6
All ages, crude . . . . .	---	---	---	---	4.8	6.8	8.1	9.8	11.7

--- Data not available.

– Quantity zero.

\* Rates based on fewer than 20 deaths are considered unreliable and are not shown.

<sup>1</sup>Includes deaths of persons who were not residents of the 50 states and the District of Columbia.

<sup>2</sup>Underlying cause of death was coded according to the Sixth Revision of the International Classification of Diseases (ICD) in 1950, Seventh Revision in 1960, Eighth Revision in 1970, and Ninth Revision in 1980–1998. See [Appendix II, Cause of death; tables IV and V](#).

<sup>3</sup>Starting with 1999 data, cause of death is coded according to ICD–10. Major changes in the classification and coding of maternal deaths account for an increase in the number of maternal deaths under ICD–10. See [Appendix II, Cause of death, Table V; Comparability ratio, Table VI; International Classification of Diseases \(ICD\); Maternal death](#).

<sup>4</sup>Increases are due to methodological changes in reporting and data processing. See [Appendix II, Maternal death](#).

<sup>5</sup>Prior to 1997, excludes data from states lacking an Hispanic-origin item on the death certificate. See [Appendix II, Hispanic origin](#).

<sup>6</sup>Rates are age-adjusted to the 1970 distribution of live births by mother's age in the United States. See [Appendix II, Age adjustment](#).

<sup>7</sup>Rates computed by relating deaths of women 35 years and over to live births to women 35–49 years. See [Appendix II, Rate: Death and related rates](#).

<sup>8</sup>Age-specific maternal mortality rates are not calculated because rates based on fewer than 20 deaths are considered unreliable.

NOTES: The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. For 1950 and 1960, rates were based on live births by race of child; for all other years, rates are based on live births by race of mother. See [Appendix II, Race](#). Rates are not calculated for American Indian or Alaska Native and Asian or Pacific Islander mothers because rates based on fewer than 20 deaths are considered unreliable. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System; numerator data from annual mortality files; denominator data from annual natality files; Kung H-C, Hoyert DL, Xu JQ, Murphy SL. Deaths: Final data for 2005. National vital statistics reports. Vol 56 no 10. Hyattsville, MD: NCHS. 2008.

**Table 43 (page 1 of 4). Death rates for motor vehicle-related injuries, by sex, race, Hispanic origin, and age: United States, selected years 1950–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 <sup>1,2</sup>	1960 <sup>1,2</sup>	1970 <sup>2</sup>	1980 <sup>2</sup>	1990 <sup>2</sup>	2000 <sup>3</sup>	2004	2005
Deaths per 100,000 resident population								
All persons								
All ages, age-adjusted <sup>4</sup>	24.6	23.1	27.6	22.3	18.5	15.4	15.2	15.2
All ages, crude	23.1	21.3	26.9	23.5	18.8	15.4	15.3	15.3
Under 1 year	8.4	8.1	9.8	7.0	4.9	4.4	3.5	3.6
1–14 years	9.8	8.6	10.5	8.2	6.0	4.3	4.0	3.6
1–4 years	11.5	10.0	11.5	9.2	6.3	4.2	4.0	3.8
5–14 years	8.8	7.9	10.2	7.9	5.9	4.3	4.1	3.6
15–24 years	34.4	38.0	47.2	44.8	34.1	26.9	26.3	25.9
15–19 years	29.6	33.9	43.6	43.0	33.1	26.0	25.2	23.6
20–24 years	38.8	42.9	51.3	46.6	35.0	28.0	27.5	28.2
25–34 years	24.6	24.3	30.9	29.1	23.6	17.3	17.6	18.0
35–44 years	20.3	19.3	24.9	20.9	16.9	15.3	15.1	15.4
45–64 years	25.2	23.0	26.5	18.0	15.7	14.3	14.7	14.9
45–54 years	22.2	21.4	25.5	18.6	15.6	14.2	15.1	15.1
55–64 years	29.0	25.1	27.9	17.4	15.9	14.4	14.1	14.7
65 years and over	43.1	34.7	36.2	22.5	23.1	21.4	20.4	20.1
65–74 years	39.1	31.4	32.8	19.2	18.6	16.5	16.1	16.7
75–84 years	52.7	41.8	43.5	28.1	29.1	25.7	24.5	22.9
85 years and over	45.1	37.9	34.2	27.6	31.2	30.4	26.1	25.1
Male								
All ages, age-adjusted <sup>4</sup>	38.5	35.4	41.5	33.6	26.5	21.7	21.4	21.7
All ages, crude	35.4	31.8	39.7	35.3	26.7	21.3	21.3	21.7
Under 1 year	9.1	8.6	9.3	7.3	5.0	4.6	3.8	3.5
1–14 years	12.3	10.7	13.0	10.0	7.0	4.9	4.5	4.1
1–4 years	13.0	11.5	12.9	10.2	6.9	4.7	4.2	4.2
5–14 years	11.9	10.4	13.1	9.9	7.0	5.0	4.7	4.1
15–24 years	56.7	61.2	73.2	68.4	49.5	37.4	36.4	36.5
15–19 years	46.3	51.7	64.1	62.6	45.5	33.9	32.5	30.7
20–24 years	66.7	73.2	84.4	74.3	53.3	41.2	40.4	42.3
25–34 years	40.8	40.1	49.4	46.3	35.7	25.5	25.8	26.9
35–44 years	32.5	29.9	37.7	31.7	24.7	22.0	21.9	22.2
45–64 years	37.7	33.3	38.9	26.5	21.9	20.2	21.1	21.6
45–54 years	33.6	31.6	37.2	27.6	22.0	20.4	21.9	22.2
55–64 years	43.1	35.6	40.9	25.4	21.7	19.8	19.8	20.9
65 years and over	66.6	52.1	54.4	33.9	32.1	29.5	28.2	28.5
65–74 years	59.1	45.8	47.3	27.3	24.2	21.7	21.3	23.2
75–84 years	85.0	66.0	68.2	44.3	41.2	35.6	34.7	32.4
85 years and over	78.1	62.7	63.1	56.1	64.5	57.5	44.2	44.1
Female								
All ages, age-adjusted <sup>4</sup>	11.5	11.7	14.9	11.8	11.0	9.5	9.3	8.9
All ages, crude	10.9	11.0	14.7	12.3	11.3	9.7	9.5	9.1
Under 1 year	7.6	7.5	10.4	6.7	4.9	4.2	3.2	3.6
1–14 years	7.2	6.3	7.9	6.3	4.9	3.7	3.5	3.1
1–4 years	10.0	8.4	10.0	8.1	5.6	3.8	3.7	3.4
5–14 years	5.7	5.4	7.2	5.7	4.7	3.6	3.4	3.0
15–24 years	12.6	15.1	21.6	20.8	17.9	15.9	15.7	14.7
15–19 years	12.9	16.0	22.7	22.8	20.0	17.5	17.5	16.2
20–24 years	12.2	14.0	20.4	18.9	16.0	14.2	13.8	13.2
25–34 years	9.3	9.2	13.0	12.2	11.5	8.8	9.1	8.8
35–44 years	8.5	9.1	12.9	10.4	9.2	8.8	8.3	8.6
45–64 years	12.6	13.1	15.3	10.3	10.1	8.7	8.6	8.5
45–54 years	10.9	11.6	14.5	10.2	9.6	8.2	8.5	8.2
55–64 years	14.9	15.2	16.2	10.5	10.8	9.5	8.8	8.9
65 years and over	21.9	20.3	23.1	15.0	17.2	15.8	14.9	14.0
65–74 years	20.6	19.0	21.6	13.0	14.1	12.3	11.7	11.2
75–84 years	25.2	23.0	27.2	18.5	21.9	19.2	17.7	16.5
85 years and over	22.1	22.0	18.0	15.2	18.3	19.3	17.9	16.4
White male <sup>5</sup>								
All ages, age-adjusted <sup>4</sup>	37.9	34.8	40.4	33.8	26.3	21.8	21.8	22.2
All ages, crude	35.1	31.5	39.1	35.9	26.7	21.6	21.9	22.3
Under 1 year	9.1	8.8	9.1	7.0	4.8	4.2	3.3	3.3
1–14 years	12.4	10.6	12.5	9.8	6.6	4.8	4.6	4.1
15–24 years	58.3	62.7	75.2	73.8	52.5	39.6	39.4	39.1
25–34 years	39.1	38.6	47.0	46.6	35.4	25.1	25.8	27.3
35–44 years	30.9	28.4	35.2	30.7	23.7	21.8	22.2	22.4
45–64 years	36.2	31.7	36.5	25.2	20.6	19.7	20.7	21.7
65 years and over	67.1	52.1	54.2	32.7	31.4	29.4	28.5	28.7

See footnotes at end of table.

**Table 43 (page 2 of 4). Death rates for motor vehicle-related injuries, by sex, race, Hispanic origin, and age: United States, selected years 1950–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 <sup>1,2</sup>	1960 <sup>1,2</sup>	1970 <sup>2</sup>	1980 <sup>2</sup>	1990 <sup>2</sup>	2000 <sup>3</sup>	2004	2005
Deaths per 100,000 resident population								
<b>Black or African American male<sup>5</sup></b>								
All ages, age-adjusted <sup>4</sup>	34.8	39.6	51.0	34.2	29.9	24.4	22.7	22.5
All ages, crude	37.2	33.1	44.3	31.1	28.1	22.5	21.2	21.2
Under 1 year	---	*	10.6	7.8	*	6.7	*	*
1–14 years <sup>6</sup>	10.4	11.2	16.3	11.4	8.9	5.5	4.8	4.4
15–24 years	42.5	46.4	58.1	34.9	36.1	30.2	26.4	28.0
25–34 years	54.4	51.0	70.4	44.9	39.5	32.6	31.8	30.8
35–44 years	46.7	43.6	59.5	41.2	33.5	27.2	24.7	25.9
45–64 years	54.6	47.8	61.7	39.5	33.3	27.1	26.9	24.8
65 years and over	52.6	48.2	53.4	42.4	36.3	32.1	28.6	29.3
<b>American Indian or Alaska Native male<sup>5</sup></b>								
All ages, age-adjusted <sup>4</sup>	---	---	---	78.9	48.3	35.8	34.5	34.3
All ages, crude	---	---	---	74.6	47.6	33.6	33.7	35.2
1–14 years	---	---	---	15.1	11.6	7.8	6.8	11.7
15–24 years	---	---	---	126.1	75.2	56.8	47.4	50.6
25–34 years	---	---	---	107.0	78.2	49.8	46.7	52.8
35–44 years	---	---	---	82.8	57.0	36.3	37.8	40.7
45–64 years	---	---	---	77.4	45.9	32.0	38.3	34.1
65 years and over	---	---	---	97.0	43.0	48.5	42.3	26.4
<b>Asian or Pacific Islander male<sup>5</sup></b>								
All ages, age-adjusted <sup>4</sup>	---	---	---	19.0	17.9	10.6	9.3	9.6
All ages, crude	---	---	---	17.1	15.8	9.8	8.8	8.9
1–14 years	---	---	---	8.2	6.3	2.5	2.6	1.8
15–24 years	---	---	---	27.2	25.7	17.0	15.3	16.1
25–34 years	---	---	---	18.8	17.0	10.4	8.4	9.0
35–44 years	---	---	---	13.1	12.2	6.9	7.4	6.4
45–64 years	---	---	---	13.7	15.1	10.1	9.0	9.1
65 years and over	---	---	---	37.3	33.6	21.1	17.0	20.5
<b>Hispanic or Latino male<sup>5,7</sup></b>								
All ages, age-adjusted <sup>4</sup>	---	---	---	---	29.5	21.3	20.9	21.3
All ages, crude	---	---	---	---	29.2	20.1	20.2	20.7
1–14 years	---	---	---	---	7.2	4.4	4.7	4.7
15–24 years	---	---	---	---	48.2	34.7	38.3	40.3
25–34 years	---	---	---	---	41.0	24.9	25.4	26.3
35–44 years	---	---	---	---	28.0	21.6	20.8	20.2
45–64 years	---	---	---	---	28.9	21.7	19.6	20.1
65 years and over	---	---	---	---	35.3	28.9	26.1	26.6
<b>White, not Hispanic or Latino male<sup>7</sup></b>								
All ages, age-adjusted <sup>4</sup>	---	---	---	---	25.7	21.7	21.7	22.0
All ages, crude	---	---	---	---	26.0	21.5	22.0	22.4
1–14 years	---	---	---	---	6.4	4.9	4.5	3.9
15–24 years	---	---	---	---	52.3	40.3	39.1	38.2
25–34 years	---	---	---	---	34.0	24.7	25.5	27.1
35–44 years	---	---	---	---	23.1	21.6	22.2	22.7
45–64 years	---	---	---	---	19.8	19.3	20.7	21.7
65 years and over	---	---	---	---	31.1	29.3	28.5	28.7
<b>White female<sup>5</sup></b>								
All ages, age-adjusted <sup>4</sup>	11.4	11.7	14.9	12.2	11.2	9.8	9.5	9.2
All ages, crude	10.9	11.2	14.8	12.8	11.6	10.0	9.8	9.5
Under 1 year	7.8	7.5	10.2	7.1	4.7	3.5	3.2	2.9
1–14 years	7.2	6.2	7.5	6.2	4.8	3.7	3.4	3.1
15–24 years	12.6	15.6	22.7	23.0	19.5	17.1	16.8	15.8
25–34 years	9.0	9.0	12.7	12.2	11.6	8.9	9.4	9.3
35–44 years	8.1	8.9	12.3	10.6	9.2	8.9	8.4	8.9
45–64 years	12.7	13.1	15.1	10.4	9.9	8.7	8.7	8.6
65 years and over	22.2	20.8	23.7	15.3	17.4	16.2	15.3	14.4

See footnotes at end of table.



**Table 43 (page 3 of 4). Death rates for motor vehicle-related injuries, by sex, race, Hispanic origin, and age: United States, selected years 1950–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 <sup>1,2</sup>	1960 <sup>1,2</sup>	1970 <sup>2</sup>	1980 <sup>2</sup>	1990 <sup>2</sup>	2000 <sup>3</sup>	2004	2005
Deaths per 100,000 resident population								
Black or African American female <sup>5</sup>								
All ages, age-adjusted <sup>4</sup> . . . . .	9.3	10.4	14.1	8.5	9.6	8.4	8.1	7.6
All ages, crude . . . . .	10.2	9.7	13.4	8.3	9.4	8.2	7.9	7.5
Under 1 year . . . . .	---	8.1	11.9	*	7.0	*	*	6.8
1–14 years <sup>6</sup> . . . . .	7.2	6.9	10.2	6.3	5.3	3.9	4.0	3.4
15–24 years . . . . .	11.6	9.9	13.4	8.0	9.9	11.7	10.9	10.7
25–34 years . . . . .	10.8	9.8	13.3	10.6	11.1	9.4	8.7	7.5
35–44 years . . . . .	11.1	11.0	16.1	8.3	9.4	8.2	8.3	7.7
45–64 years . . . . .	11.8	12.7	16.7	9.2	10.7	9.0	8.8	8.3
65 years and over . . . . .	14.3	13.2	15.7	9.5	13.5	10.4	9.6	9.8
American Indian or Alaska Native female <sup>5</sup>								
All ages, age-adjusted <sup>4</sup> . . . . .	---	---	---	32.0	17.5	19.5	17.8	15.4
All ages, crude . . . . .	---	---	---	32.0	17.3	18.6	17.3	15.5
1–14 years . . . . .	---	---	---	15.0	8.1	6.5	7.3	*
15–24 years . . . . .	---	---	---	42.3	31.4	30.3	27.0	24.3
25–34 years . . . . .	---	---	---	52.5	18.8	22.3	21.6	24.8
35–44 years . . . . .	---	---	---	38.1	18.2	22.0	21.4	17.8
45–64 years . . . . .	---	---	---	32.6	17.6	17.8	10.4	11.2
65 years and over . . . . .	---	---	---	*	*	24.0	30.0	*
Asian or Pacific Islander female <sup>5</sup>								
All ages, age-adjusted <sup>4</sup> . . . . .	---	---	---	9.3	10.4	6.7	6.3	5.9
All ages, crude . . . . .	---	---	---	8.2	9.0	5.9	6.0	5.5
1–14 years . . . . .	---	---	---	7.4	3.6	2.3	*	1.5
15–24 years . . . . .	---	---	---	7.4	11.4	6.0	9.0	7.9
25–34 years . . . . .	---	---	---	7.3	7.3	4.5	4.5	3.6
35–44 years . . . . .	---	---	---	8.6	7.5	4.9	5.0	4.3
45–64 years . . . . .	---	---	---	8.5	11.8	6.4	6.3	6.6
65 years and over . . . . .	---	---	---	18.6	24.3	18.5	14.9	13.6
Hispanic or Latina female <sup>5,7</sup>								
All ages, age-adjusted <sup>4</sup> . . . . .	---	---	---	---	9.6	7.9	7.7	7.8
All ages, crude . . . . .	---	---	---	---	8.9	7.2	7.1	7.4
1–14 years . . . . .	---	---	---	---	4.8	3.9	3.4	3.3
15–24 years . . . . .	---	---	---	---	11.6	10.6	11.1	13.4
25–34 years . . . . .	---	---	---	---	9.4	6.5	7.3	7.2
35–44 years . . . . .	---	---	---	---	8.0	7.3	6.4	7.4
45–64 years . . . . .	---	---	---	---	11.4	8.3	8.1	7.5
65 years and over . . . . .	---	---	---	---	14.9	13.4	12.3	11.1

See footnotes at end of table.

**Table 43 (page 4 of 4). Death rates for motor vehicle-related injuries, by sex, race, Hispanic origin, and age: United States, selected years 1950–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 <sup>1,2</sup>	1960 <sup>1,2</sup>	1970 <sup>2</sup>	1980 <sup>2</sup>	1990 <sup>2</sup>	2000 <sup>3</sup>	2004	2005
White, not Hispanic or Latina female <sup>7</sup>	Deaths per 100,000 resident population							
All ages, age-adjusted <sup>4</sup>	---	---	---	---	11.3	10.0	9.8	9.4
All ages, crude	---	---	---	---	11.7	10.3	10.2	9.8
1–14 years	---	---	---	---	4.7	3.5	3.4	3.0
15–24 years	---	---	---	---	20.4	18.4	18.0	16.1
25–34 years	---	---	---	---	11.7	9.3	9.8	9.7
35–44 years	---	---	---	---	9.3	9.0	8.7	9.1
45–64 years	---	---	---	---	9.7	8.7	8.6	8.6
65 years and over	---	---	---	---	17.5	16.3	15.5	14.6

--- Data not available.

\* Rates based on fewer than 20 deaths are considered unreliable and are not shown.

<sup>1</sup>Includes deaths of persons who were not residents of the 50 states and the District of Columbia.

<sup>2</sup>Underlying cause of death was coded according to the Sixth Revision of the International Classification of Diseases (ICD) in 1950, Seventh Revision in 1960, Eighth Revision in 1970, and Ninth Revision in 1980–1998. See [Appendix II, Cause of death; Tables IV and V](#).

<sup>3</sup>Starting with 1999 data, cause of death is coded according to ICD–10. See [Appendix II, Cause of death, Table V; Comparability ratio, Table VI](#).

<sup>4</sup>Age-adjusted rates are calculated using the year 2000 standard population. Prior to 2003, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2003 data, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#).

<sup>5</sup>The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native and Asian or Pacific Islander populations are known to be underestimated. See [Appendix II, Race](#), for a discussion of sources of bias in death rates by race and Hispanic origin.

<sup>6</sup>In 1950, rate is for the age group under 15 years.

<sup>7</sup>Prior to 1997, excludes data from states lacking an Hispanic-origin item on the death certificate. See [Appendix II, Hispanic origin](#).

NOTES: Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were revised based on 2000 census counts. Rates for 2001 and later years were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#). Age groups were selected to minimize the presentation of unstable age-specific death rates based on small numbers of deaths and for consistency among comparison groups. For additional injury-related statistics, see Web-based Injury Statistics Query and Reporting System, available from: <http://www.cdc.gov/ncipc/wisqars>. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and the District of Columbia reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Data for additional years are available. See [Appendix III](#).

**SOURCES:** CDC/NCHS, National Vital Statistics System; Grove RD, Hetzel AM. Vital statistics rates in the United States, 1940–1960. Washington, DC: U.S. Government Printing Office. 1968; numerator data from National Vital Statistics System, annual mortality files; denominator data from national population estimates for race groups from Table 1 and unpublished Hispanic population estimates for 1985–1996 prepared by the Housing and Household Economic Statistics Division, U.S. Census Bureau; additional mortality tables are available from: <http://www.cdc.gov/nchs/datawh/statab/unpubd/mortabs.htm>; Kung H-C, Hoyert DL, Xu JQ, Murphy SL. Deaths: Final data for 2005. National vital statistics reports. Vol 56 no 10. Hyattsville, MD: NCHS. 2008.



**Table 44 (page 1 of 4). Death rates for homicide, by sex, race, Hispanic origin, and age: United States, selected years 1950–2005**

[Data are based on death certificates]

<i>Sex, race, Hispanic origin, and age</i>	1950 <sup>1,2</sup>	1960 <sup>1,2</sup>	1970 <sup>2</sup>	1980 <sup>2</sup>	1990 <sup>2</sup>	2000 <sup>3</sup>	2004	2005
Deaths per 100,000 resident population								
All persons								
All ages, age-adjusted <sup>4</sup> . . . . .	5.1	5.0	8.8	10.4	9.4	5.9	5.9	6.1
All ages, crude . . . . .	5.0	4.6	8.1	10.6	9.9	6.0	5.9	6.1
Under 1 year . . . . .	4.4	4.8	4.3	5.9	8.4	9.2	8.0	7.5
1–14 years . . . . .	0.6	0.6	1.1	1.5	1.8	1.3	1.2	1.3
1–4 years . . . . .	0.6	0.7	1.9	2.5	2.5	2.3	2.4	2.3
5–14 years . . . . .	0.5	0.5	0.9	1.2	1.5	0.9	0.8	0.8
15–24 years . . . . .	5.8	5.6	11.3	15.4	19.7	12.6	12.2	13.0
15–19 years . . . . .	3.9	3.9	7.7	10.5	16.9	9.5	9.3	9.9
20–24 years . . . . .	8.5	7.7	15.6	20.2	22.2	16.0	15.0	16.1
25–44 years . . . . .	8.9	8.5	14.9	17.5	14.7	8.7	8.9	9.4
25–34 years . . . . .	9.3	9.2	16.2	19.3	17.4	10.4	11.2	11.8
35–44 years . . . . .	8.4	7.8	13.5	14.9	11.6	7.1	6.8	7.1
45–64 years . . . . .	5.0	5.3	8.7	9.0	6.3	4.0	4.1	4.0
45–54 years . . . . .	5.9	6.1	10.0	11.0	7.5	4.7	4.8	4.8
55–64 years . . . . .	3.9	4.1	7.1	7.0	5.0	3.0	3.0	2.8
65 years and over . . . . .	3.0	2.7	4.6	5.5	4.0	2.4	2.3	2.3
65–74 years . . . . .	3.2	2.8	4.9	5.7	3.8	2.4	2.4	2.4
75–84 years . . . . .	2.5	2.3	4.0	5.2	4.3	2.4	2.2	2.2
85 years and over . . . . .	2.3	2.4	4.2	5.3	4.6	2.4	2.1	2.1
Male								
All ages, age-adjusted <sup>4</sup> . . . . .	7.9	7.5	14.3	16.6	14.8	9.0	9.2	9.6
All ages, crude . . . . .	7.7	6.8	13.1	17.1	15.9	9.3	9.4	9.8
Under 1 year . . . . .	4.5	4.7	4.5	6.3	8.8	10.4	8.0	8.2
1–14 years . . . . .	0.6	0.6	1.2	1.6	2.0	1.5	1.4	1.4
1–4 years . . . . .	0.5	0.7	1.9	2.7	2.7	2.5	2.5	2.6
5–14 years . . . . .	0.6	0.5	1.0	1.2	1.7	1.1	1.0	1.0
15–24 years . . . . .	8.6	8.4	18.2	24.0	32.5	20.9	20.4	22.0
15–19 years . . . . .	5.5	5.7	12.1	15.9	27.8	15.5	15.3	16.8
20–24 years . . . . .	13.5	11.8	25.6	32.2	36.9	26.7	25.4	27.2
25–44 years . . . . .	13.8	12.8	24.4	28.9	23.5	13.3	14.1	14.9
25–34 years . . . . .	14.4	13.9	26.8	31.9	27.7	16.7	18.5	19.6
35–44 years . . . . .	13.2	11.7	21.7	24.5	18.6	10.3	10.1	10.6
45–64 years . . . . .	8.1	8.1	14.8	15.2	10.2	6.0	6.2	6.2
45–54 years . . . . .	9.5	9.4	16.8	18.4	11.9	6.9	7.3	7.6
55–64 years . . . . .	6.3	6.4	12.1	11.8	8.0	4.6	4.6	4.3
65 years and over . . . . .	4.8	4.3	7.7	8.8	5.8	3.3	3.2	3.0
65–74 years . . . . .	5.2	4.6	8.5	9.2	5.8	3.4	3.6	3.3
75–84 years . . . . .	3.9	3.7	5.9	8.1	5.7	3.2	2.6	2.6
85 years and over . . . . .	2.5	3.6	7.4	7.5	6.7	3.3	2.7	2.7
Female								
All ages, age-adjusted <sup>4</sup> . . . . .	2.4	2.6	3.7	4.4	4.0	2.8	2.5	2.5
All ages, crude . . . . .	2.4	2.4	3.4	4.5	4.2	2.8	2.5	2.5
Under 1 year . . . . .	4.2	4.9	4.1	5.6	8.0	7.9	7.9	6.6
1–14 years . . . . .	0.6	0.5	1.0	1.4	1.6	1.1	1.1	1.1
1–4 years . . . . .	0.7	0.7	1.9	2.2	2.3	2.1	2.2	2.0
5–14 years . . . . .	0.5	0.4	0.7	1.1	1.2	0.7	0.6	0.7
15–24 years . . . . .	3.0	2.8	4.6	6.6	6.2	3.9	3.5	3.4
15–19 years . . . . .	2.4	1.9	3.2	4.9	5.4	3.1	3.0	2.5
20–24 years . . . . .	3.7	3.8	6.2	8.2	7.0	4.7	4.0	4.3
25–44 years . . . . .	4.2	4.3	5.8	6.4	6.0	4.0	3.6	3.7
25–34 years . . . . .	4.5	4.6	6.0	6.9	7.1	4.1	3.7	3.8
35–44 years . . . . .	3.8	4.0	5.7	5.7	4.8	4.0	3.4	3.6
45–64 years . . . . .	1.9	2.5	3.1	3.4	2.8	2.1	2.1	1.9
45–54 years . . . . .	2.3	2.9	3.7	4.1	3.2	2.5	2.4	2.2
55–64 years . . . . .	1.4	2.0	2.5	2.8	2.3	1.6	1.6	1.4
65 years and over . . . . .	1.4	1.3	2.3	3.3	2.8	1.8	1.7	1.7
65–74 years . . . . .	1.3	1.3	2.2	3.0	2.2	1.6	1.4	1.6
75–84 years . . . . .	1.4	1.3	2.7	3.5	3.4	2.0	1.9	1.9
85 years and over . . . . .	2.1	1.6	2.5	4.3	3.8	2.0	1.9	1.9

See footnotes at end of table.

**Table 44 (page 2 of 4). Death rates for homicide, by sex, race, Hispanic origin, and age: United States, selected years 1950–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 <sup>1,2</sup>	1960 <sup>1,2</sup>	1970 <sup>2</sup>	1980 <sup>2</sup>	1990 <sup>2</sup>	2000 <sup>3</sup>	2004	2005
Deaths per 100,000 resident population								
White male <sup>5</sup>								
All ages, age-adjusted <sup>4</sup> . . . . .	3.8	3.9	7.2	10.4	8.3	5.2	5.3	5.3
All ages, crude . . . . .	3.6	3.6	6.6	10.7	8.8	5.2	5.3	5.4
Under 1 year . . . . .	4.3	3.8	2.9	4.3	6.4	8.2	6.9	6.7
1–14 years . . . . .	0.4	0.5	0.7	1.2	1.3	1.2	1.0	1.0
15–24 years . . . . .	3.2	5.0	7.6	15.1	15.2	9.9	10.2	10.6
25–44 years . . . . .	5.4	5.5	11.6	17.2	13.0	7.4	7.7	8.0
25–34 years . . . . .	4.9	5.7	12.5	18.5	14.7	8.4	9.3	9.8
35–44 years . . . . .	6.1	5.2	10.8	15.2	11.1	6.5	6.3	6.3
45–64 years . . . . .	4.8	4.6	8.3	9.8	6.9	4.1	4.3	4.3
65 years and over . . . . .	3.8	3.1	5.4	6.7	4.1	2.5	2.5	2.2
Black or African American male <sup>5</sup>								
All ages, age-adjusted <sup>4</sup> . . . . .	47.0	42.3	78.2	69.4	63.1	35.4	35.1	37.3
All ages, crude . . . . .	44.7	35.0	66.0	65.7	68.5	37.2	37.1	39.7
Under 1 year . . . . .	---	10.3	14.3	18.6	21.4	23.3	14.2	15.9
1–14 years <sup>6</sup> . . . . .	1.8	1.5	4.4	4.1	5.8	3.1	3.5	3.9
15–24 years . . . . .	53.8	43.2	98.3	82.6	137.1	85.3	77.6	84.1
25–44 years . . . . .	92.8	80.5	140.2	130.0	105.4	55.8	59.6	63.4
25–34 years . . . . .	104.3	86.4	154.5	142.9	123.7	73.9	81.6	86.2
35–44 years . . . . .	80.0	74.4	124.0	109.3	81.2	38.5	37.9	40.6
45–64 years . . . . .	46.0	44.6	82.3	70.6	41.4	21.9	22.0	22.3
65 years and over . . . . .	16.5	17.3	33.3	30.9	25.7	12.8	11.0	11.9
American Indian or Alaska Native male <sup>5</sup>								
All ages, age-adjusted <sup>4</sup> . . . . .	---	---	---	23.3	16.7	10.7	11.0	11.3
All ages, crude . . . . .	---	---	---	23.1	16.6	10.7	11.5	12.2
15–24 years . . . . .	---	---	---	35.4	25.1	17.0	17.7	22.1
25–44 years . . . . .	---	---	---	39.2	25.7	17.0	17.8	16.1
45–64 years . . . . .	---	---	---	22.1	14.8	*	7.5	10.8
Asian or Pacific Islander male <sup>5</sup>								
All ages, age-adjusted <sup>4</sup> . . . . .	---	---	---	9.1	7.3	4.3	3.7	4.4
All ages, crude . . . . .	---	---	---	8.3	7.9	4.4	3.9	4.6
15–24 years . . . . .	---	---	---	9.3	14.9	7.8	7.8	10.8
25–44 years . . . . .	---	---	---	11.3	9.6	4.6	3.7	4.9
45–64 years . . . . .	---	---	---	10.4	7.0	6.1	5.1	4.2
Hispanic or Latino male <sup>5,7</sup>								
All ages, age-adjusted <sup>4</sup> . . . . .	---	---	---	---	27.4	11.8	11.5	12.1
All ages, crude . . . . .	---	---	---	---	31.0	13.4	13.0	13.6
Under 1 year . . . . .	---	---	---	---	8.7	6.6	9.1	6.3
1–14 years . . . . .	---	---	---	---	3.1	1.7	1.5	1.5
15–24 years . . . . .	---	---	---	---	55.4	28.5	29.6	31.0
25–44 years . . . . .	---	---	---	---	46.4	17.2	16.6	18.0
25–34 years . . . . .	---	---	---	---	50.9	19.9	20.3	22.3
35–44 years . . . . .	---	---	---	---	39.3	13.5	11.8	12.7
45–64 years . . . . .	---	---	---	---	20.5	9.1	8.5	8.2
65 years and over . . . . .	---	---	---	---	9.4	4.4	3.7	4.4
White, not Hispanic or Latino male <sup>7</sup>								
All ages, age-adjusted <sup>4</sup> . . . . .	---	---	---	---	5.6	3.6	3.6	3.5
All ages, crude . . . . .	---	---	---	---	5.8	3.6	3.6	3.6
Under 1 year . . . . .	---	---	---	---	5.4	8.3	6.1	6.9
1–14 years . . . . .	---	---	---	---	0.9	1.0	0.8	0.8
15–24 years . . . . .	---	---	---	---	7.5	4.7	4.7	4.7
25–44 years . . . . .	---	---	---	---	8.7	5.2	5.2	5.1
25–34 years . . . . .	---	---	---	---	9.3	5.2	5.5	5.4
35–44 years . . . . .	---	---	---	---	8.0	5.2	5.0	4.8
45–64 years . . . . .	---	---	---	---	5.7	3.6	3.8	3.8
65 years and over . . . . .	---	---	---	---	3.7	2.3	2.4	2.1

See footnotes at end of table.

**Table 44 (page 3 of 4). Death rates for homicide, by sex, race, Hispanic origin, and age: United States, selected years 1950–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 <sup>1,2</sup>	1960 <sup>1,2</sup>	1970 <sup>2</sup>	1980 <sup>2</sup>	1990 <sup>2</sup>	2000 <sup>3</sup>	2004	2005
Deaths per 100,000 resident population								
White female <sup>5</sup>								
All ages, age-adjusted <sup>4</sup> . . . . .	1.4	1.5	2.3	3.2	2.7	2.1	1.9	1.9
All ages, crude . . . . .	1.4	1.4	2.1	3.2	2.8	2.1	1.9	1.9
Under 1 year . . . . .	3.9	3.5	2.9	4.3	5.1	5.0	6.2	5.5
1–14 years . . . . .	0.4	0.4	0.7	1.1	1.0	0.8	0.8	0.8
15–24 years . . . . .	1.3	1.5	2.7	4.7	4.0	2.7	2.5	2.3
25–44 years . . . . .	2.0	2.1	3.3	4.2	3.8	2.9	2.7	2.8
45–64 years . . . . .	1.5	1.7	2.1	2.6	2.3	1.8	1.7	1.5
65 years and over . . . . .	1.2	1.2	1.9	2.9	2.2	1.6	1.6	1.6
Black or African American female <sup>5</sup>								
All ages, age-adjusted <sup>4</sup> . . . . .	11.1	11.4	14.7	13.2	12.5	7.1	6.3	6.1
All ages, crude . . . . .	11.5	10.4	13.2	13.5	13.4	7.2	6.4	6.2
Under 1 year . . . . .	---	13.8	10.7	12.8	22.8	22.2	17.0	12.6
1–14 years <sup>6</sup> . . . . .	1.8	1.2	3.1	3.3	4.7	2.7	2.8	2.3
15–24 years . . . . .	16.5	11.9	17.7	18.4	18.9	10.7	8.8	8.8
25–44 years . . . . .	22.5	22.7	25.3	22.6	21.0	11.0	9.4	9.3
45–64 years . . . . .	6.8	10.3	13.4	10.8	6.5	4.5	5.1	4.9
65 years and over . . . . .	3.6	3.0	7.4	8.0	9.4	3.5	2.9	2.9
American Indian or Alaska Native female <sup>5</sup>								
All ages, age-adjusted <sup>4</sup> . . . . .	---	---	---	8.1	4.6	3.0	3.0	4.0
All ages, crude . . . . .	---	---	---	7.7	4.8	2.9	3.0	4.0
15–24 years . . . . .	---	---	---	*	*	*	*	*
25–44 years . . . . .	---	---	---	13.7	6.9	5.9	*	6.1
45–64 years . . . . .	---	---	---	*	*	*	*	*
Asian or Pacific Islander female <sup>5</sup>								
All ages, age-adjusted <sup>4</sup> . . . . .	---	---	---	3.1	2.8	1.7	1.3	1.6
All ages, crude . . . . .	---	---	---	3.1	2.8	1.7	1.4	1.6
15–24 years . . . . .	---	---	---	*	*	*	*	2.8
25–44 years . . . . .	---	---	---	4.6	3.8	2.2	1.5	1.7
45–64 years . . . . .	---	---	---	*	*	2.0	1.8	1.3
Hispanic or Latina female <sup>5,7</sup>								
All ages, age-adjusted <sup>4</sup> . . . . .	---	---	---	---	4.3	2.8	2.3	2.4
All ages, crude . . . . .	---	---	---	---	4.7	2.8	2.4	2.5
Under 1 year . . . . .	---	---	---	---	*	7.4	7.0	6.6
1–14 years . . . . .	---	---	---	---	1.9	1.0	1.1	1.0
15–24 years . . . . .	---	---	---	---	8.1	3.7	3.3	3.6
25–44 years . . . . .	---	---	---	---	6.1	3.7	3.3	3.4
45–64 years . . . . .	---	---	---	---	3.3	2.9	1.9	1.9
65 years and over . . . . .	---	---	---	---	*	2.4	*	*
White, not Hispanic or Latina female <sup>7</sup>								
All ages, age-adjusted <sup>4</sup> . . . . .	---	---	---	---	2.5	1.9	1.8	1.8
All ages, crude . . . . .	---	---	---	---	2.5	1.9	1.8	1.8
Under 1 year . . . . .	---	---	---	---	4.4	4.1	5.8	5.0
1–14 years . . . . .	---	---	---	---	0.8	0.8	0.7	0.7
15–24 years . . . . .	---	---	---	---	3.3	2.3	2.3	2.0
25–44 years . . . . .	---	---	---	---	3.5	2.7	2.5	2.6
45–64 years . . . . .	---	---	---	---	2.2	1.6	1.6	1.5
65 years and over . . . . .	---	---	---	---	2.2	1.6	1.6	1.6

See footnotes at end of table.

## Table 44 (page 4 of 4). Death rates for homicide, by sex, race, Hispanic origin, and age: United States, selected years 1950–2005

[Data are based on death certificates]

-- Data not available.

\* Rates based on fewer than 20 deaths are considered unreliable and are not shown.

<sup>1</sup>Includes deaths of persons who were not residents of the 50 states and the District of Columbia.

<sup>2</sup>Underlying cause of death was coded according to the Sixth Revision of the International Classification of Diseases (ICD) in 1950, Seventh Revision in 1960, Eighth Revision in 1970, and Ninth Revision in 1980–1998. See [Appendix II, Cause of death; Tables IV and V](#).

<sup>3</sup>Starting with 1999 data, cause of death is coded according to ICD–10. See [Appendix II, Cause of death, Table V; Comparability ratio, Table VI](#).

<sup>4</sup>Age-adjusted rates are calculated using the year 2000 standard population. Prior to 2003, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2003 data, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#).

<sup>5</sup>The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native and Asian or Pacific Islander populations are known to be underestimated. See [Appendix II, Race](#), for a discussion of sources of bias in death rates by race and Hispanic origin.

<sup>6</sup>In 1950, rate is for the age group under 15 years.

<sup>7</sup>Prior to 1997, excludes data from states lacking an Hispanic-origin item on the death certificate. See [Appendix II, Hispanic origin](#).

NOTES: Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were revised based on 2000 census counts. Rates for 2001 and later years were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#). Figures for 2001 include September 11-related deaths for which death certificates were filed as of October 24, 2002. For the period 1980–1998, homicide was coded using ICD–9 codes that are most nearly comparable with homicide codes in the 113 cause list for ICD–10. See [Appendix II, Cause of death; Table V](#) for terrorism-related ICD–10 codes. Age groups were selected to minimize the presentation of unstable age-specific death rates based on small numbers of deaths and for consistency among comparison groups. For additional injury-related statistics, see Web-based Injury Statistics Query and Reporting System, available from: <http://www.cdc.gov/ncipc/wisqars>. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and the District of Columbia reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System; Grove RD, Hetzel AM. Vital statistics rates in the United States, 1940–1960. Washington, DC: U.S. Government Printing Office. 1968; numerator data from National Vital Statistics System, annual mortality files; denominator data from national population estimates for race groups from Table 1 and unpublished Hispanic population estimates for 1985–1996 prepared by the Housing and Household Economic Statistics Division, U.S. Census Bureau; additional mortality tables are available from: <http://www.cdc.gov/nchs/data/wh/statab/unpubd/mortabs.htm>; Kung H-C, Hoyert DL, Xu JQ, Murphy SL. Deaths: Final data for 2005. National vital statistics reports. Vol 56 no 10. Hyattsville, MD: NCHS. 2008.

**Table 45 (page 1 of 3). Death rates for suicide, by sex, race, Hispanic origin, and age: United States, selected years 1950–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 <sup>1,2</sup>	1960 <sup>1,2</sup>	1970 <sup>2</sup>	1980 <sup>2</sup>	1990 <sup>2</sup>	2000 <sup>3</sup>	2004	2005
Deaths per 100,000 resident population								
All persons								
All ages, age-adjusted <sup>4</sup>	13.2	12.5	13.1	12.2	12.5	10.4	10.9	10.9
All ages, crude	11.4	10.6	11.6	11.9	12.4	10.4	11.0	11.0
Under 1 year	...	...	...	...	...	...	*	*
1–4 years	...	...	...	...	...	...	*	*
5–14 years	0.2	0.3	0.3	0.4	0.8	0.7	0.7	0.7
15–24 years	4.5	5.2	8.8	12.3	13.2	10.2	10.3	10.0
15–19 years	2.7	3.6	5.9	8.5	11.1	8.0	8.2	7.7
20–24 years	6.2	7.1	12.2	16.1	15.1	12.5	12.5	12.4
25–44 years	11.6	12.2	15.4	15.6	15.2	13.4	13.9	13.7
25–34 years	9.1	10.0	14.1	16.0	15.2	12.0	12.7	12.4
35–44 years	14.3	14.2	16.9	15.4	15.3	14.5	15.0	14.9
45–64 years	23.5	22.0	20.6	15.9	15.3	13.5	15.4	15.4
45–54 years	20.9	20.7	20.0	15.9	14.8	14.4	16.6	16.5
55–64 years	26.8	23.7	21.4	15.9	16.0	12.1	13.8	13.9
65 years and over	30.0	24.5	20.8	17.6	20.5	15.2	14.3	14.7
65–74 years	29.6	23.0	20.8	16.9	17.9	12.5	12.3	12.6
75–84 years	31.1	27.9	21.2	19.1	24.9	17.6	16.3	16.9
85 years and over	28.8	26.0	19.0	19.2	22.2	19.6	16.4	16.9
Male								
All ages, age-adjusted <sup>4</sup>	21.2	20.0	19.8	19.9	21.5	17.7	18.0	18.0
All ages, crude	17.8	16.5	16.8	18.6	20.4	17.1	17.7	17.7
Under 1 year	...	...	...	...	...	...	*	*
1–4 years	...	...	...	...	...	...	*	*
5–14 years	0.3	0.4	0.5	0.6	1.1	1.2	0.9	1.0
15–24 years	6.5	8.2	13.5	20.2	22.0	17.1	16.8	16.2
15–19 years	3.5	5.6	8.8	13.8	18.1	13.0	12.6	12.1
20–24 years	9.3	11.5	19.3	26.8	25.7	21.4	20.8	20.2
25–44 years	17.2	17.9	20.9	24.0	24.4	21.3	21.7	21.6
25–34 years	13.4	14.7	19.8	25.0	24.8	19.6	20.4	19.9
35–44 years	21.3	21.0	22.1	22.5	23.9	22.8	23.0	23.1
45–64 years	37.1	34.4	30.0	23.7	24.3	21.3	23.7	24.0
45–54 years	32.0	31.6	27.9	22.9	23.2	22.4	24.8	25.2
55–64 years	43.6	38.1	32.7	24.5	25.7	19.4	22.1	22.2
65 years and over	52.8	44.0	38.4	35.0	41.6	31.1	29.0	29.5
65–74 years	50.5	39.6	36.0	30.4	32.2	22.7	22.6	22.7
75–84 years	58.3	52.5	42.8	42.3	56.1	38.6	34.8	35.8
85 years and over	58.3	57.4	42.4	50.6	65.9	57.5	45.0	45.0
Female								
All ages, age-adjusted <sup>4</sup>	5.6	5.6	7.4	5.7	4.8	4.0	4.5	4.4
All ages, crude	5.1	4.9	6.6	5.5	4.8	4.0	4.6	4.5
Under 1 year	...	...	...	...	...	...	*	*
1–4 years	...	...	...	...	...	...	*	*
5–14 years	0.1	0.1	0.2	0.2	0.4	0.3	0.5	0.3
15–24 years	2.6	2.2	4.2	4.3	3.9	3.0	3.6	3.5
15–19 years	1.8	1.6	2.9	3.0	3.7	2.7	3.5	3.0
20–24 years	3.3	2.9	5.7	5.5	4.1	3.2	3.6	4.0
25–44 years	6.2	6.6	10.2	7.7	6.2	5.4	6.0	5.8
25–34 years	4.9	5.5	8.6	7.1	5.6	4.3	4.7	4.7
35–44 years	7.5	7.7	11.9	8.5	6.8	6.4	7.1	6.8
45–64 years	9.9	10.2	12.0	8.9	7.1	6.2	7.6	7.2
45–54 years	9.9	10.2	12.6	9.4	6.9	6.7	8.6	8.0
55–64 years	9.9	10.2	11.4	8.4	7.3	5.4	6.1	6.1
65 years and over	9.4	8.4	8.1	6.1	6.4	4.0	3.8	4.0
65–74 years	10.1	8.4	9.0	6.5	6.7	4.0	3.8	4.0
75–84 years	8.1	8.9	7.0	5.5	6.3	4.0	3.9	4.0
85 years and over	8.2	6.0	5.9	5.5	5.4	4.2	3.6	4.0
White male <sup>5</sup>								
All ages, age-adjusted <sup>4</sup>	22.3	21.1	20.8	20.9	22.8	19.1	19.6	19.6
All ages, crude	19.0	17.6	18.0	19.9	22.0	18.8	19.6	19.7
15–24 years	6.6	8.6	13.9	21.4	23.2	17.9	17.9	17.3
25–44 years	17.9	18.5	21.5	24.6	25.4	22.9	23.8	23.5
45–64 years	39.3	36.5	31.9	25.0	26.0	23.2	26.1	26.6
65 years and over	55.8	46.7	41.1	37.2	44.2	33.3	31.2	32.1
65–74 years	53.2	42.0	38.7	32.5	34.2	24.3	24.2	24.9
75–84 years	61.9	55.7	45.5	45.5	60.2	41.1	37.1	38.4
85 years and over	61.9	61.3	45.8	52.8	70.3	61.6	48.4	48.2

See footnotes at end of table.

**Table 45 (page 2 of 3). Death rates for suicide, by sex, race, Hispanic origin, and age: United States, selected years 1950–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 <sup>1,2</sup>	1960 <sup>1,2</sup>	1970 <sup>2</sup>	1980 <sup>2</sup>	1990 <sup>2</sup>	2000 <sup>3</sup>	2004	2005
Deaths per 100,000 resident population								
<b>Black or African American male<sup>5</sup></b>								
All ages, age-adjusted <sup>4</sup> . . . . .	7.5	8.4	10.0	11.4	12.8	10.0	9.6	9.2
All ages, crude . . . . .	6.3	6.4	8.0	10.3	12.0	9.4	9.0	8.7
15–24 years . . . . .	4.9	4.1	10.5	12.3	15.1	14.2	12.2	11.5
25–44 years . . . . .	9.8	12.6	16.1	19.2	19.6	14.3	13.7	13.7
45–64 years . . . . .	12.7	13.0	12.4	11.8	13.1	9.9	10.1	9.4
65 years and over . . . . .	9.0	9.9	8.7	11.4	14.9	11.5	11.3	10.2
65–74 years . . . . .	10.0	11.3	8.7	11.1	14.7	11.1	9.8	8.4
75–84 years <sup>6</sup> . . . . .	*	*	*	10.5	14.4	12.1	15.0	12.8
85 years and over . . . . .	---	*	*	*	*	*	*	*
<b>American Indian or Alaska Native male<sup>5</sup></b>								
All ages, age-adjusted <sup>4</sup> . . . . .	---	---	---	19.3	20.1	16.0	18.7	18.9
All ages, crude . . . . .	---	---	---	20.9	20.9	15.9	19.5	19.8
15–24 years . . . . .	---	---	---	45.3	49.1	26.2	30.7	32.7
25–44 years . . . . .	---	---	---	31.2	27.8	24.5	30.8	29.4
45–64 years . . . . .	---	---	---	*	*	15.4	16.0	16.8
65 years and over . . . . .	---	---	---	*	*	*	*	*
<b>Asian or Pacific Islander male<sup>5</sup></b>								
All ages, age-adjusted <sup>4</sup> . . . . .	---	---	---	10.7	9.6	8.6	8.4	7.3
All ages, crude . . . . .	---	---	---	8.8	8.7	7.9	7.9	7.2
15–24 years . . . . .	---	---	---	10.8	13.5	9.1	9.3	7.2
25–44 years . . . . .	---	---	---	11.0	10.6	9.9	8.4	9.5
45–64 years . . . . .	---	---	---	13.0	9.7	9.7	11.1	8.9
65 years and over . . . . .	---	---	---	18.6	16.8	15.4	15.1	11.0
<b>Hispanic or Latino male<sup>5,7</sup></b>								
All ages, age-adjusted <sup>4</sup> . . . . .	---	---	---	---	13.7	10.3	9.8	9.4
All ages, crude . . . . .	---	---	---	---	11.4	8.4	8.6	8.3
15–24 years . . . . .	---	---	---	---	14.7	10.9	12.8	12.1
25–44 years . . . . .	---	---	---	---	16.2	11.2	11.0	11.2
45–64 years . . . . .	---	---	---	---	16.1	12.0	11.8	10.7
65 years and over . . . . .	---	---	---	---	23.4	19.5	15.9	14.1
<b>White, not Hispanic or Latino male<sup>7</sup></b>								
All ages, age-adjusted <sup>4</sup> . . . . .	---	---	---	---	23.5	20.2	21.0	21.2
All ages, crude . . . . .	---	---	---	---	23.1	20.4	21.6	22.0
15–24 years . . . . .	---	---	---	---	24.4	19.5	19.0	18.4
25–44 years . . . . .	---	---	---	---	26.4	25.1	26.8	26.6
45–64 years . . . . .	---	---	---	---	26.8	24.0	27.4	28.2
65 years and over . . . . .	---	---	---	---	45.4	33.9	32.1	33.2
<b>White female<sup>5</sup></b>								
All ages, age-adjusted <sup>4</sup> . . . . .	6.0	5.9	7.9	6.1	5.2	4.3	5.0	4.9
All ages, crude . . . . .	5.5	5.3	7.1	5.9	5.3	4.4	5.1	5.0
15–24 years . . . . .	2.7	2.3	4.2	4.6	4.2	3.1	3.8	3.7
25–44 years . . . . .	6.6	7.0	11.0	8.1	6.6	6.0	6.6	6.5
45–64 years . . . . .	10.6	10.9	13.0	9.6	7.7	6.9	8.5	8.1
65 years and over . . . . .	9.9	8.8	8.5	6.4	6.8	4.3	4.0	4.2
<b>Black or African American female<sup>5</sup></b>								
All ages, age-adjusted <sup>4</sup> . . . . .	1.8	2.0	2.9	2.4	2.4	1.8	1.8	1.9
All ages, crude . . . . .	1.5	1.6	2.6	2.2	2.3	1.7	1.8	1.8
15–24 years . . . . .	1.8	*	3.8	2.3	2.3	2.2	2.2	1.7
25–44 years . . . . .	2.3	3.0	4.8	4.3	3.8	2.6	2.9	2.8
45–64 years . . . . .	2.7	3.1	2.9	2.5	2.9	2.1	2.2	2.5
65 years and over . . . . .	*	*	2.6	*	1.9	1.3	*	1.4

See footnotes at end of table.

**Table 45 (page 3 of 3). Death rates for suicide, by sex, race, Hispanic origin, and age: United States, selected years 1950–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1950 <sup>1,2</sup>	1960 <sup>1,2</sup>	1970 <sup>2</sup>	1980 <sup>2</sup>	1990 <sup>2</sup>	2000 <sup>3</sup>	2004	2005
Deaths per 100,000 resident population								
American Indian or Alaska Native female <sup>5</sup>								
All ages, age-adjusted <sup>4</sup>	---	---	---	4.7	3.6	3.8	5.9	4.6
All ages, crude	---	---	---	4.7	3.7	4.0	6.2	5.0
15–24 years	---	---	---	*	*	*	10.5	10.1
25–44 years	---	---	---	10.7	*	7.2	9.8	7.4
45–64 years	---	---	---	*	*	*	*	*
65 years and over	---	---	---	*	*	*	*	*
Asian or Pacific Islander female <sup>5</sup>								
All ages, age-adjusted <sup>4</sup>	---	---	---	5.5	4.1	2.8	3.5	3.3
All ages, crude	---	---	---	4.7	3.4	2.7	3.4	3.2
15–24 years	---	---	---	*	3.9	2.7	2.8	3.7
25–44 years	---	---	---	5.4	3.8	3.3	4.1	3.4
45–64 years	---	---	---	7.9	5.0	3.2	4.5	3.8
65 years and over	---	---	---	*	8.5	5.2	6.4	6.8
Hispanic or Latina female <sup>5,7</sup>								
All ages, age-adjusted <sup>4</sup>	---	---	---	---	2.3	1.7	2.0	1.8
All ages, crude	---	---	---	---	2.2	1.5	1.8	1.7
15–24 years	---	---	---	---	3.1	2.0	2.5	2.7
25–44 years	---	---	---	---	3.1	2.1	2.3	2.2
45–64 years	---	---	---	---	2.5	2.5	3.1	2.1
65 years and over	---	---	---	---	*	*	1.8	2.0
White, not Hispanic or Latina female <sup>7</sup>								
All ages, age-adjusted <sup>4</sup>	---	---	---	---	5.4	4.7	5.4	5.3
All ages, crude	---	---	---	---	5.6	4.9	5.7	5.6
15–24 years	---	---	---	---	4.3	3.3	4.0	3.9
25–44 years	---	---	---	---	7.0	6.7	7.5	7.4
45–64 years	---	---	---	---	8.0	7.3	9.1	8.7
65 years and over	---	---	---	---	7.0	4.4	4.1	4.3

... Category not applicable.

\* Rates based on fewer than 20 deaths are considered unreliable and are not shown.

--- Data not available.

<sup>1</sup>Includes deaths of persons who were not residents of the 50 states and the District of Columbia.

<sup>2</sup>Underlying cause of death was coded according to the Sixth Revision of the International Classification of Diseases (ICD) in 1950, Seventh Revision in 1960, Eighth Revision in 1970, and Ninth Revision in 1980–1998. See [Appendix II, Cause of death; Tables IV and V](#).

<sup>3</sup>Starting with 1999 data, cause of death is coded according to ICD–10. See [Appendix II, Cause of death, Table V; Comparability ratio, Table VI](#).

<sup>4</sup>Age-adjusted rates are calculated using the year 2000 standard population. Prior to 2003, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2003 data, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#).

<sup>5</sup>The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native and Asian or Pacific Islander populations are known to be underestimated. See [Appendix II, Race](#), for a discussion of sources of bias in death rates by race and Hispanic origin.

<sup>6</sup>In 1950, rate is for the age group 75 years and over.

<sup>7</sup>Prior to 1997, excludes data from states lacking a Hispanic-origin item on the death certificate. See [Appendix II, Hispanic origin](#).

NOTES: Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were revised based on 2000 census counts. Rates for 2001 and later years were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#). Figures for 2001 include September 11-related deaths for which death certificates were filed as of October 24, 2002. See [Appendix II, Cause of death; Table V](#) for terrorism-related ICD–10 codes. Age groups were selected to minimize the presentation of unstable age-specific death rates based on small numbers of deaths and for consistency among comparison groups. For additional injury-related statistics, see Web-based Injury Statistics Query and Reporting System, available from: <http://www.cdc.gov/ncipc/wisqars>. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and the District of Columbia reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System; Grove RD, Hetzel AM. Vital statistics rates in the United States, 1940–1960. Washington, DC: U.S. Government Printing Office. 1968; numerator data from National Vital Statistics System, annual mortality files; denominator data from national population estimates for race groups from Table 1 and unpublished Hispanic population estimates for 1985–1996 prepared by the Housing and Household Economic Statistics Division, U.S. Census Bureau; additional mortality tables are available from: <http://www.cdc.gov/nchs/data/wh/statab/unpubd/mortabs.htm>; Kung H-C, Hoyert DL, Xu JQ, Murphy SL. Deaths: Final data for 2005. National vital statistics reports. Vol 56 no 10. Hyattsville, MD: NCHS. 2008.



**Table 46 (page 1 of 3). Death rates for firearm-related injuries, by sex, race, Hispanic origin, and age: United States, selected years 1970–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1970 <sup>1</sup>	1980 <sup>1</sup>	1990 <sup>1</sup>	1995 <sup>1</sup>	2000 <sup>2</sup>	2003	2004	2005
Deaths per 100,000 resident population								
All persons								
All ages, age-adjusted <sup>3</sup>	14.3	14.8	14.6	13.4	10.2	10.3	10.0	10.2
All ages, crude	13.1	14.9	14.9	13.5	10.2	10.4	10.1	10.4
Under 1 year	*	*	*	*	*	*	*	*
1–14 years	1.6	1.4	1.5	1.6	0.7	0.7	0.6	0.7
1–4 years	1.0	0.7	0.6	0.6	0.3	0.3	0.3	0.4
5–14 years	1.7	1.6	1.9	1.9	0.9	0.8	0.7	0.8
15–24 years	15.5	20.6	25.8	26.7	16.8	16.6	15.7	16.2
15–19 years	11.4	14.7	23.3	24.1	12.9	12.1	12.0	12.5
20–24 years	20.3	26.4	28.1	29.2	20.9	21.1	19.3	20.0
25–44 years	20.9	22.5	19.3	16.9	13.1	13.4	13.1	13.6
25–34 years	22.2	24.3	21.8	19.6	14.5	15.5	15.0	15.7
35–44 years	19.6	20.0	16.3	14.3	11.9	11.5	11.3	11.6
45–64 years	17.6	15.2	13.6	11.7	10.0	10.7	10.5	10.6
45–54 years	18.1	16.4	13.9	12.0	10.5	11.2	11.0	11.2
55–64 years	17.0	13.9	13.3	11.3	9.4	10.1	9.8	9.8
65 years and over	13.8	13.5	16.0	14.1	12.2	11.8	11.5	11.8
65–74 years	14.5	13.8	14.4	12.8	10.6	10.4	10.2	10.3
75–84 years	13.4	13.4	19.4	16.3	13.9	13.5	13.3	13.7
85 years and over	10.2	11.6	14.7	14.4	14.2	12.5	11.9	12.0
Male								
All ages, age-adjusted <sup>3</sup>	24.8	25.9	26.1	23.8	18.1	18.4	17.7	18.3
All ages, crude	22.2	25.7	26.2	23.6	17.8	18.3	17.6	18.3
Under 1 year	*	*	*	*	*	*	*	*
1–14 years	2.3	2.0	2.2	2.3	1.1	1.0	0.9	1.0
1–4 years	1.2	0.9	0.7	0.8	0.4	0.3	0.4	0.5
5–14 years	2.7	2.5	2.9	2.9	1.4	1.2	1.1	1.2
15–24 years	26.4	34.8	44.7	46.5	29.4	29.2	27.5	28.7
15–19 years	19.2	24.5	40.1	41.6	22.4	21.2	20.7	22.0
20–24 years	35.1	45.2	49.1	51.5	37.0	37.1	34.2	35.3
25–44 years	34.1	38.1	32.6	28.4	22.0	22.9	22.3	23.1
25–34 years	36.5	41.4	37.0	33.2	24.9	27.1	26.1	27.2
35–44 years	31.6	33.2	27.4	23.6	19.4	19.1	18.7	19.2
45–64 years	31.0	25.9	23.4	20.0	17.1	18.3	17.8	18.3
45–54 years	30.7	27.3	23.2	20.1	17.6	18.8	18.3	18.9
55–64 years	31.3	24.5	23.7	19.8	16.3	17.7	17.1	17.4
65 years and over	29.7	29.7	35.3	30.7	26.4	25.4	24.8	25.1
65–74 years	29.5	27.8	28.2	25.1	20.3	20.3	19.7	19.7
75–84 years	31.0	33.0	46.9	37.8	32.2	30.2	29.8	30.8
85 years and over	26.2	34.9	49.3	47.1	44.7	37.8	35.9	35.4
Female								
All ages, age-adjusted <sup>3</sup>	4.8	4.7	4.2	3.8	2.8	2.7	2.7	2.7
All ages, crude	4.4	4.7	4.3	3.8	2.8	2.7	2.7	2.7
Under 1 year	*	*	*	*	*	*	*	*
1–14 years	0.8	0.7	0.8	0.8	0.3	0.3	0.3	0.4
1–4 years	0.9	0.5	0.5	0.5	*	0.3	0.3	0.3
5–14 years	0.8	0.7	1.0	0.9	0.4	0.3	0.3	0.4
15–24 years	4.8	6.1	6.0	5.9	3.5	3.3	3.2	3.0
15–19 years	3.5	4.6	5.7	5.6	2.9	2.4	2.9	2.4
20–24 years	6.4	7.7	6.3	6.1	4.2	4.2	3.5	3.6
25–44 years	8.3	7.4	6.1	5.5	4.2	3.8	3.8	3.9
25–34 years	8.4	7.5	6.7	5.8	4.0	3.6	3.7	3.8
35–44 years	8.2	7.2	5.4	5.2	4.4	4.0	3.9	4.0
45–64 years	5.4	5.4	4.5	3.9	3.4	3.4	3.7	3.3
45–54 years	6.4	6.2	4.9	4.2	3.6	3.8	4.0	3.7
55–64 years	4.2	4.6	4.0	3.5	3.0	2.9	3.1	2.8
65 years and over	2.4	2.5	3.1	2.8	2.2	2.1	2.0	2.1
65–74 years	2.8	3.1	3.6	3.0	2.5	2.2	2.2	2.5
75–84 years	1.7	1.7	2.9	2.8	2.0	2.2	2.3	2.1
85 years and over	*	1.3	1.3	1.8	1.7	1.3	1.0	1.3
White male <sup>4</sup>								
All ages, age-adjusted <sup>3</sup>	19.7	22.1	22.0	20.1	15.9	16.0	15.4	15.7
All ages, crude	17.6	21.8	21.8	19.9	15.6	16.0	15.5	15.8
1–14 years	1.8	1.9	1.9	1.9	1.0	0.7	0.7	0.8
15–24 years	16.9	28.4	29.5	30.8	19.6	19.2	18.4	18.2
25–44 years	24.2	29.5	25.7	23.2	18.0	18.1	17.6	17.9
25–34 years	24.3	31.1	27.8	25.2	18.1	18.8	18.2	18.6
35–44 years	24.1	27.1	23.3	21.2	17.9	17.5	17.1	17.2
45–64 years	27.4	23.3	22.8	19.5	17.4	19.0	18.4	19.0
65 years and over	29.9	30.1	36.8	32.2	28.2	27.4	26.5	27.1

See footnotes at end of table.



**Table 46 (page 2 of 3). Death rates for firearm-related injuries, by sex, race, Hispanic origin, and age: United States, selected years 1970–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1970 <sup>1</sup>	1980 <sup>1</sup>	1990 <sup>1</sup>	1995 <sup>1</sup>	2000 <sup>2</sup>	2003	2004	2005
Deaths per 100,000 resident population								
<b>Black or African American male<sup>4</sup></b>								
All ages, age-adjusted <sup>3</sup> . . . . .	70.8	60.1	56.3	49.2	34.2	35.6	34.5	36.4
All ages, crude . . . . .	60.8	57.7	61.9	52.9	36.1	37.8	36.4	38.7
1–14 years . . . . .	5.3	3.0	4.4	4.4	1.8	2.1	2.0	2.1
15–24 years . . . . .	97.3	77.9	138.0	138.7	89.3	87.6	80.7	86.8
25–44 years . . . . .	126.2	114.1	90.3	70.2	54.1	60.5	59.2	63.6
25–34 years. . . . .	145.6	128.4	108.6	92.3	74.8	87.2	83.6	88.4
35–44 years. . . . .	104.2	92.3	66.1	46.3	34.3	34.8	35.1	38.7
45–64 years . . . . .	71.1	55.6	34.5	28.3	18.4	18.1	18.3	17.8
65 years and over . . . . .	30.6	29.7	23.9	21.8	13.8	12.1	14.6	13.6
<b>American Indian or Alaska Native male<sup>4</sup></b>								
All ages, age-adjusted <sup>3</sup> . . . . .	---	24.0	19.4	19.4	13.1	14.1	14.2	15.7
All ages, crude . . . . .	---	27.5	20.5	20.9	13.2	14.7	15.0	16.7
15–24 years . . . . .	---	55.3	49.1	40.9	26.9	27.6	25.7	32.7
25–44 years . . . . .	---	43.9	25.4	31.2	16.6	21.8	23.5	23.2
45–64 years . . . . .	---	*	*	14.2	12.2	10.5	9.5	13.0
65 years and over . . . . .	---	*	*	*	*	*	*	*
<b>Asian or Pacific Islander male<sup>4</sup></b>								
All ages, age-adjusted <sup>3</sup> . . . . .	---	7.8	8.8	9.2	6.0	5.4	4.8	5.3
All ages, crude . . . . .	---	8.2	9.4	10.0	6.2	5.7	5.0	5.5
15–24 years . . . . .	---	10.8	21.0	24.3	9.3	10.5	8.8	12.1
25–44 years . . . . .	---	12.8	10.9	10.6	8.1	6.9	5.7	6.4
45–64 years . . . . .	---	10.4	8.1	8.2	7.4	5.7	6.1	5.7
65 years and over . . . . .	---	*	*	*	*	*	4.2	*
<b>Hispanic or Latino male<sup>4,5</sup></b>								
All ages, age-adjusted <sup>3</sup> . . . . .	---	---	27.6	23.8	13.6	13.6	13.1	13.3
All ages, crude . . . . .	---	---	29.9	26.2	14.2	14.6	13.9	14.2
1–14 years . . . . .	---	---	2.6	2.8	1.0	0.8	0.7	0.7
15–24 years . . . . .	---	---	55.5	61.7	30.8	32.8	32.4	33.0
25–44 years . . . . .	---	---	42.7	31.4	17.3	18.6	17.6	18.8
25–34 years. . . . .	---	---	47.3	36.4	20.3	22.8	21.3	22.9
35–44 years. . . . .	---	---	35.4	24.2	13.2	13.3	12.9	13.4
45–64 years . . . . .	---	---	21.4	17.2	12.0	10.3	9.9	9.1
65 years and over . . . . .	---	---	19.1	16.5	12.2	10.6	10.0	9.8
<b>White, not Hispanic or Latino male<sup>5</sup></b>								
All ages, age-adjusted <sup>3</sup> . . . . .	---	---	20.6	18.6	15.5	15.6	15.1	15.3
All ages, crude . . . . .	---	---	20.4	18.5	15.7	16.0	15.6	15.9
1–14 years . . . . .	---	---	1.6	1.6	1.0	0.7	0.7	0.8
15–24 years . . . . .	---	---	24.1	23.5	16.2	15.2	14.3	13.9
25–44 years . . . . .	---	---	23.3	21.4	17.9	17.7	17.4	17.4
25–34 years. . . . .	---	---	24.7	22.5	17.2	17.3	16.9	16.9
35–44 years. . . . .	---	---	21.6	20.4	18.4	18.1	17.8	17.8
45–64 years . . . . .	---	---	22.7	19.5	17.8	19.8	19.2	20.0
65 years and over . . . . .	---	---	37.4	32.5	29.0	28.4	27.6	28.2
<b>White female<sup>4</sup></b>								
All ages, age-adjusted <sup>3</sup> . . . . .	4.0	4.2	3.8	3.5	2.7	2.6	2.7	2.6
All ages, crude . . . . .	3.7	4.1	3.8	3.5	2.7	2.6	2.7	2.6
15–24 years . . . . .	3.4	5.1	4.8	4.5	2.8	2.5	2.6	2.3
25–44 years . . . . .	6.9	6.2	5.3	4.9	3.9	3.6	3.6	3.7
45–64 years . . . . .	5.0	5.1	4.5	4.0	3.5	3.7	3.9	3.6
65 years and over . . . . .	2.2	2.5	3.1	2.8	2.4	2.1	2.2	2.3

See footnotes at end of table.

**Table 46 (page 3 of 3). Death rates for firearm-related injuries, by sex, race, Hispanic origin, and age: United States, selected years 1970–2005**

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	1970 <sup>1</sup>	1980 <sup>1</sup>	1990 <sup>1</sup>	1995 <sup>1</sup>	2000 <sup>2</sup>	2003	2004	2005
Deaths per 100,000 resident population								
<b>Black or African American female<sup>4</sup></b>								
All ages, age-adjusted <sup>3</sup> . . . . .	11.1	8.7	7.3	6.2	3.9	3.8	3.6	3.6
All ages, crude . . . . .	10.0	8.8	7.8	6.5	4.0	3.9	3.7	3.7
15–24 years . . . . .	15.2	12.3	13.3	13.2	7.6	7.4	6.9	6.7
25–44 years . . . . .	19.4	16.1	12.4	9.8	6.5	6.1	5.7	6.0
45–64 years . . . . .	10.2	8.2	4.8	4.1	3.1	2.7	3.0	2.7
65 years and over . . . . .	4.3	3.1	3.1	2.6	1.3	1.8	*	1.3
<b>American Indian or Alaska Native female<sup>4</sup></b>								
All ages, age-adjusted <sup>3</sup> . . . . .	---	5.8	3.3	3.8	2.9	2.4	2.7	2.4
All ages, crude . . . . .	---	5.8	3.4	4.1	2.9	2.6	2.9	2.6
15–24 years . . . . .	---	*	*	*	*	*	*	*
25–44 years . . . . .	---	10.2	*	7.0	5.5	*	*	*
45–64 years . . . . .	---	*	*	*	*	*	*	*
65 years and over . . . . .	---	*	*	*	*	*	*	*
<b>Asian or Pacific Islander female<sup>4</sup></b>								
All ages, age-adjusted <sup>3</sup> . . . . .	---	2.0	1.9	2.0	1.1	1.1	0.9	0.9
All ages, crude . . . . .	---	2.1	2.1	2.1	1.2	1.2	1.0	0.9
15–24 years . . . . .	---	*	*	3.9	*	2.1	*	2.3
25–44 years . . . . .	---	3.2	2.7	2.7	1.5	1.3	1.4	1.0
45–64 years . . . . .	---	*	*	*	*	1.5	1.3	*
65 years and over . . . . .	---	*	*	*	*	*	*	*
<b>Hispanic or Latina female<sup>4,5</sup></b>								
All ages, age-adjusted <sup>3</sup> . . . . .	---	---	3.3	3.1	1.8	1.6	1.5	1.6
All ages, crude . . . . .	---	---	3.6	3.3	1.8	1.7	1.5	1.6
15–24 years . . . . .	---	---	6.9	6.1	2.9	3.5	2.6	2.6
25–44 years . . . . .	---	---	5.1	4.7	2.5	2.2	2.2	2.7
45–64 years . . . . .	---	---	2.4	2.4	2.2	1.5	1.5	1.2
65 years and over . . . . .	---	---	*	*	*	*	*	*
<b>White, not Hispanic or Latina female<sup>5</sup></b>								
All ages, age-adjusted <sup>3</sup> . . . . .	---	---	3.7	3.4	2.8	2.7	2.8	2.7
All ages, crude . . . . .	---	---	3.7	3.5	2.9	2.7	2.9	2.8
15–24 years . . . . .	---	---	4.3	4.1	2.7	2.2	2.5	2.2
25–44 years . . . . .	---	---	5.1	4.8	4.2	3.9	3.9	4.0
45–64 years . . . . .	---	---	4.6	4.1	3.6	3.9	4.1	3.8
65 years and over . . . . .	---	---	3.2	2.8	2.4	2.2	2.3	2.4

\* Rates based on fewer than 20 deaths are considered unreliable and are not shown.

--- Data not available.

<sup>1</sup>Underlying cause of death was coded according to the Eighth Revision in 1970 and Ninth Revision in 1980–1998. See [Appendix II, Cause of death; Tables IV and V](#).

<sup>2</sup>Starting with 1999 data, cause of death is coded according to ICD–10. See [Appendix II, Cause of death, Table V; Comparability ratio, Table VI](#).

<sup>3</sup>Age-adjusted rates are calculated using the year 2000 standard population. Prior to 2003, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2003 data, unrounded population numbers are used to calculate age-adjusted rates. See [Appendix II, Age adjustment](#).

<sup>4</sup>The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native and Asian or Pacific Islander populations are known to be underestimated. See [Appendix II, Race](#), for a discussion of sources of bias in death rates by race and Hispanic origin.

<sup>5</sup>Prior to 1997, excludes data from states lacking a Hispanic-origin item on the death certificate. See [Appendix II, Hispanic origin](#).

NOTES: Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were revised based on 2000 census counts. Rates for 2001 and later years were computed using 2000-based postcensal estimates. See [Appendix I, Population Census and Population Estimates](#). Age groups were selected to minimize the presentation of unstable age-specific death rates based on small numbers of deaths and for consistency among comparison groups. For additional injury-related statistics, see Web-based Injury Statistics Query and Reporting System, available from: <http://www.cdc.gov/ncipc/wisqars>. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data. In 2005, 21 states and the District of Columbia reported multiple-race data. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards for comparability with other states. See [Appendix II, Race](#). Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System; numerator data from annual mortality files; denominator data from national population estimates for race groups from Table 1 and unpublished Hispanic population estimates for 1985–1996 prepared by the Housing and Household Economic Statistics Division, U.S. Census Bureau; additional mortality tables are available from: <http://www.cdc.gov/nchs/datawh/statab/unpubd/mortabs.htm>; Kung H-C, Hoyert DL, Xu JQ, Murphy SL. Deaths: Final data for 2005. National vital statistics reports. Vol 56 no 10. Hyattsville, MD: NCHS. 2008.

**Table 47. Deaths from selected occupational diseases among persons 15 years of age and over: United States, selected years 1980–2005**

[Data are based on death certificates]

Cause of death <sup>1</sup>	1980 <sup>2</sup>	1985 <sup>2</sup>	1990 <sup>2</sup>	1995 <sup>2</sup>	2000 <sup>3</sup>	2003	2004	2005
Underlying and nonunderlying cause of death		Number of death certificates with cause of death code(s) mentioned						
Angiosarcoma of liver <sup>4</sup>	---	---	---	---	16	24	21	26
Malignant mesothelioma <sup>5</sup>	699	715	874	897	2,531	2,625	2,657	2,704
Pneumoconiosis <sup>6</sup>	4,151	3,783	3,644	3,151	2,859	2,635	2,524	2,425
Coal workers' pneumoconiosis	2,576	2,615	1,990	1,413	949	772	703	652
Asbestosis	339	534	948	1,169	1,486	1,464	1,460	1,416
Silicosis	448	334	308	242	151	177	165	160
Other (including unspecified)	814	321	413	343	290	236	214	222
Underlying cause of death		Number of deaths						
Angiosarcoma of liver <sup>4</sup>	---	---	---	---	15	20	21	23
Malignant mesothelioma <sup>5</sup>	531	573	725	780	2,384	2,476	2,504	2,553
Pneumoconiosis	1,581	1,355	1,335	1,117	1,142	1,101	1,013	983
Coal workers' pneumoconiosis	982	958	734	533	389	318	292	270
Asbestosis	101	139	302	355	558	583	542	532
Silicosis	207	143	150	114	71	102	76	74
Other (including unspecified)	291	115	149	115	124	98	103	107

--- Data not available.

<sup>1</sup>Cause-of-death titles for selected occupational diseases and corresponding code numbers according to the *International Classification of Diseases*, Ninth and Tenth Revisions. See [Appendix II, Cause of death; Table IV](#).

Cause of death	ICD-9 code	ICD-10 code
Angiosarcoma of liver	---	C22.3
Malignant mesothelioma	158.8, 158.9, 163	C45
Pneumoconiosis	500–505	J60–J66
Coal workers' pneumoconiosis	500	J60
Asbestosis	501	J61
Silicosis	502	J62
Other (including unspecified)	503–505	J63–J66

<sup>2</sup>For the period 1980–1998, underlying cause of death was coded according to the Ninth Revision of the International Classification of Diseases (ICD). See [Appendix II, Cause of death; Tables IV and V](#).

<sup>3</sup>Starting with 1999 data, ICD-10 was introduced for coding cause of death. Discontinuities exist between 1998 and 1999 due to ICD-10 coding and classification changes. Caution should be exercised in interpreting trends for the causes of death in this table, especially for those with major ICD-10 changes (e.g., malignant mesothelioma). See [Appendix II, International Classification of Diseases \(ICD\)](#).

<sup>4</sup>Prior to 1999, there was no discrete code for this condition.

<sup>5</sup>Prior to 1999, the combined ICD-9 categories of malignant neoplasm of peritoneum and malignant neoplasm of pleura served as a crude surrogate for malignant mesothelioma category under ICD-10.

<sup>6</sup>For underlying and nonunderlying cause of death, counts for pneumoconiosis subgroups may sum to slightly more than total pneumoconiosis due to the reporting of more than one type of pneumoconiosis on some death certificates.

NOTES: See [Appendix I, National Vital Statistics System, Multiple Cause of Death File](#), for information about tabulating cause-of-death data in this table. Selection of occupational diseases is based on definitions in Mullan RJ, Murthy LI. Occupational sentinel health events: An updated list for physician recognition and public health surveillance. 1991; *Am J Ind Med* 19(6):775–99. For more detailed information about pneumoconiosis deaths, see *Work-Related Lung Disease Surveillance Report 2002*, DHHS (NIOSH) Publication Number 2003–111 available from: <http://www.cdc.gov/niosh/docs/2008-143/default.html>. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Vital Statistics System; annual mortality files for underlying and multiple cause of death.

**Table 48 (page 1 of 2). Occupational injury deaths and rates, by industry, sex, age, race, and Hispanic origin: United States, selected years 1995–2006**

[Data are compiled from various federal, state, and local administrative sources]

Characteristic	1995	2000	2001 <sup>1</sup>	2003	2004	2005	2006
Deaths per 100,000 employed workers <sup>2</sup>							
Total work force . . . . .	4.9	4.3	4.3	4.0	4.1	4.0	4.0
Sex							
Male . . . . .	8.3	7.4	7.4	7.0	7.2	6.9	6.9
Female . . . . .	0.9	0.7	0.7	0.7	0.6	0.6	0.7
Age							
16–17 years . . . . .	1.6	1.6	1.3	1.2	1.1	1.4	0.9
18–19 years . . . . .	3.3	2.7	2.8	2.3	2.8	2.9	2.8
20–24 years . . . . .	3.8	3.3	3.2	3.4	3.1	2.8	2.7
25–34 years . . . . .	4.3	3.8	3.8	3.4	3.3	3.3	3.3
35–44 years . . . . .	4.6	4.0	4.1	3.8	3.9	3.6	3.7
45–54 years . . . . .	5.2	4.4	4.5	4.1	4.3	4.2	4.2
55–64 years . . . . .	7.2	6.1	5.5	4.8	5.2	5.1	5.0
65 years and over . . . . .	14.0	12.0	12.7	11.3	11.8	11.3	11.2
Race and Hispanic origin <sup>3</sup>							
Hispanic or Latino . . . . .	5.5	5.6	6.0	4.5	5.0	4.9	5.0
Not Hispanic or Latino . . . . .	4.9	4.2	4.1	4.0	4.0	---	---
White . . . . .	---	4.2	4.2	4.0	4.1	3.9	4.0
Black or African American . . . . .	---	3.9	3.8	3.8	3.8	3.9	3.7
Industry <sup>4</sup>							
Private sector . . . . .	---	---	---	4.2	4.4	4.3	4.3
Agriculture, forestry, fishing, and hunting . . . . .	---	---	---	31.3	30.5	32.5	30.0
Mining . . . . .	---	---	---	26.9	28.3	25.6	28.1
Utilities . . . . .	---	---	---	14.3	6.1	3.6	6.3
Construction . . . . .	---	---	---	11.7	12.0	11.1	10.9
Manufacturing . . . . .	---	---	---	2.5	2.8	2.4	2.8
Wholesale trade . . . . .	---	---	---	4.2	4.5	4.6	4.9
Retail trade . . . . .	---	---	---	2.1	2.3	2.4	2.2
Transportation and warehousing . . . . .	---	---	---	17.6	18.0	17.7	16.8
Information . . . . .	---	---	---	1.8	1.7	2.0	2.0
Finance, insurance, real estate, and rental and leasing . . . . .	---	---	---	1.4	1.2	1.0	1.2
Professional, scientific, management, and administrative . . . . .	---	---	---	3.3	3.3	3.5	3.2
Educational, health and social services . . . . .	---	---	---	0.8	0.8	0.8	0.9
Arts, entertainment, recreation, accommodation, and food services . . . . .	---	---	---	2.4	2.2	1.8	2.3
Other services (except public administration) . . . . .	---	---	---	2.8	3.0	3.0	2.6
Government <sup>5</sup> . . . . .	---	---	---	2.7	2.5	2.4	2.4
Number of deaths <sup>6</sup>							
Total work force . . . . .	6,275	5,920	5,915	5,575	5,764	5,734	5,840
Sex							
Male . . . . .	5,736	5,471	5,442	5,129	5,349	5,328	5,396
Female . . . . .	539	449	473	446	415	406	444
Age							
Under 16 years . . . . .	26	29	20	25	13	23	11
16–17 years . . . . .	42	44	33	28	25	31	21
18–19 years . . . . .	130	127	122	84	103	111	106
20–24 years . . . . .	486	446	441	462	421	403	390
25–34 years . . . . .	1,409	1,163	1,142	1,018	996	1,017	1,041
35–44 years . . . . .	1,571	1,473	1,478	1,329	1,342	1,243	1,288
45–54 years . . . . .	1,256	1,313	1,368	1,301	1,384	1,389	1,417
55–64 years . . . . .	827	831	775	802	907	933	963
65 years and over . . . . .	515	488	530	523	569	578	599
Unspecified . . . . .	13	6	6	3	4	6	4

See footnotes at end of table.

**Table 48 (page 2 of 2). Occupational injury deaths and rates, by industry, sex, age, race, and Hispanic origin: United States, selected years 1995–2006**

[Data are compiled from various federal, state, and local administrative sources]

Characteristic	1995	2000	2001 <sup>1</sup>	2003	2004	2005	2006
Race and Hispanic origin		Number of deaths <sup>6</sup>					
White . . . . .	5,120	---	---	---	---	---	---
Black or African American . . . . .	697	---	---	---	---	---	---
Hispanic or Latino . . . . .	619	815	895	794	902	923	990
Not Hispanic or Latino . . . . .	5,656	5,105	5,020	4,781	4,862	4,809	4,850
White . . . . .	4,599	4,244	4,175	3,988	4,066	3,977	4,019
Black or African American . . . . .	684	575	565	543	546	584	565
American Indian or Alaska Native . . . . .	27	33	48	42	28	50	46
Asian <sup>7</sup> . . . . .	188	171	173	147	168	154	148
Native Hawaiian or Other Pacific Islander . . . . .	---	14	9	11	12	9	11
Multiple races . . . . .	---	---	6	3	4	---	11
Other races or not reported . . . . .	158	68	44	47	38	35	50
Industry <sup>4</sup>							
Private sector . . . . .	---	---	---	5,043	5,229	5,214	5,320
Agriculture, forestry, fishing, and hunting . . . . .	---	---	---	709	669	715	655
Mining . . . . .	---	---	---	141	152	159	192
Utilities . . . . .	---	---	---	32	51	30	53
Construction . . . . .	---	---	---	1,131	1,234	1,192	1,239
Manufacturing . . . . .	---	---	---	420	463	393	456
Wholesale trade . . . . .	---	---	---	191	205	209	222
Retail trade . . . . .	---	---	---	344	377	400	359
Transportation and warehousing . . . . .	---	---	---	808	840	885	860
Information . . . . .	---	---	---	64	55	65	66
Finance, insurance, real estate, and rental and leasing . . . . .	---	---	---	129	116	99	126
Professional, scientific, management, and administrative . . . . .	---	---	---	453	452	482	459
Educational, health and social services . . . . .	---	---	---	143	157	150	178
Arts, entertainment, recreation, accommodation, and food services . . . . .	---	---	---	275	247	213	265
Other services (except public administration) . . . . .	---	---	---	194	207	210	183
Government <sup>5</sup> . . . . .	---	---	---	532	535	520	520

--- Data not available.

<sup>1</sup>2,871 fatalities due to the September 11 terrorist attacks are not included.

<sup>2</sup>Numerator excludes deaths to workers under the age of 16 years. Starting with 2003 data, employment data in denominators are average annual estimates of employed civilians 16 years of age and over from the CPS; in prior years, data also included resident armed forces figures from the U.S. Census Bureau (1995–1998) and the Department of Defense (1999–2002). Starting with 2005 data, rates are taken directly from the U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries. Revised annual data.

<sup>3</sup>Employment data for American Indian or Alaska Native workers and, prior to 2003, Asian or Pacific Islander workers, were not available for the calculation of rates.

Employment data for non-Hispanic white and non-Hispanic black workers were not available before the year 2000. In 1999 and earlier years, the race groups white and black included persons of Hispanic and non-Hispanic origin.

<sup>4</sup>Starting with 2003 data, establishments were classified by industry according to the North American Industry Classification System (NAICS). Prior to 2003, the Standard Industrial Classification (SIC) system was used. Because of substantial differences between these systems, industry data classified by these two systems are not comparable. Industry data for 1995–2002 classified by SIC are available in *Health, United States, 2004*, Table 49 available from: <http://www.cdc.gov/nchs/hus.htm>. See [Appendix II, Industry of employment](#).

<sup>5</sup>Includes fatalities to workers employed by governmental organizations, regardless of industry.

<sup>6</sup>Includes fatalities to all workers, regardless of age.

<sup>7</sup>In 1999 and earlier years, category also included Native Hawaiian or Other Pacific Islander.

NOTES: Fatalities and rates are based on revised data and may differ from originally published data from the Census of Fatal Occupational Injuries (CFOI). See [Appendix I, Census of Fatal Occupational Injuries](#). CFOI began collecting fatality data in 1992. For data for prior years, see CDC. Fatal Occupational Injuries—United States, 1980–1997. MMWR 2001;50(16):317–20, which reports trend data from the National Traumatic Occupational Fatalities (NTOF) surveillance system. NTOF was established at the National Institute of Occupational Safety and Health (NIOSH) to monitor occupational injury deaths through death certificates. Industry categories presented in this table differ from those shown in previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCES: Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries. Revised annual data.

**Table 49. Nonfatal occupational injuries and illnesses with days away from work, job transfer, or restriction, by industry: United States, 2003–2006**

[Data are based on employer records from a sample of business establishments]

Industry	Injuries and illnesses with days away from work, job transfer, or restriction							
	Cases per 100 full-time workers <sup>1</sup>				Number of cases in thousands <sup>2</sup>			
	2003	2004	2005	2006	2003	2004	2005	2006
Total private sector <sup>3</sup> . . . . .	2.6	2.5	2.4	2.3	2,301.9	2,225.0	2,184.8	2,114.6
Agriculture, forestry, fishing, and hunting <sup>4</sup> . . . . .	3.3	3.7	3.3	3.2	29.3	31.5	29.5	27.6
Mining . . . . .	2.0	2.3	2.2	2.1	11.2	12.9	13.7	14.0
Utilities . . . . .	2.2	2.5	2.4	2.2	12.2	14.1	12.9	11.8
Construction . . . . .	3.6	3.4	3.4	3.2	218.0	212.2	222.5	223.7
Manufacturing . . . . .	3.8	3.6	3.5	3.3	538.0	519.9	490.8	473.4
Wholesale trade . . . . .	2.8	2.7	2.7	2.5	147.4	146.2	146.8	140.6
Retail trade . . . . .	2.7	2.7	2.6	2.6	319.6	322.8	314.2	308.6
Transportation and warehousing . . . . .	5.4	4.9	4.6	4.3	204.0	190.0	185.6	176.3
Information . . . . .	1.1	1.1	1.1	1.0	30.8	31.1	30.9	28.3
Finance and insurance . . . . .	0.4	0.3	0.4	0.3	21.3	18.4	19.1	17.7
Real estate and rental and leasing . . . . .	2.1	1.9	2.1	1.8	35.6	33.4	37.1	33.0
Professional, scientific, and technical services . . . . .	0.6	0.5	0.6	0.5	36.0	32.2	38.4	34.5
Management of companies and enterprises . . . . .	1.6	1.5	1.3	1.1	25.1	23.4	20.8	17.9
Administrative and support and waste management and remediation services . . . . .	2.4	2.2	2.0	1.9	96.7	94.9	89.5	87.0
Educational services . . . . .	1.2	1.0	1.0	0.9	17.9	14.5	14.8	14.5
Health care and social assistance . . . . .	3.1	2.9	2.8	2.7	337.9	322.8	318.4	310.0
Arts, entertainment, and recreation . . . . .	2.9	3.1	2.9	2.5	34.1	35.2	34.1	28.7
Accommodation and food services . . . . .	2.0	1.7	1.7	1.7	135.2	122.5	120.8	124.6
Other services, except public administration . . . . .	1.7	1.6	1.5	1.4	51.7	47.0	44.8	42.4

<sup>1</sup>Incidence rate calculated as (N/EH) x 200,000, where N = total number of injuries and illnesses, EH = total hours worked by all employees during the calendar year, and 200,000 = base for 100 full-time equivalent employees working 40 hours per week, 50 weeks per year.

<sup>2</sup>Because of rounding, components may not add to total number of cases in private sector.

<sup>3</sup>Totals include data for industries not shown separately. Excludes self-employed, private households, and employees in federal, state, and local government agencies.

<sup>4</sup>Excludes farms with fewer than 11 employees.

NOTES: Starting with 2003 data, the Survey of Occupational Injuries and Illnesses began using the North American Industry Classification System (NAICS) to classify establishments by industry. Prior to 2003, the survey used the Standard Industrial Classification (SIC) system. Because of substantial differences between these systems, the data measured by these surveys are not directly comparable. See [Appendix II, Industry of employment](#). Data for previous years are presented in *Health, United States, 2004*, Table 50. Available from: <http://www.cdc.gov/nchs/hus.htm>. See [Appendix I, Survey of Occupational Injuries and Illnesses \(SOII\)](#).

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Survey of Occupational Injuries and Illnesses: Workplace injuries and illnesses, 2003–2006 editions. Summary News Release. 2004–2007. Available from: <http://www.bls.gov/iif/home.htm>.

**Table 50 (page 1 of 2). Selected notifiable disease rates and number of cases: United States, selected years 1950–2006**

[Data are based on reporting by state health departments]

Disease	1950	1960	1970	1980	1990	2000	2004	2005	2006
Cases per 100,000 population									
Diphtheria	3.83	0.51	0.21	0.00	0.00	0.00	—	—	—
<i>Haemophilus influenzae</i> , invasive	---	---	---	---	---	0.51	0.72	0.78	0.82
Hepatitis A	---	---	27.87	12.84	12.64	4.91	1.95	1.53	1.21
Hepatitis B	---	---	4.08	8.39	8.48	2.95	2.14	1.78	1.62
Lyme disease	---	---	---	---	---	6.53	6.84	7.94	6.75
Meningococcal disease	---	---	1.23	1.25	0.99	0.83	0.47	0.42	0.40
Mumps	---	---	55.55	3.86	2.17	0.13	0.09	0.11	2.22
Pertussis (whooping cough)	79.82	8.23	2.08	0.76	1.84	2.88	8.88	8.72	5.27
Poliomyelitis, total	22.02	1.77	0.02	0.00	0.00	—	—	—	—
Paralytic <sup>1</sup>	---	1.40	0.02	0.00	0.00	—	—	—	—
Rocky Mountain spotted fever	---	---	0.19	0.52	0.26	0.18	0.60	0.66	0.80
Rubella (German measles)	---	---	27.75	1.72	0.45	0.06	—	—	—
Rubeola (measles)	211.01	245.42	23.23	5.96	11.17	0.03	0.01	0.02	0.02
Salmonellosis, excluding typhoid fever	---	3.85	10.84	14.88	19.54	14.51	14.51	15.43	15.45
Shigellosis	15.45	6.94	6.79	8.41	10.89	8.41	5.03	5.51	5.23
Tuberculosis <sup>2</sup>	---	30.83	18.28	12.25	10.33	6.01	4.99	4.80	4.65
Sexually transmitted diseases: <sup>3</sup>									
Syphilis <sup>4</sup>	146.02	68.78	45.26	30.51	54.32	11.20	11.38	11.23	12.46
Primary and secondary	16.73	9.06	10.89	12.06	20.26	2.12	2.72	2.94	3.29
Early latent	39.71	10.11	8.08	9.00	22.19	3.35	2.65	2.76	3.10
Late and late latent <sup>5</sup>	70.22	45.91	24.94	9.30	10.32	5.53	5.89	5.41	5.95
Congenital <sup>6</sup>	368.30	103.70	52.30	7.70	92.95	14.29	9.10	8.24	8.49
Chlamydia <sup>7</sup>	---	---	---	---	160.19	251.38	316.51	332.51	347.80
Gonorrhea <sup>8</sup>	192.50	145.40	297.22	445.10	276.43	128.67	112.42	115.64	120.90
Chancroid	3.34	0.94	0.70	0.30	1.69	0.03	0.01	0.01	0.01
Number of cases									
Diphtheria	5,796	918	435	3	4	1	—	—	—
<i>Haemophilus influenzae</i> , invasive	---	---	---	---	---	1,398	2,085	2,304	2,496
Hepatitis A	---	---	56,797	29,087	31,441	13,397	5,683	4,488	3,579
Hepatitis B	---	---	8,310	19,015	21,102	8,036	6,212	5,119	4,713
Lyme disease	---	---	---	---	---	17,730	19,804	23,305	19,931
Meningococcal disease	---	---	2,505	2,840	2,451	2,256	1,361	1,245	1,194
Mumps	---	---	104,953	8,576	5,292	338	258	314	6,584
Pertussis (whooping cough)	120,718	14,809	4,249	1,730	4,570	7,867	25,827	25,616	15,632
Poliomyelitis, total	33,300	3,190	33	9	6	—	—	—	—
Paralytic <sup>1</sup>	---	2,525	31	9	6	—	—	1	—
Rocky Mountain spotted fever	---	---	380	1,163	651	495	1,713	1,936	2,288
Rubella (German measles)	---	---	56,552	3,904	1,125	176	10	11	11
Rubeola (measles)	319,124	441,703	47,351	13,506	27,786	86	37	66	55
Salmonellosis, excluding typhoid fever	---	6,929	22,096	33,715	48,603	39,574	42,197	45,322	45,808
Shigellosis	23,367	12,487	13,845	19,041	27,077	22,922	14,627	16,168	15,503
Tuberculosis <sup>2</sup>	---	55,494	37,137	27,749	25,701	16,377	14,517	14,097	13,779
Sexually transmitted diseases: <sup>3</sup>									
Syphilis <sup>4</sup>	217,558	122,538	91,382	68,832	135,590	31,618	33,422	33,288	36,935
Primary and secondary	23,939	16,145	21,982	27,204	50,578	5,979	7,980	8,724	9,756
Early latent	59,256	18,017	16,311	20,297	55,397	9,465	7,768	8,176	9,186
Late and late latent <sup>5</sup>	113,569	81,798	50,348	20,979	25,750	15,594	17,300	16,049	17,644
Congenital <sup>6</sup>	13,377	4,416	1,953	277	3,865	580	374	339	349
Chlamydia <sup>7</sup>	---	---	---	---	323,663	709,452	929,462	976,445	1,030,911
Gonorrhea <sup>8</sup>	286,746	258,933	600,072	1,004,029	690,042	363,136	330,132	339,593	358,366
Chancroid	4,977	1,680	1,416	788	4,212	78	30	17	33

See footnotes at end of table.



## Table 50 (page 2 of 2). Selected notifiable disease rates and number of cases: United States, selected years 1950–2006

[Data are based on reporting by state health departments]

0.00 Rate greater than zero but less than 0.005.

– Quantity zero.

- - - Data not available.

<sup>1</sup>Cases of vaccine-associated paralytic poliomyelitis caused by polio vaccine virus.

<sup>2</sup>Case reporting for tuberculosis began in 1953. Data prior to 1975 are not comparable with subsequent years because of changes in reporting criteria effective in 1975. 2006 data were updated through the Division of Tuberculosis Elimination, NCHHSTP, as of May 25, 2007.

<sup>3</sup>Starting with 1991, data include both civilian and military cases. Adjustments to the number of cases reported from state health departments were made for hardcopy forms and for electronic data submissions through June 22, 2007. For 1950, data for Alaska and Hawaii were not included.

<sup>4</sup>Includes stage of syphilis not stated.

<sup>5</sup>Includes cases of unknown duration.

<sup>6</sup>Rates include all cases of congenitally acquired syphilis per 100,000 live births. Cases of congenitally-acquired syphilis were reported through 1994; starting with 1995 data, only congenital syphilis for cases less than one year of age were reported. See STD Surveillance Report for congenital syphilis rates per 100,000 live births.

<sup>7</sup>Prior to 1994, chlamydia was not notifiable. In 1994–1999, cases for New York were exclusively reported by New York City. Starting with 2000 data, includes cases for the entire state.

<sup>8</sup>Data for 1994 do not include cases from Georgia.

NOTES: The total resident population was used to calculate all rates except sexually transmitted diseases (STD), which used the civilian resident population prior to 1991. STD rates for 1990–2002 have been revised and may differ from previous editions of *Health, United States*. Revised rates are due to revision of population estimates to incorporate bridged single-race estimates. 2005 population estimates were used to calculate 2006 rates. See [Appendix I, Population Census and Population Estimates](#). Population data from those states where diseases were not notifiable or not available were excluded from the rate calculation. See [Appendix I, National Notifiable Disease Surveillance System \(NNDSS\)](#), for information on underreporting of notifiable diseases. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC. Summary of notifiable diseases, United States, 2006. *MMWR* 2008;55(53):1–94 and CDC. Sexually transmitted disease surveillance, 2006. Atlanta, GA: U.S. Department of Health and Human Services, 2007.



**Table 51 (page 1 of 2). Acquired immunodeficiency syndrome (AIDS) cases, by year of diagnosis and selected characteristics: United States, 2002–2006**

[Data are based on reporting by state and the District of Columbia health departments]

Sex, race and Hispanic origin, age at diagnosis, and region of residence	Year of diagnosis					
	All years <sup>1</sup>	2002	2003	2004	2005	2006
			Estimated number of cases <sup>2</sup>			
All persons <sup>3</sup> . . . . .	982,498	38,132	38,538	37,726	36,552	36,828
Male, 13 years and over . . . . .	783,786	28,067	28,079	27,532	26,787	26,989
Female, 13 years and over . . . . .	189,566	9,959	10,389	10,141	9,713	9,801
Children, under 13 years . . . . .	9,144	106	70	53	53	38
Male, 13 years and over						
Hispanic origin and race:						
Not Hispanic or Latino:						
White . . . . .	353,945	9,523	9,363	9,347	9,120	9,267
Black or African American . . . . .	286,741	12,552	12,470	12,141	11,625	11,540
Asian or Pacific Islander . . . . .	6,780	349	366	358	360	423
American Indian or Alaska Native . . . . .	2,626	130	132	122	132	118
Hispanic or Latino <sup>4</sup> . . . . .	129,540	5,269	5,511	5,330	5,305	5,388
Age at diagnosis:						
13–14 years . . . . .	603	30	31	40	32	24
15–24 years . . . . .	28,682	1,045	1,219	1,316	1,436	1,472
25–34 years . . . . .	250,746	6,198	5,915	5,840	5,519	5,498
35–44 years . . . . .	313,667	11,868	11,615	10,975	10,330	10,304
45–54 years . . . . .	137,779	6,538	6,798	6,671	6,886	6,820
55–64 years . . . . .	40,645	1,888	1,940	2,087	2,046	2,256
65 years and over . . . . .	11,656	501	561	603	539	616
Female, 13 years and over						
Hispanic origin and race:						
Not Hispanic or Latina:						
White . . . . .	38,478	1,696	1,573	1,711	1,552	1,659
Black or African American . . . . .	117,586	6,624	6,996	6,735	6,418	6,391
Asian or Pacific Islander . . . . .	1,117	74	84	85	89	95
American Indian or Alaska Native . . . . .	688	47	44	59	39	37
Hispanic or Latina <sup>4</sup> . . . . .	30,218	1,424	1,581	1,432	1,509	1,516
Age at diagnosis:						
13–14 years . . . . .	475	33	43	30	33	49
15–24 years . . . . .	13,167	670	651	643	649	598
25–34 years . . . . .	63,882	2,640	2,665	2,501	2,259	2,273
35–44 years . . . . .	70,436	3,753	4,028	3,800	3,527	3,395
45–54 years . . . . .	29,336	2,091	2,183	2,318	2,369	2,495
55–64 years . . . . .	8,848	591	616	662	687	771
65 years and over . . . . .	3,419	181	202	188	188	219
Children, under 13 years						
Hispanic origin and race:						
Not Hispanic or Latino:						
White . . . . .	1,599	14	12	7	4	4
Black or African American . . . . .	5,654	70	46	33	38	30
Asian or Pacific Islander . . . . .	54	1	0	1	1	1
American Indian or Alaska Native . . . . .	31	1	0	1	0	0
Hispanic or Latino <sup>4</sup> . . . . .	1,748	18	10	9	8	3
Region of residence						
Northeast . . . . .	306,241	10,092	10,342	9,412	9,396	9,486
Midwest . . . . .	101,479	4,125	4,226	4,089	4,371	4,164
South . . . . .	374,800	17,198	17,630	18,225	16,894	17,104
West . . . . .	199,978	6,718	6,339	6,000	5,891	6,074

See footnotes at end of table.

**Table 51 (page 2 of 2). Acquired immunodeficiency syndrome (AIDS) cases, by year of diagnosis and selected characteristics: United States, 2002–2006**

[Data are based on reporting by state and the District of Columbia health departments]

Sex, race and Hispanic origin, age at diagnosis, and region of residence	Year of diagnosis					
	All years <sup>1</sup>	2002	2003	2004	2005	2006
			Percent distribution <sup>5</sup>			
All persons <sup>3</sup> . . . . .	100.0	100.0	100.0	100.0	100.0	100.0
Male, 13 years and over . . . . .	79.8	73.6	72.9	73.0	73.3	73.3
Female, 13 years and over . . . . .	19.3	26.1	27.0	26.9	26.6	26.6
Children, under 13 years . . . . .	0.9	0.3	0.2	0.1	0.1	0.1
Male, 13 years and over						
Hispanic origin and race:						
Not Hispanic or Latino:						
White . . . . .	45.2	33.9	33.3	34.0	34.0	34.3
Black or African American . . . . .	36.6	44.7	44.4	44.1	43.4	42.8
Asian or Pacific Islander . . . . .	0.9	1.2	1.3	1.3	1.3	1.6
American Indian or Alaska Native . . . . .	0.3	0.5	0.5	0.4	0.5	0.4
Hispanic or Latino <sup>4</sup> . . . . .	16.5	18.8	19.6	19.4	19.8	20.0
Age at diagnosis:						
13–14 years . . . . .	0.1	0.1	0.1	0.1	0.1	0.1
15–24 years . . . . .	3.7	3.7	4.3	4.8	5.4	5.5
25–34 years . . . . .	32.0	22.1	21.1	21.2	20.6	20.4
35–44 years . . . . .	40.0	42.3	41.4	39.9	38.6	38.2
45–54 years . . . . .	17.6	23.3	24.2	24.2	25.7	25.3
55–64 years . . . . .	5.2	6.7	6.9	7.6	7.6	8.4
65 years and over . . . . .	1.5	1.8	2.0	2.2	2.0	2.3
Female, 13 years and over						
Hispanic origin and race:						
Not Hispanic or Latina:						
White . . . . .	20.3	17.0	15.1	16.9	16.0	16.9
Black or African American . . . . .	62.0	66.5	67.3	66.4	66.1	65.2
Asian or Pacific Islander . . . . .	0.6	0.7	0.8	0.8	0.9	1.0
American Indian or Alaska Native . . . . .	0.4	0.5	0.4	0.6	0.4	0.4
Hispanic or Latina <sup>4</sup> . . . . .	15.9	14.3	15.2	14.1	15.5	15.5
Age at diagnosis:						
13–14 years . . . . .	0.3	0.3	0.4	0.3	0.3	0.5
15–24 years . . . . .	6.9	6.7	6.3	6.3	6.7	6.1
25–34 years . . . . .	33.7	26.5	25.7	24.7	23.3	23.2
35–44 years . . . . .	37.2	37.7	38.8	37.5	36.3	34.6
45–54 years . . . . .	15.5	21.0	21.0	22.9	24.4	25.5
55–64 years . . . . .	4.7	5.9	5.9	6.5	7.1	7.9
65 years and over . . . . .	1.8	1.8	1.9	1.9	1.9	2.2
Children, under 13 years						
Hispanic origin and race:						
Not Hispanic or Latino:						
White . . . . .	17.5	13.5	17.3	13.7	8.0	9.5
Black or African American . . . . .	61.8	66.3	65.2	62.8	72.7	78.5
Asian or Pacific Islander . . . . .	0.6	1.0	0.0	2.0	2.1	2.9
American Indian or Alaska Native . . . . .	0.3	1.0	0.0	1.9	0.0	0.0
Hispanic or Latino <sup>4</sup> . . . . .	19.1	17.3	14.5	17.6	15.1	9.1
Region of residence						
Northeast . . . . .	31.2	26.5	26.8	24.9	25.7	25.8
Midwest . . . . .	10.3	10.8	11.0	10.8	12.0	11.3
South . . . . .	38.1	45.1	45.7	48.3	46.2	46.4
West . . . . .	20.4	17.6	16.4	15.9	16.1	16.5

0.0 Rate greater than zero but less than 0.05.—Quantity zero.

<sup>1</sup>Based on cases reported to CDC from the beginning of the epidemic (1981) through June 30, 2007.

<sup>2</sup>Numbers are point estimates that result from adjustments for reporting delays to AIDS case counts. The estimates do not include adjustments for incomplete reporting. Data are provisional. See [Appendix I, AIDS Surveillance](#).

<sup>3</sup>Total for all years includes 5,691 persons of unknown race or multiple races, 3 persons of unknown sex, 1,079 persons of unknown state of residence, and 3 persons who were residents of other areas. All persons totals were calculated independent of values for subpopulations. Consequently, sums of subpopulations may not equal totals for all persons.

<sup>4</sup>Persons of Hispanic origin may be of any race. See [Appendix II, Hispanic origin](#).

<sup>5</sup>Percents may not sum to 100% due to rounding and because persons of unknown race and Hispanic origin are included in totals.

NOTES: See [Appendix II, Acquired immunodeficiency syndrome \(AIDS\)](#), for discussion of AIDS case reporting definitions and other issues affecting interpretation of trends. Data are for the 50 states and the District of Columbia. This table replaces surveillance data by year of report in previous editions of *Health, United States*.

SOURCES: CDC, National Center for HIV, STD, and TB Prevention, Division of HIV/AIDS Prevention—Surveillance and Epidemiology; HIV/AIDS Surveillance Report, 2006 (vol. 18). Atlanta, GA: US Department of Health and Human Services, CDC. 2008. Available from: <http://www.cdc.gov/hiv/topics/surveillance/resources/reports/>.

**Table 52 (page 1 of 3). Age-adjusted cancer incidence rates for selected cancer sites, by sex, race, and Hispanic origin: United States, selected geographic areas, selected years 1990–2005**

[Data are based on the Surveillance, Epidemiology, and End Results (SEER) Program's 13 population-based cancer registries]

Site, sex, race, and Hispanic origin	1990	1995	2000	2001	2002	2003	2004	2005	1990–2005 APC <sup>1</sup>
<b>All sites</b>									
Number of new cases per 100,000 population <sup>2</sup>									
All persons . . . . .	475.4	470.2	472.1	474.2	468.2	455.4	454.3	442.7	~0.5
White . . . . .	483.0	476.8	483.4	486.3	478.5	465.5	464.2	454.0	~0.5
Black or African American . . . . .	512.4	533.2	516.5	506.5	513.4	500.0	499.8	472.7	~0.7
American Indian or Alaska Native <sup>3</sup> . . . . .	343.5	363.3	349.0	369.3	336.6	352.6	377.6	355.7	0.1
Asian or Pacific Islander . . . . .	334.8	336.1	333.9	338.6	336.8	324.4	326.0	314.5	~0.5
Hispanic or Latino <sup>4</sup> . . . . .	354.3	357.1	356.3	357.0	359.6	343.8	350.0	339.7	~0.4
White, not Hispanic or Latino <sup>4</sup> . . . . .	495.1	490.8	501.7	505.6	497.1	485.1	483.3	473.9	~0.3
Male . . . . .	583.7	563.2	561.2	560.4	550.3	535.4	532.3	510.1	~1.1
White . . . . .	590.7	562.5	565.8	566.8	555.2	539.5	537.7	517.2	~1.1
Black or African American . . . . .	685.4	732.4	694.1	675.8	674.5	649.9	640.7	587.6	~1.4
American Indian or Alaska Native <sup>3</sup> . . . . .	391.0	418.0	361.7	422.5	358.9	408.2	373.9	368.8	-0.7
Asian or Pacific Islander . . . . .	386.3	394.0	390.6	383.7	377.5	374.0	369.2	350.2	~0.9
Hispanic or Latino <sup>4</sup> . . . . .	416.5	437.3	427.9	424.7	426.5	404.3	413.8	390.1	~0.7
White, not Hispanic or Latino <sup>4</sup> . . . . .	606.3	576.7	585.3	586.7	574.1	559.6	557.2	538.0	~1.0
Female . . . . .	411.1	409.8	411.9	415.2	412.2	400.6	400.7	396.7	-0.1
White . . . . .	421.2	422.7	428.8	432.2	427.1	415.7	414.0	411.5	0.0
Black or African American . . . . .	403.7	400.2	396.8	390.9	405.1	398.3	405.1	394.9	-0.1
American Indian or Alaska Native <sup>3</sup> . . . . .	311.2	328.0	346.1	334.4	319.6	315.1	384.6	348.7	^0.9
Asian or Pacific Islander . . . . .	294.4	293.6	294.8	308.6	311.7	292.2	299.0	292.7	0.1
Hispanic or Latina <sup>4</sup> . . . . .	320.4	307.9	314.2	314.9	318.2	306.5	310.6	309.2	-0.1
White, not Hispanic or Latina <sup>4</sup> . . . . .	430.8	436.5	445.2	450.4	444.7	434.2	431.9	430.1	0.1
<b>Lung and bronchus</b>									
Male . . . . .	95.0	86.8	77.5	76.8	75.1	74.6	70.5	68.7	~2.1
White . . . . .	94.2	85.0	76.2	75.9	74.5	73.6	69.3	68.1	~2.0
Black or African American . . . . .	133.6	136.5	109.9	111.8	108.3	110.0	99.4	93.6	~2.4
Asian or Pacific Islander . . . . .	64.2	60.0	63.0	56.5	56.9	57.3	57.7	55.4	~1.0
Hispanic or Latino <sup>4</sup> . . . . .	59.4	52.2	44.6	42.0	48.0	44.3	38.6	39.7	~2.2
White, not Hispanic or Latino <sup>4</sup> . . . . .	97.5	88.4	80.2	80.5	78.0	77.4	73.8	72.2	~1.9
Female . . . . .	47.2	49.3	48.5	48.7	49.0	49.3	48.3	48.3	0.0
White . . . . .	48.4	51.8	50.7	50.7	51.2	51.9	49.9	50.2	0.1
Black or African American . . . . .	52.8	49.7	54.2	54.4	54.8	53.9	56.4	56.4	^0.4
Asian or Pacific Islander . . . . .	28.3	27.2	27.2	29.5	29.0	28.5	30.2	29.3	^0.4
Hispanic or Latina <sup>4</sup> . . . . .	26.0	25.0	24.2	24.7	23.8	23.3	24.8	20.7	~1.1
White, not Hispanic or Latina <sup>4</sup> . . . . .	50.8	54.9	54.4	54.4	55.3	56.3	53.8	54.8	^0.4
<b>Colon and rectum</b>									
Male . . . . .	72.2	63.1	62.5	61.3	59.4	57.6	55.7	52.8	~1.7
White . . . . .	72.9	62.5	62.1	60.8	58.3	56.5	54.9	52.5	~1.8
Black or African American . . . . .	72.7	74.3	72.5	71.1	71.1	74.2	72.0	62.7	~0.6
Asian or Pacific Islander . . . . .	61.4	58.0	57.1	55.8	57.4	51.7	48.5	45.5	~1.4
Hispanic or Latino <sup>4</sup> . . . . .	47.7	45.6	49.7	48.6	44.5	45.9	45.8	43.3	~0.6
White, not Hispanic or Latino <sup>4</sup> . . . . .	75.0	64.0	63.5	62.2	59.8	57.7	56.1	53.7	~1.8
Female . . . . .	50.2	45.8	45.9	45.2	44.8	43.0	41.5	40.3	~1.1
White . . . . .	49.8	45.5	45.5	44.3	43.9	42.4	40.3	39.4	~1.2
Black or African American . . . . .	60.9	54.8	57.6	55.9	55.3	54.0	53.0	51.4	~0.6
Asian or Pacific Islander . . . . .	37.8	38.4	37.1	40.7	40.8	35.9	36.4	35.2	~0.6
Hispanic or Latina <sup>4</sup> . . . . .	34.4	31.8	33.5	31.7	31.3	32.5	31.5	31.3	~0.4
White, not Hispanic or Latina <sup>4</sup> . . . . .	50.9	46.7	46.8	45.8	45.4	43.6	41.5	40.6	~1.1
<b>Prostate</b>									
Male . . . . .	166.7	165.8	177.3	178.1	175.4	162.5	161.8	147.1	~1.6
White . . . . .	168.3	160.8	173.2	175.4	171.5	158.0	158.1	142.1	~1.8
Black or African American . . . . .	218.0	273.4	285.1	265.1	273.5	244.9	240.1	220.3	~1.4
American Indian or Alaska Native <sup>3</sup> . . . . .	98.4	90.3	64.2	84.5	81.3	98.2	76.2	69.5	~2.7
Asian or Pacific Islander . . . . .	88.4	102.5	104.3	105.6	99.5	100.4	98.0	89.7	~1.0
Hispanic or Latino <sup>4</sup> . . . . .	118.4	139.0	146.6	143.5	145.5	131.9	142.3	122.2	-0.6
White, not Hispanic or Latino <sup>4</sup> . . . . .	172.1	163.4	177.2	179.9	175.2	162.0	160.7	145.3	~1.8
<b>Breast</b>									
Female . . . . .	129.2	130.7	133.7	134.8	131.3	122.3	122.4	121.5	-0.3
White . . . . .	134.2	136.2	140.5	141.9	137.5	127.2	126.8	126.8	-0.2
Black or African American . . . . .	116.5	122.2	120.0	115.2	120.4	120.7	119.8	113.9	-0.1
American Indian or Alaska Native <sup>3</sup> . . . . .	66.4	93.2	92.2	85.6	75.6	87.2	94.9	97.2	0.7
Asian or Pacific Islander . . . . .	87.1	86.5	92.5	99.1	98.2	89.1	94.1	91.2	^0.7
Hispanic or Latina <sup>4</sup> . . . . .	89.2	87.8	95.1	89.8	90.5	85.8	87.7	89.7	0.0
White, not Hispanic or Latina <sup>4</sup> . . . . .	138.8	141.9	147.2	149.9	145.0	134.1	133.7	133.6	0.0

See footnotes at end of table.

**Table 52 (page 2 of 3). Age-adjusted cancer incidence rates for selected cancer sites, by sex, race, and Hispanic origin: United States, selected geographic areas, selected years 1990–2005**

[Data are based on the Surveillance, Epidemiology, and End Results (SEER) Program's 13 population-based cancer registries]

Site, sex, race, and Hispanic origin	1990	1995	2000	2001	2002	2003	2004	2005	1990–2005 APC <sup>1</sup>
Cervix uteri									
Number of new cases per 100,000 population <sup>2</sup>									
Female.....	11.9	9.9	8.9	8.7	8.3	8.1	7.7	7.7	^–2.7
White.....	11.2	9.2	8.9	8.4	8.2	7.8	7.7	7.6	^–2.4
Black or African American.....	16.4	14.6	10.6	10.6	9.8	10.5	9.7	8.7	^–3.8
Asian or Pacific Islander.....	12.0	10.9	7.9	9.5	8.1	8.0	6.9	7.7	^–4.0
Hispanic or Latina <sup>4</sup> .....	21.4	17.7	17.0	14.9	14.4	13.9	12.9	13.5	^–3.3
White, not Hispanic or Latina <sup>4</sup> .....	9.7	7.8	7.0	7.0	6.9	6.4	6.5	6.2	^–2.5
Corpus uteri <sup>5</sup>									
Female.....	24.2	24.4	23.4	24.1	23.4	22.7	23.1	23.1	^–0.3
White.....	26.0	26.0	25.2	25.6	24.2	24.1	24.3	24.4	^–0.4
Black or African American.....	16.2	16.9	16.3	18.9	21.2	18.4	18.8	19.9	^1.5
Asian or Pacific Islander.....	13.0	17.0	16.0	17.2	18.4	16.2	18.4	17.9	^1.5
Hispanic or Latina <sup>4</sup> .....	17.4	16.3	15.1	16.6	16.9	17.1	18.7	18.3	0.5
White, not Hispanic or Latina <sup>4</sup> .....	26.7	27.1	26.5	26.8	25.2	25.2	25.0	25.2	^–0.4
Ovary									
Female.....	15.6	14.5	14.1	14.1	13.7	13.3	12.8	12.6	^–1.1
White.....	16.4	15.4	15.1	15.3	14.5	14.0	13.5	13.3	^–1.1
Black or African American.....	11.3	10.8	10.6	9.3	9.7	11.2	10.4	10.1	–0.6
Asian or Pacific Islander.....	11.2	10.4	9.9	9.6	11.8	9.9	9.8	10.3	–0.3
Hispanic or Latina <sup>4</sup> .....	12.3	11.7	10.6	13.5	13.5	10.9	11.4	11.1	–0.3
White, not Hispanic or Latina <sup>4</sup> .....	16.7	15.9	15.7	15.6	14.5	14.5	13.8	13.6	^–1.1
Oral cavity and pharynx									
Male.....	18.5	16.5	15.7	15.0	15.5	14.9	14.9	14.4	^–1.6
White.....	17.9	16.4	15.6	15.2	15.7	15.0	15.3	14.7	^–1.3
Black or African American.....	25.4	22.1	19.2	18.1	17.9	17.0	15.6	15.1	^–3.0
Asian or Pacific Islander.....	14.8	11.7	13.2	9.8	12.6	11.4	11.2	11.0	^–1.6
Hispanic or Latino <sup>4</sup> .....	10.8	12.4	9.1	9.3	9.3	8.3	9.8	9.1	^–1.8
White, not Hispanic or Latino <sup>4</sup> .....	18.7	16.9	16.6	16.1	16.7	16.1	16.2	15.7	^–1.1
Female.....	7.3	7.0	6.2	6.6	6.4	5.9	6.1	6.0	^–1.3
White.....	7.4	7.1	6.2	6.6	6.5	5.8	6.0	5.8	^–1.5
Black or African American.....	6.4	6.6	5.3	6.5	6.2	6.7	5.9	6.6	–0.7
Asian or Pacific Islander.....	6.1	5.2	6.1	5.7	5.9	5.0	5.6	5.7	–0.7
Hispanic or Latina <sup>4</sup> .....	3.9	3.7	3.7	4.3	3.6	3.5	3.4	3.4	^–1.6
White, not Hispanic or Latina <sup>4</sup> .....	7.8	7.6	6.6	7.0	7.0	6.1	6.5	6.2	^–1.3
Stomach									
Male.....	14.6	13.5	12.5	11.8	11.9	11.6	11.7	11.0	^–1.9
White.....	12.8	11.9	10.6	10.2	10.3	10.0	10.1	9.3	^–2.0
Black or African American.....	21.5	18.4	18.4	17.4	15.7	17.9	15.8	16.6	^–2.4
Asian or Pacific Islander.....	26.9	24.3	22.4	19.0	20.0	18.6	19.7	19.3	^–2.7
Hispanic or Latino <sup>4</sup> .....	20.2	19.5	16.0	15.5	15.9	15.6	16.2	14.4	^–2.3
White, not Hispanic or Latino <sup>4</sup> .....	12.1	11.1	10.0	9.4	9.6	9.1	9.2	8.5	^–2.2
Female.....	6.7	6.2	6.1	5.8	6.1	5.9	5.9	5.5	^–1.0
White.....	5.7	5.1	5.0	4.6	5.0	4.9	5.0	4.5	^–1.2
Black or African American.....	9.9	9.8	8.6	9.0	9.8	9.3	7.4	7.7	^–1.4
Asian or Pacific Islander.....	15.4	13.0	12.9	12.1	11.1	10.9	10.8	9.9	^–2.8
Hispanic or Latina <sup>4</sup> .....	10.8	11.1	10.8	9.9	10.4	9.7	9.7	9.7	^–0.7
White, not Hispanic or Latina <sup>4</sup> .....	5.1	4.5	4.2	3.8	4.2	4.0	4.1	3.6	^–1.9
Pancreas									
Male.....	13.0	12.7	12.8	12.7	12.7	12.3	13.2	13.0	0.0
White.....	12.7	12.4	12.6	12.9	12.9	12.2	13.0	12.8	0.2
Black or African American.....	19.3	19.1	18.1	15.4	13.7	16.9	17.6	16.8	^–1.1
Asian or Pacific Islander.....	11.2	10.3	10.6	9.8	9.8	10.0	11.6	11.1	–0.6
Hispanic or Latino <sup>4</sup> .....	10.7	12.1	12.2	9.7	10.5	9.7	10.9	11.4	0.0
White, not Hispanic or Latino <sup>4</sup> .....	12.8	12.4	12.7	13.2	13.2	12.5	13.2	13.0	0.3
Female.....	10.0	9.9	9.9	9.8	10.4	10.2	10.2	10.3	0.1
White.....	9.8	9.6	9.6	9.5	10.0	10.1	10.0	10.1	0.2
Black or African American.....	12.9	15.5	12.7	13.4	15.7	14.2	14.1	15.3	–0.4
Asian or Pacific Islander.....	9.9	8.1	9.1	9.0	8.8	8.0	8.8	7.6	0.1
Hispanic or Latina <sup>4</sup> .....	9.8	8.9	9.2	9.8	10.6	8.2	8.7	10.3	–0.3
White, not Hispanic or Latina <sup>4</sup> .....	9.7	9.7	9.6	9.5	10.0	10.4	10.2	10.1	^–0.3

See footnotes at end of table.

**Table 52 (page 3 of 3). Age-adjusted cancer incidence rates for selected cancer sites, by sex, race, and Hispanic origin: United States, selected geographic areas, selected years 1990–2005**

[Data are based on the Surveillance, Epidemiology, and End Results (SEER) Program's 13 population-based cancer registries]

Site, sex, race, and Hispanic origin	1990	1995	2000	2001	2002	2003	2004	2005	1990–2005 APC <sup>1</sup>
Urinary bladder									
Number of new cases per 100,000 population <sup>2</sup>									
Male	37.2	35.3	36.7	36.5	35.4	36.3	36.2	35.5	^−0.2
White	40.7	38.8	40.7	40.6	38.9	40.1	40.1	39.2	−0.1
Black or African American	19.6	19.2	19.8	19.2	20.4	22.3	21.4	20.8	0.3
Asian or Pacific Islander	15.5	16.4	16.6	16.9	18.9	17.1	16.7	16.3	^0.9
Hispanic or Latino <sup>4</sup>	22.1	17.6	20.0	20.8	19.7	19.4	18.5	18.4	−0.6
White, not Hispanic or Latino <sup>4</sup>	42.3	41.0	43.1	43.1	41.4	42.8	43.1	42.1	0.1
Female	9.5	9.3	9.1	9.0	9.1	9.1	9.1	8.8	^−0.3
White	10.0	10.1	9.9	9.9	10.1	9.9	9.9	9.4	−0.2
Black or African American	8.6	7.2	7.7	7.1	8.3	7.5	8.2	7.4	−0.1
Asian or Pacific Islander	5.3	4.4	4.1	4.5	3.2	4.8	3.8	4.7	−0.3
Hispanic or Latina <sup>4</sup>	5.7	5.2	5.7	5.2	6.2	4.2	5.3	5.6	−0.3
White, not Hispanic or Latina <sup>4</sup>	10.3	10.6	10.4	10.6	10.6	10.7	10.6	10.0	0.0
Non-Hodgkin's lymphoma									
Male	22.6	25.0	23.4	23.9	23.4	23.6	24.4	23.6	0.1
White	23.7	26.2	24.7	25.0	24.6	25.0	25.6	24.7	0.1
Black or African American	17.4	21.4	17.5	18.0	18.0	18.7	21.2	18.3	0.1
Asian or Pacific Islander	16.6	16.4	15.9	17.5	16.0	15.8	16.0	17.1	0.0
Hispanic or Latino <sup>4</sup>	17.4	21.0	20.2	18.0	19.8	18.6	20.4	18.3	0.0
White, not Hispanic or Latino <sup>4</sup>	24.3	26.7	25.3	25.9	25.2	25.9	26.3	25.9	0.2
Female	14.5	15.1	15.8	16.0	16.2	16.9	17.0	15.9	^−1.0
White	15.5	15.9	16.8	16.8	17.2	17.7	17.9	17.0	^1.0
Black or African American	10.2	10.1	11.8	12.1	11.6	13.1	13.2	12.5	^2.1
Asian or Pacific Islander	9.1	11.8	11.3	12.8	11.9	12.5	11.9	9.4	0.9
Hispanic or Latina <sup>4</sup>	13.5	12.7	13.3	14.2	13.3	14.5	14.7	13.9	^0.8
White, not Hispanic or Latina <sup>4</sup>	15.6	16.2	17.2	17.2	17.8	18.2	18.4	17.5	^1.1
Leukemia									
Male	17.1	17.5	16.4	17.1	16.2	16.1	15.8	15.1	^−0.6
White	17.9	18.8	17.4	18.3	17.5	17.0	16.6	16.2	^−0.6
Black or African American	16.0	13.1	13.2	12.6	11.7	13.3	14.5	11.1	−0.8
Asian or Pacific Islander	8.5	10.0	10.3	10.1	8.8	9.9	9.6	8.2	−0.5
Hispanic or Latino <sup>4</sup>	12.0	14.6	12.5	10.8	11.8	11.4	11.9	11.7	−0.2
White, not Hispanic or Latino <sup>4</sup>	18.2	19.1	17.9	19.0	18.1	17.6	17.0	16.5	^−0.5
Female	9.8	10.1	10.0	10.0	9.5	9.3	9.7	9.0	^−0.4
White	10.2	10.7	10.6	10.7	10.1	9.8	10.2	9.5	−0.3
Black or African American	8.4	8.1	9.4	8.6	7.1	8.3	8.8	8.0	−0.4
Asian or Pacific Islander	5.8	6.3	6.1	5.0	6.3	6.1	6.1	5.9	−0.6
Hispanic or Latina <sup>4</sup>	8.4	8.2	7.5	7.0	8.3	6.8	8.3	7.7	−0.5
White, not Hispanic or Latina <sup>4</sup>	10.2	10.9	10.7	11.1	10.2	10.2	10.3	9.5	−0.2

^ APC is significantly different from 0 (p<0.05).

0.0 Annual percent change (APC) is greater than −0.05 but less than 0.05.

<sup>1</sup>Annual percent change (APC) has been calculated by fitting a linear regression model to the natural logarithm of the yearly rates from 1990–2004.

<sup>2</sup>Age-adjusted by 5-year age groups to the year 2000 U.S. standard population. Age-adjusted rates are based on at least 25 cases. See [Appendix II, Age adjustment](#).

<sup>3</sup>Starting with *Health, United States, 2007*, estimates for American Indian or Alaska Native population are based on the Contract Health Service Delivery Area (CHSDA) counties within SEER areas. Estimates for American Indian or Alaska Native are not shown for some sites because of the small number of annual cases.

<sup>4</sup>Starting with *Health, United States, 2007*, Hispanic data exclude cases from Alaska. The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. The NAACCR Hispanic Identification Algorithm was used on a combination of variables to classify cases as Hispanic for analytic purposes. See the report, NAACCR Guideline for Enhancing Hispanic-Latino Identification, for more information; available from: [http://seer.cancer.gov/seerstat/variables/seer/yr1973\\_2005/race\\_ethnicity/](http://seer.cancer.gov/seerstat/variables/seer/yr1973_2005/race_ethnicity/). See [Appendix II, Hispanic origin](#).

<sup>5</sup>Includes corpus uteri only cases and not uterus, not elsewhere specified cases.

NOTES: See [Appendix II, Incidence](#). Estimates are based on 13 SEER areas November 2007 submission and differ from published estimates based on 9 SEER areas or other submission dates. See [Appendix I, Surveillance, Epidemiology, and End Results Program \(SEER\)](#). The site variable distinguishes Kaposi Sarcoma and Mesothelioma as individual cancer sites. As a result, Kaposi Sarcoma and Mesothelioma cases do not contribute to other cancer sites. Data have been revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCE: National Institutes of Health, National Cancer Institute, Surveillance, Epidemiology, and End Results (SEER) Program. Available from: <http://www.seer.cancer.gov>.

**Table 53. Five-year relative cancer survival rates for selected cancer sites, by race and sex: United States, selected geographic areas, selected years 1975–1977 through 1996–2004**

[Data are based on the Surveillance, Epidemiology, and End Results (SEER) Program's 9 population-based cancer registries]

Sex and site	White						Black or African American					
	1975–1977	1981–1983	1987–1989	1990–1992	1993–1995	1996–2004	1975–1977	1981–1983	1987–1989	1990–1992	1993–1995	1996–2004
Percent of patients												
Both sexes												
All sites . . . . .	51.0	52.8	57.8	62.4	63.4	67.5	39.8	39.6	43.7	48.2	52.9	57.5
Oral cavity and pharynx . . . . .	54.6	55.0	56.6	58.7	60.9	62.4	36.4	31.8	34.4	33.3	38.2	41.7
Esophagus . . . . .	5.6	7.6	11.0	13.6	14.3	18.1	3.1	4.3	6.4	9.4	7.5	11.1
Stomach . . . . .	14.8	16.9	19.1	19.3	20.6	23.1	16.3	17.2	20.0	23.8	19.8	24.5
Colon . . . . .	51.7	56.7	61.7	64.0	61.4	66.0	46.4	49.7	53.3	54.2	52.3	55.0
Rectum . . . . .	49.4	53.8	59.7	61.3	61.7	67.2	44.9	40.6	53.6	52.2	54.8	58.9
Pancreas . . . . .	2.5	2.8	3.4	4.7	4.2	4.9	2.3	3.7	5.9	3.7	3.7	4.6
Lung and bronchus . . . . .	12.8	13.9	13.8	14.5	15.1	15.9	11.4	11.7	11.2	10.8	13.0	12.7
Urinary bladder . . . . .	74.5	79.3	81.4	81.9	82.2	81.6	50.6	60.3	63.3	64.7	61.7	66.2
Non-Hodgkin's lymphoma . . . . .	48.3	52.8	52.8	52.9	54.5	65.9	48.8	50.4	47.4	42.0	42.0	57.6
Leukemia . . . . .	36.0	40.2	45.5	48.0	49.5	52.2	33.5	34.2	36.7	37.4	42.3	42.4
Male												
All sites . . . . .	43.3	47.6	53.3	61.3	62.4	67.2	32.7	34.2	38.8	47.3	53.6	59.8
Oral cavity and pharynx . . . . .	54.1	53.8	54.4	57.0	60.0	61.7	30.0	26.4	30.1	28.3	32.8	36.0
Esophagus . . . . .	4.9	6.8	11.4	12.9	14.4	17.6	1.6	3.6	5.0	9.7	7.6	9.0
Stomach . . . . .	13.7	16.0	16.0	16.4	19.3	21.2	16.4	16.8	17.2	22.9	17.6	22.6
Colon . . . . .	51.0	57.5	62.5	64.4	61.2	66.3	45.5	45.9	51.7	55.9	51.3	55.5
Rectum . . . . .	48.4	52.3	59.8	60.4	60.4	66.8	41.7	38.3	49.3	54.1	52.1	57.7
Pancreas . . . . .	2.7	2.3	3.2	4.4	3.8	5.4	2.7	4.0	5.5	3.2	3.5	3.2
Lung and bronchus . . . . .	11.5	12.3	12.5	13.0	13.1	13.7	10.6	10.5	11.1	9.6	11.5	11.0
Prostate gland . . . . .	69.8	74.9	85.4	95.3	96.2	99.4	61.3	63.7	72.2	85.5	91.5	95.9
Urinary bladder . . . . .	75.5	80.4	83.5	84.2	83.4	82.4	56.8	65.7	68.1	67.6	68.9	69.4
Non-Hodgkin's lymphoma . . . . .	47.8	52.5	49.2	48.3	50.4	63.9	42.0	49.5	42.2	38.1	35.3	53.9
Leukemia . . . . .	35.0	40.0	47.5	48.2	50.1	52.4	30.4	33.4	35.0	31.6	41.6	42.2
Female												
All sites . . . . .	57.8	57.6	62.1	63.5	64.5	67.7	47.2	45.6	48.9	49.3	51.9	54.9
Colon . . . . .	52.2	56.1	61.0	63.5	61.6	65.7	46.8	52.4	54.5	52.9	52.9	54.6
Rectum . . . . .	50.6	55.4	59.5	62.4	63.2	67.7	47.5	42.9	57.8	49.8	57.9	60.1
Pancreas . . . . .	2.3	3.2	3.5	4.9	4.6	4.5	2.0	3.3	6.1	4.0	3.9	6.0
Lung and bronchus . . . . .	15.9	17.1	15.8	16.6	17.7	18.4	14.0	15.1	11.4	12.8	15.8	15.1
Melanoma of skin . . . . .	86.7	87.7	91.4	92.1	92.8	94.2	*	*	90.4	*	*	79.7
Breast . . . . .	75.9	77.7	85.3	86.7	88.0	90.5	62.3	64.1	71.3	71.8	72.8	77.8
Cervix uteri . . . . .	70.6	69.0	73.6	71.9	74.7	73.7	65.0	61.6	58.2	58.8	64.0	65.3
Corpus uteri <sup>1</sup> . . . . .	89.2	84.0	85.6	87.2	86.5	86.9	61.8	54.2	59.2	57.0	61.7	62.7
Ovary . . . . .	36.5	40.4	39.9	42.4	42.7	45.3	43.1	38.9	35.2	37.8	43.3	38.3
Non-Hodgkin's lymphoma . . . . .	48.9	53.2	57.2	58.8	59.7	68.1	56.1	51.5	53.7	47.5	54.8	62.4

\* Data for population groups with fewer than 25 cases are not shown because estimates are considered unreliable.

<sup>1</sup>Includes corpus uteri only cases and not uterus, not elsewhere specified cases.

NOTES: Rates are based on followup of patients through 2005. The rate is the ratio of the observed survival rate for the patient group to the expected survival rate for persons in the general population similar to the patient group with respect to age, sex, race, and calendar year of observation. It estimates the chance of surviving the effects of cancer. The site variable distinguishes Kaposi Sarcoma and Mesothelioma as individual cancer sites. As a result, Kaposi Sarcoma and Mesothelioma cases are excluded from each of the sites shown except all sites combined. The race groups, white and black, include persons of Hispanic and non-Hispanic origin. Due to death certificate race-ethnicity classification and other methodological issues related to developing life tables, survival rates for race-ethnicity groups other than white and black are not calculated. Data have been revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCE: National Institutes of Health, National Cancer Institute, Surveillance, Epidemiology, and End Results (SEER) Program. Available from: <http://www.seer.cancer.gov>.



**Table 54. Diabetes among adults 20 years of age and over, by sex, age, and race and Hispanic origin: United States, 1988–1994, 1999–2002, and 2003–2006**

[Data are based on interviews and physical examinations of a sample of the civilian noninstitutionalized population]

Sex, age, and race and Hispanic origin <sup>3</sup>	Physician-diagnosed and undiagnosed diabetes <sup>1,2</sup>			Physician-diagnosed diabetes <sup>1</sup>			Undiagnosed diabetes <sup>2</sup>		
	1988–1994	1999–2002	2003–2006	1988–1994	1999–2002	2003–2006	1988–1994	1999–2002	2003–2006
20 years and over, age-adjusted <sup>4</sup>	Percent of population								
All persons <sup>5</sup> . . . . .	8.3	9.4	10.2	5.4	6.6	7.7	2.9	2.8	2.5
Male . . . . .	8.8	10.7	11.2	5.4	7.0	7.6	3.4	3.6	3.6
Female. . . . .	7.9	8.3	9.4	5.4	6.2	7.8	2.5	2.1	*1.6
Not Hispanic or Latino:									
White only . . . . .	7.5	7.9	8.8	5.0	5.2	6.4	2.5	2.7	2.4
Black or African American only . . . . .	12.6	14.9	16.0	8.6	11.3	13.2	4.0	3.6	2.8
Mexican . . . . .	14.2	13.7	15.7	9.7	10.5	12.4	4.5	3.1	*3.3
20 years and over, crude									
All persons <sup>5</sup> . . . . .	7.8	9.3	10.3	5.1	6.5	7.7	2.7	2.8	2.5
Male . . . . .	7.9	10.2	10.9	4.8	6.7	7.4	3.0	3.5	3.5
Female. . . . .	7.8	8.5	9.7	5.4	6.3	8.1	2.4	2.2	1.7
Not Hispanic or Latino:									
White only . . . . .	7.5	8.4	9.5	5.0	5.5	6.9	2.5	2.9	2.6
Black or African American only . . . . .	10.4	13.4	14.4	6.9	10.1	11.8	3.4	*3.3	2.5
Mexican . . . . .	9.0	8.3	10.9	5.6	6.5	7.9	3.4	1.8	*3.0
Age									
20–39 years . . . . .	1.6	*2.3	2.5	1.1	1.7	1.7	*0.6	*	*
40–59 years . . . . .	8.8	9.8	10.6	5.5	6.6	8.3	3.3	3.3	*2.3
60 years and over. . . . .	18.9	20.9	22.9	12.8	15.1	16.9	6.1	5.8	6.0

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

<sup>1</sup>Physician-diagnosed diabetes was obtained by self-report and excludes women who reported having diabetes only during pregnancy.

<sup>2</sup>Undiagnosed diabetes is defined as a fasting blood glucose (FBG) of at least 126 mg/dL and no reported physician diagnosis. Respondents had fasted for at least 8 hours and less than 24 hours. Estimates in some prior editions of *Health, United States* included data from respondents who had fasted for at least 9 hours and less than 24 hours. In 2005–2006, FBG testing was performed at a different laboratory and using a different instrument than testing in earlier years. NHANES conducted a crossover study to evaluate the impact of these changes on FBG measurements. As a result of that study, NHANES recommended that 2005–2006 data on FBG measurements be adjusted to be compatible with earlier years. Undiagnosed diabetes estimates in *Health, United States* were produced after adjusting the 2005–2006 FGC data as recommended. For more information, see [http://www.cdc.gov/nchs/data/nhanes/nhanes\\_05\\_06/glu\\_d.pdf](http://www.cdc.gov/nchs/data/nhanes/nhanes_05_06/glu_d.pdf).

<sup>3</sup>Persons of Mexican origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The two non-Hispanic race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group. Prior to data year 1999, estimates were tabulated according to the 1977 Standards. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. See [Appendix II, Hispanic origin; Race](#).

<sup>4</sup>Estimates are age-adjusted to the year 2000 standard population using three age groups: 20–39 years, 40–59 years, and 60 years and over. Age-adjusted estimates in this table may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

<sup>5</sup>Includes all other races and Hispanic origins not shown separately.

NOTES: Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Starting with *Health, United States, 2007*, data use a revised weighting scheme. Data have been revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health and Nutrition Examination Survey.

**Table 55. Incidence and prevalence of end-stage renal disease, by selected characteristics: United States, selected years 1980–2005**

[Data are based on the Centers for Medicare & Medicaid Services' Renal Beneficiary and Utilization System]

Characteristic	Incidence					Prevalence				
	1980	1990	2000	2004	2005	1980	1990	2000	2004	2005
	Number of new patients					Number of patients alive on December 31				
Total . . . . .	17,614	49,868	93,197	103,030	104,927	59,009	182,852	386,311	459,764	477,583
	New patients per million population					Patients alive on December 31 per million population				
Total . . . . .	76.3	199.3	326.0	345.5	350.7	254.6	725.7	1,350.6	1,539.9	1,585.0
Age										
Under 20 years . . . . .	10.2	14.6	14.6	15.1	14.8	32.6	61.9	77.9	83.7	84.9
20–44 years . . . . .	55.6	103.3	122.8	120.5	125.3	235.8	565.1	840.3	866.3	876.1
45–64 years . . . . .	156.2	370.4	514.3	522.3	523.5	530.4	1,438.7	2,467.5	2,728.5	2,787.3
65–74 years . . . . .	232.8	737.0	1,270.2	1,311.9	1,294.8	583.6	1,952.4	4,147.0	4,795.6	4,916.9
75 years and over . . . . .	129.8	598.5	1,353.2	1,478.9	1,505.1	273.3	1,372.1	3,356.2	3,980.2	4,097.5
Sex										
Male . . . . .	87.5	219.2	354.8	386.9	394.8	289.4	802.2	1,502.0	1,733.2	1,790.2
Female . . . . .	65.7	180.5	298.3	305.4	307.9	221.8	653.0	1,204.7	1,352.4	1,385.6
Race <sup>1</sup>										
White . . . . .	63.0	158.3	264.6	283.0	286.4	209.1	562.4	1,021.3	1,173.1	1,209.3
Black or African American . . . . .	179.8	483.8	725.7	754.5	769.6	608.7	1,850.8	3,409.5	3,798.2	3,889.4
American Indian or Alaska Native . . . . .	86.7	289.0	403.0	381.7	378.7	248.9	1,028.3	1,794.4	1,990.1	2,030.3
Asian or Pacific Islander . . . . .	27.4	158.2	263.9	272.4	278.7	99.6	584.7	1,253.7	1,439.8	1,484.6
Hispanic origin <sup>1,2</sup>										
Hispanic . . . . .	---	---	300.7	276.4	279.8	---	---	1,164.9	1,333.9	1,376.2
Not Hispanic . . . . .	---	---	329.7	356.8	362.6	---	---	1,377.9	1,574.1	1,620.6
Primary diagnosis										
Diabetes . . . . .	11.4	70.9	145.5	152.8	153.7	24.4	186.6	478.6	566.4	585.4
Hypertension . . . . .	13.6	60.8	87.3	95.4	95.2	41.0	187.4	332.4	378.3	387.3
Glomerulonephritis . . . . .	12.0	27.7	29.8	28.1	26.7	58.4	157.6	237.8	253.5	256.2
Cystic kidney . . . . .	3.3	6.2	7.6	7.7	8.3	15.8	39.6	62.9	71.4	74.1
Other urologic . . . . .	2.1	5.1	9.5	9.6	7.1	6.9	24.2	41.3	45.8	44.6
Other cause . . . . .	7.9	19.2	31.5	36.1	40.6	28.7	85.1	137.4	154.3	162.6
Unknown cause . . . . .	6.7	7.5	13.1	13.5	15.3	25.7	33.2	50.2	58.0	60.8
Missing disease . . . . .	19.5	1.9	1.7	2.4	3.9	53.7	12.3	10.1	12.2	14.1

--- Data not available.

. . . Category not applicable.

<sup>1</sup>The race groups, white, black or African American, American Indian or Alaska Native, and Asian or Pacific Islander, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. See [Appendix II, Hispanic origin; Race](#).

<sup>2</sup>Centers for Medicare & Medicaid Services began collecting Hispanic ethnicity data in April 1995. Not Hispanic includes unknown ethnicity.

NOTES: Persons with unknown age, gender, or race are excluded. For incidence estimates, age is determined as of the date of diagnosis with end-stage renal disease (ESRD). For prevalence estimates, age is calculated as of December 31 of each year. Prevalence estimates include patients with a functioning transplant. See [Appendix I, United States Renal Data System \(USRDS\)](#). See [Appendix II, End-stage renal disease; Incidence; Prevalence](#).

SOURCE: United States Renal Data System, USRDS 2007 Annual data report: Atlas of chronic kidney disease and end-stage renal disease in the United States, National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases, Bethesda, MD, 2007. Available from: <http://www.usrds.org/reference.htm>.



**Table 56 (page 1 of 2). Severe headache or migraine, low back pain, and neck pain among adults 18 years of age and over, by selected characteristics: United States, selected years 1997, 2005, and 2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Severe headache or migraine <sup>1</sup>			Low back pain <sup>1</sup>			Neck pain <sup>1</sup>		
	1997	2005	2006	1997	2005	2006	1997	2005	2006
Percent of adults with pain during past 3 months									
18 years and over, age-adjusted <sup>2,3</sup>	15.8	15.2	15.1	28.2	28.3	27.3	14.7	14.7	14.3
18 years and over, crude <sup>3</sup>	16.0	15.1	15.1	28.1	28.5	27.6	14.6	14.9	14.6
Age									
18–44 years	18.7	18.4	17.8	26.1	25.0	23.9	13.3	12.8	11.7
18–24 years	18.7	18.0	16.5	21.9	20.4	18.6	9.8	9.2	8.1
25–44 years	18.7	18.5	18.2	27.3	26.6	25.7	14.3	14.0	13.0
45–64 years	15.8	14.3	14.7	31.3	31.6	31.1	17.0	18.1	18.6
45–54 years	17.8	17.2	16.9	31.3	30.3	30.0	17.3	18.0	18.9
55–64 years	12.7	10.2	11.8	31.2	33.5	32.7	16.6	18.2	18.1
65 years and over	7.0	6.4	7.3	29.5	33.0	31.7	15.0	14.9	14.9
65–74 years	8.2	7.4	8.5	30.2	32.1	31.2	15.0	15.8	15.8
75 years and over	5.4	5.2	5.9	28.6	34.1	32.2	15.0	13.9	13.9
Sex <sup>2</sup>									
Male	9.9	9.3	9.7	26.5	26.2	25.7	12.6	12.3	12.1
Female	21.4	20.8	20.4	29.6	30.3	28.9	16.6	16.9	16.5
Sex and age									
Male:									
18–44 years	11.9	11.0	11.1	24.8	23.1	22.4	11.6	10.6	9.6
45–54 years	10.3	10.3	10.6	29.4	29.6	28.9	13.9	15.0	16.0
55–64 years	8.8	7.0	7.8	30.7	30.0	29.8	14.6	15.4	15.9
65–74 years	5.0	4.5	6.3	29.0	28.2	27.6	13.6	13.2	13.1
75 years and over	*2.4	4.5	*4.8	22.5	31.1	31.9	12.6	12.0	12.2
Female:									
18–44 years	25.4	25.6	24.4	27.3	26.9	25.3	14.9	14.9	13.8
45–54 years	24.9	23.9	22.9	33.1	30.9	31.0	20.6	20.8	21.6
55–64 years	16.3	13.2	15.4	31.7	36.6	35.3	18.4	20.8	20.2
65–74 years	10.7	9.8	10.3	31.1	35.3	34.3	16.1	18.0	18.1
75 years and over	7.4	5.6	6.6	32.4	36.1	32.3	16.5	15.1	15.1
Race <sup>2,4</sup>									
White only	15.9	15.5	15.3	28.7	28.9	28.1	15.1	15.2	15.1
Black or African American only	16.7	14.1	15.8	26.9	25.7	24.3	13.3	12.1	11.0
American Indian or Alaska Native only	18.9	15.7	19.6	33.3	29.9	34.0	16.2	*11.1	15.6
Asian only	11.7	10.3	9.7	21.0	19.9	18.1	9.2	9.3	9.4
Native Hawaiian or Other Pacific Islander only	---	*	*	---	*	*	---	*	*
2 or more races	---	23.8	21.2	---	37.8	40.7	---	25.3	21.2
Hispanic origin and race <sup>2,4</sup>									
Hispanic or Latino	15.5	15.1	14.1	26.4	27.2	25.0	13.9	14.2	13.6
Mexican	14.6	14.6	13.0	25.2	25.3	23.3	12.9	12.5	12.1
Not Hispanic or Latino	15.9	15.3	15.4	28.4	28.7	27.8	14.9	15.0	14.6
White only	16.1	15.8	15.7	29.1	29.5	29.0	15.4	15.7	15.7
Black or African American only	16.8	14.0	15.8	26.9	25.5	24.2	13.3	12.0	10.9
Education <sup>5,6</sup>									
25 years and over:									
No high school diploma or GED	19.2	17.7	17.1	33.6	33.9	31.6	16.5	16.9	16.4
High school diploma or GED	16.0	15.3	15.1	30.2	30.0	30.4	15.5	15.4	14.6
Some college or more	13.8	13.6	14.2	26.9	28.2	27.2	14.6	15.2	15.4

See footnotes at end of table.

**Table 56 (page 2 of 2). Severe headache or migraine, low back pain, and neck pain among adults 18 years of age and over, by selected characteristics: United States, selected years 1997, 2005, and 2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Severe headache or migraine <sup>1</sup>			Low back pain <sup>1</sup>			Neck pain <sup>1</sup>		
	1997	2005	2006	1997	2005	2006	1997	2005	2006
Percent of poverty level <sup>2,7</sup>									
Below 100% . . . . .	23.3	22.4	21.2	35.4	34.2	35.3	18.6	18.3	18.4
100%–less than 200% . . . . .	18.9	17.4	16.3	30.8	31.8	31.0	16.1	16.6	15.8
200% or more . . . . .	13.8	13.5	13.7	26.3	26.7	25.0	13.8	13.8	13.4
Hispanic origin and race and percent of poverty level <sup>2,4,7</sup>									
Hispanic or Latino:									
Below 100% . . . . .	18.9	19.6	17.6	29.5	29.4	31.2	16.4	17.4	18.0
100%–less than 200% . . . . .	15.7	13.8	12.5	26.8	27.8	25.5	12.9	14.7	11.7
200% or more . . . . .	13.4	14.0	13.4	24.3	26.1	21.3	13.3	12.3	12.7
Not Hispanic or Latino:									
White only:									
Below 100% . . . . .	26.2	25.2	24.1	38.9	38.3	40.6	20.5	21.5	20.7
100%–less than 200% . . . . .	20.1	20.3	18.3	33.3	35.2	35.1	18.0	19.1	18.9
200% or more . . . . .	14.1	14.1	14.1	27.1	27.7	26.4	14.4	14.5	14.5
Black or African American only:									
Below 100% . . . . .	22.7	20.9	19.6	34.5	32.6	29.1	17.9	14.9	14.5
100%–less than 200% . . . . .	17.6	15.4	14.8	27.7	26.3	25.6	14.0	13.2	11.8
200% or more . . . . .	13.4	10.8	14.7	23.1	22.4	21.3	10.9	9.9	8.9
Geographic region <sup>2</sup>									
Northeast . . . . .	14.5	14.8	14.3	27.1	28.2	28.2	14.0	14.4	14.5
Midwest . . . . .	15.6	16.1	15.1	28.7	29.7	29.0	15.3	15.9	15.3
South . . . . .	17.1	15.2	15.6	27.5	27.3	25.9	13.9	13.7	12.8
West . . . . .	15.3	14.3	14.9	30.0	28.8	27.4	16.1	15.4	15.9
Location of residence <sup>2</sup>									
Within MSA <sup>8</sup> . . . . .	15.2	14.7	14.7	27.0	27.3	26.7	14.2	14.3	14.2
Outside MSA <sup>8</sup> . . . . .	18.1	17.1	17.1	32.5	32.3	30.6	16.4	16.6	15.1

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE greater than 30%.

--- Data not available.

<sup>1</sup>In three separate questions, respondents were asked, “During the past 3 months, did you have a severe headache or migraine? ...low back pain? ...neck pain?” Respondents were instructed to report pain that had lasted a whole day or more, and not to report fleeting or minor aches or pains. Persons may be represented in more than one column.

<sup>2</sup>Estimates are age-adjusted to the year 2000 standard population using five age groups: 18–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. Age-adjusted estimates in this table may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

<sup>3</sup>Includes all other races not shown separately and unknown education level.

<sup>4</sup>The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

<sup>5</sup>Estimates are for persons 25 years of age and over and are age-adjusted to the year 2000 standard population using five age groups: 25–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

<sup>6</sup>GED stands for General Educational Development high school equivalency diploma. See [Appendix II, Education](#).

<sup>7</sup>Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 26%–30% of persons 18 years of age and over in 1997–1998 and 32%–35% in 1999–2006. See [Appendix II, Family Income; Poverty](#).

<sup>8</sup>MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health Interview Survey, sample adult questionnaire.

**Table 57 (page 1 of 4). Joint pain among adults 18 years of age and over, by selected characteristics: United States, 2002, 2005, and 2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Any joint pain <sup>1</sup>			Knee pain <sup>1</sup>			Shoulder pain <sup>1</sup>		
	2002	2005	2006	2002	2005	2006	2002	2005	2006
Percent of adults reporting joint pain in past 30 days									
18 years and over, age-adjusted <sup>2,3</sup>	29.5	30.7	29.2	16.5	18.2	17.5	8.6	9.2	8.3
18 years and over, crude <sup>3</sup>	29.5	31.1	29.7	16.5	18.5	17.8	8.7	9.3	8.6
Age									
18–44 years	19.3	19.1	18.0	10.5	11.6	11.0	4.9	4.9	4.4
18–24 years	14.2	14.0	11.7	8.3	8.8	6.9	3.4	2.4	1.7
25–44 years	21.0	20.9	20.2	11.2	12.6	12.5	5.4	5.8	5.3
45–64 years	37.5	39.9	38.3	20.4	23.2	22.8	12.3	12.9	12.1
45–54 years	34.3	35.8	34.8	18.4	20.6	20.9	10.5	11.5	11.4
55–64 years	42.3	45.7	43.2	23.4	26.9	25.4	15.1	14.9	13.2
65 years and over	47.2	50.9	48.2	28.6	30.2	28.6	14.1	16.0	14.1
65–74 years	46.0	49.3	47.6	27.6	29.7	27.8	14.0	15.7	14.5
75 years and over	48.7	52.6	48.8	29.7	30.8	29.4	14.1	16.2	13.7
Sex <sup>2</sup>									
Male	28.0	28.9	27.8	15.2	16.8	16.4	8.4	9.3	8.7
Female	30.7	32.2	30.3	17.6	19.4	18.5	8.8	9.0	7.9
Sex and age									
Male:									
18–44 years	20.1	19.3	18.6	10.7	12.0	11.2	5.5	5.4	5.0
45–54 years	31.1	33.4	33.2	16.2	18.9	20.1	9.5	11.4	12.0
55–64 years	37.3	40.7	38.4	20.1	23.1	20.8	13.7	14.7	13.6
65–74 years	41.7	45.1	41.7	24.1	25.1	22.8	13.3	15.7	14.0
75 years and over	43.9	47.0	45.1	25.7	25.7	28.5	11.4	15.1	13.2
Female:									
18–44 years	18.4	18.9	17.5	10.2	11.2	10.8	4.2	4.5	3.8
45–54 years	37.3	38.2	36.3	20.5	22.3	21.6	11.4	11.5	10.8
55–64 years	46.8	50.4	47.6	26.4	30.5	29.6	16.3	15.1	12.8
65–74 years	49.6	52.9	52.7	30.5	33.6	32.1	14.7	15.7	14.9
75 years and over	51.6	56.2	51.2	32.1	34.0	30.0	15.7	16.9	14.1
Race <sup>2,4</sup>									
White only	29.8	31.3	29.9	16.3	18.5	17.8	8.8	9.5	8.6
Black or African American only	30.8	28.5	28.7	20.2	18.2	18.7	8.3	7.6	7.8
American Indian or Alaska Native only	36.7	34.8	40.7	24.5	15.0	24.5	*11.3	*8.1	*10.9
Asian only	18.1	18.5	16.3	8.5	10.2	9.2	3.9	5.3	4.1
Native Hawaiian or Other Pacific Islander only	*	*	*	*	*	*	*	*	*
2 or more races	42.7	46.2	34.7	28.1	28.6	23.7	15.4	18.9	10.8
Hispanic origin and race <sup>2,4</sup>									
Hispanic or Latino	23.4	24.2	23.3	13.6	14.9	13.9	7.6	8.2	7.5
Mexican	24.6	23.8	23.8	14.1	14.9	15.2	8.3	8.5	7.2
Not Hispanic or Latino	30.4	31.7	30.1	17.0	18.9	18.1	8.9	9.4	8.5
White only	30.8	32.8	31.2	16.9	19.4	18.7	9.1	9.8	9.0
Black or African American only	30.8	28.5	28.7	20.1	18.1	18.7	8.3	7.6	7.8
Education <sup>5,6</sup>									
25 years of age and over:									
No high school diploma or GED	33.0	33.3	31.1	19.5	20.7	19.1	10.8	11.7	10.4
High school diploma or GED	32.9	33.1	32.4	18.6	19.7	19.1	10.2	10.5	9.8
Some college or more	31.1	33.2	31.8	16.9	19.2	18.9	8.8	9.7	8.9

See footnotes at end of table.

**Table 57 (page 2 of 4). Joint pain among adults 18 years of age and over, by selected characteristics: United States, 2002, 2005, and 2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Any joint pain <sup>1</sup>			Knee pain <sup>1</sup>			Shoulder pain <sup>1</sup>		
	2002	2005	2006	2002	2005	2006	2002	2005	2006
Percent of poverty level <sup>2,7</sup>									
Below 100% . . . . .	31.7	33.7	34.6	19.9	21.4	22.9	11.2	11.2	11.8
100%–less than 200% . . . . .	31.7	31.9	30.4	19.0	19.8	18.9	10.4	10.5	9.1
200% or more . . . . .	28.7	30.1	28.2	15.6	17.5	16.4	8.0	8.6	7.6
Hispanic origin and race and percent of poverty level <sup>2,4,7</sup>									
Hispanic or Latino:									
Below 100% . . . . .	26.8	24.5	27.0	16.1	15.7	18.1	11.5	10.5	9.4
100%–less than 200% . . . . .	24.5	24.1	21.6	14.4	15.2	12.0	8.2	8.3	7.2
200% or more . . . . .	21.4	24.3	22.9	11.7	14.0	12.9	5.4	7.5	7.4
Not Hispanic or Latino:									
White only:									
Below 100% . . . . .	34.2	39.3	39.3	21.3	24.7	26.2	12.4	13.4	13.5
100%–less than 200% . . . . .	34.9	36.2	35.1	20.3	22.8	22.5	11.6	12.0	10.8
200% or more . . . . .	29.8	31.5	29.8	15.9	18.3	17.2	8.4	9.0	8.2
Black or African American only:									
Below 100% . . . . .	31.6	33.0	33.6	20.8	22.5	22.5	9.1	9.0	10.7
100%–less than 200% . . . . .	34.0	28.6	28.5	23.2	18.3	18.1	10.9	8.3	7.7
200% or more . . . . .	29.1	26.5	26.8	18.5	16.0	17.2	7.1	6.8	6.6
Geographic region <sup>2</sup>									
Northeast . . . . .	27.5	28.6	27.3	15.8	16.7	16.1	7.9	8.1	7.2
Midwest . . . . .	32.1	34.8	33.4	18.4	21.6	19.8	8.6	10.1	9.7
South . . . . .	29.3	29.8	27.9	16.7	17.9	17.3	9.1	8.9	7.7
West . . . . .	28.4	29.2	28.1	14.6	16.3	16.3	8.6	9.6	8.8
Location of residence <sup>2</sup>									
Within MSA <sup>8</sup> . . . . .	28.3	29.2	28.4	16.0	17.2	16.8	8.1	8.4	8.1
Outside MSA <sup>8</sup> . . . . .	33.9	36.3	32.5	18.7	22.3	20.4	10.8	12.2	9.6

See footnotes at end of table.

**Table 57 (page 3 of 4). Joint pain among adults 18 years of age and over, by selected characteristics: United States, 2002, 2005, and 2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Finger pain <sup>1</sup>			Hip pain <sup>1</sup>		
	2002	2005	2006	2002	2005	2006
Percent of adults reporting joint pain in past 30 days						
18 years and over, age-adjusted <sup>2,3</sup> . . . . .	7.5	7.4	7.2	6.6	7.1	6.7
18 years and over, crude <sup>3</sup> . . . . .	7.5	7.6	7.4	6.6	7.2	6.8
Age						
18–44 years . . . . .	3.4	2.8	3.2	3.2	3.2	3.0
18–24 years . . . . .	2.0	*1.0	1.6	1.6	2.1	1.6
25–44 years . . . . .	3.9	3.5	3.8	3.8	3.6	3.5
45–64 years . . . . .	11.0	11.2	10.3	9.1	9.7	9.5
45–54 years . . . . .	9.1	9.2	8.0	7.8	7.6	8.1
55–64 years . . . . .	13.9	14.0	13.6	11.0	12.6	11.4
65 years and over . . . . .	13.9	15.2	14.6	12.9	14.6	13.4
65–74 years . . . . .	14.4	14.9	14.3	12.6	13.7	13.3
75 years and over . . . . .	13.3	15.4	15.0	13.3	15.7	13.5
Sex <sup>2</sup>						
Male . . . . .	5.8	6.0	5.8	5.1	5.4	5.5
Female . . . . .	8.9	8.7	8.5	8.0	8.6	7.7
Sex and age						
Male:						
18–44 years . . . . .	3.0	2.6	3.1	2.5	2.4	2.4
45–54 years . . . . .	6.6	7.5	7.0	5.6	5.7	6.3
55–64 years . . . . .	10.5	10.4	8.9	8.0	9.5	9.1
65–74 years . . . . .	11.2	11.4	10.1	10.5	10.8	11.7
75 years and over . . . . .	10.0	12.1	11.4	10.1	12.7	11.8
Female:						
18–44 years . . . . .	3.8	3.0	3.3	3.9	4.0	3.5
45–54 years . . . . .	11.5	10.9	8.9	9.9	9.5	9.8
55–64 years . . . . .	17.0	17.4	17.9	13.7	15.4	13.5
65–74 years . . . . .	17.1	17.9	18.0	14.2	16.2	14.8
75 years and over . . . . .	15.3	17.5	17.3	15.2	17.5	14.6
Race <sup>2,4</sup>						
White only . . . . .	7.6	7.8	7.6	6.9	7.4	6.9
Black or African American only . . . . .	6.5	4.6	5.6	5.6	6.1	6.3
American Indian or Alaska Native only . . . . .	*12.9	*13.0	*13.9	*10.4	*	*7.2
Asian only . . . . .	*3.2	4.1	3.2	*2.3	*2.1	*2.1
Native Hawaiian or Other Pacific Islander only . . . . .	*	*	*	*	*	*
2 or more races . . . . .	12.8	10.5	12.5	10.0	13.7	*8.4
Hispanic origin and race <sup>2,4</sup>						
Hispanic or Latino . . . . .	6.8	6.0	5.8	3.8	4.1	4.0
Mexican . . . . .	7.8	7.0	6.5	4.0	4.1	4.1
Not Hispanic or Latino . . . . .	7.6	7.6	7.4	6.9	7.4	7.0
White only . . . . .	7.8	8.2	7.9	7.3	7.8	7.4
Black or African American only . . . . .	6.5	4.7	5.6	5.7	6.2	6.2
Education <sup>5,6</sup>						
25 years of age and over:						
No high school diploma or GED . . . . .	9.5	8.8	8.2	7.3	8.5	7.1
High school diploma or GED . . . . .	8.3	8.8	8.0	7.3	7.5	7.4
Some college or more . . . . .	8.2	8.1	8.2	7.5	7.8	7.6

See footnotes at end of table.

**Table 57 (page 4 of 4). Joint pain among adults 18 years of age and over, by selected characteristics: United States, 2002, 2005, and 2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Finger pain <sup>1</sup>			Hip pain <sup>1</sup>		
	2002	2005	2006	2002	2005	2006
Percent of poverty level <sup>2,7</sup>						
Percent of adults reporting joint pain in past 30 days						
Below 100% . . . . .	9.8	8.0	9.2	8.5	8.9	8.9
100%–less than 200% . . . . .	8.9	8.2	7.8	7.5	8.1	7.3
200% or more . . . . .	6.9	7.2	6.9	6.2	6.6	6.2
Hispanic origin and race and percent of poverty level <sup>2,4,7</sup>						
Hispanic or Latino:						
Below 100% . . . . .	8.6	6.4	8.6	5.9	4.4	4.5
100%–less than 200% . . . . .	8.2	5.7	5.0	3.9	3.9	4.0
200% or more . . . . .	5.5	6.1	5.0	2.5	4.2	*3.9
Not Hispanic or Latino:						
White only:						
Below 100% . . . . .	10.9	9.9	10.5	9.9	11.6	11.0
100%–less than 200% . . . . .	9.9	9.6	9.2	9.1	9.8	8.7
200% or more . . . . .	7.3	7.8	7.5	6.7	7.2	6.7
Black or African American only:						
Below 100% . . . . .	7.9	5.7	7.5	8.1	7.7	8.8
100%–less than 200% . . . . .	7.4	6.0	6.5	6.4	6.3	6.4
200% or more . . . . .	5.6	3.5	4.5	4.5	5.6	5.2
Geographic region <sup>2</sup>						
Northeast . . . . .	6.6	6.2	6.3	5.7	6.4	5.3
Midwest . . . . .	7.5	8.5	8.2	6.9	7.9	7.5
South . . . . .	7.6	7.3	7.0	7.0	7.1	6.7
West . . . . .	8.0	7.5	7.3	6.4	6.6	6.8
Location of residence <sup>2</sup>						
Within MSA <sup>8</sup> . . . . .	7.2	7.0	7.0	6.2	6.5	6.3
Outside MSA <sup>8</sup> . . . . .	8.4	9.1	8.2	8.0	9.3	8.1

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

<sup>1</sup>Starting with 2002 data, respondents were asked, “During the past 30 days, have you had any symptoms of pain, aching, or stiffness in or around a joint?”

Respondents were instructed not to include the back or neck. To facilitate their response, respondents were shown a card illustrating the body joints. Respondents reporting more than one type of joint pain were included in each response category. This table shows the most commonly reported joints.

<sup>2</sup>Estimates are age-adjusted to the year 2000 standard population using five age groups: 18–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

<sup>3</sup>Includes all other races not shown separately and unknown education level.

<sup>4</sup>The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

<sup>5</sup>Estimates are for persons 25 years of age and over and are age-adjusted to the year 2000 standard population using five age groups: 25–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

<sup>6</sup>GED stands for General Educational Development high school equivalency diploma. See [Appendix II, Education](#).

<sup>7</sup>Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 33%–35% of persons 18 years of age and over in 2002–2006. See [Appendix II, Family Income; Poverty](#).

<sup>8</sup>MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health Interview Survey, sample adult questionnaire.

**Table 58 (page 1 of 3). Limitation of activity caused by chronic conditions, by selected characteristics: United States, selected years 1997–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Any activity limitation <sup>1</sup>			
	1997	2004	2005	2006
All ages				
Percent of persons				
All ages, age-adjusted <sup>2,3</sup>	13.3	11.9	11.7	11.6
All ages, crude <sup>2</sup>	12.8	11.9	11.8	11.8
Age				
Under 18 years	6.6	7.0	7.0	7.3
Under 5 years	3.5	3.5	4.3	3.9
5–17 years	7.8	8.4	8.0	8.6
18–44 years	7.0	6.0	5.7	5.5
18–24 years	5.1	4.4	4.2	4.1
25–44 years	7.6	6.5	6.3	6.0
45–54 years	14.2	12.5	11.9	12.5
55–64 years	22.2	19.9	19.9	20.0
65 years and over	38.7	34.1	33.8	32.6
65–74 years	30.0	25.5	25.2	24.8
75 years and over	50.2	43.9	43.5	41.6
Sex <sup>3</sup>				
Male	13.1	11.8	11.7	11.6
Female	13.4	11.9	11.6	11.5
Race <sup>3,4</sup>				
White only	13.1	11.6	11.5	11.4
Black or African American only	17.1	15.3	14.1	14.1
American Indian or Alaska Native only	23.1	17.1	16.0	18.4
Asian only	7.5	6.4	6.4	6.6
Native Hawaiian or Other Pacific Islander only	---	*	*	*
2 or more races	---	18.8	19.9	19.7
Black or African American; White	---	*15.8	*10.9	22.2
American Indian or Alaska Native; White	---	21.5	26.3	22.7
Hispanic origin and race <sup>3,4</sup>				
Hispanic or Latino	12.8	10.2	10.5	10.0
Mexican	12.5	10.1	11.4	9.8
Not Hispanic or Latino	13.5	12.3	11.9	11.9
White only	13.2	12.1	11.8	11.8
Black or African American only	17.0	15.3	14.2	14.1
Percent of poverty level <sup>3,5</sup>				
Below 100%	25.4	23.0	22.4	22.1
100%–less than 200%	17.9	16.3	16.2	16.4
200% or more	10.1	9.2	9.0	8.7
Hispanic origin and race and percent of poverty level <sup>3,4,5</sup>				
Hispanic or Latino:				
Below 100%	19.2	15.5	15.9	15.7
100%–less than 200%	12.7	10.5	11.0	10.6
200% or more	9.2	7.7	7.9	7.1
Not Hispanic or Latino:				
White only:				
Below 100%	27.8	26.2	25.2	25.7
100%–less than 200%	19.2	18.7	18.5	18.8
200% or more	10.4	9.5	9.3	9.0
Black or African American only:				
Below 100%	28.2	27.1	25.3	22.5
100%–less than 200%	19.5	16.6	15.8	16.8
200% or more	10.7	10.3	9.5	9.0
Geographic region <sup>3</sup>				
Northeast	13.0	11.0	10.6	11.3
Midwest	13.1	12.7	12.8	12.5
South	13.9	12.3	12.0	11.9
West	13.0	11.4	10.9	10.5
Location of residence <sup>3</sup>				
Within MSA <sup>6</sup>	12.7	11.2	11.0	11.1
Outside MSA <sup>6</sup>	15.5	14.9	14.5	14.2

See footnotes at end of table.

**Table 58 (page 2 of 3). Limitation of activity caused by chronic conditions, by selected characteristics: United States, selected years 1997–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	ADL limitation <sup>7</sup>				IADL limitation <sup>7</sup>			
	1997	2004	2005	2006	1997	2004	2005	2006
65 years of age and over								
Percent of persons								
65 years and over, age-adjusted <sup>2,8</sup> . . . . .	6.7	6.1	6.2	5.8	13.7	11.5	12.0	11.2
65 years and over, crude <sup>2</sup> . . . . .	6.4	6.0	6.1	5.7	13.1	11.5	12.0	11.1
65–74 years . . . . .	3.4	2.9	3.2	3.2	6.9	5.5	6.4	5.6
75 years and over . . . . .	10.4	9.5	9.4	8.6	21.2	18.1	18.3	17.3
Sex <sup>8</sup>								
Male . . . . .	5.2	4.8	4.6	4.6	9.1	8.4	8.1	7.9
Female . . . . .	7.7	6.9	7.2	6.6	16.9	13.6	14.8	13.6
Race <sup>4,8</sup>								
White only . . . . .	6.3	5.8	5.7	5.4	13.1	11.0	11.5	10.3
Black or African American only . . . . .	11.7	8.7	10.3	11.1	21.3	17.0	17.8	19.7
American Indian or Alaska Native only . . . . .	*	*	*	*	*	*	*	*
Asian only . . . . .	*	*8.0	*7.5	*5.8	*9.1	12.3	*11.3	*8.2
Native Hawaiian or Other Pacific Islander only . . . . .	---	*	*	*	---	*	*	*
2 or more races . . . . .	---	*	*	*	---	*21.4	*	*21.5
Hispanic origin and race <sup>4,8</sup>								
Hispanic or Latino . . . . .	10.8	10.4	10.7	7.7	16.3	14.8	16.9	12.8
Mexican . . . . .	11.4	10.7	12.0	7.6	18.8	15.3	19.6	12.2
Not Hispanic or Latino . . . . .	6.5	5.8	5.9	5.7	13.6	11.3	11.8	11.1
White only . . . . .	6.1	5.5	5.4	5.2	13.0	10.7	11.2	10.2
Black or African American only . . . . .	11.7	8.7	10.1	11.1	21.2	17.1	17.7	19.7
Percent of poverty level <sup>5,8</sup>								
Below 100% . . . . .	12.5	10.1	10.4	9.6	25.3	20.9	21.8	19.7
100%–less than 200% . . . . .	7.4	6.7	6.5	7.1	15.8	13.3	14.7	14.1
200% or more . . . . .	5.3	5.2	5.4	4.6	10.4	9.1	9.3	8.5
Hispanic origin and race and percent of poverty level <sup>4,5,8</sup>								
Hispanic or Latino:								
Below 100% . . . . .	16.0	15.9	16.0	*9.7	25.5	24.0	26.2	15.9
100%–less than 200% . . . . .	11.1	*10.3	11.3	7.5	15.5	14.4	17.6	16.0
200% or more . . . . .	*6.6	*6.6	*7.3	*6.5	10.2	*8.9	11.3	*7.8
Not Hispanic or Latino:								
White only:								
Below 100% . . . . .	11.8	8.2	9.3	9.1	24.9	19.2	20.7	17.9
100%–less than 200% . . . . .	6.6	6.2	5.7	6.6	15.2	12.7	14.2	13.0
200% or more . . . . .	5.0	4.9	5.0	4.3	10.3	8.8	8.9	8.3
Black or African American only:								
Below 100% . . . . .	13.5	13.9	*11.4	*12.8	27.8	26.0	24.6	28.4
100%–less than 200% . . . . .	12.4	*7.4	*8.4	12.1	22.4	17.7	16.3	20.1
200% or more . . . . .	9.8	*6.3	10.8	*9.0	15.1	10.5	14.9	13.5

See footnotes at end of table.



**Table 58 (page 3 of 3). Limitation of activity caused by chronic conditions, by selected characteristics: United States, selected years 1997–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	ADL limitation <sup>7</sup>				IADL limitation <sup>7</sup>			
	1997	2004	2005	2006	1997	2004	2005	2006
Geographic region <sup>8</sup>								
	Percent of persons							
Northeast . . . . .	6.1	5.6	6.0	5.5	12.2	9.9	10.9	10.1
Midwest . . . . .	5.8	5.4	5.3	5.6	13.1	11.9	12.0	11.4
South . . . . .	8.2	6.8	6.8	6.5	15.8	12.7	13.0	12.2
West . . . . .	5.9	6.1	6.4	5.3	12.4	11.0	11.5	10.5
Location of residence <sup>8</sup>								
Within MSA <sup>6</sup> . . . . .	6.6	6.3	6.2	5.7	13.5	11.3	11.5	11.1
Outside MSA <sup>6</sup> . . . . .	7.2	5.3	5.8	6.1	14.4	12.4	14.0	11.8

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

--- Data not available.

<sup>1</sup>Limitation of activity is assessed by asking respondents a series of questions about limitations in their ability to perform activities usual for their age group because of a physical, mental, or emotional problem(s). The category limitation of activity includes limitations in personal care (ADL), routine needs (IADL), and other limitations due to a chronic condition. See [Appendix II, Activities of daily living; Condition; Instrumental activities of daily living; Limitation of activity](#).

<sup>2</sup>Includes all other races not shown separately.

<sup>3</sup>Estimates are age-adjusted to the year 2000 standard population using six age groups: Under 18 years, 18–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. Age-adjusted estimates in this table may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

<sup>4</sup>The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

<sup>5</sup>Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 24% of persons in 1997 and 31%–34% in 1999–2006. See [Appendix II, Family income; Poverty](#).

<sup>6</sup>MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

<sup>7</sup>These estimates are for noninstitutionalized older persons. ADL is activities of daily living and IADL is instrumental activities of daily living. Respondents were asked about needing the help of another person with personal care (ADL) and routine needs such as chores and shopping (IADL) because of a physical, mental, or emotional problem(s). See [Appendix II, Activities of daily living; Condition; Instrumental activities of daily living](#).

<sup>8</sup>Estimates are age-adjusted to the year 2000 standard population using two age groups: 65–74 years and 75 years and over. See [Appendix II, Age adjustment](#).

NOTES: Standard errors for selected years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health Interview Survey, family core questionnaire.

**Table 59 (page 1 of 2). Vision and hearing limitations among adults 18 years of age and over, by selected characteristics: United States, selected years 1997–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Any trouble seeing, even with glasses or contacts <sup>1</sup>					A lot of trouble hearing or deaf <sup>2</sup>				
	1997	2000	2004	2005	2006	1997	2000	2004	2005	2006
	Percent of adults									
18 years and over, age-adjusted <sup>3,4</sup>	10.0	9.0	8.8	9.2	9.5	3.2	3.2	3.1	3.5	3.4
18 years and over, crude <sup>4</sup>	9.8	8.9	8.9	9.3	9.6	3.1	3.1	3.1	3.5	3.4
Age										
18–44 years	6.2	5.3	5.1	5.5	5.4	1.0	0.9	0.8	0.9	0.8
18–24 years	5.4	4.2	4.3	5.0	5.0	*0.5	*0.7	*0.4	*1.0	*0.6
25–44 years	6.5	5.7	5.4	5.7	5.6	1.2	1.0	1.0	0.9	0.8
45–64 years	12.0	10.7	10.9	11.2	12.2	3.1	3.0	2.8	3.4	3.5
45–54 years	12.2	10.9	11.2	11.0	11.7	2.6	2.3	2.0	2.3	2.7
55–64 years	11.6	10.5	10.5	11.5	12.7	3.9	4.0	4.0	4.8	4.6
65 years and over	18.1	17.4	16.8	17.4	17.4	9.8	10.5	10.8	11.9	11.4
65–74 years	14.2	13.6	14.1	13.2	13.6	6.6	7.4	7.3	6.4	7.1
75 years and over	23.1	21.9	19.9	22.0	21.7	14.1	14.3	14.8	18.1	16.4
Sex <sup>3</sup>										
Male	8.8	7.9	7.6	7.9	8.4	4.2	4.3	4.1	4.8	4.3
Female	11.1	10.1	10.0	10.5	10.5	2.4	2.3	2.4	2.5	2.6
Sex and age										
Male:										
18–44 years	5.3	4.4	4.4	4.5	4.4	1.2	1.1	0.8	1.2	0.6
45–54 years	10.1	8.8	9.2	8.8	10.6	3.6	2.9	2.7	3.3	3.3
55–64 years	10.5	9.5	9.1	10.5	11.3	5.4	6.2	5.9	7.3	7.1
65–74 years	13.2	12.8	12.0	11.4	11.9	9.4	10.8	10.7	9.5	11.3
75 years and over	21.4	20.7	17.7	20.4	21.8	17.7	18.0	18.9	23.3	19.6
Female:										
18–44 years	7.1	6.2	5.8	6.5	6.5	0.9	0.8	0.9	0.7	0.9
45–54 years	14.2	12.8	13.1	13.2	12.8	1.7	1.8	1.3	1.5	2.1
55–64 years	12.6	11.5	11.7	12.4	14.0	2.6	1.9	2.3	2.6	2.3
65–74 years	15.0	14.4	15.9	14.8	15.1	4.4	4.5	4.5	3.8	3.5
75 years and over	24.2	22.7	21.4	23.0	21.7	11.7	12.1	12.2	14.7	14.4
Race <sup>3,5</sup>										
White only	9.7	8.8	8.8	9.1	9.5	3.4	3.4	3.4	3.8	3.6
Black or African American only	12.8	10.6	10.3	10.9	10.4	2.0	1.6	1.5	1.4	1.4
American Indian or Alaska Native only	19.2	16.6	14.8	*14.9	*16.7	14.1	*	*	*	*10.7
Asian only	6.2	6.3	5.1	5.5	7.0	*	*2.4	*	*2.2	*2.2
Native Hawaiian or Other Pacific Islander only	---	*	*	*	*	---	*	*	*	*
2 or more races	---	16.2	11.0	16.4	15.5	---	*5.7	*	*5.8	*5.1
Hispanic origin and race <sup>3,5</sup>										
Hispanic or Latino	10.0	9.7	8.8	9.6	9.9	1.5	2.3	1.8	2.8	2.0
Mexican	10.2	8.3	9.0	9.9	11.1	1.8	3.0	1.8	3.3	*2.5
Not Hispanic or Latino	10.0	9.1	8.9	9.2	9.5	3.3	3.3	3.2	3.6	3.5
White only	9.8	8.9	8.9	9.1	9.5	3.5	3.5	3.5	3.9	3.8
Black or African American only	12.8	10.6	10.3	10.9	10.3	2.0	1.6	1.5	1.4	1.3
Education <sup>6,7</sup>										
25 years of age and over:										
No high school diploma or GED	15.0	12.2	13.8	13.5	12.9	4.8	4.6	4.8	4.6	4.8
High school diploma or GED	10.6	9.5	10.3	10.3	10.6	3.7	3.9	3.7	4.1	3.9
Some college or more	8.9	8.9	7.9	8.6	9.2	2.9	2.8	3.0	3.5	3.6

See footnotes at end of table.

**Table 59 (page 2 of 2). Vision and hearing limitations among adults 18 years of age and over, by selected characteristics: United States, selected years 1997–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Any trouble seeing, even with glasses or contacts <sup>1</sup>					A lot of trouble hearing or deaf <sup>2</sup>				
	1997	2000	2004	2005	2006	1997	2000	2004	2005	2006
Percent of poverty level <sup>3,8</sup>						Percent of adults				
Below 100% . . . . .	17.0	12.9	14.2	15.3	14.2	4.5	3.7	3.9	4.5	4.2
100%–less than 200% . . . . .	12.9	11.6	12.0	11.5	12.2	3.6	4.2	3.6	4.2	4.1
200% or more . . . . .	8.2	7.8	7.4	7.8	8.1	3.0	2.8	2.9	3.3	3.1
Hispanic origin and race and percent of poverty level <sup>3,5,8</sup>										
Hispanic or Latino:										
Below 100% . . . . .	12.8	11.0	11.2	13.6	13.2	*1.9	3.3	*3.0	3.7	*2.8
100%–less than 200% . . . . .	11.2	9.4	10.8	8.8	9.8	*1.5	*2.3	*1.2	*2.7	*
200% or more . . . . .	7.8	9.7	6.3	8.4	8.3	*1.2	*1.7	*1.5	*	*
Not Hispanic or Latino:										
White only:										
Below 100% . . . . .	17.9	13.1	15.8	16.2	14.9	5.8	4.5	4.9	5.7	5.6
100%–less than 200% . . . . .	13.1	12.0	13.1	12.7	13.4	4.3	5.0	4.5	5.1	5.1
200% or more . . . . .	8.2	7.8	7.5	7.8	8.3	3.2	3.0	3.1	3.5	3.4
Black or African American only:										
Below 100% . . . . .	17.9	13.6	15.2	16.0	14.1	3.3	*1.6	*2.3	*1.9	*1.7
100%–less than 200% . . . . .	16.0	12.9	10.6	11.3	10.9	*2.0	*2.0	*	*	*1.8
200% or more . . . . .	8.5	8.1	8.4	8.5	8.3	*	*	*1.3	*1.5	*1.0
Geographic region <sup>3</sup>										
Northeast . . . . .	8.6	7.4	7.0	8.1	7.3	2.2	2.4	2.6	2.9	3.0
Midwest . . . . .	9.5	9.6	10.0	9.7	10.4	3.5	3.5	3.5	3.7	3.4
South . . . . .	11.4	9.2	9.2	9.8	10.2	3.5	3.3	3.2	3.7	3.6
West . . . . .	9.7	9.9	8.6	8.6	9.2	3.4	3.5	3.0	3.8	3.4
Location of residence <sup>3</sup>										
Within MSA <sup>9</sup> . . . . .	9.5	8.5	8.4	8.6	9.2	2.9	3.0	2.8	3.1	3.2
Outside MSA <sup>9</sup> . . . . .	12.0	11.1	10.6	11.7	10.8	4.5	3.9	4.2	4.9	4.3

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE greater than 30%.

--- Data not available.

<sup>1</sup> Respondents were asked, “Do you have any trouble seeing, even when wearing glasses or contact lenses?” Respondents were also asked, “Are you blind or unable to see at all?” In this analysis, any trouble seeing and blind are combined into one category. In 2006, 0.4% of adults 18 years of age and over identified themselves as blind.

<sup>2</sup> Respondents were asked, “Which statement best describes your hearing without a hearing aid: good, a little trouble, a lot of trouble, or deaf?” In this analysis, a lot of trouble and deaf are combined into one category. In 2006, 0.3% of adults 18 years of age and over identified themselves as deaf.

<sup>3</sup> Estimates are age-adjusted to the year 2000 standard population using five age groups: 18–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. Age-adjusted estimates in this table may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

<sup>4</sup> Includes all other races not shown separately and unknown education level.

<sup>5</sup> The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

<sup>6</sup> Estimates are for persons 25 years of age and over and are age-adjusted to the year 2000 standard population using five age groups: 25–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

<sup>7</sup> GED stands for General Educational Development high school equivalency diploma. See [Appendix II, Education](#).

<sup>8</sup> Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 26%–30% of persons 18 years of age and over in 1997–1998 and 32%–35% in 1999–2006. See [Appendix II, Family Income; Poverty](#).

<sup>9</sup> MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health Interview Survey, sample adult questionnaire.

**Table 60 (page 1 of 2). Respondent-assessed health status, by selected characteristics: United States, selected years 1991–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

<i>Characteristic</i>	1991 <sup>1</sup>	1995 <sup>1</sup>	1997	2000	2003	2004	2005	2006
	Percent of persons with fair or poor health <sup>2</sup>							
All ages, age-adjusted <sup>3,4</sup>	10.4	10.6	9.2	9.0	9.2	9.3	9.2	9.2
All ages, crude <sup>4</sup>	10.0	10.1	8.9	8.9	9.2	9.4	9.3	9.5
Age								
Under 18 years	2.6	2.6	2.1	1.7	1.8	1.8	1.8	1.9
Under 6 years	2.7	2.7	1.9	1.5	1.4	1.5	1.6	1.9
6–17 years	2.6	2.5	2.1	1.8	2.0	2.0	1.9	1.9
18–44 years	6.1	6.6	5.3	5.1	5.6	5.7	5.5	5.7
18–24 years	4.8	4.5	3.4	3.3	3.8	3.6	3.3	3.7
25–44 years	6.4	7.2	5.9	5.7	6.3	6.4	6.3	6.3
45–54 years	13.4	13.4	11.7	11.9	12.1	12.3	11.6	12.9
55–64 years	20.7	21.4	18.2	17.9	18.9	17.9	18.3	18.8
65 years and over	29.0	28.3	26.7	26.9	25.5	26.7	26.6	24.8
65–74 years	26.0	25.6	23.1	22.5	22.3	22.4	23.4	21.9
75 years and over	33.6	32.2	31.5	32.1	29.2	31.5	30.2	28.1
Sex <sup>3</sup>								
Male	10.0	10.1	8.8	8.8	8.8	9.0	8.8	9.0
Female	10.8	11.1	9.7	9.3	9.5	9.6	9.5	9.5
Race <sup>3,5</sup>								
White only	9.6	9.7	8.3	8.2	8.5	8.6	8.6	8.6
Black or African American only	16.8	17.2	15.8	14.6	14.7	14.6	14.3	14.4
American Indian or Alaska Native only	18.3	18.7	17.3	17.2	16.3	16.5	13.2	12.1
Asian only	7.8	9.3	7.8	7.4	7.4	8.6	6.8	6.9
Native Hawaiian or Other Pacific Islander only	---	---	---	*	*	*	*	*
2 or more races	---	---	---	16.2	14.7	12.6	14.5	13.1
Black or African American; White	---	---	---	*14.5	21.4	*10.7	8.3	*15.0
American Indian or Alaska Native; White	---	---	---	18.7	18.1	12.3	17.2	13.9
Hispanic origin and race <sup>3,5</sup>								
Hispanic or Latino	15.6	15.1	13.0	12.8	13.9	13.3	13.3	13.0
Mexican	17.0	16.7	13.1	12.8	13.7	13.4	14.3	14.1
Not Hispanic or Latino	10.0	10.1	8.9	8.7	8.7	8.9	8.7	8.8
White only	9.1	9.1	8.0	7.9	7.9	8.0	8.0	8.0
Black or African American only	16.8	17.3	15.8	14.6	14.6	14.6	14.4	14.4
Percent of poverty level <sup>3,6</sup>								
Below 100%	22.8	23.7	20.8	19.6	20.4	21.3	20.4	20.3
100%–less than 200%	14.7	15.5	13.9	14.1	14.4	14.4	14.4	14.4
200% or more	6.8	6.7	6.1	6.3	6.1	6.3	6.2	6.1
Hispanic origin and race and percent of poverty level <sup>3,5,6</sup>								
Hispanic or Latino:								
Below 100%	23.6	22.7	19.9	18.7	20.6	20.2	20.2	20.6
100%–less than 200%	18.0	16.9	13.5	15.3	15.5	15.2	15.3	14.4
200% or more	9.3	8.7	8.5	8.4	9.8	8.8	9.2	8.6
Not Hispanic or Latino:								
White only:								
Below 100%	21.9	22.8	19.7	18.8	19.5	20.8	20.1	19.5
100%–less than 200%	14.0	14.8	13.3	13.4	13.9	13.8	13.8	14.2
200% or more	6.4	6.2	5.6	5.8	5.6	5.7	5.7	5.5
Black or African American only:								
Below 100%	25.8	27.7	25.3	23.8	24.4	25.7	23.3	23.0
100%–less than 200%	17.0	19.3	19.2	18.2	18.6	16.7	17.6	16.9
200% or more	10.9	9.9	9.7	9.7	9.1	9.6	9.5	9.2

See footnotes at end of table.

**Table 60 (page 2 of 2). Respondent-assessed health status, by selected characteristics: United States, selected years 1991–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

<i>Characteristic</i>	1991 <sup>1</sup>	1995 <sup>1</sup>	1997	2000	2003	2004	2005	2006
Geographic region <sup>3</sup>		Percent of persons with fair or poor health <sup>2</sup>						
Northeast . . . . .	8.3	9.1	8.0	7.6	8.2	7.6	7.5	8.2
Midwest . . . . .	9.1	9.7	8.1	8.0	8.3	8.2	8.3	8.8
South . . . . .	13.1	12.3	10.8	10.7	10.7	11.2	11.0	10.4
West . . . . .	9.7	10.1	8.8	8.8	8.4	8.9	8.6	8.5
Location of residence <sup>3</sup>								
Within MSA <sup>7</sup> . . . . .	9.9	10.1	8.7	8.5	8.6	8.8	8.7	8.7
Outside MSA <sup>7</sup> . . . . .	11.9	12.6	11.1	11.1	11.5	11.5	11.2	11.7

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE greater than 30%.

--- Data not available.

<sup>1</sup>Data prior to 1997 are not strictly comparable with data for later years due to the 1997 questionnaire redesign. See [Appendix I, National Health Interview Survey](#).

<sup>2</sup>See Appendix II, Health status, respondent-assessed.

<sup>3</sup>Estimates are age-adjusted to the year 2000 standard population using six age groups: Under 18 years, 18–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

<sup>4</sup>Includes all other races not shown separately.

<sup>5</sup>The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

<sup>6</sup>Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 16%–18% of persons in 1991 and 1995, 24%–29% of persons in 1997–1998, and 31%–34% in 1999–2006. See [Appendix II, Family income; Poverty](#).

<sup>7</sup>MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: Standard errors for selected years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health Interview Survey, family core questionnaire.

**Table 61 (page 1 of 2). Serious psychological distress in the past 30 days among adults 18 years of age and over, by selected characteristics: United States, average annual selected years, 1997–1998 through 2005–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	1997–1998	1999–2000	2001–2002	2003–2004	2005–2006
Percent of persons with serious psychological distress <sup>1</sup>					
18 years and over, age-adjusted <sup>2,3</sup>	3.2	2.6	3.1	3.1	3.0
18 years and over, crude <sup>3</sup>	3.2	2.6	3.1	3.1	3.0
Age					
18–44 years	2.9	2.3	2.9	2.9	2.7
18–24 years	2.7	2.2	2.8	2.8	2.1
25–44 years	3.0	2.4	3.0	2.9	2.9
45–64 years	3.7	3.2	3.9	3.9	3.8
45–54 years	3.9	3.5	4.2	3.9	3.9
55–64 years	3.4	2.6	3.4	3.9	3.6
65 years and over	3.1	2.4	2.4	2.4	2.4
65–74 years	2.5	2.3	2.4	2.3	2.2
75 years and over	3.8	2.5	2.4	2.5	2.5
Sex <sup>2</sup>					
Male	2.5	2.0	2.4	2.3	2.3
Female	3.8	3.1	3.8	3.9	3.6
Race <sup>2,4</sup>					
White only	3.1	2.5	3.0	3.1	2.8
Black or African American only	4.0	2.9	3.5	3.4	3.7
American Indian or Alaska Native only	7.8	*7.2	8.1	*5.5	*4.7
Asian only	2.0	*1.4	*1.8	*1.8	2.3
Native Hawaiian or Other Pacific Islander only	---	*	*	*	*
2 or more races	---	4.8	5.0	9.1	5.5
Hispanic origin and race <sup>2,4</sup>					
Hispanic or Latino	5.0	3.5	4.0	3.9	3.3
Mexican	5.2	2.9	3.8	3.6	3.3
Not Hispanic or Latino	3.0	2.5	3.1	3.1	2.9
White only	2.9	2.4	3.0	3.0	2.8
Black or African American only	3.9	2.9	3.5	3.3	3.7
Percent of poverty level <sup>2,5</sup>					
Below 100%	9.1	6.8	8.4	8.8	7.6
100%–less than 200%	5.0	4.4	5.2	5.2	5.2
200% or more	1.8	1.6	2.0	1.8	1.7
Hispanic origin and race and percent of poverty level <sup>2,4,5</sup>					
Hispanic or Latino:					
Below 100%	8.6	6.1	7.5	7.4	5.1
100%–less than 200%	5.4	3.8	4.1	3.7	3.2
200% or more	2.9	2.2	2.9	2.3	2.6
Not Hispanic or Latino:					
White only:					
Below 100%	9.6	7.8	9.2	10.4	8.9
100%–less than 200%	5.2	4.9	5.9	6.1	6.1
200% or more	1.8	1.6	2.0	1.7	1.6
Black or African American only:					
Below 100%	8.7	6.0	7.2	7.4	7.4
100%–less than 200%	4.3	3.6	4.9	4.1	5.0
200% or more	1.6	1.3	1.7	1.5	1.7

See footnotes at end of table.

**Table 61 (page 2 of 2). Serious psychological distress in the past 30 days among adults 18 years of age and over, by selected characteristics: United States, average annual selected years, 1997–1998 through 2005–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

<i>Characteristic</i>	<i>1997–1998</i>	<i>1999–2000</i>	<i>2001–2002</i>	<i>2003–2004</i>	<i>2005–2006</i>
<i>Geographic region<sup>2</sup></i>		<i>Percent of persons with serious psychological distress<sup>1</sup></i>			
Northeast . . . . .	2.7	1.9	2.8	2.9	2.6
Midwest . . . . .	2.6	2.5	2.9	2.7	2.8
South . . . . .	3.8	2.9	3.5	3.5	3.4
West . . . . .	3.3	2.8	3.0	3.0	2.6
<i>Location of residence<sup>2</sup></i>					
Within MSA <sup>6</sup> . . . . .	3.0	2.3	3.0	2.9	2.8
Outside MSA <sup>6</sup> . . . . .	3.9	3.5	3.8	3.8	3.9

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE greater than 30%.

--- Data not available.

<sup>1</sup>Serious psychological distress is measured by a six-question scale that asks respondents how often they experienced each of six symptoms of psychological distress in the past 30 days. See [Appendix II, Serious psychological distress](#).

<sup>2</sup>Estimates are age-adjusted to the year 2000 standard population using five age groups: 18–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

<sup>3</sup>Includes all other races not shown separately.

<sup>4</sup>The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

<sup>5</sup>Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 26%–30% of persons 18 years of age and over in 1997–1998 and 32%–35% in 1999–2006. See [Appendix II, Family income; Poverty](#).

<sup>6</sup>MSA is metropolitan statistical area. Starting with 2005–2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2005, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: Standard errors for selected years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health Interview Survey, family core questionnaire.

**Table 62 (page 1 of 2). Suicidal ideation, suicide attempts, and injurious suicide attempts among students in grades 9–12, by sex, grade level, race, and Hispanic origin: United States, selected years 1991–2007**

[Data are based on a national sample of high school students, grades 9–12]

<i>Sex, grade level, race, and Hispanic origin</i>	1991	1993	1995	1997	1999	2001	2003	2005	2007
Percent of students who seriously considered suicide <sup>1</sup>									
Total . . . . .	29.0	24.1	24.1	20.5	19.3	19.0	16.9	16.9	14.5
Male									
Total . . . . .	20.8	18.8	18.3	15.1	13.7	14.2	12.8	12.0	10.3
9th grade . . . . .	17.6	17.7	18.2	16.1	11.9	14.7	11.9	12.2	10.8
10th grade . . . . .	19.5	18.0	16.7	14.5	13.7	13.8	13.2	11.9	9.3
11th grade . . . . .	25.3	20.6	21.7	16.6	13.7	14.1	12.9	11.9	10.7
12th grade . . . . .	20.7	18.3	16.3	13.5	15.6	13.7	13.2	11.6	10.2
Not Hispanic or Latino:									
White . . . . .	21.7	19.1	19.1	14.4	12.5	14.9	12.0	12.4	10.2
Black or African American . . . . .	13.3	15.4	16.7	10.6	11.7	9.2	10.3	7.0	8.5
Hispanic or Latino . . . . .	18.0	17.9	15.7	17.1	13.6	12.2	12.9	11.9	10.7
Female									
Total . . . . .	37.2	29.6	30.4	27.1	24.9	23.6	21.3	21.8	18.7
9th grade . . . . .	40.3	30.9	34.4	28.9	24.4	26.2	22.2	23.9	19.0
10th grade . . . . .	39.7	31.6	32.8	30.0	30.1	24.1	23.8	23.0	22.0
11th grade . . . . .	38.4	28.9	31.1	26.2	23.0	23.6	20.0	21.6	16.3
12th grade . . . . .	30.7	27.3	23.9	23.6	21.2	18.9	18.0	18.0	16.7
Not Hispanic or Latino:									
White . . . . .	38.6	29.7	31.6	26.1	23.2	24.2	21.2	21.5	17.8
Black or African American . . . . .	29.4	24.5	22.2	22.0	18.8	17.2	14.7	17.1	18.0
Hispanic or Latino . . . . .	34.6	34.1	34.1	30.3	26.1	26.5	23.4	24.2	21.1
Percent of students who attempted suicide <sup>1</sup>									
Total . . . . .	7.3	8.6	8.7	7.7	8.3	8.8	8.5	8.4	6.9
Male									
Total . . . . .	3.9	5.0	5.6	4.5	5.7	6.2	5.4	6.0	4.6
9th grade . . . . .	4.5	5.8	6.8	6.3	6.1	8.2	5.8	6.8	5.3
10th grade . . . . .	3.3	5.9	5.4	3.8	6.2	6.7	5.5	7.6	4.9
11th grade . . . . .	4.1	3.4	5.8	4.4	4.8	4.9	4.6	4.5	3.7
12th grade . . . . .	3.8	4.5	4.7	3.7	5.4	4.4	5.2	4.3	4.2
Not Hispanic or Latino:									
White . . . . .	3.3	4.4	5.2	3.2	4.5	5.3	3.7	5.2	3.4
Black or African American . . . . .	3.3	5.4	7.0	5.6	7.1	7.5	7.7	5.2	5.5
Hispanic or Latino . . . . .	3.7	7.4	5.8	7.2	6.6	8.0	6.1	7.8	6.3
Female									
Total . . . . .	10.7	12.5	11.9	11.6	10.9	11.2	11.5	10.8	9.3
9th grade . . . . .	13.8	14.4	14.9	15.1	14.0	13.2	14.7	14.1	10.5
10th grade . . . . .	12.2	13.1	15.1	14.3	14.8	12.2	12.7	10.8	11.2
11th grade . . . . .	8.7	13.6	11.4	11.3	7.5	11.5	10.0	11.0	7.8
12th grade . . . . .	7.8	9.1	6.6	6.2	5.8	6.5	6.9	6.5	6.5
Not Hispanic or Latino:									
White . . . . .	10.4	11.3	10.4	10.3	9.0	10.3	10.3	9.3	7.7
Black or African American . . . . .	9.4	11.2	10.8	9.0	7.5	9.8	9.0	9.8	9.9
Hispanic or Latino . . . . .	11.6	19.7	21.0	14.9	18.9	15.9	15.0	14.9	14.0

See footnotes at end of table.



**Table 62 (page 2 of 2). Suicidal ideation, suicide attempts, and injurious suicide attempts among students in grades 9–12, by sex, grade level, race, and Hispanic origin: United States, selected years 1991–2007**

[Data are based on a national sample of high school students, grades 9–12]

<i>Sex, grade level, race, and Hispanic origin</i>	1991	1993	1995	1997	1999	2001	2003	2005	2007
Percent of students with an injurious suicide attempt <sup>1,2</sup>									
Total . . . . .	1.7	2.7	2.8	2.6	2.6	2.6	2.9	2.3	2.0
Male									
Total . . . . .	1.0	1.6	2.2	2.0	2.1	2.1	2.4	1.8	1.5
9th grade . . . . .	1.0	2.1	2.3	3.2	2.6	2.6	3.1	2.1	1.9
10th grade . . . . .	0.5	1.3	2.4	1.4	1.8	2.5	2.1	2.2	1.0
11th grade . . . . .	1.5	1.1	2.0	2.6	2.1	1.6	2.0	1.4	1.4
12th grade . . . . .	0.9	1.5	2.2	1.0	1.7	1.5	1.8	1.0	1.5
Not Hispanic or Latino:									
White . . . . .	1.0	1.4	2.1	1.5	1.6	1.7	1.1	1.5	0.9
Black or African American . . . . .	0.4	2.0	2.8	1.8	3.4	3.6	5.2	1.4	2.5
Hispanic or Latino . . . . .	0.5	2.0	2.9	2.1	1.4	2.5	4.2	2.8	1.8
Female									
Total . . . . .	2.5	3.8	3.4	3.3	3.1	3.1	3.2	2.9	2.4
9th grade . . . . .	2.8	3.5	6.3	5.0	3.8	3.8	3.9	4.0	2.6
10th grade . . . . .	2.6	5.1	3.8	3.7	4.0	3.6	3.2	2.4	3.1
11th grade . . . . .	2.1	3.9	2.9	2.8	2.8	2.8	2.9	2.9	1.7
12th grade . . . . .	2.4	2.9	1.3	2.0	1.3	1.7	2.2	2.2	1.8
Not Hispanic or Latino:									
White . . . . .	2.3	3.6	2.9	2.6	2.3	2.9	2.4	2.7	2.1
Black or African American . . . . .	2.9	4.0	3.6	3.0	2.4	3.1	2.2	2.6	2.1
Hispanic or Latino . . . . .	2.7	5.5	6.6	3.8	4.6	4.2	5.7	3.7	3.9

<sup>1</sup>Response is for the 12 months preceding the survey.

<sup>2</sup>A suicide attempt that required medical attention.

NOTES: Only youths attending school participated in the survey. Persons of Hispanic origin may be of any race. See [Appendix II, Hispanic origin; Race; Suicidal ideation](#). Standard errors for selected years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>.

SOURCE: CDC, National Center for Chronic Disease Prevention and Health Promotion, National Youth Risk Behavior Survey (YRBS).

**Table 63 (page 1 of 2). Current cigarette smoking among adults 18 years of age and over, by sex, race, and age: United States, selected years 1965–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Sex, race, and age	1965 <sup>1</sup>	1974 <sup>1</sup>	1979 <sup>1</sup>	1985 <sup>1</sup>	1990 <sup>1</sup>	1995 <sup>1</sup>	2000	2002	2003	2004	2005	2006
18 years and over, age-adjusted <sup>2</sup>												
Percent of persons who are current cigarette smokers <sup>3</sup>												
All persons	41.9	37.0	33.3	29.9	25.3	24.6	23.1	22.3	21.5	20.8	20.8	20.8
Male	51.2	42.8	37.0	32.2	28.0	26.5	25.2	24.6	23.7	23.0	23.4	23.6
Female	33.7	32.2	30.1	27.9	22.9	22.7	21.1	20.0	19.4	18.7	18.3	18.1
White male <sup>4</sup>	50.4	41.7	36.4	31.3	27.6	26.2	25.4	24.9	23.8	23.0	23.3	23.5
Black or African American male <sup>4</sup>	58.8	53.6	43.9	40.2	32.8	29.4	25.7	26.6	25.3	23.5	25.9	26.1
White female <sup>4</sup>	33.9	32.0	30.3	27.9	23.5	23.4	22.0	21.0	20.1	19.5	19.1	18.8
Black or African American female <sup>4</sup>	31.8	35.6	30.5	30.9	20.8	23.5	20.7	18.3	17.9	16.9	17.1	18.5
18 years and over, crude												
All persons	42.4	37.1	33.5	30.1	25.5	24.7	23.2	22.4	21.6	20.9	20.9	20.8
Male	51.9	43.1	37.5	32.6	28.4	27.0	25.6	25.1	24.1	23.4	23.9	23.9
Female	33.9	32.1	29.9	27.9	22.8	22.6	20.9	19.8	19.2	18.5	18.1	18.0
White male <sup>4</sup>	51.1	41.9	36.8	31.7	28.0	26.6	25.7	25.0	24.0	23.2	23.6	23.6
Black or African American male <sup>4</sup>	60.4	54.3	44.1	39.9	32.5	28.5	26.2	27.0	25.7	23.9	26.5	27.0
White female <sup>4</sup>	34.0	31.7	30.1	27.7	23.4	23.1	21.4	20.6	19.7	19.1	18.7	18.4
Black or African American female <sup>4</sup>	33.7	36.4	31.1	31.0	21.2	23.5	20.8	18.5	18.1	17.3	17.3	18.8
All males												
18–24 years	54.1	42.1	35.0	28.0	26.6	27.8	28.1	32.1	26.3	25.6	28.0	28.5
25–34 years	60.7	50.5	43.9	38.2	31.6	29.5	28.9	27.2	28.7	26.1	27.7	27.4
35–44 years	58.2	51.0	41.8	37.6	34.5	31.5	30.2	29.7	28.1	26.5	26.0	24.8
45–64 years	51.9	42.6	39.3	33.4	29.3	27.1	26.4	24.5	23.9	25.0	25.2	24.5
65 years and over	28.5	24.8	20.9	19.6	14.6	14.9	10.2	10.1	10.1	9.8	8.9	12.6
White male <sup>4</sup>												
18–24 years	53.0	40.8	34.3	28.4	27.4	28.4	30.4	34.3	27.7	26.7	29.7	28.9
25–34 years	60.1	49.5	43.6	37.3	31.6	29.9	29.7	27.7	28.8	26.3	27.7	27.9
35–44 years	57.3	50.1	41.3	36.6	33.5	31.2	30.6	29.7	28.8	26.6	26.3	25.3
45–64 years	51.3	41.2	38.3	32.1	28.7	26.3	25.8	24.4	23.3	24.4	24.5	23.4
65 years and over	27.7	24.3	20.5	18.9	13.7	14.1	9.8	9.3	9.6	9.4	7.9	12.6
Black or African American male <sup>4</sup>												
18–24 years	62.8	54.9	40.2	27.2	21.3	*14.6	20.9	22.7	18.6	18.0	21.6	31.2
25–34 years	68.4	58.5	47.5	45.6	33.8	25.1	23.2	28.9	31.0	21.2	29.8	26.3
35–44 years	67.3	61.5	48.6	45.0	42.0	36.3	30.7	28.3	23.6	28.4	23.3	22.2
45–64 years	57.9	57.8	50.0	46.1	36.7	33.9	32.2	29.8	30.1	29.2	32.4	32.6
65 years and over	36.4	29.7	26.2	27.7	21.5	28.5	14.2	19.4	18.0	14.1	16.8	16.0
All females												
18–24 years	38.1	34.1	33.8	30.4	22.5	21.8	24.9	24.5	21.5	21.5	20.7	19.3
25–34 years	43.7	38.8	33.7	32.0	28.2	26.4	22.3	21.3	21.3	21.0	21.5	21.5
35–44 years	43.7	39.8	37.0	31.5	24.8	27.1	26.2	23.7	24.2	21.6	21.3	20.6
45–64 years	32.0	33.4	30.7	29.9	24.8	24.0	21.7	21.1	20.2	19.8	18.8	19.3
65 years and over	9.6	12.0	13.2	13.5	11.5	11.5	9.3	8.6	8.3	8.1	8.3	8.3
White female <sup>4</sup>												
18–24 years	38.4	34.0	34.5	31.8	25.4	24.9	28.5	26.7	23.6	22.9	22.6	20.7
25–34 years	43.4	38.6	34.1	32.0	28.5	27.3	24.9	23.8	22.5	22.6	23.1	23.7
35–44 years	43.9	39.3	37.2	31.0	25.0	27.0	26.6	24.4	25.2	22.7	22.2	21.7
45–64 years	32.7	33.0	30.6	29.7	25.4	24.3	21.4	21.5	20.1	20.1	18.9	18.8
65 years and over	9.8	12.3	13.8	13.3	11.5	11.7	9.1	8.5	8.4	8.2	8.4	8.4
Black or African American female <sup>4</sup>												
18–24 years	37.1	35.6	31.8	23.7	10.0	*8.8	14.2	17.1	10.8	15.6	14.2	14.8
25–34 years	47.8	42.2	35.2	36.2	29.1	26.7	15.5	13.9	17.0	18.3	16.9	15.4
35–44 years	42.8	46.4	37.7	40.2	25.5	31.9	30.2	24.0	23.2	18.9	19.0	21.0
45–64 years	25.7	38.9	34.2	33.4	22.6	27.5	25.6	22.2	23.3	20.9	21.0	25.5
65 years and over	7.1	*8.9	*8.5	14.5	11.1	13.3	10.2	9.4	8.0	6.7	10.0	9.3

See footnotes at end of table.

**Table 63 (page 2 of 2). Current cigarette smoking among adults 18 years of age and over, by sex, race, and age: United States, selected years 1965–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error of 20%–30%.

<sup>1</sup>Data prior to 1997 are not strictly comparable with data for later years due to the 1997 questionnaire redesign. See [Appendix I, National Health Interview Survey](#).

<sup>2</sup>Estimates are age-adjusted to the year 2000 standard population using five age groups: 18–24 years, 25–34 years, 35–44 years, 45–64 years, 65 years and over.

Age-adjusted estimates in this table may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

<sup>3</sup>Starting with 1993 data, current cigarette smokers were defined as ever smoking 100 cigarettes in their lifetime and smoking now on every day or some days. See [Appendix II, Cigarette smoking](#).

<sup>4</sup>The race groups, white and black, include persons of Hispanic and non-Hispanic origin. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The single-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group. Prior to 1999, data were tabulated according to the 1977 Standards. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#). For additional data on cigarette smoking by racial groups, see Table 65.

NOTES: Standard errors for selected years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

**SOURCES:** CDC/NCHS, National Health Interview Survey. Data are from the core questionnaire (1965) and the following questionnaire supplements: hypertension (1974), smoking (1979), alcohol and health practices (1983), health promotion and disease prevention (1985, 1990–1991), cancer control and cancer epidemiology (1992), and year 2000 objectives (1993–1995). Starting with 1997, data are from the family core and sample adult questionnaires.

**Table 64. Age-adjusted prevalence of current cigarette smoking among adults 25 years of age and over, by sex, race, and education level: United States, selected years 1974–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Sex, race, and education level	1974 <sup>1</sup>	1979 <sup>1</sup>	1985 <sup>1</sup>	1990 <sup>1</sup>	1995 <sup>1</sup>	2000	2002	2003	2004	2005	2006
25 years and over, age-adjusted <sup>2</sup>	Percent of persons who are current cigarette smokers <sup>3</sup>										
All persons <sup>4</sup>	36.9	33.1	30.0	25.4	24.5	22.6	21.4	21.1	20.4	20.3	20.3
No high school diploma or GED	43.7	40.7	40.8	36.7	35.6	31.6	30.5	29.7	29.1	28.2	28.8
High school diploma or GED	36.2	33.6	32.0	29.1	29.1	29.2	27.9	27.8	25.8	27.0	26.5
Some college, no bachelor's degree	35.9	33.2	29.5	23.4	22.6	21.7	21.5	21.1	21.4	21.8	22.1
Bachelor's degree or higher	27.2	22.6	18.5	13.9	13.6	10.9	10.0	10.2	10.0	9.1	8.2
All males <sup>4</sup>	42.9	37.3	32.8	28.2	26.4	24.7	23.5	23.3	22.6	22.7	22.9
No high school diploma or GED	52.3	47.6	45.7	42.0	39.7	36.0	34.0	34.4	33.6	31.7	31.6
High school diploma or GED	42.4	38.9	35.5	33.1	32.7	32.1	31.0	29.9	28.2	29.9	29.7
Some college, no bachelor's degree	41.8	36.5	32.9	25.9	23.7	23.3	23.2	22.7	23.4	24.9	25.2
Bachelor's degree or higher	28.3	22.7	19.6	14.5	13.8	11.6	11.0	11.2	10.8	9.7	9.2
White males <sup>4,5</sup>	41.9	36.7	31.7	27.6	25.9	24.7	23.5	23.2	22.4	22.4	22.7
No high school diploma or GED	51.5	47.6	45.0	41.8	38.7	38.2	35.6	33.6	32.6	31.6	31.4
High school diploma or GED	42.0	38.5	34.8	32.9	32.9	32.4	31.0	29.6	28.9	30.0	29.2
Some college, no bachelor's degree	41.6	36.4	32.2	25.4	23.3	23.5	23.2	23.3	22.9	24.5	25.8
Bachelor's degree or higher	27.8	22.5	19.1	14.4	13.4	11.3	11.1	11.2	10.5	9.3	8.9
Black or African American males <sup>4,5</sup>	53.4	44.4	42.1	34.5	31.6	26.4	27.2	26.3	24.4	26.5	25.4
No high school diploma or GED	58.1	49.7	50.5	41.6	41.9	38.2	37.2	37.4	36.7	35.9	35.2
High school diploma or GED	*50.7	48.6	41.8	37.4	36.6	29.0	31.3	33.4	23.1	30.1	31.3
Some college, no bachelor's degree	*45.3	39.2	41.8	28.1	26.4	19.9	25.6	19.5	24.7	27.4	21.0
Bachelor's degree or higher	*41.4	*36.8	*32.0	*20.8	*17.3	14.6	*10.8	*10.3	11.3	10.0	12.9
All females <sup>4</sup>	32.0	29.5	27.5	22.9	22.9	20.5	19.3	19.1	18.3	18.0	17.9
No high school diploma or GED	36.6	34.8	36.5	31.8	31.7	27.1	26.9	24.9	24.5	24.6	26.0
High school diploma or GED	32.2	29.8	29.5	26.1	26.4	26.6	25.2	25.8	23.7	24.1	23.4
Some college, no bachelor's degree	30.1	30.0	26.3	21.0	21.6	20.4	20.0	19.7	19.7	19.1	19.6
Bachelor's degree or higher	25.9	22.5	17.1	13.3	13.3	10.1	9.0	9.3	9.3	8.5	7.2
White females <sup>4,5</sup>	31.7	29.7	27.3	23.3	23.1	21.0	20.2	19.6	19.0	18.6	18.5
No high school diploma or GED	36.8	35.8	36.7	33.4	32.4	28.4	29.0	25.0	24.4	24.6	25.9
High school diploma or GED	31.9	29.9	29.4	26.5	26.8	27.8	26.8	26.8	24.7	25.9	24.6
Some college, no bachelor's degree	30.4	30.7	26.7	21.2	22.2	21.1	20.5	20.6	21.1	19.5	20.5
Bachelor's degree or higher	25.5	21.9	16.5	13.4	13.5	10.2	9.6	9.4	9.9	9.1	7.7
Black or African American females <sup>4,5</sup>	35.6	30.3	32.0	22.4	25.7	21.6	18.4	18.9	17.1	17.5	19.1
No high school diploma or GED	36.1	31.6	39.4	26.3	32.3	31.1	27.1	26.9	29.2	27.8	31.2
High school diploma or GED	40.9	32.6	32.1	24.1	27.8	25.4	19.5	23.3	21.0	18.2	18.6
Some college, no bachelor's degree	32.3	*28.9	23.9	22.7	20.8	20.4	20.7	17.0	13.9	17.5	18.9
Bachelor's degree or higher	*36.3	*43.3	26.6	17.0	17.3	10.8	*7.7	11.4	*6.9	*6.6	*8.5

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error of 20%–30%.

<sup>1</sup>Data prior to 1997 are not strictly comparable with data for later years due to the 1997 questionnaire redesign. See [Appendix I, National Health Interview Survey](#).

<sup>2</sup>Estimates are age-adjusted to the year 2000 standard population using four age groups: 25–34 years, 35–44 years, 45–64 years, and 65 years and over. See [Appendix II, Age adjustment](#). For age groups where smoking was 0% or 100%, the age-adjustment procedure was modified to substitute the percentage smoking from the next lower education group.

<sup>3</sup>Starting with 1993 data, current cigarette smokers were defined as ever smoking 100 cigarettes in their lifetime and smoking now on every day or some days. For previous definition, see [Appendix II, Cigarette smoking](#).

<sup>4</sup>Includes unknown education level. Education categories shown are for 1997 and subsequent years. GED stands for General Educational Development high school equivalency diploma. In 1974–1995 the following categories based on number of years of school completed were used: less than 12 years, 12 years, 13–15 years, 16 years or more. See [Appendix II, Education](#).

<sup>5</sup>The race groups, white and black, include persons of Hispanic and non-Hispanic origin. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The single-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group. Prior to 1999, data were tabulated according to the 1977 Standards. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#). For additional data on cigarette smoking by racial groups, see Table 65.

NOTES: Standard errors for selected years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health Interview Survey. Data are from the following questionnaire supplements: hypertension (1974), smoking (1979), alcohol and health practices (1983), health promotion and disease prevention (1985, 1990–1991), cancer control and cancer epidemiology (1992), and year 2000 objectives (1993–1995). Starting with 1997, data are from the family core and sample adult questionnaires.

**Table 65 (page 1 of 2). Current cigarette smoking among adults, by sex, race, Hispanic origin, age, and education level: United States, average annual 1990–1992, 1995–1998, and 2004–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Male			Female		
	1990–1992 <sup>1</sup>	1995–1998 <sup>1</sup>	2004–2006	1990–1992 <sup>1</sup>	1995–1998 <sup>1</sup>	2004–2006
18 years and over, age-adjusted <sup>2</sup>	Percent of persons who are current cigarette smokers <sup>3</sup>					
All persons <sup>4</sup> . . . . .	27.9	26.5	23.3	23.7	22.1	18.4
Race <sup>5</sup>						
White only . . . . .	27.4	26.4	23.3	24.3	22.9	19.1
Black or African American only . . . . .	33.9	30.7	25.2	23.1	21.8	17.5
American Indian or Alaska Native only . . . . .	34.2	40.5	31.5	36.7	28.9	23.2
Asian only . . . . .	24.8	18.1	18.1	6.3	11.0	5.2
Native Hawaiian or Other Pacific Islander only . . . . .	---	---	*	---	---	*
2 or more races . . . . .	---	---	30.3	---	---	25.8
American Indian or Alaska Native; White . . . . .	---	---	35.5	---	---	33.1
Hispanic origin and race <sup>5</sup>						
Hispanic or Latino . . . . .	25.7	24.4	19.0	15.8	13.7	10.5
Mexican . . . . .	26.2	24.5	19.2	14.8	12.0	9.5
Not Hispanic or Latino . . . . .	28.1	26.9	24.2	24.4	23.1	19.6
White only . . . . .	27.7	26.9	24.3	25.2	24.1	20.9
Black or African American only . . . . .	33.9	30.7	25.5	23.2	21.9	17.6
18 years and over, crude						
All persons <sup>4</sup> . . . . .	28.4	27.0	23.7	23.6	22.0	18.2
Race <sup>5</sup>						
White only . . . . .	27.8	26.8	23.5	24.1	22.6	18.7
Black or African American only . . . . .	33.2	30.6	25.8	23.3	21.8	17.8
American Indian or Alaska Native only . . . . .	35.5	39.2	32.8	37.3	31.2	24.2
Asian only . . . . .	24.9	20.0	19.1	6.3	11.2	5.3
Native Hawaiian or Other Pacific Islander only . . . . .	---	---	*	---	---	*
2 or more races . . . . .	---	---	32.4	---	---	26.0
American Indian or Alaska Native; White . . . . .	---	---	37.4	---	---	33.3
Hispanic origin and race <sup>5</sup>						
Hispanic or Latino . . . . .	26.5	25.5	20.1	16.6	13.8	10.7
Mexican . . . . .	27.1	25.2	20.1	15.0	11.6	9.2
Not Hispanic or Latino . . . . .	28.5	27.2	24.3	24.2	22.9	19.2
White only . . . . .	28.0	27.0	24.1	24.8	23.5	20.0
Black or African American only . . . . .	33.3	30.6	26.1	23.3	21.9	17.9
Age and Hispanic origin and race <sup>5</sup>						
18–24 years:						
Hispanic or Latino . . . . .	19.3	26.5	20.3	12.8	12.0	10.1
Not Hispanic or Latino:						
White only . . . . .	28.9	35.5	31.0	28.7	31.6	25.1
Black or African American only . . . . .	17.7	21.3	23.1	10.8	9.8	14.6
25–34 years:						
Hispanic or Latino . . . . .	29.9	25.9	19.7	19.2	12.6	9.3
Not Hispanic or Latino:						
White only . . . . .	32.7	30.5	29.7	30.9	28.5	27.0
Black or African American only . . . . .	34.6	28.5	26.1	29.2	22.0	16.7
35–44 years:						
Hispanic or Latino . . . . .	32.1	26.2	22.0	19.9	17.6	13.0
Not Hispanic or Latino:						
White only . . . . .	32.3	31.5	26.9	27.3	28.1	24.0
Black or African American only . . . . .	44.1	34.7	25.1	31.3	30.3	19.9
45–64 years:						
Hispanic or Latino . . . . .	26.6	26.8	21.8	17.1	14.7	12.3
Not Hispanic or Latino:						
White only . . . . .	28.4	26.8	24.4	26.1	22.3	20.1
Black or African American only . . . . .	38.0	38.8	31.7	26.1	26.9	22.8
65 years and over:						
Hispanic or Latino . . . . .	16.1	14.7	8.3	6.6	9.4	5.6
Not Hispanic or Latino:						
White only . . . . .	14.2	10.6	10.1	12.3	11.6	8.5
Black or African American only . . . . .	25.2	20.9	16.0	10.7	11.2	8.7

See footnotes at end of table.

**Table 65 (page 2 of 2). Current cigarette smoking among adults, by sex, race, Hispanic origin, age, and education level: United States, average annual 1990–1992, 1995–1998, and 2004–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Male			Female		
	1990–1992 <sup>1</sup>	1995–1998 <sup>1</sup>	2004–2006	1990–1992 <sup>1</sup>	1995–1998 <sup>1</sup>	2004–2006
Education, Hispanic origin, and race <sup>5,6</sup>	Percent of persons who are current cigarette smokers <sup>3</sup>					
25 years and over, age-adjusted <sup>7</sup>						
No high school diploma or GED:						
Hispanic or Latino . . . . .	30.2	27.6	20.6	15.8	13.3	9.5
Not Hispanic or Latino:						
White only . . . . .	46.1	43.9	43.0	40.4	40.7	40.8
Black or African American only . . . . .	45.4	44.6	37.2	31.3	30.0	30.3
High school diploma or GED:						
Hispanic or Latino . . . . .	29.6	26.7	18.7	18.4	16.4	12.0
Not Hispanic or Latino:						
White only . . . . .	32.9	32.8	31.2	28.4	28.8	27.7
Black or African American only . . . . .	38.2	35.7	28.7	25.4	26.6	19.7
Some college or more:						
Hispanic or Latino . . . . .	20.4	16.6	15.8	14.3	13.5	10.6
Not Hispanic or Latino:						
White only . . . . .	19.3	18.3	16.6	18.1	17.2	15.0
Black or African American only . . . . .	25.6	23.3	19.1	22.8	18.9	13.3

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

--- Data not available.

<sup>1</sup>Data prior to 1997 are not strictly comparable with data for later years due to the 1997 questionnaire redesign. See [Appendix I, National Health Interview Survey](#). The column labeled 1995–1998 includes data for 1995, 1997, and 1998 because cigarette smoking data were not collected in 1996.

<sup>2</sup>Estimates are age-adjusted to the year 2000 standard population using five age groups: 18–24 years, 25–34 years, 35–44 years, 45–64 years, and 65 years and over. See [Appendix II, Age adjustment](#). For age groups where smoking is 0% or 100%, the age-adjustment procedure was modified to substitute the percentage smoking from the previous 3-year period.

<sup>3</sup>Starting with 1993 data, current cigarette smokers were defined as ever smoking 100 cigarettes in their lifetime and smoking now on every day or some days. For previous definition, see [Appendix II, Cigarette smoking](#).

<sup>4</sup>Includes all other races not shown separately and unknown education level.

<sup>5</sup>The race groups, white, black, American Indian or Alaska Native (AI/AN), Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 2002–2004 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

<sup>6</sup>Education categories shown are for 1997 and subsequent years. GED stands for General Educational Development high school equivalency diploma. In years prior to 1997, the following categories based on number of years of school completed were used: less than 12 years, 12 years, 13 years or more. See [Appendix II, Education](#).

<sup>7</sup>Estimates are age-adjusted to the year 2000 standard using four age groups: 25–34 years, 35–44 years, 45–64 years, and 65 years and over. See [Appendix II, Age adjustment](#).

NOTES: Standard errors for selected years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

**SOURCES:** CDC/NCHS, National Health Interview Survey. Data are from the following questionnaire supplements: health promotion and disease prevention (1990–1991), cancer control and cancer epidemiology (1992), and year 2000 objectives (1993–1995). Starting with 1997, data are from the family core and sample adult questionnaires.

**Table 66 (page 1 of 2). Use of selected substances in the past month among persons 12 years of age and over, by age, sex, race, and Hispanic origin: United States, 2002, 2005, and 2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population 12 years of age and over]

Age, sex, race, and Hispanic origin	Any illicit drug <sup>1</sup>			Marijuana			Nonmedical use of any psychotherapeutic drug <sup>2</sup>		
	2002	2005	2006	2002	2005	2006	2002	2005	2006
Percent of population									
12 years and over . . . . .	8.3	8.1	8.3	6.2	6.0	6.0	2.6	2.6	2.8
Age									
12–13 years . . . . .	4.2	3.8	3.9	1.4	0.9	0.9	1.7	1.7	2.0
14–15 years . . . . .	11.2	8.9	9.1	7.6	5.9	5.8	4.0	2.8	3.1
16–17 years . . . . .	19.8	17.0	16.0	15.7	13.6	13.0	6.2	5.4	4.7
18–25 years . . . . .	20.2	20.1	19.8	17.3	16.6	16.3	5.4	6.3	6.4
26–34 years . . . . .	10.5	11.0	11.9	7.7	8.6	8.5	3.6	3.5	4.3
35 years and over . . . . .	4.6	4.5	4.7	3.1	3.0	3.2	1.6	1.5	1.7
Sex									
Male . . . . .	10.3	10.2	10.5	8.1	8.2	8.1	2.7	2.8	3.2
Female . . . . .	6.4	6.1	6.2	4.4	4.0	4.1	2.6	2.5	2.5
Age and sex									
12–17 years . . . . .	11.6	9.9	9.8	8.2	6.8	6.7	4.0	3.3	3.3
Male . . . . .	12.3	10.1	9.8	9.1	7.5	6.8	3.6	3.1	3.1
Female . . . . .	10.9	9.7	9.7	7.2	6.2	6.4	4.3	3.6	3.5
Hispanic origin and race <sup>3</sup>									
Not Hispanic or Latino:									
White only . . . . .	8.5	8.1	8.5	6.5	6.1	6.4	2.8	2.8	3.0
Black or African American only . . . . .	9.7	9.7	9.8	7.4	7.6	7.4	2.0	1.8	2.1
American Indian or Alaska Native only . . . . .	10.1	12.8	13.7	6.7	9.8	9.8	3.2	5.0	5.3
Native Hawaiian or Other Pacific Islander only . . . . .	7.9	8.7	7.5	4.4	5.7	6.2	3.8	3.3	1.2
Asian only . . . . .	3.5	3.1	3.6	1.8	1.6	1.9	0.7	1.5	1.5
2 or more races . . . . .	11.4	12.2	8.9	9.0	10.6	7.3	3.5	2.7	4.2
Hispanic or Latino . . . . .	7.2	7.6	6.9	4.3	5.1	4.1	2.9	2.5	2.9

Age, sex, race, and Hispanic origin	Alcohol use			Binge alcohol use <sup>4</sup>			Heavy alcohol use <sup>5</sup>		
	2002	2005	2006	2002	2005	2006	2002	2005	2006
Percent of population									
12 years and over . . . . .	51.0	51.8	50.9	22.9	22.7	23.0	6.7	6.6	6.9
Age									
12–13 years . . . . .	4.3	4.2	3.9	1.8	2.0	1.5	0.3	0.2	0.2
14–15 years . . . . .	16.6	15.1	15.6	9.2	8.0	8.9	1.9	1.7	1.2
16–17 years . . . . .	32.6	30.1	29.7	21.4	19.7	20.0	5.6	5.3	5.6
18–25 years . . . . .	60.5	60.9	61.9	40.9	41.9	42.2	14.9	15.3	15.6
26–34 years . . . . .	61.4	62.5	61.8	33.1	32.9	34.2	9.0	9.6	10.0
35 years and over . . . . .	52.1	53.3	51.8	18.6	18.3	18.4	5.2	4.7	5.1
Sex									
Male . . . . .	57.4	58.1	57.0	31.2	30.5	31.2	10.8	10.3	10.7
Female . . . . .	44.9	45.9	45.2	15.1	15.2	15.2	3.0	3.1	3.3
Age and sex									
12–17 years . . . . .	17.6	16.5	16.6	10.7	9.9	10.3	2.5	2.4	2.4
Male . . . . .	17.4	15.9	16.3	11.4	10.4	10.7	3.1	3.0	2.8
Female . . . . .	17.9	17.2	17.0	9.9	9.4	9.9	1.9	1.8	1.9
Hispanic origin and race <sup>3</sup>									
Not Hispanic or Latino:									
White only . . . . .	55.0	56.5	55.8	23.4	23.4	24.1	7.5	7.4	7.8
Black or African American only . . . . .	39.9	40.8	40.0	21.0	20.3	19.1	4.4	4.2	4.6
American Indian or Alaska Native only . . . . .	44.7	42.4	37.2	27.9	32.8	31.0	8.7	11.5	9.0
Native Hawaiian or Other Pacific Islander only . . . . .	*	37.3	36.7	25.2	25.7	24.1	8.3	5.3	11.0
Asian only . . . . .	37.1	38.1	35.4	12.4	12.7	11.8	2.6	2.0	2.4
2 or more races . . . . .	49.9	47.3	47.1	19.8	20.8	22.8	7.5	5.6	6.3
Hispanic or Latino . . . . .	42.8	42.6	41.8	24.8	23.7	23.9	5.9	5.6	5.7

See footnotes at end of table.



**Table 66 (page 2 of 2). Use of selected substances in the past month among persons 12 years of age and over, by age, sex, race, and Hispanic origin: United States, 2002, 2005, and 2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population 12 years of age and over]

Age, sex, race, and Hispanic origin	Any tobacco <sup>6</sup>			Cigarettes			Cigars		
	2002	2005	2006	2002	2005	2006	2002	2005	2006
Percent of population									
12 years and over . . . . .	30.4	29.4	29.6	26.0	24.9	25.0	5.4	5.6	5.6
Age									
12–13 years . . . . .	3.8	3.0	2.2	3.2	2.4	1.7	0.7	0.7	0.5
14–15 years . . . . .	13.4	11.3	11.8	11.2	9.2	9.1	3.8	3.3	3.9
16–17 years . . . . .	29.0	24.8	24.2	24.9	20.6	19.9	9.3	8.6	7.9
18–25 years . . . . .	45.3	44.3	43.9	40.8	39.0	38.4	11.0	12.0	12.1
26–34 years . . . . .	38.2	37.7	39.8	32.7	33.0	34.1	6.6	6.8	8.1
35 years and over . . . . .	27.9	27.0	27.0	23.4	22.3	22.5	4.1	4.2	3.8
Sex									
Male . . . . .	37.0	35.8	36.4	28.7	27.4	27.8	9.4	9.6	9.3
Female . . . . .	24.3	23.4	23.3	23.4	22.5	22.4	1.7	1.8	2.1
Age and sex									
12–17 years . . . . .	15.2	13.1	12.9	13.0	10.8	10.4	4.5	4.2	4.1
Male . . . . .	16.0	14.2	14.0	12.3	10.7	10.0	6.2	5.8	5.5
Female . . . . .	14.4	11.9	11.8	13.6	10.8	10.7	2.7	2.5	2.7
Hispanic origin and race <sup>3</sup>									
Not Hispanic or Latino:									
White only . . . . .	32.0	31.2	31.4	26.9	26.0	26.1	5.5	5.9	5.7
Black or African American only . . . . .	28.8	28.4	29.1	25.3	24.5	24.4	6.8	6.4	7.2
American Indian or Alaska Native only . . . . .	44.3	41.7	42.3	37.1	36.0	38.1	5.2	10.6	7.8
Native Hawaiian or Other Pacific Islander only . . . . .	28.8	30.3	*	*	28.8	*	4.1	3.7	2.7
Asian only . . . . .	18.6	14.6	16.0	17.7	13.4	14.6	1.1	1.6	1.2
2 or more races . . . . .	38.1	33.9	34.2	35.0	30.9	30.5	5.5	7.8	6.9
Hispanic or Latino . . . . .	25.2	24.5	24.4	23.0	22.1	22.4	5.0	4.3	4.8

\* Estimates are considered unreliable. Data not shown if the relative standard error is greater than 17.5% of the log transformation of the proportion, the minimum effective sample size is less than 68, the minimum nominal sample size is less than 100, or the prevalence is close to 0% or 100%.

<sup>1</sup>Any illicit drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens (including LSD and PCP), inhalants, or any prescription-type psychotherapeutic drug used nonmedically.

<sup>2</sup>Nonmedical use of prescription-type psychotherapeutic drugs includes the nonmedical use of pain relievers, tranquilizers, stimulants, or sedatives and does not include over-the-counter drugs.

<sup>3</sup>Persons of Hispanic origin may be of any race. Race and Hispanic origin were collected using the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity. Single-race categories shown include persons who reported only one racial group. The category 2 or more races includes persons who reported more than one racial group. See [Appendix II, Hispanic origin; Race](#).

<sup>4</sup>Binge alcohol use is defined as drinking five or more drinks on the same occasion on at least one day in the past 30 days. Occasion is defined as at the same time or within a couple of hours of each other. See [Appendix II, Binge drinking](#).

<sup>5</sup>Heavy alcohol use is defined as drinking five or more drinks on the same occasion on each of five or more days in the past 30 days. By definition, all heavy alcohol users are also binge alcohol users.

<sup>6</sup>Any tobacco product includes cigarettes, smokeless tobacco (i.e., chewing tobacco or snuff), cigars, or pipe tobacco.

NOTES: The National Survey on Drug Use & Health (NSDUH), formerly called the National Household Survey on Drug Abuse (NHSDA), began a new baseline in 2002 and cannot be compared with previous years. Because of methodological differences among the National Survey on Drug Use & Health, the Monitoring the Future Study (MTF), and the Youth Risk Behavior Survey (YRBS), rates of substance use measured by these surveys are not directly comparable. See [Appendix I, MTF, NSDUH, and YRBS](#). Data for additional years are available. See [Appendix III](#).

SOURCE: Substance Abuse and Mental Health Services Administration, Office of Applied Studies, National Survey on Drug Use & Health. Available from: <http://www.oas.samhsa.gov/nsduh.htm>.



**Table 67 (page 1 of 3). Use of selected substances among high school seniors, tenth-, and eighth-graders, by sex and race: United States, selected years 1980–2007**

[Data are based on a survey of high school seniors, tenth-, and eighth-graders in the coterminous United States]

<i>Substance, grade in school, sex, and race</i>	1980	1985	1990	1991	1995	2000	2004	2005	2006	2007
<b>Cigarettes</b>										
Percent using substance in the past month										
All high school seniors . . . . .	30.5	30.1	29.4	28.3	33.5	31.4	25.0	23.2	21.6	21.6
Male . . . . .	26.8	28.2	29.1	29.0	34.5	32.8	25.3	24.8	22.4	23.1
Female. . . . .	33.4	31.4	29.2	27.5	32.0	29.7	24.1	20.7	20.1	19.6
White . . . . .	31.0	31.7	32.5	31.8	37.3	36.6	28.2	27.0	24.7	25.2
Black or African American . . . . .	25.2	18.7	12.0	9.4	15.0	13.6	11.3	10.0	11.0	10.6
All tenth-graders. . . . .	---	---	---	20.8	27.9	23.9	16.0	14.9	14.5	14.0
Male . . . . .	---	---	---	20.8	27.7	23.8	16.2	14.5	13.4	14.6
Female. . . . .	---	---	---	20.7	27.9	23.6	15.7	15.1	15.5	13.3
White . . . . .	---	---	---	23.9	31.2	27.3	18.1	17.0	16.3	16.1
Black or African American . . . . .	---	---	---	6.4	12.2	11.3	9.6	7.7	8.5	5.8
All eighth-graders . . . . .	---	---	---	14.3	19.1	14.6	9.2	9.3	8.7	7.1
Male . . . . .	---	---	---	15.5	18.8	14.3	8.3	8.7	8.1	7.5
Female. . . . .	---	---	---	13.1	19.0	14.7	9.9	9.7	8.9	6.4
White . . . . .	---	---	---	15.0	21.7	16.4	9.4	9.5	9.1	7.1
Black or African American . . . . .	---	---	---	5.3	8.2	8.4	7.5	6.7	5.4	4.8
<b>Marijuana</b>										
All high school seniors . . . . .	33.7	25.7	14.0	13.8	21.2	21.6	19.9	19.8	18.3	18.8
Male . . . . .	37.8	28.7	16.1	16.1	24.6	24.7	23.0	23.6	19.7	22.3
Female. . . . .	29.1	22.4	11.5	11.2	17.2	18.3	16.6	15.8	16.4	15.0
White . . . . .	34.2	26.4	15.6	15.0	21.5	22.0	21.5	21.7	19.2	19.9
Black or African American . . . . .	26.5	21.7	5.2	6.5	17.8	17.5	14.2	15.1	16.7	15.4
All tenth-graders. . . . .	---	---	---	8.7	17.2	19.7	15.9	15.2	14.2	14.2
Male . . . . .	---	---	---	10.1	19.2	23.3	17.4	16.7	15.7	15.8
Female. . . . .	---	---	---	7.3	15.0	16.2	14.2	13.4	12.6	12.5
White . . . . .	---	---	---	9.4	17.7	20.1	15.8	15.7	14.7	14.8
Black or African American . . . . .	---	---	---	3.8	15.1	17.0	17.2	13.5	14.2	11.0
All eighth-graders . . . . .	---	---	---	3.2	9.1	9.1	6.4	6.6	6.5	5.7
Male . . . . .	---	---	---	3.8	9.8	10.2	6.3	7.6	6.7	6.2
Female. . . . .	---	---	---	2.6	8.2	7.8	6.3	5.7	6.0	4.9
White . . . . .	---	---	---	3.0	9.0	8.3	5.5	6.0	5.7	5.1
Black or African American . . . . .	---	---	---	2.1	7.0	8.5	8.1	8.2	6.7	6.0
<b>Cocaine</b>										
All high school seniors . . . . .	5.2	6.7	1.9	1.4	1.8	2.1	2.3	2.3	2.5	2.0
Male . . . . .	6.0	7.7	2.3	1.7	2.2	2.7	2.9	2.6	3.0	2.4
Female. . . . .	4.3	5.6	1.3	0.9	1.3	1.6	1.7	1.8	2.1	1.5
White . . . . .	5.4	7.0	1.8	1.3	1.7	2.2	2.5	2.3	2.6	2.3
Black or African American . . . . .	2.0	2.7	0.5	0.8	0.4	1.0	0.9	0.5	1.0	0.5
All tenth-graders. . . . .	---	---	---	0.7	1.7	1.8	1.7	1.5	1.5	1.3
Male . . . . .	---	---	---	0.7	1.8	2.1	1.9	1.9	1.6	1.4
Female. . . . .	---	---	---	0.6	1.5	1.4	1.4	1.2	1.3	1.1
White . . . . .	---	---	---	0.6	1.7	1.7	1.7	1.5	1.5	1.2
Black or African American . . . . .	---	---	---	0.2	0.4	0.4	0.4	0.8	0.7	0.4
All eighth-graders . . . . .	---	---	---	0.5	1.2	1.2	0.9	1.0	1.0	0.9
Male . . . . .	---	---	---	0.7	1.1	1.3	0.8	0.9	1.0	0.7
Female. . . . .	---	---	---	0.4	1.2	1.1	1.0	1.0	0.9	1.0
White . . . . .	---	---	---	0.4	1.0	1.1	0.8	0.9	0.8	0.6
Black or African American . . . . .	---	---	---	0.4	0.4	0.5	0.8	0.3	0.4	0.6

See footnotes at end of table.

**Table 67 (page 2 of 3). Use of selected substances among high school seniors, tenth-, and eighth-graders, by sex and race: United States, selected years 1980–2007**

[Data are based on a survey of high school seniors, tenth-, and eighth-graders in the coterminous United States]

<i>Substance, grade in school, sex, and race</i>	1980	1985	1990	1991	1995	2000	2004	2005	2006	2007
Inhalants										
Percent using substance in the past month										
All high school seniors . . . . .	1.4	2.2	2.7	2.4	3.2	2.2	1.5	2.0	1.5	1.2
Male . . . . .	1.8	2.8	3.5	3.3	3.9	2.9	1.7	2.4	1.5	1.5
Female. . . . .	1.0	1.7	2.0	1.6	2.5	1.7	1.3	1.6	1.4	0.9
White . . . . .	1.4	2.4	3.0	2.4	3.7	2.1	1.6	2.1	1.5	1.2
Black or African American . . . . .	1.0	0.8	1.5	1.5	1.1	2.1	1.0	1.4	1.2	0.9
All tenth-graders. . . . .	---	---	---	2.7	3.5	2.6	2.4	2.2	2.3	2.5
Male . . . . .	---	---	---	2.9	3.8	3.0	2.4	1.9	2.2	2.7
Female. . . . .	---	---	---	2.6	3.2	2.2	2.3	2.5	2.4	2.4
White . . . . .	---	---	---	2.9	3.9	2.8	2.6	2.2	2.4	2.6
Black or African American . . . . .	---	---	---	2.0	1.2	1.5	1.4	1.4	1.8	1.5
All eighth-graders . . . . .	---	---	---	4.4	6.1	4.5	4.5	4.2	4.1	3.9
Male . . . . .	---	---	---	4.1	5.6	4.1	4.0	3.1	3.6	3.4
Female. . . . .	---	---	---	4.7	6.6	4.8	5.1	5.3	4.7	4.3
White . . . . .	---	---	---	4.5	7.0	4.8	4.4	4.0	4.2	3.6
Black or African American . . . . .	---	---	---	2.3	2.3	2.3	3.8	2.9	2.7	2.8
MDMA (Ecstasy)										
All high school seniors . . . . .	---	---	---	---	---	3.6	1.2	1.0	1.3	1.6
Male . . . . .	---	---	---	---	---	4.1	1.6	1.0	1.5	1.5
Female. . . . .	---	---	---	---	---	3.1	0.9	1.0	1.1	1.6
White . . . . .	---	---	---	---	---	3.9	1.2	1.0	1.4	1.7
Black or African American . . . . .	---	---	---	---	---	1.9	1.1	0.9	0.6	0.8
All tenth-graders. . . . .	---	---	---	---	---	2.6	0.8	1.0	1.2	1.2
Male . . . . .	---	---	---	---	---	2.5	1.0	1.0	1.5	1.3
Female. . . . .	---	---	---	---	---	2.5	0.6	0.9	0.8	1.1
White . . . . .	---	---	---	---	---	2.5	0.9	1.0	1.3	1.4
Black or African American . . . . .	---	---	---	---	---	1.8	0.1	0.3	1.0	0.4
All eighth-graders . . . . .	---	---	---	---	---	1.4	0.8	0.6	0.7	0.6
Male . . . . .	---	---	---	---	---	1.6	0.7	0.8	0.5	0.7
Female. . . . .	---	---	---	---	---	1.2	0.9	0.4	0.8	0.6
White . . . . .	---	---	---	---	---	1.4	0.6	0.6	0.5	0.5
Black or African American . . . . .	---	---	---	---	---	0.8	1.2	0.9	0.7	0.8
Alcohol <sup>1</sup>										
All high school seniors . . . . .	72.0	65.9	57.1	54.0	51.3	50.0	48.0	47.0	45.3	44.4
Male . . . . .	77.4	69.8	61.3	58.4	55.7	54.0	51.1	50.7	47.3	47.1
Female. . . . .	66.8	62.1	52.3	49.0	47.0	46.1	45.1	43.3	43.0	41.4
White . . . . .	75.8	70.2	62.2	57.7	54.8	55.3	52.5	52.2	49.1	49.4
Black or African American . . . . .	47.7	43.6	32.9	34.4	37.4	29.3	29.2	28.8	29.5	27.9
All tenth-graders. . . . .	---	---	---	42.8	38.8	41.0	35.2	33.2	33.8	33.4
Male . . . . .	---	---	---	45.5	39.7	43.3	36.3	32.8	33.8	33.4
Female. . . . .	---	---	---	40.3	37.8	38.6	34.0	33.6	33.8	33.3
White . . . . .	---	---	---	45.7	41.3	44.3	37.3	36.7	36.0	35.7
Black or African American . . . . .	---	---	---	30.2	24.9	24.7	25.4	20.8	22.4	21.0
All eighth-graders . . . . .	---	---	---	25.1	24.6	22.4	18.6	17.1	17.2	15.9
Male . . . . .	---	---	---	26.3	25.0	22.5	17.9	16.2	16.3	15.6
Female. . . . .	---	---	---	23.8	24.0	22.0	19.0	17.9	17.6	16.0
White . . . . .	---	---	---	26.0	25.4	23.9	18.6	17.3	16.5	14.7
Black or African American . . . . .	---	---	---	17.8	17.3	15.1	16.0	13.9	12.4	12.3

See footnotes at end of table.

**Table 67 (page 3 of 3). Use of selected substances among high school seniors, tenth-, and eighth-graders, by sex and race: United States, selected years 1980–2007**

[Data are based on a survey of high school seniors, tenth-, and eighth-graders in the coterminous United States]

<i>Substance, grade in school, sex, and race</i>	1980	1985	1990	1991	1995	2000	2004	2005	2006	2007
Binge drinking <sup>2</sup>										
Percent in last 2 weeks										
All high school seniors . . . . .	41.2	36.7	32.2	29.8	29.8	30.0	29.2	27.1	25.4	25.9
Male . . . . .	52.1	45.3	39.1	37.8	36.9	36.7	34.3	32.6	28.9	30.7
Female . . . . .	30.5	28.2	24.4	21.2	23.0	23.5	24.2	21.6	21.5	21.5
White . . . . .	44.6	40.1	36.2	32.9	32.9	34.4	33.1	31.8	28.9	30.5
Black or African American . . . . .	17.0	16.7	11.6	11.8	15.5	11.0	11.7	10.9	11.9	11.0
All tenth-graders . . . . .	---	---	---	22.9	24.0	26.2	22.0	21.0	21.9	21.9
Male . . . . .	---	---	---	26.4	26.4	29.8	23.8	22.0	22.9	23.4
Female . . . . .	---	---	---	19.5	21.5	22.5	20.2	19.9	20.9	20.4
White . . . . .	---	---	---	24.4	25.7	28.5	23.7	23.3	23.5	23.9
Black or African American . . . . .	---	---	---	14.4	12.3	12.9	11.5	10.6	12.2	12.5
All eighth-graders . . . . .	---	---	---	12.9	14.5	14.1	11.4	10.5	10.9	10.3
Male . . . . .	---	---	---	14.3	15.1	14.4	10.8	10.2	10.5	10.4
Female . . . . .	---	---	---	11.4	13.9	13.6	11.8	10.6	10.8	10.0
White . . . . .	---	---	---	12.6	14.5	14.6	11.2	10.3	10.1	9.2
Black or African American . . . . .	---	---	---	9.9	10.0	9.3	8.6	7.9	8.0	7.4

--- Data not available.

0.0 Quantity more than zero but less than 0.05.

<sup>1</sup>In 1993, the alcohol question was changed to indicate that a drink meant more than a few sips. Data for 1993, available in the spreadsheet version of this table, are based on a half sample. See [Appendix II, Alcohol consumption](#).

<sup>2</sup>Five or more alcoholic drinks in a row at least once in the prior 2-week period. See [Appendix II, Binge drinking](#).

NOTES: Estimates for Hispanic students are not shown due to small sample size. For 2-year estimates for Hispanic students, see Johnson LD, O'Malley PM, Bachman JG, Schulenberg JE. Monitoring the Future national results on adolescent drug use: Overview of key findings, 2005. NIH Pub No. 06-5882, 2006. Bethesda, MD: National Institute on Drug Abuse, available from <http://www.nida.nih.gov/PDF/overview2005.pdf>. Because of methodological differences among the National Survey on Drug Use & Health (NSDUH), the Monitoring the Future Study (MTF), and the Youth Risk Behavior Survey (YRBS), rates of substance use measured by these surveys are not directly comparable. See [Appendix I, NSDUH, MTF, and YRBS](#). Data for additional years are available. See [Appendix III](#).

SOURCE: National Institutes of Health, National Institute on Drug Abuse (NIDA), Monitoring the Future Study, annual surveys.

**Table 68 (page 1 of 3). Lifetime alcohol drinking status among adults 18 years of age and over, by selected characteristics: United States, selected years 1997–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Lifetime alcohol drinking status <sup>1</sup>											
	Current drinker				Former drinker				Lifetime abstainer			
	1997	2000	2005	2006	1997	2000	2005	2006	1997	2000	2005	2006
	Percent of adults											
18 years and over, age-adjusted <sup>2</sup>	63.1	61.4	61.4	60.8	15.7	14.4	14.3	14.1	21.2	24.2	24.4	25.0
18 years and over, crude	63.4	61.6	61.4	60.8	15.5	14.3	14.3	14.3	21.1	24.1	24.3	24.9
Both sexes												
Age												
All persons:												
18–44 years	69.4	67.3	66.4	65.8	10.6	9.7	8.8	9.3	19.9	23.1	24.8	24.9
18–24 years	62.2	59.1	58.1	59.3	5.9	5.2	4.4	4.6	31.8	35.7	37.5	36.1
25–44 years	71.6	69.9	69.2	68.1	12.0	11.1	10.3	10.9	16.4	19.1	20.5	21.0
45–64 years	63.3	62.0	62.6	61.5	18.5	16.8	17.3	17.2	18.3	21.1	20.1	21.3
45–54 years	67.1	65.1	66.3	64.9	16.8	15.0	15.1	14.6	16.1	20.0	18.6	20.4
55–64 years	57.3	57.3	57.3	56.8	21.1	19.7	20.4	20.8	21.6	22.9	22.2	22.4
65 years and over	43.4	42.1	43.1	43.7	26.7	25.0	25.8	23.6	29.9	33.0	31.1	32.7
65–74 years	48.6	47.0	47.7	48.2	24.8	23.8	25.1	22.2	26.6	29.3	27.3	29.5
75 years and over	36.6	36.2	38.0	38.5	29.1	26.4	26.6	25.1	34.3	37.4	35.4	36.4
Race <sup>2,3</sup>												
White only	66.0	64.5	64.4	63.8	15.2	14.2	14.1	14.0	18.7	21.3	21.5	22.2
Black or African American only	47.8	46.7	46.4	48.5	21.0	17.1	16.4	16.0	31.1	36.1	37.2	35.5
American Indian or Alaska Native only	53.9	54.2	50.0	52.8	22.9	21.7	18.9	19.9	23.2	*24.1	31.1	27.3
Asian only	45.8	43.0	42.9	43.0	8.8	9.2	9.5	9.3	45.3	47.8	47.6	47.7
Native Hawaiian or Other Pacific Islander only	---	*	*	*	---	*	*	*	---	*	*	*
2 or more races	---	61.4	51.6	55.0	---	19.5	22.6	26.6	---	19.1	25.8	18.4
Hispanic origin and race <sup>2,3</sup>												
Hispanic or Latino	53.4	52.4	50.8	50.5	14.7	12.4	13.8	13.6	32.0	35.2	35.4	35.9
Mexican	53.0	51.0	48.1	49.0	14.4	13.4	14.8	14.5	32.6	35.6	37.0	36.4
Not Hispanic or Latino	64.1	62.6	62.9	62.5	15.8	14.6	14.3	14.2	20.1	22.8	22.7	23.3
White only	67.5	65.9	67.0	66.4	15.4	14.4	14.1	14.0	17.1	19.7	18.9	19.6
Black or African American only	47.8	46.7	46.0	48.4	21.0	17.1	16.5	16.1	31.2	36.2	37.5	35.4
Percent of poverty level <sup>2,4</sup>												
Below 100%	46.1	45.3	43.3	46.0	20.2	18.8	19.2	19.1	33.6	35.9	37.5	34.9
100%–less than 200%	52.8	50.6	49.2	51.2	20.1	17.9	18.2	18.0	27.1	31.5	32.6	30.8
200% or more	68.7	66.3	67.1	65.9	13.9	12.9	12.6	12.4	17.4	20.8	20.3	21.7
Male												
Age												
18 years and over, age-adjusted <sup>2</sup>	69.8	67.6	67.5	67.4	16.2	14.8	14.6	14.9	14.0	17.5	17.9	17.8
18 years and over, crude	70.5	68.2	67.8	67.6	15.6	14.3	14.3	14.8	14.0	17.5	17.9	17.7
Age												
18–44 years	74.8	73.0	72.0	71.4	9.8	8.5	7.6	9.1	15.4	18.5	20.4	19.6
18–24 years	66.7	63.6	62.7	64.2	5.3	3.5	3.3	4.2	28.0	32.8	34.0	31.6
25–44 years	77.2	76.0	75.3	73.9	11.1	10.2	9.0	10.7	11.6	13.9	15.7	15.4
45–64 years	70.8	68.1	68.0	67.3	19.2	17.2	18.5	18.6	10.1	14.7	13.5	14.1
45–54 years	73.8	70.3	71.0	69.8	17.2	15.5	16.1	15.7	9.0	14.2	12.9	14.5
55–64 years	65.8	64.5	63.8	63.8	22.3	20.0	22.0	22.8	11.8	15.4	14.2	13.4
65 years and over	52.7	50.2	52.0	54.4	31.4	30.2	29.2	26.1	15.8	19.6	18.8	19.4
65–74 years	56.7	52.7	55.1	58.5	29.7	28.2	27.3	23.7	13.5	19.1	17.6	17.7
75 years and over	46.7	46.7	47.8	48.8	34.0	33.1	31.7	29.4	19.3	20.3	20.4	21.8
Race <sup>2,3</sup>												
White only	71.8	69.7	69.8	69.4	15.8	14.7	14.5	14.7	12.4	15.7	15.6	15.9
Black or African American only	56.9	56.2	56.2	58.7	22.6	17.2	15.9	15.8	20.5	26.6	27.9	25.6
American Indian or Alaska Native only	66.1	62.4	54.1	57.3	*17.8	*23.3	*23.8	26.1	*16.1	*	*22.1	*
Asian only	60.2	55.9	53.5	55.9	10.1	10.3	10.9	11.9	29.8	33.8	35.6	32.3
Native Hawaiian or Other Pacific Islander only	---	*	*	*	---	*	*	*	---	*	*	*
2 or more races	---	70.5	55.7	59.5	---	*19.4	21.5	29.3	---	*10.1	*22.8	*11.2

See footnotes at end of table.

**Table 68 (page 2 of 3). Lifetime alcohol drinking status among adults 18 years of age and over, by selected characteristics: United States, selected years 1997–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Lifetime alcohol drinking status <sup>1</sup>											
	Current drinker				Former drinker				Lifetime abstainer			
	1997	2000	2005	2006	1997	2000	2005	2006	1997	2000	2005	2006
Percent of adults												
Hispanic origin and race <sup>2,3</sup>												
Hispanic or Latino . . . . .	64.6	63.8	61.8	62.6	17.5	14.2	15.9	15.1	17.9	22.0	22.3	22.3
Mexican . . . . .	66.9	64.5	61.3	61.5	17.3	15.1	17.0	16.5	15.9	20.5	21.7	22.0
Not Hispanic or Latino . . . . .	70.2	68.2	68.3	68.2	16.2	14.9	14.4	14.9	13.6	16.9	17.2	16.9
White only . . . . .	72.7	70.4	71.4	70.8	15.7	14.7	14.4	14.7	11.6	14.9	14.2	14.5
Black or African American only . . . . .	57.1	56.4	55.8	58.8	22.3	17.1	15.8	16.0	20.5	26.5	28.4	25.2
Percent of poverty level <sup>2,4</sup>												
Below 100% . . . . .	57.2	55.3	53.5	56.4	21.8	18.7	20.3	20.7	21.1	26.0	26.1	22.9
100%–less than 200% . . . . .	60.6	59.0	56.3	58.5	21.5	20.2	19.4	19.4	17.9	20.8	24.2	22.2
200% or more . . . . .	73.7	71.0	71.6	70.9	14.3	13.1	12.8	13.2	11.9	15.9	15.5	15.9
Female												
18 years and over, age-adjusted <sup>2</sup> . . . . .	57.0	55.8	55.8	54.9	15.3	14.2	14.1	13.5	27.6	30.0	30.1	31.5
18 years and over, crude . . . . .	57.0	55.5	55.4	54.5	15.4	14.4	14.4	13.8	27.7	30.1	30.2	31.7
Age												
18–44 years . . . . .	64.2	61.7	60.9	60.4	11.5	10.7	10.0	9.5	24.3	27.5	29.2	30.1
18–24 years . . . . .	57.7	54.6	53.7	54.5	6.6	6.8	5.4	5.0	35.7	38.5	41.0	40.5
25–44 years . . . . .	66.1	64.0	63.3	62.4	12.9	12.0	11.6	11.0	21.0	24.1	25.1	26.6
45–64 years . . . . .	56.2	56.4	57.5	56.1	17.9	16.5	16.2	15.9	25.9	27.2	26.3	28.0
45–54 years . . . . .	60.7	60.1	61.9	60.3	16.4	14.5	14.1	13.6	22.9	25.4	24.0	26.1
55–64 years . . . . .	49.4	50.7	51.5	50.4	20.0	19.5	19.0	19.0	30.5	29.8	29.6	30.6
65 years and over . . . . .	36.6	36.2	36.5	35.6	23.2	21.2	23.2	21.7	40.2	42.5	40.3	42.7
65–74 years . . . . .	42.0	42.3	41.3	39.4	20.9	20.2	23.2	21.0	37.1	37.5	35.5	39.6
75 years and over . . . . .	30.2	29.8	31.7	31.8	25.9	22.3	23.2	22.4	43.8	47.9	45.1	45.8
Race <sup>2,3</sup>												
White only . . . . .	60.7	59.8	59.4	58.6	15.0	14.0	13.9	13.4	24.3	26.2	26.7	28.0
Black or African American only . . . . .	40.9	39.5	38.8	40.4	19.9	17.2	16.8	16.3	39.3	43.3	44.4	43.2
American Indian or Alaska Native only . . . . .	45.2	47.0	47.7	48.1	26.1	*20.3	*15.3	*14.4	28.7	32.7	37.0	37.5
Asian only . . . . .	31.6	29.3	32.4	31.3	8.1	8.0	8.6	7.0	60.3	62.7	59.0	61.7
Native Hawaiian or Other Pacific Islander only . . . . .	---	*	*	*	---	*	*	*	---	*	*	*
2 or more races . . . . .	---	52.5	48.2	52.9	---	19.1	23.5	24.2	---	28.4	28.3	22.9
Hispanic origin and race <sup>2,3</sup>												
Hispanic or Latino . . . . .	42.1	41.2	39.7	38.2	12.5	11.2	12.3	12.6	45.4	47.6	48.0	49.2
Mexican . . . . .	38.9	36.9	34.8	35.2	11.6	12.2	13.2	12.6	49.4	50.8	51.9	52.3
Not Hispanic or Latino . . . . .	58.7	57.6	58.1	57.5	15.6	14.5	14.3	13.6	25.7	27.9	27.6	28.9
White only . . . . .	62.9	61.9	63.0	62.4	15.2	14.3	14.0	13.5	21.9	23.8	23.0	24.1
Black or African American only . . . . .	40.7	39.3	38.5	40.3	20.0	17.2	17.0	16.3	39.3	43.5	44.5	43.4
Percent of poverty level <sup>2,4</sup>												
Below 100% . . . . .	39.1	38.5	36.3	38.6	19.9	19.2	18.9	18.4	41.1	42.2	44.8	43.0
100%–less than 200% . . . . .	46.0	43.4	43.2	45.0	19.5	16.4	17.6	17.0	34.5	40.1	39.2	38.0
200% or more . . . . .	63.7	61.7	62.7	60.9	13.5	12.9	12.4	11.7	22.7	25.4	24.9	27.4

See footnotes at end of table.

## Table 68 (page 3 of 3). Lifetime alcohol drinking status among adults 18 years of age and over, by selected characteristics: United States, selected years 1997–2006

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

-- Data not available.

<sup>1</sup>Lifetime alcohol drinking status categories are based on self-reported responses to questions about alcohol consumption. Current drinkers had at least 12 drinks in their lifetime and at least one drink in the past year. Former drinkers had at least 12 drinks in their lifetime and none in the past year. Lifetime abstainers had fewer than 12 drinks in their lifetime. See [Appendix II, Alcohol consumption](#).

<sup>2</sup>Estimates are age-adjusted to the year 2000 standard population using four age groups: 18–24 years, 25–44 years, 45–64 years, and 65 years and over. Age-adjusted estimates in this table may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

<sup>3</sup>The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

<sup>4</sup>Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 26%–30% of adults 18 years of age and over in 1997–1998 and 32%–35% in 1999–2006. See [Appendix II, Family income; Poverty](#).

NOTES: Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health Interview Survey, family core and sample adult questionnaires.

**Table 69 (page 1 of 3). Heavier drinking and drinking five or more drinks in a day among adults 18 years of age and over, by selected characteristics: United States, selected years 1997–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Heavier drinker <sup>1</sup>				Five or more drinks in a day on at least 1 day in the past year <sup>1</sup>				Five or more drinks in a day on at least 12 days in the past year <sup>1</sup>			
	1997	2000	2005	2006	1997	2000	2005	2006	1997	2000	2005	2006
	Percent of adults											
18 years and over, age-adjusted <sup>2</sup> . . . . .	4.9	4.3	4.8	5.0	21.1	19.2	20.1	20.2	9.7	8.7	8.9	9.2
18 years and over, crude . . . . .	5.0	4.3	4.9	5.0	21.5	19.3	19.9	20.0	9.8	8.7	8.8	9.1
Both sexes												
Age												
All persons:												
18–44 years . . . . .	5.2	4.7	5.2	5.1	29.2	26.9	28.5	27.6	13.2	12.2	12.7	12.7
18–24 years . . . . .	5.3	5.8	6.6	6.0	31.8	30.3	31.4	31.3	15.2	15.5	15.7	15.9
25–44 years . . . . .	5.2	4.3	4.8	4.8	28.5	25.8	27.5	26.3	12.6	11.1	11.6	11.6
45–64 years . . . . .	5.5	4.6	5.2	5.7	15.9	14.4	14.7	16.1	7.6	6.4	6.3	7.2
45–54 years . . . . .	5.5	4.4	5.4	6.2	19.0	16.4	17.5	19.3	8.7	7.0	7.7	8.6
55–64 years . . . . .	5.4	5.0	4.9	4.9	11.1	11.3	10.8	11.8	5.8	5.4	4.4	5.2
65 years and over . . . . .	3.1	2.6	3.0	3.6	4.9	3.8	3.6	4.5	2.2	1.8	1.7	2.1
65–74 years . . . . .	3.9	3.1	4.0	4.7	6.7	5.2	5.4	6.5	3.0	2.5	2.7	3.2
75 years and over . . . . .	2.1	2.0	2.0	2.4	2.4	2.1	1.6	2.1	1.1	*0.9	*0.7	*0.9
Race <sup>2,3</sup>												
White only . . . . .	5.2	4.5	5.2	5.4	22.9	20.8	21.9	22.3	10.3	9.2	9.6	10.0
Black or African American only . . . . .	4.0	3.5	3.0	3.5	11.7	11.6	12.0	11.7	6.5	6.5	5.6	6.2
American Indian or Alaska Native only . . . . .	*	*	*	*	29.2	23.7	22.8	22.7	17.4	*12.1	*11.9	*12.2
Asian only . . . . .	*1.9	*2.3	*2.1	*1.3	11.4	8.8	9.8	8.7	*4.8	3.6	3.8	3.7
Native Hawaiian or Other Pacific Islander only . . . . .	---	*	*	*	---	*	*	*	---	*	*	*
2 or more races . . . . .	---	*7.5	*5.0	*5.8	---	28.0	18.8	21.4	---	15.9	*9.0	*9.4
Hispanic origin and race <sup>2,3</sup>												
Hispanic or Latino . . . . .	3.9	3.2	2.4	2.8	20.4	17.3	17.4	16.7	11.2	9.0	8.4	8.4
Mexican . . . . .	4.4	3.8	2.5	2.6	21.2	19.9	18.5	18.5	12.6	10.8	9.9	9.6
Not Hispanic or Latino . . . . .	5.1	4.5	5.2	5.3	21.3	19.7	20.7	20.8	9.5	8.8	9.0	9.4
White only . . . . .	5.4	4.7	5.8	5.9	23.5	21.5	23.0	23.5	10.3	9.3	9.9	10.4
Black or African American only . . . . .	3.9	3.4	3.0	3.5	11.6	11.5	11.7	11.7	6.5	6.5	5.6	6.2
Percent of poverty level <sup>2,4</sup>												
Below 100% . . . . .	4.8	4.3	4.2	4.4	17.3	15.0	15.3	16.2	9.7	8.6	8.1	8.4
100%–less than 200% . . . . .	4.9	4.2	4.5	4.2	18.4	15.7	15.9	17.4	9.8	8.0	8.4	8.8
200% or more . . . . .	5.0	4.3	5.1	5.3	22.6	20.6	21.9	21.5	9.7	8.9	9.1	9.5
Male												
18 years and over, age-adjusted <sup>2</sup> . . . . .	6.1	5.1	5.6	5.5	30.7	28.3	28.5	28.0	15.8	14.4	14.2	14.4
18 years and over, crude . . . . .	6.1	5.2	5.6	5.5	31.7	29.0	28.8	28.3	16.3	14.7	14.4	14.6
Age												
All persons:												
18–44 years . . . . .	6.5	5.6	6.2	5.9	40.6	37.8	39.0	37.0	21.1	19.6	19.8	19.2
18–24 years . . . . .	6.0	6.3	8.1	6.4	40.6	38.0	41.4	39.3	22.9	22.9	22.8	21.7
25–44 years . . . . .	6.6	5.3	5.6	5.7	40.6	37.7	38.1	36.2	20.6	18.5	18.8	18.3
45–64 years . . . . .	6.6	5.5	5.8	5.8	25.3	23.5	22.3	23.8	12.7	11.3	10.6	12.1
45–54 years . . . . .	6.6	5.7	5.9	6.3	29.4	26.3	25.9	26.9	14.5	12.3	12.7	13.9
55–64 years . . . . .	6.6	5.4	5.6	5.0	18.9	19.0	17.1	19.4	10.0	9.8	7.5	9.7
65 years and over . . . . .	3.7	3.1	3.1	3.6	9.3	7.4	6.9	7.8	4.7	3.7	3.5	3.8
65–74 years . . . . .	4.8	3.9	4.0	4.9	12.2	9.5	9.6	10.9	6.1	4.9	5.0	5.3
75 years and over . . . . .	*2.1	*2.0	*2.1	*1.9	5.1	4.4	3.4	3.8	*2.5	*2.0	*1.4	*1.9
Race <sup>2,3</sup>												
White only . . . . .	6.3	5.1	5.8	5.8	32.8	29.9	30.4	30.3	16.7	14.9	15.2	15.5
Black or African American only . . . . .	5.3	5.4	4.4	4.4	18.4	19.8	20.0	19.2	11.0	12.4	10.5	11.6
American Indian or Alaska Native only . . . . .	*	*	*	*	45.7	29.2	30.1	30.6	30.4	*14.0	*19.0	*
Asian only . . . . .	*2.3	*3.5	*	*1.8	17.8	14.1	13.6	13.4	*7.5	*5.9	*5.7	5.7
Native Hawaiian or Other Pacific Islander only . . . . .	---	*	*	*	---	*	*	*	---	*	*	*
2 or more races . . . . .	---	*12.1	*	*	---	39.2	28.2	25.1	---	23.7	*13.2	*12.1

See footnotes at end of table.

**Table 69 (page 2 of 3). Heavier drinking and drinking five or more drinks in a day among adults 18 years of age and over, by selected characteristics: United States, selected years 1997–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Heavier drinker <sup>1</sup>				Five or more drinks in a day on at least 1 day in the past year <sup>1</sup>				Five or more drinks in a day on at least 12 days in the past year <sup>1</sup>			
	1997	2000	2005	2006	1997	2000	2005	2006	1997	2000	2005	2006
Hispanic origin and race <sup>2,3</sup>												
Percent of adults												
Hispanic or Latino . . . . .	5.7	5.2	3.8	4.0	30.9	27.9	27.4	25.5	18.8	15.9	14.4	13.5
Mexican . . . . .	6.9	6.6	4.2	4.1	34.2	32.2	29.7	28.9	21.9	19.1	17.3	15.8
Not Hispanic or Latino . . . . .	6.1	5.2	5.9	5.8	30.7	28.6	28.8	28.6	15.5	14.3	14.3	14.7
White only . . . . .	6.4	5.2	6.3	6.3	33.3	30.6	31.4	31.4	16.6	15.0	15.5	16.0
Black or African American only . . . . .	5.3	5.4	4.4	4.5	18.4	19.7	19.6	19.2	11.1	12.3	10.4	11.5
Percent of poverty level <sup>2,4</sup>												
Below 100% . . . . .	6.8	6.4	6.2	5.9	26.9	24.8	24.4	24.4	16.5	15.7	14.4	14.7
100%–less than 200% . . . . .	7.1	5.8	6.0	5.7	27.3	23.6	23.7	24.3	16.4	13.3	14.0	14.1
200% or more . . . . .	5.7	4.8	5.4	5.4	32.1	29.6	30.1	29.2	15.6	14.5	14.2	14.4
Female												
18 years and over, age-adjusted <sup>2</sup> . . . . .	3.9	3.5	4.1	4.5	12.2	10.8	12.2	12.8	3.9	3.4	3.8	4.3
18 years and over, crude . . . . .	3.9	3.5	4.1	4.6	12.1	10.6	11.8	12.3	3.9	3.3	3.7	4.1
Age												
All persons:												
18–44 years . . . . .	4.0	3.8	4.3	4.2	18.3	16.5	18.3	18.4	5.5	5.2	5.7	6.4
18–24 years . . . . .	4.5	5.2	5.0	5.6	23.0	22.8	21.6	23.5	7.6	8.3	8.8	10.3
25–44 years . . . . .	3.9	3.4	4.0	3.8	16.9	14.5	17.2	16.7	4.9	4.2	4.7	5.1
45–64 years . . . . .	4.4	3.8	4.6	5.5	7.2	6.0	7.7	9.0	2.9	1.9	2.4	2.6
45–54 years . . . . .	4.5	3.2	5.0	6.1	9.2	7.1	9.6	12.1	3.3	2.1	3.0	3.6
55–64 years . . . . .	4.4	4.6	4.2	4.8	4.1	4.4	5.2	4.9	2.1	1.5	1.6	*1.3
65 years and over . . . . .	2.6	2.2	3.0	3.6	1.6	1.2	1.1	1.9	*0.4	*0.4	*	*0.8
65–74 years . . . . .	3.1	2.5	4.0	*4.5	2.3	1.7	1.8	2.8	*	*	*	*1.4
75 years and over . . . . .	2.0	1.9	1.9	*2.7	*0.7	*	*	*	*	*	*	*
Race <sup>2,3</sup>												
White only . . . . .	4.2	4.0	4.6	5.0	13.5	12.1	13.6	14.5	4.2	3.7	4.2	4.8
Black or African American only . . . . .	2.9	2.0	1.9	2.7	6.5	5.2	5.5	5.7	2.9	1.9	1.7	2.0
American Indian or Alaska Native only . . . . .	*	*	*	*	18.1	*19.0	*16.6	*14.1	*	*	*	*
Asian only . . . . .	*	*	*	*	*5.2	*3.7	*5.9	*4.5	*	*	*	*
Native Hawaiian or Other Pacific Islander only . . . . .	---	*	*	*	---	*	*	*	---	*	*	*
2 or more races . . . . .	---	*	*	*	---	17.0	*10.7	17.1	---	*8.2	*	*
Hispanic origin and race <sup>2,3</sup>												
Hispanic or Latino . . . . .	2.2	1.2	1.0	*1.7	9.7	6.8	7.2	7.7	3.5	2.1	2.2	3.1
Mexican . . . . .	*1.9	*1.1	*0.9	*	8.2	7.1	7.1	6.9	3.2	*2.2	2.3	2.5
Not Hispanic or Latino . . . . .	4.1	3.8	4.6	4.9	12.6	11.5	13.1	13.7	4.0	3.6	4.1	4.5
White only . . . . .	4.4	4.3	5.2	5.5	14.2	13.0	15.1	16.0	4.3	4.0	4.7	5.1
Black or African American only . . . . .	2.9	2.0	1.9	2.7	6.2	5.2	5.4	5.6	2.9	1.9	1.7	2.0
Percent of poverty level <sup>2,4</sup>												
Below 100% . . . . .	3.6	2.8	2.8	3.5	10.8	8.2	9.0	10.2	5.1	3.6	3.7	3.8
100%–less than 200% . . . . .	3.1	2.9	3.2	2.9	10.5	9.0	9.3	11.0	4.0	3.5	3.7	3.8
200% or more . . . . .	4.2	3.8	4.7	5.2	13.1	11.7	13.7	13.8	3.7	3.4	3.9	4.6

See footnotes at end of table.



**Table 69 (page 3 of 3). Heavier drinking and drinking five or more drinks in a day among adults 18 years of age and over, by selected characteristics: United States, selected years 1997–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

- - - Data not available.

<sup>1</sup>Heavier drinking is based on self-reported responses to questions about average alcohol consumption and is defined as more than 14 drinks per week for men and more than seven drinks per week for women on average. (Most drinking guidelines consider more than seven drinks per week to be a heavier level of consumption for women. U.S. Department of Agriculture: Dietary Guidelines for Americans, 2000, 5th edition.) Respondents were also asked, “In the past year, on how many days did you have five or more drinks of any alcoholic beverage?” See [Appendix II, Alcohol consumption](#).

<sup>2</sup>Estimates are age-adjusted to the year 2000 standard population using four age groups: 18–24 years, 25–44 years, 45–64 years, and 65 years and over. Age-adjusted estimates in this table may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

<sup>3</sup>The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

<sup>4</sup>Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 26%–30% of adults 18 years of age and over in 1997–1998 and 32%–35% in 1999–2006. See [Appendix II, Family income; Poverty](#).

NOTES: Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. For more data on alcohol consumption see the Early Release reports on the National Health Interview Survey home page: <http://www.cdc.gov/nchs/nhis.htm>. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health Interview Survey, family core and sample adult questionnaires.

**Table 70. Selected health conditions and risk factors: United States, 1988–1994 through 2005–2006**

[Data are based on interviews and physical examinations of a sample of the civilian noninstitutionalized population]

Health conditions	1988–1994	1999–2000	2001–2002	2003–2004	2005–2006
Diabetes <sup>1</sup>					
Percent of persons 20 years of age and over					
Total, age-adjusted <sup>2</sup>	8.0	8.8	10.0	10.4	10.1
Total, crude.	7.8	8.3	9.6	10.3	10.2
High serum total cholesterol <sup>3</sup>					
Total, age-adjusted <sup>4</sup>	20.8	18.3	16.5	16.9	15.6
Total, crude.	19.6	17.8	16.4	17.0	15.9
Hypertension <sup>5</sup>					
Total, age-adjusted <sup>4</sup>	25.5	30.0	29.7	32.1	30.5
Total, crude.	24.1	28.9	28.9	32.5	31.7
Overweight (includes Obesity) <sup>6</sup>					
Total, age-adjusted <sup>4</sup>	56.0	64.0	65.3	66.0	66.6
Total, crude.	54.9	63.6	65.2	66.2	67.0
Obesity <sup>7</sup>					
Total, age-adjusted <sup>4</sup>	22.9	30.1	29.9	32.0	33.9
Total, crude.	22.3	29.9	30.0	32.0	34.2
Untreated dental caries <sup>8</sup>					
Total, age-adjusted <sup>4</sup>	27.7	24.3	21.3	30.0	---
Total, crude.	28.2	25.0	21.6	30.3	---
Overweight <sup>9</sup>					
Percent of persons under 20 years of age					
2–5 years.	7.2	10.3	10.6	13.9	11.0
6–11 years.	11.3	15.1	16.3	18.8	15.1
12–19 years.	10.5	14.8	16.7	17.4	17.8
Untreated dental caries <sup>8</sup>					
2–5 years.	19.1	23.2	15.8	23.4	---
6–19 years.	23.6	22.7	20.6	25.2	---

--- Data not available.

<sup>1</sup>Includes physician-diagnosed and undiagnosed diabetes. Physician-diagnosed diabetes was obtained by self-report and excludes women who reported having diabetes only during pregnancy. Undiagnosed diabetes is defined as a fasting blood glucose (FBG) of at least 126 mg/dL and no reported physician diagnosis. In 2005–2006, FBG testing was performed at a different laboratory and using a different instrument than testing in earlier years. NHANES conducted a crossover study to evaluate the impact of these changes on FBG measurements. As a result of that study, NHANES recommended that 2005–2006 data on FBG measurements be adjusted to be compatible with earlier years. Undiagnosed diabetes estimates in *Health, United States* were produced after adjusting the 2005–2006 FGC data as recommended. For more information, see [http://www.cdc.gov/nchs/data/nhanes/nhanes\\_05\\_06/glu\\_d.pdf](http://www.cdc.gov/nchs/data/nhanes/nhanes_05_06/glu_d.pdf). See related Table 54.

<sup>2</sup>Estimates are age-adjusted to the year 2000 standard population using three age groups: 20–39 years, 40–59 years, and 60 years and over. Because of the smaller sample size for fasting tests, age adjustment is to three age groups only. Age-adjusted estimates in this table may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

<sup>3</sup>High serum cholesterol is defined as greater than or equal to 240 mg/dL (6.20 mmol/L). Risk levels have been defined by the Third Report of the National Cholesterol Education Program Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults. National Heart, Lung, and Blood Institute, National Institutes of Health. September 2002. (Available from: <http://www.nhlbi.nih.gov/guidelines/cholesterol/index.htm> and summarized in JAMA 2001;285(19):2486–97.) Individuals who take medicine to lower their serum cholesterol levels and whose measured total serum cholesterol levels are below the cut-offs for high cholesterol are not defined as having high cholesterol. See related Table 72.

<sup>4</sup>Age-adjusted to the 2000 standard population using five age groups: 20–34 years, 35–44 years, 45–54 years, 55–64 years, and 65 years and over. Age-adjusted estimates may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

<sup>5</sup>Hypertension is defined as having elevated blood pressure and/or taking antihypertensive medication. Elevated blood pressure is defined as having systolic pressure of at least 140 mmHg or diastolic pressure of at least 90 mmHg. Those with elevated blood pressure may be taking prescribed medicine for high blood pressure. Respondents were asked, “Are you now taking prescribed medicine for your high blood pressure?” See [Appendix II, Blood pressure, elevated](#). See related Table 71.

<sup>6</sup>Excludes pregnant women. Overweight is defined as body mass index (BMI) greater than or equal to 25 kilograms/meter<sup>2</sup>. See [Appendix II, Body mass index](#). See related Table 75.

<sup>7</sup>Excludes pregnant women. Obesity is defined as body mass index (BMI) greater than or equal to 30 kilograms/meter<sup>2</sup>. See [Appendix II, Body mass index](#). See related Table 75.

<sup>8</sup>Untreated dental caries refers to untreated coronal caries, that is, caries on the crown or enamel surface of the tooth. Root tips are classified as coronal caries. Root caries are not included. For children 2–5 years of age, only dental caries in primary teeth was evaluated. Caries in both permanent and primary teeth was evaluated for children 6–11 years of age. For children 12 years and over and for adults, only dental caries in permanent teeth was evaluated. Persons without at least one primary or one permanent tooth or one root tip were classified as edentulous and were excluded from this analysis. The majority of edentulous persons are 65 years of age and over. Estimates of edentulism among persons 65 years of age and over are 33% in 1988–1994 and 27% in 1999–2004. See [Appendix II, Dental caries](#). See related Table 77.

<sup>9</sup>Overweight is defined as body mass index (BMI) at or above the sex- and age-specific 95th percentile BMI cutoff points from the 2000 CDC Growth Charts: United States. Advance data from vital and health statistics; no 314. Hyattsville, MD: National Center for Health Statistics. 2000. Excludes pregnant girls. See related Table 76.

NOTES: See related Tables 54, 71, 72, 75, 76, and 77. Standard errors for selected years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hs.htm>. Data have been revised and differ from previous editions of *Health, United States*.

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey.

**Table 71 (page 1 of 2). Hypertension and elevated blood pressure among persons 20 years of age and over, by selected characteristics: United States, 1988–1994, 1999–2002, and 2003–2006**

[Data are based on interviews and physical examinations of a sample of the civilian noninstitutionalized population]

Sex, age, race and Hispanic origin <sup>1</sup> , and percent of poverty level	Hypertension <sup>2,3</sup> (elevated blood pressure and/or taking antihypertensive medication)			Elevated blood pressure <sup>2</sup>		
	1988–1994	1999–2002	2003–2006	1988–1994	1999–2002	2003–2006
20 years and over, age-adjusted <sup>4</sup>						
Percent of population						
Both sexes <sup>5</sup> . . . . .	25.5	30.0	31.3	18.5	19.9	17.9
Male . . . . .	26.4	28.8	31.8	20.6	19.1	18.2
Female . . . . .	24.4	30.6	30.3	16.4	20.2	17.3
Not Hispanic or Latino:						
White only, male . . . . .	25.6	27.6	31.2	19.7	17.6	17.4
White only, female . . . . .	23.0	28.5	28.3	15.1	18.5	15.9
Black or African American only, male . . . . .	37.5	40.6	42.2	30.3	28.2	26.5
Black or African American only, female . . . . .	38.3	43.5	44.1	26.4	28.8	23.9
Mexican male . . . . .	26.9	26.8	24.8	22.2	21.5	15.3
Mexican female . . . . .	25.0	27.9	28.6	20.4	21.2	19.2
Percent of poverty level: <sup>6</sup>						
Below 100% . . . . .	31.7	33.9	35.0	22.5	23.3	22.6
100%–less than 200% . . . . .	26.6	33.5	34.1	19.3	23.0	21.1
200% or more . . . . .	23.9	28.2	30.3	17.5	18.2	16.6
20 years and over, crude						
Both sexes <sup>5</sup> . . . . .	24.1	30.2	32.1	17.6	19.9	18.2
Male . . . . .	23.8	27.6	31.3	18.7	18.2	17.9
Female . . . . .	24.4	32.7	32.9	16.5	21.6	18.6
Not Hispanic or Latino:						
White only, male . . . . .	24.3	28.3	32.4	18.7	17.8	17.9
White only, female . . . . .	24.6	32.8	33.4	16.4	21.6	18.8
Black or African American only, male . . . . .	31.1	35.9	38.8	25.5	25.2	24.8
Black or African American only, female . . . . .	32.5	41.9	42.8	22.2	27.2	22.4
Mexican male . . . . .	16.4	16.5	16.6	13.9	14.1	10.9
Mexican female . . . . .	15.9	18.8	20.0	12.7	13.8	13.0
Percent of poverty level: <sup>6</sup>						
Below 100% . . . . .	25.7	30.3	28.8	18.7	21.1	18.3
100%–less than 200% . . . . .	26.7	34.8	36.8	19.8	24.1	22.5
200% or more . . . . .	22.2	28.2	31.1	16.2	17.8	16.8
Male						
20–34 years . . . . .	7.1	*8.1	9.2	6.6	*7.3	7.6
35–44 years . . . . .	17.1	17.1	21.1	15.2	12.1	13.2
45–54 years . . . . .	29.2	31.0	36.2	21.9	20.4	21.0
55–64 years . . . . .	40.6	45.0	50.2	28.4	24.8	26.4
65–74 years . . . . .	54.4	59.6	64.1	39.9	34.9	29.2
75 years and over . . . . .	60.4	69.0	65.0	49.7	50.6	38.2
Female						
20–34 years . . . . .	2.9	*2.7	*2.2	*2.4	*1.4	*
35–44 years . . . . .	11.2	15.1	12.6	6.4	8.5	5.8
45–54 years . . . . .	23.9	31.8	36.2	13.7	19.1	20.0
55–64 years . . . . .	42.6	53.9	54.4	27.0	31.9	28.6
65–74 years . . . . .	56.2	72.7	70.8	38.2	53.0	40.8
75 years and over . . . . .	73.6	83.1	80.2	59.9	64.4	55.4

See footnotes at end of table.

**Table 71 (page 2 of 2). Hypertension and elevated blood pressure among persons 20 years of age and over, by selected characteristics: United States, 1988–1994, 1999–2002, and 2003–2006**

[Data are based on interviews and physical examinations of a sample of the civilian noninstitutionalized population]

- \* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error of 20%–30%. Data not shown have an RSE greater than 30%.
- <sup>1</sup>Persons of Mexican origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The two non-Hispanic race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group. Prior to data year 1999, estimates were tabulated according to the 1977 Standards. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. See [Appendix II, Hispanic origin; Race](#).
- <sup>2</sup>Hypertension is defined as having measured elevated blood pressure and/or taking antihypertensive medication. Elevated blood pressure is defined as having a measured systolic pressure of at least 140 mmHg or diastolic pressure of at least 90 mmHg. Those with elevated blood pressure also may be taking prescribed medicine for high blood pressure. Those taking antihypertensive medication may not have measured elevated blood pressure but are still classified as having hypertension. See [Appendix II, Blood pressure, elevated](#).
- <sup>3</sup>Respondents were asked, “Are you now taking prescribed medicine for your high blood pressure?”
- <sup>4</sup>Age-adjusted to the 2000 standard population using five age groups: 20–34 years, 35–44 years, 45–54 years, 55–64 years, and 65 years and over (65–74 years for estimates for 20–74 years). Age-adjusted estimates may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).
- <sup>5</sup>Includes persons of all races and Hispanic origins, not just those shown separately.
- <sup>6</sup>Percent of poverty level is based on family income and family size. Persons with unknown percent of poverty level are excluded (5% in 2003–2006). See [Appendix II, Family income; Poverty](#).

NOTES: Percents are based on the average of blood pressure measurements taken. In 2003–2006, 81% of participants had three blood pressure readings. See *Health, United States, 2003*, Table 66 for a longer trend based on a single blood pressure measurement, which provides comparable data across five time periods (1960–1962 through 1999–2000). Excludes pregnant women. Estimates for persons 20 years and over are used for setting and tracking *Healthy People 2010* objectives. Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data have been revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey.

**Table 72 (page 1 of 3). Serum total cholesterol levels among persons 20 years of age and over, by sex, age, race and Hispanic origin, and poverty level: United States, selected years 1960–1962 through 2003–2006**

[Data are based on interviews and laboratory work of a sample of the civilian noninstitutionalized population]

<i>Sex, age, race and Hispanic origin<sup>1</sup>, and percent of poverty level</i>	1960–1962	1971–1974	1976–1980 <sup>2</sup>	1988–1994	1999–2002	2003–2006
20–74 years, age-adjusted <sup>3</sup>						
Percent of population with high serum total cholesterol (greater than or equal to 240 mg/dL)						
Both sexes <sup>4</sup> . . . . .	33.3	28.6	27.8	19.7	17.0	16.3
Male . . . . .	30.6	27.9	26.4	18.8	16.9	15.6
Female . . . . .	35.6	29.1	28.8	20.5	17.0	16.9
Not Hispanic or Latino:						
White only, male . . . . .	---	---	26.4	18.7	17.0	16.0
White only, female . . . . .	---	---	29.6	20.7	17.4	17.9
Black or African American only, male . . . . .	---	---	25.5	16.4	12.5	11.2
Black or African American only, female . . . . .	---	---	26.3	19.9	16.6	13.0
Mexican male . . . . .	---	---	20.3	18.7	17.6	17.7
Mexican female . . . . .	---	---	20.5	17.7	12.7	13.8
Percent of poverty level: <sup>5</sup>						
Below 100% . . . . .	---	24.4	23.5	19.3	17.8	18.2
100%–less than 200% . . . . .	---	28.9	26.5	19.4	18.8	16.5
200% or more . . . . .	---	28.9	29.0	19.6	16.5	16.2
20 years and over, age-adjusted <sup>3</sup>						
Both sexes <sup>4</sup> . . . . .	---	---	---	20.8	17.3	16.3
Male . . . . .	---	---	---	19.0	16.4	15.1
Female . . . . .	---	---	---	22.0	17.8	17.1
Not Hispanic or Latino:						
White only, male . . . . .	---	---	---	18.8	16.5	15.5
White only, female . . . . .	---	---	---	22.2	18.1	18.0
Black or African American only, male . . . . .	---	---	---	16.9	12.4	10.9
Black or African American only, female . . . . .	---	---	---	21.4	17.7	13.3
Mexican male . . . . .	---	---	---	18.5	17.4	17.6
Mexican female . . . . .	---	---	---	18.7	13.8	14.4
Percent of poverty level: <sup>5</sup>						
Below 100% . . . . .	---	---	---	20.6	18.3	18.1
100%–less than 200% . . . . .	---	---	---	20.6	19.1	16.7
200% or more . . . . .	---	---	---	20.4	16.5	16.0
20 years and over, crude						
Both sexes <sup>4</sup> . . . . .	---	---	---	19.6	17.3	16.4
Male . . . . .	---	---	---	17.7	16.6	15.2
Female . . . . .	---	---	---	21.3	18.0	17.5
Not Hispanic or Latino:						
White only, male . . . . .	---	---	---	18.0	16.9	15.7
White only, female . . . . .	---	---	---	22.5	19.1	18.9
Black or African American only, male . . . . .	---	---	---	14.7	12.2	10.8
Black or African American only, female . . . . .	---	---	---	18.2	16.1	12.5
Mexican male . . . . .	---	---	---	15.4	15.0	15.7
Mexican female . . . . .	---	---	---	14.3	10.7	12.6
Percent of poverty level: <sup>5</sup>						
Below 100% . . . . .	---	---	---	17.6	16.4	16.8
100%–less than 200% . . . . .	---	---	---	19.8	18.2	16.0
200% or more . . . . .	---	---	---	19.5	16.9	16.5
Male						
20–34 years . . . . .	15.1	12.4	11.9	8.2	9.8	9.5
35–44 years . . . . .	33.9	31.8	27.9	19.4	19.8	20.5
45–54 years . . . . .	39.2	37.5	36.9	26.6	23.6	20.8
55–64 years . . . . .	41.6	36.2	36.8	28.0	19.9	16.0
65–74 years . . . . .	38.0	34.7	31.7	21.9	13.7	10.9
75 years and over . . . . .	---	---	---	20.4	10.2	9.6
Female						
20–34 years . . . . .	12.4	10.9	9.8	7.3	8.9	10.3
35–44 years . . . . .	23.1	19.3	20.7	12.3	12.4	12.7
45–54 years . . . . .	46.9	38.7	40.5	26.7	21.4	19.7
55–64 years . . . . .	70.1	53.1	52.9	40.9	25.6	30.5
65–74 years . . . . .	68.5	57.7	51.6	41.3	32.3	24.2
75 years and over . . . . .	---	---	---	38.2	26.5	18.6

See footnotes at end of table.

**Table 72 (page 2 of 3). Serum total cholesterol levels among persons 20 years of age and over, by sex, age, race and Hispanic origin, and poverty level: United States, selected years 1960–1962 through 2003–2006**

[Data are based on interviews and laboratory work of a sample of the civilian noninstitutionalized population]

<i>Sex, age, race and Hispanic origin<sup>1</sup>, and percent of poverty level</i>	1960–1962	1971–1974	1976–1980 <sup>2</sup>	1988–1994	1999–2002	2003–2006
20–74 years, age-adjusted <sup>3</sup>						
Mean serum cholesterol level, mg/dL						
Both sexes <sup>4</sup> . . . . .	222	216	215	205	203	200
Male . . . . .	220	216	213	204	203	199
Female . . . . .	224	217	216	205	202	201
Not Hispanic or Latino:						
White only, male . . . . .	---	---	213	204	202	199
White only, female . . . . .	---	---	216	206	204	203
Black or African American only, male . . . . .	---	---	211	201	195	193
Black or African American only, female . . . . .	---	---	216	204	200	194
Mexican male . . . . .	---	---	209	206	205	203
Mexican female . . . . .	---	---	209	204	198	199
Percent of poverty level: <sup>5</sup>						
Below 100% . . . . .	---	211	211	203	200	203
100%–less than 200% . . . . .	---	217	213	203	203	201
200% or more . . . . .	---	217	216	206	203	200
20 years and over, age-adjusted <sup>3</sup>						
Both sexes <sup>4</sup> . . . . .	---	---	---	206	203	200
Male . . . . .	---	---	---	204	202	198
Female . . . . .	---	---	---	207	204	202
Not Hispanic or Latino:						
White only, male . . . . .	---	---	---	205	202	198
White only, female . . . . .	---	---	---	208	205	203
Black or African American only, male . . . . .	---	---	---	202	195	193
Black or African American only, female . . . . .	---	---	---	207	202	195
Mexican male . . . . .	---	---	---	206	204	203
Mexican female . . . . .	---	---	---	206	199	200
Percent of poverty level: <sup>5</sup>						
Below 100% . . . . .	---	---	---	205	201	203
100%–less than 200% . . . . .	---	---	---	205	204	201
200% or more . . . . .	---	---	---	207	203	200
20 years and over, crude						
Both sexes <sup>4</sup> . . . . .	---	---	---	204	203	200
Male . . . . .	---	---	---	202	202	198
Female . . . . .	---	---	---	206	204	202
Not Hispanic or Latino:						
White only, male . . . . .	---	---	---	203	203	198
White only, female . . . . .	---	---	---	208	206	205
Black or African American only, male . . . . .	---	---	---	198	194	192
Black or African American only, female . . . . .	---	---	---	201	199	194
Mexican male . . . . .	---	---	---	199	200	200
Mexican female . . . . .	---	---	---	198	194	196
Percent of poverty level: <sup>5</sup>						
Below 100% . . . . .	---	---	---	200	198	200
100%–less than 200% . . . . .	---	---	---	202	202	199
200% or more . . . . .	---	---	---	205	204	201
Male						
20–34 years . . . . .	198	194	192	186	188	186
35–44 years . . . . .	227	221	217	206	207	209
45–54 years . . . . .	231	229	227	216	215	208
55–64 years . . . . .	233	229	229	216	212	202
65–74 years . . . . .	230	226	221	212	202	191
75 years and over . . . . .	---	---	---	205	195	187
Female						
20–34 years . . . . .	194	191	189	184	185	188
35–44 years . . . . .	214	207	207	195	198	197
45–54 years . . . . .	237	232	232	217	211	208
55–64 years . . . . .	262	245	249	235	221	219
65–74 years . . . . .	266	250	246	233	224	214
75 years and over . . . . .	---	---	---	229	217	206

See footnotes at end of table.

**Table 72 (page 3 of 3). Serum total cholesterol levels among persons 20 years of age and over, by sex, age, race and Hispanic origin, and poverty level: United States, selected years 1960–1962 through 2003–2006**

[Data are based on interviews and laboratory work of a sample of the civilian noninstitutionalized population]

-- Data not available.

<sup>1</sup>Persons of Mexican origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The two non-Hispanic race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group. Prior to data year 1999, estimates were tabulated according to the 1977 Standards. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. See [Appendix II, Hispanic origin; Race](#).

<sup>2</sup>Data for Mexicans are for 1982–1984. See [Appendix I, National Health and Nutrition Examination Survey \(NHANES\)](#).

<sup>3</sup>Age-adjusted to the 2000 standard population using five age groups: 20–34 years, 35–44 years, 45–54 years, 55–64 years, and 65 years and over (65–74 years for estimates for 20–74 years). Age-adjusted estimates may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

<sup>4</sup>Includes persons of all races and Hispanic origins, not just those shown separately.

<sup>5</sup>Percent of poverty level is based on family income and family size. Persons with unknown percent of poverty level are excluded (4% in 2003–2006). See [Appendix II, Family income; Poverty](#).

NOTES: High serum cholesterol is defined as greater than or equal to 240 mg/dL (6.20 mmol/L). Borderline high serum cholesterol is defined as greater than or equal to 200 mg/dL and less than 240 mg/dL. Risk levels have been defined by the Third Report of the National Cholesterol Education Program Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults. National Heart, Lung, and Blood Institute, National Institutes of Health. September 2002. (Available from: <http://www.nhlbi.nih.gov/guidelines/cholesterol/index.htm> and summarized in JAMA 2001;285(19):2486–97). Individuals who take medicine to lower their serum cholesterol levels and whose measured total serum cholesterol levels are below the cut-offs for high and borderline high cholesterol are not defined as having high or borderline high cholesterol, respectively. See [Appendix II, Cholesterol, serum](#). Standard errors for selected years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hsus.htm>. Data for additional years are available. See [Appendix III](#).

**SOURCES:** CDC/NCHS, National Health and Nutrition Examination Survey, Hispanic Health and Nutrition Examination Survey (1982–1984), and National Health Examination Survey (1960–1962).

**Table 73. Mean energy and macronutrient intake among persons 20–74 years of age, by sex and age: United States, 1971–1974 through 2001–2004**

[Data are based on dietary recall interviews of a sample of the civilian noninstitutionalized population]

Sex and age	1971–1974	1976–1980	1988–1994	2001–2004
Energy intake in kcals				
Male, age-adjusted <sup>1</sup>	2,450	2,439	2,664	2,693
Male, crude	2,461	2,459	2,692	2,697
20–39 years	2,784	2,753	2,964	2,949
40–59 years	2,303	2,315	2,567	2,649
60–74 years	1,918	1,906	2,104	2,117
Female, age-adjusted <sup>1</sup>	1,542	1,522	1,796	1,886
Female, crude	1,540	1,525	1,804	1,884
20–39 years	1,652	1,643	1,956	2,032
40–59 years	1,510	1,473	1,734	1,836
60–74 years	1,325	1,322	1,520	1,622
Percent kcals from carbohydrate				
Male, age-adjusted <sup>1</sup>	42.4	42.6	48.3	48.2
Male, crude	42.4	42.7	48.3	48.2
20–39 years	42.2	43.1	48.1	49.5
40–59 years	41.6	41.5	47.8	47.1
60–74 years	44.8	44.1	49.7	47.3
Female, age-adjusted <sup>1</sup>	45.4	46.0	50.7	50.6
Female, crude	45.5	46.1	50.7	50.6
20–39 years	45.8	46.0	50.6	51.4
40–59 years	44.4	45.0	50.0	49.6
60–74 years	46.8	48.6	52.6	51.1
Percent kcals from total fat				
Male, age-adjusted <sup>1</sup>	36.9	36.7	33.9	33.4
Male, crude	36.9	36.7	33.9	33.4
20–39 years	37.0	36.2	34.0	32.1
40–59 years	36.9	37.2	34.2	34.1
60–74 years	36.4	36.8	32.9	34.9
Female, age-adjusted <sup>1</sup>	36.1	36.0	33.4	33.8
Female, crude	36.0	35.9	33.3	33.8
20–39 years	36.3	36.0	33.6	33.0
40–59 years	36.3	36.4	34.0	34.6
60–74 years	34.9	34.7	31.6	34.0
Percent kcals from saturated fat				
Male, age-adjusted <sup>1</sup>	13.5	13.2	11.3	10.8
Male, crude	13.5	13.2	11.4	10.8
20–39 years	13.6	13.1	11.5	10.7
40–59 years	13.5	13.4	11.3	10.9
60–74 years	13.3	13.1	10.9	11.0
Female, age-adjusted <sup>1</sup>	13.0	12.5	11.2	10.9
Female, crude	12.9	12.5	11.2	10.9
20–39 years	13.0	12.6	11.4	10.9
40–59 years	13.1	12.6	11.3	11.1
60–74 years	12.4	11.8	10.4	10.6

<sup>1</sup>Age-adjusted to the 2000 standard population using three age groups, 20–39 years, 40–59 years, and 60–74 years. Age-adjusted estimates in this table may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

NOTES: Numbers have been revised and differ from previous editions of *Health, United States*. Estimates of energy intake include kilocalories (kcal) from all foods and beverages, including alcoholic beverages, consumed during the preceding 24 hours. Individuals who reported no energy intake were excluded. In 2001–2004, only data collected in the Mobile Examination Center were used to calculate dietary intake. Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>.

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey.



**Table 74 (page 1 of 2). Leisure-time physical activity among adults 18 years of age and over, by selected characteristics: United States, 1998, 2005, and 2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Inactive <sup>1</sup>			Some leisure-time activity <sup>1</sup>			Regular leisure-time activity <sup>1</sup>		
	1998	2005	2006	1998	2005	2006	1998	2005	2006
	Percent of adults								
18 years and over, age-adjusted <sup>2,3</sup> . . . . .	40.5	40.5	39.5	30.0	29.3	29.5	29.5	30.2	31.0
18 years and over, crude <sup>3</sup> . . . . .	40.2	40.5	39.5	30.0	29.3	29.6	29.8	30.1	30.9
Age									
18–44 years . . . . .	35.2	35.9	34.9	31.4	30.5	30.4	33.5	33.7	34.6
18–24 years . . . . .	32.8	33.5	34.8	30.1	29.1	27.1	37.1	37.4	38.1
25–44 years . . . . .	35.9	36.7	35.0	31.8	31.0	31.6	32.4	32.4	33.4
45–64 years . . . . .	41.2	41.2	39.7	30.6	29.7	30.8	28.2	29.1	29.5
45–54 years . . . . .	38.9	39.5	38.2	31.4	30.1	30.7	29.8	30.4	31.1
55–64 years . . . . .	44.9	43.6	41.9	29.3	29.2	30.9	25.8	27.2	27.2
65 years and over . . . . .	55.4	53.9	53.4	24.7	24.9	24.5	19.9	21.3	22.0
65–74 years . . . . .	49.1	47.8	48.0	26.5	27.0	25.8	24.4	25.3	26.2
75 years and over . . . . .	63.3	60.6	59.6	22.4	22.6	23.1	14.3	16.8	17.3
Sex <sup>2</sup>									
Male . . . . .	37.8	39.1	38.5	28.7	29.2	28.4	33.5	31.8	33.1
Female . . . . .	42.9	41.7	40.3	31.1	29.5	30.7	26.0	28.8	29.0
Sex and age									
Male:									
18–44 years . . . . .	32.0	34.4	34.2	30.7	30.5	28.8	37.2	35.1	36.9
45–54 years . . . . .	37.7	40.2	39.0	29.6	29.4	28.4	32.6	30.4	32.7
55–64 years . . . . .	44.5	43.4	41.1	26.9	28.0	30.6	28.6	28.7	28.2
65–74 years . . . . .	45.3	44.7	46.9	23.6	27.5	25.0	31.1	27.8	28.2
75 years and over . . . . .	57.4	54.1	52.1	21.6	24.0	26.6	20.9	21.9	21.4
Female:									
18–44 years . . . . .	38.2	37.3	35.6	32.0	30.5	32.0	29.8	32.2	32.4
45–54 years . . . . .	39.9	38.8	37.5	33.0	30.8	33.0	27.1	30.3	29.5
55–64 years . . . . .	45.2	43.8	42.6	31.5	30.3	31.1	23.3	25.9	26.3
65–74 years . . . . .	52.2	50.4	49.0	28.7	26.5	26.5	19.0	23.1	24.5
75 years and over . . . . .	67.0	64.8	64.4	22.9	21.7	20.8	10.1	13.6	14.7
Race <sup>2,4</sup>									
White only . . . . .	38.8	38.6	38.2	30.5	29.9	29.9	30.7	31.6	31.9
Black or African American only . . . . .	52.2	54.7	48.9	25.2	24.1	26.2	22.6	21.2	24.9
American Indian or Alaska Native only . . . . .	49.2	42.7	32.8	19.0	29.0	37.8	31.8	28.3	29.5
Asian only . . . . .	39.4	41.0	39.8	35.2	31.3	29.7	25.4	27.6	30.5
Native Hawaiian or Other Pacific Islander only . . . . .	---	*	*	---	*	*	---	*	*
2 or more races . . . . .	---	40.7	34.2	---	30.9	35.8	---	28.4	30.0
Hispanic origin and race <sup>2,4</sup>									
Hispanic or Latino . . . . .	55.5	56.7	53.4	23.4	23.3	23.8	21.1	20.0	22.8
Mexican . . . . .	56.7	54.9	53.9	23.9	24.3	24.2	19.4	20.8	22.0
Not Hispanic or Latino . . . . .	38.8	38.1	37.3	30.7	30.1	30.4	30.5	31.8	32.3
White only . . . . .	36.7	35.3	35.3	31.3	30.9	31.0	32.0	33.8	33.8
Black or African American only . . . . .	52.2	54.6	49.0	25.1	24.3	26.4	22.6	21.1	24.7
Education <sup>5,6</sup>									
No high school diploma or GED . . . . .	64.8	62.9	62.3	19.4	21.5	21.2	15.8	15.7	16.5
High school diploma or GED . . . . .	47.6	50.2	47.5	28.7	28.1	29.0	23.7	21.6	23.5
Some college or more . . . . .	30.2	30.7	29.2	34.3	32.4	33.3	35.5	36.8	37.6

See footnotes at end of table.

**Table 74 (page 2 of 2). Leisure-time physical activity among adults 18 years of age and over, by selected characteristics: United States, 1998, 2005, and 2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Inactive <sup>1</sup>			Some leisure-time activity <sup>1</sup>			Regular leisure-time activity <sup>1</sup>		
	1998	2005	2006	1998	2005	2006	1998	2005	2006
Percent of poverty level <sup>2,7</sup>				Percent of adults					
Below 100% . . . . .	59.4	58.2	56.0	20.5	22.3	23.4	20.1	19.5	20.6
100%–less than 200% . . . . .	52.2	52.8	50.4	26.2	25.5	25.8	21.6	21.7	23.8
200% or more . . . . .	34.7	34.5	33.6	32.4	31.4	31.6	33.0	34.1	34.8
Hispanic origin and race and percent of poverty level <sup>2,4,7</sup>									
Hispanic or Latino:									
Below 100% . . . . .	68.6	65.9	65.3	18.0	21.1	19.2	13.4	13.0	15.5
100%–less than 200% . . . . .	60.8	62.7	59.4	21.2	20.4	22.3	18.0	16.9	18.4
200% or more . . . . .	45.6	48.6	44.3	27.6	26.3	26.7	26.8	25.1	29.0
Not Hispanic or Latino:									
White only:									
Below 100% . . . . .	53.7	52.1	50.8	22.5	23.5	25.5	23.8	24.4	23.7
100%–less than 200% . . . . .	49.0	47.6	46.1	27.6	27.5	26.3	23.4	24.9	27.5
200% or more . . . . .	32.7	31.3	31.2	32.9	32.3	32.5	34.4	36.3	36.3
Black or African American only:									
Below 100% . . . . .	64.3	65.1	58.7	17.4	18.8	21.8	18.3	16.1	19.4
100%–less than 200% . . . . .	55.6	60.5	56.2	24.4	23.7	24.3	19.9	15.8	19.5
200% or more . . . . .	46.0	48.1	41.2	28.7	26.6	29.4	25.3	25.3	29.5
Geographic region <sup>2</sup>									
Northeast . . . . .	39.4	39.0	36.1	31.3	28.2	31.1	29.4	32.7	32.8
Midwest . . . . .	37.3	34.3	34.7	31.7	34.3	32.7	31.0	31.4	32.6
South . . . . .	46.9	47.6	44.8	27.1	25.6	27.2	26.0	26.8	28.0
West . . . . .	33.9	36.9	38.1	31.6	30.6	28.9	34.6	32.5	33.0
Location of residence <sup>2</sup>									
Within MSA <sup>8</sup> . . . . .	39.3	39.2	38.0	30.6	29.7	30.2	30.0	31.1	31.8
Outside MSA <sup>8</sup> . . . . .	44.7	45.7	46.4	27.5	27.9	26.6	27.8	26.5	26.9

\* Estimates are considered unreliable. Data not shown have a relative standard error of greater than 30%.

--- Data not available.

<sup>1</sup>All questions related to leisure-time physical activity were phrased in terms of current behavior and lack a specific reference period. Respondents were asked about the frequency and duration of vigorous and light/moderate physical activity during leisure time. Adults classified as inactive reported no sessions of light/moderate or vigorous leisure-time activity of at least 10 minutes duration; adults classified with some leisure-time activity reported at least one session of light/moderate or vigorous physical activity of at least 10 minutes duration but did not meet the definition for regular leisure-time activity; adults classified with regular leisure-time activity reported three or more sessions per week of vigorous activity lasting at least 20 minutes or five or more sessions per week of light/moderate activity lasting at least 30 minutes in duration. See [Appendix II, Physical activity, leisure-time](#).

<sup>2</sup>Estimates are age-adjusted to the year 2000 standard population using five age groups: 18–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. Age-adjusted estimates in this table may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

<sup>3</sup>Includes all other races not shown separately and unknown education level.

<sup>4</sup>The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

<sup>5</sup>Estimates are for persons 25 years of age and over and are age-adjusted to the year 2000 standard population using five age groups: 25–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

<sup>6</sup>GED stands for General Educational Development high school equivalency diploma. See [Appendix II, Education](#).

<sup>7</sup>Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 30%–35% of adults 18 years of age and over in 1998–2006. See [Appendix II, Family income; Poverty](#).

<sup>8</sup>MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health Interview Survey, family core and sample adult questionnaires.

**Table 75 (page 1 of 4). Overweight, obesity, and healthy weight among persons 20 years of age and over, by selected characteristics: United States, 1960–1962 through 2003–2006**

[Data are based on measured height and weight of a sample of the civilian noninstitutionalized population]

<i>Sex, age, race and Hispanic origin<sup>1</sup>, and percent of poverty level</i>	<i>Overweight (includes obesity)<sup>2</sup></i>					
	1960–1962	1971–1974	1976–1980 <sup>3</sup>	1988–1994	1999–2002	2003–2006
20–74 years, age-adjusted <sup>4</sup>						
Percent of population						
Both sexes <sup>5</sup> . . . . .	44.8	47.7	47.4	56.0	65.2	66.9
Male . . . . .	49.5	54.7	52.9	61.0	68.8	72.6
Female . . . . .	40.2	41.1	42.0	51.2	61.7	61.2
Not Hispanic or Latino:						
White only, male . . . . .	---	---	53.8	61.6	69.5	72.1
White only, female . . . . .	---	---	38.7	47.2	57.0	57.4
Black or African American only, male . . . . .	---	---	51.3	58.2	62.0	72.0
Black or African American only, female . . . . .	---	---	62.6	68.5	77.6	80.5
Mexican male . . . . .	---	---	61.6	69.4	74.1	77.3
Mexican female . . . . .	---	---	61.7	69.6	71.4	74.4
Percent of poverty level: <sup>6</sup>						
Below 100% . . . . .	---	49.3	50.0	59.8	65.2	66.0
100%–less than 200% . . . . .	---	50.9	49.0	58.2	68.0	66.6
200% or more . . . . .	---	46.7	46.6	54.5	64.9	67.0
20 years and over, age-adjusted <sup>4</sup>						
Both sexes <sup>5</sup> . . . . .	---	---	---	56.0	65.1	66.7
Male . . . . .	---	---	---	60.9	68.8	72.1
Female . . . . .	---	---	---	51.4	61.6	61.3
Not Hispanic or Latino:						
White only, male . . . . .	---	---	---	61.6	69.4	71.8
White only, female . . . . .	---	---	---	47.5	57.2	57.9
Black or African American only, male . . . . .	---	---	---	57.8	62.6	71.6
Black or African American only, female . . . . .	---	---	---	68.2	77.2	79.8
Mexican male . . . . .	---	---	---	68.9	73.2	75.8
Mexican female . . . . .	---	---	---	68.9	71.2	73.9
Percent of poverty level: <sup>6</sup>						
Below 100% . . . . .	---	---	---	59.6	64.7	65.7
100%–less than 200% . . . . .	---	---	---	58.0	67.3	66.5
200% or more . . . . .	---	---	---	54.8	65.1	66.8
20 years and over, crude						
Both sexes <sup>5</sup> . . . . .	---	---	---	54.9	65.2	66.9
Male . . . . .	---	---	---	59.4	68.6	72.1
Female . . . . .	---	---	---	50.7	62.0	61.9
Not Hispanic or Latino:						
White only, male . . . . .	---	---	---	60.6	69.9	72.5
White only, female . . . . .	---	---	---	47.4	58.2	59.4
Black or African American only, male . . . . .	---	---	---	56.7	61.7	71.6
Black or African American only, female . . . . .	---	---	---	66.0	76.9	79.7
Mexican male . . . . .	---	---	---	63.9	70.1	74.6
Mexican female . . . . .	---	---	---	65.9	69.3	73.0
Percent of poverty level: <sup>6</sup>						
Below 100% . . . . .	---	---	---	56.8	62.5	64.4
100%–less than 200% . . . . .	---	---	---	55.7	66.2	66.0
200% or more . . . . .	---	---	---	54.2	65.8	67.7
Male						
20–34 years . . . . .	42.7	42.8	41.2	47.5	57.4	61.6
35–44 years . . . . .	53.5	63.2	57.2	65.5	70.5	75.2
45–54 years . . . . .	53.9	59.7	60.2	66.1	75.7	78.5
55–64 years . . . . .	52.2	58.5	60.2	70.5	75.4	79.7
65–74 years . . . . .	47.8	54.6	54.2	68.5	76.2	78.0
75 years and over . . . . .	---	---	---	56.5	67.4	65.8
Female						
20–34 years . . . . .	21.2	25.8	27.9	37.0	52.9	50.9
35–44 years . . . . .	37.2	40.5	40.7	49.6	60.6	60.7
45–54 years . . . . .	49.3	49.0	48.7	60.3	65.1	67.3
55–64 years . . . . .	59.9	54.5	53.7	66.3	72.2	69.6
65–74 years . . . . .	60.9	55.9	59.5	60.3	70.9	70.5
75 years and over . . . . .	---	---	---	52.3	59.9	62.6

See footnotes at end of table.

**Table 75 (page 2 of 4). Overweight, obesity, and healthy weight among persons 20 years of age and over, by selected characteristics: United States, 1960–1962 through 2003–2006**

[Data are based on measured height and weight of a sample of the civilian noninstitutionalized population]

<i>Sex, age, race and Hispanic origin<sup>1</sup>, and percent of poverty level</i>	<i>Obesity<sup>7</sup></i>					
	1960–1962	1971–1974	1976–1980 <sup>3</sup>	1988–1994	1999–2002	2003–2006
20–74 years, age-adjusted <sup>4</sup>			Percent of population			
Both sexes <sup>5</sup> . . . . .	13.3	14.6	15.1	23.3	31.1	34.1
Male . . . . .	10.7	12.2	12.8	20.6	28.1	33.1
Female . . . . .	15.7	16.8	17.1	26.0	34.0	35.2
Not Hispanic or Latino:						
White only, male . . . . .	---	---	12.4	20.7	28.7	33.0
White only, female . . . . .	---	---	15.4	23.3	31.3	32.5
Black or African American only, male . . . . .	---	---	16.5	21.3	27.9	36.3
Black or African American only, female . . . . .	---	---	31.0	39.1	49.4	54.3
Mexican male . . . . .	---	---	15.7	24.4	29.0	30.4
Mexican female . . . . .	---	---	26.6	36.1	38.9	42.6
Percent of poverty level: <sup>6</sup>						
Below 100% . . . . .	---	20.7	21.9	29.2	36.0	35.9
100%–less than 200% . . . . .	---	18.4	18.7	26.6	35.4	36.7
200% or more . . . . .	---	12.4	12.9	21.4	29.2	33.1
20 years and over, age-adjusted <sup>4</sup>						
Both sexes <sup>5</sup> . . . . .	---	---	---	22.9	30.4	33.4
Male . . . . .	---	---	---	20.2	27.5	32.4
Female . . . . .	---	---	---	25.5	33.2	34.3
Not Hispanic or Latino:						
White only, male . . . . .	---	---	---	20.3	28.0	32.4
White only, female . . . . .	---	---	---	22.9	30.7	31.6
Black or African American only, male . . . . .	---	---	---	20.9	27.8	35.7
Black or African American only, female . . . . .	---	---	---	38.3	48.6	53.4
Mexican male . . . . .	---	---	---	23.8	27.8	29.5
Mexican female . . . . .	---	---	---	35.2	38.0	41.8
Percent of poverty level: <sup>6</sup>						
Below 100% . . . . .	---	---	---	28.1	34.7	35.0
100%–less than 200% . . . . .	---	---	---	26.1	34.1	35.9
200% or more . . . . .	---	---	---	21.1	28.7	32.3
20 years and over, crude						
Both sexes <sup>5</sup> . . . . .	---	---	---	22.3	30.5	33.5
Male . . . . .	---	---	---	19.5	27.5	32.4
Female . . . . .	---	---	---	25.0	33.4	34.6
Not Hispanic or Latino:						
White only, male . . . . .	---	---	---	19.9	28.4	32.6
White only, female . . . . .	---	---	---	22.7	31.3	32.2
Black or African American only, male . . . . .	---	---	---	20.7	27.5	35.8
Black or African American only, female . . . . .	---	---	---	36.7	48.7	53.2
Mexican male . . . . .	---	---	---	20.6	26.0	29.0
Mexican female . . . . .	---	---	---	33.3	37.0	41.2
Percent of poverty level: <sup>6</sup>						
Below 100% . . . . .	---	---	---	25.9	33.0	34.6
100%–less than 200% . . . . .	---	---	---	24.3	32.8	35.0
200% or more . . . . .	---	---	---	20.9	29.3	33.0
Male						
20–34 years . . . . .	9.2	9.7	8.9	14.1	21.7	26.2
35–44 years . . . . .	12.1	13.5	13.5	21.5	28.5	37.0
45–54 years . . . . .	12.5	13.7	16.7	23.2	30.6	34.6
55–64 years . . . . .	9.2	14.1	14.1	27.2	35.5	39.3
65–74 years . . . . .	10.4	10.9	13.2	24.1	31.9	33.0
75 years and over . . . . .	---	---	---	13.2	18.0	24.0
Female						
20–34 years . . . . .	7.2	9.7	11.0	18.5	28.3	28.4
35–44 years . . . . .	14.7	17.7	17.8	25.5	32.1	36.1
45–54 years . . . . .	20.3	18.9	19.6	32.4	36.9	40.0
55–64 years . . . . .	24.4	24.1	22.9	33.7	42.1	41.0
65–74 years . . . . .	23.2	22.0	21.5	26.9	39.3	36.4
75 years and over . . . . .	---	---	---	19.2	23.6	24.2

See footnotes at end of table.

**Table 75 (page 3 of 4). Overweight, obesity, and healthy weight among persons 20 years of age and over, by selected characteristics: United States, 1960–1962 through 2003–2006**

[Data are based on measured height and weight of a sample of the civilian noninstitutionalized population]

<i>Sex, age, race and Hispanic origin<sup>1</sup>, and percent of poverty level</i>	<i>Healthy weight<sup>8</sup></i>					
	1960–1962	1971–1974	1976–1980 <sup>3</sup>	1988–1994	1999–2002	2003–2006
20–74 years, age-adjusted <sup>4</sup>			Percent of population			
Both sexes <sup>5</sup> . . . . .	51.2	48.8	49.6	41.7	32.9	31.4
Male . . . . .	48.3	43.0	45.4	37.9	30.2	26.1
Female . . . . .	54.1	54.3	53.7	45.3	35.6	36.6
Not Hispanic or Latino:						
White only, male . . . . .	---	---	45.3	37.4	29.5	26.5
White only, female . . . . .	---	---	56.7	49.2	39.7	40.0
Black or African American only, male . . . . .	---	---	46.6	40.0	35.5	26.8
Black or African American only, female . . . . .	---	---	35.0	28.9	21.2	18.4
Mexican male . . . . .	---	---	37.1	29.8	25.6	22.4
Mexican female . . . . .	---	---	36.4	29.0	27.6	24.5
Percent of poverty level: <sup>6</sup>						
Below 100% . . . . .	---	45.8	45.1	37.3	32.4	31.7
100%–less than 200% . . . . .	---	45.1	47.6	39.2	29.7	31.1
200% or more . . . . .	---	50.2	51.0	43.4	33.5	31.6
20 years and over, age-adjusted <sup>4</sup>						
Both sexes <sup>5</sup> . . . . .	---	---	---	41.6	33.0	31.6
Male . . . . .	---	---	---	37.9	30.2	26.6
Female . . . . .	---	---	---	45.0	35.7	36.5
Not Hispanic or Latino:						
White only, male . . . . .	---	---	---	37.3	29.6	26.8
White only, female . . . . .	---	---	---	48.7	39.5	39.6
Black or African American only, male . . . . .	---	---	---	40.1	34.7	27.0
Black or African American only, female . . . . .	---	---	---	29.2	21.6	19.2
Mexican male . . . . .	---	---	---	30.2	26.5	23.8
Mexican female . . . . .	---	---	---	29.7	27.5	25.1
Percent of poverty level: <sup>6</sup>						
Below 100% . . . . .	---	---	---	37.5	32.7	32.1
100%–less than 200% . . . . .	---	---	---	39.3	30.5	31.3
200% or more . . . . .	---	---	---	43.1	33.4	31.8
20 years and over, crude						
Both sexes <sup>5</sup> . . . . .	---	---	---	42.6	32.9	31.4
Male . . . . .	---	---	---	39.4	30.4	26.6
Female . . . . .	---	---	---	45.7	35.4	35.9
Not Hispanic or Latino:						
White only, male . . . . .	---	---	---	38.2	29.2	26.2
White only, female . . . . .	---	---	---	48.8	38.7	38.2
Black or African American only, male . . . . .	---	---	---	41.5	35.9	27.1
Black or African American only, female . . . . .	---	---	---	31.2	21.8	19.2
Mexican male . . . . .	---	---	---	35.2	29.4	25.2
Mexican female . . . . .	---	---	---	32.4	29.5	25.8
Percent of poverty level: <sup>6</sup>						
Below 100% . . . . .	---	---	---	39.8	34.5	33.2
100%–less than 200% . . . . .	---	---	---	41.5	31.5	31.7
200% or more . . . . .	---	---	---	43.6	32.8	30.9
Male						
20–34 years . . . . .	55.3	54.7	57.1	51.1	40.3	35.9
35–44 years . . . . .	45.2	35.2	41.3	33.4	29.0	24.1
45–54 years . . . . .	44.8	38.5	38.7	33.6	24.0	20.8
55–64 years . . . . .	44.9	38.3	38.7	28.6	23.8	19.3
65–74 years . . . . .	46.2	42.1	42.3	30.1	22.8	21.2
75 years and over . . . . .	---	---	---	40.9	32.0	33.1
Female						
20–34 years . . . . .	67.6	65.8	65.0	57.9	42.5	45.1
35–44 years . . . . .	58.4	56.7	55.6	47.1	37.1	37.6
45–54 years . . . . .	47.6	49.3	48.7	37.2	33.1	31.1
55–64 years . . . . .	38.1	41.1	43.5	31.5	27.6	29.5
65–74 years . . . . .	36.4	40.6	37.8	37.0	26.4	28.5
75 years and over . . . . .	---	---	---	43.0	36.9	35.4

See footnotes at end of table.

**Table 75 (page 4 of 4). Overweight, obesity, and healthy weight among persons 20 years of age and over, by selected characteristics: United States, 1960–1962 through 2003–2006**

[Data are based on measured height and weight of a sample of the civilian noninstitutionalized population]

-- Data not available.

<sup>1</sup>Persons of Mexican origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The two non-Hispanic race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group. Prior to data year 1999, estimates were tabulated according to the 1977 Standards. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. See [Appendix II, Hispanic origin; Race](#).

<sup>2</sup>Body mass index (BMI) greater than or equal to 25 kilograms/meter<sup>2</sup>. See [Appendix II, Body mass index](#).

<sup>3</sup>Data for Mexicans are for 1982–1984. See [Appendix I, National Health and Nutrition Examination Survey \(NHANES\)](#).

<sup>4</sup>Age-adjusted to the 2000 standard population using five age groups: 20–34 years, 35–44 years, 45–54 years, 55–64 years, and 65 years and over (65–74 years for estimates for 20–74 years). Age-adjusted estimates in this table may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

<sup>5</sup>Includes persons of all races and Hispanic origins, not just those shown separately.

<sup>6</sup>Percent of poverty level is based on family income and family size. Persons with unknown percent of poverty level are excluded (5% in 2003–2006). See [Appendix II, Family income; Poverty](#).

<sup>7</sup>Body mass index (BMI) greater than or equal to 30 kilograms/meter<sup>2</sup>.

<sup>8</sup>BMI of 18.5 to less than 25 kilograms/meter<sup>2</sup>.

NOTES: Percents do not sum to 100 because the percentage of persons with BMI less than 18.5 kilograms/meter<sup>2</sup> is not shown and the percentage of persons with obesity is a subset of the percent with overweight. Height was measured without shoes; two pounds were deducted from data for 1960–1962 to allow for weight of clothing. Excludes pregnant women. Standard errors for selected years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data have been revised and differ from previous editions of *Health United States*. Data for additional years are available. See [Appendix III](#).

**SOURCES:** CDC/NCHS, National Health and Nutrition Examination Survey, Hispanic Health and Nutrition Examination Survey (1982–1984), and National Health Examination Survey (1960–1962).

**Table 76. Overweight among children and adolescents 6–19 years of age, by selected characteristics: United States, 1963–1965 through 2003–2006**

[Data are based on physical examinations of a sample of the civilian noninstitutionalized population]

Sex, age, race and Hispanic origin <sup>1</sup> , and percent of poverty level	1963–1965 1966–1970 <sup>2</sup>	1971–1974	1976–1980 <sup>3</sup>	1988–1994	1999–2002	2003–2006
6–11 years of age			Percent of population			
Both sexes <sup>4</sup> . . . . .	4.2	4.0	6.5	11.3	15.8	17.0
Boys . . . . .	4.0	*4.3	6.6	11.6	16.9	18.0
Not Hispanic or Latino:						
White only . . . . .	---	---	6.1	10.7	14.0	15.5
Black or African American only . . . . .	---	---	6.8	12.3	17.0	18.6
Mexican . . . . .	---	---	13.3	17.5	26.5	27.5
Girls . . . . .	4.5	*3.6	6.4	11.0	14.7	15.8
Not Hispanic or Latino:						
White only . . . . .	---	---	5.2	*9.8	13.1	14.4
Black or African American only . . . . .	---	---	11.2	17.0	22.8	24.0
Mexican . . . . .	---	---	9.8	15.3	17.1	19.7
Percent of poverty level: <sup>5</sup>						
Below 100% . . . . .	---	---	---	11.4	19.1	22.0
100%–less than 200% . . . . .	---	---	---	11.1	16.4	19.2
200% or more . . . . .	---	---	---	11.1	14.3	13.5
12–19 years of age						
Both sexes <sup>4</sup> . . . . .	4.6	6.1	5.0	10.5	16.0	17.6
Boys . . . . .	4.5	6.1	4.8	11.3	16.7	18.2
Not Hispanic or Latino:						
White only . . . . .	---	---	3.8	11.6	14.6	17.3
Black or African American only . . . . .	---	---	6.1	10.7	18.7	18.5
Mexican . . . . .	---	---	7.7	14.1	24.7	22.1
Girls . . . . .	4.7	6.2	5.3	9.7	15.3	16.8
Not Hispanic or Latino:						
White only . . . . .	---	---	4.6	8.9	12.6	14.5
Black or African American only . . . . .	---	---	10.7	16.3	23.5	27.7
Mexican . . . . .	---	---	8.8	*13.4	19.6	19.9
Percent of poverty level: <sup>5</sup>						
Below 100% . . . . .	---	---	---	15.8	19.8	19.3
100%–less than 200% . . . . .	---	---	---	11.2	15.1	18.4
200% or more . . . . .	---	---	---	7.9	14.9	16.3

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error of 20%–30%.

--- Data not available.

<sup>1</sup>Persons of Mexican origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The two non-Hispanic race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group. Prior to data year 1999, estimates were tabulated according to the 1977 Standards. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. See [Appendix II, Hispanic origin; Race](#).

<sup>2</sup>Data for 1963–1965 are for children 6–11 years of age; data for 1966–1970 are for adolescents 12–17 years of age, not 12–19 years.

<sup>3</sup>Data for Mexicans are for 1982–1984. See [Appendix I, National Health and Nutrition Examination Survey \(NHANES\)](#).

<sup>4</sup>Includes persons of all races and Hispanic origins, not just those shown separately.

<sup>5</sup>Percent of poverty level is based on family income and family size. Persons with unknown percent of poverty level are excluded (3% in 2003–2006). See [Appendix II, Family income; Poverty](#).

NOTES: Overweight is defined as body mass index (BMI) at or above the sex- and age-specific 95th percentile BMI cutoff points from the 2000 CDC Growth Charts: United States. Advance data from vital and health statistics; no 314. Hyattsville, MD: National Center for Health Statistics. 2000. Age is at time of examination at the mobile examination center. Crude rates, not age-adjusted rates, are shown. Excludes pregnant girls starting with 1971–1974. Pregnancy status not available for 1963–1965 and 1966–1970. Standard errors for selected years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data have been revised and differ from previous versions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

**SOURCES:** CDC/NCHS, National Health and Nutrition Examination Survey, Hispanic Health and Nutrition Examination Survey (1982–1984), and National Health Examination Survey (1963–1965 and 1966–1970).



**Table 77 (page 1 of 2). Untreated dental caries, by selected characteristics: United States, 1971–1974, 1988–1994, and 2001–2004**

[Data are based on dental examinations of a sample of the civilian noninstitutionalized population]

Sex, race and Hispanic origin <sup>1</sup> , and percent of poverty level	2–5 years			6–19 years		
	1971–1974	1988–1994	2001–2004	1971–1974	1988–1994	2001–2004
Percent of persons with untreated dental caries						
Total <sup>2</sup> . . . . .	25.0	19.1	19.5	54.7	23.6	22.9
Sex						
Male . . . . .	26.4	19.3	20.0	54.9	22.8	23.9
Female . . . . .	23.6	18.9	19.1	54.5	24.5	22.0
Race and Hispanic origin						
Not Hispanic or Latino:						
White only . . . . .	23.7	13.8	14.5	51.6	18.8	19.4
Black or African American only . . . . .	29.0	24.7	24.2	71.0	33.7	28.1
Mexican . . . . .	---	34.9	29.2	---	36.5	30.6
Percent of poverty level: <sup>3</sup>						
Below 100% . . . . .	32.0	30.2	26.1	68.0	38.3	31.5
100%–less than 200% . . . . .	29.9	24.3	25.4	60.3	28.2	32.7
200% or more . . . . .	17.8	9.4	12.1	46.2	15.1	14.7
Race, Hispanic origin, and percent of poverty level <sup>3</sup>						
Not Hispanic or Latino:						
White only:						
Below 100% of poverty level . . . . .	32.1	25.7	19.6	65.9	33.5	29.3
100% or more of poverty level . . . . .	22.0	11.7	13.8	49.9	16.7	17.6
Black or African American only:						
Below 100% of poverty level . . . . .	29.1	27.2	26.2	73.9	37.0	33.7
100% or more of poverty level . . . . .	27.9	22.5	21.8	67.3	31.0	24.1
Mexican:						
Below 100% of poverty level . . . . .	---	38.8	35.0	---	46.4	35.9
100% or more of poverty level . . . . .	---	30.3	25.1	---	26.4	27.2

Sex, race and Hispanic origin <sup>1</sup> , and percent of poverty level	20–64 years			65–74 years		
	1971–1974	1988–1994	2001–2004	1971–1974	1988–1994	2001–2004
Percent of persons with untreated dental caries						
Total <sup>2</sup> . . . . .	48.0	28.3	26.8	29.7	25.4	18.6
Sex						
Male . . . . .	50.5	31.5	29.7	32.6	29.8	19.0
Female . . . . .	45.6	25.3	23.9	27.4	21.5	18.2
Race and Hispanic origin						
Not Hispanic or Latino:						
White only . . . . .	45.3	23.9	21.5	28.3	22.7	15.3
Black or African American only . . . . .	67.3	48.5	42.9	41.5	46.7	44.6
Mexican . . . . .	---	40.2	40.1	---	43.8	45.2
Percent of poverty level: <sup>3</sup>						
Below 100% . . . . .	63.5	48.1	46.7	34.3	46.6	47.3
100%–less than 200% . . . . .	56.2	43.5	40.4	35.6	40.1	28.7
200% or more . . . . .	42.7	19.6	18.8	26.2	19.2	13.6
Race, Hispanic origin, and percent of poverty level <sup>3</sup>						
Not Hispanic or Latino:						
White only:						
Below 100% of poverty level . . . . .	60.2	43.7	42.3	33.3	*39.0	*40.5
100% or more of poverty level . . . . .	44.2	21.8	19.0	28.3	22.7	15.2
Black or African American only:						
Below 100% of poverty level . . . . .	71.9	60.4	57.4	39.8	49.7	52.8
100% or more of poverty level . . . . .	65.3	43.9	38.1	41.1	43.8	44.7
Mexican:						
Below 100% of poverty level . . . . .	---	52.7	50.0	---	55.5	67.1
100% or more of poverty level . . . . .	---	31.8	36.1	---	35.6	37.6

See footnotes at end of table.



**Table 77 (page 2 of 2). Untreated dental caries, by selected characteristics: United States, 1971–1974, 1988–1994, and 2001–2004**

[Data are based on dental examinations of a sample of the civilian noninstitutionalized population]

Sex, race and Hispanic origin <sup>1</sup> , and percent of poverty level	75 years and over		
	1971–1974	1988–1994	2001–2004
	Percent of persons with untreated dental caries		
Total <sup>2</sup> . . . . .	---	30.3	23.5
Sex			
Male . . . . .	---	34.4	26.4
Female . . . . .	---	28.1	21.5
Race and Hispanic origin			
Not Hispanic or Latino:			
White only . . . . .	---	27.8	21.8
Black or African American only . . . . .	---	62.6	43.9
Mexican . . . . .	---	55.6	46.8
Percent of poverty level: <sup>3</sup>			
Below 100% . . . . .	---	47.1	36.5
100%–less than 200% . . . . .	---	34.5	25.4
200% or more . . . . .	---	23.2	20.9
Race, Hispanic origin, and percent of poverty level <sup>3</sup>			
Not Hispanic or Latino:			
White only:			
Below 100% of poverty level . . . . .	---	38.0	*36.4
100% or more of poverty level . . . . .	---	26.1	20.8
Black or African American only:			
Below 100% of poverty level . . . . .	---	68.6	65.8
100% or more of poverty level . . . . .	---	60.2	38.6
Mexican:			
Below 100% of poverty level . . . . .	---	79.4	52.9
100% or more of poverty level . . . . .	---	*	46.5

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30% or fewer than 30 cases.

--- Data not available.

<sup>1</sup>Persons of Mexican origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The two non-Hispanic race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group. Prior to data year 1999, estimates were tabulated according to the 1977 Standards. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. See [Appendix II, Hispanic origin; Race](#).

<sup>2</sup>Includes persons of all races and Hispanic origins, not just those shown separately, and those with unknown percent of poverty level.

<sup>3</sup>Percent of poverty level is based on family income and family size. Persons with unknown percent of poverty level are excluded (4% in 1971–1974, 6% in 1988–1994, and 5% in 2001–2004). See [Appendix II, Family income; Poverty](#).

NOTES: Untreated dental caries refers to untreated coronal caries, that is, caries on the crown or enamel surface of the tooth. Root tips are classified as coronal caries. Root caries are not included. For children 2–5 years of age, only dental caries in primary teeth was evaluated. Caries in both permanent and primary teeth was evaluated for children 6–11 years of age. For children 12–19 years of age and adults, only dental caries in permanent teeth was evaluated. Persons without at least one primary or one permanent tooth or one root tip were classified as edentulous and were excluded from this analysis. The majority of edentulous persons are 65 years of age and over. Estimates of edentulism among persons 65 years of age and over are 46% in 1971–1974, 33% in 1988–1994, and 26% in 2001–2004. See [Appendix II, Dental caries](#). Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data have been revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey.

**Table 78 (page 1 of 2). No usual source of health care among children under 18 years of age, by selected characteristics: United States, average annual 1993–1994, 2001–2002, and 2005–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Under 18 years			Under 6 years			6–17 years		
	1993–1994 <sup>1</sup>	2001–2002	2005–2006	1993–1994 <sup>1</sup>	2001–2002	2005–2006	1993–1994 <sup>1</sup>	2001–2002	2005–2006
	Percent of children without a usual source of health care <sup>2</sup>								
All children <sup>3</sup> . . . . .	7.7	6.0	5.4	5.2	4.4	3.6	9.0	6.8	6.3
Race <sup>4</sup>									
White only . . . . .	7.0	5.2	5.3	4.7	4.0	3.5	8.3	5.8	6.1
Black or African American only . . . . .	10.3	6.6	5.7	7.6	3.6	3.5	11.9	8.0	6.7
American Indian or Alaska Native only . . . . .	*9.3	*	*5.8	*	*	*	*8.7	*	*6.6
Asian only . . . . .	9.7	11.2	7.7	*3.4	*	*4.2	13.5	13.2	9.4
Native Hawaiian or Other Pacific Islander only . . . . .	---	*	*	---	*	*	---	*	*
2 or more races . . . . .	---	7.3	*4.6	---	*7.0	*	---	*7.5	*4.9
Hispanic origin and race <sup>4</sup>									
Hispanic or Latino . . . . .	14.3	13.5	11.5	9.3	9.2	7.2	17.7	16.0	14.1
Not Hispanic or Latino . . . . .	6.7	4.4	3.9	4.4	3.2	2.5	7.8	4.9	4.6
White only . . . . .	5.7	3.4	3.3	3.7	2.7	2.2	6.7	3.7	3.8
Black or African American only . . . . .	10.2	6.6	5.4	7.7	3.6	*3.2	11.6	8.0	6.5
Percent of poverty level <sup>5</sup>									
Below 100% . . . . .	13.9	11.7	8.6	9.4	8.2	5.6	16.8	13.7	10.5
100%–less than 200% . . . . .	9.8	8.9	8.1	6.7	7.0	5.2	11.6	9.9	9.6
200% or more . . . . .	3.7	3.3	3.3	1.8	2.1	2.1	4.6	3.8	3.9
Hispanic origin and race and percent of poverty level <sup>4,5</sup>									
Hispanic or Latino:									
Below 100% . . . . .	19.6	18.5	14.3	12.7	12.1	8.7	24.8	22.4	18.1
100%–less than 200% . . . . .	15.3	16.0	12.7	9.9	11.2	8.4	18.9	18.7	15.3
200% or more . . . . .	5.0	7.1	7.9	*2.7	*4.5	*4.5	6.5	8.6	9.7
Not Hispanic or Latino:									
White only:									
Below 100% . . . . .	10.2	7.5	5.1	6.5	*	*	12.7	8.2	6.1
100%–less than 200% . . . . .	8.7	5.4	5.9	6.3	*4.8	*3.6	10.1	5.7	6.9
200% or more . . . . .	3.4	2.4	2.3	1.6	1.5	*1.5	4.2	2.7	2.6
Black or African American only:									
Below 100% . . . . .	13.7	9.0	5.8	10.9	*4.0	*3.4	15.5	11.5	7.2
100%–less than 200% . . . . .	9.1	7.3	6.9	*6.0	*5.1	*	10.8	8.4	8.1
200% or more . . . . .	4.6	4.2	4.0	*	*	*	5.8	5.1	4.7
Health insurance status at the time of interview <sup>6</sup>									
Insured . . . . .	5.0	3.3	2.8	3.3	2.2	2.0	5.9	3.8	3.2
Private . . . . .	3.8	2.5	2.1	1.9	1.4	1.1	4.6	3.0	2.5
Medicaid . . . . .	8.9	5.5	3.9	6.4	4.0	3.1	11.3	6.5	4.5
Uninsured . . . . .	23.5	29.1	30.6	18.0	25.2	23.2	26.0	30.7	33.3
Health insurance status prior to interview <sup>6</sup>									
Insured continuously all 12 months . . . . .	4.6	3.0	2.6	3.1	2.0	1.9	5.5	3.4	2.9
Uninsured for any period up to 12 months . . . . .	15.3	16.7	14.5	10.9	13.8	10.5	18.1	18.4	16.3
Uninsured more than 12 months . . . . .	27.6	36.5	39.0	21.4	32.1	29.9	30.0	38.1	41.6

See footnotes at end of table.

**Table 78 (page 2 of 2). No usual source of health care among children under 18 years of age, by selected characteristics: United States, average annual 1993–1994, 2001–2002, and 2005–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Under 18 years			Under 6 years			6–17 years		
	1993–1994 <sup>1</sup>	2001–2002	2005–2006	1993–1994 <sup>1</sup>	2001–2002	2005–2006	1993–1994 <sup>1</sup>	2001–2002	2005–2006
Percent of poverty level and health insurance status prior to interview <sup>5,6</sup>	Percent of children without a usual source of health care <sup>2</sup>								
Below 100%:									
Insured continuously all 12 months . . . . .	8.6	5.0	3.8	5.8	*2.7	3.0	10.7	6.4	4.4
Uninsured for any period up to 12 months . . . . .	21.7	21.2	16.4	18.0	18.5	*13.8	23.7	23.0	17.8
Uninsured more than 12 months . . . . .	31.2	46.2	43.3	25.5	42.5	33.0	33.4	47.6	46.6
100%–less than 200%:									
Insured continuously all 12 months . . . . .	5.6	4.0	3.2	3.7	3.3	2.5	6.7	4.4	3.6
Uninsured for any period up to 12 months . . . . .	14.5	18.7	16.9	*9.7	*15.8	*12.2	18.0	20.2	18.7
Uninsured more than 12 months . . . . .	27.6	33.8	38.1	21.4	29.9	28.4	30.2	35.3	40.9
200% or more:									
Insured continuously all 12 months . . . . .	2.8	2.1	2.0	1.4	1.3	1.3	3.5	2.5	2.3
Uninsured for any period up to 12 months . . . . .	9.1	11.9	10.8	*5.7	*8.4	*6.6	11.4	13.9	12.8
Uninsured more than 12 months . . . . .	18.3	27.3	35.3	*10.6	*18.8	*28.5	20.9	29.8	37.3
Geographic region									
Northeast . . . . .	4.1	2.4	2.4	2.9	*2.4	*1.6	4.8	2.4	2.8
Midwest . . . . .	5.2	4.2	3.5	4.1	3.8	2.8	5.9	4.4	3.9
South . . . . .	10.9	7.3	6.9	7.3	4.6	4.4	12.7	8.7	8.1
West . . . . .	8.6	8.8	7.5	5.3	6.3	4.6	10.6	10.1	8.9
Location of residence									
Within MSA <sup>7</sup> . . . . .	7.7	6.1	5.4	5.0	4.5	3.5	9.2	6.9	6.4
Outside MSA <sup>7</sup> . . . . .	7.8	5.7	5.5	6.0	3.9	4.1	8.7	6.5	6.2

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

--- Data not available.

<sup>1</sup>Data prior to 1997 are not strictly comparable with data for later years due to the 1997 questionnaire redesign. See [Appendix I, National Health Interview Survey](#).

<sup>2</sup>Persons who report the emergency department as the place of their usual source of care are defined as having no usual source of care. See [Appendix II, Usual source of care](#).

<sup>3</sup>Includes all other races not shown separately and unknown health insurance status.

<sup>4</sup>The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

<sup>5</sup>Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 14% of children in 1993–1996, 21%–25% in 1997–1998, and 27%–31% in 1999–2006. See [Appendix II, Family income; Poverty](#).

<sup>6</sup>Health insurance categories are mutually exclusive. Persons who reported both Medicaid and private coverage are classified as having private coverage. Medicaid includes other public assistance through 1996. Starting with 1997 data, state-sponsored health plan coverage is included as Medicaid coverage. Starting with 1999 data, coverage by the State Children's Health Insurance Program (SCHIP) is included as Medicaid coverage. In addition to private and Medicaid, the insured category also includes military, other government, and Medicare coverage. Persons not covered by private insurance, Medicaid, SCHIP, public assistance (through 1996), state-sponsored or other government-sponsored health plans (starting in 1997), Medicare, or military plans are considered to have no health insurance coverage. Persons with only Indian Health Service coverage are considered to have no health insurance coverage. Health insurance status was unknown for 8%–9% of children in 1993–1996 and about 1% in 1997–2006. See [Appendix II, Health insurance coverage](#).

<sup>7</sup>MSA is metropolitan statistical area. Starting with 2005–2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2005, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health Interview Survey, access to care and health insurance supplements (1993–1996). Starting in 1997, data are from the family core and sample child questionnaires.

**Table 79 (page 1 of 2). No usual source of health care among adults 18–64 years of age, by selected characteristics: United States, average annual selected years 1993–1994 through 2005–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	1993–1994 <sup>1</sup>	1995–1996 <sup>1</sup>	1997–1998	1999–2000	2001–2002	2003–2004	2005–2006
	Percent of adults without a usual source of health care <sup>2</sup>						
18–64 years <sup>3</sup>	18.9	16.9	17.7	17.8	16.4	17.3	18.4
Age							
18–44 years	21.7	19.6	21.1	21.6	20.6	21.7	23.5
18–24 years	26.6	22.6	27.0	27.2	27.2	28.0	29.8
25–44 years	20.3	18.8	19.3	19.9	18.5	19.5	21.3
45–64 years	12.8	11.3	11.2	10.9	9.2	10.4	10.7
45–54 years	14.1	12.2	12.6	12.0	10.3	11.7	12.3
55–64 years	11.1	9.8	9.0	9.2	7.6	8.7	8.4
Sex							
Male	23.9	21.4	23.6	24.1	21.6	22.5	23.9
Female	14.1	12.6	12.0	11.8	11.4	12.4	13.0
Race <sup>4</sup>							
White only	18.4	16.5	17.0	16.7	15.4	17.0	18.1
Black or African American only	20.0	18.3	19.4	19.2	16.9	18.4	19.8
American Indian or Alaska Native only	19.7	16.5	21.3	19.2	16.3	21.5	21.9
Asian only	24.8	21.5	21.7	22.1	20.1	19.3	17.9
Native Hawaiian or Other Pacific Islander only	---	---	---	*	*	*	*
2 or more races	---	---	---	21.0	20.1	18.4	20.9
American Indian or Alaska Native; White	---	---	---	25.8	18.1	17.8	21.4
Hispanic origin and race <sup>4</sup>							
Hispanic or Latino	30.3	27.4	30.4	32.6	32.5	32.9	35.1
Mexican	32.4	29.8	35.9	36.5	36.5	36.4	39.3
Not Hispanic or Latino	17.7	15.7	16.2	15.8	14.0	14.9	15.6
White only	17.1	15.0	15.4	14.9	13.1	14.0	14.8
Black or African American only	19.7	18.1	19.3	19.2	16.8	18.1	19.2
Percent of poverty level <sup>5</sup>							
Below 100%	29.5	26.1	29.1	29.6	29.3	28.9	32.1
100%–less than 200%	25.4	22.9	25.6	27.1	25.6	26.6	27.8
200% or more	14.8	13.5	13.9	14.0	12.3	13.1	13.6
Hispanic origin and race and percent of poverty level <sup>4,5</sup>							
Hispanic or Latino:							
Below 100%	40.0	34.3	42.8	44.4	46.3	42.8	46.7
100%–less than 200%	36.9	32.9	35.4	40.6	40.0	39.7	41.8
200% or more	19.0	18.9	20.1	22.7	22.4	23.7	25.5
Not Hispanic or Latino:							
White only:							
Below 100%	28.2	23.6	25.0	24.2	23.4	23.0	26.2
100%–less than 200%	23.3	20.7	22.4	23.0	20.7	22.0	23.5
200% or more	14.3	12.8	13.1	12.8	10.8	11.7	12.0
Black or African American only:							
Below 100%	24.7	21.9	23.9	23.7	22.8	24.3	29.5
100%–less than 200%	22.3	22.1	25.3	24.4	20.4	22.8	22.6
200% or more	15.1	14.0	14.9	15.4	13.2	14.0	13.5
Health insurance status at the time of interview <sup>6</sup>							
Insured	13.3	11.4	11.4	10.9	9.1	9.4	9.7
Private	13.1	11.3	11.5	11.1	9.0	9.5	9.6
Medicaid	16.3	13.0	10.3	9.9	11.1	9.9	11.6
Uninsured	43.1	41.8	46.7	49.2	49.1	50.2	53.0
Health insurance status prior to interview <sup>6</sup>							
Insured continuously all 12 months	---	---	10.6	10.3	8.3	8.7	8.9
Uninsured for any period up to 12 months	---	---	30.7	31.2	33.3	32.1	33.4
Uninsured more than 12 months	---	---	51.4	54.8	54.6	55.0	58.0

See footnotes at end of table.

**Table 79 (page 2 of 2). No usual source of health care among adults 18–64 years of age, by selected characteristics: United States, average annual selected years 1993–1994 through 2005–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	1993–1994 <sup>1</sup>	1995–1996 <sup>1</sup>	1997–1998	1999–2000	2001–2002	2003–2004	2005–2006
Percent of poverty level and health insurance status prior to interview <sup>5,6</sup>							
			Percent of adults without a usual source of health care <sup>2</sup>				
Below 100%:							
Insured continuously all 12 months . . .	---	---	13.1	11.6	11.5	11.2	12.0
Uninsured for any period up to 12 months . . . . .	---	---	33.0	31.9	36.5	36.2	36.5
Uninsured more than 12 months . . . . .	---	---	54.3	57.1	58.8	57.2	63.2
100%–less than 200%:							
Insured continuously all 12 months . . .	---	---	13.0	12.3	11.0	10.5	10.4
Uninsured for any period up to 12 months . . . . .	---	---	31.1	34.6	35.1	34.2	37.8
Uninsured more than 12 months . . . . .	---	---	51.1	54.9	54.5	55.1	57.0
200% or more:							
Insured continuously all 12 months . . .	---	---	10.0	9.8	7.6	8.2	8.3
Uninsured for any period up to 12 months . . . . .	---	---	29.6	29.5	31.5	29.5	30.2
Uninsured more than 12 months . . . . .	---	---	49.2	53.1	51.7	53.4	55.2
Geographic region							
Northeast . . . . .	14.7	13.4	13.3	12.8	11.9	12.1	12.2
Midwest . . . . .	16.2	14.7	15.1	17.0	14.1	14.7	15.8
South . . . . .	21.8	18.7	20.7	19.7	18.3	19.7	21.4
West . . . . .	21.1	19.9	20.2	20.1	19.9	21.0	21.1
Location of residence							
Within MSA <sup>7</sup> . . . . .	19.3	17.3	17.9	18.1	16.6	17.6	18.7
Outside MSA <sup>7</sup> . . . . .	17.5	15.4	17.0	16.8	15.4	16.2	16.7

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

--- Data not available.

<sup>1</sup>Data prior to 1997 are not strictly comparable with data for later years due to the 1997 questionnaire redesign. See [Appendix I, National Health Interview Survey](#).

<sup>2</sup>Persons who report the emergency department as the place of their usual source of care are defined as having no usual source of care. See [Appendix II, Usual source of care](#).

<sup>3</sup>Includes all other races not shown separately and unknown health insurance status.

<sup>4</sup>The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

<sup>5</sup>Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 15%–17% of persons 18–64 years of age in 1993–1996, 24%–28% in 1997–1998, and 30%–33% in 1999–2006. See [Appendix II, Family income; Poverty](#).

<sup>6</sup>Health insurance categories are mutually exclusive. Persons who reported both Medicaid and private coverage are classified as having private coverage. Medicaid includes other public assistance through 1996. Starting with 1997 data, state-sponsored health plan coverage is included as Medicaid coverage. Starting with 1999 data, coverage by the State Children’s Health Insurance Program (SCHIP) is included as Medicaid coverage. In addition to private and Medicaid, the insured category also includes military, other government, and Medicare coverage. Persons not covered by private insurance, Medicaid, SCHIP, public assistance (through 1996), state-sponsored or other government-sponsored health plans (starting in 1997), Medicare, or military plans are considered to have no health insurance coverage. Persons with only Indian Health Service coverage are considered to have no health insurance coverage. In 1993–1996, health insurance status was unknown for 8%–9% of adults in the sample. In 1997–2006, health insurance status was unknown for 1% of adults. See [Appendix II, Health insurance coverage](#).

<sup>7</sup>MSA is metropolitan statistical area. Starting with 2005–2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2005, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: Between 1997 and 2006, about 5% of persons 65–74 years of age and 4% of persons 75 years of age and over did not have a usual source of care. Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health Interview Survey, access to care and health insurance supplements (1993–1996). Starting in 1997, data are from the family core and sample adult questionnaires.

**Table 80 (page 1 of 2). Reduced access to medical care during the past 12 months due to cost, by selected characteristics: United States, 1997, 2005, and 2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Did not get medical care due to cost <sup>1</sup>			Delayed medical care due to cost <sup>2</sup>			Did not get prescription drugs due to cost <sup>3</sup>		
	1997	2005	2006	1997	2005	2006	1997	2005	2006
	Percent								
Total, age-adjusted <sup>4,5</sup>	4.5	5.2	5.7	7.3	7.4	7.8	4.7	7.2	7.0
Total, crude <sup>5</sup>	4.5	5.3	5.8	7.3	7.5	7.8	4.8	7.2	7.0
Age									
Under 18 years	2.2	2.1	2.4	3.7	3.7	4.0	2.2	2.9	3.0
Under 6 years	1.6	1.5	2.1	3.0	3.0	3.5	1.6	2.5	2.7
6–17 years	2.5	2.4	2.6	4.1	4.1	4.2	2.4	3.1	3.2
18–64 years	6.0	7.1	7.8	9.5	9.7	10.2	6.3	9.4	9.3
18–44 years	6.1	7.3	7.8	9.7	9.8	10.0	6.9	9.8	9.6
18–24 years	5.8	7.3	7.4	8.8	9.8	9.4	6.7	9.6	9.9
25–34 years	6.2	7.5	8.6	10.2	10.1	11.3	6.9	10.2	9.6
35–44 years	6.0	7.0	7.4	9.8	9.6	9.2	7.1	9.6	9.4
45–64 years	5.8	6.8	7.7	9.0	9.4	10.4	5.1	8.7	8.7
45–54 years	6.0	6.9	8.5	9.6	9.4	10.9	5.6	9.2	9.5
55–64 years	5.4	6.6	6.5	8.2	9.4	9.7	4.2	8.0	7.6
65 years and over	2.3	2.4	2.3	3.9	4.0	3.7	2.8	5.1	3.6
65–74 years	2.6	3.0	3.0	4.3	4.6	4.6	3.4	6.4	3.8
75 years and over	1.8	1.8	1.5	3.4	3.4	2.7	2.0	3.6	3.5
Sex									
Male	3.8	4.7	5.5	6.4	6.8	7.3	3.9	5.7	5.6
Female	5.2	5.8	6.1	8.1	8.2	8.4	5.6	8.7	8.4
Race <sup>6</sup>									
White only	4.4	5.1	5.8	7.5	7.6	8.0	4.5	7.0	6.7
Black or African American only	5.5	6.4	6.7	6.6	7.3	7.7	7.1	8.9	9.8
American Indian or Alaska Native only	6.7	6.2	*6.3	10.0	9.0	*7.8	*7.5	*10.2	*13.6
Asian only	2.6	2.8	2.7	4.0	3.7	3.9	*2.3	3.2	3.4
Native Hawaiian or Other Pacific Islander only	---	*	*	---	*	*	---	*	*
2 or more races	---	8.7	6.9	---	11.9	9.6	---	13.5	8.1
Hispanic origin and race <sup>6</sup>									
Hispanic or Latino	5.7	6.0	6.5	6.9	7.7	8.1	5.5	8.8	8.7
Mexican	5.5	6.0	6.2	6.6	7.7	7.8	5.5	9.3	9.0
Not Hispanic or Latino	4.4	5.1	5.7	7.3	7.4	7.8	4.7	6.9	6.7
White only	4.2	5.0	5.6	7.6	7.6	8.1	4.3	6.7	6.2
Black or African American only	5.6	6.3	6.8	6.6	7.3	7.6	7.1	8.8	10.0
Education <sup>7</sup>									
No high school diploma or GED	8.5	9.5	10.1	10.9	11.3	11.4	8.9	14.4	13.1
High school diploma or GED	5.2	6.7	7.1	8.5	8.9	9.4	5.9	9.1	8.4
Some college or more	4.2	5.2	5.9	7.9	8.0	8.6	4.1	6.5	6.4
Percent of poverty level <sup>8</sup>									
Below 100%	9.8	10.3	10.6	11.6	12.2	12.2	10.3	14.1	13.7
100%–less than 200%	7.4	9.0	9.6	11.2	11.6	11.8	7.9	11.6	11.1
200% or more	2.5	3.2	3.6	5.1	5.4	5.7	2.6	4.6	4.2
Age and percent of poverty level <sup>8</sup>									
Under 18 years of age:									
Below 100%	4.5	3.7	3.5	5.5	5.4	4.8	4.6	5.7	5.5
100%–less than 200%	3.0	3.6	4.2	5.9	5.9	6.6	3.4	4.2	3.9
200% or more	1.1	1.0	1.4	2.2	2.4	2.7	0.8	1.5	1.8
18–44 years:									
Below 100%	12.7	13.0	14.2	14.8	14.9	16.0	13.8	17.2	17.2
100%–less than 200%	10.1	12.7	12.6	14.9	15.0	14.7	11.6	15.2	15.4
200% or more	3.5	4.6	4.9	7.1	7.3	7.2	4.0	6.6	6.0
45–64 years:									
Below 100%	18.3	20.6	21.1	21.9	22.5	22.7	17.7	25.6	26.2
100%–less than 200%	13.8	15.0	16.9	18.5	18.9	19.4	11.7	18.5	18.5
200% or more	2.8	3.9	4.4	5.8	6.4	7.3	2.4	5.1	4.8
65 years and over:									
Below 100%	7.2	6.1	4.1	8.5	9.0	6.1	7.3	11.7	8.1
100%–less than 200%	3.3	4.3	4.2	5.8	6.3	5.8	4.3	8.7	6.0
200% or more	0.9	1.0	1.2	2.2	2.3	2.4	1.2	2.5	1.8

See footnotes at end of table.

**Table 80 (page 2 of 2). Reduced access to medical care during the past 12 months due to cost, by selected characteristics: United States, 1997, 2005, and 2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Did not get medical care due to cost <sup>1</sup>			Delayed medical care due to cost <sup>2</sup>			Did not get prescription drugs due to cost <sup>3</sup>		
	1997	2005	2006	1997	2005	2006	1997	2005	2006
Percent of poverty level and health insurance status prior to interview for persons under 65 years of age <sup>4,8,9</sup>	Percent								
Insured continuously all 12 months . . . . .	1.8	2.1	2.5	3.9	3.9	4.1	2.2	4.0	3.7
Below 100% . . . . .	3.6	3.5	3.5	4.8	5.2	4.8	5.2	7.4	6.3
100%–less than 200% . . . . .	3.4	4.1	4.7	6.4	5.9	6.1	4.3	6.7	7.0
200% or more . . . . .	1.2	1.5	1.9	3.3	3.3	3.6	1.3	2.9	2.6
Uninsured for any period									
up to 12 months . . . . .	14.3	18.6	19.4	22.5	25.4	26.4	14.9	20.5	21.8
Below 100% . . . . .	18.6	24.8	24.6	23.5	28.5	28.1	20.2	26.9	28.4
100%–less than 200% . . . . .	15.1	20.1	21.1	24.2	26.7	27.4	15.9	23.0	21.2
200% or more . . . . .	11.4	15.3	16.0	20.9	23.5	25.0	11.2	16.7	19.0
Uninsured more than 12 months . . . . .	18.9	22.2	23.0	23.9	25.7	26.1	16.7	22.7	21.6
Below 100% . . . . .	22.2	24.5	27.1	24.1	25.9	28.8	19.0	27.0	28.6
100%–less than 200% . . . . .	18.4	23.7	23.0	23.1	27.0	25.6	16.8	22.2	21.1
200% or more . . . . .	16.4	19.3	19.9	24.7	24.3	24.4	14.5	19.9	16.6
Geographic region									
Northeast . . . . .	3.5	3.9	4.1	5.7	5.6	5.4	3.4	5.4	5.1
Midwest . . . . .	4.0	4.5	5.3	7.3	7.3	8.4	4.4	6.8	6.7
South . . . . .	5.3	6.5	7.1	8.1	8.4	8.7	5.7	8.9	8.4
West . . . . .	4.7	5.2	5.5	7.2	7.8	7.8	4.8	6.4	6.5
Location of residence . . . . .									
Within MSA <sup>10</sup> . . . . .	4.3	5.1	5.5	6.9	7.3	7.6	4.4	6.8	6.8
Outside MSA <sup>10</sup> . . . . .	5.3	5.8	7.1	8.6	8.3	9.1	6.0	8.7	7.9

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

--- Data not available.

<sup>1</sup>Based on persons responding yes to the question, “During the past 12 months was there any time when person needed medical care but did not get it because person couldn’t afford it?”

<sup>2</sup>Based on persons responding yes to the question, “During the past 12 months has medical care been delayed because of worry about the cost?”

<sup>3</sup>Based on persons responding yes to the question, “During the past 12 months was there any time when you needed prescription medicine but didn’t get it because you couldn’t afford it?”

<sup>4</sup>Estimates are age-adjusted to the year 2000 standard population using six age groups: 0–17 years, 18–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

<sup>5</sup>Includes all other races not shown separately, unknown health insurance status, and unknown education level.

<sup>6</sup>The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

<sup>7</sup>Estimates are for persons 25 years of age and over. GED stands for General Educational Development high school equivalency diploma. See [Appendix II, Education](#).

<sup>8</sup>Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 24%–29% of persons in 1997–1998 and 31%–34% in 1996–2006. See [Appendix II, Family Income; Poverty](#).

<sup>9</sup>For information on the health insurance categories see [Appendix II, Health Insurance Coverage](#).

<sup>10</sup>MSA is metropolitan statistical area.

NOTES: Standard errors and additional data years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health Interview Survey, family core, sample child, and sample adult questionnaires.



**Table 81. Reduced access to medical care during the past 12 months due to cost, by state: 25 largest states and United States, average annual 1997–1998, 2001–2002, and 2005–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

State	<i>Did not get medical care due to cost<sup>1</sup></i>			<i>Delayed medical care due to cost<sup>2</sup></i>			<i>Did not get prescription drugs due to cost<sup>3</sup></i>		
	1997–1998	2001–2002	2005–2006	1997–1998	2001–2002	2005–2006	1997–1998	2001–2002	2005–2006
	Percent								
Total, United States . . . . .	4.4	4.7	5.5	6.9	6.6	7.7	4.5	5.8	7.1
Alabama . . . . .	4.4	5.5	6.9	6.3	6.6	8.0	6.8	9.0	13.8
Arizona . . . . .	5.0	4.0	6.8	7.1	6.4	9.5	4.1	5.4	7.8
California . . . . .	4.2	4.2	3.8	5.8	5.5	5.3	3.9	5.0	5.2
Colorado . . . . .	3.7	5.3	6.0	5.8	7.2	9.5	3.1	4.8	5.6
Florida . . . . .	5.8	5.9	7.1	8.7	8.4	10.0	4.8	6.4	7.7
Georgia . . . . .	4.6	4.9	5.7	7.4	6.7	5.5	4.2	3.8	5.9
Illinois . . . . .	3.0	3.6	3.7	5.3	5.4	6.0	3.0	4.4	5.3
Indiana . . . . .	5.2	5.6	6.7	7.8	7.6	9.5	5.1	7.2	8.1
Kentucky . . . . .	6.5	7.0	9.5	10.1	9.1	10.9	6.3	9.6	11.7
Louisiana . . . . .	5.8	6.9	6.3	8.6	9.0	7.9	8.7	9.6	10.8
Maryland . . . . .	5.5	5.3	3.5	6.8	6.5	5.6	5.8	6.6	5.8
Massachusetts . . . . .	2.4	3.5	3.2	4.3	4.6	5.0	1.7	4.8	4.5
Michigan . . . . .	3.8	4.1	5.2	6.3	5.8	8.1	3.8	5.8	6.9
Minnesota . . . . .	3.4	3.0	5.2	7.2	5.8	7.6	3.6	3.7	6.5
Missouri . . . . .	4.0	4.4	5.8	6.5	5.4	8.8	4.3	5.4	8.9
New Jersey . . . . .	3.3	3.1	4.0	6.3	4.8	5.2	3.8	4.5	3.9
New York . . . . .	3.6	3.8	3.6	5.4	5.4	5.0	2.8	4.0	5.3
North Carolina . . . . .	4.1	4.4	5.4	6.6	6.6	7.2	4.0	6.0	5.4
Ohio . . . . .	4.6	4.2	5.7	8.2	7.3	9.0	5.0	6.3	7.5
Pennsylvania . . . . .	3.4	3.7	4.9	5.1	5.3	6.2	4.3	3.8	6.7
Tennessee . . . . .	4.6	5.2	6.8	9.1	7.0	8.2	8.0	6.1	8.1
Texas . . . . .	4.8	6.0	8.2	6.9	7.4	10.5	4.7	8.5	11.1
Virginia . . . . .	3.6	4.3	3.8	5.2	5.9	5.4	4.1	4.8	5.1
Washington . . . . .	4.8	5.6	6.4	7.6	7.8	10.0	4.8	6.2	6.5
Wisconsin . . . . .	2.8	3.8	2.8	5.9	5.1	5.5	*3.0	3.9	4.8

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%.

<sup>1</sup>Based on persons responding yes to the question, “During the past 12 months was there any time when person needed medical care but did not get it because person couldn’t afford it?”

<sup>2</sup>Based on persons responding yes to the question, “During the past 12 months has medical care been delayed because of worry about the cost?”

<sup>3</sup>Based on persons responding yes to the question, “During the past 12 months was there any time when you needed prescription medicine but didn’t get it because you couldn’t afford it?”

NOTES: Data are for the 25 states with the largest populations in 2005–2006. Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. See related Table 79. Data for additional years are available. See Appendix III.

SOURCE: CDC/NCHS, National Health Interview Survey, family core, sample child, and sample adult questionnaires.



**Table 82 (page 1 of 2). No health care visits to an office or clinic within the past 12 months among children under 18 years of age, by selected characteristics: United States, average annual 1997–1998, 2001–2002, and 2005–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Under 18 years			Under 6 years			6–17 years		
	1997–1998	2001–2002	2005–2006	1997–1998	2001–2002	2005–2006	1997–1998	2001–2002	2005–2006
	Percent of children without a health care visit <sup>1</sup>								
All children <sup>2</sup>	12.8	12.1	11.7	5.7	6.3	6.1	16.3	14.9	14.4
Race <sup>3</sup>									
White only	12.2	11.5	11.3	5.5	6.4	6.3	15.5	13.9	13.8
Black or African American only	14.3	13.3	11.7	6.5	5.9	4.6	18.1	16.8	15.1
American Indian or Alaska Native only	13.8	*18.6	*15.7	*	*	*	*17.6	*23.0	*17.7
Asian only	16.3	15.6	17.5	*5.6	*6.8	10.5	22.1	20.5	20.8
Native Hawaiian or Other Pacific Islander only	---	*	*	---	*	*	---	*	*
2 or more races	---	8.3	10.4	---	*3.3	*	---	12.4	14.8
Hispanic origin and race <sup>3</sup>									
Hispanic or Latino	19.3	18.8	17.4	9.7	9.6	9.6	25.3	24.0	21.9
Not Hispanic or Latino	11.6	10.6	10.3	4.8	5.4	5.1	14.9	13.0	12.6
White only	10.7	9.7	9.4	4.3	5.3	5.0	13.7	11.7	11.4
Black or African American only	14.5	13.4	11.7	6.5	6.0	*4.4	18.3	16.8	15.1
Percent of poverty level <sup>4</sup>									
Below 100%	17.6	17.3	14.2	8.1	9.1	7.7	23.6	21.8	18.2
100%–less than 200%	16.2	14.8	14.9	7.2	7.4	8.4	20.8	18.7	18.2
200% or more	9.9	9.6	9.6	4.1	4.8	4.6	12.6	11.7	11.8
Hispanic origin and race and percent of poverty level <sup>3,4</sup>									
Hispanic or Latino:									
Below 100%	23.2	22.1	20.0	11.7	10.4	11.5	31.1	29.4	25.6
100%–less than 200%	20.9	21.3	19.1	9.7	12.3	10.1	28.1	26.2	24.4
200% or more	13.4	13.7	13.4	7.2	6.4	7.0	16.8	17.6	16.7
Not Hispanic or Latino:									
White only:									
Below 100%	14.0	13.2	9.4	*5.6	*8.6	*5.6	19.7	15.6	11.8
100%–less than 200%	14.1	11.8	13.2	6.0	*6.0	8.5	18.0	14.8	15.4
200% or more	9.2	8.8	8.4	3.6	4.5	4.0	11.7	10.5	10.3
Black or African American only:									
Below 100%	15.8	16.1	12.1	7.6	*7.8	*	20.5	20.3	16.4
100%–less than 200%	16.4	13.3	13.1	*7.7	*4.4	*	20.4	17.5	16.2
200% or more	11.8	11.2	10.2	*4.1	*5.4	*	14.8	13.6	13.1
Health insurance status at the time of interview <sup>5</sup>									
Insured	10.4	9.8	9.5	4.5	4.7	4.9	13.4	12.3	11.9
Private	10.4	9.5	9.4	4.3	4.3	4.4	13.1	11.8	11.6
Medicaid	10.1	10.3	9.5	5.0	5.5	5.8	14.4	13.3	12.2
Uninsured	28.8	31.9	31.7	14.6	21.0	20.6	34.9	36.3	35.6
Health insurance status prior to interview <sup>5</sup>									
Insured continuously all 12 months	10.3	9.5	9.5	4.4	4.6	4.9	13.2	12.0	11.9
Uninsured for any period up to 12 months	15.9	17.7	15.8	7.7	10.3	9.3	20.9	21.9	18.8
Uninsured more than 12 months	34.9	41.4	39.0	19.9	30.2	28.0	40.2	45.3	42.2

See footnotes at end of table.

**Table 82 (page 2 of 2). No health care visits to an office or clinic within the past 12 months among children under 18 years of age, by selected characteristics: United States, average annual 1997–1998, 2001–2002, and 2005–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Under 18 years			Under 6 years			6–17 years		
	1997–1998	2001–2002	2005–2006	1997–1998	2001–2002	2005–2006	1997–1998	2001–2002	2005–2006
Percent of poverty level and health insurance status prior to interview <sup>4,5</sup>	Percent of children without a health care visit <sup>1</sup>								
Below 100%:									
Insured continuously all 12 months . . . . .	12.6	11.7	10.4	5.7	6.1	5.8	17.6	14.9	13.5
Uninsured for any period up to 12 months . . . . .	19.9	21.8	17.5	*9.9	*14.4	*	26.1	26.6	21.6
Uninsured more than 12 months . . . . .	39.9	48.2	44.6	24.9	*28.0	*32.3	45.2	55.7	48.4
100%–less than 200%:									
Insured continuously all 12 months . . . . .	12.6	10.9	11.5	4.8	4.2	6.7	16.7	14.5	14.2
Uninsured for any period up to 12 months . . . . .	15.6	18.9	17.7	*8.7	*10.7	*10.8	20.2	23.2	20.4
Uninsured more than 12 months . . . . .	33.7	41.3	39.2	21.3	35.4	26.0	37.9	43.6	42.9
200% or more:									
Insured continuously all 12 months . . . . .	8.9	8.6	8.6	3.8	4.2	3.9	11.3	10.6	10.7
Uninsured for any period up to 12 months . . . . .	12.4	13.8	12.8	*	*6.9	*7.7	16.7	17.7	15.2
Uninsured more than 12 months . . . . .	29.7	32.3	32.5	*10.5	*24.8	*25.8	36.7	34.4	34.4
Geographic region									
Northeast . . . . .	7.0	6.0	6.8	3.1	3.9	4.0	8.9	6.9	8.1
Midwest . . . . .	12.2	10.3	9.8	5.9	5.1	5.2	15.3	12.8	12.0
South . . . . .	14.3	14.0	12.4	5.6	7.0	6.2	18.5	17.4	15.5
West . . . . .	16.3	16.0	16.5	7.9	8.1	8.8	20.7	20.0	20.3
Location of residence									
Within MSA <sup>6</sup> . . . . .	12.3	11.7	11.4	5.4	6.1	5.9	15.9	14.5	14.1
Outside MSA <sup>6</sup> . . . . .	14.6	13.5	12.9	6.9	6.9	7.4	17.9	16.3	15.4

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

--- Data not available.

<sup>1</sup> Respondents were asked how many times a doctor or other health care professional was seen in the past 12 months at a doctor's office, clinic, or some other place. Excluded are visits to emergency rooms, hospitalizations, home visits, and telephone calls. Starting with 2000 data, dental visits were also excluded. See [Appendix II, Health care contact](#).

<sup>2</sup> Includes all other races not shown separately and unknown health insurance status.

<sup>3</sup> The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

<sup>4</sup> Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 21%–25% of children under 18 years of age in 1997–1998 and 27%–31% in 1999–2006. See [Appendix II, Family income; Poverty](#).

<sup>5</sup> Health insurance categories are mutually exclusive. Persons who reported both Medicaid and private coverage are classified as having private coverage. Starting with 1997 data, state-sponsored health plan coverage is included as Medicaid coverage. Starting with 1999 data, coverage by the State Children's Health Insurance Program (SCHIP) is included as Medicaid coverage. In addition to private and Medicaid, the insured category also includes military, other government, and Medicare coverage. Persons not covered by private insurance, Medicaid, SCHIP, state-sponsored or other government-sponsored health plans (starting in 1997), Medicare, or military plans are considered to have no health insurance coverage. Persons with only Indian Health Service coverage are considered to have no health insurance coverage. See [Appendix II, Health insurance coverage](#).

<sup>6</sup> MSA is metropolitan statistical area. Starting with 2005–2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2005, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: In 1997 the National Health Interview Survey questionnaire was redesigned. See [Appendix I, National Health Interview Survey](#). Standard errors for selected years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health Interview Survey, family core and sample child questionnaires.

**Table 83 (page 1 of 3). Health care visits to doctor offices, emergency departments, and home visits within the past 12 months, by selected characteristics: United States, 1997, 2005, and 2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Number of health care visits <sup>1</sup>											
	None			1–3 visits			4–9 visits			10 or more visits		
	1997	2005	2006	1997	2005	2006	1997	2005	2006	1997	2005	2006
	Percent distribution											
Total, age-adjusted <sup>2,3</sup>	16.5	15.6	17.2	46.2	46.2	46.9	23.6	24.6	23.1	13.7	13.7	12.8
Total, crude <sup>2</sup>	16.5	15.5	17.2	46.5	46.2	46.8	23.5	24.6	23.1	13.5	13.7	12.9
Age												
Under 18 years	11.8	10.2	10.9	54.1	56.3	57.2	25.2	26.1	24.6	8.9	7.4	7.3
Under 6 years	5.0	5.1	4.9	44.9	47.9	50.6	37.0	37.5	34.8	13.0	9.5	9.7
6–17 years	15.3	12.7	13.8	58.7	60.4	60.5	19.3	20.6	19.6	6.8	6.4	6.1
18–44 years	21.7	23.1	25.3	46.7	46.0	45.8	19.0	18.8	17.8	12.6	12.1	11.0
18–24 years	22.0	24.3	25.3	46.8	44.7	47.2	20.0	19.2	17.4	11.2	11.8	10.2
25–44 years	21.6	22.6	25.4	46.7	46.5	45.3	18.7	18.7	17.9	13.0	12.2	11.4
45–64 years	16.9	14.1	16.4	42.9	43.1	44.3	24.7	26.4	23.6	15.5	16.4	15.7
45–54 years	17.9	15.9	18.5	43.9	45.1	46.1	23.4	23.9	21.8	14.8	15.1	13.6
55–64 years	15.3	11.5	13.5	41.3	40.5	41.9	26.7	29.8	26.1	16.7	18.2	18.5
65 years and over	8.9	5.7	6.0	34.7	31.1	33.2	32.5	36.7	36.2	23.8	26.5	24.6
65–74 years	9.8	6.0	6.7	36.9	34.8	34.6	31.6	35.1	36.6	21.6	24.1	22.1
75 years and over	7.7	5.3	5.3	31.8	26.9	31.5	33.8	38.5	35.7	26.6	29.2	27.6
Sex <sup>3</sup>												
Male	21.3	20.4	22.8	47.1	46.9	46.8	20.6	21.9	20.0	11.0	10.8	10.4
Female	11.8	10.8	11.8	45.4	45.5	46.8	26.5	27.3	26.2	16.3	16.4	15.2
Race <sup>3,4</sup>												
White only	16.0	15.2	17.2	46.1	46.0	46.2	23.9	24.9	23.4	14.0	14.0	13.2
Black or African American only	16.8	16.0	16.0	46.1	47.5	49.2	23.2	23.6	23.3	13.9	12.9	11.5
American Indian or Alaska Native only	17.1	20.5	13.5	38.0	36.6	44.2	24.2	29.4	27.6	20.7	13.4	14.7
Asian only	22.8	21.6	21.9	49.1	49.5	51.3	19.7	20.5	18.1	8.3	8.5	8.7
Native Hawaiian or Other Pacific Islander only	---	*	*	---	*	*	---	*	*	---	*	*
2 or more races	---	15.6	16.3	---	37.9	44.8	---	26.7	21.3	---	19.9	17.6
Hispanic origin and race <sup>3,4</sup>												
Hispanic or Latino	24.9	24.0	27.1	42.3	42.4	43.0	20.3	21.7	19.6	12.5	11.9	10.3
Mexican	28.9	26.7	31.1	40.8	41.7	40.8	18.5	20.5	18.3	11.8	11.1	9.8
Not Hispanic or Latino	15.4	13.9	15.4	46.7	46.8	47.6	24.0	25.2	23.7	13.9	14.0	13.2
White only	14.7	13.1	15.0	46.6	46.7	46.9	24.4	25.7	24.2	14.3	14.6	13.9
Black or African American only	16.9	16.0	15.7	46.1	47.5	49.5	23.1	23.6	23.4	13.8	12.9	11.4
Respondent-assessed health status <sup>3</sup>												
Fair or poor	7.8	9.2	12.2	23.3	21.9	21.2	29.0	27.1	28.1	39.9	41.9	38.6
Good to excellent	17.2	16.2	17.8	48.4	48.5	49.3	23.3	24.4	22.8	11.1	10.9	10.1
Percent of poverty level <sup>3,5</sup>												
Below 100%	20.6	20.8	21.0	37.8	37.5	39.5	22.7	24.3	22.3	18.9	17.4	17.2
100%–less than 200%	20.1	20.4	21.6	43.3	42.3	43.5	21.7	22.8	21.5	14.9	14.5	13.3
200% or more	14.5	13.3	15.2	48.7	48.7	49.3	24.2	25.2	23.7	12.6	12.8	11.9

See footnotes at end of table.

**Table 83 (page 2 of 3). Health care visits to doctor offices, emergency departments, and home visits within the past 12 months, by selected characteristics: United States, 1997, 2005, and 2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Number of health care visits <sup>1</sup>											
	None			1–3 visits			4–9 visits			10 or more visits		
	1997	2005	2006	1997	2005	2006	1997	2005	2006	1997	2005	2006
Percent distribution												
Hispanic origin and race and percent of poverty level <sup>3,4,5</sup>												
Hispanic or Latino:												
Below 100% . . . . .	30.2	28.1	32.8	34.8	37.4	35.3	19.9	19.8	19.2	15.0	14.7	12.7
100%–less than 200% . . . . .	28.7	27.8	29.9	39.7	39.0	42.0	20.4	22.2	19.3	11.2	11.1	8.8
200% or more . . . . .	18.9	19.4	22.2	48.8	47.1	47.4	20.4	22.7	20.4	11.9	10.8	10.1
Not Hispanic or Latino:												
White only:												
Below 100% . . . . .	17.0	16.6	16.3	38.3	36.4	38.7	23.9	27.4	24.2	20.9	19.7	20.8
100%–less than 200% . . . . .	17.3	17.6	18.8	44.1	42.2	43.7	22.2	23.2	22.2	16.3	17.0	15.4
200% or more . . . . .	13.8	11.8	14.0	48.2	48.7	48.6	24.9	26.0	24.6	13.1	13.6	12.7
Black or African American only:												
Below 100% . . . . .	17.4	17.9	18.1	38.5	40.2	45.0	23.4	24.5	21.9	20.7	17.4	15.0
100%–less than 200% . . . . .	18.8	16.2	17.9	43.7	47.1	45.5	22.9	24.0	24.2	14.5	12.7	12.5
200% or more . . . . .	15.6	15.2	13.5	51.7	50.4	53.6	22.7	23.4	23.5	10.0	11.0	9.3
Health insurance status at the time of interview <sup>6,7</sup>												
Under 65 years:												
Insured . . . . .	14.3	12.5	14.3	49.0	49.9	50.4	23.6	24.5	23.1	13.1	13.1	12.3
Private . . . . .	14.7	12.9	14.7	50.6	51.8	52.6	23.1	24.1	22.4	11.6	11.3	10.3
Medicaid . . . . .	9.8	10.0	11.3	35.5	38.3	37.4	26.5	25.8	25.5	28.2	25.9	25.8
Uninsured . . . . .	33.7	37.6	39.2	42.8	42.1	42.2	15.3	14.4	12.5	8.2	5.9	6.1
Health insurance status prior to interview <sup>6,7</sup>												
Under 65 years:												
Insured continuously all 12 months . . . . .	14.1	12.4	14.3	49.2	50.1	50.8	23.6	24.5	23.1	13.0	12.9	11.9
Uninsured for any period up to 12 months . . . . .	18.9	18.9	19.1	46.0	45.1	46.3	20.8	22.1	20.9	14.4	13.8	13.7
Uninsured more than 12 months . . . . .	39.0	43.6	45.6	41.4	40.1	40.2	13.2	12.1	9.6	6.4	4.2	4.5
Percent of poverty level and health insurance status prior to interview <sup>5,6,7</sup>												
Under 65 years:												
Below 100%:												
Insured continuously all 12 months . . . . .	13.8	12.7	12.6	39.7	40.7	43.1	25.2	25.7	24.2	21.4	21.0	20.1
Uninsured for any period up to 12 months . . . . .	19.7	19.0	17.8	37.6	37.6	39.3	21.9	23.2	23.4	20.9	20.2	19.5
Uninsured more than 12 months . . . . .	41.2	46.2	50.1	39.9	35.3	35.3	12.2	14.2	9.9	6.6	4.4	4.8
100%–less than 200%:												
Insured continuously all 12 months . . . . .	16.0	14.9	16.3	46.4	46.1	45.9	21.9	23.6	23.0	15.8	15.4	14.8
Uninsured for any period up to 12 months . . . . .	18.8	19.3	20.6	45.1	44.9	49.8	21.0	21.7	18.7	15.0	14.1	10.9
Uninsured more than 12 months . . . . .	38.7	43.6	44.3	41.0	39.4	42.1	14.0	12.5	10.2	6.3	4.5	3.4
200% or more:												
Insured continuously all 12 months . . . . .	13.7	11.8	14.1	51.0	51.8	52.6	23.6	24.6	22.9	11.7	11.7	10.4
Uninsured for any period up to 12 months . . . . .	17.8	18.6	18.6	50.3	48.1	48.0	20.4	22.1	20.7	11.5	11.2	12.7
Uninsured more than 12 months . . . . .	36.6	41.1	42.8	43.8	44.8	42.4	13.2	10.2	9.3	6.4	3.9	*5.5
Geographic region <sup>3</sup>												
Northeast . . . . .	13.2	11.4	12.1	45.9	47.1	47.6	26.0	26.5	25.1	14.9	15.0	15.2
Midwest . . . . .	15.9	13.8	15.2	47.7	47.4	48.4	22.8	24.7	23.6	13.6	14.0	12.7
South . . . . .	17.2	16.1	18.3	46.1	46.0	45.6	23.3	24.6	23.5	13.5	13.3	12.6
West . . . . .	19.1	20.1	21.7	44.8	44.4	46.7	22.8	22.8	20.2	13.3	12.6	11.3

See footnotes at end of table.

**Table 83 (page 3 of 3). Health care visits to doctor offices, emergency departments, and home visits within the past 12 months, by selected characteristics: United States, 1997, 2005, and 2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Number of health care visits <sup>1</sup>											
	None			1–3 visits			4–9 visits			10 or more visits		
	1997	2005	2006	1997	2005	2006	1997	2005	2006	1997	2005	2006
Location of residence <sup>3</sup>	Percent distribution											
Within MSA <sup>8</sup>	16.2	15.6	16.8	46.4	46.5	47.5	23.7	24.5	23.1	13.7	13.4	12.6
Outside MSA <sup>8</sup>	17.3	15.4	19.2	45.4	44.7	43.7	23.3	25.2	23.3	13.9	14.7	13.8

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE greater than 30%.

--- Data not available.

<sup>1</sup>This table presents a summary measure of health care visits to doctor offices, emergency departments, and home visits during a 12-month period. See [Appendix II, Emergency department visit; Health care contact; Home visit](#).

<sup>2</sup>Includes all other races not shown separately and unknown health insurance status.

<sup>3</sup>Estimates are age-adjusted to the year 2000 standard population using six age groups: Under 18 years, 18–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

<sup>4</sup>The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

<sup>5</sup>Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 24%–29% of persons in 1997–1998 and 31%–34% in 1999–2006. See [Appendix II, Family income; Poverty](#).

<sup>6</sup>Estimates for persons under 65 years of age are age-adjusted to the year 2000 standard population using four age groups: Under 18 years, 18–44 years, 45–54 years, and 55–64 years of age. See [Appendix II, Age adjustment](#).

<sup>7</sup>Health insurance categories are mutually exclusive. Persons who reported both Medicaid and private coverage are classified as having private coverage. Starting with 1997 data, state-sponsored health plan coverage is included as Medicaid coverage. Starting with 1999 data, coverage by the State Children's Health Insurance Program (SCHIP) is included as Medicaid coverage. In addition to private and Medicaid, the insured category also includes military plans, other government-sponsored health plans, and Medicare, not shown separately. Persons not covered by private insurance, Medicaid, SCHIP, state-sponsored or other government-sponsored health plans (starting in 1997), Medicare, or military plans are considered to have no health insurance coverage. Persons with only Indian Health Service coverage are considered to have no health insurance coverage. See [Appendix II, Health insurance coverage](#).

<sup>8</sup>MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: In 1997, the National Health Interview Survey questionnaire was redesigned. See [Appendix I, National Health Interview Survey](#). Standard errors are available in the spreadsheet version of this table. See <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health Interview Survey, family core and sample adult questionnaires.

**Table 84. Influenza vaccination among adults 65 years of age and over: Selected countries, 1998–2005**

[Data are based on reporting by countries]

Country	1998	1999	2000	2001	2002	2003	2004	2005
Percent receiving influenza vaccination during past 12 months								
Australia . . . . .	---	69.0	74.0	78.0	76.9	76.9	79.1	---
Belgium . . . . .	---	---	58.0	---	---	65.0	59.6	---
Canada . . . . .	---	---	63.0	---	---	62.4	---	66.5
Finland . . . . .	---	---	---	25.0	43.0	45.0	46.0	52.0
France . . . . .	61.0	58.0	65.0	65.0	67.0	65.0	68.0	68.0
Germany <sup>1</sup> . . . . .	---	44.6	---	55.8	---	48.0	---	63.0
Hungary . . . . .	---	---	---	---	36.8	38.9	37.9	37.1
Ireland . . . . .	---	---	---	---	---	62.2	61.4	63.0
Italy . . . . .	---	40.7	50.7	55.2	60.3	63.4	66.6	68.3
Japan . . . . .	---	---	---	28.0	35.0	43.0	48.0	---
South Korea . . . . .	---	---	---	---	---	---	75.7	77.2
Luxembourg . . . . .	---	---	---	42.8	46.0	49.1	51.0	55.4
Netherlands . . . . .	72.0	72.0	76.0	76.0	78.0	77.0	73.0	77.0
Portugal . . . . .	31.3	39.0	---	41.9	36.9	47.0	39.0	41.6
Spain . . . . .	63.5	59.8	61.5	61.9	67.2	68.0	68.6	70.1
Switzerland . . . . .	41.0	46.0	51.0	54.0	55.0	58.0	57.0	54.0
United Kingdom . . . . .	---	---	65.0	68.0	69.0	71.0	71.0	75.0
United States . . . . .	63.3	65.7	64.4	63.1	65.7	65.5	64.6	59.6

--- Data not available.

<sup>1</sup>1998 data for Germany are for adults 69 years and over. Starting with 1999 data, data are for adults 60 years and over.

NOTES: Data are for adults 65 years of age and over. Countries estimate influenza vaccination coverage using different methods. Therefore, estimates may not be directly comparable across countries and comparisons among them should be made with caution. See the OECD Health Statistics portal, available at <http://www.ecosante.fr/index2.php?base=OCDE&langs=ENG&langh=ENG&valeur=&source=1>, for more information on the sources and methods for collecting influenza immunization data.

**SOURCES:** Organisation for Economic Co-operation and Development (OECD): OECD Health Data 2007, <http://www.oecd.org/els/health/>; Australia: Australian Institute of Health and Welfare 2005. 2004 Influenza vaccine survey: summary results, <http://www.aihw.gov.au>; Belgium: Health Interview Survey (1997, 2001, and 2004 data) and Agence Inter-mutualiste, <http://www.cin-aim.be> (2005 data); Canada: Statistics Canada. National Population Health Survey (1996–1997 data) and Canadian Community Health Survey (2000–2001, 2003, and 2005 data); Finland: National Public Health Institute, Department of Vaccines; France: Groupe d'Expertise et d'Informations sur la Grippe (GEIG), <http://www.grippe-geig.com>; Germany: Robert Koch-Institut, Epidemiological Bulletin, <http://www.rki.de>; Hungary: Johan Béla National Center of Epidemiology (OEK), Epidemic Department, <http://www.oek.hu/oek.web?lang=eng>; Ireland: Health Protection Surveillance Centre; Italy: Ministry of Health - Health Information System; Japan: Report on Regional Health Services and Health Services for the Aged; South Korea: Institute for Health and Social Affairs; Luxembourg: Union des caisses de maladie (UCM); Netherlands Health Interview Survey (2005 data) and the Integrated System of Social Surveys (1998–2004); Portugal: Instituto Nacional de Saúde, Dr Ricardo Jorge, Observatório Nacional de Saúde (ONSA); Spain: Ministry of Health and Consumer Affairs; Switzerland: Federal Office of Public Health, Bern; United Kingdom: Health Protection Agency Centre for Infections (England data), National Public Health Service Wales (Wales data), <http://www.nphs.wales.nhs.uk/>, and Practitioner Services Division, NHS National Services (Scotland data); United States: CDC/NCHS, National Health Interview Survey.

**Table 85 (page 1 of 2). Vaccination coverage among children 19–35 months of age for selected diseases, by race, Hispanic origin, poverty level, and location of residence in metropolitan statistical area (MSA): United States, selected years 1995–2006**

[Data are based on telephone interviews of a sample of the civilian noninstitutionalized population supplemented by a survey of immunization providers for interview participants]

Vaccination and year	Race and Hispanic origin <sup>1</sup>								Poverty level		Location of residence		
	Not Hispanic or Latino								Below poverty level	At or above poverty level	Inside MSA <sup>2</sup>		
	All	White	Black or African American	American Indian or Alaska Native	Asian <sup>3</sup>	Native Hawaiian or Other Pacific Islander <sup>3</sup>	2 or more races	Hispanic or Latino			Central city	Remaining area	Outside MSA <sup>2</sup>
Percent of children 19–35 months of age													
Combined series (4:3:1:3:3:1): <sup>4</sup>													
2002	66	66	62	---	74	---	61	66	62	66	64	68	61
2003	73	74	68	69	76	---	74	71	70	74	72	74	70
2004	76	77	71	67	80	---	77	76	73	77	75	78	74
2005	76	76	76	---	77	---	80	76	74	77	75	78	74
2006	77	78	74	75	76	---	75	77	73	78	77	78	75
DTP/DT/DTaP (4 doses or more): <sup>5</sup>													
1995	78	80	74	71	84	---	---	75	71	81	77	79	78
2000	82	84	76	75	85	---	---	79	76	84	80	83	83
2002	82	84	76	*	88	*	78	79	75	84	79	84	80
2003	85	88	80	80	89	*	84	82	80	87	84	86	83
2004	86	88	80	77	90	*	86	84	81	87	84	87	85
2005	86	87	84	*	89	*	86	84	82	87	85	87	85
2006	85	87	81	83	86	*	84	85	81	87	84	86	85
Polio (3 doses or more):													
1995	88	89	84	86	90	---	---	87	85	89	87	88	89
2000	90	91	87	90	93	---	---	88	87	90	88	90	91
2002	90	91	87	*	92	95	87	90	88	91	89	91	90
2003	92	93	89	91	91	90	91	90	89	93	91	92	92
2004	92	92	90	87	93	*	92	91	90	92	91	92	92
2005	92	91	91	*	93	*	94	92	90	92	91	93	92
2006	93	93	90	91	92	96	92	93	92	93	93	93	93
Measles, Mumps, Rubella:													
1995	90	91	87	88	95	---	---	88	86	91	90	90	89
2000	91	92	88	87	90	---	---	90	89	91	90	91	91
2002	92	93	90	84	95	94	89	91	90	92	90	93	90
2003	93	93	92	92	96	*	94	93	92	93	93	93	92
2004	93	94	91	89	94	*	94	93	91	94	93	94	92
2005	92	91	92	90	92	90	94	91	89	92	92	92	90
2006	92	93	91	89	95	94	91	92	91	93	93	93	92
Hib (3 doses or more): <sup>6</sup>													
1995	91	93	88	93	90	---	---	89	88	93	91	92	92
2000	93	95	93	90	92	---	---	91	90	95	92	94	95
2002	93	94	92	*	95	93	90	92	90	94	92	94	93
2003	94	95	92	89	91	*	93	93	91	95	94	94	94
2004	94	95	91	90	92	*	96	93	92	94	93	94	94
2005	94	94	93	88	89	91	95	94	92	95	93	94	94
2006	93	94	91	94	90	96	91	94	91	94	93	94	92
Hepatitis B (3 doses or more):													
1995	68	68	66	52	80	---	---	70	65	69	69	71	59
2000	90	91	89	91	91	---	---	88	87	91	89	90	92
2002	90	91	88	*	94	94	84	90	88	90	89	91	90
2003	92	93	92	90	94	*	93	91	91	93	92	93	93
2004	92	93	91	91	93	*	94	92	91	93	92	93	93
2005	93	93	93	90	93	*	94	93	91	94	92	94	93
2006	93	94	92	95	92	97	92	94	93	94	93	94	93
Varicella: <sup>7</sup>													
1998	43	42	42	28	53	---	---	47	41	44	45	45	34
2000	68	66	67	62	77	---	---	70	64	69	69	70	60
2002	81	79	83	71	87	*	79	82	79	81	81	83	75
2003	85	84	85	81	91	*	86	86	84	85	86	86	80
2004	88	87	86	84	91	*	89	89	86	88	88	89	85
2005	88	86	91	82	92	*	90	89	87	88	88	88	86
2006	89	89	89	85	93	90	91	90	88	90	90	90	86

See footnotes at end of table.



**Table 85 (page 2 of 2). Vaccination coverage among children 19–35 months of age for selected diseases, by race, Hispanic origin, poverty level, and location of residence in metropolitan statistical area (MSA): United States, selected years 1995–2006**

[Data are based on telephone interviews of a sample of the civilian noninstitutionalized population supplemented by a survey of immunization providers for interview participants]

Vaccination and year	Race and Hispanic origin <sup>1</sup>						Poverty level		Location of residence				
	Not Hispanic or Latino								Inside MSA <sup>2</sup>				
	All	White	Black or African American	American Indian or Alaska Native	Asian <sup>3</sup>	Native Hawaiian or Other Pacific Islander <sup>3</sup>	2 or more races or Latino	Below poverty level	At or above poverty level	Central city	Remaining area	Outside MSA <sup>2</sup>	
Percent of children 19–35 months of age													
PCV (3 doses or more): <sup>8</sup>													
2002 . . . . .	41	44	34	33	55	*	38	37	33	43	41	45	32
2003 . . . . .	68	71	62	60	71	*	66	66	62	71	68	71	61
2004 . . . . .	73	75	68	75	76	*	78	70	69	75	72	77	68
2005 . . . . .	83	83	80	75	79	*	87	84	78	84	82	85	78
2006 . . . . .	87	87	83	87	81	*	86	89	84	88	88	88	81
Not Hispanic or Latino													
Vaccination and year	White		Black or African American		Hispanic or Latino								
	Below poverty level	At or above poverty level	Below poverty level	At or above poverty level	Below poverty level	At or above poverty level							
Percent of children 19–35 months of age													
Combined series (4:3:1:3:3:1): <sup>4</sup>													
2002 . . . . .		59	67		59	62		66	73		66		66
2003 . . . . .		69	75		64	72		73	75		75		78
2004 . . . . .		72	78		68	75		75	76		76		75
2005 . . . . .		70	77		74	80		76	77		76		75
2006 . . . . .		69	79		72	77		76	77		76		78

--- Data not available.

\* Estimates are considered unreliable. Percents not shown if the unweighted sample size for the numerator was less than 30 or the confidence interval half width divided by the estimate was greater than 50% or the confidence interval half width was greater than 10.

<sup>1</sup>Persons of Hispanic origin may be of any race. Starting with 2002 data, estimates were tabulated using the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity. Estimates for earlier years were tabulated using the 1977 Standards on Race and Ethnicity. See [Appendix II, Hispanic origin; Race](#).

<sup>2</sup>Metropolitan statistical area. See [Appendix II, Metropolitan statistical area](#).

<sup>3</sup>Prior to data year 2002, the category Asian included Native Hawaiian and Other Pacific Islander.

<sup>4</sup>The 4:3:1:3:3:1 combined series consists of 4 or more doses of diphtheria and tetanus toxoids and pertussis vaccine (DTP), diphtheria and tetanus toxoids (DT), or diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP); 3 or more doses of any poliovirus vaccine; 1 or more doses of a measles-containing vaccine (MCV); 3 or more doses of *Haemophilus influenzae* type b vaccine (Hib); 3 or more doses of hepatitis B vaccine; and 1 or more doses of varicella vaccine. The 4:3:1:3:3:1 combined series meets CDC's current recommendation for early childhood vaccination. This expanded series replaces the combined series shown in previous editions of *Health, United States*.

<sup>5</sup>Diphtheria and tetanus toxoids and pertussis vaccine, diphtheria and tetanus toxoids, and diphtheria and tetanus toxoids and acellular pertussis vaccine.

<sup>6</sup>*Haemophilus influenzae* type b vaccine (Hib).

<sup>7</sup>Recommended in 1996. Data collection for varicella began in July 1996.

<sup>8</sup>Pneumococcal conjugate vaccine (PCV). Recommended in 2000. Data collection for PCV began in July 2001.

NOTES: Final estimates from the National Immunization Survey include an adjustment for children with missing immunization provider data. Poverty level is based on family income and family size using U.S. Census Bureau poverty thresholds. In 2006, 5.0% of all children with provider-reported vaccination history data, 10.4% of Hispanic, 2.6% of non-Hispanic white, and 6.6% of non-Hispanic black children were missing information about poverty level and were omitted from the estimates of vaccination coverage by poverty level. See [Appendix II, Poverty](#). See [Appendix I, National Immunization Survey](#).

Additional information on childhood immunizations is available from: <http://www.cdc.gov/vaccines/recs/schedules/child-schedule.htm#printable>.

Data have been revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS and National Center for Immunization and Respiratory Diseases, National Immunization Survey. Available from: <http://www.cdc.gov/vaccines/stats-surv/imz-coverage.htm#nis> and <http://www.cdc.gov/nis/>.



**Table 86 (page 1 of 2). Vaccination coverage among children 19–35 months of age, by geographic division, state, and selected urban area: United States, 2002–2006**

[Data are based on telephone interviews of a sample of the civilian noninstitutionalized population supplemented by a survey of immunization providers for interview participants]

<i>Geographic division and state</i>	2002	2003	2004	2005	2006
	Percent of children 19–35 months of age with 4:3:1:3:3:1 series <sup>1</sup>				
United States . . . . .	66	73	76	76	77
New England:					
Connecticut . . . . .	73	89	85	82	82
Maine . . . . .	62	69	74	76	76
Massachusetts . . . . .	78	83	84	91	84
New Hampshire . . . . .	66	76	78	77	76
Rhode Island . . . . .	81	80	82	80	81
Vermont . . . . .	58	65	67	63	75
Middle Atlantic:					
New Jersey . . . . .	66	64	74	72	76
New York . . . . .	67	73	78	74	77
Pennsylvania . . . . .	68	79	82	77	79
East North Central:					
Illinois . . . . .	58	69	74	77	74
Indiana . . . . .	59	62	68	70	76
Michigan . . . . .	72	79	79	81	78
Ohio . . . . .	64	71	71	78	75
Wisconsin . . . . .	68	73	78	77	81
West North Central:					
Iowa . . . . .	58	63	76	76	79
Kansas . . . . .	55	63	66	72	70
Minnesota . . . . .	62	71	78	78	78
Missouri . . . . .	60	74	75	73	81
Nebraska . . . . .	64	68	73	84	75
North Dakota . . . . .	56	63	71	79	80
South Dakota . . . . .	62	60	73	80	74
South Atlantic:					
Delaware . . . . .	70	66	80	82	80
District of Columbia . . . . .	68	72	80	72	79
Florida . . . . .	66	74	85	78	79
Georgia . . . . .	77	75	82	82	81
Maryland . . . . .	71	77	76	79	78
North Carolina . . . . .	70	77	78	82	82
South Carolina . . . . .	74	80	77	76	81
Virginia . . . . .	65	80	74	82	77
West Virginia . . . . .	66	63	76	68	68
East South Central:					
Alabama . . . . .	73	79	80	82	79
Kentucky . . . . .	64	79	77	71	80
Mississippi . . . . .	64	78	80	79	73
Tennessee . . . . .	67	74	79	80	77
West South Central:					
Arkansas . . . . .	68	75	81	64	73
Louisiana . . . . .	62	65	70	74	70
Oklahoma . . . . .	60	67	71	72	78
Texas . . . . .	65	70	69	77	75
Mountain:					
Arizona . . . . .	59	68	73	75	71
Colorado . . . . .	56	63	73	79	76
Idaho . . . . .	53	61	70	68	68
Montana . . . . .	49	65	65	65	66
Nevada . . . . .	65	66	65	63	60
New Mexico . . . . .	59	71	79	75	72
Utah . . . . .	61	70	68	68	78
Wyoming . . . . .	54	57	64	67	63
Pacific:					
Alaska . . . . .	56	73	66	68	67
California . . . . .	67	76	79	74	79
Hawaii . . . . .	69	79	80	78	79
Oregon . . . . .	60	70	74	65	74
Washington . . . . .	52	56	67	66	71

See footnotes at end of table.

**Table 86 (page 2 of 2). Vaccination coverage among children 19–35 months of age, by geographic division, state, and selected urban area: United States, 2002–2006**

[Data are based on telephone interviews of a sample of the civilian noninstitutionalized population supplemented by a survey of immunization providers for interview participants]

<i>Geographic division and state</i>	2002	2003	2004	2005	2006
Percent of children 19–35 months of age with 4:3:1:3:3:1 series <sup>1</sup>					
New England:					
Boston, Massachusetts . . . . .	71	86	79	---	82
Middle Atlantic:					
New York City, New York . . . . .	71	69	77	71	72
Newark, New Jersey . . . . .	50	64	64	67	68
Philadelphia, Pennsylvania . . . . .	68	75	75	77	80
East North Central:					
Chicago, Illinois . . . . .	58	71	71	70	77
Cuyahoga County (Cleveland), Ohio . . . . .	65	66	78	77	77
Detroit, Michigan . . . . .	60	64	66	71	65
Franklin County (Columbus), Ohio . . . . .	69	71	79	81	---
Marion County (Indianapolis), Indiana . . . . .	62	66	74	---	77
Milwaukee County (Milwaukee), Wisconsin . . . . .	60	71	73	74	78
South Atlantic:					
Baltimore, Maryland . . . . .	69	74	80	77	72
Dade County (Miami), Florida . . . . .	60	73	73	---	80
District of Columbia . . . . .	68	72	80	72	79
Duval County (Jacksonville), Florida . . . . .	70	75	69	77	76
Fulton/DeKalb Counties (Atlanta), Georgia . . . . .	75	71	81	72	75
East South Central:					
Davidson County (Nashville), Tennessee . . . . .	67	76	88	81	---
Shelby County (Memphis), Tennessee . . . . .	61	69	71	74	73
Jefferson County (Birmingham), Alabama . . . . .	74	79	81	85	---
West South Central:					
Bexar County (San Antonio), Texas . . . . .	72	75	73	71	75
Dallas County (Dallas), Texas . . . . .	68	67	67	73	73
El Paso County (El Paso), Texas . . . . .	61	72	64	69	69
Houston, Texas . . . . .	56	63	62	77	70
Orleans Parish (New Orleans), Louisiana . . . . .	53	68	68	---	---
Mountain:					
Maricopa County (Phoenix), Arizona . . . . .	62	69	72	76	68
Pacific:					
King County (Seattle), Washington . . . . .	56	61	74	69	71
Los Angeles County (Los Angeles), California . . . . .	72	79	77	78	79
San Diego County (San Diego), California . . . . .	71	75	74	---	80
Santa Clara County (Santa Clara), California . . . . .	75	77	80	---	78

--- Data not available.

\* Percents not shown if the unweighted sample size for the numerator was less than 30 or the confidence interval half width divided by the estimate was greater than 50% or the confidence interval half width was greater than 10.

<sup>1</sup>The 4:3:1:3:3:1 combined series consists of 4 or more doses of diphtheria and tetanus toxoids and pertussis vaccine (DTP), diphtheria and tetanus toxoids (DT), or diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP); 3 or more doses of any poliovirus vaccine; 1 or more doses of a measles-containing vaccine (MCV); 3 or more doses of *Haemophilus influenzae* type b vaccine (Hib); 3 or more doses of hepatitis B vaccine; and 1 or more doses of varicella vaccine. The 4:3:1:3:3:1 combined series meets CDC's current recommendation for early childhood vaccination. This expanded series replaces the combined series shown in previous editions of *Health, United States*.

NOTES: Urban areas were originally selected because they were at risk for undervaccination. Final estimates from the National Immunization Survey include an adjustment for children with missing immunization provider data. Additional information on childhood immunizations is available from: <http://www.cdc.gov/vaccines/recs/schedules/child-schedule.htm#printable>. Data have been revised and differ from previous editions of *Health, United States*.

SOURCE: CDC/NCHS and National Center for Immunization and Respiratory Diseases, National Immunization Survey. Available from: <http://www.cdc.gov/vaccines/stats-surv/imz-coverage.htm#nis> and <http://www.cdc.gov/nis/>.

**Table 87 (page 1 of 2). Influenza vaccination among adults 18 years of age and over, by selected characteristics: United States, selected years 1989–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

<i>Characteristic</i>	<i>1989</i>	<i>1995</i>	<i>2000</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>
	Percent receiving influenza vaccination during past 12 months <sup>1</sup>							
18 years and over, age-adjusted <sup>2,3</sup>	9.6	23.7	28.7	28.3	29.2	29.5	21.3	27.3
18 years and over, crude <sup>3</sup>	9.1	23.0	28.4	28.0	29.0	29.4	21.2	27.4
Age								
18–49 years	3.4	13.1	17.1	16.2	16.8	17.9	10.4	15.4
50 years and over	19.9	41.9	47.9	47.7	48.9	47.9	38.0	45.9
50–64 years	10.6	27.0	34.6	34.0	36.8	35.9	22.9	33.2
65 years and over	30.4	58.2	64.4	65.7	65.5	64.6	59.6	64.2
65–74 years	28.0	54.9	61.1	60.9	60.5	60.1	53.7	60.1
75 years and over	34.2	63.0	68.4	71.3	71.0	69.7	66.3	69.0
50 years and over								
Sex								
Male	19.2	40.2	45.9	45.1	46.8	45.1	34.6	43.1
Female	20.6	43.4	49.5	49.8	50.7	50.2	40.8	48.2
Race <sup>4</sup>								
White only	20.9	43.6	49.8	49.4	50.4	49.8	39.6	47.1
Black or African American only	12.5	28.2	33.2	36.2	35.3	32.8	26.8	34.8
American Indian or Alaska Native only	26.2	*	43.6	*37.6	44.7	51.3	*22.9	56.3
Asian only	*9.2	35.6	43.3	39.5	45.9	41.7	30.6	44.6
Native Hawaiian or Other Pacific Islander only	---	---	*	*	*	*	*	*
2 or more races	---	---	50.7	47.9	53.7	44.5	29.9	40.2
Hispanic origin and race <sup>4</sup>								
Hispanic or Latino	13.2	33.8	34.4	33.7	33.6	36.9	24.4	31.7
Mexican	13.0	35.4	33.0	33.9	32.8	39.2	25.4	33.5
Not Hispanic or Latino	20.3	42.4	48.8	48.7	50.1	48.8	39.1	47.0
White only	21.3	44.3	50.6	50.3	51.8	50.9	41.0	48.6
Black or African American only	12.4	28.5	33.2	36.5	35.4	32.9	26.9	35.1
Percent of poverty level <sup>5</sup>								
Below 100%	19.6	39.7	44.1	41.9	41.8	42.5	35.8	42.1
100%–less than 200%	24.0	43.2	50.7	49.8	50.9	49.9	41.0	47.4
200% or more	19.0	41.9	47.6	47.9	49.4	48.1	37.4	45.9
Hispanic origin and race and percent of poverty level <sup>4,5</sup>								
Hispanic or Latino:								
Below 100%	12.7	29.7	35.8	36.6	31.9	36.3	22.3	30.9
100%–less than 200%	20.4	34.7	35.6	32.6	29.9	33.1	26.4	32.0
200% or more	11.9	35.5	33.1	33.2	36.6	39.2	24.0	31.9
Not Hispanic or Latino:								
White only:								
Below 100%	22.5	44.4	48.6	42.7	45.9	48.1	42.2	47.8
100%–less than 200%	26.1	46.7	54.8	54.2	55.9	55.0	46.1	51.5
200% or more	19.9	43.5	49.8	50.3	51.5	50.2	39.7	47.9
Black or African American only:								
Below 100%	14.6	31.8	35.5	41.8	37.4	32.0	28.9	34.8
100%–less than 200%	12.0	28.3	37.9	39.4	40.9	36.8	27.4	35.0
200% or more	12.0	26.3	29.9	33.3	32.1	31.6	25.9	35.3
Geographic region								
Northeast	17.9	39.7	45.9	47.2	50.5	47.9	38.3	44.0
Midwest	20.0	43.2	49.3	49.6	50.2	49.9	39.8	49.4
South	20.2	41.4	46.8	46.5	48.4	47.3	37.2	43.8
West	21.8	43.8	50.1	48.1	46.4	46.5	36.7	47.2
Location of residence								
Within MSA <sup>6</sup>	18.9	41.6	47.1	47.1	48.8	47.6	37.1	44.9
Outside MSA <sup>6</sup>	23.3	42.9	50.2	49.7	49.3	48.9	40.9	49.6

See footnotes at end of table.

## Table 87 (page 2 of 2). Influenza vaccination among adults 18 years of age and over, by selected characteristics: United States, selected years 1989–2006

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

- - - Data not available.

<sup>1</sup> Respondents were asked, “During the past 12 months, have you had a flu shot? A flu shot is usually given in the fall and protects against influenza for the flu season.” Estimates exclude 1% of respondents who reported receiving Flu Mist.

<sup>2</sup> Estimates are age-adjusted to the year 2000 standard population using four age groups: 18–49 years, 50–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

<sup>3</sup> Includes all other races not shown separately and unknown poverty level in 1989.

<sup>4</sup> The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

<sup>5</sup> Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Poverty level was unknown for 11% of persons 18 years and over in 1989. Missing family income data were imputed for 16% of persons 18 years and over in 1995, 26%–30% in 1997–1998, and 32%–35% in 1999–2006. See [Appendix II, Family Income; Poverty](#).

<sup>6</sup> MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: Some numbers have been revised and differ from previous editions of *Health, United States*. In 2000, the Advisory Committee on Immunization Practices (ACIP) of the Centers for Disease Control and Prevention (CDC) recommended universal influenza vaccination for persons 50 years and over. Medicare reimbursement for the costs of the vaccine and its administration began in 1993. CDC. Prevention and control of influenza: Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2000;49(RR03):1–38. Available from <http://www.cdc.gov/mmwr/pdf/rr/rr4903.pdf>. Recommended adult immunization schedule Recommendations for influenza vaccination are updated annually by ACIP. United States, October 2007–September 2008. Available from: <http://www.cdc.gov/flu/professionals/acip/index.htm>. Standard errors for selected years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

**SOURCE:** CDC/NCHS, National Health Interview Survey. Data are from the Immunization Supplement (1981), the Health Promotion and Disease Prevention Supplement (1991), and the Year 2000 Supplement (1993–1995). Starting in 1997, data are from the sample adult questionnaire.

**Table 88 (page 1 of 2). Pneumococcal vaccination among adults 18 years of age and over, by selected characteristics: United States, selected years 1989–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

<i>Characteristic</i>	1989	1995	2000	2002	2003	2004	2005	2006
	Percent ever receiving pneumococcal vaccination <sup>1</sup>							
18 years and over, age-adjusted <sup>2,3</sup>	4.6	12.0	15.4	16.4	16.4	16.8	16.7	17.0
18 years and over, crude <sup>3</sup>	4.4	11.7	15.1	16.0	16.0	16.5	16.5	17.0
Age								
18–49 years	2.1	6.5	5.4	5.6	5.6	5.7	5.8	5.7
50–64 years	4.4	10.0	14.7	16.3	16.7	17.2	17.1	18.2
65 years and over	14.1	34.0	53.1	56.0	55.6	56.8	56.2	57.1
65–74 years	13.1	31.4	48.2	50.2	49.8	50.4	49.4	52.0
75 years and over	15.7	37.8	59.1	62.8	62.1	64.2	63.9	63.0
65 years and over								
Sex								
Male	13.9	34.6	52.1	55.9	53.7	54.3	53.4	54.3
Female	14.3	33.6	53.9	56.1	57.0	58.7	58.4	59.2
Race <sup>4</sup>								
White only	14.8	35.3	55.6	58.7	57.9	59.1	58.4	60.0
Black or African American only	6.4	21.9	30.6	37.0	36.9	38.6	40.2	35.5
American Indian or Alaska Native only	31.2	*	70.1	*	*	*42.0	*	*57.5
Asian only	*	*23.4	40.9	32.6	35.3	35.1	35.0	35.6
Native Hawaiian or Other Pacific Islander only	---	---	*	*	*	*	*	*
2 or more races	---	---	55.6	52.8	*39.3	*48.8	64.8	63.6
Hispanic origin and race <sup>4</sup>								
Hispanic or Latino	9.8	23.2	30.4	27.1	31.0	33.7	27.5	33.3
Mexican	12.9	*18.8	32.0	30.0	33.6	33.3	31.3	29.3
Not Hispanic or Latino	14.3	34.5	54.4	57.7	57.1	58.3	58.1	58.7
White only	15.0	35.9	56.8	60.4	59.6	60.9	60.6	62.0
Black or African American only	6.2	21.8	30.6	37.0	36.9	38.6	40.4	35.6
Percent of poverty level <sup>5</sup>								
Below 100%	11.2	28.7	40.6	42.6	47.7	42.5	46.7	45.4
100%–less than 200%	15.1	30.7	51.4	54.6	56.7	56.1	54.5	55.8
200% or more	15.0	37.2	56.2	59.2	56.5	59.7	58.5	59.6
Hispanic origin and race and percent of poverty level <sup>4,5</sup>								
Hispanic or Latino:								
Below 100%	*	*14.1	23.8	20.1	23.8	31.8	20.9	24.5
100%–less than 200%	*11.0	*15.6	32.3	25.1	26.8	29.0	26.9	30.9
200% or more	*10.4	39.4	32.9	33.5	39.5	39.1	31.7	40.7
Not Hispanic or Latino:								
White only:								
Below 100%	13.3	32.5	47.9	51.5	57.5	50.6	55.6	56.0
100%–less than 200%	16.0	33.5	56.1	59.9	62.1	61.9	60.5	61.6
200% or more	15.5	37.8	58.3	61.8	58.9	61.9	61.3	62.8
Black or African American only:								
Below 100%	*5.0	*22.6	28.8	27.8	35.1	27.0	42.3	38.4
100%–less than 200%	7.8	*20.9	28.1	40.7	39.6	36.4	36.6	36.2
200% or more	*5.2	*21.8	34.4	39.4	35.7	49.1	42.7	33.3
Geographic region								
Northeast	10.4	28.2	51.2	56.9	54.8	56.0	55.8	53.7
Midwest	13.7	31.0	52.6	55.8	57.1	59.5	58.5	61.5
South	14.9	35.9	51.3	54.2	55.1	57.2	57.4	55.7
West	17.9	41.1	59.7	59.3	55.7	53.7	51.4	57.2
Location of residence								
Within MSA <sup>6</sup>	13.1	33.8	52.4	56.3	56.0	56.7	55.1	56.6
Outside MSA <sup>6</sup>	17.1	34.8	55.4	55.3	54.3	57.3	59.8	58.9

See footnotes at end of table.

## Table 88 (page 2 of 2). Pneumococcal vaccination among adults 18 years of age and over, by selected characteristics: United States, selected years 1989–2006

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

- - - Data not available.

<sup>1</sup> Respondents were asked, “Have you ever had a pneumonia shot? This shot is usually given only once or twice in a person’s lifetime and is different from the flu shot. It is also called the pneumococcal vaccine.”

<sup>2</sup> Estimates are age-adjusted to the year 2000 standard population using four age groups: 18–49 years, 50–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

<sup>3</sup> Includes all other races not shown separately and unknown poverty level in 1989.

<sup>4</sup> The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

<sup>5</sup> Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Poverty level was unknown for 11% of persons 18 years and over in 1989. Missing family income data were imputed for 16% of persons 18 years of age and over in 1995, 26%–30% in 1997–1998, and 32%–35% in 1999–2006. See [Appendix II, Family Income; Poverty](#).

<sup>6</sup> MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: In 1997, the Advisory Committee on Immunization Practices (ACIP) of the Centers for Disease Control and Prevention (CDC) recommended universal pneumonia vaccination for persons 65 years and over. A pneumococcal polysaccharide vaccine was first licensed in 1977. Medicare reimbursement for the costs of the vaccine and its administration began in 1981. CDC. Prevention of pneumococcal disease: Recommendations of the advisory committee on immunization practices (ACIP). *MMWR* 1997;46(RR-08):1–24. Available from: <http://www.cdc.gov/mmwr/preview/mmwrhtml/00047135.htm>. Pneumococcal vaccination among adults 19–64 years is recommended for those with other risk factors (medical, occupational, lifestyle, or other indications). Recommended adult immunization schedule United States, October 2007–September 2008. Available from: <http://www.cdc.gov/mmwr/pdf/wk/mm5641-Immunization.pdf>. Standard errors for selected years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

**SOURCE:** CDC/NCHS, National Health Interview Survey. Data are from the Immunization Supplement (1981), the Health Promotion and Disease Prevention Supplement (1991), and the Year 2000 Supplement (1993–1995). Starting in 1997, data are from the sample adult questionnaire.

**Table 89 (page 1 of 2). Use of mammography among women 40 years of age and over, by selected characteristics: United States, selected years 1987–2005**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	1987	1990	1991	1998	1999	2000	2003	2005
Percent of women having a mammogram within the past 2 years <sup>1</sup>								
40 years and over, age-adjusted <sup>2,3</sup>	29.0	51.7	54.7	67.0	70.3	70.4	69.5	66.6
40 years and over, crude <sup>2</sup>	28.7	51.4	54.6	66.9	70.3	70.4	69.7	66.8
50 years and over, age-adjusted <sup>2,3</sup>	27.3	49.8	54.3	69.0	72.1	73.7	72.4	68.2
50 years and over, crude <sup>2</sup>	27.4	49.7	54.1	68.9	71.9	73.6	72.4	68.4
Age								
40–49 years	31.9	55.1	55.6	63.4	67.2	64.3	64.4	63.5
50–64 years	31.7	56.0	60.3	73.7	76.5	78.7	76.2	71.8
65 years and over	22.8	43.4	48.1	63.8	66.8	67.9	67.7	63.8
65–74 years	26.6	48.7	55.7	69.4	73.9	74.0	74.6	72.5
75 years and over	17.3	35.8	37.8	57.2	58.9	61.3	60.6	54.7
Race <sup>4</sup>								
40 years and over, crude:								
White only	29.6	52.2	55.6	67.4	70.6	71.4	70.1	67.4
Black or African American only	24.0	46.4	48.0	66.0	71.0	67.8	70.4	64.9
American Indian or Alaska Native only	*	43.2	54.5	45.2	63.0	47.4	63.1	72.8
Asian only	*	46.0	45.9	60.2	58.3	53.5	57.6	54.6
Native Hawaiian or Other Pacific Islander only	---	---	---	---	*	*	*	*
2 or more races	---	---	---	---	70.2	69.2	65.3	63.7
Hispanic origin and race <sup>4</sup>								
40 years and over, crude:								
Hispanic or Latina	18.3	45.2	49.2	60.2	65.7	61.2	65.0	58.8
Not Hispanic or Latina	29.4	51.8	54.9	67.5	70.7	71.1	70.1	67.5
White only	30.3	52.7	56.0	68.0	71.1	72.2	70.5	68.3
Black or African American only	23.8	46.0	47.7	66.0	71.0	67.9	70.5	65.2
Age, Hispanic origin, and race <sup>4</sup>								
40–49 years:								
Hispanic or Latina	*15.3	45.1	44.0	55.2	61.6	54.1	59.4	54.2
Not Hispanic or Latina:								
White only	34.3	57.0	58.1	64.4	68.3	67.2	65.2	65.5
Black or African American only	27.8	48.4	48.0	65.0	69.2	60.9	68.2	62.1
50–64 years:								
Hispanic or Latina	23.0	47.5	61.7	67.2	69.7	66.5	69.4	61.5
Not Hispanic or Latina:								
White only	33.6	58.1	61.5	75.3	77.9	80.6	77.2	73.5
Black or African American only	26.4	48.4	52.4	71.2	75.0	77.7	76.2	71.6
65 years and over:								
Hispanic or Latina	*	41.1	40.9	59.0	67.2	68.3	69.5	63.8
Not Hispanic or Latina:								
White only	24.0	43.8	49.1	64.3	66.8	68.3	68.1	64.7
Black or African American only	14.1	39.7	41.6	60.6	68.1	65.5	65.4	60.5
Age and percent of poverty level <sup>5</sup>								
40 years and over, crude:								
Below 100%	14.6	30.8	35.2	50.1	57.4	54.8	55.4	48.5
100%–less than 200%	20.9	39.1	44.4	56.1	59.5	58.1	60.8	55.3
200% or more	34.9	59.2	62.2	72.6	75.0	75.9	74.3	72.5
40–49 years:								
Below 100%	18.6	32.2	33.0	44.8	51.3	47.4	50.6	42.5
100%–less than 200%	18.4	39.0	43.8	46.9	52.8	43.6	54.0	49.8
200% or more	36.4	60.1	61.2	68.4	71.6	69.9	68.3	69.0
50–64 years:								
Below 100%	14.6	29.9	37.3	52.7	63.3	61.7	58.3	50.4
100%–less than 200%	24.2	39.8	50.2	61.8	64.9	68.3	64.0	58.8
200% or more	36.9	63.3	66.0	78.7	80.2	82.6	80.9	76.8
65 years and over:								
Below 100%	13.1	30.8	35.2	51.9	57.6	54.8	57.0	52.3
100%–less than 200%	19.9	38.6	41.8	57.8	60.2	60.3	62.8	56.1
200% or more	29.5	51.5	57.8	70.1	72.5	75.0	72.6	70.1

See footnotes at end of table.



**Table 89 (page 2 of 2). Use of mammography among women 40 years of age and over, by selected characteristics: United States, selected years 1987–2005**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	1987	1990	1991	1998	1999	2000	2003	2005
Health insurance status at the time of interview <sup>6</sup>	Percent of women having a mammogram within the past 2 years <sup>1</sup>							
40–64 years:								
Insured . . . . .	---	---	---	72.3	75.5	76.0	75.1	72.5
Private . . . . .	---	---	---	73.4	76.3	77.1	76.3	74.5
Medicaid . . . . .	---	---	---	59.7	62.5	61.7	63.5	55.6
Uninsured . . . . .	---	---	---	40.1	44.8	40.7	41.5	38.1
Health insurance status prior to interview <sup>6</sup>								
40–64 years:								
Insured continuously all 12 months . . . . .	---	---	---	73.0	76.1	76.8	75.6	73.1
Uninsured for any period up to 12 months . . . . .	---	---	---	47.6	57.1	53.0	56.0	51.3
Uninsured more than 12 months . . . . .	---	---	---	36.3	38.9	34.0	37.0	32.9
Age and education <sup>7</sup>								
40 years and over, crude:								
No high school diploma or GED . . . . .	17.8	36.4	40.0	54.5	56.7	57.7	58.1	52.8
High school diploma or GED . . . . .	31.3	52.7	55.8	66.7	69.2	69.7	67.8	64.9
Some college or more . . . . .	37.7	62.8	65.2	72.8	77.3	76.2	75.1	72.7
40–49 years:								
No high school diploma or GED . . . . .	15.1	38.5	40.8	47.3	48.8	46.8	53.3	51.2
High school diploma or GED . . . . .	32.6	53.1	52.0	59.1	60.8	59.0	60.8	58.8
Some college or more . . . . .	39.2	62.3	63.7	68.3	74.4	70.6	68.1	68.3
50–64 years:								
No high school diploma or GED . . . . .	21.2	41.0	43.6	58.8	62.3	66.5	63.4	56.9
High school diploma or GED . . . . .	33.8	56.5	60.8	73.3	77.2	76.6	71.8	70.1
Some college or more . . . . .	40.5	68.0	72.7	79.8	81.2	84.2	82.7	77.0
65 years and over:								
No high school diploma or GED . . . . .	16.5	33.0	37.7	54.7	56.6	57.4	56.9	50.7
High school diploma or GED . . . . .	25.9	47.5	54.0	66.8	68.4	71.8	69.7	64.3
Some college or more . . . . .	32.3	56.7	57.9	71.3	77.1	74.1	75.1	73.0

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE greater than 30%.

--- Data not available.

<sup>1</sup>Questions concerning use of mammography differed slightly on the National Health Interview Survey across the years for which data are shown. See [Appendix II, Mammography](#).

<sup>2</sup>Includes all other races not shown separately, unknown poverty level in 1987, unknown health insurance status, and unknown education level.

<sup>3</sup>Estimates for women 40 years and over are age-adjusted to the year 2000 standard population using four age groups: 40–49 years, 50–64 years, 65–74 years, and 75 years and over. Estimates for women 50 years and over are age-adjusted using three age groups. See [Appendix II, Age adjustment](#).

<sup>4</sup>The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

<sup>5</sup>Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Poverty level was unknown for 11% of women 40 years of age and over in 1987. Missing family income data were imputed for 19%–23% of women 40 years of age and over in 1990–1994 and 34%–38% in 1998–2005. See [Appendix II, Family income; Poverty](#).

<sup>6</sup>Health insurance categories are mutually exclusive. Persons who reported both Medicaid and private coverage are classified as having private coverage. Starting with 1997 data, state-sponsored health plan coverage is included as Medicaid coverage. Starting with 1999 data, coverage by the State Children's Health Insurance Program (SCHIP) is included as Medicaid coverage. In addition to private and Medicaid, the insured category also includes military plans, other government-sponsored health plans, and Medicare, not shown separately. Persons not covered by private insurance, Medicaid, SCHIP, public assistance (through 1996), state-sponsored or other government-sponsored health plans (starting in 1997), Medicare, or military plans are considered to have no health insurance coverage. Persons with only Indian Health Service coverage are considered to have no health insurance coverage. See [Appendix II, Health insurance coverage](#).

<sup>7</sup>Education categories shown are for 1998 and subsequent years. GED stands for General Educational Development high school equivalency diploma. In years prior to 1998 the following categories based on number of years of school completed were used: less than 12 years, 12 years, 13 years or more. See [Appendix II, Education](#).

NOTES: Some numbers have been revised and differ from previous editions of *Health, United States*. Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data starting in 1997 are not strictly comparable with data for earlier years due to the 1997 questionnaire redesign. See [Appendix I, National Health Interview Survey](#). Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health Interview Survey. Data are from the following supplements: cancer control (1987), health promotion and disease prevention (1990–1991), and year 2000 objectives (1993–1994). Starting in 1998, data are from the family core and sample adult questionnaires.



**Table 90 (page 1 of 2). Use of Pap smears among women 18 years of age and over, by selected characteristics: United States, selected years 1987–2005**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	1987	1993	1994	1998	1999	2000	2003	2005
Percent of women having a Pap smear within the past 3 years <sup>1</sup>								
18 years and over, age-adjusted <sup>2,3</sup>	74.1	77.7	76.8	79.3	80.8	81.3	79.2	77.9
18 years and over, crude <sup>2</sup>	74.4	77.7	76.8	79.1	80.8	81.2	79.0	77.7
Age								
18–44 years	83.3	84.6	82.8	84.4	86.8	84.9	83.9	83.6
18–24 years	74.8	78.8	76.6	73.6	76.8	73.5	75.1	74.5
25–44 years	86.3	86.3	84.6	87.6	89.9	88.5	86.8	86.8
45–64 years	70.5	77.2	77.4	81.4	81.7	84.6	81.3	80.6
45–54 years	75.7	82.1	81.9	83.7	83.8	86.3	83.6	83.4
55–64 years	65.2	70.6	71.0	78.0	78.4	82.0	77.8	76.8
65 years and over	50.8	57.6	57.3	59.8	61.0	64.5	60.8	54.9
65–74 years	57.9	64.7	64.9	67.0	70.0	71.6	70.1	66.3
75 years and over	40.4	48.0	47.3	51.2	50.8	56.7	51.1	42.7
Race <sup>4</sup>								
18 years and over, crude:								
White only	74.1	77.3	76.2	78.9	80.6	81.3	78.7	77.7
Black or African American only	80.7	82.7	83.5	84.2	85.7	85.1	84.0	81.1
American Indian or Alaska Native only	85.4	78.1	73.5	74.6	92.2	76.8	84.8	75.2
Asian only	51.9	68.8	66.4	68.5	64.4	66.4	68.3	64.1
Native Hawaiian or Other Pacific Islander only	---	---	---	---	*	*	*	*
2 or more races	---	---	---	---	86.9	80.0	81.6	86.2
Hispanic origin and race <sup>4</sup>								
18 years and over, crude:								
Hispanic or Latina	67.6	77.2	74.4	75.2	76.3	77.0	75.4	75.5
Not Hispanic or Latina	74.9	77.8	77.0	79.6	81.3	81.7	79.5	78.0
White only	74.7	77.3	76.5	79.3	81.0	81.8	79.3	78.1
Black or African American only	80.9	82.7	83.8	84.2	86.0	85.1	83.8	81.2
Age, Hispanic origin, and race <sup>4</sup>								
18–44 years:								
Hispanic or Latina	73.9	80.9	80.6	76.4	77.0	78.1	75.9	76.5
Not Hispanic or Latina:								
White only	84.5	85.3	82.9	85.7	88.7	86.6	85.8	85.8
Black or African American only	89.1	88.0	89.1	88.9	90.8	88.5	88.6	86.4
45–64 years:								
Hispanic or Latina	57.7	75.8	70.1	78.3	79.5	77.8	77.9	78.4
Not Hispanic or Latina:								
White only	71.2	77.2	77.5	81.7	81.9	85.9	81.4	81.4
Black or African American only	76.2	80.3	82.2	84.1	84.6	85.7	84.7	80.5
65 years and over:								
Hispanic or Latina	41.7	57.1	43.8	59.8	63.7	66.8	64.6	60.0
Not Hispanic or Latina:								
White only	51.8	57.1	58.2	59.7	60.5	64.2	60.7	54.1
Black or African American only	44.8	61.2	59.5	61.7	64.5	67.2	59.6	60.1
Age and percent of poverty level <sup>5</sup>								
18 years and over, crude:								
Below 100%	64.3	70.3	68.8	69.8	73.6	72.0	70.5	68.7
100%–less than 200%	68.2	71.2	68.8	70.6	72.5	73.4	71.4	69.0
200% or more	79.9	82.1	81.9	83.5	84.3	85.0	83.0	82.1
18–44 years:								
Below 100%	77.1	77.0	78.9	77.1	79.7	77.1	77.1	76.2
100%–less than 200%	80.4	81.9	78.2	79.2	84.0	79.4	79.5	78.1
200% or more	86.3	87.9	85.7	87.6	89.0	88.0	86.9	87.2
45–64 years:								
Below 100%	53.6	66.5	62.0	67.6	73.1	73.6	66.0	65.9
100%–less than 200%	60.4	64.8	66.2	69.9	70.4	76.1	71.4	69.6
200% or more	75.5	81.4	82.0	85.1	84.6	87.4	85.1	84.4
65 years and over:								
Below 100%	33.2	47.4	44.0	48.2	51.9	53.7	52.6	44.4
100%–less than 200%	50.4	55.7	51.5	55.1	54.7	61.0	55.4	49.5
200% or more	59.6	62.0	66.8	65.3	66.4	68.8	65.4	59.7

See footnotes at end of table.

**Table 90 (page 2 of 2). Use of Pap smears among women 18 years of age and over, by selected characteristics: United States, selected years 1987–2005**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	1987	1993	1994	1998	1999	2000	2003	2005
Percent of women having a Pap smear within the past 3 years <sup>1</sup>								
Health insurance status at the time of interview <sup>6</sup>								
18–64 years, crude:								
Insured . . . . .	---	84.7	83.8	86.0	87.2	87.8	86.4	85.6
Private . . . . .	---	84.8	83.6	86.5	87.5	88.0	87.0	86.5
Medicaid . . . . .	---	82.7	86.2	83.0	84.2	85.8	82.8	80.9
Uninsured . . . . .	---	69.4	68.6	69.6	73.3	70.4	66.6	67.7
Health insurance status prior to interview <sup>6</sup>								
18–64 years, crude:								
Insured continuously all 12 months . . . . .	---	84.8	83.7	86.3	87.3	88.0	86.6	85.8
Uninsured for any period up to 12 months . . . . .	---	81.8	83.4	81.7	83.5	83.7	81.8	81.3
Uninsured more than 12 months . . . . .	---	65.1	63.6	64.0	68.8	65.1	60.2	62.0
Age and education <sup>7</sup>								
25 years and over, crude:								
No high school diploma or GED . . . . .	57.1	61.9	60.9	65.0	66.1	69.9	64.9	64.1
High school diploma or GED . . . . .	76.4	78.2	76.0	77.4	79.3	79.8	75.9	73.8
Some college or more . . . . .	84.0	84.4	85.2	86.9	87.8	88.0	86.2	84.6
25–44 years:								
No high school diploma or GED . . . . .	75.1	73.6	73.6	76.8	79.0	79.6	71.7	75.5
High school diploma or GED . . . . .	85.6	85.4	82.4	83.9	87.6	86.2	84.3	83.1
Some college or more . . . . .	90.1	89.8	89.1	91.5	93.0	91.4	90.8	90.5
45–64 years:								
No high school diploma or GED . . . . .	58.0	65.6	66.1	69.2	71.6	75.7	71.4	69.7
High school diploma or GED . . . . .	72.3	77.6	75.9	81.0	79.8	81.8	77.6	79.0
Some college or more . . . . .	80.1	83.0	84.7	85.5	85.7	89.1	86.2	84.1
65 years and over:								
No high school diploma or GED . . . . .	44.0	50.7	47.7	52.4	51.8	56.6	52.5	46.0
High school diploma or GED . . . . .	55.4	61.6	61.2	60.7	63.7	66.9	61.2	52.5
Some college or more . . . . .	59.4	62.3	66.5	67.9	68.8	69.8	67.8	63.8

\* Estimates are considered unreliable. Data not shown have a relative standard error greater than 30%.

--- Data not available.

<sup>1</sup>Questions concerning use of Pap smears differed slightly on the National Health Interview Survey across the years for which data are shown. See [Appendix II, Pap smear](#).

<sup>2</sup>Includes all other races not shown separately, unknown poverty level in 1987, unknown health insurance status, and unknown education level.

<sup>3</sup>Estimates are age-adjusted to the year 2000 standard population using five age groups: 18–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. Age-adjusted estimates in this table may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

<sup>4</sup>The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

<sup>5</sup>Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Poverty level was unknown for 9% of women 18 years of age and over in 1987. Missing family income data were imputed for 17%–20% of women 18 years of age and over in 1990–1994 and 30%–35% in 1998–2005. See [Appendix II, Family income; Poverty](#).

<sup>6</sup>Health insurance categories are mutually exclusive. Persons who reported both Medicaid and private coverage are classified as having private coverage. Starting with 1997 data, state-sponsored health plan coverage is included as Medicaid coverage. Starting with 1999 data coverage by the State Children's Health Insurance Program (SCHIP) is included as Medicaid coverage. In addition to private and Medicaid, the insured category also includes military plans, other government-sponsored health plans, and Medicare, not shown separately. Persons not covered by private insurance, Medicaid, SCHIP, public assistance (through 1996), state-sponsored or other government-sponsored health plans (starting in 1997), Medicare, or military plans are considered to have no health insurance coverage. Persons with only Indian Health Service coverage are considered to have no health insurance coverage. See [Appendix II, Health insurance coverage](#).

<sup>7</sup>Education categories shown are for 1998 and subsequent years. GED stands for General Educational Development high school equivalency diploma. In years prior to 1998 the following categories based on number of years of school completed were used: less than 12 years, 12 years, 13 years or more. See [Appendix II, Education](#).

NOTES: Some numbers have been revised and differ from previous editions of *Health, United States*. Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data starting in 1997 are not strictly comparable with data for earlier years due to the 1997 questionnaire redesign. See [Appendix I, National Health Interview Survey](#).

SOURCES: CDC/NCHS, National Health Interview Survey. Data are from the following supplements: cancer control (1987), year 2000 objectives (1993–1994). Starting in 1998, data are from the family core and sample adult questionnaires.

**Table 91 (page 1 of 3). Emergency department visits within the past 12 months among children under 18 years of age, by selected characteristics: United States, 1997, 2005, and 2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Under 18 years			Under 6 years			6–17 years		
	1997	2005	2006	1997	2005	2006	1997	2005	2006
	Percent of children with one or more emergency department visits <sup>1</sup>								
All children <sup>2</sup> . . . . .	19.9	20.5	21.3	24.3	26.8	28.2	17.7	17.4	17.9
Race <sup>3</sup>									
White only . . . . .	19.4	19.8	21.2	22.6	25.3	28.0	17.8	17.1	17.9
Black or African American only . . . . .	24.0	23.8	25.0	33.1	31.6	33.6	19.4	20.0	21.0
American Indian or Alaska Native only . . . . .	*24.1	*32.1	*19.7	*24.3	*	*	*24.0	*	*
Asian only . . . . .	12.6	14.6	13.4	20.8	20.2	19.6	8.6	12.3	10.2
Native Hawaiian or Other Pacific Islander only . . . . .	---	*	*	---	*	*	---	*	*
2 or more races . . . . .	---	24.8	17.1	---	38.3	19.8	---	17.1	15.2
Hispanic origin and race <sup>3</sup>									
Hispanic or Latino . . . . .	21.1	19.5	19.7	25.7	28.0	28.5	18.1	14.5	14.5
Not Hispanic or Latino . . . . .	19.7	20.7	21.7	24.0	26.5	28.2	17.6	18.0	18.7
White only . . . . .	19.2	19.9	21.5	22.2	24.5	27.6	17.7	17.9	18.7
Black or African American only . . . . .	23.6	23.8	25.3	32.7	31.8	34.0	19.2	20.0	21.3
Percent of poverty level <sup>4</sup>									
Below 100% . . . . .	25.1	27.3	25.8	29.5	33.5	32.6	22.2	23.5	21.6
100%–less than 200% . . . . .	22.0	21.8	22.1	28.0	30.8	30.3	19.0	17.4	17.8
200% or more . . . . .	17.3	17.9	19.3	20.5	22.7	25.3	15.8	15.7	16.7
Hispanic origin and race and percent of poverty level <sup>3,4</sup>									
Hispanic or Latino:									
Percent of poverty level:									
Below 100% . . . . .	21.9	21.8	21.0	25.0	28.4	31.1	19.6	17.4	14.3
100%–less than 200% . . . . .	20.8	17.8	20.5	28.8	26.1	27.3	15.6	13.1	16.3
200% or more . . . . .	20.4	18.8	17.7	23.4	29.3	26.5	18.7	13.5	13.3
Not Hispanic or Latino:									
White only:									
Percent of poverty level:									
Below 100% . . . . .	25.5	34.1	27.5	27.2	37.3	32.3	24.4	32.2	24.6
100%–less than 200% . . . . .	22.3	22.8	22.9	25.8	30.7	33.3	20.7	19.1	18.2
200% or more . . . . .	17.2	17.4	20.0	20.1	20.8	24.9	15.9	15.9	17.9
Black or African American only:									
Percent of poverty level:									
Below 100% . . . . .	29.3	27.1	31.1	39.5	34.8	37.7	23.0	22.6	27.3
100%–less than 200% . . . . .	22.5	24.1	24.8	31.7	33.3	32.9	18.5	20.3	21.1
200% or more . . . . .	17.7	20.6	19.4	22.6	27.4	29.6	15.9	17.6	15.7
Health insurance status at the time of interview <sup>5</sup>									
Insured . . . . .	19.8	20.7	21.9	24.4	26.8	28.5	17.5	17.7	18.5
Private . . . . .	17.5	17.4	19.2	20.9	21.7	24.5	15.9	15.5	17.0
Medicaid . . . . .	28.2	28.5	27.2	33.0	35.5	34.2	24.1	23.6	22.3
Uninsured . . . . .	20.2	18.4	16.8	23.0	26.6	25.4	18.9	15.4	13.7
Health insurance status prior to interview <sup>5</sup>									
Insured continuously all 12 months . . . . .	19.6	20.5	21.5	24.1	26.7	27.9	17.3	17.3	18.2
Uninsured for any period up to 12 months . . . . .	24.0	26.0	26.0	27.1	34.4	36.2	21.9	22.4	21.1
Uninsured more than 12 months . . . . .	18.4	14.4	12.8	19.3	*15.7	*17.6	18.1	14.0	11.5
Percent of poverty level and health insurance status prior to interview <sup>4,5</sup>									
Below 100%:									
Insured continuously all 12 months . . . . .	26.3	28.1	26.5	30.9	34.3	31.7	22.8	23.8	23.1
Uninsured for any period up to 12 months . . . . .	26.5	31.2	32.2	29.7	39.1	41.8	24.4	*28.2	*25.7
Uninsured more than 12 months . . . . .	17.5	15.7	*12.5	*16.0	*	*	18.0	*15.6	*9.8
100%–less than 200%:									
Insured continuously all 12 months . . . . .	21.8	22.1	22.4	28.0	31.0	30.8	18.6	17.4	17.6
Uninsured for any period up to 12 months . . . . .	24.5	27.4	27.1	29.7	41.2	*32.9	21.0	21.9	24.8
Uninsured more than 12 months . . . . .	19.5	14.7	*12.9	*22.5	*	*	18.6	*14.5	*11.0
200% or more:									
Insured continuously all 12 months . . . . .	17.1	17.9	19.5	20.3	22.6	25.2	15.6	15.7	17.0
Uninsured for any period up to 12 months . . . . .	20.7	21.4	20.0	21.3	26.8	34.4	20.4	18.7	*13.6
Uninsured more than 12 months . . . . .	17.9	*12.6	*13.3	*19.2	*	*	17.3	*	*14.5

See footnotes at end of table.

**Table 91 (page 2 of 3). Emergency department visits within the past 12 months among children under 18 years of age, by selected characteristics: United States, 1997, 2005, and 2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Under 18 years			Under 6 years			6–17 years		
	1997	2005	2006	1997	2005	2006	1997	2005	2006
Geographic region									
Percent of children with one or more emergency department visits <sup>1</sup>									
Northeast . . . . .	18.5	20.9	24.1	20.7	26.3	30.8	17.4	18.5	21.1
Midwest . . . . .	19.5	21.8	22.4	26.0	30.1	28.3	16.4	17.8	19.5
South . . . . .	21.8	21.7	22.8	25.6	27.1	32.5	19.9	18.8	18.0
West . . . . .	18.5	16.7	15.4	23.5	22.9	19.3	15.9	13.8	13.4
Location of residence									
Within MSA <sup>6</sup> . . . . .	19.7	20.0	20.8	23.9	25.7	27.3	17.4	17.2	17.6
Outside MSA <sup>6</sup> . . . . .	20.8	22.4	23.9	26.2	31.8	32.6	18.6	18.2	19.6
Percent of children with two or more emergency department visits <sup>1</sup>									
All children <sup>2</sup> . . . . .	7.1	6.8	7.7	9.6	9.8	10.6	5.8	5.4	6.3
Race <sup>3</sup>									
White only . . . . .	6.6	6.3	7.5	8.4	9.1	10.1	5.7	4.9	6.2
Black or African American only . . . . .	9.6	9.2	9.9	14.9	12.7	14.8	6.9	7.5	7.6
American Indian and Alaska Native only . . . . .	*	*	*	*	*	*	*	*	*
Asian only . . . . .	*5.7	*4.6	5.8	*12.9	*	*6.7	*	*3.9	*5.3
Native Hawaiian and Other Pacific Islander only . . . . .	---	*	*	---	*	*	---	*	*
2 or more races . . . . .	---	*8.6	*6.2	---	*13.2	*	---	*	*
Hispanic origin and race <sup>3</sup>									
Hispanic or Latino . . . . .	8.9	7.7	7.7	11.8	12.1	11.2	7.0	5.2	5.6
Not Hispanic or Latino . . . . .	6.8	6.6	7.7	9.2	9.2	10.4	5.7	5.4	6.4
White only . . . . .	6.2	5.9	7.3	7.8	8.2	9.6	5.5	4.9	6.2
Black or African American only . . . . .	9.3	9.1	9.9	14.6	12.4	14.5	6.8	7.5	7.7
Percent of poverty level <sup>4</sup>									
Below 100% . . . . .	11.1	11.5	10.1	14.5	16.1	12.4	8.9	8.6	8.6
100%–less than 200% . . . . .	8.3	7.7	8.8	12.2	12.1	12.6	6.3	5.5	6.9
200% or more . . . . .	5.3	5.1	6.4	6.5	6.6	8.9	4.7	4.4	5.3
Hispanic origin and race and percent of poverty level <sup>3,4</sup>									
Hispanic or Latino:									
Percent of poverty level:									
Below 100% . . . . .	10.4	10.2	8.2	13.9	14.0	10.8	8.0	7.6	*6.4
100%–less than 200% . . . . .	8.2	5.8	8.8	12.0	7.6	12.7	5.7	4.8	*6.5
200% or more . . . . .	7.6	7.2	6.3	8.4	14.2	*10.1	7.1	3.6	*4.2
Not Hispanic or Latino:									
White only:									
Percent of poverty level:									
Below 100% . . . . .	10.7	13.9	10.0	12.2	18.8	*10.5	9.8	10.9	*9.6
100%–less than 200% . . . . .	8.0	8.0	8.6	11.2	13.3	*11.6	6.4	5.4	*7.3
200% or more . . . . .	5.0	4.4	6.4	5.8	5.1	8.8	4.6	4.0	5.4
Black or African American only:									
Percent of poverty level:									
Below 100% . . . . .	12.7	11.7	12.3	19.1	16.6	16.5	8.8	8.8	10.0
100%–less than 200% . . . . .	9.2	8.4	10.4	*13.5	*12.3	*17.0	*7.2	*6.8	*7.2
200% or more . . . . .	5.5	7.3	6.9	*8.2	*7.8	*9.5	*4.5	7.0	*5.9
Health insurance status at the time of interview <sup>5</sup>									
Insured . . . . .	7.0	6.8	7.8	9.6	9.7	10.6	5.7	5.3	6.4
Private . . . . .	5.2	5.0	6.3	6.8	6.2	8.5	4.5	4.4	5.3
Medicaid . . . . .	13.1	11.1	10.8	16.2	15.8	13.7	10.4	7.7	8.8
Uninsured . . . . .	7.7	7.0	7.0	9.8	11.5	*11.4	6.8	5.4	5.5
Health insurance status prior to interview <sup>5</sup>									
Insured continuously all 12 months . . . . .	6.9	6.7	7.7	9.4	9.7	10.4	5.7	5.2	6.3
Uninsured for any period up to 12 months . . . . .	8.5	8.9	9.6	11.5	13.6	*13.3	6.6	6.9	7.8
Uninsured more than 12 months . . . . .	6.8	5.5	*5.5	*8.6	*	*	6.2	5.3	*4.4

See footnotes at end of table.

**Table 91 (page 3 of 3). Emergency department visits within the past 12 months among children under 18 years of age, by selected characteristics: United States, 1997, 2005, and 2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Under 18 years			Under 6 years			6–17 years		
	1997	2005	2006	1997	2005	2006	1997	2005	2006
Geographic region									
Percent of children with two or more emergency department visits <sup>1</sup>									
Northeast . . . . .	6.2	6.2	9.6	7.6	8.9	10.8	5.4	5.0	9.1
Midwest . . . . .	6.6	6.9	7.4	10.4	9.6	10.4	4.8	5.5	6.0
South . . . . .	8.0	7.9	8.4	10.1	10.8	12.6	6.9	6.3	6.4
West . . . . .	7.1	5.5	5.1	10.0	9.1	7.3	5.6	3.9	3.9
Location of residence									
Within MSA <sup>6</sup> . . . . .	7.2	6.7	7.4	9.6	9.5	10.2	5.9	5.2	6.1
Outside MSA <sup>6</sup> . . . . .	6.8	7.5	9.0	9.7	11.2	12.8	5.6	5.9	7.2

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

--- Data not available.

<sup>1</sup>See [Appendix II, Emergency department visit](#).

<sup>2</sup>Includes all other races not shown separately and unknown health insurance status.

<sup>3</sup>The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

<sup>4</sup>Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 21%–25% of children in 1997–1998 and 27%–31% in 1999–2006. See [Appendix II, Family income; Poverty](#).

<sup>5</sup>Health insurance categories are mutually exclusive. Persons who reported both Medicaid and private coverage are classified as having private coverage. Starting with 1997 data, state-sponsored health plan coverage is included as Medicaid coverage. Starting with 1999 data, coverage by the State Children's Health Insurance Program (SCHIP) is included as Medicaid coverage. In addition to private and Medicaid, the insured category also includes military, other government, and Medicare coverage. Persons not covered by private insurance, Medicaid, SCHIP, state-sponsored or other government-sponsored health plans (starting in 1997), Medicare, or military plans are considered to have no health insurance coverage. Persons with only Indian Health Service coverage are considered to have no health insurance coverage. See [Appendix II, Health insurance coverage](#).

<sup>6</sup>MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health Interview Survey, family core and sample child questionnaires.

**Table 92 (page 1 of 2). Emergency department visits within the past 12 months among adults 18 years of age and over, by selected characteristics: United States, selected years 1997–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	One or more emergency department visits				Two or more emergency department visits			
	1997	2000	2005	2006	1997	2000	2005	2006
Percent of adults with emergency department visits <sup>1</sup>								
18 years and over, age-adjusted <sup>2,3</sup>	19.6	20.2	20.5	20.5	6.7	6.9	7.1	7.5
18 years and over, crude <sup>2</sup>	19.6	20.1	20.4	20.4	6.7	6.8	7.0	7.4
Age								
18–44 years	20.7	20.5	20.8	20.5	6.8	7.0	7.1	7.3
18–24 years	26.3	25.7	25.3	24.9	9.1	8.8	8.9	9.6
25–44 years	19.0	18.8	19.2	18.9	6.2	6.4	6.5	6.5
45–64 years	16.2	17.6	18.2	18.4	5.6	5.6	6.4	6.8
45–54 years	15.7	17.9	17.6	17.9	5.5	5.8	6.1	6.3
55–64 years	16.9	17.0	19.0	18.9	5.7	5.3	6.8	7.5
65 years and over	22.0	23.7	23.7	24.5	8.1	8.6	8.2	9.0
65–74 years	20.3	21.6	20.8	20.6	7.1	7.4	7.4	6.8
75 years and over	24.3	26.2	27.1	28.9	9.3	10.0	9.1	11.6
Sex <sup>3</sup>								
Male	19.1	18.7	18.6	19.0	5.9	5.7	5.9	6.0
Female	20.2	21.6	22.3	22.1	7.5	7.9	8.2	8.9
Race <sup>3,4</sup>								
White only	19.0	19.4	19.8	20.1	6.2	6.4	6.5	7.0
Black or African American only	25.9	26.5	26.3	25.6	11.1	10.8	11.9	11.3
American Indian or Alaska Native only	24.8	30.3	31.0	21.1	13.1	*12.6	*11.1	*10.5
Asian only	11.6	13.6	15.4	13.6	*2.9	*3.8	*3.8	3.8
Native Hawaiian or Other Pacific Islander only	---	*	*	*	---	*	*	*
2 or more races	---	32.5	25.7	24.5	---	11.3	12.8	*9.4
American Indian or Alaska Native; White	---	33.9	29.3	21.9	---	*9.4	*15.3	*
Hispanic origin and race <sup>3,4</sup>								
Hispanic or Latino	19.2	18.3	20.1	17.3	7.4	7.0	7.1	5.7
Mexican	17.8	17.4	17.2	15.4	6.4	7.1	5.8	4.8
Not Hispanic or Latino	19.7	20.6	20.7	21.1	6.7	6.9	7.1	7.7
White only	19.1	19.8	20.1	20.8	6.2	6.4	6.4	7.3
Black or African American only	25.9	26.5	26.2	25.8	11.0	10.8	11.9	11.3
Percent of poverty level <sup>3,5</sup>								
Below 100%	28.1	29.0	29.8	28.2	12.8	13.3	13.7	13.0
100%–less than 200%	23.8	23.9	23.2	24.0	9.3	9.6	9.6	10.6
200% or more	17.0	18.0	18.3	18.2	4.9	5.2	5.3	5.5
Hispanic origin and race and percent of poverty level <sup>3,4,5</sup>								
Hispanic or Latino:								
Below 100%	22.1	22.4	24.0	20.7	9.8	9.7	9.2	6.8
100%–less than 200%	19.2	18.1	18.7	16.0	8.1	6.7	7.1	5.9
200% or more	17.6	16.8	19.6	16.5	5.4	6.1	6.1	5.2
Not Hispanic or Latino:								
White only:								
Below 100%	29.5	30.1	30.8	31.7	13.0	13.9	13.7	15.2
100%–less than 200%	24.3	25.5	24.3	26.3	9.1	10.4	9.8	11.7
200% or more	16.8	17.7	18.1	18.3	4.8	5.0	5.0	5.3
Black or African American only:								
Below 100%	34.6	35.4	35.4	31.4	17.5	17.4	18.3	15.8
100%–less than 200%	29.2	28.5	28.9	30.3	12.8	12.2	14.2	13.6
200% or more	19.7	22.6	21.6	21.5	7.2	8.0	8.5	8.5
Health insurance status at the time of interview <sup>6,7</sup>								
18–64 years:								
Insured	18.8	19.5	20.0	19.9	6.1	6.4	6.6	7.2
Private	16.9	17.6	17.3	17.2	4.7	5.1	4.8	5.3
Medicaid	37.6	42.2	40.1	39.0	19.7	21.0	20.1	20.7
Uninsured	20.0	19.3	19.5	18.9	7.5	6.9	8.0	6.9

See footnotes at end of table.



**Table 92 (page 2 of 2). Emergency department visits within the past 12 months among adults 18 years of age and over, by selected characteristics: United States, selected years 1997–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	One or more emergency department visits				Two or more emergency department visits			
	1997	2000	2005	2006	1997	2000	2005	2006
Health insurance status prior to interview <sup>6,7</sup>								
Percent of adults with emergency department visits <sup>1</sup>								
18–64 years:								
Insured continuously all 12 months . . . . .	18.3	19.0	19.4	19.1	5.8	6.1	6.3	6.7
Uninsured for any period up to 12 months . . . . .	25.5	28.2	28.0	27.4	9.4	10.3	12.4	11.8
Uninsured more than 12 months . . . . .	18.9	17.3	18.0	17.4	7.1	6.4	7.0	6.3
Percent of poverty level and health insurance status prior to interview <sup>5,6,7</sup>								
18–64 years:								
Below 100%:								
Insured continuously all 12 months . . . . .	30.2	31.6	33.6	29.6	14.7	15.4	15.3	14.3
Uninsured for any period up to 12 months . . . . .	34.1	43.7	39.1	39.5	16.1	18.1	21.5	21.9
Uninsured more than 12 months . . . . .	20.8	20.5	20.5	19.4	8.1	9.1	8.5	8.2
100%–less than 200%:								
Insured continuously all 12 months . . . . .	24.5	25.5	23.7	25.6	8.9	10.2	9.8	11.8
Uninsured for any period up to 12 months . . . . .	28.7	27.7	28.4	27.2	12.3	11.7	12.7	12.6
Uninsured more than 12 months . . . . .	19.0	17.4	18.5	16.8	8.3	6.4	7.7	5.8
200% or more:								
Insured continuously all 12 months . . . . .	16.0	17.0	17.2	16.8	4.4	4.7	4.7	4.9
Uninsured for any period up to 12 months . . . . .	20.2	22.9	24.0	22.8	5.3	7.0	9.2	7.3
Uninsured more than 12 months . . . . .	17.4	15.6	15.6	16.7	5.3	4.7	5.4	5.3
Geographic region <sup>3</sup>								
Northeast . . . . .	19.5	20.0	21.6	22.4	6.9	6.2	7.2	8.9
Midwest . . . . .	19.3	20.1	21.6	20.6	6.2	6.9	7.2	7.3
South . . . . .	20.9	21.2	20.7	21.0	7.3	7.6	7.6	7.7
West . . . . .	17.7	18.6	17.8	18.1	6.0	6.3	6.0	5.9
Location of residence <sup>3</sup>								
Within MSA <sup>8</sup> . . . . .	19.1	19.6	20.1	20.1	6.4	6.6	6.8	7.3
Outside MSA <sup>8</sup> . . . . .	21.5	22.5	22.3	22.6	7.8	7.8	8.1	8.2

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

--- Data not available.

<sup>1</sup>See [Appendix II, Emergency department visit](#).

<sup>2</sup>Includes all other races not shown separately and unknown health insurance status.

<sup>3</sup>Estimates are for persons 18 years of age and over and are age-adjusted to the year 2000 standard population using five age groups: 18–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

<sup>4</sup>The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups, and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

<sup>5</sup>Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 26%–30% of persons 18 years of age and over in 1997–1998 and 32%–35% in 1999–2006. See [Appendix II, Family income; Poverty](#).

<sup>6</sup>Estimates for persons 18–64 years of age are age-adjusted to the year 2000 standard population using three age groups: 18–44 years, 45–54 years, and 55–64 years of age. See [Appendix II, Age adjustment](#).

<sup>7</sup>Health insurance categories are mutually exclusive. Persons who reported both Medicaid and private coverage are classified as having private coverage. Starting with 1997 data, state-sponsored health plan coverage is included as Medicaid coverage. Starting with 1999 data, coverage by the State Children’s Health Insurance Program (SCHIP) is included as Medicaid coverage. In addition to private and Medicaid, the insured category also includes military plans, other government-sponsored health plans, and Medicare, not shown separately. Persons not covered by private insurance, Medicaid, SCHIP, state-sponsored or other government-sponsored health plans (starting in 1997), Medicare, or military plans are considered to have no health insurance coverage. Persons with only Indian Health Service coverage are considered to have no health insurance coverage. See [Appendix II, Health insurance coverage](#).

<sup>8</sup>MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health Interview Survey, family core and sample adult questionnaires.

**Table 93 (page 1 of 2). Injury-related visits to hospital emergency departments, by sex, age, and intent and mechanism of injury: United States, average annual 1995–1996, 1999–2000, and 2005–2006**

[Data are based on reporting by a sample of hospital emergency departments]

<i>Sex, age, and intent and mechanism of injury<sup>1</sup></i>	1995–1996	1999–2000	2005–2006 <sup>2</sup>	1995–1996	1999–2000	2005–2006 <sup>2</sup>
Both sexes	Injury-related visits in thousands			Injury-related visits per 10,000 persons		
All ages <sup>3,4</sup> . . . . .	33,191	35,316	31,706	1,231.9	1,266.6	1,068.6
Male						
All ages <sup>3,4</sup> . . . . .	18,788	19,596	16,966	1,406.5	1,423.4	1,164.2
Under 18 years <sup>3</sup> . . . . .	5,985	6,020	5,072	1,644.9	1,624.4	1,346.6
Unintentional injuries <sup>5</sup> . . . . .	5,432	5,421	4,391	1,492.9	1,462.8	1,165.8
Falls . . . . .	1,402	1,303	1,362	385.2	351.6	361.5
Struck by or against objects or persons . . . . .	1,011	1,377	816	277.9	371.5	216.6
Motor vehicle traffic . . . . .	450	432	357	123.7	116.6	94.8
Cut or pierce . . . . .	493	455	291	135.6	122.8	77.3
Intentional injuries . . . . .	290	242	190	79.7	65.4	50.4
18–24 years <sup>3</sup> . . . . .	2,882	2,927	2,552	2,259.7	2,177.6	1,729.5
Unintentional injuries <sup>5</sup> . . . . .	2,419	2,404	1,985	1,896.7	1,788.5	1,345.4
Falls . . . . .	299	307	318	234.8	228.1	215.2
Struck by or against objects or persons . . . . .	387	401	290	303.2	298.2	196.9
Motor vehicle traffic . . . . .	347	469	386	272.4	348.6	261.6
Cut or pierce . . . . .	304	394	265	238.7	293.0	179.5
Intentional injuries . . . . .	335	322	273	262.4	239.8	185.2
25–44 years <sup>3</sup> . . . . .	6,794	6,688	5,199	1,622.3	1,604.1	1,243.6
Unintentional injuries <sup>5</sup> . . . . .	5,720	5,503	4,001	1,365.7	1,320.0	957.1
Falls . . . . .	817	850	763	195.2	204.0	182.4
Struck by or against objects or persons . . . . .	619	781	472	147.8	187.3	112.9
Motor vehicle traffic . . . . .	909	848	629	217.0	203.3	150.5
Cut or pierce . . . . .	860	762	480	205.3	182.8	114.8
Intentional injuries . . . . .	697	511	436	166.4	122.5	104.4
45–64 years <sup>3</sup> . . . . .	2,034	2,634	2,842	795.1	893.1	790.0
Unintentional injuries <sup>5</sup> . . . . .	1,821	2,315	2,275	711.9	785.1	632.5
Falls . . . . .	445	582	599	174.1	197.4	166.6
Struck by or against objects or persons . . . . .	186	232	208	72.6	78.8	57.9
Motor vehicle traffic . . . . .	244	316	262	95.5	107.1	72.9
Cut or pierce . . . . .	203	294	285	79.2	99.6	79.2
Intentional injuries . . . . .	86	99	205	33.5	33.5	57.1
65 years and over <sup>3</sup> . . . . .	1,093	1,327	1,301	797.1	925.2	837.5
Unintentional injuries <sup>5</sup> . . . . .	1,004	1,203	1,082	732.1	838.2	696.8
Falls . . . . .	505	579	644	368.3	403.2	414.5
Struck by or against objects or persons . . . . .	*39	*112	46	*28.4	*77.8	29.8
Motor vehicle traffic . . . . .	99	*114	98	72.2	*79.6	63.4
Cut or pierce . . . . .	*81	102	70	*59.1	71.3	45.3
Intentional injuries . . . . .	*	*	*	*	*	*

See footnotes at end of table.



**Table 93 (page 2 of 2). Injury-related visits to hospital emergency departments, by sex, age, and intent and mechanism of injury: United States, average annual 1995–1996, 1999–2000, and 2005–2006**

[Data are based on reporting by a sample of hospital emergency departments]

Sex, age, and intent and mechanism of injury <sup>1</sup>	1995–1996			1999–2000			2005–2006 <sup>2</sup>		
	1995–1996	1999–2000	2005–2006 <sup>2</sup>	1995–1996	1999–2000	2005–2006 <sup>2</sup>	1995–1996	1999–2000	2005–2006 <sup>2</sup>
Female	Injury-related visits in thousands			Injury-related visits per 10,000 persons					
All ages <sup>3,4</sup>	14,403	15,720	14,740	1,050.5	1,104.7	976.3			
Under 18 years <sup>3</sup>	4,097	4,095	3,625	1,183.2	1,161.0	1,008.7			
Unintentional injuries <sup>5</sup>	3,741	3,713	3,058	1,080.3	1,052.7	851.1			
Falls	1,040	1,025	1,039	300.3	290.7	289.1			
Struck by or against objects or persons	477	728	419	137.7	206.5	116.7			
Motor vehicle traffic	447	430	367	129.1	122.0	102.1			
Cut or pierce	253	232	160	72.9	65.7	44.4			
Intentional injuries	220	149	188	63.5	42.3	52.3			
18–24 years <sup>3</sup>	1,721	1,957	1,882	1,376.8	1,487.5	1,329.3			
Unintentional injuries <sup>5</sup>	1,405	1,564	1,431	1,123.4	1,189.1	1,010.5			
Falls	268	234	290	214.0	177.9	205.0			
Struck by or against objects or persons	134	170	146	107.1	129.5	103.4			
Motor vehicle traffic	373	469	397	298.0	356.8	280.6			
Cut or pierce	131	156	116	105.0	118.2	82.2			
Intentional injuries	239	219	176	191.2	166.7	124.2			
25–44 years <sup>3</sup>	4,515	4,900	4,173	1,064.5	1,159.6	1,004.2			
Unintentional injuries <sup>5</sup>	3,845	3,951	3,266	906.6	935.0	785.8			
Falls	817	947	873	192.7	224.1	210.1			
Struck by or against objects or persons	380	382	309	89.5	90.5	74.3			
Motor vehicle traffic	871	788	719	205.3	186.4	173.1			
Cut or pierce	338	434	269	79.6	102.6	64.7			
Intentional injuries	418	425	313	98.6	100.7	75.4			
45–64 years <sup>3</sup>	2,025	2,569	2,904	744.2	822.2	767.8			
Unintentional injuries <sup>5</sup>	1,810	2,168	2,278	665.2	693.9	602.2			
Falls	600	749	865	220.7	239.9	228.7			
Struck by or against objects or persons	159	192	160	58.4	61.4	42.2			
Motor vehicle traffic	343	324	359	126.0	103.7	94.8			
Cut or pierce	127	175	158	46.7	55.9	41.7			
Intentional injuries	*64	125	149	*23.4	40.0	39.4			
65 years and over <sup>3</sup>	2,045	2,199	2,155	1,039.0	1,082.7	1,002.9			
Unintentional injuries <sup>5</sup>	1,900	2,005	1,889	965.5	986.9	879.1			
Falls	1,220	1,219	1,347	619.7	600.2	626.9			
Struck by or against objects or persons	82	103	69	41.9	50.5	31.9			
Motor vehicle traffic	169	132	139	85.7	65.1	64.5			
Cut or pierce	*42	72	*50	*21.2	*35.3	*23.3			
Intentional injuries	*	*	*	*	*	*			

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

<sup>1</sup>Intent and mechanism of injury are based on the first-listed external cause of injury code (E code). Intentional injuries include suicide attempts and assaults. See [Appendix II, External cause of injury](#) and [Table VII](#) for a listing of E codes.

<sup>2</sup>Estimates for 2005–2006 were limited to those visits that were initial visits for the condition. This was determined using an imputed variable indicating that the visit was or was not the initial visit. Limiting the estimates to initial visits decreases the total number of injury-related visits by 8.6% for 2005–2006. No similar variable indicating initial visits was available for 1995–1996 or 1999–2000 data. Therefore, 2005–2006 estimates are not directly comparable with 1995–1996 and 1999–2000 estimates.

<sup>3</sup>Includes all injury-related visits not shown separately in table including those with undetermined intent (1.0% in 2005–2006) and insufficient or no information to code cause of injury (11.7% in 2005–2006).

<sup>4</sup>Rates are age-adjusted to the year 2000 standard population using six age groups: under 18 years, 18–24 years, 25–44 years, 45–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

<sup>5</sup>Includes unintentional injury-related visits with mechanism of injury not shown in table.

NOTES: An emergency department visit was considered injury related if the physician's diagnosis was injury related (ICD-9-CM 800-909.2, 909.4, 909.9-994.9, 995.50-995.59, and 995.80-995.85) or an external cause of injury code was present (ICD-9-CM E800-E869, E880-E929, and E950-E999). Visits with a first-listed diagnosis or external cause code describing a complication or adverse effect of medical care are excluded. For more information on injury-related visits, see Bergen G, Chen LH, Warner M, Fingerhut LA. Injury in the United States: 2007 Chartbook. Hyattsville, MD: NCHS. 2008. Available from: <http://www.cdc.gov/nchs/data/misc/injury2007.pdf>. Rates were calculated using estimates of the civilian population of the United States including institutionalized persons. The population estimates used are the same used for rates calculated for the National Hospital Discharge Survey. Population data are from unpublished tabulations provided by the U.S. Census Bureau. Rates prior to 2001 were calculated using population estimates based on the 1990 census. Rates for 2005–2006 were calculated using postcensal population estimates based on the 2000 census. Estimates and definitions have been revised and differ from previous editions of *Health, United States*.

SOURCE: CDC/NCHS, National Hospital Ambulatory Medical Care Survey.

**Table 94 (page 1 of 3). Visits to physician offices, hospital outpatient departments, and hospital emergency departments, by selected characteristics: United States, selected years 1995–2006**

[Data are based on reporting by a sample of office-based physicians, hospital outpatient departments, and hospital emergency departments]

Age, sex, and race	<i>All places</i> <sup>1</sup>				<i>Physician offices</i>			
	1995	2000	2003	2006	1995	2000	2003	2006
Number of visits in thousands								
Total . . . . .	860,859	1,014,848	1,114,504	1,123,354	697,082	823,542	906,023	901,954
Under 18 years . . . . .	194,644	212,165	223,724	231,535	150,351	163,459	169,392	181,560
18–44 years . . . . .	285,184	315,774	331,015	317,502	219,065	243,011	251,853	234,063
45–64 years . . . . .	188,320	255,894	301,558	310,667	159,531	216,783	257,258	256,494
45–54 years . . . . .	104,891	142,233	164,431	164,692	88,266	119,474	138,634	133,402
55–64 years . . . . .	83,429	113,661	137,126	145,975	71,264	97,309	118,624	123,092
65 years and over . . . . .	192,712	231,014	258,206	263,649	168,135	200,289	227,520	229,837
65–74 years . . . . .	102,605	116,505	120,655	124,089	90,544	102,447	106,424	108,063
75 years and over . . . . .	90,106	114,510	137,552	139,560	77,591	97,842	121,096	121,774
Number of visits per 100 persons								
Total, age-adjusted <sup>2</sup> . . . . .	334	374	391	380	271	304	317	305
Total, crude . . . . .	329	370	390	382	266	300	317	307
Under 18 years . . . . .	275	293	307	315	213	226	232	247
18–44 years . . . . .	264	291	301	287	203	224	229	212
45–64 years . . . . .	364	422	442	418	309	358	377	345
45–54 years . . . . .	339	385	406	384	286	323	343	311
55–64 years . . . . .	401	481	494	465	343	412	428	392
65 years and over . . . . .	612	706	753	740	534	612	664	645
65–74 years . . . . .	560	656	667	665	494	577	588	579
75 years and over . . . . .	683	766	850	824	588	654	748	719
Sex and age								
Male, age-adjusted <sup>2</sup> . . . . .	290	325	338	328	232	261	273	262
Male, crude . . . . .	277	314	329	322	220	251	264	256
Under 18 years . . . . .	273	302	317	309	209	231	241	242
18–44 years . . . . .	190	203	203	197	139	148	147	139
45–54 years . . . . .	275	316	335	328	229	260	280	260
55–64 years . . . . .	351	428	422	410	300	367	365	344
65–74 years . . . . .	508	614	632	631	445	539	558	554
75 years and over . . . . .	711	771	881	810	616	670	777	709
Female, age-adjusted <sup>2</sup> . . . . .	377	420	442	431	309	345	360	346
Female, crude . . . . .	378	424	449	440	310	348	368	355
Under 18 years . . . . .	277	285	297	321	217	221	223	252
18–44 years . . . . .	336	377	397	377	265	298	309	284
45–54 years . . . . .	400	451	475	437	339	384	403	359
55–64 years . . . . .	446	529	561	515	382	453	486	436
65–74 years . . . . .	603	692	696	693	534	609	613	600
75 years and over . . . . .	666	763	830	832	571	645	730	725
Race and age <sup>3</sup>								
White, age-adjusted <sup>2</sup> . . . . .	339	380	399	384	282	315	332	317
White, crude . . . . .	338	381	404	391	281	316	337	324
Under 18 years . . . . .	295	306	330	325	237	243	260	263
18–44 years . . . . .	267	301	308	292	211	239	242	225
45–54 years . . . . .	334	386	409	379	286	330	352	317
55–64 years . . . . .	397	480	500	465	345	416	439	402
65–74 years . . . . .	557	641	653	672	496	568	582	593
75 years and over . . . . .	689	764	844	820	598	658	747	721
Black or African American, age-adjusted . . . . .	309	353	393	397	204	239	261	251
Black or African American, crude . . . . .	281	324	365	379	178	214	236	235
Under 18 years . . . . .	193	264	248	299	100	167	131	*188
18–44 years . . . . .	260	257	329	331	158	149	199	180
45–54 years . . . . .	387	383	445	438	281	269	315	272
55–64 years . . . . .	414	495	487	515	294	373	349	347
65–74 years . . . . .	553	656	761	615	429	512	602	458
75 years and over . . . . .	534	745	774	744	395	568	608	569

See footnotes at end of table.

**Table 94 (page 2 of 3). Visits to physician offices, hospital outpatient departments, and hospital emergency departments, by selected characteristics: United States, selected years 1995–2006**

[Data are based on reporting by a sample of office-based physicians, hospital outpatient departments, and hospital emergency departments]

Age, sex, and race	Hospital outpatient departments				Hospital emergency departments			
	1995	2000	2003	2006	1995	2000	2003	2006
Number of visits in thousands								
Total . . . . .	67,232	83,289	94,578	102,208	96,545	108,017	113,903	119,191
Under 18 years . . . . .	17,636	21,076	25,412	23,679	26,657	27,630	28,920	26,296
18–44 years . . . . .	24,299	26,947	32,714	33,301	41,820	45,816	46,449	50,139
45–64 years . . . . .	14,811	20,772	23,307	28,707	13,978	18,339	20,992	25,466
45–54 years . . . . .	8,029	11,558	12,937	15,626	8,595	11,201	12,861	15,663
55–64 years . . . . .	6,782	9,214	10,370	13,080	5,383	7,138	8,132	9,803
65 years and over . . . . .	10,486	14,494	13,144	16,522	14,090	16,232	17,542	17,290
65–74 years . . . . .	6,004	7,515	7,077	8,931	6,057	6,543	7,153	7,095
75 years and over . . . . .	4,482	6,979	6,067	7,591	8,033	9,690	10,389	10,195
Number of visits per 100 persons								
Total, age-adjusted <sup>2</sup> . . . . .	26	31	33	35	37	40	40	41
Total, crude . . . . .	26	30	33	35	37	39	40	41
Under 18 years . . . . .	25	29	35	32	38	38	40	36
18–44 years . . . . .	22	25	30	30	39	42	42	45
45–64 years . . . . .	29	34	34	39	27	30	31	34
45–54 years . . . . .	26	31	32	36	28	30	32	37
55–64 years . . . . .	33	39	37	42	26	30	29	31
65 years and over . . . . .	33	44	38	46	45	50	51	49
65–74 years . . . . .	33	42	39	48	33	37	40	38
75 years and over . . . . .	34	47	38	45	61	65	64	60
Sex and age								
Male, age-adjusted <sup>2</sup> . . . . .	21	26	27	28	37	38	39	38
Male, crude . . . . .	21	25	26	28	36	38	38	38
Under 18 years . . . . .	25	29	34	31	40	41	41	36
18–44 years . . . . .	14	17	19	19	37	38	37	39
45–54 years . . . . .	20	26	25	31	26	30	30	36
55–64 years . . . . .	26	32	29	34	25	30	29	31
65–74 years . . . . .	29	38	34	40	34	36	41	38
75 years and over . . . . .	34	42	38	44	61	59	67	58
Female, age-adjusted <sup>2</sup> . . . . .	31	35	40	41	37	41	42	44
Female, crude . . . . .	31	35	40	41	37	41	42	43
Under 18 years . . . . .	25	29	36	33	35	35	38	36
18–44 years . . . . .	31	33	41	41	40	46	47	52
45–54 years . . . . .	32	36	39	41	29	31	33	37
55–64 years . . . . .	38	45	45	48	26	31	30	31
65–74 years . . . . .	36	46	44	54	32	37	39	38
75 years and over . . . . .	34	49	37	45	61	69	63	62
Race and age <sup>3</sup>								
White, age-adjusted <sup>2</sup> . . . . .	23	28	30	31	34	37	38	36
White, crude . . . . .	23	28	30	31	34	37	37	36
Under 18 years . . . . .	23	27	32	30	35	36	38	32
18–44 years . . . . .	20	23	27	27	36	39	39	40
45–54 years . . . . .	23	28	28	32	25	28	29	30
55–64 years . . . . .	28	36	33	36	24	28	28	27
65–74 years . . . . .	29	38	35	44	32	35	36	35
75 years and over . . . . .	31	44	35	41	60	63	62	57
Black or African American, age-adjusted . . . . .	48	51	61	65	58	62	71	81
Black or African American, crude . . . . .	45	48	60	64	58	62	69	80
Under 18 years . . . . .	39	40	55	49	53	57	61	62
18–44 years . . . . .	38	40	54	59	64	68	77	93
45–54 years . . . . .	55	61	65	78	51	53	65	88
55–64 years . . . . .	73	70	86	97	47	52	53	71
65–74 years . . . . .	*77	85	83	84	47	59	77	73
75 years and over . . . . .	66	85	64	80	73	92	103	94

See footnotes at end of table.

## Table 94 (page 3 of 3). Visits to physician offices, hospital outpatient departments, and hospital emergency departments, by selected characteristics: United States, selected years 1995–2006

[Data are based on reporting by a sample of office-based physicians, hospital outpatient departments, and hospital emergency departments]

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error of 20%–30%.

<sup>1</sup>All places includes visits to physician offices and hospital outpatient and emergency departments.

<sup>2</sup>Estimates are age-adjusted to the year 2000 standard population using six age groups: under 18 years, 18–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

<sup>3</sup>Starting with 1999 data, the instruction for the race item on the Patient Record Form was changed so that more than one race could be recorded. In previous years only one race could be checked. Estimates for race in this table are for visits where only one race was recorded. Because of the small number of responses with more than one racial group checked, estimates for visits with multiple races checked are unreliable and are not presented.

NOTES: Rates for 1995–2000 were computed using 1990-based postcensal estimates of the civilian noninstitutionalized population as of July 1 adjusted for net underenumeration using the 1990 National Population Adjustment Matrix from the U.S. Census Bureau. Starting with 2001 data, rates were computed using 2000-based postcensal estimates of the civilian noninstitutionalized population as of July 1. The difference between rates for 2000 computed using 1990-based postcensal estimates and 2000 census counts is minimal. More information is available from: <http://www.cdc.gov/nchs/about/major/ahcd/census2000.htm>. Rates will be overestimated to the extent that visits by institutionalized persons are counted in the numerator (for example, hospital emergency department visits by nursing home residents) and institutionalized persons are omitted from the denominator (the civilian noninstitutionalized population). Starting with *Health, United States, 2005*, data for physician offices for 2001 and beyond use a revised weighting scheme. See [Appendix I, National Ambulatory Medical Care Survey \(NAMCS\)](#). Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Ambulatory Medical Care Survey and National Hospital Ambulatory Medical Care Survey.

**Table 95 (page 1 of 2). Visits to primary care generalist and specialist physicians, by selected characteristics and type of physician: United States, selected years 1980–2006**

[Data are based on reporting by a sample of office-based physicians]

Age, sex, and race	Type of primary care generalist physician <sup>1</sup>											
	All primary care generalists				General and family practice				Internal medicine			
	1980	1990	2000	2006	1980	1990	2000	2006	1980	1990	2000	2006
	Percent of all physician office visits											
Total . . . . .	66.2	63.6	58.9	57.5	33.5	29.9	24.1	22.8	12.1	13.8	15.3	13.9
Under 18 years . . . . .	77.8	79.5	79.7	84.5	26.1	26.5	19.9	16.9	2.0	2.9	*	*
18–44 years . . . . .	65.3	65.2	62.1	63.2	34.3	31.9	28.2	29.0	8.6	11.8	12.7	11.9
45–64 years . . . . .	60.2	55.5	51.2	48.2	36.3	32.1	26.4	25.0	19.5	18.6	20.1	18.1
45–54 years . . . . .	60.2	55.6	52.3	49.9	37.4	32.0	27.8	26.0	17.1	17.1	18.7	17.4
55–64 years . . . . .	60.2	55.5	49.9	46.4	35.4	32.1	24.7	24.0	21.8	20.0	21.7	19.0
65 years and over . . . . .	61.6	52.6	46.5	40.7	37.5	28.1	20.2	18.5	22.7	23.3	24.5	20.2
65–74 years . . . . .	61.2	52.7	46.6	43.5	37.4	28.1	19.7	20.0	22.1	23.0	24.5	20.7
75 years and over . . . . .	62.3	52.4	46.4	38.2	37.6	28.0	20.8	17.1	23.5	23.7	24.5	19.8
Sex and age												
Male:												
Under 18 years . . . . .	77.3	78.1	77.7	83.1	25.6	24.1	18.3	16.7	2.0	3.0	*	*
18–44 years . . . . .	50.8	51.8	51.5	49.3	38.0	35.9	34.2	32.6	11.5	15.0	14.4	15.2
45–64 years . . . . .	55.6	50.6	49.4	45.7	34.4	31.0	28.7	27.3	20.5	19.2	19.8	18.3
65 years and over . . . . .	58.2	51.2	43.1	38.3	35.6	27.7	19.3	18.8	22.3	23.3	23.8	19.4
Female:												
Under 18 years . . . . .	78.5	81.1	82.0	85.9	26.6	29.1	21.7	17.1	2.0	2.8	*	*
18–44 years . . . . .	72.1	71.3	67.2	69.9	32.5	30.0	25.3	27.3	7.3	10.3	11.9	10.3
45–64 years . . . . .	63.4	58.8	52.5	50.0	37.7	32.8	24.9	23.5	18.9	18.2	20.2	18.0
65 years and over . . . . .	63.9	53.5	48.9	42.3	38.7	28.3	20.9	18.2	22.9	23.3	25.0	20.8
Race and age <sup>2</sup>												
White:												
Under 18 years . . . . .	77.6	79.2	78.5	83.4	26.4	27.1	21.2	17.4	2.0	2.3	*	*
18–44 years . . . . .	64.8	64.4	61.4	63.0	34.5	31.9	29.2	29.5	8.6	10.6	11.0	11.3
45–64 years . . . . .	59.6	54.2	49.3	47.3	36.0	31.5	27.3	25.6	19.2	17.6	17.1	16.9
65 years and over . . . . .	61.4	51.9	45.1	39.6	36.6	27.5	20.3	18.3	23.3	23.1	23.0	19.3
Black or African American:												
Under 18 years . . . . .	79.9	85.5	87.3	89.3	23.7	20.2	*	*15.6	*2.2	9.8	*	*
18–44 years . . . . .	68.5	68.3	65.0	64.9	31.7	31.9	22.0	27.2	9.0	18.1	20.9	*13.0
45–64 years . . . . .	66.1	61.6	61.7	54.3	38.6	31.2	23.3	25.2	22.6	26.9	35.9	22.1
65 years and over . . . . .	64.6	58.6	52.8	47.6	49.0	28.9	*18.5	*21.8	14.2	28.7	33.4	*23.5

See footnotes at end of table.

**Table 95 (page 2 of 2). Visits to primary care generalist and specialist physicians, by selected characteristics and type of physician: United States, selected years 1980–2006**

[Data are based on reporting by a sample of office-based physicians]

Age, sex, and race	Type of primary care generalist physician <sup>1</sup>								Specialty care physicians			
	Obstetrics and gynecology				Pediatrics				1980	1990	2000	2006
	1980	1990	2000	2006	1980	1990	2000	2006				
Percent of all physician office visits												
Total . . . . .	9.6	8.7	7.8	7.6	10.9	11.2	11.7	13.3	33.8	36.4	41.1	42.5
Under 18 years . . . . .	1.3	1.2	*1.1	1.1	48.5	48.9	57.3	64.1	22.2	20.5	20.3	15.5
18–44 years . . . . .	21.7	20.8	20.4	21.0	0.7	0.7	*0.9	*1.2	34.7	34.8	37.9	36.8
45–64 years . . . . .	4.2	4.6	4.5	5.0	*	*	*	*	39.8	44.5	48.8	51.8
45–54 years . . . . .	5.6	6.3	5.6	6.6	*	*	*	*	39.8	44.4	47.7	50.1
55–64 years . . . . .	2.9	3.1	3.3	3.3	*	*	*	*	39.8	44.5	50.1	53.6
65 years and over . . . . .	1.4	1.1	1.5	1.9	*	*	*	*	38.4	47.4	53.5	59.3
65–74 years . . . . .	1.7	1.6	2.0	2.5	*	*	*	*	38.8	47.3	53.4	56.5
75 years and over . . . . .	1.0	*0.6	*1.0	*1.3	*	*	*	*	37.7	47.6	53.6	61.8
Sex and age												
Male:												
Under 18 years . . . . .	...	...	...	...	49.4	50.7	58.0	64.7	22.7	21.9	22.3	16.9
18–44 years . . . . .	...	...	...	...	1.0	0.7	*1.7	*	49.2	48.2	48.5	50.7
45–64 years . . . . .	...	...	...	...	*	*	*	*	44.4	49.4	50.6	54.3
65 years and over . . . . .	...	...	...	...	*	*	*	*	41.8	48.8	56.9	61.7
Female:												
Under 18 years . . . . .	2.5	2.3	2.1	2.1	47.4	46.9	56.5	63.5	21.5	18.9	18.0	14.1
18–44 years . . . . .	31.7	30.4	29.6	31.2	0.6	0.7	*	*1.0	27.9	28.7	32.8	30.1
45–64 years . . . . .	6.7	7.7	7.3	8.5	*	*	*	*	36.6	41.2	47.5	50.0
65 years and over . . . . .	2.1	1.8	2.6	3.2	*	*	*	*	36.1	46.5	51.1	57.7
Race and age <sup>2</sup>												
White:												
Under 18 years . . . . .	1.1	1.0	*1.2	0.9	48.2	48.8	54.7	63.1	22.4	20.8	21.5	16.6
18–44 years . . . . .	21.0	21.1	20.4	20.8	0.7	0.7	*0.8	*1.3	35.2	35.6	38.6	37.0
45–64 years . . . . .	4.1	4.8	4.7	4.8	*	*	*	*	40.4	45.8	50.7	52.7
65 years and over . . . . .	1.4	1.2	1.5	1.9	*	*	*	*	38.6	48.1	54.9	60.4
Black or African American:												
Under 18 years . . . . .	2.8	*3.4	*	*	51.2	52.1	75.0	63.3	20.1	14.5	*12.7	*10.7
18–44 years . . . . .	27.1	17.9	20.7	24.5	*	*	*	*	31.5	31.7	35.0	35.1
45–64 years . . . . .	4.8	3.5	*2.4	*6.9	*	*	*	*	33.9	38.4	38.3	45.7
65 years and over . . . . .	*	*	*	*	*	*	*	*	35.4	41.4	47.2	52.4

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have a RSE of greater than 30%.

... Category not applicable.

<sup>1</sup>Type of physician is based on physician's self-designated primary area of practice. Primary care generalist physicians are defined as practitioners in the fields of general and family practice, general internal medicine, general obstetrics and gynecology, and general pediatrics and exclude primary care specialists. Primary care generalists in general and family practice exclude primary care specialties, such as sports medicine and geriatrics. Primary care internal medicine physicians exclude internal medicine specialists, such as allergists, cardiologists, and endocrinologists. Primary care obstetrics and gynecology physicians exclude obstetrics and gynecology specialties, such as gynecological oncology, maternal and fetal medicine, obstetrics and gynecology critical care medicine, and reproductive endocrinology. Primary care pediatricians exclude pediatric specialists, such as adolescent medicine specialists, neonatologists, pediatric allergists, and pediatric cardiologists. See [Appendix II, Physician specialty](#).

<sup>2</sup>Starting with 1999 data, the instruction for the race item on the Patient Record Form was changed so that more than one race could be recorded. In previous years only one racial category could be checked. Estimates for racial groups presented in this table are for visits where only one race was recorded. Because of the small number of responses with more than one racial group checked, estimates for visits with multiple races checked are unreliable and are not presented.

NOTES: This table presents data on visits to physician offices and excludes visits to other sites, such as hospital outpatient and emergency departments. In 1980 the survey excluded Alaska and Hawaii. Data for all other years include all 50 states and the District of Columbia. Visits with specialty of physician unknown are excluded. Starting with *Health, United States, 2005*, data for 2001 and later years for physician offices use a revised weighting scheme. See [Appendix I, National Ambulatory Medical Care Survey \(NAMCS\)](#). Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Ambulatory Medical Care Survey.

**Table 96 (page 1 of 2). Dental visits in the past year, by selected characteristics: United States, 1997, 2005, and 2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	2 years and over			2–17 years			18–64 years			65 years and over <sup>1</sup>		
	1997	2005	2006	1997	2005	2006	1997	2005	2006	1997	2005	2006
Percent of persons with a dental visit in the past year <sup>2</sup>												
2 years and over <sup>3</sup> . . . . .	65.1	65.8	64.9	72.7	76.2	75.7	64.1	63.5	62.4	54.8	57.7	58.0
Sex												
Male . . . . .	62.9	63.0	61.5	72.3	75.5	75.0	60.4	59.4	57.5	55.4	56.6	55.3
Female . . . . .	67.1	68.4	68.2	73.0	77.0	76.5	67.7	67.6	67.1	54.4	58.6	60.0
Race <sup>4</sup>												
White only . . . . .	66.4	66.8	65.7	74.0	77.1	76.4	65.7	64.8	63.3	56.8	59.9	59.5
Black or African American only . . . . .	58.9	59.8	59.0	68.8	72.9	72.4	57.0	57.0	55.6	35.4	36.0	40.7
American Indian or Alaska Native only . . . . .	55.1	59.3	55.4	66.8	74.8	72.0	49.9	54.1	51.0	*	*	*
Asian only . . . . .	62.5	62.5	69.8	69.9	70.1	75.5	60.3	60.2	68.7	53.9	60.0	66.0
Native Hawaiian or Other Pacific Islander only . . . . .	---	*	*	---	*	*	---	*	*	---	*	*
2 or more races . . . . .	---	67.3	65.8	---	78.1	78.1	---	60.8	54.9	---	*39.7	62.9
Black or African American; White . . . . .	---	66.0	72.3	---	75.3	79.5	---	51.3	59.5	---	*	*
American Indian or Alaska Native; White . . . . .	---	56.2	55.7	---	70.9	69.6	---	54.4	48.5	---	*	62.9
Hispanic origin and race <sup>4</sup>												
Hispanic or Latino . . . . .	54.0	53.9	53.0	61.0	66.5	66.3	50.8	48.5	47.2	47.8	43.1	44.2
Not Hispanic or Latino . . . . .	66.4	67.8	66.9	74.7	78.5	78.1	65.7	66.0	64.9	55.2	58.7	58.9
White only . . . . .	68.0	69.4	68.2	76.4	80.4	79.6	67.5	67.9	66.5	57.2	61.2	60.6
Black or African American only . . . . .	58.8	59.7	59.0	68.8	72.7	72.4	56.9	57.0	55.5	35.3	35.5	40.9
Percent of poverty level <sup>5</sup>												
Below 100% . . . . .	50.5	50.4	51.5	62.0	66.2	67.5	46.9	44.6	44.8	31.5	34.7	36.9
100%–less than 200% . . . . .	50.8	52.4	52.0	62.5	68.6	68.4	48.3	47.8	46.8	40.8	42.5	44.5
200% or more . . . . .	72.5	72.6	71.7	80.1	82.0	81.5	71.2	70.5	69.6	65.9	67.8	67.3
Hispanic origin and race and percent of poverty level <sup>4,5</sup>												
Hispanic or Latino:												
Below 100% . . . . .	45.7	47.4	46.6	55.9	64.4	63.1	39.2	36.3	36.7	33.6	37.1	29.7
100%–less than 200% . . . . .	47.2	47.6	47.5	53.8	60.2	62.2	43.5	42.3	40.7	47.9	36.2	36.5
200% or more . . . . .	65.1	61.9	60.5	73.7	73.6	72.9	62.3	58.2	56.1	58.8	51.8	59.5
Not Hispanic or Latino:												
White only:												
Below 100% . . . . .	51.7	51.5	55.1	64.4	65.0	71.6	50.6	49.6	50.6	32.0	37.9	41.4
100%–less than 200% . . . . .	52.4	54.5	53.2	66.1	72.5	71.5	50.4	50.9	48.6	42.2	45.7	46.7
200% or more . . . . .	73.8	74.6	73.4	81.3	84.2	83.3	72.7	72.8	71.7	67.0	69.7	68.1
Black or African American only:												
Below 100% . . . . .	52.8	52.5	49.3	66.1	71.1	67.1	46.2	44.1	39.9	27.7	24.6	27.8
100%–less than 200% . . . . .	48.7	51.3	52.8	61.2	70.5	70.1	46.3	45.2	48.7	26.9	26.9	28.6
200% or more . . . . .	67.7	67.6	67.7	77.1	75.9	79.2	66.1	66.7	65.1	49.8	50.7	58.3

See footnotes at end of table.



**Table 96 (page 2 of 2). Dental visits in the past year, by selected characteristics: United States, 1997, 2005, and 2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	2 years and over			2–17 years			18–64 years			65 years and over <sup>1</sup>		
	1997	2005	2006	1997	2005	2006	1997	2005	2006	1997	2005	2006
Percent of persons with a dental visit in the past year <sup>2</sup>												
Geographic region												
Northeast . . . . .	69.6	71.7	72.0	77.5	81.0	82.6	69.6	71.1	70.7	55.5	59.8	57.6
Midwest . . . . .	68.4	68.6	67.0	76.4	79.0	78.2	67.4	66.8	64.5	57.6	58.7	59.9
South . . . . .	60.2	60.7	60.4	68.0	72.2	72.6	59.4	58.1	57.4	49.0	52.6	54.1
West . . . . .	65.0	66.1	64.6	71.5	76.0	72.6	62.9	62.7	62.0	61.9	64.3	63.1
Location of residence												
Within MSA <sup>6</sup> . . . . .	66.7	67.0	66.5	73.6	76.0	76.3	65.7	64.8	63.9	57.6	60.9	61.1
Outside MSA <sup>6</sup> . . . . .	59.1	61.0	57.6	69.3	77.0	73.0	58.0	58.5	54.7	46.1	47.5	46.8

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE greater than 30%.

-- Data not available.

<sup>1</sup>Based on the 1997–2006 National Health Interview Surveys, about 25%–30% of persons 65 years and over were edentulous (having lost all their natural teeth). In 1997–2006 about 68%–70% of older dentate persons compared with 16%–21% of older edentate persons had a dental visit in the past year.

<sup>2</sup>Respondents were asked “About how long has it been since you last saw or talked to a dentist?” See [Appendix II, Dental visit](#).

<sup>3</sup>Includes all other races not shown separately.

<sup>4</sup>The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups, and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

<sup>5</sup>Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 25%–29% of persons 2 years of age and over in 1997–1998 and 31%–34% in 1999–2006. See [Appendix II, Family income; Poverty](#).

<sup>6</sup>MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: In 1997 the National Health Interview Survey questionnaire was redesigned. See [Appendix I, National Health Interview Survey](#). Standard errors for selected years are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health Interview Survey, sample child and sample adult questionnaires.



**Table 97 (page 1 of 3). Selected prescription and nonprescription drugs recorded during physician office visits and hospital outpatient department visits, by sex and age: United States, 1995–1996 and 2004–2005**

[Data are based on reporting by a sample of office-based physicians and hospital outpatient departments]

Age group and National Drug Code (NDC) Directory therapeutic class <sup>1</sup> (common reasons for use)	Total		Male		Female	
	1995–1996	2004–2005	1995–1996	2004–2005	1995–1996	2004–2005
All ages						
Drug visits <sup>3</sup>	189.8	239.4	156.5	201.9	221.5	275.2
Visits with at least one drug per 100 population <sup>2</sup>						
Total number of drugs <sup>5</sup>	400.3	684.2	321.1	568.4	475.6	795.0
Number of drugs per 100 population <sup>4</sup>						
Antidepressants (depression and related disorders)	13.8	35.5	9.1	22.8	18.2	47.7
Hypertension control drugs, not otherwise specified (high blood pressure)	6.0	32.1	4.1	28.1	7.8	35.9
Hyperlipidemia (high cholesterol)	5.4	30.8	5.4	31.0	5.4	30.6
Antiasthmatics/bronchodilators (asthma, breathing)	13.1	29.0	11.7	25.6	14.4	32.1
NSAID <sup>6</sup> (pain relief)	19.9	28.8	16.0	24.4	23.7	33.1
Nonnarcotic analgesics (pain relief)	14.4	28.7	13.0	27.3	15.7	30.0
Acid/peptic disorders (gastrointestinal reflux, ulcers)	12.0	25.1	9.8	20.8	14.1	29.2
Blood glucose/sugar regulators (diabetes)	9.5	24.0	8.6	24.4	10.4	23.6
Antihistamines (allergies)	13.7	23.4	10.8	18.3	16.4	28.2
Vitamins/minerals (dietary supplements)	9.2	21.2	3.4	12.6	14.8	29.5
Beta blockers (high blood pressure, heart disease)	5.9	20.0	5.1	17.7	6.7	22.3
ACE inhibitors (high blood pressure, heart disease)	9.6	19.9	9.0	19.5	10.2	20.4
Narcotic analgesics (pain relief)	11.2	19.7	10.3	15.9	12.2	23.3
Diuretics (high blood pressure, heart disease)	10.2	19.5	7.8	15.5	12.6	23.3
Estrogens/progestins (menopause, hot flashes)	...	...	...	...	19.8	15.1
Under 18 years						
Drug visits <sup>3</sup>	153.9	178.2	152.3	183.2	155.6	173.0
Visits with at least one drug per 100 population <sup>2</sup>						
Total number of drugs <sup>5</sup>	261.3	338.4	255.6	350.2	267.3	326.1
Number of drugs per 100 population <sup>4</sup>						
Antiasthmatics/bronchodilators (asthma, breathing)	13.4	29.1	14.8	34.2	11.9	23.7
Penicillins (bacterial infections)	37.2	27.5	36.4	29.4	38.0	25.5
Antihistamines (allergies)	17.5	25.1	16.7	23.7	18.4	26.5
Nonnarcotic analgesics (pain relief)	12.1	15.5	10.4	15.7	13.9	15.3
NSAID <sup>6</sup> (pain relief)	7.4	14.6	6.9	15.6	7.9	13.5
Cephalosporins (bacterial infections)	18.1	11.3	18.8	11.6	17.3	10.9
Antitussives/expectorants (cough and cold, congestion)	11.8	11.1	11.0	10.2	12.7	11.9
Erythromycins/lincosamides (infections)	10.2	10.9	11.0	10.1	9.4	11.6
Adrenal corticosteroids (anti-inflammatory)	4.3	10.5	4.7	12.4	3.9	8.6
Nasal corticosteroid inhalants (asthma, breathing, allergies)	3.5	10.1	3.5	10.9	3.5	9.3
Nasal decongestants (congestion)	14.0	9.9	12.4	9.9	15.7	10.0
Anorexiant/CNS stimulants (attention deficit disorder, hyperactivity)	3.9	8.9	5.6	13.8	2.1	3.9
Antidepressants (depression and related disorders)	1.9	7.5	1.9	7.9	1.9	7.0
18–44 years						
Drug visits <sup>3</sup>	136.2	159.9	90.9	109.0	180.4	210.0
Visits with at least one drug per 100 population <sup>2</sup>						
Total number of drugs <sup>5</sup>	251.0	356.1	168.8	244.7	331.2	466.1
Number of drugs per 100 population <sup>4</sup>						
Antidepressants (depression and related disorders)	14.0	29.3	9.3	17.8	18.5	40.5
NSAID <sup>6</sup> (pain relief)	16.7	19.3	14.5	16.5	18.8	22.1
Narcotic analgesics (pain relief)	11.7	17.7	10.8	14.3	12.7	21.0
Antihistamines (allergies)	10.8	17.5	7.5	11.4	14.1	23.6
Vitamins/minerals (dietary supplements)	11.8	15.3	1.1	3.2	22.2	27.3
Antiasthmatics/bronchodilator (asthma, breathing)	6.9	14.0	3.3	8.7	10.3	19.3
Acid/peptic disorders (gastrointestinal reflux, ulcers)	6.6	11.6	5.3	8.3	7.9	14.9
Anticonvulsants (epilepsy, seizure and related disorders)	4.5	10.6	3.8	8.0	5.1	13.3
Nonnarcotic analgesics (pain relief)	6.0	8.7	4.5	6.7	7.4	10.7
Antitussives/expectorants (cough and cold, congestion)	7.7	8.1	5.8	5.9	9.5	10.3
Nasal corticosteroid inhalants (asthma, breathing, allergies)	4.7	8.1	3.3	6.2	6.1	9.9
Antianxiety agents (generalized anxiety and related disorders)	5.8	8.0	4.5	5.3	7.1	10.6
Erythromycins/lincosamides (infections)	7.5	7.9	5.4	6.2	9.5	9.6
Hypertension control drugs, not otherwise specified (high blood pressure)	1.5	7.9	1.0	7.9	2.0	7.8
Contraceptive agents (prevent pregnancy)	...	...	...	...	13.4	20.6

See footnotes at end of table.

**Table 97 (page 2 of 3). Selected prescription and nonprescription drugs recorded during physician office visits and hospital outpatient department visits, by sex and age: United States, 1995–1996 and 2004–2005**

[Data are based on reporting by a sample of office-based physicians and hospital outpatient departments]

Age group and National Drug Code (NDC) Directory therapeutic class <sup>1</sup> (common reasons for use)	Total		Male		Female	
	1995–1996	2004–2005	1995–1996	2004–2005	1995–1996	2004–2005
45–64 years						
Drug visits <sup>3</sup>	222.4	290.3	185.0	249.6	257.4	328.6
Visits with at least one drug per 100 population <sup>2</sup>						
Number of drugs per 100 population <sup>4</sup>						
Total number of drugs <sup>5</sup>	505.1	912.0	403.2	780.7	600.4	1,035.9
Antidepressants (depression and related disorders)	23.5	59.8	14.9	39.8	31.5	78.6
Hyperlipidemia (high cholesterol)	10.4	53.4	12.0	58.1	8.8	49.0
Hypertension control drugs, not otherwise specified (high blood pressure)	9.4	52.5	6.9	50.6	11.7	54.3
Blood glucose/sugar regulators (diabetes)	17.7	44.4	16.7	49.0	18.7	40.0
NSAID <sup>6</sup> (pain relief)	30.3	41.2	23.9	34.8	36.4	47.3
Acid/peptic disorders (gastrointestinal reflux, ulcers)	19.8	38.4	18.3	33.6	21.3	43.0
Nonnarcotic analgesics (pain relief)	16.3	35.7	15.6	37.3	17.0	34.3
Antiasthmatics/bronchodilators (asthma, breathing)	14.4	34.0	11.4	27.3	17.1	40.3
ACE inhibitors (high blood pressure, heart disease)	16.8	33.4	17.7	35.0	16.0	31.9
Narcotic analgesics (pain relief)	17.5	31.4	17.0	27.7	18.0	34.9
Beta blockers (high blood pressure, heart disease)	10.4	28.5	9.8	27.5	11.0	29.4
Antihistamines (allergies)	13.5	27.3	9.1	19.9	17.7	34.3
Diuretics (high blood pressure, heart disease)	13.6	26.5	11.2	22.3	15.8	30.4
Vitamins/minerals (dietary supplements)	6.4	23.3	4.0	19.0	8.6	27.3
Estrogens/progestins (menopause, hot flashes)	...	...	...	...	55.7	30.4
65 years and over						
Drug visits <sup>3</sup>	399.4	515.3	378.1	481.1	414.7	540.5
Visits with at least one drug per 100 population <sup>2</sup>						
Number of drugs per 100 population <sup>4</sup>						
Total number of drugs <sup>5</sup>	1,047.4	1,982.0	956.9	1,820.3	1,112.5	2,101.6
Hypertension control drugs, not otherwise specified (high blood pressure)	29.1	133.3	22.7	120.7	33.8	142.6
Hyperlipidemia (high cholesterol)	24.7	128.1	25.1	135.0	24.5	123.0
Nonnarcotic analgesics (pain relief)	44.9	104.7	49.0	109.3	42.0	101.3
Diuretics (high blood pressure, heart disease)	55.2	95.4	48.5	86.0	60.0	102.4
Beta blockers (high blood pressure, heart disease)	24.9	92.7	22.8	89.5	26.4	95.0
Blood glucose/sugar regulators (diabetes)	37.5	86.4	38.0	95.7	37.1	79.6
Acid/peptic disorders (gastrointestinal reflux, ulcers)	42.2	84.2	36.0	78.8	46.6	88.2
ACE inhibitors (high blood pressure, heart disease)	42.6	81.7	41.2	84.8	43.6	79.4
Vitamins/minerals (dietary supplements)	17.1	69.8	13.1	54.4	20.0	81.2
Calcium channel blockers (high blood pressure, heart disease)	57.3	69.5	52.2	64.0	60.9	73.5
Antiasthmatics/bronchodilators (asthma, breathing)	31.3	65.7	37.1	62.7	27.0	67.9
Antidepressants (depression and related disorders)	23.5	64.7	16.7	38.9	28.5	83.7
NSAID <sup>6</sup> (pain relief)	41.8	63.5	31.9	51.3	49.0	72.5
Anticoagulants/thrombolytics (blood thinning, reduce or prevent blood clots)	20.7	56.8	24.0	65.5	18.3	50.4
Estrogens/progestins (menopause, hot flashes)	...	...	...	...	37.1	28.6
65–74 years						
Drug visits <sup>3</sup>	362.8	470.5	323.0	435.7	394.9	499.7
Visits with at least one drug per 100 population <sup>2</sup>						
Number of drugs per 100 population <sup>4</sup>						
Total number of drugs <sup>5</sup>	930.5	1,747.5	804.7	1,632.9	1,032.1	1,843.9
Hyperlipidemia (high cholesterol)	27.3	127.5	27.1	141.7	27.4	115.5
Hypertension control drugs, not otherwise specified (high blood pressure)	24.8	114.6	19.2	103.8	29.3	123.6
Blood glucose/sugar regulators (diabetes)	35.7	87.9	32.4	97.2	38.4	80.1
Nonnarcotic analgesics (pain relief)	38.0	86.0	40.5	93.7	35.9	79.5
Beta blockers (high blood pressure, heart disease)	23.5	78.8	20.4	79.2	26.0	78.4
Acid/peptic disorders (gastrointestinal reflux, ulcers)	38.7	78.0	30.6	73.0	45.2	82.3
ACE inhibitors (high blood pressure, heart disease)	37.1	71.5	35.6	77.9	38.3	66.1
Diuretics (high blood pressure, heart disease)	40.1	71.4	32.4	66.7	46.4	75.3
NSAID <sup>6</sup> (pain relief)	42.0	64.8	31.2	53.0	50.8	74.8
Antiasthmatics/bronchodilators (asthma, breathing)	31.1	63.8	33.0	58.7	29.5	68.1
Antidepressants (depression and related disorders)	22.7	62.9	14.2	40.0	29.6	82.1
Calcium channel blockers (high blood pressure, heart disease)	48.9	61.2	46.2	58.7	51.2	63.2
Vitamins/minerals (dietary supplements)	14.1	56.4	10.1	47.5	17.4	63.9
Anticoagulants/thrombolytics (blood thinning, reduce or prevent blood clots)	14.9	42.1	17.2	50.1	12.9	35.4
Estrogens/progestins (menopause, hot flashes)	...	...	...	...	47.5	37.6

See footnotes at end of table.

**Table 97 (page 3 of 3). Selected prescription and nonprescription drugs recorded during physician office visits and hospital outpatient department visits, by sex and age: United States, 1995–1996 and 2004–2005**

[Data are based on reporting by a sample of office-based physicians and hospital outpatient departments]

Age group and National Drug Code (NDC) Directory therapeutic class <sup>1</sup> (common reasons for use)	Total		Male		Female	
	1995–1996	2004–2005	1995–1996	2004–2005	1995–1996	2004–2005
75 years and over	Visits with at least one drug per 100 population <sup>2</sup>					
Drug visits <sup>3</sup> . . . . .	449.2	564.7	466.3	539.8	438.7	580.6
	Number of drugs per 100 population <sup>4</sup>					
Total number of drugs <sup>5</sup> . . . . .	1,206.8	2,240.8	1,200.9	2,062.6	1,210.4	2,354.8
Hypertension control drugs, not otherwise specified (high blood pressure) . . . . .	35.1	154.0	28.4	142.6	39.2	161.3
Hyperlipidemia (high cholesterol) . . . . .	21.3	128.7	21.8	126.2	21.0	130.4
Nonnarcotic analgesics (pain relief) . . . . .	54.4	125.4	62.6	129.4	49.4	122.8
Diuretics (high blood pressure, heart disease) . . . . .	75.8	122.0	74.5	111.1	76.6	129.0
Beta blockers (high blood pressure, heart disease) . . . . .	26.8	108.0	26.5	102.9	26.9	111.2
ACE inhibitors (high blood pressure, heart disease) . . . . .	50.2	93.0	50.2	93.7	50.1	92.5
Acid/peptic disorders (gastrointestinal reflux, ulcers) . . . . .	47.0	91.1	44.7	86.4	48.3	94.1
Blood glucose/sugar regulators (diabetes) . . . . .	39.8	84.8	46.9	93.7	35.5	79.1
Vitamins/minerals (dietary supplements) . . . . .	21.2	84.6	18.0	63.3	23.2	98.2
Calcium channel blockers (high blood pressure, heart disease) . . . . .	68.6	78.6	61.8	70.7	72.7	83.6
Anticoagulants/thrombolytics (blood thinning, reduce or prevent blood clots) . . . . .	28.6	73.1	34.9	85.4	24.7	65.2
Antiasthmatics/bronchodilators (asthma, breathing) . . . . .	31.5	67.7	43.7	67.8	24.0	67.7
Antidepressants (depression and related disorders) . . . . .	24.6	66.6	20.7	37.5	27.0	85.3
NSAID <sup>6</sup> (pain relief) . . . . .	41.5	62.0	33.1	49.1	46.7	70.2
Thyroid/antithyroid (hyper- and hypothyroidism) . . . . .	27.1	61.0	15.1	36.3	34.4	76.7

. . . . . Category not applicable.

<sup>1</sup>The National Drug Code (NDC) Directory therapeutic class is a general therapeutic or pharmacological classification scheme for drug products reported to the Food and Drug Administration (FDA) under the provisions of the Drug Listing Act. Drugs are classified based on the NDC Directory classifications for 2005 data. See [Appendix II, National Drug Code \(NDC\) Directory therapeutic class; Table XII](#).

<sup>2</sup>Estimated number of drug visits during the 2-year period divided by the sum of population estimates for both years times 100.

<sup>3</sup>Drug visits are physician office and hospital outpatient department visits in which at least one prescription or nonprescription drug was recorded on the patient record form.

<sup>4</sup>Estimated number of drugs recorded during visits during the 2-year period divided by the sum of population estimates for both years times 100.

<sup>5</sup>Until 2002, up to six prescription and nonprescription medications were recorded on the patient record form. Starting with 2003 data, up to eight prescription and nonprescription medications are recorded on the patient record form. If 2004–2005 data were restricted to six instead of eight drugs, the 2004–2005 total drug rate for all ages would be 6.4% lower. See [Appendix II, Drug](#).

<sup>6</sup>NSAID is nonsteroidal anti-inflammatory drug. Aspirin was not included as an NSAID in this analysis. See [Appendix II, National Drug Code \(NDC\) Directory therapeutic class](#).

NOTES: Drugs recorded on the patient record form are those prescribed, continued, administered, or provided during a physician office or hospital outpatient department visit. Numbers have been revised and differ from previous editions of *Health, United States*.

SOURCES: CDC/NCHS, National Ambulatory Medical Care Survey and National Hospital Ambulatory Medical Care Survey.

**Table 98. Prescription drug use in the past month by sex, age, race and Hispanic origin: United States, 1988–1994 and 2001–2004**

[Data are based on a sample of the civilian noninstitutionalized population]

Sex and age	Not Hispanic or Latino							
	All persons <sup>1</sup>		White only <sup>2</sup>		Black or African American only <sup>2</sup>		Mexican <sup>2,3</sup>	
	1988–1994	2001–2004	1988–1994	2001–2004	1988–1994	2001–2004	1988–1994	2001–2004
Percent of population with at least one prescription drug in past month								
Both sexes, age-adjusted <sup>4</sup>	39.1	46.7	41.1	50.6	36.9	40.5	31.7	34.5
Male	32.7	41.6	34.2	45.0	31.1	36.2	27.5	28.8
Female	45.0	51.5	47.6	56.0	41.4	43.8	36.0	40.5
Both sexes, crude	37.8	46.5	41.4	52.6	31.2	36.5	24.0	25.4
Male	30.6	40.5	33.5	46.0	25.5	31.6	20.1	20.6
Female	44.6	52.2	48.9	59.0	36.2	40.7	28.1	30.6
Under 18 years	20.5	23.9	22.9	27.3	14.8	18.0	16.1	16.3
18–44 years	31.3	37.6	34.3	43.5	27.8	29.4	21.1	20.9
45–64 years	54.8	66.2	55.5	68.6	57.5	63.4	48.1	53.8
65 years and over	73.6	87.3	74.0	88.3	74.5	80.8	67.7	79.6
Male:								
Under 18 years	20.4	25.3	22.3	29.4	15.5	18.8	16.3	16.9
18–44 years	21.5	29.2	23.5	33.4	21.1	22.6	14.9	14.1
45–64 years	47.2	58.7	48.1	60.8	48.2	58.0	43.8	42.7
65 years and over	67.2	83.6	67.4	84.8	64.4	75.9	61.3	74.4
Female:								
Under 18 years	20.6	22.4	23.6	25.1	14.2	17.1	16.0	15.7
18–44 years	40.7	45.9	44.7	53.5	33.4	34.9	28.1	28.6
45–64 years	62.0	73.4	62.6	76.3	64.4	67.7	52.2	65.8
65 years and over	78.3	90.1	78.8	91.0	81.3	84.0	73.0	83.9
Percent of population with three or more prescription drugs in past month								
Both sexes, age-adjusted <sup>4</sup>	11.8	20.2	12.4	21.8	12.6	17.7	9.0	14.4
Male	9.4	17.3	9.9	18.7	10.2	15.1	7.0	12.1
Female	13.9	22.7	14.6	24.8	14.3	19.6	11.0	16.7
Both sexes, crude	11.0	19.9	12.5	23.6	9.2	14.6	4.8	7.9
Male	8.3	16.3	9.5	19.5	7.0	11.9	3.4	6.2
Female	13.6	23.3	15.4	27.6	11.1	17.0	6.4	9.8
Under 18 years	2.4	4.0	3.2	5.0	1.5	2.8	*1.2	2.0
18–44 years	5.7	10.2	6.3	12.2	5.4	8.0	3.0	4.3
45–64 years	20.0	34.2	20.9	35.6	21.9	33.7	16.0	27.5
65 years and over	35.3	59.6	35.0	61.8	41.2	50.0	31.3	47.8
Male:								
Under 18 years	2.6	4.1	3.3	4.9	1.7	3.4	*	*1.7
18–44 years	3.6	8.0	4.1	9.8	4.2	6.1	*1.8	2.6
45–64 years	15.1	28.3	15.8	29.1	18.7	28.2	11.6	23.8
65 years and over	31.3	53.9	30.9	56.2	31.7	43.6	27.6	42.0
Female:								
Under 18 years	2.3	3.9	3.0	5.2	*1.2	2.1	*1.5	2.4
18–44 years	7.6	12.3	8.5	14.7	6.4	9.5	4.3	*6.2
45–64 years	24.7	39.8	25.8	41.9	24.3	38.1	20.3	31.4
65 years and over	38.2	63.8	38.0	66.1	47.7	54.2	34.5	52.7

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

<sup>1</sup>Includes persons of all races and Hispanic origins, not just those shown separately.

<sup>2</sup>Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The two non-Hispanic race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group. Prior to data year 1999, estimates were tabulated according to the 1977 Standards. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. See [Appendix II, Hispanic origin; Race](#).

<sup>3</sup>Persons of Mexican origin may be of any race.

<sup>4</sup>Age-adjusted to the 2000 standard population using four age groups: Under 18 years, 18–44 years, 45–64 years, and 65 years and over. Age-adjusted estimates in this table may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

NOTES: See [Appendix II, Drug](#). Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey.

**Table 99. Dietary supplement use among persons 20 years of age and over, by selected characteristics: United States, 1988–1994 and 2001–2004**

[Data are based on interviews of a sample of the civilian noninstitutionalized population]

Sex, age, race and Hispanic origin <sup>1</sup> , and percent of poverty level	Any supplement use in past month <sup>2</sup>		Any vitamin D supplement use in past month <sup>3</sup>		Any folate (folic acid) supplement use in past month <sup>4</sup>	
	1988–1994	2001–2004	1988–1994	2001–2004	1988–1994	2001–2004
20 years and over, age-adjusted <sup>5</sup>						
Both sexes <sup>6</sup> . . . . .	42.1	53.1	28.1	38.8	30.0	38.6
Male . . . . .	35.7	47.0	24.1	33.3	25.9	34.7
Female . . . . .	47.8	58.7	31.8	43.8	33.8	42.3
Not Hispanic or Latino:						
White only, male . . . . .	37.5	51.4	25.8	36.8	27.9	38.4
White only, female . . . . .	50.9	64.5	35.0	49.9	37.3	48.5
Black or African American only, male . . . . .	29.5	32.3	18.3	20.3	18.0	22.1
Black or African American only, female . . . . .	38.2	38.3	22.5	25.2	23.5	25.2
Mexican male . . . . .	28.9	31.9	16.9	20.9	18.4	21.1
Mexican female . . . . .	36.8	43.8	21.7	30.8	23.1	28.0
Percent of poverty level: <sup>7</sup>						
Below 100% . . . . .	30.0	37.1	16.6	24.2	18.1	23.4
100%–less than 200% . . . . .	36.0	45.9	23.1	30.1	24.0	29.3
200% or more . . . . .	46.9	58.5	32.3	44.5	34.7	44.4
20 years and over, crude						
Both sexes <sup>6</sup> . . . . .	41.8	52.7	28.1	38.6	30.0	38.4
Male . . . . .	35.3	46.2	23.9	32.8	25.7	34.1
Female . . . . .	47.7	58.8	31.8	43.9	33.8	42.4
Not Hispanic or Latino:						
White only, male . . . . .	37.4	51.5	25.7	37.0	27.8	38.6
White only, female . . . . .	51.1	65.5	35.0	50.5	37.3	48.9
Black or African American only, male . . . . .	28.9	31.0	18.6	19.4	18.3	21.0
Black or African American only, female . . . . .	37.0	37.6	22.7	24.7	23.7	24.8
Mexican male . . . . .	25.6	26.6	15.3	17.3	16.9	17.3
Mexican female . . . . .	34.9	39.1	21.6	27.1	22.9	25.8
Percent of poverty level: <sup>7</sup>						
Below 100% . . . . .	29.4	34.9	16.9	23.2	18.2	22.5
100%–less than 200% . . . . .	36.8	46.7	23.9	30.6	24.8	29.9
200% or more . . . . .	46.6	58.4	32.3	44.5	34.8	44.4
Male						
20–34 years . . . . .	31.0	34.7	21.7	24.2	23.3	24.9
35–44 years . . . . .	36.8	43.2	26.0	31.1	28.3	32.5
45–54 years . . . . .	32.8	47.9	23.3	35.3	25.1	36.1
55–64 years . . . . .	42.9	55.9	27.9	41.5	30.0	43.2
65–74 years . . . . .	39.4	64.4	24.1	43.8	25.9	46.6
75 years and over . . . . .	40.9	64.0	22.7	41.7	23.8	44.4
Female						
20–34 years . . . . .	43.6	47.9	32.7	36.3	35.1	37.1
35–44 years . . . . .	46.5	52.0	31.6	38.7	34.1	37.9
45–54 years . . . . .	47.8	62.7	31.9	45.6	33.3	44.5
55–64 years . . . . .	52.3	72.6	33.2	55.7	35.5	51.3
65–74 years . . . . .	52.9	69.3	29.6	51.6	30.7	46.8
75 years and over . . . . .	54.0	72.2	29.5	53.1	30.3	48.6

--- Data not available.

<sup>1</sup>Persons of Mexican origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The two non-Hispanic race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group. Prior to data year 1999, estimates were tabulated according to the 1977 Standards. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. See [Appendix II, Hispanic origin; Race](#).

<sup>2</sup>Respondents were asked “Have you used or taken any vitamins, minerals or other dietary supplements in the past month?” To facilitate their response, respondents were shown a card with some examples of different types of dietary supplements. The question wording differs slightly on the earlier, 1988–1994, survey. See [Appendix II, Dietary supplement](#).

<sup>3</sup>Includes supplements with vitamin D, cholecalciferol, calciferol, ergocalciferol, or calcitriol as an ingredient.

<sup>4</sup>Includes supplements with folate or folic acid as an ingredient.

<sup>5</sup>Age-adjusted to the 2000 standard population using five age groups: 20–34 years, 35–44 years, 45–54 years, 55–64 years, and 65 years and over. Age-adjusted estimates may differ from other age-adjusted estimates based on the same data and presented elsewhere if different age groups are used in the adjustment procedure. See [Appendix II, Age adjustment](#).

<sup>6</sup>Includes persons of all races and Hispanic origins, not just those shown separately.

<sup>7</sup>Percent of poverty level is based on family income and family size. Persons with unknown percent of poverty level are excluded (7% in 2001–2004). See [Appendix II, Family income; Poverty](#).

NOTES: For more information see [Appendix II, Dietary supplement](#). Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>.

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey.

**Table 100. Admissions to mental health organizations, by type of service and organization: United States, selected years 1986–2004**

[Data are based on inventories of mental health organizations]

<i>Service and organization</i>	1986	1990	2002	2004	1986	1990	2002	2004
	Admissions in thousands <sup>1</sup>				Admissions per 100,000 civilian population <sup>2</sup>			
24-hour hospital and residential treatment								
All organizations . . . . .	1,819	2,110	2,158	2,713	759.9	833.0	738.9	910.5
State and county mental hospitals . . . . .	333	283	234	266	139.1	111.6	80.1	89.1
Private psychiatric hospitals . . . . .	235	411	477	599	98.0	162.4	163.3	200.9
Nonfederal general hospital psychiatric services <sup>3</sup> . . . . .	849	962	1,087	1,533	354.8	379.9	372.2	514.6
Department of Veterans Affairs medical centers <sup>4</sup> . . . . .	180	203	158	---	75.1	80.3	54.1	---
Residential treatment centers for emotionally disturbed children . . . . .	25	50	63	61	10.2	19.8	21.6	20.3
All other organizations <sup>5</sup> . . . . .	198	200	139	255	82.7	79.0	47.6	85.5
Less than 24-hour care <sup>6</sup>								
All organizations . . . . .	2,955	3,377	4,099	4,667	1,233.4	1,333.3	1,403.2	1,566.6
State and county mental hospitals . . . . .	68	50	62	130	28.4	19.7	21.2	43.6
Private psychiatric hospitals . . . . .	132	163	598	447	55.2	64.5	204.7	150.1
Nonfederal general hospital psychiatric services . . . . .	533	661	681	900	222.4	260.8	233.0	302.2
Department of Veterans Affairs medical centers <sup>4</sup> . . . . .	133	235	99	---	55.3	92.8	33.9	---
Residential treatment centers for emotionally disturbed children . . . . .	67	100	222	194	28.1	39.3	75.8	65.2
All other organizations <sup>5</sup> . . . . .	2,022	2,168	2,438	2,995	844.0	856.2	834.3	1,005.4

--- Data not available.

<sup>1</sup>Admissions sometimes are referred to as additions. See [Appendix II, Admission](#).

<sup>2</sup>Civilian population estimates for 2000 and beyond are based on the 2000 census as of July 1; population estimates for 1992–1998 are 1990 postcensal estimates.

<sup>3</sup>These data exclude mental health care provided in nonpsychiatric units of hospitals such as general medical units.

<sup>4</sup>Department of Veterans Affairs Medical Centers (VA general hospital psychiatric services and VA psychiatric outpatient clinics) were dropped from the survey as of 2004.

<sup>5</sup>Includes freestanding psychiatric outpatient clinics, partial care organizations, and multiservice mental health organizations. See [Appendix I, Survey of Mental Health Organizations](#).

<sup>6</sup>Formerly reported as partial care and outpatient treatment, the survey format was changed in 1994 and the reporting of these services was combined due to similarities in the care provided. These data exclude private office-based mental health care.

NOTES: Data for 1990, 1992, 1994, 1998, 2000, and 2002 are revised final estimates and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCES: Substance Abuse and Mental Health Services Administration, Center for Mental Health Services (CMHS). Revised 1990, 1992, 1994, 1998, 2000, and 2002 Estimates from the Survey of Mental Health Organizations. 2004 Survey of Mental Health Organizations, unpublished data.



**Table 101 (page 1 of 3). Persons with hospital stays in the past year, by selected characteristics: United States, 1997, 2005, and 2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	One or more hospital stays <sup>1</sup>			Two or more hospital stays <sup>1</sup>		
	1997	2005	2006	1997	2005	2006
				Percent		
1 year and over, age-adjusted <sup>2,3</sup>	7.8	7.4	7.3	1.8	1.7	1.8
1 year and over, crude <sup>2</sup>	7.7	7.4	7.3	1.7	1.8	1.8
Age						
1–17 years	2.8	2.5	2.6	0.5	0.4	0.4
1–5 years	3.9	3.7	3.7	0.7	0.8	0.6
6–17 years	2.3	2.0	2.1	0.4	0.3	0.4
18–44 years	7.4	6.7	6.6	1.2	1.1	1.2
18–24 years	7.9	6.3	6.4	1.3	1.0	1.0
25–44 years	7.3	6.9	6.7	1.2	1.2	1.2
45–64 years	8.2	8.2	8.1	2.2	2.2	2.3
45–54 years	6.9	7.1	6.8	1.7	1.8	1.9
55–64 years	10.2	9.8	9.8	2.9	2.9	2.9
65 years and over	18.0	17.8	17.3	5.4	5.4	5.3
65–74 years	16.1	14.5	14.2	4.8	4.5	4.4
75 years and over	20.4	21.4	20.8	6.2	6.4	6.2
1–64 years						
Total, 1–64 years <sup>2,4</sup>	6.3	5.9	5.8	1.3	1.2	1.2
Sex						
Male	4.5	4.3	4.2	1.0	1.1	1.0
1–17 years	2.9	2.8	2.6	0.6	0.5	0.4
18–44 years	3.6	3.2	3.3	0.6	0.7	0.6
45–54 years	6.0	6.6	6.3	1.4	1.9	1.9
55–64 years	11.1	10.3	9.6	3.0	3.4	2.9
Female	8.0	7.4	7.4	1.6	1.3	1.5
1–17 years	2.6	2.2	2.6	0.5	0.4	0.4
18–44 years	11.2	10.2	9.8	1.8	1.6	1.7
45–54 years	7.6	7.6	7.4	2.0	1.7	1.9
55–64 years	9.4	9.3	10.0	2.9	2.4	3.0
Race <sup>4,5</sup>						
White only	6.2	5.9	5.8	1.2	1.1	1.2
Black or African American only	7.6	6.6	7.0	1.9	1.8	1.8
American Indian or Alaska Native only	7.6	6.9	7.0	*	*2.5	*
Asian only	3.9	3.9	3.5	*0.5	*0.5	*0.6
Native Hawaiian or Other Pacific Islander only	---	*	*	---	*	*
2 or more races	---	6.0	6.3	---	*1.9	*1.9
Hispanic origin and race <sup>4,5</sup>						
Hispanic or Latino	6.8	5.4	5.0	1.3	1.2	1.0
Not Hispanic or Latino	6.2	6.0	5.9	1.3	1.2	1.3
White only	6.1	6.0	5.9	1.2	1.1	1.2
Black or African American only	7.5	6.6	7.0	1.9	1.7	1.8
Percent of poverty level <sup>4,6</sup>						
Below 100%	10.3	8.8	8.8	2.8	2.5	2.6
100%–less than 200%	7.3	7.4	6.7	1.7	1.9	1.7
200% or more	5.3	5.1	5.0	0.9	0.9	0.9
Hispanic origin and race and percent of poverty level <sup>4,5,6</sup>						
Hispanic or Latino:						
Below 100%	9.1	7.6	6.4	2.0	2.0	1.4
100%–less than 200%	5.9	5.9	5.0	1.0	1.4	*0.8
200% or more	5.8	4.2	4.2	1.1	0.7	0.8
Not Hispanic or Latino:						
White only:						
Below 100%	10.7	9.3	10.2	3.2	2.5	3.0
100%–less than 200%	7.7	8.2	6.9	1.8	2.0	1.8
200% or more	5.3	5.2	5.2	0.9	0.9	0.9
Black or African American only:						
Below 100%	11.4	9.4	9.0	3.3	3.1	2.9
100%–less than 200%	8.0	7.7	9.2	2.1	2.0	*2.5
200% or more	5.5	5.1	5.2	1.2	1.2	1.2

See footnotes at end of table.

**Table 101 (page 2 of 3). Persons with hospital stays in the past year, by selected characteristics: United States, 1997, 2005, and 2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	One or more hospital stays <sup>1</sup>			Two or more hospital stays <sup>1</sup>		
	1997	2005	2006	1997	2005	2006
Health insurance status at the time of interview <sup>4,7</sup>						
	Percent					
Insured . . . . .	6.6	6.3	6.2	1.3	1.3	1.4
Private . . . . .	5.6	5.2	5.1	1.0	0.9	0.9
Medicaid . . . . .	16.1	14.6	13.3	4.9	4.1	4.7
Uninsured . . . . .	4.8	4.4	4.4	1.0	0.9	0.8
Health insurance status prior to interview <sup>4,7</sup>						
Insured continuously all 12 months . . . . .	6.5	6.1	6.0	1.3	1.2	1.3
Uninsured for any period up to 12 months . . . . .	8.5	9.0	8.3	1.8	2.4	1.9
Uninsured more than 12 months . . . . .	3.8	3.2	3.4	0.8	0.6	0.6
Percent of poverty level and health insurance status prior to interview <sup>4,6,7</sup>						
Below 100%:						
Insured continuously all 12 months . . . . .	12.4	10.8	10.3	3.7	3.1	3.2
Uninsured for any period up to 12 months . . . . .	13.7	13.6	12.8	3.4	4.1	*3.4
Uninsured more than 12 months . . . . .	4.9	3.9	4.4	1.0	*0.8	*1.2
100%–less than 200%:						
Insured continuously all 12 months . . . . .	8.5	8.4	7.9	2.0	2.2	2.1
Uninsured for any period up to 12 months . . . . .	9.3	10.7	9.8	*1.9	3.1	*2.0
Uninsured more than 12 months . . . . .	3.8	3.7	2.7	*0.7	*0.8	*0.6
200% or more:						
Insured continuously all 12 months . . . . .	5.5	5.3	5.2	0.9	0.9	0.9
Uninsured for any period up to 12 months . . . . .	5.9	6.8	5.6	*1.1	1.5	*1.3
Uninsured more than 12 months . . . . .	3.0	2.3	3.2	*0.6	*0.4	*
Geographic region <sup>4</sup>						
Northeast . . . . .	6.0	5.8	5.8	1.2	1.1	1.2
Midwest . . . . .	6.5	6.3	6.2	1.5	1.3	1.4
South . . . . .	6.8	6.3	6.5	1.4	1.4	1.4
West . . . . .	5.4	4.8	4.4	0.8	0.8	1.0
Location of residence <sup>4</sup>						
Within MSA <sup>8</sup> . . . . .	6.1	5.7	5.6	1.2	1.2	1.2
Outside MSA <sup>8</sup> . . . . .	7.0	6.8	7.0	1.6	1.4	1.4
65 years and over						
Total 65 years and over <sup>2,9</sup> . . . . .	18.1	17.8	17.3	5.4	5.4	5.3
65–74 years . . . . .	16.1	14.5	14.2	4.8	4.5	4.4
75 years and over . . . . .	20.4	21.4	20.8	6.2	6.4	6.2
Sex <sup>9</sup>						
Male . . . . .	19.0	18.6	17.6	5.8	6.0	5.3
Female . . . . .	17.5	17.3	17.1	5.1	4.9	5.2
Hispanic origin and race <sup>5,9</sup>						
Hispanic or Latino . . . . .	17.3	17.7	11.8	6.2	5.7	*3.1
Not Hispanic or Latino . . . . .	18.2	17.9	17.7	5.4	5.4	5.4
White only . . . . .	18.3	17.9	17.8	5.4	5.4	5.4
Black or African American only . . . . .	18.9	19.0	18.8	5.5	6.3	6.1
Percent of poverty level <sup>6,9</sup>						
Below 100% . . . . .	20.9	22.1	18.8	6.4	7.9	5.9
100%–less than 200% . . . . .	19.6	19.2	19.0	6.5	5.9	6.3
200% or more . . . . .	17.1	16.7	16.4	4.9	4.9	4.7
Geographic region <sup>9</sup>						
Northeast . . . . .	17.2	16.1	18.8	5.1	4.5	5.0
Midwest . . . . .	18.2	18.9	18.9	5.6	5.8	6.4
South . . . . .	19.4	19.7	16.7	6.1	6.3	5.1
West . . . . .	16.5	15.0	14.9	4.4	4.3	4.4

See footnotes at end of table.



**Table 101 (page 3 of 3). Persons with hospital stays in the past year, by selected characteristics: United States, 1997, 2005, and 2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	One or more hospital stays <sup>1</sup>			Two or more hospital stays <sup>1</sup>		
	1997	2005	2006	1997	2005	2006
Location of residence <sup>9</sup>	Percent					
Within MSA <sup>8</sup> . . . . .	17.8	17.4	17.3	5.2	5.2	5.2
Outside MSA <sup>8</sup> . . . . .	19.1	19.2	17.5	6.3	6.2	5.4

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

--- Data not available.

<sup>1</sup>These estimates exclude hospitalizations for institutionalized persons and those who died while hospitalized. See [Appendix II, Hospital utilization](#).

<sup>2</sup>Includes all other races not shown separately and unknown health insurance status.

<sup>3</sup>Estimates for persons 1 year and over are age-adjusted to the year 2000 standard population using six age groups: 1–17 years, 18–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years of age and over. See [Appendix II, Age adjustment](#).

<sup>4</sup>Estimates are for persons 1–64 years of age and are age-adjusted to the year 2000 standard population using four age groups: 1–17 years, 18–44 years, 45–54 years, and 55–64 years of age. See [Appendix II, Age adjustment](#).

<sup>5</sup>The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups, and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

<sup>6</sup>Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed for 23%–27% of persons 1–64 years of age in 1997–1998 and 29%–33% in 1999–2006; and 34%–39% of persons 65 years of age and over in 1997–1998 and 41%–45% in 1999–2006. See [Appendix II, Family income; Poverty](#).

<sup>7</sup>Health insurance categories are mutually exclusive. Persons who reported both Medicaid and private coverage are classified as having private coverage. Starting with 1997 data, state-sponsored health plan coverage is included as Medicaid coverage. Starting with 1999 data, coverage by the State Children’s Health Insurance Program (SCHIP) is included as Medicaid coverage. In addition to private and Medicaid, the insured category also includes military, other government, and Medicare coverage. Persons not covered by private insurance, Medicaid, SCHIP, state-sponsored or other government-sponsored health plans (starting in 1997), Medicare, or military plans are considered to have no health insurance coverage. Persons with only Indian Health Service coverage are considered to have no health insurance coverage. See [Appendix II, Health insurance coverage](#).

<sup>8</sup>MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

<sup>9</sup>Estimates are for persons 65 years of age and over and are age-adjusted to the year 2000 standard population using two age groups: 65–74 years and 75 years and over. See [Appendix II, Age adjustment](#).

NOTES: Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Health Interview Survey, family core questionnaire.

**Table 102 (page 1 of 3). Discharges, days of care, and average length of stay in nonfederal short-stay hospitals, by selected characteristics: United States, selected years 1980–2006**

[Data are based on a sample of hospital records]

Characteristic	1980 <sup>1</sup>	1985 <sup>1</sup>	1990	1995	2000	2004	2005	2006
Discharges per 10,000 population								
Total, age-adjusted <sup>2</sup>	1,744.5	1,522.3	1,252.4	1,180.2	1,132.8	1,184.3	1,162.4	1,153.1
Total, crude	1,676.8	1,484.1	1,222.7	1,157.4	1,128.3	1,192.3	1,174.4	1,168.7
Age								
Under 18 years	756.5	614.0	463.5	423.7	402.6	430.2	411.0	393.9
Under 1 year	2,317.6	2,137.9	1,915.3	1,977.6	2,027.6	2,065.3	1,949.3	1,818.4
1–4 years	864.6	650.2	466.9	457.1	458.0	458.9	429.7	418.8
5–17 years	609.3	477.4	334.1	290.2	268.6	296.2	286.5	276.0
18–44 years	1,578.8	1,301.2	1,026.6	914.3	849.4	910.8	898.0	906.7
18–24 years	1,570.3	1,297.8	1,065.3	928.9	854.1	863.5	862.4	870.4
25–44 years	1,582.8	1,302.5	1,013.8	909.9	847.9	927.2	910.3	919.3
25–34 years	1,682.9	1,416.9	1,140.3	1,015.0	942.5	1,021.8	1,007.8	1,011.2
35–44 years	1,438.3	1,153.1	868.8	808.0	764.8	841.8	821.5	834.6
45–64 years	1,947.6	1,707.8	1,354.5	1,185.4	1,114.2	1,177.9	1,147.0	1,161.2
45–54 years	1,750.2	1,470.7	1,123.9	984.7	920.8	997.2	964.3	970.5
55–64 years	2,153.6	1,948.0	1,632.6	1,483.4	1,415.0	1,436.3	1,402.4	1,422.1
65 years and over	3,836.9	3,698.0	3,341.2	3,477.4	3,533.6	3,628.9	3,595.6	3,507.9
65–74 years	3,158.4	2,972.6	2,616.3	2,600.0	2,546.0	2,592.3	2,628.9	2,533.6
75 years and over	4,893.0	4,756.1	4,340.3	4,590.7	4,619.6	4,702.2	4,588.4	4,512.6
75–84 years	4,638.6	4,464.2	3,957.0	4,155.7	4,124.4	4,269.7	4,131.7	4,025.9
85 years and over	5,764.6	5,728.9	5,606.3	5,925.1	6,050.9	5,856.7	5,758.1	5,711.4
Sex <sup>2</sup>								
Male	1,543.9	1,382.5	1,130.0	1,048.5	990.8	1,025.7	1,013.0	1,000.5
Female	1,951.9	1,675.6	1,389.5	1,317.3	1,277.3	1,349.0	1,319.6	1,312.3
Sex and age								
Male, all ages	1,390.4	1,240.2	1,002.2	941.7	910.6	964.9	959.0	954.9
Under 18 years	762.6	626.4	463.1	431.3	408.6	436.4	412.2	401.5
18–44 years	950.9	776.9	579.2	507.2	450.0	464.8	471.1	476.8
45–64 years	1,953.1	1,775.6	1,402.7	1,212.0	1,127.4	1,183.6	1,148.8	1,175.7
65–74 years	3,474.1	3,255.2	2,877.6	2,762.2	2,649.1	2,685.0	2,742.6	2,584.3
75–84 years	5,093.5	5,031.8	4,417.3	4,361.1	4,294.1	4,540.5	4,388.1	4,220.3
85 years and over	6,372.3	6,406.9	6,420.9	6,387.9	6,166.6	5,838.3	5,984.1	5,983.5
Female, all ages	1,944.0	1,712.2	1,431.7	1,362.9	1,336.6	1,411.3	1,382.2	1,375.3
Under 18 years	750.2	601.0	464.1	415.7	396.2	423.7	409.8	385.9
18–44 years	2,180.2	1,808.3	1,468.0	1,318.0	1,248.1	1,361.9	1,330.9	1,343.5
45–64 years	1,942.5	1,645.9	1,309.7	1,160.5	1,101.7	1,172.5	1,145.3	1,147.3
65–74 years	2,916.6	2,754.8	2,411.2	2,469.4	2,461.0	2,514.4	2,533.1	2,490.7
75–84 years	4,370.4	4,130.4	3,678.9	4,024.1	4,013.5	4,087.4	3,957.7	3,893.0
85 years and over	5,500.3	5,458.0	5,289.6	5,743.7	6,003.3	5,865.0	5,654.4	5,584.1
Geographic region <sup>2</sup>								
Northeast	1,622.9	1,428.7	1,332.2	1,335.3	1,274.8	1,287.9	1,245.9	1,261.4
Midwest	1,925.2	1,584.7	1,287.5	1,132.8	1,109.2	1,143.9	1,174.9	1,168.0
South	1,814.1	1,569.4	1,325.0	1,252.4	1,209.2	1,255.5	1,202.5	1,198.8
West	1,519.7	1,469.6	1,006.6	967.4	894.0	1,011.5	1,005.9	964.1

See footnotes at end of table.

**Table 102 (page 2 of 3). Discharges, days of care, and average length of stay in nonfederal short-stay hospitals, by selected characteristics: United States, selected years 1980–2006**

[Data are based on a sample of hospital records]

Characteristic	1980 <sup>1</sup>	1985 <sup>1</sup>	1990	1995	2000	2004	2005	2006
Days of care per 10,000 population								
Total, age-adjusted <sup>2</sup>	13,027.0	10,017.9	8,189.3	6,386.2	5,576.8	5,686.8	5,541.7	5,474.7
Total, crude	12,166.8	9,576.6	7,840.5	6,201.7	5,546.5	5,741.2	5,620.9	5,577.8
Age								
Under 18 years	3,415.1	2,812.3	2,263.1	1,846.7	1,789.7	1,931.8	1,918.3	1,857.6
Under 1 year	13,213.9	14,141.2	11,484.7	10,834.5	11,524.0	12,434.5	12,131.6	11,624.2
1–4 years	3,333.5	2,280.4	1,700.1	1,525.6	1,482.2	1,416.8	1,355.3	1,405.4
5–17 years	2,698.5	2,049.8	1,633.2	1,240.3	1,172.1	1,281.8	1,300.9	1,239.1
18–44 years	8,323.6	6,294.7	4,676.7	3,517.2	3,093.8	3,349.3	3,305.0	3,360.6
18–24 years	7,174.6	5,287.2	4,015.9	2,987.4	2,679.5	2,817.3	2,819.9	2,889.4
25–44 years	8,861.4	6,685.2	4,895.5	3,676.4	3,225.5	3,532.5	3,472.8	3,524.5
25–34 years	8,497.5	6,688.9	4,939.7	3,536.1	3,161.7	3,427.4	3,434.3	3,462.2
35–44 years	9,386.6	6,680.4	4,844.8	3,812.3	3,281.5	3,627.4	3,507.9	3,581.9
45–64 years	15,969.5	12,015.9	9,139.3	6,574.5	5,515.4	5,915.8	5,717.3	5,793.0
45–54 years	13,167.2	9,692.8	6,996.6	5,162.0	4,374.2	4,911.4	4,711.2	4,667.4
55–64 years	18,895.4	14,369.5	11,722.6	8,671.6	7,290.8	7,352.0	7,124.0	7,333.6
65 years and over	40,983.5	32,279.7	28,956.1	23,736.5	21,118.9	20,486.0	19,882.8	19,197.5
65–74 years	31,470.3	24,373.3	20,878.2	16,847.0	14,389.7	14,051.7	13,985.3	13,170.2
75 years and over	55,788.2	43,812.7	40,090.8	32,478.1	28,518.6	27,148.7	25,939.4	25,413.1
75–84 years	51,836.2	40,521.6	35,995.1	28,947.5	25,397.8	24,540.6	23,155.3	22,671.7
85 years and over	69,332.0	54,782.4	53,616.9	43,305.9	37,537.8	34,110.0	33,071.5	32,165.5
Sex <sup>2</sup>								
Male	12,475.8	9,792.1	8,057.8	6,239.0	5,358.8	5,411.5	5,301.3	5,208.8
Female	13,662.9	10,340.4	8,404.5	6,548.8	5,809.7	5,996.5	5,828.7	5,764.2
Sex and age								
Male, all ages	10,674.1	8,518.8	6,943.0	5,507.5	4,860.8	5,049.4	4,979.7	4,947.3
Under 18 years	3,473.1	2,942.7	2,335.7	1,998.0	1,955.7	2,015.2	2,006.2	1,968.0
18–44 years	6,102.4	4,746.6	3,517.4	2,729.7	2,175.0	2,255.6	2,282.7	2,375.6
45–64 years	15,894.9	12,290.1	9,434.2	6,822.7	5,704.4	6,123.8	5,773.5	6,004.3
65–74 years	33,697.6	26,220.5	22,515.5	17,697.4	14,897.4	14,423.4	14,502.6	13,262.1
75–84 years	54,723.3	44,087.4	38,257.8	29,642.6	26,616.7	26,458.3	25,106.9	23,972.7
85 years and over	77,013.1	58,609.5	60,347.3	45,263.6	37,765.3	34,025.9	35,179.0	32,604.0
Female, all ages	13,560.1	10,566.3	8,691.1	6,863.4	6,202.7	6,407.7	6,239.5	6,186.8
Under 18 years	3,354.5	2,675.5	2,186.8	1,687.9	1,615.1	1,844.4	1,826.1	1,741.8
18–44 years	10,450.7	7,792.0	5,820.3	4,297.9	4,010.8	4,455.4	4,341.8	4,361.5
45–64 years	16,037.1	11,765.5	8,865.1	6,341.7	5,336.4	5,718.2	5,663.9	5,592.2
65–74 years	29,764.7	22,949.2	19,592.7	16,162.0	13,971.3	13,739.5	13,549.0	13,092.4
75–84 years	50,133.3	38,424.7	34,628.3	28,502.5	24,601.0	23,249.9	21,830.1	21,782.1
85 years and over	65,990.5	53,253.6	51,000.5	42,538.6	37,444.4	34,147.9	32,103.5	31,960.3
Geographic region <sup>2</sup>								
Northeast	14,024.4	11,143.1	10,266.8	8,389.7	7,185.9	6,875.9	6,636.5	6,608.5
Midwest	14,871.9	10,803.6	8,306.5	5,908.8	5,005.3	4,987.1	4,954.3	4,893.5
South	12,713.5	9,642.6	8,204.1	6,659.9	5,925.1	6,141.7	5,830.4	5,844.8
West	9,635.2	8,300.7	5,755.1	4,510.6	4,082.0	4,575.1	4,690.3	4,451.6

See footnotes at end of table.

**Table 102 (page 3 of 3). Discharges, days of care, and average length of stay in nonfederal short-stay hospitals, by selected characteristics: United States, selected years 1980–2006**

[Data are based on a sample of hospital records]

Characteristic	1980 <sup>1</sup>	1985 <sup>1</sup>	1990	1995	2000	2004	2005	2006
Average length of stay in days								
Total, age-adjusted <sup>2</sup>	7.5	6.6	6.5	5.4	4.9	4.8	4.8	4.7
Total, crude	7.3	6.5	6.4	5.4	4.9	4.8	4.8	4.8
Age								
Under 18 years	4.5	4.6	4.9	4.4	4.4	4.5	4.7	4.7
Under 1 year	5.7	6.6	6.0	5.5	5.7	6.0	6.2	6.4
1–4 years	3.9	3.5	3.6	3.3	3.2	3.1	3.2	3.4
5–17 years	4.4	4.3	4.9	4.3	4.4	4.3	4.5	4.5
18–44 years	5.3	4.8	4.6	3.8	3.6	3.7	3.7	3.7
18–24 years	4.6	4.1	3.8	3.2	3.1	3.3	3.3	3.3
25–44 years	5.6	5.1	4.8	4.0	3.8	3.8	3.8	3.8
25–34 years	5.0	4.7	4.3	3.5	3.4	3.4	3.4	3.4
35–44 years	6.5	5.8	5.6	4.7	4.3	4.3	4.3	4.3
45–64 years	8.2	7.0	6.7	5.5	5.0	5.0	5.0	5.0
45–54 years	7.5	6.6	6.2	5.2	4.8	4.9	4.9	4.8
55–64 years	8.8	7.4	7.2	5.8	5.2	5.1	5.1	5.2
65 years and over	10.7	8.7	8.7	6.8	6.0	5.6	5.5	5.5
65–74 years	10.0	8.2	8.0	6.5	5.7	5.4	5.3	5.2
75 years and over	11.4	9.2	9.2	7.1	6.2	5.8	5.7	5.6
75–84 years	11.2	9.1	9.1	7.0	6.2	5.7	5.6	5.6
85 years and over	12.0	9.6	9.6	7.3	6.2	5.8	5.7	5.6
Sex <sup>2</sup>								
Male	8.1	7.1	7.1	6.0	5.4	5.3	5.2	5.2
Female	7.0	6.2	6.0	5.0	4.5	4.4	4.4	4.4
Sex and age								
Male, all ages	7.7	6.9	6.9	5.8	5.3	5.2	5.2	5.2
Under 18 years	4.6	4.7	5.0	4.6	4.8	4.6	4.9	4.9
18–44 years	6.4	6.1	6.1	5.4	4.8	4.9	4.8	5.0
45–64 years	8.1	6.9	6.7	5.6	5.1	5.2	5.0	5.1
65–74 years	9.7	8.1	7.8	6.4	5.6	5.4	5.3	5.1
75–84 years	10.7	8.8	8.7	6.8	6.2	5.8	5.7	5.7
85 years and over	12.1	9.1	9.4	7.1	6.1	5.8	5.9	5.4
Female, all ages	7.0	6.2	6.1	5.0	4.6	4.5	4.5	4.5
Under 18 years	4.5	4.5	4.7	4.1	4.1	4.4	4.5	4.5
18–44 years	4.8	4.3	4.0	3.3	3.2	3.3	3.3	3.2
45–64 years	8.3	7.1	6.8	5.5	4.8	4.9	4.9	4.9
65–74 years	10.2	8.3	8.1	6.5	5.7	5.5	5.3	5.3
75–84 years	11.5	9.3	9.4	7.1	6.1	5.7	5.5	5.6
85 years and over	12.0	9.8	9.6	7.4	6.2	5.8	5.7	5.7
Geographic region <sup>2</sup>								
Northeast	8.6	7.8	7.7	6.3	5.6	5.3	5.3	5.2
Midwest	7.7	6.8	6.5	5.2	4.5	4.4	4.2	4.2
South	7.0	6.1	6.2	5.3	4.9	4.9	4.8	4.9
West	6.3	5.6	5.7	4.7	4.6	4.5	4.7	4.6

<sup>1</sup>Comparisons of data from 1980–1985 with data from subsequent years should be made with caution as estimates of change may reflect improvements in the survey design rather than true changes in hospital use. See [Appendix I, National Hospital Discharge Survey](#).

<sup>2</sup>Estimates are age-adjusted to the year 2000 standard population using six age groups: under 18 years, 18–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

NOTES: Excludes newborn infants. Rates are based on the civilian population as of July 1. Starting with *Health, United States, 2003*, rates for 2000 and beyond are based on the 2000 census. Rates for 1990–1999 use population estimates based on the 1990 census adjusted for net underenumeration using the 1990 National Population Adjustment Matrix from the U.S. Census Bureau. Rates for 1990–1999 are not strictly comparable with rates for 2000 and beyond because population estimates for 1990–1999 have not been revised to reflect the 2000 census. See [Appendix I, National Hospital Discharge Survey; Population Census and Population Estimates](#). Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Hospital Discharge Survey.

**Table 103 (page 1 of 3). Discharges in nonfederal short-stay hospitals, by sex, age, and selected first-listed diagnosis: United States, 1990, 2000, and 2006**

[Data are based on a sample of hospital records]

Age and first-listed diagnosis	Discharges								
	Both sexes			Male			Female		
	1990	2000	2006	1990	2000	2006	1990	2000	2006
	Number in thousands								
All ages <sup>1</sup> . . . . .	30,788	31,706	34,854	12,280	12,514	13,990	18,508	19,192	20,864
Under 18 years <sup>1</sup> . . . . .	3,072	2,912	2,905	1,572	1,515	1,515	1,500	1,397	1,389
Dehydration . . . . .	63	114	116	32	64	*59	31	50	57
Acute bronchitis and bronchiolitis . . . . .	114	201	152	67	116	84	47	85	*69
Pneumonia . . . . .	221	182	180	126	95	101	95	87	79
Asthma . . . . .	182	214	155	111	129	*99	71	85	56
Appendicitis . . . . .	83	86	99	50	48	64	34	38	35
Injury . . . . .	329	243	249	210	156	167	119	87	82
Fracture . . . . .	117	100	90	76	68	64	42	32	26
Complications of care and adverse effects . . . . .	41	*52	45	22	*29	27	19	*23	18
18–44 years <sup>1</sup> . . . . .	11,138	9,439	10,193	3,120	2,498	2,701	8,018	6,941	7,492
HIV/AIDS . . . . .	*20	47	48	*15	32	30	*	15	17
Cancer, all . . . . .	181	117	107	64	41	39	116	76	68
Childbirth . . . . .	...	...	...	...	...	...	3,815	3,588	3,980
Uterine fibroids . . . . .	...	...	...	...	...	...	110	121	103
Diabetes . . . . .	105	127	160	61	72	86	44	55	74
Alcohol and drug <sup>2</sup> . . . . .	284	330	286	199	217	186	84	*112	101
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses <sup>3</sup> . . . . .	384	*596	707	184	*296	336	200	*300	370
Schizophrenia . . . . .	145	*160	176	88	*104	110	57	*56	65
Mood disorders . . . . .	211	*399	478	83	*172	193	128	*227	286
Heart disease . . . . .	236	242	273	163	148	173	73	95	100
Ischemic heart disease . . . . .	129	109	93	95	79	62	34	31	30
Pneumonia . . . . .	136	121	102	69	55	47	67	66	55
Asthma . . . . .	106	100	79	27	30	21	79	70	58
Intervertebral disc disorders . . . . .	222	138	101	138	81	50	84	58	51
Injury . . . . .	935	509	574	641	346	398	294	164	176
Fracture . . . . .	302	198	216	217	141	161	85	57	55
Poisoning and toxic effects . . . . .	124	95	141	54	37	68	70	57	73
Complications of care and adverse effects . . . . .	135	135	187	63	62	88	72	73	99
45–64 years <sup>1</sup> . . . . .	6,244	6,958	8,686	3,115	3,424	4,287	3,129	3,534	4,399
HIV/AIDS . . . . .	*3	*20	26	*3	*15	18	*	*	*8
Cancer, all . . . . .	545	393	438	236	189	222	309	204	217
Colorectal cancer . . . . .	59	49	46	33	27	24	26	22	23
Lung/bronchus/tracheal cancer . . . . .	101	43	51	60	26	25	41	17	26
Breast cancer <sup>4</sup> . . . . .	...	...	...	...	...	...	69	45	30
Prostate cancer . . . . .	...	...	...	19	29	51	...	...	...
Uterine fibroids . . . . .	...	...	...	...	...	...	70	114	106
Diabetes . . . . .	134	207	205	65	114	105	70	93	100
Alcohol and drug <sup>2</sup> . . . . .	100	146	199	77	102	148	23	44	51
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses <sup>3</sup> . . . . .	152	267	422	56	*120	179	95	146	243
Schizophrenia . . . . .	47	80	134	19	*44	66	28	36	69
Mood disorders . . . . .	91	*168	256	32	*66	97	58	*103	158
Heart disease . . . . .	1,100	1,271	1,285	704	802	803	397	470	481
Ischemic heart disease . . . . .	739	789	701	502	539	475	237	251	226
Heart attack . . . . .	233	242	218	165	178	151	68	64	68
Arrhythmias . . . . .	131	157	193	79	97	112	53	60	82
Heart failure . . . . .	122	196	246	68	102	142	54	94	105
Hypertension . . . . .	75	119	122	38	53	46	37	65	76
Stroke . . . . .	162	229	236	91	116	117	72	113	119
Pneumonia . . . . .	154	220	251	76	104	122	79	117	129
Chronic obstructive pulmonary disease . . . . .	26	156	175	15	75	77	11	81	98
Asthma . . . . .	86	84	121	26	19	34	59	65	87
Osteoarthritis . . . . .	87	150	327	36	63	136	51	87	191
Intervertebral disc disorders . . . . .	145	132	148	82	68	72	63	64	76
Injury . . . . .	334	299	432	178	155	252	157	144	180
Fracture . . . . .	149	164	202	74	77	108	75	87	94
Poisoning and toxic effects . . . . .	29	39	73	10	17	37	19	23	36
Internal organ injury . . . . .	36	28	60	23	18	43	14	10	17
Complications of care and adverse effects . . . . .	148	215	330	79	110	167	69	105	163

See footnotes at end of table.

**Table 103 (page 2 of 3). Discharges in nonfederal short-stay hospitals, by sex, age, and selected first-listed diagnosis: United States, 1990, 2000, and 2006**

[Data are based on a sample of hospital records]

Age and first-listed diagnosis	Discharges								
	Both sexes			Male			Female		
	1990	2000	2006	1990	2000	2006	1990	2000	2006
	Number in thousands								
65–74 years <sup>1</sup> . . . . .	4,689	4,678	4,793	2,268	2,199	2,241	2,421	2,479	2,552
Septicemia . . . . .	49	65	96	27	33	51	21	32	45
Cancer, all . . . . .	436	292	311	222	146	151	214	146	160
Colorectal cancer . . . . .	48	42	43	24	25	17	24	17	27
Lung/bronchus/tracheal cancer . . . . .	77	48	59	50	23	31	26	25	27
Breast cancer <sup>4</sup> . . . . .	...	...	...	...	...	...	42	31	12
Prostate cancer . . . . .	...	...	...	40	31	27	...	...	...
Diabetes . . . . .	93	85	88	34	39	40	59	47	48
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses <sup>3</sup> . . . . .	59	68	59	20	*28	20	39	40	39
Dementia and Alzheimer's disease . . . . .	10	*21	16	4	*13	*5	*6	*7	*11
Heart disease . . . . .	1,000	1,111	925	547	586	519	453	525	406
Ischemic heart disease . . . . .	576	564	423	331	329	259	245	235	164
Heart attack . . . . .	185	184	137	110	104	78	75	81	59
Arrhythmias . . . . .	124	188	169	67	90	90	57	99	79
Heart failure . . . . .	188	242	219	93	113	114	95	128	105
Hypertension . . . . .	39	39	57	13	14	16	26	26	41
Stroke . . . . .	222	233	210	108	109	105	114	124	105
Pneumonia . . . . .	176	223	212	90	106	101	86	117	112
Chronic obstructive pulmonary disease . . . . .	27	159	155	14	68	72	12	91	84
Gallstones . . . . .	79	61	50	30	25	17	49	36	33
Kidney disease . . . . .	18	35	66	9	17	35	9	18	31
Urinary tract infection . . . . .	54	47	76	17	16	22	37	31	54
Hyperplasia of the prostate . . . . .	...	...	...	113	45	29	...	...	...
Osteoarthritis . . . . .	122	186	269	44	86	100	78	101	169
Injury . . . . .	193	187	179	71	70	70	122	117	109
Fracture . . . . .	120	116	114	36	39	36	85	77	78
Hip fracture . . . . .	48	49	41	12	*17	12	36	32	29
Complications of care and adverse effects . . . . .	125	147	176	68	79	88	57	68	88
75–84 years <sup>1</sup> . . . . .	3,949	5,119	5,252	1,660	2,107	2,236	2,289	3,013	3,016
Septicemia . . . . .	54	85	140	24	38	65	30	46	75
Cancer, all . . . . .	300	241	240	158	104	114	142	137	126
Colorectal cancer . . . . .	50	41	39	20	18	16	29	23	22
Lung/bronchus/tracheal cancer . . . . .	36	33	41	22	16	20	*15	18	21
Breast cancer <sup>4</sup> . . . . .	...	...	...	...	...	...	24	23	13
Prostate cancer . . . . .	...	...	...	37	13	7	...	...	...
Diabetes . . . . .	44	79	73	17	33	29	27	45	44
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses <sup>3</sup> . . . . .	39	51	38	*10	*15	12	28	36	26
Dementia and Alzheimer's disease . . . . .	20	45	59	9	18	23	11	27	37
Heart disease . . . . .	865	1,185	1,066	377	521	496	488	664	570
Ischemic heart disease . . . . .	382	517	379	177	259	199	205	258	180
Heart attack . . . . .	156	207	155	83	104	70	73	103	85
Arrhythmias . . . . .	133	219	232	58	86	98	76	134	134
Heart failure . . . . .	261	327	319	108	133	142	153	194	177
Hypertension . . . . .	23	49	41	*	*14	11	19	35	30
Stroke . . . . .	258	317	247	104	137	113	154	181	134
Pneumonia . . . . .	224	327	281	112	153	141	112	175	140
Chronic obstructive pulmonary disease . . . . .	20	145	154	*13	68	83	7	77	71
Gallstones . . . . .	48	49	50	20	20	17	28	29	33
Kidney disease . . . . .	24	47	103	10	24	49	*14	23	53
Urinary tract infection . . . . .	86	106	134	25	36	39	61	71	95
Hyperplasia of the prostate . . . . .	...	...	...	69	33	22	...	...	...
Osteoarthritis . . . . .	69	125	189	25	38	69	44	87	119
Injury . . . . .	259	284	316	58	84	94	201	200	222
Fracture . . . . .	195	211	238	35	57	61	161	154	177
Hip fracture . . . . .	115	123	128	20	34	31	95	89	97
Complications of care and adverse effects . . . . .	81	126	152	38	67	77	43	59	75

See footnotes at end of table.

**Table 103 (page 3 of 3). Discharges in nonfederal short-stay hospitals, by sex, age, and selected first-listed diagnosis: United States, 1990, 2000, and 2006**

[Data are based on a sample of hospital records]

Age and first-listed diagnosis	Discharges								
	Both sexes			Male			Female		
	1990	2000	2006	1990	2000	2006	1990	2000	2006
	Number in thousands								
85 years and over <sup>1</sup>	1,694	2,599	3,025	543	771	1,010	1,151	1,828	2,015
Septicemia	41	66	109	12	26	37	29	40	72
Cancer, all	77	84	86	31	31	38	45	52	47
Colorectal cancer	14	21	20	*5	*7	*8	9	14	*12
Lung/bronchus/tracheal cancer	*6	5	*10	*	*3	*3	*	*3	*6
Breast cancer <sup>4</sup>	...	...	...	...	...	...	*9	*6	*2
Prostate cancer	...	...	...	*7	*6	*	...	...	...
Diabetes	16	28	27	*5	*7	10	11	21	18
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses <sup>3</sup>	*8	*16	13	*	*	*	*7	*13	*9
Dementia and Alzheimer's disease	15	46	46	*2	12	13	13	34	33
Heart disease	335	558	633	112	176	209	223	382	424
Ischemic heart disease	128	183	164	49	67	60	79	117	104
Heart attack	60	108	101	23	37	35	37	71	66
Arrhythmias	51	100	121	16	31	37	35	69	84
Heart failure	126	206	270	39	57	89	87	149	180
Hypertension	*5	18	27	*	*2	*8	*4	15	19
Stroke	129	161	148	35	50	44	95	111	105
Pneumonia	151	221	217	64	76	82	88	145	134
Chronic obstructive pulmonary disease	*4	48	47	*	15	20	*	33	27
Gallstones	18	17	16	*6	*4	*5	13	*13	10
Kidney disease	14	21	69	8	*9	28	*6	*13	41
Urinary tract infection	65	82	132	20	19	41	45	63	92
Hyperplasia of the prostate	...	...	...	13	*9	*11	...	...	...
Osteoarthritis	13	24	41	*	*	14	8	17	27
Injury	164	234	274	37	44	71	127	190	203
Fracture	133	194	214	28	32	49	104	162	165
Hip fracture	82	118	125	19	18	29	63	100	96
Complications of care and adverse effects	29	34	45	11	11	20	18	23	25

... Category not applicable.

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

<sup>1</sup>Includes discharges with first-listed diagnoses not shown in table.

<sup>2</sup>Includes abuse, dependence, and withdrawal. These estimates are for nonfederal short-stay hospitals only and do not include alcohol and drug discharges from other types of facilities or programs such as the Department of Veterans Affairs or day treatment programs.

<sup>3</sup>These estimates are for nonfederal short-stay hospitals only and do not include discharges from other types of facilities or programs such as the Department of Veterans Affairs or long-term hospitals.

<sup>4</sup>Shown for women only.

NOTES: Excludes newborn infants. Diagnostic categories are based on the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD–9–CM). See [Appendix II, Diagnosis; Human immunodeficiency virus \(HIV\) disease](#); *International Classification of Diseases, Ninth Revision, Clinical Modification*; [Table X](#) for ICD–9–CM codes. Additional data and diagnosis categories available from [http://www.cdc.gov/nchs/health\\_data\\_for\\_all\\_ages.htm](http://www.cdc.gov/nchs/health_data_for_all_ages.htm). Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Hospital Discharge Survey.



**Table 104 (page 1 of 6). Discharge rate and average length of stay in nonfederal short-stay hospitals, by sex, age, and selected first-listed diagnosis: United States, 1990, 2000, and 2006**

[Data are based on a sample of hospital records]

Age and first-listed diagnosis	Discharges								
	Both sexes			Male			Female		
	1990	2000	2006	1990	2000	2006	1990	2000	2006
	Number per 10,000 population								
All ages, age-adjusted <sup>1,2</sup>	1,252.4	1,132.8	1,153.1	1,130.0	990.8	1,000.5	1,389.5	1,277.3	1,312.3
All ages, crude <sup>2</sup>	1,222.7	1,128.3	1,168.7	1,002.2	910.6	954.9	1,431.7	1,336.6	1,375.3
Under 18 years <sup>2</sup>	463.5	402.6	393.9	463.1	408.6	401.5	464.1	396.2	385.9
Dehydration	9.5	15.7	15.7	9.4	17.2	*15.6	9.7	14.2	15.8
Acute bronchitis and bronchiolitis	17.2	27.8	20.7	19.6	31.4	22.2	14.6	24.1	*19.1
Pneumonia	33.3	25.2	24.5	37.0	25.7	26.8	29.5	24.6	22.0
Asthma	27.5	29.6	21.0	32.7	34.8	*26.2	22.0	24.0	15.5
Appendicitis	12.6	11.9	13.4	14.6	13.0	17.0	10.5	10.8	9.7
Injury	49.7	33.6	33.8	62.0	42.0	44.2	36.8	24.8	22.9
Fracture	17.7	13.8	12.3	22.3	18.3	17.0	12.9	9.0	7.3
Complications of care and adverse effects	6.2	*7.3	6.1	6.5	*7.9	7.1	5.9	*6.6	5.1
18–44 years <sup>2</sup>	1,026.6	849.4	906.7	579.2	450.0	476.8	1,468.0	1,248.1	1,343.5
HIV/AIDS	*1.8	4.3	4.2	*2.8	5.8	5.4	*	2.8	3.1
Cancer, all	16.6	10.5	9.5	11.9	7.3	6.8	21.3	13.7	12.2
Childbirth	...	...	...	...	...	...	698.6	645.2	713.8
Uterine fibroids	...	...	...	...	...	...	20.2	21.7	18.4
Diabetes	9.7	11.5	14.2	11.3	13.0	15.2	8.1	9.9	13.2
Alcohol and drug <sup>3</sup>	26.2	29.7	25.5	37.0	39.1	32.8	15.5	*20.2	18.0
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses <sup>4</sup>	35.4	*53.6	62.9	34.1	*53.2	59.4	36.7	*53.9	66.4
Schizophrenia	13.4	*14.4	15.6	16.4	*18.6	19.4	10.5	*10.1	11.7
Mood disorders	19.4	*35.9	42.5	15.4	*31.0	34.0	23.4	*40.9	51.2
Heart disease	21.7	21.8	24.3	30.2	26.6	30.5	13.4	17.0	18.0
Ischemic heart disease	11.9	9.9	8.3	17.7	14.2	11.0	6.3	5.6	5.4
Pneumonia	12.5	10.9	9.1	12.8	10.0	8.2	12.2	11.9	9.9
Asthma	9.8	9.0	7.1	5.1	5.4	3.8	14.4	12.6	10.4
Intervertebral disc disorders	20.5	12.5	9.0	25.6	14.5	8.9	15.4	10.4	9.1
Injury	86.2	45.8	51.0	119.0	62.3	70.3	53.8	29.4	31.5
Fracture	27.8	17.8	19.2	40.2	25.4	28.4	15.5	10.2	9.8
Poisoning and toxic effects	11.4	8.5	12.5	10.0	6.7	11.9	12.7	10.3	13.2
Complications of care and adverse effects	12.5	12.2	16.6	11.7	11.2	15.5	13.3	13.1	17.7
45–64 years <sup>2</sup>	1,354.5	1,114.2	1,161.2	1,402.7	1,127.4	1,175.7	1,309.7	1,101.7	1,147.3
HIV/AIDS	*0.6	*3.2	3.4	*1.2	*4.9	4.9	*	*	*2.1
Cancer, all	118.3	62.9	58.6	106.3	62.1	60.8	129.5	63.6	56.5
Colorectal cancer	12.7	7.9	6.2	14.8	8.9	6.5	10.8	6.9	5.9
Lung/bronchus/tracheal cancer	21.8	6.9	6.8	26.8	8.6	6.8	17.2	5.2	6.9
Breast cancer <sup>5</sup>	...	...	...	...	...	...	29.0	14.2	7.8
Prostate cancer	...	...	...	8.5	9.6	14.1	...	...	...
Uterine fibroids	...	...	...	...	...	...	29.3	35.6	27.5
Diabetes	29.1	33.1	27.4	29.1	37.4	28.8	29.2	29.0	26.1
Alcohol and drug <sup>3</sup>	21.7	23.3	26.5	34.6	33.5	40.5	9.6	13.7	13.3
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses <sup>4</sup>	32.9	42.7	56.5	25.4	*39.6	49.2	39.8	45.6	63.4
Schizophrenia	10.1	12.8	18.0	8.4	*14.4	18.0	11.7	11.3	18.0
Mood disorders	19.6	*26.9	34.2	14.5	*21.6	26.7	24.4	*32.0	41.3
Heart disease	238.7	203.6	171.7	316.8	264.0	220.3	166.1	146.4	125.5
Ischemic heart disease	160.3	126.4	93.7	226.1	177.3	130.3	99.2	78.2	58.9
Heart attack	50.6	38.8	29.2	74.4	58.7	41.3	28.4	19.9	17.7
Arrhythmias	28.5	25.1	25.9	35.5	31.8	30.7	22.1	18.7	21.3
Heart failure	26.4	31.4	32.9	30.7	33.5	38.8	22.4	29.3	27.3
Hypertension	16.3	19.0	16.4	16.9	17.6	12.7	15.6	20.3	19.9
Stroke	35.2	36.7	31.5	40.8	38.3	32.1	30.1	35.2	30.9
Pneumonia	33.5	35.3	33.6	34.0	34.2	33.5	33.0	36.4	33.7
Chronic obstructive pulmonary disease	5.7	25.0	23.3	6.8	24.6	21.0	4.6	25.3	25.6
Asthma	18.6	13.4	16.2	11.8	6.2	9.3	24.9	20.2	22.8
Osteoarthritis	18.9	24.0	43.7	16.3	20.8	37.4	21.2	27.0	49.7
Intervertebral disc disorders	31.5	21.2	19.7	36.8	22.5	19.8	26.5	20.0	19.7
Injury	72.5	47.9	57.7	79.9	51.2	69.1	65.6	44.7	46.8
Fracture	32.4	26.2	27.0	33.4	25.3	29.5	31.5	27.0	24.6
Poisoning and toxic effects	6.3	6.3	9.8	4.5	5.5	10.2	8.0	7.1	9.4
Internal organ injury	7.9	4.5	8.0	10.2	5.9	11.9	5.7	3.2	4.4
Complications of care and adverse effects	32.0	34.5	44.1	35.6	36.3	45.9	28.7	32.7	42.5

See footnotes at end of table.



**Table 104 (page 2 of 6). Discharge rate and average length of stay in nonfederal short-stay hospitals, by sex, age, and selected first-listed diagnosis: United States, 1990, 2000, and 2006**

[Data are based on a sample of hospital records]

Age and first-listed diagnosis	Discharges								
	Both sexes			Male			Female		
	1990	2000	2006	1990	2000	2006	1990	2000	2006
	Number per 10,000 population								
65–74 years <sup>2</sup>	2,616.3	2,546.0	2,533.6	2,877.6	2,649.1	2,584.3	2,411.2	2,461.0	2,490.7
Septicemia	27.2	35.6	50.8	34.9	40.1	58.3	21.2	32.0	44.3
Cancer, all	243.1	159.0	164.1	281.4	176.4	173.8	213.0	144.7	156.0
Colorectal cancer	27.0	22.8	22.7	30.6	29.9	19.0	24.1	16.9	25.9
Lung/bronchus/tracheal cancer	42.9	26.1	31.1	63.9	28.2	36.3	26.4	24.5	26.8
Breast cancer <sup>5</sup>	...	...	...	...	...	...	42.3	31.2	11.6
Prostate cancer	...	...	...	50.6	37.1	31.1	...	...	...
Diabetes	51.8	46.4	46.5	43.6	46.8	46.3	58.3	46.2	46.7
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses <sup>4</sup>	32.7	37.1	31.1	25.3	*34.2	23.0	38.6	39.6	38.0
Dementia and Alzheimer's disease	5.6	*11.2	8.3	4.9	*16.2	*5.8	*6.1	*7.0	*10.4
Heart disease	558.1	604.8	489.0	694.2	706.4	598.4	451.3	521.0	396.5
Ischemic heart disease	321.3	307.0	223.5	419.9	396.5	298.2	243.9	233.2	160.4
Heart attack	103.3	100.3	72.6	139.8	124.7	90.3	74.6	80.2	57.7
Arrhythmias	69.1	102.6	89.4	84.7	108.3	103.8	56.9	97.9	77.3
Heart failure	105.2	131.6	115.6	118.0	136.4	131.0	95.1	127.6	102.6
Hypertension	21.8	21.5	30.2	16.2	16.5	18.6	26.2	25.5	39.9
Stroke	123.9	127.1	111.2	137.5	131.8	121.4	113.1	123.2	102.6
Pneumonia	98.1	121.3	112.3	113.6	127.7	116.4	85.9	116.1	108.8
Chronic obstructive pulmonary disease	14.8	86.4	82.0	18.1	81.8	82.5	12.3	90.2	81.6
Gallstones	44.2	33.4	26.6	38.2	30.2	19.9	48.9	36.0	32.2
Kidney disease	9.9	19.1	34.7	11.0	21.0	39.9	9.0	17.5	30.2
Urinary tract infection	30.2	25.5	40.4	21.7	19.7	25.7	36.9	30.3	52.8
Hyperplasia of the prostate	...	...	...	143.5	53.6	33.9	...	...	...
Osteoarthritis	68.0	101.4	142.2	55.2	103.1	115.2	78.0	100.1	165.1
Injury	107.7	101.5	94.5	90.7	83.8	80.4	121.1	116.2	106.4
Fracture	67.2	63.3	60.1	45.2	46.8	41.3	84.4	76.9	76.0
Hip fracture	26.7	26.4	21.5	15.3	*20.0	13.6	35.7	31.7	28.2
Complications of care and adverse effects	69.7	80.0	93.1	85.7	95.7	101.4	57.2	67.1	86.0
75–84 years <sup>2</sup>	3,957.0	4,124.4	4,025.9	4,417.3	4,294.1	4,220.3	3,678.9	4,013.5	3,893.0
Septicemia	53.9	68.3	107.3	63.8	78.1	121.8	47.9	61.9	97.4
Cancer, all	300.3	194.0	183.6	420.8	211.0	214.5	227.6	182.9	162.5
Colorectal cancer	49.8	33.0	29.7	54.0	37.5	30.9	47.3	30.1	28.8
Lung/bronchus/tracheal cancer	36.5	27.0	31.3	57.2	32.2	37.0	*24.0	23.6	27.5
Breast cancer <sup>5</sup>	...	...	...	...	...	...	38.7	30.8	17.4
Prostate cancer	...	...	...	99.2	27.4	13.9	...	...	...
Diabetes	44.3	63.4	55.6	44.8	68.1	54.2	44.0	60.3	56.6
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses <sup>4</sup>	38.8	41.4	28.9	*27.3	*30.6	22.7	45.7	48.5	33.2
Dementia and Alzheimer's disease	20.0	36.5	45.6	22.8	36.8	42.9	18.3	36.3	47.4
Heart disease	866.6	954.8	817.2	1,003.8	1,062.5	936.9	783.7	884.3	735.3
Ischemic heart disease	382.4	416.7	290.6	470.5	528.5	375.3	329.1	343.6	232.6
Heart attack	155.9	166.9	118.8	220.9	212.8	132.4	116.7	136.9	109.5
Arrhythmias	133.4	176.8	178.0	153.3	174.4	185.7	121.4	178.3	172.7
Heart failure	261.4	263.1	244.2	286.2	271.1	268.0	246.4	257.9	228.0
Hypertension	22.6	39.7	31.6	*	*28.4	20.9	30.7	47.1	38.8
Stroke	259.0	255.5	189.2	277.7	278.4	214.0	247.7	240.6	172.3
Pneumonia	224.6	263.5	215.7	297.8	310.8	266.0	180.4	232.6	181.2
Chronic obstructive pulmonary disease	19.6	117.1	118.2	*33.3	138.5	157.5	11.2	103.1	91.4
Gallstones	47.6	39.6	38.3	51.9	41.4	32.5	45.0	38.5	42.2
Kidney disease	24.5	37.6	78.6	27.6	48.7	93.2	*22.6	30.4	68.6
Urinary tract infection	86.0	85.6	102.6	66.6	72.5	73.8	97.8	94.2	122.3
Hyperplasia of the prostate	...	...	...	183.3	67.2	41.0	...	...	...
Osteoarthritis	68.6	100.6	144.5	65.2	76.5	131.0	70.7	116.4	153.7
Injury	259.1	229.1	242.3	153.4	171.7	178.1	323.0	266.6	286.1
Fracture	195.8	170.2	182.7	92.6	116.4	115.7	258.1	205.4	228.5
Hip fracture	115.2	99.0	98.0	53.7	68.6	58.5	152.4	118.8	125.0
Complications of care and adverse effects	81.5	101.4	116.2	101.4	136.0	145.0	69.4	78.8	96.5

See footnotes at end of table.

**Table 104 (page 3 of 6). Discharge rate and average length of stay in nonfederal short-stay hospitals, by sex, age, and selected first-listed diagnosis: United States, 1990, 2000, and 2006**

[Data are based on a sample of hospital records]

Age and first-listed diagnosis	Discharges								
	Both sexes			Male			Female		
	1990	2000	2006	1990	2000	2006	1990	2000	2006
	Number per 10,000 population								
85 years and over <sup>2</sup> . . . . .	5,606.3	6,050.9	5,711.4	6,420.9	6,166.6	5,983.5	5,289.6	6,003.3	5,584.1
Septicemia . . . . .	135.6	153.9	205.3	139.0	207.3	219.8	134.3	131.9	198.6
Cancer, all . . . . .	254.0	194.5	161.9	370.6	250.5	227.5	208.7	171.5	131.3
Colorectal cancer . . . . .	47.6	49.7	37.5	*59.1	*58.8	*47.8	43.2	45.9	*32.7
Lung/bronchus/tracheal cancer . . . . .	*19.1	12.1	*18.2	*	*20.9	*18.9	*	*8.5	*17.8
Breast cancer <sup>5</sup> . . . . .	...	...	...	...	...	...	*41.7	*20.5	*5.1
Prostate cancer . . . . .	...	...	...	*87.8	*49.3	*	...	...	...
Diabetes . . . . .	53.0	65.6	51.5	*53.5	*54.2	56.8	52.8	70.3	49.0
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses <sup>4</sup> . . . . .	*27.9	*37.3	24.0	*	*	*	*30.7	*43.0	*24.8
Dementia and Alzheimer's disease . . . . .	49.7	107.0	87.5	*28.9	94.3	77.1	57.7	112.2	92.4
Heart disease . . . . .	1,107.0	1,298.2	1,194.3	1,320.3	1,407.4	1,238.5	1,024.1	1,253.4	1,173.6
Ischemic heart disease . . . . .	423.0	427.2	310.0	581.6	534.4	357.9	361.3	383.2	287.6
Heart attack . . . . .	199.8	251.1	191.3	274.2	296.0	208.0	170.9	232.7	183.5
Arrhythmias . . . . .	167.2	232.4	228.5	189.6	247.1	218.1	158.5	226.4	233.3
Heart failure . . . . .	416.7	480.4	509.3	460.5	455.7	529.0	399.7	490.5	500.1
Hypertension . . . . .	*17.9	41.1	51.4	*	*18.3	*49.4	*19.3	50.4	52.4
Stroke . . . . .	427.2	373.8	280.1	408.2	396.7	258.5	434.6	364.3	290.2
Pneumonia . . . . .	501.0	514.9	408.8	753.7	607.8	487.2	402.8	476.8	372.1
Chronic obstructive pulmonary disease . . . . .	*14.1	110.9	89.1	*	117.4	117.2	*	108.2	75.9
Gallstones . . . . .	60.7	39.2	29.5	*68.2	*29.7	*30.4	57.8	*43.1	29.0
Kidney disease . . . . .	47.1	49.5	130.2	92.4	*68.1	166.5	*29.4	*41.9	113.2
Urinary tract infection . . . . .	216.5	191.5	250.1	239.3	153.1	240.2	207.6	207.2	254.7
Hyperplasia of the prostate . . . . .	...	...	...	158.6	*69.9	*64.4	...	...	...
Osteoarthritis . . . . .	44.5	56.0	78.0	*	*	85.7	35.8	57.3	74.4
Injury . . . . .	542.0	545.5	516.8	435.4	355.6	419.1	583.4	623.5	562.5
Fracture . . . . .	439.0	450.9	403.6	335.7	252.4	287.3	479.2	532.4	458.0
Hip fracture . . . . .	272.3	275.1	235.7	224.4	146.5	170.7	291.0	327.9	266.0
Complications of care and adverse effects . . . . .	96.6	79.1	84.8	132.3	90.5	118.3	82.7	74.4	69.1

See footnotes at end of table.

**Table 104 (page 4 of 6). Discharge rate and average length of stay in nonfederal short-stay hospitals, by sex, age, and selected first-listed diagnosis: United States, 1990, 2000, and 2006**

[Data are based on a sample of hospital records]

Age and first-listed diagnosis	Average length of stay <sup>6</sup>								
	Both sexes			Male			Female		
	1990	2000	2006	1990	2000	2006	1990	2000	2006
	Number of days								
All ages, crude <sup>2</sup>	6.4	4.9	4.8	6.9	5.3	5.2	6.1	4.6	4.5
Under 18 years <sup>2</sup>	4.9	4.4	4.7	5.0	4.8	4.9	4.7	4.1	4.5
Dehydration	3.0	2.2	*2.4	2.9	2.2	*2.6	3.0	2.1	2.2
Acute bronchitis and bronchiolitis	3.7	3.1	*3.2	3.6	3.0	*3.4	3.8	*3.3	*2.9
Pneumonia	4.6	3.6	3.4	4.6	3.4	*3.3	4.7	3.9	3.5
Asthma	2.9	2.2	2.2	2.8	2.1	*2.1	3.1	2.3	2.4
Appendicitis	4.0	3.2	*3.2	3.9	2.9	*3.3	4.0	3.5	*3.1
Injury	4.1	3.8	*3.9	4.2	4.1	*3.9	3.8	*3.2	*3.9
Fracture	4.5	3.5	3.0	4.2	3.9	3.2	5.0	2.5	2.6
Complications of care and adverse effects	*5.3	*5.7	*5.6	*6.0	*5.5	*5.8	*4.5	*5.9	*5.4
18–44 years <sup>2</sup>	4.6	3.6	3.7	6.1	4.8	5.0	4.0	3.2	3.2
HIV/AIDS	*10.7	*8.8	6.3	*10.6	*9.4	6.4	*	*7.5	6.0
Cancer, all	7.8	6.3	5.4	8.4	7.9	6.4	7.5	5.4	4.9
Childbirth	...	...	...	...	...	...	2.8	2.5	2.6
Uterine fibroids	...	...	...	...	...	...	4.2	2.5	2.4
Diabetes	5.8	3.9	3.9	6.2	3.7	4.1	5.2	4.3	3.7
Alcohol and drug <sup>3</sup>	9.0	*5.0	*4.4	8.9	4.8	*4.4	9.1	*5.3	*4.5
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses <sup>4</sup>	14.3	*7.9	7.6	13.8	*8.2	8.2	14.8	*7.6	7.1
Schizophrenia	15.4	*11.0	11.5	15.3	*10.6	11.4	15.6	*11.9	11.8
Mood disorders	14.3	*6.6	6.1	*13.2	*6.6	6.1	15.0	*6.5	6.1
Heart disease	5.4	3.6	3.6	5.4	3.5	3.7	5.4	3.7	3.4
Ischemic heart disease	4.6	3.0	3.0	4.8	2.8	3.2	4.1	3.6	2.6
Pneumonia	6.9	5.1	5.0	7.8	5.0	5.3	6.0	5.2	4.7
Asthma	4.4	2.9	2.7	3.8	2.5	2.5	4.6	3.1	2.8
Intervertebral disc disorders	4.4	2.3	2.6	4.2	2.2	2.6	4.7	2.3	2.5
Injury	5.1	4.3	4.5	5.0	4.5	4.8	5.3	4.1	3.7
Fracture	6.0	4.9	5.4	5.6	5.0	5.7	6.9	4.4	4.5
Poisoning and toxic effects	2.7	2.5	2.5	2.7	2.8	2.8	2.7	2.4	2.2
Complications of care and adverse effects	5.6	4.7	5.9	5.3	4.9	6.1	*5.9	4.6	5.7
45–64 years <sup>2</sup>	6.7	5.0	5.0	6.7	5.1	5.1	6.8	4.8	4.9
HIV/AIDS	*	*	7.0	*	*	6.7	*	*	*7.9
Cancer, all	8.8	6.2	6.2	9.3	6.8	6.6	8.4	5.6	5.8
Colorectal cancer	13.3	7.4	6.9	*13.0	7.4	6.9	*13.6	7.4	6.8
Lung/bronchus/tracheal cancer	7.7	6.2	7.1	7.1	6.0	7.9	8.6	6.4	6.4
Breast cancer <sup>5</sup>	...	...	...	...	...	...	4.3	2.0	2.7
Prostate cancer	...	...	...	7.3	3.2	2.7	...	...	...
Uterine fibroids	...	...	...	...	...	...	4.5	2.8	2.4
Diabetes	8.1	5.6	5.0	7.3	6.0	5.2	8.9	5.2	4.8
Alcohol and drug <sup>3</sup>	8.5	4.8	4.6	8.6	4.6	4.6	8.3	*5.0	*4.7
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses <sup>4</sup>	14.6	9.1	8.9	13.7	*8.8	8.8	15.2	9.4	8.9
Schizophrenia	15.6	*11.9	*12.1	14.2	*11.4	10.9	16.5	*12.5	*13.2
Mood disorders	14.7	*7.9	7.4	13.4	*7.3	7.8	15.4	*8.3	7.2
Heart disease	5.9	3.9	3.9	5.8	3.8	3.7	6.1	4.1	4.2
Ischemic heart disease	5.7	3.7	3.4	5.7	3.6	3.3	5.8	3.8	3.6
Heart attack	7.5	4.8	4.5	7.5	4.7	4.3	7.6	5.0	4.9
Arrhythmias	4.6	2.9	2.8	4.6	2.8	2.7	4.6	2.9	3.0
Heart failure	7.0	4.9	5.3	6.9	5.2	5.1	7.3	4.7	5.7
Hypertension	3.9	2.2	2.2	*4.3	2.0	1.9	3.6	2.4	2.3
Stroke	10.3	5.3	5.1	10.0	5.2	4.7	10.7	5.5	5.6
Pneumonia	8.0	5.8	5.0	8.0	6.0	5.0	7.9	5.7	5.1
Chronic obstructive pulmonary disease	5.9	5.1	4.4	*6.4	5.5	3.9	5.2	4.7	4.7
Asthma	5.2	3.9	3.8	5.3	*3.2	3.3	5.2	4.0	4.1
Osteoarthritis	7.4	3.9	3.7	7.1	3.6	3.4	7.5	4.1	3.8
Intervertebral disc disorders	5.2	2.8	2.9	5.0	2.6	2.8	5.4	3.1	2.9
Injury	6.5	5.1	5.8	6.6	5.5	6.6	6.4	4.6	4.7
Fracture	7.6	5.6	5.5	7.2	6.4	6.1	7.9	4.9	4.8
Poisoning and toxic effects	4.9	3.0	3.6	*	*2.9	4.0	4.3	3.1	3.2
Internal organ injury	*8.3	7.6	*8.5	*	8.3	*9.5	*8.1	*	*6.0
Complications of care and adverse effects	7.9	6.1	5.9	8.4	5.9	5.8	7.4	6.4	6.1

See footnotes at end of table.

**Table 104 (page 5 of 6). Discharge rate and average length of stay in nonfederal short-stay hospitals, by sex, age, and selected first-listed diagnosis: United States, 1990, 2000, and 2006**

[Data are based on a sample of hospital records]

Age and first-listed diagnosis	Average length of stay <sup>6</sup>								
	Both sexes			Male			Female		
	1990	2000	2006	1990	2000	2006	1990	2000	2006
	Number of days								
65–74 years <sup>2</sup> . . . . .	8.0	5.7	5.2	7.8	5.6	5.1	8.1	5.7	5.3
Septicemia . . . . .	*15.9	8.6	9.2	*	8.5	8.9	14.4	8.8	9.5
Cancer, all . . . . .	9.4	7.0	6.8	9.9	6.9	6.7	9.0	7.1	6.9
Colorectal cancer . . . . .	12.9	9.1	7.9	11.3	9.2	8.3	14.5	9.0	7.7
Lung/bronchus/tracheal cancer . . . . .	9.2	7.0	7.2	8.7	6.8	7.4	10.2	*7.1	7.1
Breast cancer <sup>5</sup> . . . . .	...	...	...	...	...	...	4.4	*	*2.6
Prostate cancer . . . . .	...	...	...	6.5	3.8	*2.7	...	...	...
Diabetes . . . . .	8.4	5.9	5.2	9.1	6.2	5.6	8.0	5.6	4.8
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses <sup>4</sup> . . . . .	16.6	11.7	9.8	17.4	*11.7	8.7	16.3	11.7	10.4
Dementia and Alzheimer's disease . . . . .	*12.6	*9.3	*7.2	*10.4	*9.6	*7.0	*14.0	*8.9	*
Heart disease . . . . .	7.0	4.8	4.5	7.0	4.7	4.3	7.0	4.9	4.7
Ischemic heart disease . . . . .	6.6	4.6	4.0	6.8	4.3	4.0	6.3	4.9	4.1
Heart attack . . . . .	8.4	5.9	5.8	8.8	5.3	5.9	7.8	6.6	5.7
Arrhythmias . . . . .	5.7	3.8	3.4	5.6	3.8	3.2	5.8	3.7	3.6
Heart failure . . . . .	8.4	5.5	5.1	7.9	5.7	4.8	8.8	5.4	5.5
Hypertension . . . . .	4.3	2.6	1.9	*4.6	*2.7	1.6	4.1	2.4	2.1
Stroke . . . . .	8.4	4.7	4.6	8.3	4.5	4.7	8.5	4.8	4.4
Pneumonia . . . . .	9.5	6.4	5.5	9.5	6.4	5.1	9.5	6.3	5.8
Chronic obstructive pulmonary disease . . . . .	*9.6	5.1	4.5	*11.1	5.0	4.0	*7.9	5.2	4.8
Gallstones . . . . .	6.6	4.4	4.9	6.9	*5.2	4.3	6.5	3.9	5.1
Kidney disease . . . . .	10.4	7.6	6.0	8.4	6.9	5.9	*12.4	8.2	6.1
Urinary tract infection . . . . .	8.0	4.8	4.5	7.2	5.1	4.7	8.4	4.7	4.4
Hyperplasia of the prostate . . . . .	...	...	...	4.5	2.8	2.5	...	...	...
Osteoarthritis . . . . .	9.3	4.7	3.7	8.8	4.7	3.6	9.5	4.7	3.7
Injury . . . . .	9.2	5.6	5.4	8.4	5.7	4.7	9.7	5.6	5.9
Fracture . . . . .	11.1	5.9	5.2	10.2	6.4	5.0	11.5	5.7	5.3
Hip fracture . . . . .	*15.5	7.1	6.3	*11.8	*7.9	6.1	*16.7	6.7	6.3
Complications of care and adverse effects . . . . .	7.8	6.4	6.6	7.3	6.1	6.7	8.5	6.8	6.5
75–84 years <sup>2</sup> . . . . .	9.1	6.2	5.6	8.7	6.2	5.7	9.4	6.1	5.6
Septicemia . . . . .	12.1	7.9	8.8	12.9	7.4	8.8	11.5	8.4	8.8
Cancer, all . . . . .	10.4	7.2	7.2	9.3	7.2	8.0	11.7	7.2	6.5
Colorectal cancer . . . . .	12.9	9.0	8.9	12.5	*9.3	10.1	13.2	8.8	8.0
Lung/bronchus/tracheal cancer . . . . .	9.5	6.5	7.1	9.6	6.2	7.4	*9.4	6.9	6.9
Breast cancer <sup>5</sup> . . . . .	...	...	...	...	...	...	5.7	*3.2	*3.0
Prostate cancer . . . . .	...	...	...	6.6	*5.1	*3.9	...	...	...
Diabetes . . . . .	12.5	6.0	5.8	11.7	6.4	6.0	13.1	5.6	5.6
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses <sup>4</sup> . . . . .	15.8	10.8	11.1	*15.7	*11.6	*11.4	15.8	10.4	10.9
Dementia and Alzheimer's disease . . . . .	*15.3	8.2	7.5	*12.8	7.6	8.0	*	8.6	7.3
Heart disease . . . . .	8.0	5.3	4.8	8.1	5.4	4.8	7.8	5.3	4.9
Ischemic heart disease . . . . .	7.9	5.1	4.8	8.5	5.2	4.9	7.4	5.1	4.6
Heart attack . . . . .	9.7	6.2	6.5	10.1	5.8	6.8	9.3	6.6	6.2
Arrhythmias . . . . .	6.6	4.2	3.7	6.5	4.3	3.3	6.7	4.1	4.0
Heart failure . . . . .	8.0	5.9	5.3	7.7	6.1	5.2	8.2	5.8	5.3
Hypertension . . . . .	6.0	2.6	2.6	*	*2.1	2.3	*5.6	2.8	2.7
Stroke . . . . .	10.4	5.9	4.6	10.0	5.7	4.5	10.6	6.0	4.8
Pneumonia . . . . .	10.4	6.3	5.6	9.8	6.4	5.4	11.0	6.3	5.8
Chronic obstructive pulmonary disease . . . . .	6.9	5.1	5.1	*6.9	5.0	4.9	*7.0	5.3	5.2
Gallstones . . . . .	8.5	5.3	5.3	8.0	5.6	5.4	8.8	5.1	5.2
Kidney disease . . . . .	10.5	7.4	6.9	11.0	8.2	6.8	*10.1	6.6	7.0
Urinary tract infection . . . . .	11.0	5.2	5.0	8.1	5.5	5.0	12.3	5.1	4.9
Hyperplasia of the prostate . . . . .	...	...	...	6.0	3.1	3.2	...	...	...
Osteoarthritis . . . . .	10.1	4.6	4.1	9.9	4.4	4.3	10.2	4.7	4.0
Injury . . . . .	10.1	6.8	5.8	8.9	*8.2	6.7	10.4	6.3	5.4
Fracture . . . . .	11.0	7.4	5.9	10.0	*	6.6	11.2	6.7	5.6
Hip fracture . . . . .	12.1	7.7	6.4	10.4	7.8	7.1	12.5	7.6	6.2
Complications of care and adverse effects . . . . .	12.5	7.1	6.1	14.0	8.1	6.2	11.2	6.0	5.9

See footnotes at end of table.

**Table 104 (page 6 of 6). Discharge rate and average length of stay in nonfederal short-stay hospitals, by sex, age, and selected first-listed diagnosis: United States, 1990, 2000, and 2006**

[Data are based on a sample of hospital records]

Age and first-listed diagnosis	Average length of stay <sup>6</sup>								
	Both sexes			Male			Female		
	1990	2000	2006	1990	2000	2006	1990	2000	2006
	Number of days								
85 years and over <sup>2</sup> . . . . .	9.6	6.2	5.6	9.4	6.1	5.4	9.6	6.2	5.7
Septicemia . . . . .	12.6	6.9	7.2	*11.8	6.7	6.7	12.9	6.9	7.5
Cancer, all . . . . .	12.1	7.5	6.4	13.4	8.6	5.9	11.3	6.8	6.9
Colorectal cancer . . . . .	22.4	*10.1	7.9	*	*	*8.6	*21.1	8.2	*7.4
Lung/bronchus/tracheal cancer . . . . .	*	*8.0	*6.8	*	*5.9	*	*	*	*
Breast cancer <sup>5</sup> . . . . .	...	...	...	...	...	...	*5.3	*	*
Prostate cancer . . . . .	...	...	...	*7.5	*	*	...	...	...
Diabetes . . . . .	9.1	5.5	4.6	*	*	5.1	9.2	4.9	4.4
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses <sup>4</sup> . . . . .	*	*10.5	7.1	*	*	*	*	*10.8	*7.4
Dementia and Alzheimer's disease . . . . .	11.4	7.9	7.0	*	*8.8	6.6	*11.0	*7.6	*7.2
Heart disease . . . . .	8.1	5.2	4.8	7.8	5.1	4.7	8.2	5.3	4.8
Ischemic heart disease . . . . .	7.5	5.4	4.9	6.8	5.4	4.7	7.9	5.4	5.0
Heart attack . . . . .	9.8	6.7	5.7	8.9	6.4	5.8	10.3	6.9	5.7
Arrhythmias . . . . .	8.3	4.4	4.2	*9.6	4.3	4.2	7.7	4.4	4.2
Heart failure . . . . .	8.6	5.3	4.8	8.0	4.9	4.9	8.8	5.5	4.7
Hypertension . . . . .	*	*4.2	2.9	*	*	*	*	*	2.8
Stroke . . . . .	9.6	5.3	5.3	9.6	5.6	4.6	9.5	5.1	5.6
Pneumonia . . . . .	10.9	7.0	5.7	11.1	6.1	5.6	10.7	7.5	5.9
Chronic obstructive pulmonary disease . . . . .	*	5.8	4.7	*	5.4	4.9	*	5.9	4.5
Gallstones . . . . .	10.3	5.8	5.9	*9.3	*5.6	*5.8	10.7	*5.9	5.9
Kidney disease . . . . .	*12.6	8.5	6.2	*	*9.0	6.2	*13.8	*8.2	6.1
Urinary tract infection . . . . .	10.2	5.6	5.1	9.3	5.7	5.0	10.7	5.5	5.1
Hyperplasia of the prostate . . . . .	...	...	...	6.6	*3.7	*2.9	...	...	...
Osteoarthritis . . . . .	10.5	4.7	4.0	*	*	*3.9	*9.6	4.4	4.0
Injury . . . . .	10.5	5.9	5.3	11.0	6.4	5.2	10.3	5.8	5.4
Fracture . . . . .	11.1	6.1	5.6	11.2	6.4	5.8	11.1	6.0	5.5
Hip fracture . . . . .	12.7	6.5	6.1	12.6	6.8	6.5	12.7	6.5	6.0
Complications of care and adverse effects . . . . .	*11.7	*8.2	5.7	*10.7	*6.4	6.3	*12.3	*9.1	5.3

... Category not applicable.

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

<sup>1</sup>Estimates are age-adjusted to the year 2000 standard population using six age groups: under 18 years, 18–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

<sup>2</sup>Includes discharges with first-listed diagnoses not shown in table.

<sup>3</sup>Includes abuse, dependence, and withdrawal. These estimates are for nonfederal short-stay hospitals only and do not include alcohol and drug discharges from other types of facilities or programs such as the Department of Veterans Affairs or day treatment programs.

<sup>4</sup>These estimates are for nonfederal short-stay hospitals only and do not include discharges from other types of facilities or programs such as the Department of Veterans Affairs or long-term hospitals.

<sup>5</sup>Shown for women only.

<sup>6</sup>Average length of stay is calculated by dividing days of care by number of discharges. See [Appendix II, Average length of stay; Days of care](#).

NOTES: Excludes newborn infants. Diagnostic categories are based on the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD–9–CM). See [Appendix II, Diagnosis; Human immunodeficiency virus \(HIV\) disease; International Classification of Diseases, Ninth Revision, Clinical Modification; Table X](#) for ICD–9–CM codes. Rates are based on the civilian population as of July 1. Starting with *Health, United States, 2003*, rates for 2000 and beyond are based on the 2000 census. Rates for 1990–1999 use population estimates based on the 1990 census adjusted for net underenumeration using the 1990 National Population Adjustment Matrix from the U.S. Census Bureau. Rates for 1990–1999 are not strictly comparable with rates for 2000 and beyond because population estimates for 1990–1999 have not been revised to reflect the 2000 census. See [Appendix I, National Hospital Discharge Survey; Population Census and Population Estimates](#). Additional data and diagnosis categories available from [http://www.cdc.gov/nchs/health\\_data\\_for\\_all\\_ages.htm](http://www.cdc.gov/nchs/health_data_for_all_ages.htm). Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Hospital Discharge Survey.

**Table 105 (page 1 of 4). Discharges with at least one procedure in nonfederal short-stay hospitals, by sex, age, and selected procedures: United States, selected years 1990–2006**

[Data are based on a sample of hospital records]

Age and procedure (any listed)	Both sexes			Male			Female		
	1990	2000	2006	1990	2000	2006	1990	2000	2006
18 years and over									
Hospital discharges with at least one procedure, crude <sup>1</sup> . . . . .	67.4	62.1	63.3	65.2	59.2	60.3	68.7	63.9	65.2
Percent									
Number per 10,000 population									
Hospital discharges with at least one procedure, age-adjusted <sup>1,2</sup> . . . . .	1,020.1	859.9	899.0	882.2	701.4	723.0	1,176.4	1,026.2	1,086.0
Hospital discharges with at least one procedure, crude <sup>1</sup> . . . . .	1,006.4	856.8	900.8	788.1	648.4	691.2	1,205.9	1,049.8	1,097.8
Operations on vessels of heart . . . . .	28.3	41.2	39.6	41.9	56.9	54.7	15.8	26.7	25.5
Coronary angioplasty or arthroectomy . . . . .	14.0	26.2	29.0	20.5	34.9	38.9	8.0	18.1	19.7
Coronary artery stent insertion . . . . .	...	21.7	28.4	...	28.7	38.1	...	15.3	19.2
Drug-eluting stent insertion . . . . .	...	...	24.2	...	...	32.7	...	...	16.3
Coronary artery bypass graft (CABG) . . . . .	14.1	15.0	11.3	21.2	21.8	16.6	7.7	8.7	6.3
Cardiac catheterization . . . . .	52.1	57.8	49.0	68.3	72.1	60.3	37.4	44.6	38.4
Pacemaker . . . . .	8.6	8.5	10.0	10.1	8.5	10.0	7.1	8.5	10.1
Carotid (neck arteries) endarterectomy . . . . .	3.6	5.9	4.4	4.1	6.6	5.1	3.1	5.3	3.8
Endoscopy of small intestine . . . . .	40.8	42.5	44.8	38.6	39.1	40.0	42.8	45.6	49.3
Endoscopy of large intestine . . . . .	27.9	25.0	22.5	22.5	20.2	18.7	32.8	29.4	26.1
Gall bladder removal . . . . .	27.9	19.6	18.1	16.5	13.3	12.2	38.2	25.5	23.6
Laparoscopic gall bladder removal . . . . .	...	14.8	14.0	...	9.2	8.8	...	20.1	19.0
Treatment of intra-abdominal scar tissue . . . . .	17.0	14.4	14.9	6.5	5.7	6.8	26.6	22.4	22.5
Reduction of fracture . . . . .	27.6	24.9	24.7	27.3	22.0	22.9	27.8	27.7	26.3
Excision of intervertebral disc and spinal fusion . . . . .	18.7	18.2	18.5	22.3	20.0	18.7	15.4	16.4	18.4
Total hip replacement . . . . .	6.4	7.3	10.3	5.4	6.8	9.3	7.3	7.7	11.1
Partial hip replacement . . . . .	4.8	5.0	10.9	2.0	2.3	7.7	7.3	7.6	13.9
Total knee replacement . . . . .	6.7	13.8	23.0	4.9	11.0	17.1	8.4	16.4	28.6
CAT scan . . . . .	68.4	29.2	25.4	68.6	27.4	25.1	68.2	30.9	25.7
Arteriography and angiocardiology with contrast . . . . .	59.7	63.0	48.2	75.6	76.2	55.2	45.2	50.7	41.6
Diagnostic ultrasound . . . . .	72.3	36.9	34.9	62.1	33.1	33.8	81.7	40.4	35.9
Magnetic resonance imaging . . . . .	9.5	9.2	10.8	9.4	8.2	9.3	9.6	10.2	12.3
Mechanical ventilation . . . . .	17.6	23.0	25.4	18.8	23.9	27.6	16.4	22.1	23.4
18–44 years									
Hospital discharges with at least one procedure <sup>1</sup> . . . . .	73.0	71.7	72.3	62.6	55.9	55.7	77.0	77.4	78.2
Percent									
Number per 10,000 population									
Hospital discharges with at least one procedure <sup>1</sup> . . . . .	749.3	609.1	655.2	362.8	251.6	265.8	1,130.6	965.9	1,050.8
Operations on vessels of heart . . . . .	3.0	3.9	3.6	4.9	5.5	5.3	*1.2	2.3	1.8
Coronary angioplasty or arthroectomy . . . . .	1.9	3.0	2.9	3.0	4.3	4.2	*0.8	1.6	1.6
Coronary artery stent insertion . . . . .	...	2.5	2.8	...	3.6	4.1	...	1.4	1.6
Drug-eluting stent insertion . . . . .	...	...	2.5	...	...	3.7	...	...	*1.3
Coronary artery bypass graft (CABG) . . . . .	1.0	0.9	*0.7	*1.8	1.1	*	...	*0.7	*
Cardiac catheterization . . . . .	9.0	8.5	7.7	12.5	11.0	9.7	5.5	5.9	5.6
Endoscopy of small intestine . . . . .	13.1	10.3	13.0	13.2	10.4	11.2	13.0	10.2	14.8
Endoscopy of large intestine . . . . .	6.9	5.5	5.7	5.6	4.7	5.3	8.1	6.3	6.2
Gall bladder removal . . . . .	18.7	11.9	13.3	6.2	4.3	5.7	31.0	19.4	21.0
Laparoscopic gall bladder removal . . . . .	...	9.9	11.5	...	3.0	4.6	...	16.8	18.5
Treatment of intra-abdominal scar tissue . . . . .	14.1	10.8	10.5	2.0	1.5	2.6	26.0	20.1	18.5
Hysterectomy . . . . .	...	...	...	...	...	...	63.3	55.7	46.2
Abdominal hysterectomy . . . . .	...	...	...	...	...	...	47.1	34.6	24.3
Vaginal hysterectomy . . . . .	...	...	...	...	...	...	15.8	19.1	16.2
Forceps, vacuum, and breech delivery . . . . .	...	...	...	...	...	...	77.5	59.9	48.3
Episiotomy . . . . .	...	...	...	...	...	...	293.3	160.8	77.3
Other procedures inducing or assisting delivery . . . . .	...	...	...	...	...	...	387.9	384.2	423.9
Medical induction of labor . . . . .	...	...	...	...	...	...	41.1	77.7	113.3
Cesarean section . . . . .	...	...	...	...	...	...	167.1	149.5	227.1
Reduction of fracture . . . . .	19.1	13.7	13.1	27.9	19.0	18.6	10.4	8.4	7.4
Excision of intervertebral disc and spinal fusion . . . . .	17.0	14.1	10.1	21.5	16.2	10.9	12.6	12.1	9.4
CAT scan . . . . .	27.5	10.6	11.4	32.3	11.0	12.3	22.7	10.3	10.6
Arteriography and angiocardiology with contrast . . . . .	12.5	10.3	10.7	17.4	12.9	11.8	7.6	7.7	9.5
Diagnostic ultrasound . . . . .	34.2	11.6	11.4	19.3	8.3	9.5	48.9	14.9	13.4
Magnetic resonance imaging . . . . .	4.9	3.8	4.5	4.9	3.6	4.0	4.9	*4.0	5.0
Mechanical ventilation . . . . .	4.6	7.0	8.7	5.4	8.2	10.5	3.8	5.8	6.8

See footnotes at end of table.



**Table 105 (page 2 of 4). Discharges with at least one procedure in nonfederal short-stay hospitals, by sex, age, and selected procedures: United States, selected years 1990–2006**

[Data are based on a sample of hospital records]

Age and procedure (any listed)	Both sexes			Male			Female		
	1990	2000	2006	1990	2000	2006	1990	2000	2006
45–64 years									
Hospital discharges with at least one procedure <sup>1</sup> . . . . .	68.2	62.3	63.2	68.9	63.4	64.3	67.6	61.3	62.1
Percent									
Number per 10,000 population									
Hospital discharges with at least one procedure <sup>1</sup> . . . . .	924.2	694.6	733.7	965.9	714.4	755.6	885.4	675.9	712.8
Operations on vessels of heart . . . . .	53.0	57.7	52.8	83.2	88.5	79.1	24.8	28.4	27.8
Coronary angioplasty or arthroectomy . . . . .	29.4	37.5	39.7	45.3	55.9	58.2	14.5	20.0	22.2
Coronary artery stent insertion . . . . .	...	31.1	38.7	...	46.5	56.6	...	16.5	21.8
Drug-eluting stent insertion . . . . .	...	...	33.0	...	...	48.2	...	...	18.5
Coronary artery bypass graft (CABG) . . . . .	23.4	20.3	14.1	37.5	32.5	22.6	10.3	8.6	6.0
Cardiac catheterization . . . . .	98.2	83.0	64.9	136.8	113.9	84.0	62.3	53.7	46.8
Pacemaker . . . . .	7.8	4.0	3.6	10.9	5.2	4.4	*4.9	2.8	2.8
Carotid (neck arteries) endarterectomy . . . . .	4.0	5.2	2.9	5.2	5.2	*3.4	3.0	*5.2	2.4
Endoscopy of small intestine . . . . .	45.0	36.4	40.2	46.3	40.7	39.1	43.8	32.3	41.2
Endoscopy of large intestine . . . . .	28.5	19.3	19.8	25.4	18.1	17.4	31.4	20.4	22.1
Gall bladder removal . . . . .	36.4	20.6	17.1	22.3	16.3	13.8	49.5	24.6	20.3
Laparoscopic gall bladder removal . . . . .	...	15.3	12.8	...	12.1	10.0	...	18.5	15.4
Treatment of intra-abdominal scar tissue . . . . .	17.1	15.0	15.6	9.5	7.0	7.8	24.2	22.6	23.0
Removal of prostate . . . . .	...	...	...	35.8	15.6	17.8	...	...	...
Transurethral prostatectomy . . . . .	...	...	...	30.4	7.0	3.9	...	...	...
Hysterectomy . . . . .	...	...	...	...	...	...	76.4	78.2	64.0
Abdominal hysterectomy . . . . .	...	...	...	...	...	...	58.4	53.2	38.1
Vaginal hysterectomy . . . . .	...	...	...	...	...	...	17.6	21.6	19.7
Reduction of fracture . . . . .	20.3	18.5	19.3	19.5	17.6	20.4	21.0	19.3	18.3
Excision of intervertebral disc and spinal fusion . . . . .	26.1	25.7	26.8	29.4	27.1	26.7	23.1	24.4	26.9
Total hip replacement . . . . .	6.2	8.1	12.2	5.7	9.1	13.1	6.5	7.2	11.5
Partial hip replacement . . . . .	*	*1.3	9.5	*	*0.8	9.3	*	*1.7	9.8
Total knee replacement . . . . .	6.7	12.7	25.7	5.8	8.7	19.2	*7.4	16.4	31.9
Mastectomy . . . . .	...	...	...	...	...	...	21.2	10.6	6.1
CAT scan . . . . .	65.4	25.2	24.5	69.9	25.9	25.7	61.2	24.5	23.4
Arteriography and angiocardiology with contrast . . . . .	105.4	85.3	59.0	138.5	111.4	72.1	74.6	60.7	46.5
Diagnostic ultrasound . . . . .	69.5	34.3	34.1	73.8	38.0	36.1	65.5	30.9	32.3
Magnetic resonance imaging . . . . .	10.9	8.9	10.9	10.7	9.4	10.5	11.0	8.4	11.2
Mechanical ventilation . . . . .	17.6	21.2	24.3	18.6	22.9	27.6	16.7	19.6	21.1
65–74 years									
Hospital discharges with at least one procedure <sup>1</sup> . . . . .	66.5	61.3	63.3	69.3	63.9	66.1	63.8	58.9	60.8
Percent									
Number per 10,000 population									
Hospital discharges with at least one procedure <sup>1</sup> . . . . .	1,739.4	1,559.8	1,602.7	1,994.1	1,692.3	1,708.1	1,539.4	1,450.6	1,513.6
Operations on vessels of heart . . . . .	97.0	139.8	127.0	148.9	195.3	186.8	56.3	94.1	76.4
Coronary angioplasty or arthroectomy . . . . .	44.1	86.3	86.9	64.9	116.0	121.8	27.8	61.9	57.3
Coronary artery stent insertion . . . . .	...	71.7	87.0	...	94.9	125.1	...	52.5	54.7
Drug-eluting stent insertion . . . . .	...	...	76.0	...	...	111.2	...	...	46.3
Coronary artery bypass graft (CABG) . . . . .	52.1	53.9	40.1	83.1	79.7	61.2	27.7	32.6	22.3
Cardiac catheterization . . . . .	164.0	174.2	144.0	213.8	222.7	190.3	124.9	134.2	104.8
Pacemaker . . . . .	24.6	22.5	26.7	32.1	22.8	32.9	18.7	22.3	21.4
Carotid (neck arteries) endarterectomy . . . . .	14.6	24.1	17.0	18.0	29.5	19.5	11.9	19.6	15.0
Endoscopy of small intestine . . . . .	92.8	106.6	107.4	91.5	102.4	113.9	93.7	110.0	101.9
Endoscopy of large intestine . . . . .	70.3	64.8	53.2	62.5	59.7	51.3	76.5	69.0	54.8
Gall bladder removal . . . . .	45.0	42.1	33.6	42.0	37.9	28.4	47.4	45.5	37.9
Laparoscopic gall bladder removal . . . . .	...	29.5	23.0	...	24.4	18.6	...	33.7	26.8
Treatment of intra-abdominal scar tissue . . . . .	23.1	21.4	24.7	17.1	14.5	16.8	27.7	27.1	31.4
Removal of prostate . . . . .	...	...	...	201.1	83.7	63.0	...	...	...
Transurethral prostatectomy . . . . .	...	...	...	180.9	59.4	36.9	...	...	...
Hysterectomy . . . . .	...	...	...	...	...	...	37.4	35.9	39.7
Abdominal hysterectomy . . . . .	...	...	...	...	...	...	20.8	20.5	*25.6
Vaginal hysterectomy . . . . .	...	...	...	...	...	...	16.5	14.7	13.2
Reduction of fracture . . . . .	36.2	36.4	33.1	24.3	26.2	23.2	45.5	44.8	41.4
Excision of intervertebral disc and spinal fusion . . . . .	16.3	21.1	32.7	14.2	22.5	30.1	18.0	20.0	34.9
Total hip replacement . . . . .	24.0	25.4	35.7	23.0	26.4	31.5	24.9	24.5	39.3
Partial hip replacement . . . . .	8.9	7.6	21.2	*4.0	*	12.8	*12.7	10.5	28.3
Total knee replacement . . . . .	33.2	65.4	93.8	26.4	64.5	71.2	38.6	66.0	112.9
Mastectomy . . . . .	...	...	...	...	...	...	30.7	22.7	9.5
CAT scan . . . . .	153.7	64.3	50.7	163.4	65.7	55.7	146.1	63.1	46.6
Arteriography and angiocardiology with contrast . . . . .	184.5	186.2	132.8	239.0	231.9	160.6	141.7	148.5	109.2
Diagnostic ultrasound . . . . .	155.2	92.7	84.8	165.2	94.1	97.2	147.4	91.6	74.4
Magnetic resonance imaging . . . . .	20.6	17.2	22.3	19.2	*14.6	20.1	21.7	*19.3	24.2
Mechanical ventilation . . . . .	48.6	60.0	67.0	58.7	70.3	75.5	40.6	51.6	59.8

See footnotes at end of table.

**Table 105 (page 3 of 4). Discharges with at least one procedure in nonfederal short-stay hospitals, by sex, age, and selected procedures: United States, selected years 1990–2006**

[Data are based on a sample of hospital records]

Age and procedure (any listed)	Both sexes			Male			Female		
	1990	2000	2006	1990	2000	2006	1990	2000	2006
75–84 years									
Percent									
Hospital discharges with at least one procedure <sup>1</sup> . . . . .	59.0	53.6	56.1	61.7	56.3	57.5	57.0	51.8	55.1
Number per 10,000 population									
Hospital discharges with at least one procedure <sup>1</sup> . . . . .	2,332.9	2,212.3	2,259.0	2,723.9	2,416.5	2,427.7	2,096.7	2,078.8	2,143.6
Operations on vessels of heart . . . . .	69.1	143.2	140.0	107.6	202.5	189.3	45.8	104.5	106.3
Coronary angioplasty or arthroctomy . . . . .	22.4	84.7	100.3	33.7	109.3	133.4	15.7	68.7	77.6
Coronary artery stent insertion . . . . .	...	69.8	95.7	...	86.5	124.1	...	58.8	76.2
Drug-eluting stent insertion . . . . .	...	...	79.6	...	...	102.3	...	...	64.1
Coronary artery bypass graft (CABG) . . . . .	47.0	57.7	44.2	74.7	90.5	65.1	30.3	36.2	29.9
Cardiac catheterization . . . . .	116.6	190.2	160.9	166.0	236.9	206.9	86.8	159.6	129.5
Pacemaker . . . . .	50.8	58.1	69.9	70.6	72.2	78.4	38.8	48.9	64.1
Carotid (neck arteries) endarterectomy . . . . .	19.8	32.8	29.5	24.2	45.5	44.2	*17.1	24.5	19.5
Endoscopy of small intestine . . . . .	171.4	189.7	172.5	188.9	193.8	171.4	160.8	187.0	173.2
Endoscopy of large intestine . . . . .	131.1	123.7	95.3	126.1	113.8	88.1	134.1	130.1	100.2
Gall bladder removal . . . . .	51.8	43.4	38.4	64.4	46.7	38.8	44.2	41.3	38.1
Laparoscopic gall bladder removal . . . . .	...	28.9	26.7	...	29.6	23.6	...	28.5	28.8
Treatment of intra-abdominal scar tissue . . . . .	34.0	28.6	29.9	28.2	26.3	18.1	37.5	30.2	38.0
Removal of prostate . . . . .	...	...	...	273.5	98.0	64.7	...	...	...
Transurethral prostatectomy . . . . .	...	...	...	257.5	89.0	57.9	...	...	...
Hysterectomy . . . . .	...	...	...	...	...	...	28.5	25.5	16.6
Abdominal hysterectomy . . . . .	...	...	...	...	...	...	18.8	16.2	*9.1
Vaginal hysterectomy . . . . .	...	...	...	...	...	...	*9.4	8.1	*7.2
Reduction of fracture . . . . .	86.2	80.1	82.7	43.4	57.2	50.5	112.1	95.0	104.7
Excision of intervertebral disc and spinal fusion . . . . .	12.0	17.4	26.1	*13.2	*20.4	30.1	11.3	15.3	23.4
Total hip replacement . . . . .	30.7	26.3	34.2	*26.9	*21.3	29.1	33.1	29.6	37.7
Partial hip replacement . . . . .	43.6	36.6	43.5	*14.3	20.0	28.5	61.2	47.5	53.8
Total knee replacement . . . . .	28.4	59.3	90.3	*19.5	48.7	79.5	33.9	66.3	97.6
Mastectomy . . . . .	...	...	...	...	...	...	29.2	22.0	14.6
CAT scan . . . . .	279.7	119.2	75.9	307.2	127.9	79.9	263.0	113.5	73.2
Arteriography and angiocardiology with contrast . . . . .	141.0	219.2	166.3	192.3	287.9	209.5	109.9	174.3	136.7
Diagnostic ultrasound . . . . .	273.5	134.1	119.4	315.7	142.8	134.0	248.0	128.4	109.3
Magnetic resonance imaging . . . . .	30.5	*37.3	37.3	43.0	*33.6	32.5	*23.0	*39.8	*40.6
Mechanical ventilation . . . . .	79.8	91.1	88.6	110.3	106.5	104.7	61.3	80.9	77.5
85 years and over									
Percent									
Hospital discharges with at least one procedure <sup>1</sup> . . . . .	49.3	44.6	45.9	52.4	45.4	48.5	47.8	44.3	44.6
Number per 10,000 population									
Hospital discharges with at least one procedure <sup>1</sup> . . . . .	2,762.1	2,700.5	2,620.8	3,367.3	2,797.9	2,904.6	2,526.8	2,660.6	2,488.0
Operations on vessels of heart . . . . .	*14.0	51.1	59.9	*	83.0	85.5	*	38.0	48.0
Coronary angioplasty or arthroctomy . . . . .	*	36.3	48.9	*	*52.9	65.7	*	29.5	41.0
Coronary artery stent insertion . . . . .	...	31.6	49.4	...	*48.9	65.2	...	*24.4	42.0
Drug-eluting stent insertion . . . . .	...	...	39.7	...	...	*49.8	...	...	35.0
Coronary artery bypass graft (CABG) . . . . .	*	*15.1	10.5	*	*30.1	*20.2	*	*9.0	*6.0
Cardiac catheterization . . . . .	*23.7	87.7	86.8	*	122.8	120.4	*19.0	73.2	71.1
Pacemaker . . . . .	79.5	82.9	95.6	120.4	104.3	111.8	63.5	74.2	88.0
Carotid (neck arteries) endarterectomy . . . . .	*	*12.0	*12.1	*	*	*	*	*4.8	*
Endoscopy of small intestine . . . . .	228.8	262.4	246.4	288.7	245.1	232.5	205.5	269.5	252.9
Endoscopy of large intestine . . . . .	180.8	158.1	127.3	188.0	133.3	110.4	178.0	168.3	135.2
Gall bladder removal . . . . .	46.4	40.9	28.4	*68.4	*42.9	*30.7	37.8	*40.1	27.3
Laparoscopic gall bladder removal . . . . .	...	*30.4	22.1	...	*	*24.9	...	*30.5	20.8
Treatment of intra-abdominal scar tissue . . . . .	29.6	24.3	26.2	*	*16.4	*	33.7	*27.5	20.7
Removal of prostate . . . . .	...	...	...	257.2	*113.0	*77.3	...	...	...
Transurethral prostatectomy . . . . .	...	...	...	247.1	*110.0	*73.7	...	...	...
Hysterectomy . . . . .	...	...	...	...	...	...	*	*	*
Abdominal hysterectomy . . . . .	...	...	...	...	...	...	*	*	*
Vaginal hysterectomy . . . . .	...	...	...	...	...	...	*	*	*
Reduction of fracture . . . . .	196.2	200.5	173.2	150.6	93.8	133.8	213.9	244.3	191.7
Excision of intervertebral disc and spinal fusion . . . . .	*	*2.3	*11.1	*	*	*	*	*	*
Total hip replacement . . . . .	*27.8	*20.7	25.8	*	*	*	*23.2	*26.3	26.4
Partial hip replacement . . . . .	67.4	82.2	80.3	*52.9	*44.1	*45.5	73.1	97.9	96.6
Total knee replacement . . . . .	*12.4	*22.9	34.5	*	*	*48.3	*	*16.2	*28.1
Mastectomy . . . . .	...	...	...	...	...	...	*28.9	*15.7	*
CAT scan . . . . .	378.4	158.7	119.1	401.2	141.4	*112.5	369.5	165.9	122.2
Arteriography and angiocardiology with contrast . . . . .	50.6	120.8	100.3	*87.6	164.4	122.1	36.2	102.8	90.1
Diagnostic ultrasound . . . . .	327.7	208.5	158.4	394.5	181.4	*164.6	301.7	219.6	155.4
Magnetic resonance imaging . . . . .	*18.5	*40.4	39.2	*	*	*33.1	*16.2	*	42.1
Mechanical ventilation . . . . .	91.5	106.0	93.6	97.9	116.5	114.8	89.1	101.7	83.7

See footnotes at end of table.



**Table 105 (page 4 of 4). Discharges with at least one procedure in nonfederal short-stay hospitals, by sex, age, and selected procedures: United States, selected years 1990–2006**

[Data are based on a sample of hospital records]

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

. . . Category not applicable.

<sup>1</sup>Includes discharges for procedures not shown separately.

<sup>2</sup>Estimates are age-adjusted to the year 2000 standard population using five age groups: 18–44 years, 45–54 years, 55–64 years, 65–74 years, and 75 years and over. See [Appendix II, Age adjustment](#).

NOTES: Excludes newborn infants. Up to four procedures were coded for each hospital discharge. If more than one procedure with the same code (e.g., a coronary artery bypass graft) was performed during the hospital stay, it was counted only once (any listed). Procedure categories are based on the *International Classification of Diseases, Ninth Revision, Clinical Modification (ICD–9–CM)*. See [Appendix II, International Classification of Diseases, Ninth Revision, Clinical Modification; Procedure; Table XI](#) for ICD–9–CM codes. Rates are based on the civilian population as of July 1. Starting with *Health, United States, 2003*, rates for 2000 and beyond are based on the 2000 census. Rates for 1990–1999 use population estimates based on the 1990 census adjusted for net underenumeration using the 1990 National Population Adjustment Matrix from the U.S. Census Bureau. Rates for 1990–1999 are not strictly comparable with rates for 2000 and beyond because population estimates for 1990–1999 have not been revised to reflect the 2000 census. See [Appendix I, National Hospital Discharge Survey; Population Census and Population Estimates](#). Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Hospital Discharge Survey.

**Table 106. Hospital admissions, average length of stay, outpatient visits, and outpatient surgery by type of ownership and size of hospital: United States, selected years 1975–2006**

[Data are based on reporting by a census of hospitals]

Type of ownership and size of hospital	1975	1980	1990	1995	2000	2003	2005	2006
Admissions								
Number in thousands								
All hospitals . . . . .	36,157	38,892	33,774	33,282	34,891	36,611	37,006	37,189
Federal . . . . .	1,913	2,044	1,759	1,559	1,034	973	952	1,008
Nonfederal <sup>1</sup> . . . . .	34,243	36,848	32,015	31,723	33,946	35,637	36,054	36,180
Community <sup>2</sup> . . . . .	33,435	36,143	31,181	30,945	33,089	34,783	35,239	35,378
Nonprofit . . . . .	23,722	25,566	22,878	22,557	24,453	25,668	25,881	25,798
For profit . . . . .	2,646	3,165	3,066	3,428	4,141	4,481	4,618	4,732
State-local government . . . . .	7,067	7,413	5,236	4,961	4,496	4,634	4,740	4,848
6–24 beds . . . . .	174	159	95	124	141	162	186	192
25–49 beds . . . . .	1,431	1,254	870	944	995	1,098	1,173	1,188
50–99 beds . . . . .	3,675	3,700	2,474	2,299	2,355	2,464	2,412	2,301
100–199 beds . . . . .	7,017	7,162	5,833	6,288	6,735	6,817	6,678	6,662
200–299 beds . . . . .	6,174	6,596	6,333	6,495	6,702	6,887	7,075	7,008
300–399 beds . . . . .	4,739	5,358	5,091	4,693	5,135	5,590	6,025	5,721
400–499 beds . . . . .	3,689	4,401	3,644	3,413	3,617	3,591	3,634	3,872
500 beds or more . . . . .	6,537	7,513	6,840	6,690	7,410	8,174	8,054	8,435
Average length of stay <sup>3</sup>								
Number of days								
All hospitals . . . . .	11.4	10.0	9.1	7.8	6.8	6.6	6.5	6.4
Federal . . . . .	20.3	16.8	14.9	13.1	12.8	11.5	11.6	11.2
Nonfederal <sup>1</sup> . . . . .	10.8	9.6	8.8	7.5	6.6	6.4	6.3	6.3
Community <sup>2</sup> . . . . .	7.7	7.6	7.2	6.5	5.8	5.7	5.6	5.6
Nonprofit . . . . .	7.8	7.7	7.3	6.4	5.7	5.5	5.5	5.4
For profit . . . . .	6.6	6.5	6.4	5.8	5.4	5.3	5.3	5.2
State-local government . . . . .	7.6	7.3	7.7	7.4	6.7	6.6	6.6	6.5
6–24 beds . . . . .	5.6	5.3	5.4	5.5	4.3	4.1	4.2	4.0
25–49 beds . . . . .	6.0	5.8	6.1	5.7	5.1	5.0	4.9	4.9
50–99 beds . . . . .	6.8	6.7	7.2	7.0	6.5	6.3	6.4	6.3
100–199 beds . . . . .	7.1	7.0	7.1	6.4	5.7	5.6	5.6	5.5
200–299 beds . . . . .	7.5	7.4	6.9	6.2	5.7	5.4	5.3	5.2
300–399 beds . . . . .	7.8	7.6	7.0	6.1	5.5	5.4	5.4	5.4
400–499 beds . . . . .	8.1	7.9	7.3	6.3	5.6	5.5	5.5	5.4
500 beds or more . . . . .	9.1	8.7	8.1	7.1	6.3	6.1	6.0	5.9
Outpatient visits <sup>4</sup>								
Number in thousands								
All hospitals . . . . .	254,844	262,951	368,184	483,195	592,673	648,560	673,689	690,425
Federal . . . . .	51,957	50,566	58,527	59,934	63,402	74,240	80,018	83,974
Nonfederal <sup>1</sup> . . . . .	202,887	212,385	309,657	423,261	531,972	574,320	593,671	606,452
Community <sup>2</sup> . . . . .	190,672	202,310	301,329	414,345	521,405	563,186	584,429	599,553
Nonprofit . . . . .	131,435	142,156	221,073	303,851	393,168	424,215	441,653	453,501
For profit . . . . .	7,713	9,696	20,110	31,940	43,378	44,246	46,016	44,207
State-local government . . . . .	51,525	50,459	60,146	78,554	84,858	94,725	96,760	101,845
6–24 beds . . . . .	915	1,155	1,471	3,644	4,555	6,512	7,970	7,803
25–49 beds . . . . .	5,855	6,227	10,812	19,465	27,007	31,261	35,172	37,054
50–99 beds . . . . .	16,303	17,976	27,582	38,597	49,385	52,959	53,382	52,975
100–199 beds . . . . .	35,156	36,453	58,940	91,312	114,183	119,856	121,053	124,426
200–299 beds . . . . .	32,772	36,073	60,561	84,080	99,248	100,095	107,332	103,431
300–399 beds . . . . .	29,169	30,495	43,699	54,277	73,444	80,938	85,366	82,916
400–499 beds . . . . .	22,127	25,501	33,394	44,284	52,205	57,203	56,023	60,440
500 beds or more . . . . .	48,375	48,430	64,870	78,685	101,378	114,362	118,131	130,508
Outpatient surgery								
Percent of total surgeries <sup>5</sup>								
Community hospitals <sup>2</sup> . . . . .	---	16.3	50.5	58.1	62.7	63.3	63.3	63.1

--- Data not available.

<sup>1</sup>The category of nonfederal hospitals comprises psychiatric, tuberculosis and other respiratory diseases hospitals, and long-term and short-term general and other special hospitals. See [Appendix II, Hospital](#).

<sup>2</sup>Community hospitals are nonfederal short-term general and special hospitals whose facilities and services are available to the public. See [Appendix II, Hospital](#).

<sup>3</sup>Average length of stay is calculated as the number of inpatient days divided by the number of admissions. See [Appendix II, Average length of stay](#).

<sup>4</sup>Outpatient visits include visits to the emergency department, outpatient department, referred visits (pharmacy, EKG, radiology), and outpatient surgery. See [Appendix II, Outpatient visit](#).

<sup>5</sup>Total surgeries is a measure of patients with at least one surgical procedure. Persons with multiple surgical procedures during the same outpatient visit or inpatient stay are counted only once. See [Appendix II, Outpatient surgery](#).

NOTE: Data have been revised and differ from previous editions of *Health, United States*.

SOURCES: American Hospital Association (AHA) Annual Survey of Hospitals. Hospital Statistics, 1976, 1981, 1991–2008 editions. Chicago, IL. (Copyrights 1976, 1981, 1991–2008: Used with the permission of Health Forum LLC, an affiliate of the AHA.)

**Table 107. Nursing home residents 65 years of age and over, by age, sex, and race: United States, selected years 1973–2004**

[Data are based on a sample of nursing home residents]

Age, sex, and race	Number of residents in hundreds					Residents per 1,000 population <sup>1</sup>				
	1973–1974	1985	1995	1999	2004	1973–1974	1985	1995	1999	2004
<b>Age</b>										
65 years and over, age-adjusted <sup>2</sup>	...	...	...	...	...	58.5	54.0	46.4	43.3	34.8
65 years and over, crude	9,615	13,183	14,229	14,695	13,173	44.7	46.2	42.8	42.9	36.3
65–74 years	1,631	2,121	1,897	1,948	1,741	12.3	12.5	10.2	10.8	9.4
75–84 years	3,849	509	5,096	5,176	4,687	57.7	57.7	46.1	43.0	36.1
85 years and over	4,136	5,973	7,235	7,571	6,745	257.3	220.3	200.9	182.5	138.8
<b>Male</b>										
65 years and over, age-adjusted <sup>2</sup>	...	...	...	...	...	42.5	38.8	33.0	30.6	24.1
65 years and over, crude	2,657	3,344	3,571	3,778	3,369	30.0	29.0	26.2	26.5	22.2
65–74 years	651	806	795	841	754	11.3	10.8	9.6	10.3	8.9
75–84 years	1,023	1,413	1,443	1,495	1,409	39.9	43.0	33.5	30.8	27.0
85 years and over	983	1,126	1,333	1,442	1,206	182.7	145.7	131.5	116.5	80.0
<b>Female</b>										
65 years and over, age-adjusted <sup>2</sup>	...	...	...	...	...	67.5	61.5	52.8	49.8	40.4
65 years and over, crude	6,958	9,839	10,658	10,917	9,804	54.9	57.9	54.3	54.6	46.4
65–74 years	980	1,315	1,103	1,107	988	13.1	13.8	10.7	11.2	9.8
75–84 years	2,826	3,677	3,654	3,681	3,278	68.9	66.4	54.3	51.2	42.3
85 years and over	3,153	4,847	5,902	6,129	5,539	294.9	250.1	228.1	210.5	165.2
<b>White<sup>3</sup></b>										
65 years and over, age-adjusted <sup>2</sup>	...	...	...	...	...	61.2	55.5	45.8	41.9	34.0
65 years and over, crude	9,206	12,274	12,715	12,796	11,489	46.9	47.7	42.7	42.1	36.2
65–74 years	1,501	1,878	1,541	1,573	1,342	12.5	12.3	9.3	10.0	8.5
75–84 years	3,697	4,736	4,513	4,406	4,058	60.3	59.1	45.0	40.5	35.2
85 years and over	4,008	5,660	6,662	6,817	6,089	270.8	228.7	203.2	181.8	139.4
<b>Black or African American<sup>3</sup></b>										
65 years and over, age-adjusted <sup>2</sup>	...	...	...	...	...	28.2	41.5	50.8	55.5	49.9
65 years and over, crude	377	820	1,229	1,459	1,454	22.0	35.0	45.5	51.0	47.7
65–74 years	122	225	296	303	345	11.1	15.4	18.5	18.2	20.2
75–84 years	134	306	475	587	546	26.7	45.3	57.8	66.5	55.5
85 years and over	121	290	458	569	563	105.7	141.5	168.2	182.8	160.7

... Category not applicable.

<sup>1</sup>Rates are calculated using estimates of the civilian population of the United States including institutionalized persons. Population data are from unpublished tabulations provided by the U.S. Census Bureau. The 2004 population estimates are postcensal estimates as of July 1, 2004, based on the 2000 census. For more information about the 2004 population estimates, see the Technical Notes in Kozak LJ, DeFrances CJ, Hall MJ. National Hospital Discharge Survey: 2004 annual summary with detailed diagnosis and procedure data. National Center for Health Statistics. Vital Health Stat 13(162). 2006. Available from: <http://www.cdc.gov/nchs/products/pubs/pubd/series/ser.htm>.

<sup>2</sup>Age-adjusted to the year 2000 population standard using the following three age groups: 65–74 years, 75–84 years, and 85 years and over. See [Appendix II, Age adjustment](#).

<sup>3</sup>Starting with 1999 data, the instruction for the race item on the Current Resident Questionnaire was changed so that more than one race could be recorded. In previous years, only one racial category could be checked. Estimates for racial groups presented in this table are for residents for whom only one race was recorded. Estimates for residents where multiple races were checked are unreliable due to small sample sizes and are not shown.

NOTES: Residents are persons on the roster of the nursing home as of the night before the survey. Residents for whom beds are maintained even though they may be away on overnight leave or in a hospital are included. People residing in personal care or domiciliary care homes are excluded. See [Appendix I, National Nursing Home Survey \(NNHS\)](#). Data for 2004 have been revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCE: CDC/NCHS, National Nursing Home Survey.

**Table 108. Persons employed in health service sites, by site and sex: United States, 2000–2007**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Site	2000	2001	2002	2003	2004	2005	2006	2007
Both sexes								
Number of persons in thousands								
All employed civilians <sup>1</sup>	136,891	136,933	136,485	137,736	139,252	141,730	144,427	146,047
All health service sites <sup>2</sup>	12,211	12,558	13,069	13,615	13,817	14,052	14,352	14,687
Offices and clinics of physicians	1,387	1,499	1,533	1,673	1,727	1,801	1,785	1,720
Offices and clinics of dentists	672	701	734	771	780	792	852	843
Offices and clinics of chiropractors	120	111	132	142	156	163	163	144
Offices and clinics of optometrists	95	102	113	92	93	98	98	114
Offices and clinics of other health practitioners <sup>3</sup>	143	140	149	250	274	275	292	299
Outpatient care centers	772	830	850	873	885	901	919	881
Home health care services	548	582	636	741	750	795	928	959
Other health care services <sup>4</sup>	1,027	1,101	1,188	943	976	1,045	1,096	1,334
Hospitals	5,202	5,256	5,330	5,652	5,700	5,719	5,712	5,955
Nursing care facilities	1,593	1,568	1,715	1,877	1,858	1,848	1,807	1,689
Residential care facilities, without nursing	652	668	689	601	618	615	700	749
Men								
All health service sites <sup>2</sup>	2,756	2,778	2,838	2,986	3,067	3,097	3,187	3,316
Offices and clinics of physicians	354	379	370	414	424	418	421	417
Offices and clinics of dentists	158	150	151	163	158	156	173	161
Offices and clinics of chiropractors	32	39	47	53	63	68	61	54
Offices and clinics of optometrists	26	27	29	29	24	27	29	26
Offices and clinics of other health practitioners <sup>3</sup>	38	41	42	63	69	80	80	71
Outpatient care centers	186	185	172	200	203	201	199	216
Home health care services	45	51	54	56	65	81	91	96
Other health care services <sup>4</sup>	304	345	362	297	314	311	344	399
Hospitals	1,241	1,187	1,195	1,263	1,333	1,347	1,337	1,464
Nursing care facilities	195	189	223	267	251	246	263	217
Residential care facilities, without nursing	177	185	193	181	164	162	189	195
Women								
All health service sites <sup>2</sup>	9,457	9,782	10,232	10,631	10,750	10,958	11,167	11,370
Offices and clinics of physicians	1,034	1,120	1,164	1,259	1,302	1,383	1,364	1,303
Offices and clinics of dentists	514	551	584	607	623	637	679	681
Offices and clinics of chiropractors	88	72	85	90	93	95	102	90
Offices and clinics of optometrists	69	75	84	64	69	71	69	88
Offices and clinics of other health practitioners <sup>3</sup>	106	99	106	186	204	195	213	228
Outpatient care centers	586	646	678	673	683	700	720	665
Home health care services	503	531	582	685	685	713	837	863
Other health care services <sup>4</sup>	723	756	826	646	662	734	752	935
Hospitals	3,961	4,069	4,135	4,390	4,366	4,372	4,376	4,491
Nursing care facilities	1,398	1,380	1,492	1,611	1,607	1,602	1,544	1,472
Residential care facilities, without nursing	475	483	496	420	454	453	511	554
Both sexes								
Percent of employed civilians								
All health service sites	8.9	9.2	9.6	9.9	9.9	9.9	9.9	10.1
Percent distribution								
All health service sites	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Offices and clinics of physicians	11.4	11.9	11.7	12.3	12.5	12.8	12.4	11.7
Offices and clinics of dentists	5.5	5.6	5.6	5.7	5.6	5.6	5.9	5.7
Offices and clinics of chiropractors	1.0	0.9	1.0	1.0	1.1	1.2	1.1	1.0
Offices and clinics of optometrists	0.8	0.8	0.9	0.7	0.7	0.7	0.7	0.8
Offices and clinics of other health practitioners <sup>3</sup>	1.2	1.1	1.1	1.8	2.0	2.0	2.0	2.0
Outpatient care centers	6.3	6.6	6.5	6.4	6.4	6.4	6.4	6.0
Home health care services	4.5	4.6	4.9	5.4	5.4	5.7	6.5	6.5
Other health care services <sup>4</sup>	8.4	8.8	9.1	6.9	7.1	7.4	7.6	9.1
Hospitals	42.6	41.9	40.8	41.5	41.3	40.7	39.8	40.5
Nursing care facilities	13.0	12.5	13.1	13.8	13.4	13.2	12.6	11.5
Residential care facilities, without nursing	5.3	5.3	5.3	4.4	4.5	4.4	4.9	5.1

<sup>1</sup>Excludes workers under the age of 16 years.

<sup>2</sup>Data for health service sites for men and women may not sum to total for all health service sites for both sexes due to rounding.

<sup>3</sup>Includes health service sites such as psychologists' offices, nutritionists' offices, speech defect clinics, and other offices and clinics. Complete list of clinics under this category is available from: [http://www.census.gov/hhes/www/oiindex/cens\\_797\\_847.html](http://www.census.gov/hhes/www/oiindex/cens_797_847.html), Census Industry Code 808.

<sup>4</sup>Includes health service sites such as clinical laboratories, blood banks, CT-SCAN (computer tomography) centers, and other offices and clinics. Complete list of clinics under this category is available from: [http://www.census.gov/hhes/www/oiindex/cens\\_797\\_847.html](http://www.census.gov/hhes/www/oiindex/cens_797_847.html), Census Industry Code 818.

NOTES: Annual data are based on data collected each month and averaged over the year. Health service sites are based on the North American Industry Classification System. [Appendix II, Industry of employment](#), Table IX for codes for industries. Data for additional years are available. See [Appendix III](#).

SOURCES: U.S. Department of Labor, Bureau of Labor Statistics, Current Population Survey: Employment and Earnings, January 2008, available from: <http://www.bls.gov/cps/home.htm#annual> (tables 2 and 18), and unpublished data.

**Table 109 (page 1 of 2). Active physicians and physicians in patient care, by geographic division and state: United States, selected years 1975–2006**

[Data are based on reporting by physicians]

Geographic division and state	Active physicians <sup>1,2</sup>					Physicians in patient care <sup>1,2,3</sup>				
	1975	1985	1995 <sup>4</sup>	2002	2006	1975	1985	1995 <sup>4</sup>	2002	2006
	Number per 10,000 civilian population									
United States . . . . .	15.3	20.7	24.2	25.4	27.0	13.5	18.0	21.3	22.5	25.3
New England . . . . .	19.1	26.7	32.5	35.0	37.6	16.9	22.9	28.8	31.2	34.6
Connecticut . . . . .	19.8	27.6	32.8	34.4	35.7	17.7	24.3	29.5	30.9	32.9
Maine . . . . .	12.8	18.7	22.3	27.1	30.5	10.7	15.6	18.2	22.6	28.3
Massachusetts . . . . .	20.8	30.2	37.5	39.2	42.8	18.3	25.4	33.2	35.1	39.0
New Hampshire . . . . .	14.3	18.1	21.5	25.2	26.8	13.1	16.7	19.8	23.0	25.3
Rhode Island . . . . .	17.8	23.3	30.4	33.4	36.2	16.1	20.2	26.7	29.7	33.8
Vermont . . . . .	18.2	23.8	26.9	33.7	35.1	15.5	20.3	24.2	30.6	32.5
Middle Atlantic . . . . .	19.5	26.1	32.4	33.8	35.1	17.0	22.2	28.0	29.2	32.5
New Jersey . . . . .	16.2	23.4	29.3	31.4	32.7	14.0	19.8	24.9	26.8	30.4
New York . . . . .	22.7	29.0	35.3	36.5	38.0	20.2	25.2	31.6	32.6	35.2
Pennsylvania . . . . .	16.6	23.6	30.1	31.5	32.2	13.9	19.2	24.6	25.5	29.6
East North Central . . . . .	13.9	19.3	23.3	25.0	26.7	12.0	16.4	19.8	21.5	25.1
Illinois . . . . .	14.5	20.5	24.8	26.0	27.6	13.1	18.2	22.1	23.1	25.9
Indiana . . . . .	10.6	14.7	18.4	20.9	22.0	9.6	13.2	16.6	18.9	20.9
Michigan . . . . .	15.4	20.8	24.8	25.8	27.8	12.0	16.0	19.0	20.1	26.0
Ohio . . . . .	14.1	19.9	23.8	26.0	27.8	12.2	16.8	20.0	22.0	26.1
Wisconsin . . . . .	12.5	17.7	21.5	24.1	26.0	11.4	15.9	19.6	22.0	24.5
West North Central . . . . .	13.3	18.3	21.8	23.3	25.0	11.4	15.6	18.9	20.3	23.5
Iowa . . . . .	11.4	15.6	19.2	19.9	21.2	9.4	12.4	15.1	15.7	19.5
Kansas . . . . .	12.8	17.3	20.8	21.7	23.4	11.2	15.1	18.0	18.8	22.1
Minnesota . . . . .	14.9	20.5	23.4	25.3	28.0	13.7	18.5	21.5	23.3	26.4
Missouri . . . . .	15.0	20.5	23.9	24.8	25.9	11.6	16.3	19.7	20.6	24.2
Nebraska . . . . .	12.1	15.7	19.8	22.6	23.9	10.9	14.4	18.3	20.8	22.5
North Dakota . . . . .	9.7	15.8	20.5	22.5	24.4	9.2	14.9	18.9	20.8	23.3
South Dakota . . . . .	8.2	13.4	16.7	20.1	22.6	7.7	12.3	15.7	18.6	21.8
South Atlantic . . . . .	14.0	19.7	23.4	24.8	26.5	12.6	17.6	21.0	22.3	24.7
Delaware . . . . .	14.3	19.7	23.4	25.2	26.3	12.7	17.1	19.7	21.5	24.9
District of Columbia . . . . .	39.6	55.3	63.6	61.8	73.6	34.6	45.6	53.6	53.9	64.4
Florida . . . . .	15.2	20.2	22.9	24.1	25.2	13.4	17.8	20.3	21.4	23.9
Georgia . . . . .	11.5	16.2	19.7	20.4	21.6	10.6	14.7	18.0	18.8	20.3
Maryland . . . . .	18.6	30.4	34.1	35.3	39.7	16.5	24.9	29.9	31.2	35.0
North Carolina . . . . .	11.7	16.9	21.1	23.3	24.7	10.6	15.0	19.4	21.4	23.1
South Carolina . . . . .	10.0	14.7	18.9	21.5	22.9	9.3	13.6	17.6	19.9	21.8
Virginia . . . . .	12.9	19.5	22.5	24.5	26.6	11.9	17.8	20.8	22.5	25.1
West Virginia . . . . .	11.0	16.3	21.0	23.7	25.1	10.0	14.6	17.9	19.8	23.5
East South Central . . . . .	10.5	15.0	19.2	21.2	22.8	9.7	14.0	17.8	19.6	21.7
Alabama . . . . .	9.2	14.2	18.4	19.9	21.4	8.6	13.1	17.0	18.3	20.4
Kentucky . . . . .	10.9	15.1	19.2	21.3	22.8	10.1	13.9	18.0	19.8	21.7
Mississippi . . . . .	8.4	11.8	13.9	17.1	18.1	8.0	11.1	13.0	15.6	17.2
Tennessee . . . . .	12.4	17.7	22.5	24.2	26.1	11.3	16.2	20.8	22.5	24.8
West South Central . . . . .	11.9	16.4	19.5	20.7	21.7	10.5	14.5	17.3	18.4	20.5
Arkansas . . . . .	9.1	13.8	17.3	19.2	20.5	8.5	12.8	16.0	17.8	19.6
Louisiana . . . . .	11.4	17.3	21.7	24.4	25.6	10.5	16.1	20.3	23.0	24.4
Oklahoma . . . . .	11.6	16.1	18.8	19.2	20.7	9.4	12.9	14.7	14.8	19.4
Texas . . . . .	12.5	16.8	19.4	20.3	21.3	11.0	14.7	17.3	18.1	20.1
Mountain . . . . .	14.3	17.8	20.2	20.4	22.6	12.6	15.7	17.8	18.4	21.3
Arizona . . . . .	16.7	20.2	21.4	18.9	22.2	14.1	17.1	18.2	17.6	20.9
Colorado . . . . .	17.3	20.7	23.7	24.0	26.7	15.0	17.7	20.6	21.2	25.0
Idaho . . . . .	9.5	12.1	13.9	16.6	18.0	8.9	11.4	13.1	15.2	17.2
Montana . . . . .	10.6	14.0	18.4	21.9	22.9	10.1	13.2	17.1	20.3	22.0
Nevada . . . . .	11.9	16.0	16.7	17.9	19.4	10.9	14.5	14.6	16.1	18.6
New Mexico . . . . .	12.2	17.0	20.2	22.0	23.8	10.1	14.7	18.0	19.0	22.2
Utah . . . . .	14.1	17.2	19.2	19.8	21.1	13.0	15.5	17.6	17.9	19.8
Wyoming . . . . .	9.5	12.9	15.3	18.2	19.4	8.9	12.0	13.9	16.6	18.4

See footnotes at end of table.

**Table 109 (page 2 of 2). Active physicians and physicians in patient care, by geographic division and state: United States, selected years 1975–2006**

[Data are based on reporting by physicians]

Geographic division and state	Active physicians <sup>1,2</sup>					Physicians in patient care <sup>1,2,3</sup>				
	1975	1985	1995 <sup>4</sup>	2002	2006	1975	1985	1995 <sup>4</sup>	2002	2006
	Number per 10,000 civilian population									
Pacific . . . . .	17.9	22.5	23.3	24.1	26.0	16.3	20.5	21.2	21.9	24.4
Alaska . . . . .	8.4	13.0	15.7	20.0	24.5	7.8	12.1	14.2	17.7	23.0
California . . . . .	18.8	23.7	23.7	24.0	25.7	17.3	21.5	21.7	21.8	24.1
Hawaii . . . . .	16.2	21.5	24.8	27.7	31.3	14.7	19.8	22.8	25.2	29.4
Oregon . . . . .	15.6	19.7	21.6	24.1	27.2	13.8	17.6	19.5	21.7	25.5
Washington . . . . .	15.3	20.2	22.5	24.7	26.5	13.6	17.9	20.2	22.3	24.6

<sup>1</sup>Includes active doctors of medicine (MDs) and active doctors of osteopathy (DOs). See [Appendix II, Physician](#).

<sup>2</sup>Starting with 2003 data, federal and nonfederal physicians are included. Data prior to 2003 include nonfederal physicians only.

<sup>3</sup>Prior to 2006, excludes DOs. Excludes physicians in medical teaching, administration, research, and other nonpatient care activities. Includes residents.

<sup>4</sup>Data for DOs are as of July 1996.

NOTES: Data for doctors of medicine are as of December 31. Data for DOs are as of May 31st. Data for additional years are available. See [Appendix III](#).

**SOURCES:** American Medical Association (AMA): Physician distribution and medical licensure in the U.S., 1975; Physician characteristics and distribution in the U.S., 1986 edition; 1996–1997 edition; 2008 edition; Department of Physician Practice and Communication Information, Division of Survey and Data Resources, AMA. (Copyrights 1976, 1986, 1997, 2004, 2008: Used with the permission of the AMA); American Osteopathic Association: 1975–1976 Yearbook and Directory of Osteopathic Physicians, 1985–1986 Yearbook and Directory of Osteopathic Physicians; American Association of Colleges of Osteopathic Medicine: Annual Statistical Report, 1996; American Osteopathic Association: Factsheet 2006, 2006.



**Table 110. Doctors of medicine, by place of medical education and activity: United States and outlying U.S. areas, selected years 1975–2006**

[Data are based on reporting by physicians]

Place of medical education and activity	1975	1985	1995	2000	2003	2004	2005	2006
Number of doctors of medicine								
Total doctors of medicine . . . . .	393,742	552,716	720,325	813,770	871,535	884,974	902,053	921,904
Active doctors of medicine <sup>1</sup> . . . . .	340,280	497,140	625,443	692,368	736,211	744,143	762,438	766,836
Place of medical education:								
U.S. medical graduates . . . . .	---	392,007	481,137	525,691	558,167	563,118	571,798	574,315
International medical graduates <sup>2</sup> . . . . .	---	105,133	144,306	164,437	178,044	181,025	190,640	192,521
Activity:								
Patient care <sup>3,4</sup> . . . . .	287,837	431,527	564,074	631,431	691,873	700,287	718,473	723,118
Office-based practice . . . . .	213,334	329,041	427,275	490,398	529,836	538,538	563,225	560,411
General and family practice . . . . .	46,347	53,862	59,932	67,534	73,508	73,234	74,999	74,900
Cardiovascular diseases . . . . .	5,046	9,054	13,739	16,300	17,301	17,252	17,519	17,480
Dermatology . . . . .	3,442	5,325	6,959	7,969	8,477	8,651	8,795	8,920
Gastroenterology . . . . .	1,696	4,135	7,300	8,515	9,326	9,430	9,742	9,881
Internal medicine . . . . .	28,188	52,712	72,612	88,699	99,670	101,776	107,028	107,284
Pediatrics . . . . .	12,687	22,392	33,890	42,215	47,996	49,356	51,854	51,815
Pulmonary diseases . . . . .	1,166	3,035	4,964	6,095	6,919	7,072	7,321	7,377
General surgery . . . . .	19,710	24,708	24,086	24,475	25,284	25,229	26,079	25,592
Obstetrics and gynecology . . . . .	15,613	23,525	29,111	31,726	33,636	33,811	34,659	34,225
Ophthalmology . . . . .	8,795	12,212	14,596	15,598	16,240	16,304	16,580	15,765
Orthopedic surgery . . . . .	8,148	13,033	17,136	17,367	18,423	18,632	19,115	19,220
Otolaryngology . . . . .	4,297	5,751	7,139	7,581	8,103	8,160	8,206	8,199
Plastic surgery . . . . .	1,706	3,299	4,612	5,308	5,725	5,845	6,011	6,016
Urological surgery . . . . .	5,025	7,081	7,991	8,460	8,804	8,793	8,955	8,850
Anesthesiology . . . . .	8,970	15,285	23,770	27,624	29,254	29,984	31,887	31,746
Diagnostic radiology . . . . .	1,978	7,735	12,751	14,622	16,403	16,828	17,618	17,577
Emergency medicine . . . . .	---	---	11,700	14,541	17,727	18,961	20,173	20,055
Neurology . . . . .	1,862	4,691	7,623	8,559	9,304	9,632	10,400	10,423
Pathology, anatomical/clinical . . . . .	4,195	6,877	9,031	10,267	10,209	10,653	11,747	11,465
Psychiatry . . . . .	12,173	18,521	23,334	24,955	25,656	25,998	27,638	27,387
Radiology . . . . .	6,970	7,355	5,994	6,674	7,010	6,900	7,049	6,954
Other specialty . . . . .	15,320	28,453	29,005	35,314	34,861	36,037	39,850	39,280
Hospital-based practice . . . . .	74,503	102,486	136,799	141,033	162,037	161,749	155,248	162,707
Residents and interns <sup>5</sup> . . . . .	53,527	72,159	93,650	95,125	100,033	102,563	95,391	97,102
Full-time hospital staff . . . . .	20,976	30,327	43,149	45,908	62,004	59,186	59,857	65,605
Other professional activity <sup>6</sup> . . . . .	24,252	44,046	40,290	41,556	44,338	43,856	43,965	43,718
Inactive . . . . .	21,449	38,646	72,326	75,168	84,360	92,323	99,823	108,344
Not classified . . . . .	26,145	13,950	20,579	45,136	50,447	48,011	39,304	46,252
Unknown address . . . . .	5,868	2,980	1,977	1,098	517	497	488	472

--- Data not available.

<sup>1</sup>Doctors of medicine who are inactive, have unknown address, or primary specialty not classified are excluded. See [Appendix II, Physician](#).

<sup>2</sup>International medical graduates received their medical education in schools outside the United States and Canada.

<sup>3</sup>Specialty information is based on the physician's self-designated primary area of practice. Categories include generalists and specialists. See [Appendix II, Physician specialty](#).

<sup>4</sup>Starting with 2003 data, estimates include federal and nonfederal doctors of medicine. Prior to 2003, estimates were for nonfederal doctors of medicine only. See *Health, United States, 2004*, Table 103 for data on federal doctors of medicine.

<sup>5</sup>Starting with 1990 data, clinical fellows are included in this category. In prior years, clinical fellows were included in the other professional activity category.

<sup>6</sup>Includes medical teaching, administration, research, and other. Prior to 1990, this category also included clinical fellows.

NOTES: Data for doctors of medicine are as of December 31, except for 1990–1994 data, which are as of January 1. Outlying areas include Puerto Rico, the U.S. Virgin Islands, and the Pacific islands of Canton, Caroline, Guam, Mariana, Marshall, American Samoa, and Wake. Data for additional years are available. See [Appendix III](#).

**SOURCES:** American Medical Association (AMA). *Distribution of physicians in the United States, 1970*; *Physician distribution and medical licensure in the U.S., 1975*; *Physician characteristics and distribution in the U.S., 1981, 1986, 1989, 1990, 1992, 1993, 1994, 1995–1996, 1996–1997, 1997–1998, 1999, 2000–2001, 2001–2002, 2002–2003, 2003–2004, 2004, 2005, 2006, 2007, 2008* editions, Department of Physician Practice and Communications Information, Division of Survey and Data Resources, AMA. (Copyrights 1971, 1976, 1982, 1986, 1989, 1990, 1992, 1993, 1994, 1996, 1997, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008: Used with the permission of the AMA.)



**Table 111. Doctors of medicine in primary care, by specialty: United States and outlying U.S. areas, selected years 1949–2006**

[Data are based on reporting by physicians]

Specialty	1949 <sup>1</sup>	1960 <sup>1</sup>	1970	1980	1990	1995	2000	2002	2005	2006
	Number									
Total doctors of medicine <sup>2</sup>	201,277	260,484	334,028	467,679	615,421	720,325	813,770	853,187	902,053	921,904
Active doctors of medicine <sup>3</sup>	191,577	247,257	310,845	414,916	547,310	625,443	692,368	719,431	762,438	766,836
General primary care specialists	113,222	125,359	134,354	170,705	213,514	241,329	274,653	286,294	300,022	300,907
General practice/family medicine	95,980	88,023	57,948	60,049	70,480	75,976	86,312	89,357	91,858	92,371
Internal medicine	12,453	26,209	39,924	58,462	76,295	88,240	101,353	106,499	112,934	113,340
Obstetrics/Gynecology	---	---	18,532	24,612	30,220	33,519	35,922	36,810	38,285	37,996
Pediatrics	4,789	11,127	17,950	27,582	36,519	43,594	51,066	53,628	56,945	57,200
Primary care subspecialists	---	---	3,161	16,642	30,911	39,659	52,294	57,929	65,420	67,519
Family medicine	---	---	---	---	---	236	483	627	835	938
Internal medicine	---	---	1,948	13,069	22,054	26,928	34,831	38,821	43,552	44,914
Obstetrics/Gynecology	---	---	344	1,693	3,477	4,133	4,319	4,228	4,315	4,337
Pediatrics	---	---	869	1,880	5,380	8,362	12,661	14,253	16,718	17,330
	Percent of active doctors of medicine									
General primary care specialists	59.1	50.7	43.2	41.1	39.0	38.6	39.7	39.8	39.4	39.2
General practice/family medicine	50.1	35.6	18.6	14.5	12.9	12.1	12.5	12.4	12.0	12.0
Internal medicine	6.5	10.6	12.8	14.1	13.9	14.1	14.6	14.8	14.8	14.8
Obstetrics/Gynecology	---	---	6.0	5.9	5.5	5.4	5.2	5.1	5.0	5.0
Pediatrics	2.5	4.5	5.8	6.6	6.7	7.0	7.4	7.5	7.5	7.5
Primary care subspecialists	---	---	1.0	4.0	5.6	6.3	7.6	8.1	8.6	8.8
Family medicine	---	---	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
Internal medicine	---	---	0.6	3.1	4.0	4.3	5.0	5.4	5.7	5.9
Obstetrics/Gynecology	---	---	0.1	0.4	0.6	0.7	0.6	0.6	0.6	0.6
Pediatrics	---	---	0.3	0.5	1.0	1.3	1.8	2.0	2.2	2.3

0.0 Percent greater than zero but less than 0.05.

--- Data not available.

<sup>1</sup>Estimated by the Bureau of Health Professions, Health Resources Administration. Active doctors of medicine (M.D.s) include those with address unknown and primary specialty not classified.

<sup>2</sup>Includes M.D.s engaged in federal and nonfederal patient care (office-based or hospital-based) and other professional activities.

<sup>3</sup>Starting with 1970 data, M.D.s who are inactive, have unknown address, or primary specialty not classified are excluded. See related Table 110. See [Appendix II, Physician](#).

NOTES: See [Appendix II, Physician specialty](#). Data are as of December 31 except for 1990–1994 data, which are as of January 1, and 1949 data, which are as of midyear. Outlying areas include Puerto Rico, the U.S. Virgin Islands, and the Pacific islands of Canton, Caroline, Guam, Mariana, Marshall, American Samoa, and Wake. Data have been revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCES: Health Manpower Source Book: Medical Specialists, USDHEW, 1962; American Medical Association (AMA). Distribution of physicians in the United States, 1970; Physician characteristics and distribution in the U.S., 1981, 1992, 1996–1997, 1997–1998, 1999, 2000–2001, 2001–2002, 2002–2003, 2003–2004, 2004, 2005, 2006, 2007, 2008 editions, Department of Physician Practice and Communications Information, Division of Survey and Data Resources, AMA. (Copyrights 1971, 1982, 1992, 1996, 1997, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008: Used with the permission of the AMA.)

**Table 112. Employees and wages, by selected healthcare occupations: United States, selected years 1999–2006**

[Data are based on a semi-annual mail survey of nonfarm establishments]

Occupation title	1999	2002	2004	2006	1999–2006	1999	2002	2004	2006	1999–2006
<b>Healthcare practitioner and technical occupations</b>										
	Number of employees <sup>1</sup>				AAPC <sup>2</sup>	Mean hourly wage <sup>3</sup>				AAPC <sup>2</sup>
Audiologists . . . . .	12,950	10,180	9,810	10,910	-2.4	\$21.96	\$24.92	\$26.47	\$29.38	4.2
Cardiovascular Technologists and Technicians . . . . .	41,490	42,870	43,540	43,870	0.8	\$16.00	\$18.12	\$19.09	\$21.15	4.1
Dental Hygienists . . . . .	90,050	148,530	155,810	166,380	9.2	\$23.15	\$27.78	\$28.58	\$30.01	3.8
Diagnostic Medical Sonographers . . . . .	29,280	36,530	41,280	44,340	6.1	\$21.04	\$23.90	\$25.78	\$27.94	4.1
Dietetic Technicians . . . . .	29,190	28,910	24,630	24,450	-2.5	\$10.09	\$11.59	\$11.89	\$12.55	3.2
Dietitians and Nutritionists . . . . .	41,320	45,150	46,530	51,230	3.1	\$17.96	\$20.16	\$21.46	\$23.02	3.6
Emergency Medical Technicians and Paramedics . . . . .	172,360	178,700	187,900	196,190	1.9	\$11.19	\$12.78	\$13.30	\$14.13	3.4
Licensed Practical and Licensed Vocational Nurse . . . . .	688,510	692,290	702,740	720,380	0.6	\$13.95	\$15.53	\$16.75	\$18.05	3.7
Nuclear Medicine Technologists . . . . .	17,880	17,090	17,520	19,270	1.1	\$20.40	\$25.13	\$29.43	\$30.29	5.8
Occupational Therapists . . . . .	78,950	78,580	83,560	88,570	1.7	\$24.96	\$25.50	\$27.19	\$30.05	2.7
Opticians, Dispensing . . . . .	58,860	61,790	62,350	65,190	1.5	\$12.11	\$13.38	\$14.37	\$15.49	3.6
Pharmacists . . . . .	226,300	219,390	222,960	239,920	0.8	\$30.31	\$36.13	\$40.56	\$44.95	5.8
Pharmacy Technicians . . . . .	196,430	207,380	255,290	282,450	5.3	\$ 9.64	\$11.15	\$11.87	\$12.75	4.1
Physical Therapists . . . . .	131,050	130,290	142,940	156,100	2.5	\$28.05	\$28.93	\$30.00	\$32.72	2.2
Physician Assistants . . . . .	56,750	61,910	59,470	62,960	1.5	\$24.35	\$30.53	\$33.07	\$35.71	5.6
Psychiatric Technicians . . . . .	54,560	58,600	59,010	58,940	1.1	\$11.30	\$13.49	\$13.43	\$14.64	3.8
Radiation Therapists . . . . .	12,340	13,510	14,470	14,290	2.1	\$20.84	\$28.90	\$29.05	\$32.49	6.5
Radiologic Technologists and Technicians . . . . .	177,850	173,540	177,220	190,180	1.0	\$17.07	\$19.30	\$21.41	\$23.71	4.8
Recreational Therapists . . . . .	30,190	26,130	23,050	24,130	-3.2	\$14.08	\$15.23	\$16.48	\$17.55	3.2
Registered Nurses . . . . .	2,205,430	2,239,530	2,311,970	2,417,150	1.3	\$21.38	\$23.96	\$26.06	\$28.71	4.3
Respiratory Therapists . . . . .	80,230	85,350	91,350	99,330	3.1	\$17.72	\$19.57	\$21.24	\$23.37	4.0
Respiratory Therapy Technicians . . . . .	33,990	26,220	24,190	18,710	-8.2	\$16.07	\$16.79	\$18.00	\$19.17	2.6
Speech-Language Pathologists . . . . .	85,920	87,030	89,260	98,690	2.0	\$22.99	\$24.75	\$26.71	\$29.25	3.5
<b>Healthcare support occupations</b>										
Dental Assistants . . . . .	175,160	268,220	264,820	277,040	6.8	\$11.60	\$13.42	\$13.97	\$14.83	3.6
Home Health Aides . . . . .	577,530	569,670	596,330	751,480	3.8	\$ 9.04	\$ 9.16	\$ 9.13	\$ 9.66	1.0
Massage Therapists . . . . .	21,910	27,160	32,200	41,920	9.7	\$13.82	\$16.21	\$17.63	\$18.93	4.6
Medical Assistants . . . . .	281,480	361,960	380,340	409,570	5.5	\$10.89	\$11.93	\$12.21	\$13.07	2.6
Medical Equipment Preparers . . . . .	29,070	35,490	40,380	42,740	5.7	\$10.20	\$11.50	\$12.14	\$12.97	3.5
Medical Transcriptionists . . . . .	97,260	99,160	92,740	86,790	-1.6	\$11.86	\$13.33	\$14.01	\$14.74	3.2
Nursing Aides, Orderlies, and Attendants . . . . .	1,308,740	1,329,310	1,384,120	1,376,660	0.7	\$ 8.59	\$ 9.87	\$10.39	\$11.04	3.6
Occupational Therapist Aides . . . . .	9,250	8,040	5,240	7,780	-2.4	\$10.92	\$11.78	\$12.51	\$13.35	2.9
Occupational Therapist Assistants . . . . .	17,290	17,970	20,880	23,700	4.6	\$15.97	\$17.76	\$18.49	\$20.25	3.5
Pharmacy Aides . . . . .	48,270	58,020	47,720	47,810	-0.1	\$ 9.14	\$ 9.47	\$ 9.52	\$10.07	1.4
Physical Therapist Aides . . . . .	44,340	37,330	41,910	45,520	0.4	\$ 9.69	\$10.63	\$11.14	\$11.20	2.1
Physical Therapist Assistants . . . . .	48,600	50,430	57,420	59,350	2.9	\$16.20	\$17.48	\$18.14	\$19.91	3.0
Psychiatric Aides . . . . .	51,100	56,260	54,520	57,000	1.6	\$10.76	\$11.42	\$11.70	\$12.01	1.6

<sup>1</sup>Estimates do not include self-employed workers and were rounded to the nearest 10.

<sup>2</sup>Average annual percent change. See [Appendix II, Average annual rate of change \(percentage change\)](#).

<sup>3</sup>The mean hourly wage rate for an occupation is the total wages that all workers in the occupation earn in an hour divided by the total employment of the occupation.

More information is available from: [http://www.bls.gov/oes/current/oes\\_tec.htm](http://www.bls.gov/oes/current/oes_tec.htm).

NOTES: This table excludes occupations such as dentists, physicians, and chiropractors, with a large percentage of workers who are self-employed and/or not employed by establishments. Data for additional years are available. See [Appendix III](#).

SOURCE: U.S. Department of Labor. Bureau of Labor Statistics. Occupational Employment Statistics. Available from: <http://www.bls.gov/oes>.

**Table 113. First-year enrollment and graduates of health professions schools, and number of schools, by selected profession: United States, selected years 1980–2006**

[Data are based on reporting by health professions associations]

Profession	1980	1985	1990	1995	2000	2003	2006
<b>First-year enrollment</b>							
Dentistry	6,132	5,047	3,979	4,121	4,314	4,448	4,688
Medicine (Allopathic) <sup>1</sup>	16,930	16,997	16,756	17,085	---	16,953	17,376
Medicine (Osteopathic)	1,426	1,750	1,844	2,217	2,848	3,079	3,908
<b>Nursing:</b>							
Baccalaureate	---	---	---	---	103,999	126,981	180,127
Generic (entry-level) baccalaureate	---	---	---	---	72,986	95,766	133,578
Registered nurse-to-baccalaureate	---	---	---	---	31,013	31,215	46,549
Master's	---	---	---	---	31,862	37,241	56,028
Doctoral	---	---	---	---	3,024	3,229	3,927
Optometry <sup>1</sup>	1,202	1,187	1,258	1,390	1,410	1,416	1,434
Pharmacy <sup>1,2</sup>	8,035	6,986	8,267	8,740	8,382	9,909	10,992
Podiatry <sup>3</sup>	695	811	561	630	606	419	552
Public Health <sup>1,4</sup>	---	---	4,392	5,332	5,840	6,786	7,382
<b>Graduates</b>							
Dentistry	5,256	5,353	4,233	3,908	4,171	4,443	4,515
Medicine (Allopathic) <sup>1</sup>	15,113	16,318	15,398	15,883	15,718	15,540	15,925
Medicine (Osteopathic)	1,059	1,474	1,529	1,843	2,279	2,607	2,849
<b>Nursing:</b>							
Baccalaureate	---	---	---	---	34,618	33,477	51,083
Generic (entry-level) baccalaureate	---	---	---	---	23,102	23,621	37,851
Registered nurse-to-baccalaureate	---	---	---	---	11,516	9,856	13,232
Master's	---	---	---	---	10,272	10,030	13,470
Doctoral	---	---	---	---	444	402	437
Optometry <sup>1</sup>	1,073	1,114	1,115	1,219	1,315	1,305	1,220
Pharmacy <sup>1</sup>	7,432	5,735	6,956	7,837	7,260	7,488	9,040
Podiatry	597	582	679	558	583	436	348
Public Health <sup>1</sup>	3,326	3,047	3,549	4,636	5,879	5,906	6,792
<b>Schools</b>							
Dentistry	60	60	58	54	55	56	56
Medicine (Allopathic) <sup>1</sup>	126	127	127	125	125	126	126
Medicine (Osteopathic)	14	15	15	16	19	19	20
<b>Nursing:<sup>5</sup></b>							
Baccalaureate	---	---	---	---	---	673	709
Generic (entry-level) baccalaureate	---	---	---	---	---	566	585
Registered nurse-to-baccalaureate	---	---	---	---	---	611	629
Master's	---	---	---	---	---	400	448
Doctoral	---	---	---	---	---	88	103
Optometry <sup>1</sup>	16	17	17	17	17	17	17
Pharmacy <sup>1</sup>	72	72	74	75	81	89	100
Podiatry	5	7	7	7	7	7	7
Public Health <sup>1</sup>	21	23	25	27	28	33	37

--- Data not available.

<sup>1</sup>Include data from schools in Puerto Rico.

<sup>2</sup>Starting with 2005 data, first-year enrollment for pharmacy schools include Pharm.D.1 enrollments only. Prior to 2005, first-year enrollment data include both Pharm.D.1, B.S. Pharmacy, and B.Pharm. enrollments.

<sup>3</sup>First-year enrollment data for podiatry from 1980 to 1995 are reported as of the beginning of the academic year.

<sup>4</sup>Number of students entering Schools of Public Health for the first time. Starting with 2003–2004 data, first-year enrollment data for public health schools include Spring, Summer, and Fall enrollment. Prior to 2003–2004, the data are for Fall enrollment only and are not directly comparable to 2003–2004 data.

<sup>5</sup>Some nursing schools offer more than one type of program. Numbers shown for nursing are number of nursing programs. Data shown for Doctoral program excludes Doctor of Nursing (ND) program.

NOTES: Data on the number of schools are reported as of the beginning of the academic year while data on first-year enrollment and number of graduates are reported as of the end of the academic year. Optometry, pharmacy, podiatry, and public health data on first-year enrollment are reported as of the beginning of the academic year. Some numbers in this table have been revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

**SOURCES:** Association of American Medical Colleges: AAMC Data Book, Medical Schools and Teaching Hospitals by the Numbers, Washington, DC. 2004, 2005, 2006 (Copyright 2005, 2006, 2007: Used with the permission of the AAMC) and unpublished data. Bureau of Health Professions: United States Health Personnel FACTBOOK. Health Resources and Services Administration. Rockville, MD. 2003; National League for Nursing: unpublished data; American Dental Association: 2006–2007 Survey of Predoctoral Dental Education, vol. 1, Academic Programs, Enrollments, and Graduates, Chicago, IL. 2008 (Copyright 2008: Used with the permission of the ADA), Annual U.S. Dental Education at-a-Glance (available from: <http://www.adea.org>), and unpublished data; American Association of Colleges of Osteopathic Medicine. Annual Report on Osteopathic Medical Education, Chevy Chase, MD, available from: <http://www.aacom.org>; Association of Schools of Public Health: Annual Data Reports. Washington, DC., available from: <http://www.asph.org/document.cfm?page=749>; Association of Schools and Colleges of Optometry: Annual Student Data Report Academic Years 2003–2004, 2005–2006 and unpublished data; (Copyright 2006: Used with permission of the ASCO); American Association of Colleges of Pharmacy: Academic Pharmacy's Vital Statistics, Profile of Pharmacy Students, Fall 2006 (available from: <http://www.aacp.org>) and unpublished data; American Association of Colleges of Podiatric Medicine: unpublished data; American Medical Association: Health Professions Career and Education Directory, 29th edition. Chicago, IL. 2001. American Association of Colleges of Nursing. Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing. Washington, DC. 1997, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007. (Copyright 2008: Used with the permission of the American Association of Colleges of Nursing.)

**Table 114 (page 1 of 2). Total enrollment of minorities in schools for selected health occupations, by race and Hispanic origin: United States, selected academic years 1980–1981 through 2005–2006**

[Data are based on reporting by health professions associations]

<i>Occupation, race, and Hispanic origin</i>	1980–1981	1990–1991	2005–2006	1980–1981	1990–1991	2005–2006
<b>Dentistry</b>	Number of students			Percent distribution of students		
All races <sup>1</sup> . . . . .	22,842	15,951	18,610	100.0	100.0	100.0
Not Hispanic or Latino:						
White . . . . .	19,947	11,185	11,666	87.3	70.1	62.7
Black or African American . . . . .	1,022	940	1,060	4.5	5.9	5.7
Hispanic or Latino <sup>2</sup> . . . . .	780	1,254	1,060	3.4	7.9	5.7
American Indian or Alaska Native . . . . .	53	53	101	0.2	0.3	0.5
Asian or Pacific Islander . . . . .	1,040	2,519	4,090	4.6	15.8	22.0
<b>Medicine (Allopathic)<sup>3</sup></b>						
All races <sup>1</sup> . . . . .	65,189	65,163	68,343	100.0	100.0	100.0
Not Hispanic or Latino:						
White . . . . .	55,434	47,893	43,125	85.0	73.5	63.1
Black or African American . . . . .	3,708	4,241	5,023	5.7	6.5	7.3
Hispanic or Latino . . . . .	2,761	3,538	5,059	4.2	5.4	7.4
Mexican . . . . .	951	1,109	1,701	1.5	1.7	2.5
Puerto Rican . . . . .	1,012	1,253	1,308	1.6	1.9	1.9
Other Hispanic or Latino <sup>4</sup> . . . . .	683	1,176	2,050	1.0	1.8	3.0
American Indian or Alaska Native <sup>5</sup> . . . . .	221	277	628	0.3	0.4	0.9
Asian or Pacific Islander . . . . .	1,924	8,436	14,358	3.0	12.9	21.0
<b>Medicine (Osteopathic)</b>						
All races <sup>1</sup> . . . . .	4,940	6,792	13,406	100.0	100.0	100.0
White, Non-Hispanic . . . . .	4,688	5,680	9,637	94.9	83.6	71.9
Black or African American . . . . .	94	217	517	1.9	3.2	3.9
Hispanic or Latino . . . . .	52	277	519	1.1	4.1	3.9
American Indian or Alaska Native . . . . .	19	36	111	0.4	0.5	0.8
Asian or Pacific Islander . . . . .	87	582	2,126	1.8	8.6	15.9
<b>Nursing, Baccalaureate<sup>6</sup></b>						
All races <sup>1</sup> . . . . .	---	69,448	148,944	---	100.0	100.0
White . . . . .	---	58,610	113,282	---	84.4	76.1
Black or African American . . . . .	---	6,862	18,007	---	9.9	12.1
Hispanic or Latino . . . . .	---	1,913	7,795	---	2.8	5.2
American Indian or Alaska Native . . . . .	---	391	1,147	---	0.6	0.8
Asian or Pacific Islander . . . . .	---	1,672	8,713	---	2.4	5.8
<b>Optometry</b>						
All races <sup>1</sup> . . . . .	4,641	4,760	5,377	100.0	100.0	100.0
Not Hispanic or Latino:						
White . . . . .	4,221	3,706	3,399	91.0	77.9	63.2
Black or African American . . . . .	57	134	189	1.2	2.8	3.5
Hispanic or Latino . . . . .	108	296	273	2.3	6.2	5.1
American Indian or Alaska Native . . . . .	12	21	29	0.3	0.4	0.5
Asian or Pacific Islander . . . . .	243	603	1,266	5.2	12.7	23.5
<b>Pharmacy<sup>7</sup></b>						
All races <sup>1</sup> . . . . .	21,628	29,797	46,527	100.0	100.0	100.0
Not Hispanic or Latino:						
White . . . . .	19,153	21,717	27,860	88.6	80.5	59.9
Black or African American . . . . .	945	2,103	3,703	4.4	5.7	8.0
Hispanic or Latino . . . . .	459	1,118	1,778	2.1	4.2	3.8
American Indian or Alaska Native . . . . .	36	85	234	0.2	0.3	0.5
Asian or Pacific Islander . . . . .	1,035	3,346	9,690	4.8	9.4	20.8

See footnotes at end of table.

**Table 114 (page 2 of 2). Total enrollment of minorities in schools for selected health occupations, by race and Hispanic origin: United States, selected academic years 1980–1981 through 2005–2006**

[Data are based on reporting by health professions associations]

<i>Occupation, race, and Hispanic origin</i>	1980–1981	1990–1991	2005–2006	1980–1981	1990–1991	2005–2006
Podiatry	Number of students			Percent distribution of students		
All races <sup>1</sup> . . . . .	2,577	2,221	1,702	100.0	100.0	100.0
Not Hispanic or Latino:						
White . . . . .	2,353	1,671	1,046	91.3	75.2	61.5
Black or African American . . . . .	110	235	239	4.3	10.6	14.0
Hispanic or Latino . . . . .	39	149	117	1.5	6.7	6.9
American Indian or Alaska Native . . . . .	6	7	11	0.2	0.3	0.6
Asian or Pacific Islander . . . . .	69	159	184	2.7	7.2	10.8

--- Data not available.

<sup>1</sup>Includes other and unknown races; may also include foreign students.

<sup>2</sup>Includes students from the University of Puerto Rico.

<sup>3</sup>Starting with 2002–2003 data, allopathic medical students had the option of reporting both their race and ethnicity alone or in combination with some other race or ethnicity, allowing multiple responses. Total enrollments only include unduplicated number of enrollments. Therefore, the data for 2003–2004 and subsequent years are not directly comparable to earlier years.

<sup>4</sup>Includes Cuban students.

<sup>5</sup>Starting with 1997–1998 data, includes American Indian, Alaska Native, and Native Hawaiian; prior to 1997, included only American Indian and Alaska Native.

<sup>6</sup>Data are for generic (entry-level) or registered nurses seeking the baccalaureate degree. An evaluation of the former system revealed considerable underreporting. Therefore, race-specific data before 1990 are not comparable and not shown. Additional changes in the minority data question were introduced in academic years 2000–2001 and 2001–2002, resulting in a discontinuity in the trend.

<sup>7</sup>Prior to 1992–1993, pharmacy total enrollment data were only for students in the final three years of pharmacy education. Starting with 1992–1993 data, pharmacy data are for all students.

NOTES: Total enrollment data are collected at the beginning of the academic year. Data for chiropractic students, occupational and physical therapy students, and public health students were not available for this table. Some numbers have been revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

**SOURCES:** Bureau of Health Professions: *Minorities and Women in the Health Fields*, 1990 Edition; Association of American Medical Colleges: *AAMC Data Book: Medical Schools and Teaching Hospitals by the Numbers*. Washington, DC. 2005, 2006 (Copyrights 2006, 2007: Used with the permission of the AAMC); American Association of Colleges of Osteopathic Medicine: *2006 Annual Report on Osteopathic Medical Education*. Chevy Chase, MD. 2007. Available from: <http://www.aacom.org> (Copyright 2007: Used with the permission of the AACOM); American Dental Education Association: *2006–2007 Survey of Dental Education*, vol. 1, Academic Programs, Enrollments, and Graduates, Chicago, IL. 2008; (Copyright 2008: Used with the permission of the ADA) and unpublished data; Association of Schools and Colleges of Optometry: *Annual Student Data Report Academic Year 2002–2004, 2005–2006, 2006–2007*, and unpublished data (Copyright 2005, 2006, 2007: Used with the permission of the ASCO); American Association of Colleges of Pharmacy: *Profile of Pharmacy Students*, Fall 2006, available from: <http://www.aacp.org>; American Association of Colleges of Podiatric Medicine: unpublished data; American Association of Colleges of Nursing: *Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing*. Washington, DC. 1991, 2001, 2002, 2003, 2004, 2005, 2006, 2007 (Copyright 1008: Used with the permissions of the AACN).

**Table 115. First-year and total enrollment of women in schools for selected health occupations: United States, selected academic years 1980–1981 through 2005–2006**

[Data are based on reporting by health professions associations]

Enrollment and occupation	Both sexes			Women		
	1980–1981	1990–1991	2005–2006 <sup>1</sup>	1980–1981	1990–1991 <sup>2</sup>	2005–2006 <sup>1</sup>
First-year enrollment	Number of students			Percent of students		
Dentistry . . . . .	6,030	4,001	4,688	19.8	38.0	44.3
Medicine (Allopathic) <sup>3</sup> . . . . .	17,186	16,876	17,376	28.9	38.8	48.4
Medicine (Osteopathic) . . . . .	1,496	1,950	3,908	22.0	34.2	49.8
Nurses <sup>4</sup> . . . . .	---	---	---	---	---	---
Optometry <sup>3</sup> . . . . .	1,258	1,239	1,429	25.3	50.6	64.9
Pharmacy <sup>3,5</sup> . . . . .	7,377	8,267	10,506	48.4	---	64.6
Podiatry . . . . .	695	561	552	---	28.0	46.9
Public Health <sup>3,6</sup> . . . . .	3,348	4,289	7,382	---	62.1	69.8
Total enrollment						
Dentistry . . . . .	22,842	15,951	18,610	17.0	34.4	44.3
Medicine (Allopathic) <sup>3</sup> . . . . .	65,189	65,163	68,008	26.5	37.3	48.8
Medicine (Osteopathic) . . . . .	4,940	6,792	13,406	19.7	32.7	49.6
Nurses <sup>4</sup> . . . . .	---	---	177,822	---	---	90.1
Optometry <sup>3</sup> . . . . .	4,641	4,760	5,377	---	47.3	63.1
Pharmacy <sup>3,5</sup> . . . . .	26,617	29,797	46,527	47.4	62.4	65.5
Podiatry . . . . .	2,577	2,154	1,702	11.9	28.9	47.4
Public Health <sup>3,6</sup> . . . . .	8,486	11,386	19,443	55.2	62.5	70.6

--- Data not available.

<sup>1</sup>Starting with 2003–2004 data, osteopathic medicine data include the students of the Edward Via Virginia College of Osteopathic Medicine.

<sup>2</sup>Percentage of women podiatry students is for 1991–1992.

<sup>3</sup>Include data from schools in Puerto Rico.

<sup>4</sup>Data are for generic (entry-level) or registered nurses seeking the baccalaureate degree. Data for first-year enrollment are not available.

<sup>5</sup>First-year enrollment data for pharmacy schools are for students in the first year of the final three years of pharmacy education. Prior to 1992–1993, pharmacy total enrollment data were for students in the final three years of pharmacy education. Starting in 1992–1993, pharmacy total enrollment data are for all students.

<sup>6</sup>For 2003–2004 data, first-year enrollment data for public health schools include Spring, Summer, and Fall enrollment. All other years of data including 2004–2005 are for Fall enrollment only and are not directly comparable to 2003–2004 data.

NOTES: Total enrollment data are collected at the beginning of the academic year while first-year enrollment data are collected during the academic year. Data for chiropractic students and occupational, physical, and speech therapy students were not available for this table. Some numbers in this table have been revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

**SOURCES:** Association of American Medical Colleges: AAMC Data Book: Medical Schools and Teaching Hospitals by the Numbers. Washington, DC. 2004, 2005, 2006 (Copyrights 2005, 2006, 2007: Used with the permission of the AAMC); American Association of Colleges of Osteopathic Medicine: 2006 Annual Report on Osteopathic Medical Education. Chevy Chase, MD. 2007, available from: <http://www.aacom.org>; Bureau of Health Professions: Minorities and Women in the Health Fields, 1990 edition; American Dental Association: 2006–2007 Survey of Dental Education, vol.1, Academic Programs, Enrollments, and Graduates, Chicago, IL. 2008 (Copyright 2008: Used with the permission of the ADA) and unpublished data; Association of Schools and Colleges of Optometry: Annual Student Data Report Academic Years 2003–2004, 2005–2006 and unpublished data (Copyright 2006: Used with the permission of the ASCO); American Association of Colleges of Pharmacy: Profile of Pharmacy Students, Fall 2005, available from: <http://www.aacp.org>, and unpublished data; American Association of Colleges of Podiatric Medicine: unpublished data; American Association of Colleges of Nursing. Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing. Washington, DC. 2002, 2003, 2004, 2007 (Copyright 2008: Used with the permission of the American Association of Colleges of Nursing); Association of Schools of Public Health: Annual Data Report. Washington, DC. Available from: <http://www.asph.org/document.cfm?page=749>.



**Table 116. Hospitals, beds, and occupancy rates, by type of ownership and size of hospital: United States, selected years 1975–2006**

[Data are based on reporting by a census of hospitals]

Type of ownership and size of hospital	1975	1980	1990	1995	2000	2003	2006
<b>Hospitals</b>							
	Number						
All hospitals . . . . .	7,156	6,965	6,649	6,291	5,810	5,764	5,747
Federal . . . . .	382	359	337	299	245	239	221
Nonfederal <sup>1</sup> . . . . .	6,774	6,606	6,312	5,992	5,565	5,525	5,526
Community <sup>2</sup> . . . . .	5,875	5,830	5,384	5,194	4,915	4,895	4,927
Nonprofit . . . . .	3,339	3,322	3,191	3,092	3,003	2,984	2,919
For profit . . . . .	775	730	749	752	749	790	889
State-local government . . . . .	1,761	1,778	1,444	1,350	1,163	1,121	1,119
6–24 beds . . . . .	299	259	226	278	288	327	375
25–49 beds . . . . .	1,155	1,029	935	922	910	965	1,066
50–99 beds . . . . .	1,481	1,462	1,263	1,139	1,055	1,031	969
100–199 beds . . . . .	1,363	1,370	1,306	1,324	1,236	1,168	1,117
200–299 beds . . . . .	678	715	739	718	656	624	607
300–399 beds . . . . .	378	412	408	354	341	349	354
400–499 beds . . . . .	230	266	222	195	182	172	180
500 beds or more . . . . .	291	317	285	264	247	256	259
<b>Beds</b>							
All hospitals . . . . .	1,465,828	1,364,516	1,213,327	1,080,601	983,628	965,256	947,412
Federal . . . . .	131,946	117,328	98,255	77,079	53,067	47,456	46,691
Nonfederal <sup>1</sup> . . . . .	1,333,882	1,247,188	1,115,072	1,003,522	930,561	917,800	900,721
Community <sup>2</sup> . . . . .	941,844	988,387	927,360	872,736	823,560	813,307	802,658
Nonprofit . . . . .	658,195	692,459	656,755	609,729	582,988	574,587	559,216
For profit . . . . .	73,495	87,033	101,377	105,737	109,883	109,671	115,337
State-local government . . . . .	210,154	208,895	169,228	157,270	130,689	129,049	128,105
6–24 beds . . . . .	5,615	4,932	4,427	5,085	5,156	5,635	6,446
25–49 beds . . . . .	41,783	37,478	35,420	34,352	33,333	33,613	34,217
50–99 beds . . . . .	106,776	105,278	90,394	82,024	75,865	74,025	69,408
100–199 beds . . . . .	192,438	192,892	183,867	187,381	175,778	167,451	160,426
200–299 beds . . . . .	164,405	172,390	179,670	175,240	159,807	152,487	148,541
300–399 beds . . . . .	127,728	139,434	138,938	121,136	117,220	119,903	121,747
400–499 beds . . . . .	101,278	117,724	98,833	86,459	80,763	76,333	79,732
500 beds or more . . . . .	201,821	218,259	195,811	181,059	175,638	183,860	182,141
<b>Occupancy rate<sup>3</sup></b>							
	Percent						
All hospitals . . . . .	76.7	77.7	69.5	65.7	66.1	68.1	68.9
Federal . . . . .	80.7	80.1	72.9	72.6	68.2	64.8	66.4
Nonfederal <sup>1</sup> . . . . .	76.3	77.4	69.2	65.1	65.9	68.3	69.1
Community <sup>2</sup> . . . . .	75.0	75.6	66.8	62.8	63.9	66.2	67.1
Nonprofit . . . . .	77.5	78.2	69.3	64.5	65.5	67.7	68.8
For profit . . . . .	65.9	65.2	52.8	51.8	55.9	59.6	58.7
State-local government . . . . .	70.4	71.1	65.3	63.7	63.2	65.3	67.4
6–24 beds . . . . .	48.0	46.8	32.3	36.9	31.7	31.9	32.9
25–49 beds . . . . .	56.7	52.8	41.3	42.6	41.3	44.6	47.2
50–99 beds . . . . .	64.7	64.2	53.8	54.1	54.8	57.2	57.6
100–199 beds . . . . .	71.2	71.4	61.5	58.8	60.0	62.6	63.0
200–299 beds . . . . .	77.1	77.4	67.1	63.1	65.0	67.0	67.7
300–399 beds . . . . .	79.7	79.7	70.0	64.8	65.7	68.5	69.4
400–499 beds . . . . .	81.1	81.2	73.5	68.1	69.1	70.7	71.7
500 beds or more . . . . .	80.9	82.1	77.3	71.4	72.2	74.2	75.2

<sup>1</sup>The category of nonfederal hospitals comprises psychiatric, tuberculosis and other respiratory diseases hospitals, and long-term and short-term general and other special hospitals. See [Appendix II, Hospital](#).

<sup>2</sup>Community hospitals are nonfederal short-term general and special hospitals whose facilities and services are available to the public. See [Appendix II, Hospital](#).

<sup>3</sup>Estimated percentage of staffed beds that are occupied. Occupancy rate is calculated as the average daily census (from the American Hospital Association) divided by the number of hospital beds. See [Appendix II, Occupancy rate](#).

**SOURCES:** American Hospital Association (AHA) Annual Survey of Hospitals. Hospital Statistics, 1976, 1981, 1991–2008 editions. Chicago, IL. (Copyrights 1976, 1981, 1991–2008: Used with the permission of Health Forum LLC, an affiliate of the AHA.)



**Table 117. Mental health organizations and beds for 24-hour hospital and residential treatment, by type of organization: United States, selected years 1986–2004**

[Data are based on inventories of mental health organizations]

Type of organization	1986	1990	1994	1998	2000	2002	2004
Number of mental health organizations							
All organizations . . . . .	3,512	3,942	3,853	3,741	3,211	3,044	2,891
State and county mental hospitals . . . . .	285	278	270	237	229	227	237
Private psychiatric hospitals . . . . .	314	464	432	347	271	255	264
Nonfederal general hospital psychiatric services . . . . .	1,351	1,577	1,539	1,595	1,325	1,231	1,230
Department of Veterans Affairs medical centers <sup>1</sup> . . . . .	139	131	136	124	134	132	---
Residential treatment centers for emotionally disturbed children . . . . .	437	501	472	462	476	510	458
All other organizations <sup>2</sup> . . . . .	986	991	1,004	976	776	689	702
Number of beds							
All organizations . . . . .	267,613	325,529	293,139	269,148	214,186	211,040	212,231
State and county mental hospitals . . . . .	119,033	102,307	84,063	71,266	61,833	57,314	57,034
Private psychiatric hospitals . . . . .	30,201	45,952	42,742	31,731	26,402	24,996	28,422
Nonfederal general hospital psychiatric services . . . . .	45,808	53,576	53,455	54,775	40,410	40,520	41,403
Department of Veterans Affairs medical centers <sup>1</sup> . . . . .	26,874	24,779	21,346	17,173	8,989	9,581	---
Residential treatment centers for emotionally disturbed children . . . . .	24,547	35,170	32,691	32,040	33,508	39,407	33,835
All other organizations <sup>2</sup> . . . . .	21,150	63,745	58,842	62,163	43,044	39,222	51,536
Beds per 100,000 civilian population <sup>3</sup>							
All organizations . . . . .	111.7	128.5	110.9	94.0	74.8	72.2	71.2
State and county mental hospitals . . . . .	49.7	40.4	31.8	24.9	21.6	19.6	19.1
Private psychiatric hospitals . . . . .	12.6	18.1	16.2	11.1	9.2	8.6	9.5
Nonfederal general hospital psychiatric services . . . . .	19.1	21.2	20.2	19.1	14.1	13.9	13.9
Department of Veterans Affairs medical centers <sup>1</sup> . . . . .	11.2	9.9	8.1	6.0	3.1	3.3	---
Residential treatment centers for emotionally disturbed children . . . . .	10.3	13.9	12.4	11.2	11.7	13.5	11.4
All other organizations <sup>2</sup> . . . . .	8.8	25.2	22.2	21.7	15.0	13.4	17.3

--- Data not available.

<sup>1</sup>Department of Veterans Affairs Medical Centers (VA general hospital psychiatric services and VA psychiatric outpatient clinics) were dropped from the survey as of 2004.

<sup>2</sup>Includes freestanding psychiatric outpatient clinics, partial care organizations, and multiservice mental health organizations. See [Appendix I, Survey of Mental Health Organizations \(SMHO\)](#).

<sup>3</sup>Civilian population estimates for 2000 and beyond are based on the 2000 census as of July 1; population estimates for 1992–1998 are 1990 postcensal estimates.

NOTES: Data for 1990, 1992, 1994, 1998, 2000, and 2002 are revised final estimates and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCE: Substance Abuse and Mental Health Services Administration, Center for Mental Health Services (CMHS), Survey of Mental Health Organizations.

**Table 118. Community hospital beds and average annual percentage change, by geographic division and state: United States, selected years 1960–2006**

[Data are based on reporting by a census of hospitals]

Geographic division and state	1960	1970	1980	1990	2000	2006	1960–1970	1970–1980	1980–1990	1990–2000	2000–2006
	Beds per 1,000 resident population <sup>1</sup>						Average annual percent change <sup>2</sup>				
United States . . . . .	3.6	4.3	4.5	3.7	2.9	2.7	1.8	0.5	-1.9	-2.4	-1.2
New England . . . . .	3.9	4.1	4.1	3.4	2.5	2.4	0.5	0.0	-1.9	-3.0	-0.7
Connecticut . . . . .	3.4	3.4	3.5	2.9	2.3	2.3	0.0	0.3	-1.9	-2.3	0.0
Maine . . . . .	3.4	4.7	4.7	3.7	2.9	2.6	3.3	0.0	-2.4	-2.4	-1.8
Massachusetts . . . . .	4.2	4.4	4.4	3.6	2.6	2.5	0.5	0.0	-2.0	-3.2	-0.7
New Hampshire . . . . .	4.4	4.0	3.9	3.1	2.3	2.1	-0.9	-0.3	-2.3	-2.9	-1.5
Rhode Island . . . . .	3.7	4.0	3.8	3.2	2.3	2.2	0.8	-0.5	-1.7	-3.2	-0.7
Vermont . . . . .	4.5	4.5	4.4	3.0	2.7	2.1	0.0	-0.2	-3.8	-1.0	-4.1
Middle Atlantic . . . . .	4.0	4.4	4.6	4.1	3.4	3.1	1.0	0.4	-1.1	-1.9	-1.5
New Jersey . . . . .	3.1	3.6	4.2	3.7	3.0	2.5	1.5	1.6	-1.3	-2.1	-3.0
New York . . . . .	4.3	4.6	4.5	4.1	3.5	3.3	0.7	-0.2	-0.9	-1.6	-1.0
Pennsylvania . . . . .	4.1	4.7	4.8	4.4	3.4	3.2	1.4	0.2	-0.9	-2.5	-1.0
East North Central . . . . .	3.6	4.4	4.7	3.9	2.9	2.7	2.0	0.7	-1.8	-2.9	-1.2
Illinois . . . . .	4.0	4.7	5.1	4.0	3.0	2.7	1.6	0.8	-2.4	-2.8	-1.7
Indiana . . . . .	3.1	4.0	4.5	3.9	3.2	2.9	2.6	1.2	-1.4	-2.0	-1.6
Michigan . . . . .	3.3	4.3	4.4	3.7	2.6	2.6	2.7	0.2	-1.7	-3.5	0.0
Ohio . . . . .	3.4	4.2	4.7	4.0	3.0	2.9	2.1	1.1	-1.6	-2.8	-0.6
Wisconsin . . . . .	4.3	5.2	4.9	3.8	2.9	2.5	1.9	-0.6	-2.5	-2.7	-2.4
West North Central . . . . .	4.3	5.7	5.8	4.9	3.9	3.5	2.9	0.2	-1.7	-2.3	-1.8
Iowa . . . . .	3.9	5.6	5.7	5.1	4.0	3.5	3.7	0.2	-1.1	-2.4	-2.2
Kansas . . . . .	4.2	5.4	5.8	4.8	4.0	3.6	2.5	0.7	-1.9	-1.8	-1.7
Minnesota . . . . .	4.8	6.1	5.7	4.4	3.4	3.1	2.4	-0.7	-2.6	-2.5	-1.5
Missouri . . . . .	3.9	5.1	5.7	4.8	3.6	3.2	2.7	1.1	-1.7	-2.8	-1.9
Nebraska . . . . .	4.4	6.2	6.0	5.5	4.8	4.2	3.5	-0.3	-0.9	-1.4	-2.2
North Dakota . . . . .	5.2	6.8	7.4	7.0	6.0	5.6	2.7	0.8	-0.6	-1.5	-1.1
South Dakota . . . . .	4.5	5.6	5.5	6.1	5.7	5.5	2.2	-0.2	1.0	-0.7	-0.6
South Atlantic . . . . .	3.3	4.0	4.5	3.7	2.9	2.7	1.9	1.2	-1.9	-2.4	-1.2
Delaware . . . . .	3.7	3.7	3.6	3.0	2.3	2.5	0.0	-0.3	-1.8	-2.6	1.4
District of Columbia . . . . .	5.9	7.4	7.3	7.6	5.8	6.2	2.3	-0.1	0.4	-2.7	1.1
Florida . . . . .	3.1	4.4	5.1	3.9	3.2	2.8	3.6	1.5	-2.6	-2.0	-2.2
Georgia . . . . .	2.8	3.8	4.6	4.0	2.9	2.6	3.1	1.9	-1.4	-3.2	-1.8
Maryland . . . . .	3.3	3.1	3.6	2.8	2.1	2.0	-0.6	1.5	-2.5	-2.8	-0.8
North Carolina . . . . .	3.4	3.8	4.2	3.3	2.9	2.6	1.1	1.0	-2.4	-1.3	-1.8
South Carolina . . . . .	2.9	3.7	3.9	3.3	2.9	2.7	2.5	0.5	-1.7	-1.3	-1.2
Virginia . . . . .	3.0	3.7	4.1	3.3	2.4	2.3	2.1	1.0	-2.1	-3.1	-0.7
West Virginia . . . . .	4.1	5.4	5.5	4.7	4.4	4.0	2.8	0.2	-1.6	-0.7	-1.6
East South Central . . . . .	3.0	4.4	5.1	4.7	3.8	3.6	3.9	1.5	-0.8	-2.1	-0.9
Alabama . . . . .	2.8	4.3	5.1	4.6	3.7	3.4	4.4	1.7	-1.0	-2.2	-1.4
Kentucky . . . . .	3.0	4.0	4.5	4.3	3.7	3.5	2.9	1.2	-0.5	-1.5	-0.9
Mississippi . . . . .	2.9	4.4	5.3	5.0	4.8	4.5	4.3	1.9	-0.6	-0.4	-1.1
Tennessee . . . . .	3.4	4.7	5.5	4.8	3.6	3.4	3.3	1.6	-1.4	-2.8	-0.9
West South Central . . . . .	3.3	4.3	4.7	3.8	3.0	2.8	2.7	0.9	-2.1	-2.3	-1.1
Arkansas . . . . .	2.9	4.2	5.0	4.6	3.7	3.3	3.8	1.8	-0.8	-2.2	-1.9
Louisiana . . . . .	3.9	4.2	4.8	4.6	3.9	3.7	0.7	1.3	-0.4	-1.6	-0.9
Oklahoma . . . . .	3.2	4.5	4.6	4.0	3.2	3.0	3.5	0.2	-1.4	-2.2	-1.1
Texas . . . . .	3.3	4.3	4.7	3.5	2.7	2.5	2.7	0.9	-2.9	-2.6	-1.3
Mountain . . . . .	3.5	4.3	3.8	3.1	2.3	2.1	2.1	-1.2	-2.0	-2.9	-1.5
Arizona . . . . .	3.0	4.1	3.6	2.7	2.1	1.9	3.2	-1.3	-2.8	-2.5	-1.7
Colorado . . . . .	3.8	4.6	4.2	3.2	2.2	2.0	1.9	-0.9	-2.7	-3.7	-1.6
Idaho . . . . .	3.2	4.0	3.7	3.2	2.7	2.3	2.3	-0.8	-1.4	-1.7	-2.6
Montana . . . . .	5.1	5.8	5.9	5.8	4.7	4.3	1.3	0.2	-0.2	-2.1	-1.5
Nevada . . . . .	3.9	4.2	4.2	2.8	1.9	1.9	0.7	0.0	-4.0	-3.8	0.0
New Mexico . . . . .	2.9	3.5	3.1	2.8	1.9	1.8	1.9	-1.2	-1.0	-3.8	-0.9
Utah . . . . .	2.8	3.6	3.1	2.6	1.9	1.8	2.5	-1.5	-1.7	-3.1	-0.9
Wyoming . . . . .	4.6	5.5	3.6	4.8	3.9	4.0	1.8	-4.1	2.9	-2.1	0.4
Pacific . . . . .	3.1	3.7	3.5	2.7	2.1	1.9	1.8	-0.6	-2.6	-2.5	-1.7
Alaska . . . . .	2.4	2.3	2.7	2.3	2.3	2.3	-0.4	1.6	-1.6	0.0	0.0
California . . . . .	3.0	3.8	3.6	2.7	2.1	1.9	2.4	-0.5	-2.8	-2.5	-1.7
Hawaii . . . . .	3.7	3.4	3.1	2.7	2.5	2.3	-0.8	-0.9	-1.4	-0.8	-1.4
Oregon . . . . .	3.5	4.0	3.5	2.8	1.9	1.8	1.3	-1.3	-2.2	-3.8	-0.9
Washington . . . . .	3.3	3.5	3.1	2.5	1.9	1.7	0.6	-1.2	-2.1	-2.7	-1.8

<sup>1</sup>Civilian population for 1997 and earlier years.

<sup>2</sup>See [Appendix II, Average annual rate of change \(percentage change\)](#).

NOTE: The types of facilities included in the category of community hospitals have changed over time. See [Appendix II, Hospital](#).

SOURCES: American Hospital Association (AHA): Hospitals. *JAHA* 35(15):383–430, 1961 (Copyright 1961: Used with permission of AHA); AHA Annual Survey of Hospitals for 1970 and 1980 unpublished; Hospital Statistics 1991–1992, 2001–2008 editions. Chicago, IL. (Copyrights 1971, 1981, 1991, 2001–2008: Used with permission of Health Forum LLC, an affiliate of the AHA.)

**Table 119. Occupancy rates in community hospitals and average annual percent change, by geographic division and state: United States, selected years 1960–2006**

[Data are based on reporting by a census of hospitals]

<i>Geographic division and state</i>	1960	1970	1980	1990	2000	2006	1960–1970	1970–1980	1980–1990	1990–2000	2000–2006
	Occupancy rate <sup>1</sup>						Average annual percent change <sup>2</sup>				
United States . . . . .	75	77	75	67	64	67	0.3	-0.3	-1.1	-0.5	0.8
New England . . . . .	75	80	80	74	70	74	0.6	0.0	-0.8	-0.6	0.9
Connecticut . . . . .	78	83	80	77	75	79	0.6	-0.4	-0.4	-0.3	0.9
Maine . . . . .	73	73	75	72	64	67	0.0	0.3	-0.4	-1.2	0.8
Massachusetts . . . . .	76	80	82	74	71	74	0.5	0.2	-1.0	-0.4	0.7
New Hampshire . . . . .	67	73	73	67	59	62	0.9	0.0	-0.9	-1.3	0.8
Rhode Island . . . . .	76	83	86	79	72	78	0.9	0.4	-0.8	-0.9	1.3
Vermont . . . . .	69	76	74	67	67	68	1.0	-0.3	-1.0	0.0	0.2
Middle Atlantic . . . . .	78	82	83	81	74	75	0.5	0.1	-0.2	-0.9	0.2
New Jersey . . . . .	78	83	83	80	69	72	0.6	0.0	-0.4	-1.5	0.7
New York . . . . .	79	83	86	86	79	80	0.5	0.4	0.0	-0.8	0.2
Pennsylvania . . . . .	76	82	80	73	68	70	0.8	-0.2	-0.9	-0.7	0.5
East North Central . . . . .	78	80	77	65	61	64	0.3	-0.4	-1.7	-0.6	0.8
Illinois . . . . .	76	79	75	66	60	65	0.4	-0.5	-1.3	-0.9	1.3
Indiana . . . . .	80	80	78	61	56	58	0.0	-0.3	-2.4	-0.9	0.6
Michigan . . . . .	81	81	78	66	65	66	0.0	-0.4	-1.7	-0.2	0.3
Ohio . . . . .	81	82	79	65	61	65	0.1	-0.4	-1.9	-0.6	1.1
Wisconsin . . . . .	74	73	74	65	60	62	-0.1	0.1	-1.3	-0.8	0.5
West North Central . . . . .	72	74	71	62	60	62	0.3	-0.4	-1.3	-0.3	0.5
Iowa . . . . .	73	72	69	62	58	59	-0.1	-0.4	-1.1	-0.7	0.3
Kansas . . . . .	69	71	69	56	53	55	0.3	-0.3	-2.1	-0.5	0.6
Minnesota . . . . .	72	74	74	67	67	68	0.3	0.0	-1.0	0.0	0.2
Missouri . . . . .	76	79	75	62	58	63	0.4	-0.5	-1.9	-0.7	1.4
Nebraska . . . . .	66	70	67	58	59	62	0.6	-0.4	-1.4	0.2	0.8
North Dakota . . . . .	71	67	69	64	60	59	-0.6	0.3	-0.7	-0.6	-0.3
South Dakota . . . . .	66	66	61	62	65	65	0.0	-0.8	0.2	0.5	0.0
South Atlantic . . . . .	75	78	76	67	65	69	0.4	-0.3	-1.3	-0.3	1.0
Delaware . . . . .	70	79	82	77	75	86	1.2	0.4	-0.6	-0.3	2.3
District of Columbia . . . . .	81	78	83	75	74	75	-0.4	0.6	-1.0	-0.1	0.2
Florida . . . . .	74	76	72	62	61	66	0.3	-0.5	-1.5	-0.2	1.3
Georgia . . . . .	72	77	70	66	63	69	0.7	-0.9	-0.6	-0.5	1.5
Maryland . . . . .	74	79	84	79	73	76	0.7	0.6	-0.6	-0.8	0.7
North Carolina . . . . .	74	79	78	73	70	72	0.7	-0.1	-0.7	-0.4	0.5
South Carolina . . . . .	77	76	77	71	69	72	-0.1	0.1	-0.8	-0.3	0.7
Virginia . . . . .	78	81	78	67	68	70	0.4	-0.4	-1.5	0.1	0.5
West Virginia . . . . .	75	79	76	63	61	61	0.5	-0.4	-1.9	-0.3	0.0
East South Central . . . . .	72	78	75	63	59	62	0.8	-0.4	-1.7	-0.7	0.8
Alabama . . . . .	71	80	73	63	60	62	1.2	-0.9	-1.5	-0.5	0.5
Kentucky . . . . .	73	80	77	62	62	61	0.9	-0.4	-2.1	0.0	-0.3
Mississippi . . . . .	63	74	71	59	59	57	1.6	-0.4	-1.8	0.0	-0.6
Tennessee . . . . .	76	78	76	64	56	65	0.3	-0.3	-1.7	-1.3	2.5
West South Central . . . . .	69	73	70	58	58	60	0.6	-0.4	-1.9	0.0	0.6
Arkansas . . . . .	70	74	70	62	59	57	0.6	-0.6	-1.2	-0.5	-0.6
Louisiana . . . . .	68	74	70	57	56	61	0.8	-0.6	-2.0	-0.2	1.4
Oklahoma . . . . .	71	73	68	58	56	59	0.3	-0.7	-1.6	-0.4	0.9
Texas . . . . .	68	73	70	57	59	61	0.7	-0.4	-2.0	0.3	0.6
Mountain . . . . .	70	71	70	61	61	64	0.1	-0.1	-1.4	0.0	0.8
Arizona . . . . .	74	73	74	62	63	69	-0.1	0.1	-1.8	0.2	1.5
Colorado . . . . .	81	74	72	64	58	62	-0.9	-0.3	-1.2	-1.0	1.1
Idaho . . . . .	56	66	65	56	53	56	1.7	-0.2	-1.5	-0.5	0.9
Montana . . . . .	60	66	66	61	67	65	1.0	0.0	-0.8	0.9	-0.5
Nevada . . . . .	71	73	69	60	71	74	0.3	-0.6	-1.4	1.7	0.7
New Mexico . . . . .	65	70	66	58	58	59	0.7	-0.6	-1.3	0.0	0.3
Utah . . . . .	70	74	70	59	56	59	0.6	-0.6	-1.7	-0.5	0.9
Wyoming . . . . .	61	63	57	54	56	56	0.3	-1.0	-0.5	0.4	0.0
Pacific . . . . .	71	71	69	64	65	70	0.0	-0.3	-0.7	0.2	1.2
Alaska . . . . .	54	59	58	50	57	54	0.9	-0.2	-1.5	1.3	-0.9
California . . . . .	74	71	69	64	66	72	-0.4	-0.3	-0.7	0.3	1.5
Hawaii . . . . .	62	76	75	85	76	78	2.1	-0.1	1.3	-1.1	0.4
Oregon . . . . .	66	69	69	57	59	63	0.4	0.0	-1.9	0.3	1.1
Washington . . . . .	63	70	72	63	60	62	1.1	0.3	-1.3	-0.5	0.5

<sup>1</sup>Estimated percent of staffed beds that are occupied. Occupancy rate is calculated as the average daily census (inpatient days divided by 365) divided by the number of hospital beds. See [Appendix II, Occupancy rate](#).

<sup>2</sup>See [Appendix II, Average annual rate of change \(percentage change\)](#).

NOTE: The types of facilities included in the category of community hospitals have changed over time. See [Appendix II, Hospital](#).

SOURCES: American Hospital Association (AHA): Hospitals. *JAHA* 35(15):383–430, 1961. (Copyright 1961: Used with permission of AHA); AHA Annual Survey of Hospitals, 1970 and 1980 unpublished; Hospital Statistics 1991–1992, 2001–2008 editions. Chicago, IL. (Copyrights 1971, 1981, 1991, 2001–2008: Used with permission of Health Forum LLC, an affiliate of the AHA.)

**Table 120 (page 1 of 2). Nursing homes, beds, occupancy, and residents, by geographic division and state: United States, selected years 1995–2007**

[Data are based on a census of certified nursing facilities]

Geographic division and state	Nursing homes				Beds			
	1995	2000	2006	2007	1995	2000	2006	2007
United States . . . . .	16,389	16,886	15,899	15,825	1,751,302	1,795,388	1,716,102	1,711,894
New England . . . . .	1,140	1,137	1,021	1,010	115,488	118,562	108,027	107,329
Connecticut . . . . .	267	259	245	244	32,827	32,433	30,100	30,003
Maine . . . . .	132	126	113	113	9,243	8,248	7,359	7,281
Massachusetts . . . . .	550	526	453	446	54,532	56,030	50,416	50,144
New Hampshire . . . . .	74	83	82	81	7,412	7,837	7,829	7,779
Rhode Island . . . . .	94	89	87	86	9,612	10,271	8,889	8,780
Vermont . . . . .	23	44	41	40	1,862	3,743	3,434	3,342
Middle Atlantic . . . . .	1,650	1,796	1,734	1,735	244,342	267,772	261,537	260,090
New Jersey . . . . .	300	361	363	362	43,967	52,195	52,126	50,991
New York . . . . .	624	665	655	657	107,750	120,514	120,850	120,961
Pennsylvania . . . . .	726	770	716	716	92,625	95,063	88,561	88,138
East North Central . . . . .	3,171	3,301	3,090	3,084	367,879	369,657	339,079	338,747
Illinois . . . . .	827	869	799	796	103,230	110,766	102,941	102,750
Indiana . . . . .	556	564	511	513	59,538	56,762	56,964	57,747
Michigan . . . . .	432	439	424	422	49,473	50,696	47,432	47,206
Ohio . . . . .	943	1,009	958	958	106,884	105,038	93,210	93,194
Wisconsin . . . . .	413	420	398	395	48,754	46,395	38,532	37,850
West North Central . . . . .	2,258	2,281	2,144	2,129	200,109	193,754	180,287	178,979
Iowa . . . . .	419	467	455	453	39,959	37,034	34,532	34,140
Kansas . . . . .	429	392	352	350	30,016	27,067	25,908	26,081
Minnesota . . . . .	432	433	399	393	43,865	42,149	35,837	34,976
Missouri . . . . .	546	551	519	515	52,679	54,829	54,541	54,506
Nebraska . . . . .	231	236	225	225	18,169	17,877	16,258	16,286
North Dakota . . . . .	87	88	83	83	7,125	6,954	6,502	6,437
South Dakota . . . . .	114	114	111	110	8,296	7,844	6,709	6,553
South Atlantic . . . . .	2,215	2,418	2,345	2,345	243,069	264,147	263,950	264,674
Delaware . . . . .	42	43	44	44	4,739	4,906	4,754	4,799
District of Columbia . . . . .	19	20	20	20	3,206	3,078	2,988	2,982
Florida . . . . .	627	732	682	681	72,656	83,365	82,319	82,498
Georgia . . . . .	352	363	359	362	38,097	39,817	39,920	40,189
Maryland . . . . .	218	255	233	234	28,394	31,495	29,020	29,173
North Carolina . . . . .	391	410	421	422	38,322	41,376	43,768	43,929
South Carolina . . . . .	166	178	176	173	16,682	18,102	18,415	18,500
Virginia . . . . .	271	278	279	278	30,070	30,595	31,830	31,664
West Virginia . . . . .	129	139	131	131	10,903	11,413	10,936	10,940
East South Central . . . . .	1,014	1,071	1,053	1,049	99,707	106,250	108,675	108,432
Alabama . . . . .	221	225	231	231	23,353	25,248	26,836	26,632
Kentucky . . . . .	288	307	293	292	23,221	25,341	26,041	26,070
Mississippi . . . . .	183	190	203	203	16,059	17,068	18,323	18,391
Tennessee . . . . .	322	349	326	323	37,074	38,593	37,475	37,339
West South Central . . . . .	2,264	2,199	2,011	1,994	224,695	224,100	216,867	216,400
Arkansas . . . . .	256	255	237	236	29,952	25,715	24,684	24,566
Louisiana . . . . .	337	337	293	287	37,769	39,430	37,043	36,261
Oklahoma . . . . .	405	392	336	327	33,918	33,903	30,776	30,038
Texas . . . . .	1,266	1,215	1,145	1,144	123,056	125,052	124,364	125,535
Mountain . . . . .	800	827	773	764	70,134	75,152	73,353	72,865
Arizona . . . . .	152	150	135	134	16,162	17,458	16,508	16,246
Colorado . . . . .	219	225	211	209	19,912	20,240	19,982	19,836
Idaho . . . . .	76	84	80	77	5,747	6,181	6,195	6,053
Montana . . . . .	100	104	97	92	7,210	7,667	7,338	7,187
Nevada . . . . .	42	51	47	48	3,998	5,547	5,615	5,675
New Mexico . . . . .	83	80	72	72	6,969	7,289	6,939	6,912
Utah . . . . .	91	93	92	93	7,101	7,651	7,724	7,904
Wyoming . . . . .	37	40	39	39	3,035	3,119	3,052	3,052
Pacific . . . . .	1,877	1,856	1,728	1,715	185,879	175,994	164,327	164,378
Alaska . . . . .	15	15	15	15	814	821	725	725
California . . . . .	1,382	1,369	1,283	1,274	140,203	131,762	124,416	124,745
Hawaii . . . . .	34	45	46	46	2,513	4,006	4,127	4,140
Oregon . . . . .	161	150	138	138	13,885	13,500	12,573	12,468
Washington . . . . .	285	277	246	242	28,464	25,905	22,486	22,300

See footnotes at end of table.

**Table 120 (page 2 of 2). Nursing homes, beds, occupancy, and residents, by geographic division and state: United States, selected years 1995–2007**

[Data are based on a census of certified nursing facilities]

Geographic division and state	Residents				Occupancy rate <sup>1</sup>				Resident rate <sup>2</sup>			
	1995	2000	2006	2007	1995	2000	2006	2007	1995	2000	2006	2007
United States . . . . .	1,479,550	1,480,076	1,433,523	1,424,824	84.5	82.4	83.5	83.2	404.5	349.1	270.6	258.5
New England . . . . .	105,792	106,308	97,511	96,742	91.6	89.7	90.3	90.1	474.2	419.5	324.6	315.3
Connecticut . . . . .	29,948	29,657	27,364	27,257	91.2	91.4	90.9	90.8	541.7	461.4	358.2	350.5
Maine . . . . .	8,587	7,298	6,651	6,598	92.9	88.5	90.4	90.6	417.9	313.0	246.2	236.3
Massachusetts . . . . .	49,765	49,805	45,068	44,746	91.3	88.9	89.4	89.2	477.3	426.8	328.9	320.2
New Hampshire . . . . .	6,877	7,158	7,052	6,978	92.8	91.3	90.1	89.7	434.1	392.6	305.0	291.4
Rhode Island . . . . .	8,823	9,041	8,265	8,112	91.8	88.0	93.0	92.4	476.9	432.6	329.0	319.9
Vermont . . . . .	1,792	3,349	3,111	3,051	96.2	89.5	90.6	91.3	207.0	335.0	265.6	252.8
Middle Atlantic . . . . .	228,649	242,674	238,468	237,327	93.6	90.6	91.2	91.2	384.0	354.2	286.3	277.2
New Jersey . . . . .	40,397	45,837	45,667	45,551	91.9	87.8	87.6	89.3	351.6	337.0	274.2	269.2
New York . . . . .	103,409	112,957	112,141	111,510	96.0	93.7	92.8	92.2	371.8	362.6	301.7	289.9
Pennsylvania . . . . .	84,843	83,880	80,660	80,266	91.6	88.2	91.1	91.1	419.2	353.1	273.6	265.5
East North Central . . . . .	294,319	289,404	273,438	271,871	80.0	78.3	80.6	80.3	476.1	414.3	325.1	313.7
Illinois . . . . .	83,696	83,604	77,204	76,974	81.1	75.5	75.0	74.9	495.3	435.4	340.0	329.6
Indiana . . . . .	44,328	42,328	39,758	39,986	74.5	74.6	69.8	69.2	548.9	462.3	357.6	348.7
Michigan . . . . .	43,271	42,615	41,090	40,626	87.5	84.1	86.6	86.1	345.0	299.1	235.1	223.5
Ohio . . . . .	79,026	81,946	81,275	81,146	73.9	78.0	87.2	87.1	499.5	463.5	374.6	365.8
Wisconsin . . . . .	43,998	38,911	34,111	33,139	90.2	83.9	88.5	87.6	518.9	406.9	306.9	288.1
West North Central . . . . .	164,660	157,224	143,361	141,564	82.3	81.1	79.5	79.1	489.6	429.8	337.2	322.8
Iowa . . . . .	27,506	29,204	26,866	26,505	68.8	78.9	77.8	77.6	458.0	448.5	357.4	342.5
Kansas . . . . .	25,140	22,230	19,785	19,701	83.8	82.1	76.4	75.5	528.9	429.4	332.4	324.5
Minnesota . . . . .	41,163	38,813	32,738	31,909	93.8	92.1	91.4	91.2	537.4	453.4	322.1	304.3
Missouri . . . . .	39,891	38,586	38,001	37,794	75.7	70.4	69.7	69.3	432.8	391.5	334.0	320.2
Nebraska . . . . .	16,166	14,989	13,327	13,176	89.0	83.8	82.0	80.9	501.4	441.5	340.6	328.8
North Dakota . . . . .	6,868	6,343	5,967	5,926	96.4	91.2	91.8	92.1	522.0	430.7	355.2	339.6
South Dakota . . . . .	7,926	7,059	6,677	6,553	95.5	90.0	99.5	100.0	543.3	438.8	350.0	326.2
South Atlantic . . . . .	217,303	227,818	233,404	233,422	89.4	86.2	88.4	88.2	335.4	291.9	224.4	212.8
Delaware . . . . .	3,819	3,900	3,855	4,004	80.6	79.5	81.1	83.4	448.7	369.7	264.9	261.1
District of Columbia . . . . .	2,576	2,858	2,760	2,804	80.3	92.9	92.4	94.0	297.6	318.4	256.3	262.6
Florida . . . . .	61,845	69,050	72,552	72,326	85.1	82.8	88.1	87.7	228.2	208.4	156.9	146.5
Georgia . . . . .	35,933	36,559	35,755	35,682	94.3	91.8	89.6	88.8	496.0	416.1	315.4	302.3
Maryland . . . . .	24,716	25,629	25,273	25,456	87.0	81.4	87.1	87.3	432.7	383.1	294.6	284.9
North Carolina . . . . .	35,511	36,658	38,362	38,176	92.7	88.6	87.6	86.9	401.1	347.6	281.6	267.7
South Carolina . . . . .	14,568	15,739	16,635	16,827	87.3	86.9	90.3	91.0	366.0	313.1	242.1	232.1
Virginia . . . . .	28,119	27,091	28,380	28,321	93.5	88.5	89.2	89.4	385.2	310.4	253.1	241.7
West Virginia . . . . .	10,216	10,334	9,832	9,826	93.7	90.5	89.9	89.8	355.2	325.2	272.6	262.6
East South Central . . . . .	91,563	96,348	95,987	95,916	91.8	90.7	88.3	88.5	416.6	385.5	324.0	312.7
Alabama . . . . .	21,691	23,089	23,488	23,392	92.9	91.4	87.5	87.8	370.1	343.1	295.3	285.2
Kentucky . . . . .	20,696	22,730	23,261	23,393	89.1	89.7	89.3	89.7	391.9	390.1	334.9	326.1
Mississippi . . . . .	15,247	15,815	16,419	16,498	94.9	92.7	89.6	89.7	405.3	368.7	331.1	325.6
Tennessee . . . . .	33,929	34,714	32,819	32,633	91.5	89.9	87.6	87.4	479.6	426.1	335.9	319.1
West South Central . . . . .	169,047	159,160	155,800	154,149	75.2	71.0	71.8	71.2	486.1	397.6	317.5	301.1
Arkansas . . . . .	20,823	19,317	17,970	17,857	69.5	75.1	72.8	72.7	508.3	415.5	327.4	314.6
Louisiana . . . . .	32,493	30,735	27,800	26,556	86.0	77.9	75.0	73.2	639.3	523.8	411.2	387.0
Oklahoma . . . . .	26,377	23,833	20,242	19,769	77.8	70.3	65.8	65.8	499.1	416.8	308.7	289.6
Texas . . . . .	89,354	85,275	89,788	89,967	72.6	68.2	72.2	71.7	439.9	358.4	296.7	282.6
Mountain . . . . .	58,738	59,379	58,042	57,408	83.8	79.0	79.1	78.8	335.9	271.2	190.0	176.4
Arizona . . . . .	12,382	13,253	12,775	12,447	76.6	75.9	77.4	76.6	233.3	193.4	121.5	110.4
Colorado . . . . .	17,055	17,045	16,579	16,608	85.7	84.2	83.0	83.7	420.6	353.5	270.8	256.5
Idaho . . . . .	4,697	4,640	4,646	4,513	81.7	75.1	75.0	74.6	321.7	257.0	198.7	182.9
Montana . . . . .	6,415	5,973	5,405	5,204	89.0	77.9	73.7	72.4	491.4	389.5	284.5	262.3
Nevada . . . . .	3,645	3,657	4,664	4,724	91.2	65.9	83.1	83.2	312.0	215.3	167.5	158.2
New Mexico . . . . .	6,051	6,503	6,019	5,981	86.8	89.2	86.7	86.5	332.0	279.0	192.2	176.5
Utah . . . . .	5,832	5,703	5,480	5,486	82.1	74.5	70.9	69.4	323.5	262.2	187.4	176.8
Wyoming . . . . .	2,661	2,605	2,474	2,445	87.7	83.5	81.1	80.1	468.2	386.8	295.7	285.2
Pacific . . . . .	149,479	141,761	137,512	136,425	80.4	80.5	83.7	83.0	302.4	241.3	179.9	169.9
Alaska . . . . .	634	595	640	628	77.9	72.5	88.3	86.6	348.0	225.9	154.3	138.2
California . . . . .	109,805	106,460	105,458	104,610	78.3	80.8	84.8	83.9	302.9	250.1	189.9	179.0
Hawaii . . . . .	2,413	3,558	3,828	3,830	96.0	88.8	92.8	92.5	178.5	202.6	142.4	130.3
Oregon . . . . .	11,673	9,990	8,108	8,134	84.1	74.0	64.5	65.2	244.9	173.9	114.2	111.1
Washington . . . . .	24,954	21,158	19,478	19,223	87.7	81.7	86.6	86.2	362.5	251.6	182.0	172.5

<sup>1</sup>Percentage of beds occupied (number of nursing home residents per 100 nursing home beds).

<sup>2</sup>Number of nursing home residents (all ages) per 1,000 resident population 85 years of age and over. Resident rates for 1995–1999 are based on population estimates projected from the 1990 census. Starting with 2000 data, resident rates are based on the 2000 census and postcensal population estimates. Available from: <http://www.census.gov/popest/datasets.html>.

NOTES: See [Appendix I, Online Survey Certification and Reporting Database \(OSCAR\)](#). Annual numbers of nursing homes, beds, and residents are based on a 15-month OSCAR reporting cycle. Data for additional years are available. See [Appendix III](#).

SOURCES: Cowles CM ed., 2007 Nursing Home Statistical Yearbook. McMinnville, OR: Cowles Research Group, 2008 and previous editions; and Cowles Research Group, unpublished data. Based on data from the Centers for Medicare & Medicaid Services' Online Survey Certification and Reporting (OSCAR) database.

**Table 121. Medicare-certified providers and suppliers: United States, selected years 1980–2006**

[Data are compiled from various Centers for Medicare &amp; Medicaid Services data systems]

<i>Providers or suppliers</i>	1980	1985	1990	1996	1997	1998	2000	2002	2004	2006
	Number of providers or suppliers									
Home health agencies . . . . .	2,924	5,679	5,730	8,437	10,807	9,330	7,857	6,813	7,519	8,618
Clinical Lab Improvement Act Facilities . . . . .	---	---	---	159,907	164,054	166,817	171,018	173,807	189,340	199,817
End stage renal disease facilities . . . . .	999	1,393	1,937	2,876	3,367	3,531	3,787	4,113	4,618	4,892
Outpatient physical therapy . . . . .	419	854	1,195	2,302	2,758	2,890	2,867	2,836	2,971	3,009
Portable X-ray . . . . .	216	308	443	555	656	657	666	644	608	549
Rural health clinics . . . . .	391	428	551	2,775	3,673	3,551	3,453	3,283	3,536	3,723
Comprehensive outpatient rehabilitation facilities . . . . .	---	72	186	307	531	590	522	524	635	589
Ambulatory surgical centers . . . . .	---	336	1,197	2,112	2,480	2,644	2,894	3,371	4,136	4,707
Hospices . . . . .	---	164	825	1,927	2,344	2,317	2,326	2,275	2,645	3,071

--- Data not available.

NOTES: Provider and supplier data for 1980–1990 are as of July 1. Provider and supplier data for 1996–2006 are as of December. Providers and suppliers certified for Medicare are deemed to meet Medicaid standards. Data for additional years are available. See [Appendix III](#).

SOURCE: Centers for Medicare & Medicaid Services (CMS). 2007 CMS Statistics. Baltimore, MD: CMS; 2007 and previous editions.



**Table 122. Number of Magnetic Resonance Imaging (MRI) units and Computed Tomography (CT) scanners: Selected countries, selected years 1990–2006**

[Data are based on reporting by countries]

Country	1990	1995	2000	2003	2004	2005	2006	1990	1995	2000	2003	2004	2005	2006
	Number of MRI units per million population							Number of CT scanners per million population						
Australia <sup>1</sup>	0.6	2.9	3.5	3.7	3.7	4.2	4.9	13.8	20.5	26.1	40.3	45.3	51.1	---
Austria	---	---	10.9	13.6	15.9	16.2	16.8	11.7	---	25.8	27.2	29.2	29.6	29.8
Belgium	2.0	3.3	6.0	6.8	7.0	7.0	7.1	16.1	---	21.8	30.6	31.6	38.7	39.8
Canada <sup>2</sup>	0.7	1.4	2.5	4.7	4.9	5.7	6.2	7.1	8.0	---	10.3	10.7	11.5	12.0
Czech Republic <sup>3</sup>	---	1.0	1.7	2.5	2.8	3.1	3.8	---	6.7	9.6	12.6	12.6	12.3	13.1
Denmark	2.5	---	5.4	9.1	10.2	---	---	4.3	7.3	11.4	14.5	14.6	13.8	15.8
Finland	1.8	4.3	9.9	13.0	14.0	14.7	15.2	9.8	11.7	13.5	14.0	14.2	14.7	14.8
France	0.8	2.1	2.6	2.8	3.1	4.7	5.3	6.7	9.2	9.5	8.3	7.4	9.8	10.0
Germany <sup>4</sup>	---	2.3	4.9	6.2	6.6	7.1	7.7	---	9.0	12.7	14.7	15.4	16.2	16.7
Greece	0.4	---	---	---	---	13.2	---	6.5	---	---	---	---	25.8	---
Hungary <sup>5</sup>	0.1	1.0	1.8	2.6	2.6	2.6	2.6	1.9	4.6	5.7	6.5	6.8	7.1	7.2
Iceland	3.9	7.5	10.7	17.3	20.5	20.3	19.7	11.8	18.7	21.3	20.7	17.1	23.7	26.3
Italy <sup>6</sup>	1.3	---	7.7	11.9	14.1	15.0	---	6.0	---	21.0	23.9	26.3	27.7	---
Japan <sup>7</sup>	6.1	---	---	---	---	40.1	---	55.2	---	---	---	---	---	---
South Korea	---	3.9	5.4	9.0	11.1	12.1	13.6	---	15.5	28.4	31.9	31.5	32.3	33.7
Mexico	---	---	---	1.4	1.3	1.4	1.4	---	---	---	3.0	3.2	3.5	3.6
New Zealand	---	---	---	3.7	---	---	---	3.6	---	8.8	11.5	12.1	---	---
Poland	---	---	---	1.0	1.9	2.0	1.9	---	---	4.4	6.3	6.9	7.9	9.2
Portugal <sup>8</sup>	0.8	---	---	3.9	---	---	5.8	4.6	---	---	12.8	---	26.2	25.8
Spain <sup>9</sup>	---	2.7	4.8	7.3	7.7	8.1	8.8	---	8.3	12.0	13.0	13.3	13.5	13.9
Sweden	1.5	6.8	---	---	---	---	---	10.5	---	---	---	---	---	---
Switzerland	---	---	12.9	14.2	14.3	14.4	14.0	---	---	18.5	18.0	17.9	18.2	18.7
Turkey	---	---	---	3.0	3.0	---	3.5	1.6	---	---	7.3	---	---	7.8
United Kingdom <sup>10</sup>	---	---	4.7	4.4	5.0	5.4	5.6	---	---	4.5	6.7	7.0	7.5	7.6
United States <sup>11</sup>	---	12.3	---	21.9	26.6	---	26.5	---	---	---	29.2	32.2	---	33.9
	Number of MRI units							Number of CT scanners						
Australia <sup>1</sup>	11	52	67	73	75	86	100	235	370	500	800	910	1,040	---
Austria	---	---	88	110	130	133	139	90	---	209	221	239	244	247
Belgium	20	33	61	71	73	73	75	160	---	223	318	329	406	420
Canada <sup>2</sup>	19	40	76	150	156	185	201	198	234	---	325	341	373	392
Czech Republic <sup>3</sup>	---	10	17	25	29	32	39	---	69	99	129	129	126	134
Denmark	13	---	29	49	55	---	---	22	38	61	78	79	75	86
Finland	9	22	51	68	73	77	80	49	60	70	73	74	77	78
France	45	123	156	169	191	288	325	379	534	563	503	449	595	615
Germany <sup>4</sup>	---	184	405	514	545	585	635	---	737	1,040	1,215	1,268	1,334	1,376
Greece	4	---	---	---	---	147	---	66	---	---	---	---	286	---
Hungary <sup>5</sup>	1	10	18	26	26	26	26	20	47	58	66	69	72	73
Iceland	1	2	3	5	6	6	6	3	5	6	6	5	7	8
Italy <sup>6</sup>	72	---	442	682	813	870	---	340	---	1,203	1,371	1,513	1,613	---
Japan <sup>7</sup>	756	---	---	---	---	5,128	---	6,821	---	---	---	---	---	---
South Korea	---	174	254	430	531	584	657	---	699	1,334	1,526	1,515	1,557	1,629
Mexico	---	---	---	138	135	142	146	---	---	---	309	330	360	373
New Zealand	---	---	---	15	---	---	---	12	---	34	46	49	---	---
Poland	---	---	---	39	73	77	74	---	---	169	242	264	303	352
Portugal <sup>8</sup>	8	---	---	41	---	---	61	45	---	---	134	---	277	273
Spain <sup>9</sup>	---	107	194	306	328	350	386	---	327	483	544	566	587	611
Sweden	13	60	---	---	---	---	---	90	---	---	---	---	---	---
Switzerland	---	---	93	104	106	107	105	---	---	133	132	132	135	140
Turkey	---	---	---	211	212	---	254	89	---	---	516	---	---	566
United Kingdom <sup>10</sup>	---	---	277	263	300	326	342	---	---	264	400	421	450	458
United States <sup>11</sup>	---	3,265	---	6,375	7,810	---	7,930	---	---	---	8,490	9,455	---	10,150

--- Data not available.

<sup>1</sup>Starting with 2000 data, the number of MRI units include only those that are approved for billing to Medicare (Australia's national health program). In 1999, approved units represented approximately 60% of total units.

<sup>2</sup>The number of units in freestanding imaging facilities was imputed for years prior to 2003 based on data collected in the 2003 National Survey of Selected Medical Imaging Equipment, conducted by the Canadian Institute for Health Information. MRI units in Quebec are not included in 2000.

<sup>3</sup>Prior to 2000, the data include only equipment of Health Sector establishments.

<sup>4</sup>The data include equipment installed in acute care hospitals and prevention and rehabilitation homes.

<sup>5</sup>Equipment used in military hospitals and the health institutes of Hungarian State Railways are not included.

<sup>6</sup>1990 data include only equipment in public and private hospitals.

<sup>7</sup>Prior to 2000, the data include only equipment in hospitals.

<sup>8</sup>The data do not include equipment in all the private sectors.

<sup>9</sup>The data include equipment available in hospitals and do not include equipment in other health care facilities.

<sup>10</sup>The data include devices in public sector establishments only.

<sup>11</sup>Data are from the MRI Census and are comparable to the OECD definition. The devices in U.S. territories are not included.

NOTE: Data for additional years are available. See [Appendix III](#).

SOURCES: Organisation for Economic Co-operation and Development (OECD); 2005 Computed Tomography (CT) and Magnetic Resonance Imaging (MRI) Census. Benchmark Report: IMV, Limited, Medical Information Division.



**Table 123. Total health expenditures as a percent of gross domestic product and per capita health expenditures in dollars, by selected countries: Selected years 1960–2005**

[Data compiled by the Organisation for Economic Co-operation and Development]

Country	1960	1970	1980	1990	1995	2000	2001	2002	2003 <sup>1</sup>	2004 <sup>1</sup>	2005 <sup>1</sup>
Health expenditures as a percent of gross domestic product											
Australia	3.9	---	6.8	7.5	8.0	8.8	8.9	9.1	9.2	9.5	---
Austria	4.3	5.2	7.5	7.0	9.8	10.0	10.0	10.1	10.2	10.3	10.2
Belgium	---	3.9	6.3	7.2	8.2	8.6	8.7	9.0	10.1	10.2	10.3
Canada	5.4	6.9	7.0	8.9	9.0	8.8	9.3	9.6	9.8	9.8	9.8
Czech Republic	---	---	---	4.7	7.0	6.5	6.7	7.1	7.4	7.3	7.2
Denmark	---	---	8.9	8.3	8.1	8.3	8.6	8.8	9.1	9.2	9.1
Finland	3.8	5.5	6.3	7.7	7.5	6.6	6.7	7.0	7.3	7.4	7.5
France	3.8	5.4	7.0	8.4	9.9	9.6	9.7	10.0	10.9	11.0	11.1
Germany	---	6.0	8.4	8.3	10.1	10.3	10.4	10.6	10.8	10.6	10.7
Greece	---	4.7	5.1	5.8	7.5	9.3	9.8	9.7	10.0	9.6	10.1
Hungary	---	---	---	---	7.3	6.9	7.2	7.6	8.3	8.1	---
Iceland	3.0	4.7	6.3	7.8	8.2	9.3	9.2	10.0	10.3	10.0	9.5
Ireland	3.7	5.1	8.3	6.1	6.7	6.3	7.0	7.2	7.3	7.5	7.5
Italy	---	---	---	7.7	7.3	8.1	8.2	8.3	8.3	8.7	8.9
Japan	3.0	4.6	6.5	6.0	6.9	7.7	7.9	8.0	8.1	8.0	---
Luxembourg	---	3.1	5.2	5.4	5.6	5.8	6.4	6.8	7.6	7.9	7.9
Mexico	---	---	---	4.8	5.6	5.6	6.0	6.2	6.3	6.5	6.4
Netherlands	---	---	7.5	8.0	8.3	8.0	8.3	8.9	9.1	9.2	---
New Zealand	---	5.1	5.9	6.9	7.2	7.7	7.8	8.2	8.0	8.5	9.0
Norway	2.9	4.4	7.0	7.6	7.9	8.4	8.8	9.8	10.0	9.7	9.1
Poland	---	---	---	4.8	5.5	5.5	5.9	6.3	6.2	6.2	6.2
Portugal	---	2.5	5.3	5.9	7.8	8.8	8.8	9.0	9.7	10.0	10.2
Slovak Republic	---	---	---	---	---	5.5	5.5	5.6	5.9	7.2	7.1
South Korea	---	---	---	4.3	4.1	4.8	5.4	5.3	5.4	5.5	6.0
Spain	1.5	3.5	5.3	6.5	7.4	7.2	7.2	7.3	7.8	8.1	8.3
Sweden	---	6.8	9.0	8.3	8.1	8.4	8.7	9.1	9.3	9.1	9.1
Switzerland	4.9	5.5	7.4	8.3	9.7	10.4	10.9	11.1	11.5	11.5	11.6
Turkey	---	---	3.3	3.6	3.4	6.6	7.5	7.4	7.6	7.7	7.6
United Kingdom	3.9	4.5	5.6	6.0	7.0	7.3	7.5	7.7	7.8	8.1	8.3
United States <sup>2</sup>	5.1	7.0	8.8	11.9	13.3	13.2	13.9	14.7	15.2	15.2	15.3
Per capita health expenditures <sup>3</sup>											
Australia	\$ 94	---	\$ 697	\$1,307	\$1,738	\$2,397	\$2,541	\$2,724	\$2,892	\$3,128	---
Austria	77	193	769	1,327	2,250	2,825	2,898	3,018	3,236	3,418	3,519
Belgium	---	148	636	1,341	1,830	2,301	2,452	2,631	3,080	3,290	3,389
Canada	125	301	780	1,738	2,057	2,509	2,727	2,867	3,006	3,161	3,326
Czech Republic	---	---	---	570	915	971	1,055	1,199	1,353	1,413	1,479
Denmark	---	---	883	1,521	1,843	2,381	2,561	2,656	2,793	2,972	3,108
Finland	63	188	582	1,392	1,429	1,717	1,861	2,012	2,045	2,202	2,331
France	69	200	677	1,499	2,065	2,487	2,649	2,795	3,011	3,191	3,374
Germany	---	264	950	1,730	2,225	2,634	2,754	2,886	3,129	3,169	3,287
Greece	---	159	486	843	1,250	1,950	2,178	2,364	2,616	2,669	2,981
Hungary	---	---	---	---	685	857	977	1,115	1,291	1,337	---
Iceland	57	170	733	1,619	1,853	2,697	2,775	3,036	3,161	3,331	3,443
Ireland	43	117	519	796	1,211	1,822	2,151	2,368	2,536	2,742	2,926
Italy	---	---	---	1,380	1,562	2,078	2,188	2,278	2,281	2,437	2,532
Japan	30	150	583	1,121	1,546	1,967	2,080	2,138	2,243	2,358	---
Luxembourg	---	163	640	1,532	2,032	2,984	3,270	3,729	4,611	5,095	5,563
Mexico	---	---	---	306	388	506	548	578	608	655	675
Netherlands	---	---	755	1,434	1,821	2,258	2,525	2,775	2,910	3,094	---
New Zealand	---	210	509	991	1,244	1,605	1,709	1,850	1,911	2,122	2,330
Norway	49	145	676	1,392	1,892	3,082	3,293	3,616	3,872	4,103	4,364
Poland	---	---	---	296	417	590	647	734	754	814	867
Portugal	---	51	292	673	1,096	1,625	1,685	1,783	1,834	1,935	2,041
Slovak Republic	---	---	---	---	---	595	642	716	798	1,061	1,137
South Korea	---	---	---	356	531	780	932	977	1,051	1,138	1,318
Spain	16	95	363	872	1,193	1,520	1,617	1,723	1,951	2,101	2,261
Sweden	---	310	938	1,581	1,733	2,272	2,409	2,593	2,760	2,827	2,918
Switzerland	166	351	1,030	2,028	2,571	3,181	3,371	3,650	3,861	4,045	4,177
Turkey	---	---	76	168	187	451	461	484	514	562	586
United Kingdom	84	165	482	989	1,384	1,859	2,034	2,228	2,328	2,560	2,724
United States <sup>2</sup>	147	351	1,068	2,738	3,656	4,569	4,917	5,306	5,684	6,037	6,401

--- Data not available.

<sup>1</sup>For some countries, data are preliminary estimates. See <http://www.ecosante.org/oe.cd.htm> for more information.

<sup>2</sup>The Organisation for Economic Co-operation and Development (OECD) estimates for the United States differ from the National Health Expenditures estimates shown in Table 124 because of differences in methodology.

<sup>3</sup>Per capita health expenditures for each country have been adjusted to U.S. dollars using gross domestic product purchasing power parities for each year. See [Appendix II, Gross domestic product; Purchasing power parities](#).

NOTES: These data include revisions in health expenditures and differ from previous editions of *Health, United States*. Trends should be interpreted with caution due to data series breaks and changes in methodology. Data for additional years are available. Please see [Appendix III](#).

SOURCE: The Organisation for Economic Co-operation and Development Health Data File 2007, incorporating revisions to the annual update. Available from: <http://www.ecosante.org/oe.cd.htm>.

**Table 124. Gross domestic product, federal, and state and local government expenditures, national health expenditures, and average annual percent change: United States, selected years 1960–2006**

[Data are compiled from various sources by the Centers for Medicare & Medicaid Services]

<i>Gross domestic product, government expenditures, and national health expenditures</i>	1960	1970	1980	1990	1995	2000	2004	2005	2006
Amount in billions									
Gross domestic product (GDP) . . . . .	\$ 526	\$1,039	\$2,790	\$5,803	\$7,398	\$9,817	\$11,686	\$12,434	\$13,195
Implicit price deflator for GDP <sup>1</sup> . . . . .	21.0	27.5	54.0	81.6	92.1	100.0	109.5	113.0	116.6
All federal government expenditures . . . . .	\$ 87	\$ 201	\$ 586	\$1,254	\$1,604	\$1,864	\$ 2,380	\$ 2,562	\$ 2,716
All state and local government expenditures . . . . .	40	113	329	731	978	1,270	1,593	1,692	1,773
National health expenditures . . . . .	\$ 28	\$ 75	\$ 253	\$ 714	\$1,016	\$1,354	\$ 1,852	\$ 1,973	\$ 2,106
Private . . . . .	21	47	147	427	552	757	1,015	1,077	1,135
Public . . . . .	7	28	106	287	465	597	837	897	970
Federal government . . . . .	3	18	72	194	327	418	597	639	705
State and local government . . . . .	4	10	35	93	138	179	240	258	265
Amount per capita									
National health expenditures . . . . .	\$ 148	\$ 356	\$1,100	\$2,813	\$3,783	\$4,790	\$ 6,301	\$ 6,649	\$ 7,026
Private . . . . .	111	222	638	1,684	2,053	2,679	3,452	3,627	3,788
Public . . . . .	36	134	462	1,130	1,730	2,111	2,849	3,022	3,238
Percent									
National health expenditures as percent of GDP . . . . .	5.2	7.2	9.1	12.3	13.7	13.8	15.9	15.9	16.0
Health expenditures as a percent of total government expenditures									
All federal government . . . . .	3.3	8.8	12.2	15.5	20.4	22.4	25.1	24.9	26.0
All state and local government . . . . .	9.8	9.2	10.6	12.7	14.1	14.1	15.1	15.2	15.0
Percent distribution									
National health expenditures . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Private . . . . .	75.3	62.4	58.0	59.8	54.3	55.9	54.8	54.6	53.9
Public . . . . .	24.7	37.6	42.0	40.2	45.7	44.1	45.2	45.4	46.1
Average annual percent change from previous year shown <sup>2</sup>									
Gross domestic product . . . . .	...	7.0	10.4	7.6	5.0	5.8	6.6	6.4	6.1
Federal government expenditures . . . . .	...	8.8	11.3	7.9	5.0	3.1	5.7	7.7	6.0
State and local government expenditures . . . . .	...	10.9	11.3	8.3	6.0	5.4	5.2	6.2	4.8
National health expenditures . . . . .	...	10.5	13.0	10.9	7.3	5.9	6.9	6.5	6.7
Private . . . . .	...	8.5	12.1	11.3	5.2	6.5	6.2	6.1	5.4
Public . . . . .	...	15.3	14.2	10.4	10.1	5.1	7.7	7.1	8.2
Federal government . . . . .	...	20.0	15.0	10.5	11.0	5.0	8.4	7.0	10.3
State and local government . . . . .	...	10.2	12.8	10.3	8.2	5.4	6.1	7.2	3.0
National health expenditures, per capita . . . . .	...	9.2	11.9	9.8	6.1	4.8	5.9	5.5	5.7
Private . . . . .	...	7.2	11.1	10.2	4.0	5.5	5.2	5.1	4.4
Public . . . . .	...	13.9	13.2	9.4	8.9	4.1	6.7	6.1	7.2

... Category not applicable.

<sup>1</sup>Year 2000=100. Last revised Sept. 27, 2007 by the Bureau of Economic Analysis.

<sup>2</sup>See [Appendix II, Average annual percent change](#).

NOTES: The data reflect U.S. Census Bureau resident population estimates as of July 2006, excluding the armed forces overseas. Federal and state and local government total expenditures reflect revisions from the Bureau of Economic Analysis. See [Appendix II, Gross domestic product \(GDP\); Health expenditures, national](#). Percents are calculated using unrounded data. Estimates may not add to totals because of rounding. Data have been revised and differ from previous editions of *Health, United States*.

**SOURCE:** Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group, National Health Expenditure Accounts, National health expenditures, 2006. Available from: <http://www.cms.hhs.gov/NationalHealthExpendData/>.

**Table 125. Consumer Price Index and average annual percent change for all items, selected items, and medical care components: United States, selected years 1960–2007**

[Data are based on reporting by samples of providers and other retail outlets]

<i>Items and medical care components</i>	1960	1970	1980	1990	1995	2000	2005	2006	2007
Consumer Price Index (CPI)									
All items . . . . .	29.6	38.8	82.4	130.7	152.4	172.2	195.3	201.6	207.3
All items less medical care . . . . .	30.2	39.2	82.8	128.8	148.6	167.3	188.7	194.7	200.1
Services . . . . .	24.1	35.0	77.9	139.2	168.7	195.3	230.1	238.9	246.8
Food . . . . .	30.0	39.2	86.8	132.4	148.4	167.8	190.7	195.2	202.9
Apparel . . . . .	45.7	59.2	90.9	124.1	132.0	129.6	119.5	119.5	119.0
Housing . . . . .	---	36.4	81.1	128.5	148.5	169.6	195.7	203.2	209.6
Energy . . . . .	22.4	25.5	86.0	102.1	105.2	124.6	177.1	196.9	207.7
Medical care . . . . .	22.3	34.0	74.9	162.8	220.5	260.8	323.2	336.2	351.1
Components of medical care									
Medical care services . . . . .	19.5	32.3	74.8	162.7	224.2	266.0	336.7	350.6	369.3
Professional services . . . . .	---	37.0	77.9	156.1	201.0	237.7	281.7	289.3	300.8
Physicians' services . . . . .	21.9	34.5	76.5	160.8	208.8	244.7	287.5	291.9	303.2
Dental services . . . . .	27.0	39.2	78.9	155.8	206.8	258.5	324.0	340.9	358.4
Eyeglasses and eye care <sup>1</sup> . . . . .	---	---	---	117.3	137.0	149.7	163.2	168.1	171.6
Services by other medical professionals <sup>1</sup> . . . . .	---	---	---	120.2	143.9	161.9	186.8	192.2	197.4
Hospital and related services . . . . .	---	---	69.2	178.0	257.8	317.3	439.9	468.1	498.9
Hospital services <sup>2</sup> . . . . .	---	---	---	---	---	115.9	161.6	172.1	183.6
Inpatient hospital services <sup>2,3</sup> . . . . .	---	---	---	---	---	113.8	156.6	167.5	178.1
Outpatient hospital services <sup>1,3</sup> . . . . .	---	---	---	138.7	204.6	263.8	373.0	395.0	424.2
Hospital rooms . . . . .	9.3	23.6	68.0	175.4	251.2	---	---	---	---
Other inpatient services <sup>1</sup> . . . . .	---	---	---	142.7	206.8	---	---	---	---
Nursing homes and adult day care <sup>2</sup> . . . . .	---	---	---	---	---	117.0	145.0	151.0	159.6
Health insurance <sup>4</sup> . . . . .	---	---	---	---	---	---	---	103.1	113.5
Medical care commodities . . . . .	46.9	46.5	75.4	163.4	204.5	238.1	276.0	285.9	290.0
Prescription drugs and medical supplies . . . . .	54.0	47.4	72.5	181.7	235.0	285.4	349.0	363.9	369.2
Nonprescription drugs and medical supplies <sup>1</sup> . . . . .	---	---	---	120.6	140.5	149.5	151.7	154.6	156.8
Internal and respiratory over-the-counter drugs . . . . .	---	42.3	74.9	145.9	167.0	176.9	179.7	183.4	186.4
Nonprescription medical equipment and supplies . . . . .	---	---	79.2	138.0	166.3	178.1	180.6	183.2	185.1
Average annual percent change from previous year shown									
All items . . . . .	...	2.7	7.8	4.7	3.1	2.5	2.5	3.2	2.8
All items excluding medical care . . . . .	...	2.6	7.8	4.5	2.9	2.4	2.4	3.2	2.8
All services . . . . .	...	3.8	8.3	6.0	3.9	3.0	3.3	3.8	3.3
Food . . . . .	...	2.7	8.3	4.3	2.3	2.5	2.6	2.4	4.0
Apparel . . . . .	...	2.6	4.4	3.2	1.2	-0.4	-1.6	0.0	-0.4
Housing . . . . .	...	---	8.3	4.7	2.9	2.7	2.9	3.8	3.1
Energy . . . . .	...	1.3	12.9	1.7	0.6	3.4	7.3	11.2	5.5
Medical care . . . . .	...	4.3	8.2	8.1	6.3	3.4	4.4	4.0	4.4
Components of medical care									
Medical care services . . . . .	...	5.2	8.8	8.1	6.6	3.5	4.8	4.1	5.3
Professional services . . . . .	...	---	7.7	7.2	5.2	3.4	3.5	2.7	4.0
Physicians' services . . . . .	...	4.6	8.3	7.7	5.4	3.2	3.3	1.5	3.9
Dental services . . . . .	...	3.8	7.2	7.0	5.8	4.6	4.6	5.2	5.1
Eyeglasses and eye care <sup>1</sup> . . . . .	...	---	---	---	3.2	1.8	1.7	3.0	2.1
Services by other medical professionals <sup>1</sup> . . . . .	...	---	---	---	3.7	2.4	2.9	2.9	2.7
Hospital and related services . . . . .	...	---	---	9.9	7.7	4.2	6.8	6.4	6.6
Hospital services <sup>2</sup> . . . . .	...	---	---	---	---	---	6.9	6.5	6.7
Inpatient hospital services <sup>2,3</sup> . . . . .	...	---	---	---	---	---	6.6	7.0	6.3
Outpatient hospital services <sup>1,3</sup> . . . . .	...	---	---	---	8.1	5.2	7.2	5.9	7.4
Hospital rooms . . . . .	...	9.8	11.2	9.9	7.4	---	---	---	---
Other inpatient services <sup>1</sup> . . . . .	...	---	---	---	7.7	---	---	---	---
Nursing homes and adult day care <sup>2</sup> . . . . .	...	---	---	---	---	---	4.4	4.1	5.7
Health insurance <sup>4</sup> . . . . .	...	---	---	---	---	---	---	---	10.1
Medical care commodities . . . . .	...	-0.1	5.0	8.0	4.6	3.1	3.0	3.6	1.4
Prescription drugs and medical supplies . . . . .	...	-1.3	4.3	9.6	5.3	4.0	4.1	4.3	1.4
Nonprescription drugs and medical supplies <sup>1</sup> . . . . .	...	---	---	---	3.1	1.2	0.3	1.9	1.4
Internal and respiratory over-the-counter drugs . . . . .	...	---	5.9	6.9	2.7	1.2	0.3	2.1	1.6
Nonprescription medical equipment and supplies . . . . .	...	---	---	5.7	3.8	1.4	0.3	1.4	1.0

--- Data not available. . . . . Category not applicable. <sup>1</sup>December 1986 = 100. <sup>2</sup>December 1996 = 100.  
<sup>3</sup>Special index based on a substantially smaller sample. <sup>4</sup>December 2005 = 100.

NOTES: Consumer Price Index for all urban consumers (CPI-U) U.S. city average, detailed expenditure categories. 1982–1984 = 100, except where noted. Data are not seasonally adjusted. See [Appendix I, Consumer Price Index](#). See [Appendix II, Consumer Price Index](#). Data for additional years are available. See [Appendix III](#).

SOURCES: U.S. Department of Labor, Bureau of Labor Statistics, Consumer Price Index. Various releases. 2007 data available from: <http://www.bls.gov/cpi/cpid07av.pdf>.

**Table 126. Growth in personal health care expenditures and percent distribution of factors affecting growth: United States, 1960–2006**

[Data are compiled from various sources by the Centers for Medicare & Medicaid Services]

Period	Average annual percent increase	Factors affecting growth				
		All factors	Inflation <sup>1</sup>		Population	Intensity <sup>2</sup>
			Economy-wide	Medical		
Percent distribution <sup>3</sup>						
1960–2006	9.9	100	40	17	11	33
1960–1965	8.3	100	17	10	18	55
1965–1970	12.7	100	34	12	8	46
1970–1975	12.3	100	55	1	8	36
1975–1980	13.8	100	55	12	7	26
1980–1985	11.6	100	46	32	9	13
1985–1990	10.3	100	32	26	10	32
1990–1995	7.3	100	34	29	16	20
1995–2000	5.7	100	30	18	18	35
1995–1996	5.4	100	36	19	19	26
1996–1997	5.4	100	31	9	20	40
1997–1998	5.3	100	21	20	20	38
1998–1999	5.7	100	26	22	18	34
1999–2000	6.7	100	33	17	15	34
2000–2005	7.7	100	33	17	13	37
2000–2001	8.7	100	28	17	12	42
2001–2002	8.2	100	22	26	13	40
2002–2003	7.8	100	28	20	12	40
2003–2004	7.0	100	42	17	14	27
2004–2005	6.8	100	48	4	14	33
2005–2006	6.6	100	49	3	15	32

<sup>1</sup>Total inflation is economy-wide and medical inflation is the medical inflation above economy-wide inflation.

<sup>2</sup>Intensity is the residual percent of growth that cannot be attributed to inflation or population growth. It represents changes in the use or kinds of services and supplies.

<sup>3</sup>Percents may not sum to 100 due to rounding.

NOTES: These data include revisions in health expenditures for 1975 and subsequent years and revisions in population for 2000 and subsequent years. The implicit price deflator for Gross domestic product (GDP) is used to measure economy-wide inflation for all years 1960–2006. See [Appendix II, Health expenditures, national; Gross domestic product \(GDP\)](#). All indexes used to calculate the factors affecting growth were rebased in 2003 with base year 2000. Data have been revised and differ from previous editions of *Health, United States*.

SOURCES: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group, National Health Expenditure Accounts, National health expenditures, 2006. Available from: <http://www.cms.hhs.gov/NationalHealthExpendData/>; unpublished data.

**Table 127 (page 1 of 2). National health expenditures, average annual percent change, and percent distribution, by type of expenditure: United States, selected years 1960–2006**

[Data are compiled from various sources by the Centers for Medicare & Medicaid Services]

Type of national health expenditure	1960	1970	1980	1990	1995	2000	2003	2004	2005	2006
Amount in billions										
National health expenditures . . . . .	\$27.5	\$74.9	\$253.4	\$714.0	\$1,016.5	\$1,353.6	\$1,732.4	\$1,852.3	\$1,973.3	\$2,105.5
Health services and supplies . . . . .	24.9	67.1	233.4	666.7	952.8	1,264.8	1,620.7	1,730.6	1,843.6	1,966.2
Personal health care . . . . .	23.3	62.9	214.8	607.5	863.7	1,139.6	1,445.9	1,547.7	1,653.7	1,762.0
Hospital care . . . . .	9.2	27.6	101.0	251.6	340.7	417.1	525.4	564.4	605.5	648.2
Professional services . . . . .	8.3	20.6	67.3	216.8	316.5	426.7	542.9	580.7	622.2	660.2
Physician and clinical services . . . . .	5.4	14.0	47.1	157.5	220.5	288.6	366.7	393.6	422.6	447.6
Other professional services . . . . .	0.4	0.7	3.6	18.2	28.5	39.1	49.0	52.4	56.2	58.9
Dental services . . . . .	2.0	4.7	13.3	31.5	44.5	62.0	76.9	81.5	86.6	91.5
Other personal health care . . . . .	0.6	1.2	3.3	9.6	23.0	37.0	50.3	53.2	56.8	62.2
Nursing home and home health . . . . .	0.9	4.3	20.9	65.2	104.6	125.8	148.5	157.9	168.7	177.6
Home health care <sup>1</sup> . . . . .	0.1	0.2	2.4	12.6	30.5	30.5	38.0	42.7	47.9	52.7
Nursing home care <sup>1</sup> . . . . .	0.8	4.0	18.5	52.6	74.1	95.3	110.5	115.2	120.7	124.9
Retail outlet sales of medical products . . . . .	4.9	10.5	25.7	74.0	101.8	170.1	229.0	244.7	257.3	276.0
Prescription drugs . . . . .	2.7	5.5	12.0	40.3	60.9	120.6	174.2	188.8	199.7	216.7
Other medical products . . . . .	2.3	5.0	13.6	33.7	41.0	49.5	54.9	55.9	57.6	59.3
Government administration and net cost of private health insurance . . . . .	1.2	2.8	12.2	39.2	58.1	81.8	121.0	129.0	133.6	145.4
Government public health activities <sup>2</sup> . . . . .	0.4	1.4	6.4	20.0	31.0	43.4	53.8	53.9	56.3	58.7
Investment . . . . .	2.6	7.8	19.9	47.3	63.7	88.8	111.8	121.7	129.7	139.4
Research <sup>3</sup> . . . . .	0.7	2.0	5.4	12.7	18.3	25.6	35.5	38.8	40.6	41.8
Structures and equipment . . . . .	1.9	5.8	14.5	34.7	45.4	63.2	76.3	83.0	89.1	97.6
Average annual percent change from previous year shown										
National health expenditures . . . . .	...	10.5	13.0	10.9	7.3	5.9	8.0	6.9	6.5	6.7
Health services and supplies . . . . .	...	10.4	13.3	11.1	7.4	5.8	8.1	6.8	6.5	6.6
Personal health care . . . . .	...	10.4	13.1	11.0	7.3	5.7	7.8	7.0	6.8	6.6
Hospital care . . . . .	...	11.6	13.9	9.6	6.3	4.1	7.5	7.4	7.3	7.0
Professional services . . . . .	...	9.5	12.5	12.4	7.9	6.2	7.9	7.0	7.1	6.1
Physician and clinical services . . . . .	...	10.1	12.9	12.8	7.0	5.5	8.5	7.3	7.4	5.9
Other professional services . . . . .	...	6.6	17.1	17.5	9.5	6.5	7.5	7.0	7.1	4.9
Dental services . . . . .	...	9.1	11.1	9.0	7.1	6.9	4.8	6.0	6.3	5.7
Other personal health care . . . . .	...	7.3	10.1	11.4	19.2	10.0	8.7	5.7	6.8	9.5
Nursing home and home health . . . . .	...	17.2	17.2	12.1	9.9	3.8	6.1	6.3	6.9	5.3
Home health care <sup>1</sup> . . . . .	...	14.5	26.9	18.1	19.4	0.0	11.1	12.3	12.3	9.9
Nursing home care <sup>1</sup> . . . . .	...	17.4	16.4	11.0	7.1	5.2	4.5	4.2	4.9	3.5
Retail outlet sales of medical products . . . . .	...	7.8	9.4	11.2	6.6	10.8	9.5	6.8	5.2	7.3
Prescription drugs . . . . .	...	7.5	8.2	12.8	8.6	14.6	10.5	8.4	5.8	8.5
Other medical products . . . . .	...	8.1	10.6	9.5	4.0	3.9	6.5	1.8	3.1	3.0
Government administration and net cost of private health insurance . . . . .	...	8.6	16.0	12.4	8.2	7.1	13.6	6.6	3.6	8.8
Government public health activities <sup>2</sup> . . . . .	...	12.8	16.5	12.0	9.2	7.0	3.2	0.2	4.4	4.3
Investment . . . . .	...	11.7	9.9	9.0	6.1	6.9	7.5	8.9	6.6	7.4
Research <sup>3</sup> . . . . .	...	10.9	10.8	8.9	7.7	6.9	9.2	9.1	4.8	2.9
Structures and equipment . . . . .	...	11.9	9.5	9.1	5.5	6.8	6.7	8.8	7.4	9.5

See footnotes at end of table.

**Table 127 (page 2 of 2). National health expenditures, average annual percent change, and percent distribution, by type of expenditure: United States, selected years 1960–2006**

[Data are compiled from various sources by the Centers for Medicare & Medicaid Services]

Type of national health expenditure	1960	1970	1980	1990	1995	2000	2003	2004	2005	2006
	Percent distribution									
National health expenditures . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Health services and supplies . . . . .	90.6	89.6	92.1	93.4	93.7	93.4	93.5	93.4	93.4	93.4
Personal health care. . . . .	84.7	84.0	84.8	85.1	85.0	84.2	83.5	83.6	83.8	83.7
Hospital care . . . . .	33.3	36.8	39.9	35.2	33.5	30.8	30.3	30.5	30.7	30.8
Professional services. . . . .	30.2	27.6	26.5	30.4	31.1	31.5	31.3	31.4	31.5	31.4
Physician and clinical services . . . . .	19.4	18.7	18.6	22.1	21.7	21.3	21.2	21.3	21.4	21.3
Other professional services. . . . .	1.4	1.0	1.4	2.5	2.8	2.9	2.8	2.8	2.8	2.8
Dental services . . . . .	7.1	6.2	5.3	4.4	4.4	4.6	4.4	4.4	4.4	4.3
Other personal health care . . . . .	2.2	1.7	1.3	1.3	2.3	2.7	2.9	2.9	2.9	3.0
Nursing home and home health . . . . .	3.2	5.7	8.2	9.1	10.3	9.3	8.6	8.5	8.5	8.4
Home health care <sup>1</sup> . . . . .	0.2	0.3	0.9	1.8	3.0	2.3	2.2	2.3	2.4	2.5
Nursing home care <sup>1</sup> . . . . .	2.9	5.4	7.3	7.4	7.3	7.0	6.4	6.2	6.1	5.9
Retail outlet sales of medical products . . . . .	18.0	14.0	10.1	10.4	10.0	12.6	13.2	13.2	13.0	13.1
Prescription drugs . . . . .	9.7	7.3	4.8	5.6	6.0	8.9	10.1	10.2	10.1	10.3
Other medical products. . . . .	8.2	6.6	5.4	4.7	4.0	3.7	3.2	3.0	2.9	2.8
Government administration and net cost of private health insurance. . . . .	4.4	3.7	4.8	5.5	5.7	6.0	7.0	7.0	6.8	6.9
Government public health activities <sup>2</sup> . . . . .	1.5	1.9	2.5	2.8	3.0	3.2	3.1	2.9	2.9	2.8
Investment . . . . .	9.4	10.4	7.9	6.6	6.3	6.6	6.5	6.6	6.6	6.6
Research <sup>3</sup> . . . . .	2.5	2.6	2.1	1.8	1.8	1.9	2.1	2.1	2.1	2.0
Structures and equipment . . . . .	6.9	7.8	5.7	4.9	4.5	4.7	4.4	4.5	4.5	4.6

. . . Category not applicable.

<sup>1</sup>Freestanding facilities only. Additional services of this type are provided in hospital-based facilities and counted as hospital care.

<sup>2</sup>Includes personal care services delivered by government public health agencies.

<sup>3</sup>Research and development expenditures of drug companies and other manufacturers and providers of medical equipment and supplies are excluded. They are included in the expenditure class in which the product falls because these expenditures are covered by the payment received for that product. See [Appendix II, Health expenditures, national](#).

NOTES: Percents are calculated using unrounded data. Data have been revised and differ from previous editions of *Health, United States*.

SOURCES: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group, National Health Expenditure Accounts, National health expenditures, 2006. Available from: <http://www.cms.hhs.gov/NationalHealthExpendData/>; unpublished data.

**Table 128 (page 1 of 2). Personal health care expenditures, by source of funds and type of expenditure: United States, selected years 1960–2006**

[Data are compiled from various sources by the Centers for Medicare & Medicaid Services]

<i>Type of personal health care expenditures and source of funds</i>	1960	1970	1980	1990	1995	2000	2004	2005	2006
	Amount								
Per capita . . . . .	\$ 125	\$ 299	\$ 932	\$2,394	\$3,214	\$ 4,033	\$ 5,265	\$ 5,572	\$ 5,880
	Amount in billions								
All personal health care expenditures <sup>1</sup> . . . .	\$ 23.3	\$ 62.9	\$214.8	\$607.5	\$863.7	\$1,139.6	\$1,547.7	\$1,653.7	\$1,762.0
Personal health care implicit price deflator <sup>2</sup> . . . . .	10.7	16.0	34.5	70.4	87.8	100.0	116.3	120.4	124.5
	Percent distribution								
All sources of funds . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Out-of-pocket payments . . . . .	55.2	39.6	27.1	22.4	16.9	16.9	15.2	14.9	14.6
Private health insurance . . . . .	21.4	22.3	28.5	33.7	33.2	35.4	36.2	36.2	36.0
Other private funds . . . . .	2.0	2.8	4.3	5.0	5.1	5.0	4.2	4.2	4.1
Government <sup>3</sup> . . . . .	21.4	35.3	40.1	38.9	44.8	42.7	44.4	44.7	45.3
Medicare . . . . .	...	11.6	16.8	17.5	20.8	18.9	19.3	19.7	21.6
Medicaid . . . . .	...	8.0	11.5	11.5	15.8	16.4	17.4	17.5	16.2
SCHIP <sup>4</sup> . . . . .	...	...	...	...	...	0.2	0.4	0.4	0.4
	Amount in billions								
Hospital care expenditures <sup>5</sup> . . . . .	\$ 9.2	\$ 27.6	\$101.0	\$251.6	\$340.7	\$ 417.1	\$ 564.4	\$ 605.5	\$ 648.2
	Percent distribution								
All sources of funds . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Out-of-pocket payments . . . . .	20.7	9.0	5.4	4.5	3.0	3.3	3.3	3.3	3.3
Private health insurance . . . . .	35.8	32.5	36.6	38.9	32.0	34.6	35.9	35.6	36.2
Other private funds . . . . .	1.2	3.2	5.0	4.1	4.2	5.2	4.5	4.4	4.5
Government <sup>3</sup> . . . . .	42.2	55.2	53.0	52.5	60.8	56.9	56.3	56.7	55.9
Medicare . . . . .	...	19.4	26.1	27.0	32.0	29.8	29.0	29.4	28.9
Medicaid . . . . .	...	9.6	9.1	10.6	16.7	17.0	17.2	17.4	17.1
SCHIP <sup>4</sup> . . . . .	...	...	...	...	...	0.2	0.4	0.4	0.4
	Amount in billions								
Physician and clinical services expenditures . . . . .	\$ 5.4	\$ 14.0	\$ 47.1	\$157.5	\$220.5	\$ 288.6	\$ 393.6	\$ 422.6	\$ 447.6
	Percent distribution								
All sources of funds . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Out-of-pocket payments . . . . .	61.7	46.2	30.4	19.2	11.8	11.2	10.2	10.2	10.3
Private health insurance . . . . .	29.8	30.1	35.5	42.7	48.1	47.4	48.5	49.0	49.1
Other private funds . . . . .	1.4	1.6	3.9	7.2	8.0	7.7	6.7	6.6	6.4
Government <sup>3</sup> . . . . .	7.2	22.1	30.2	30.9	32.1	33.8	34.6	34.1	34.2
Medicare . . . . .	...	11.8	17.0	18.6	18.8	20.2	20.6	20.4	20.6
Medicaid . . . . .	...	4.6	5.2	4.5	6.7	6.6	7.1	7.1	7.0
SCHIP <sup>4</sup> . . . . .	...	...	...	...	...	0.3	0.4	0.4	0.4
	Amount in billions								
Nursing home expenditures <sup>6</sup> . . . . .	\$ 0.8	\$ 4.0	\$ 18.5	\$ 52.6	\$ 74.1	\$ 95.3	\$ 115.2	\$ 120.7	\$ 124.9
	Percent distribution								
All sources of funds . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Out-of-pocket payments . . . . .	77.3	52.0	35.7	36.1	28.1	30.1	26.8	26.1	26.4
Private health insurance . . . . .	0.0	0.2	1.1	5.6	7.9	8.3	7.5	7.3	7.4
Other private funds . . . . .	6.3	4.8	4.0	7.2	6.7	4.8	3.7	3.6	3.7
Government <sup>3</sup> . . . . .	16.4	43.0	59.2	51.1	57.2	56.8	62.1	63.0	62.5
Medicare . . . . .	...	3.5	1.7	3.2	9.0	10.6	14.8	15.9	16.7
Medicaid . . . . .	...	23.3	55.4	45.8	46.0	44.1	44.7	44.5	43.4
SCHIP <sup>4</sup> . . . . .	...	...	...	...	...	0.0	0.0	0.0	0.0

See footnotes at end of table.



**Table 128 (page 2 of 2). Personal health care expenditures, by source of funds and type of expenditure: United States, selected years 1960–2005**

[Data are compiled from various sources by the Centers for Medicare & Medicaid Services]

Type of personal health care expenditures and source of funds	1960	1970	1980	1990	1995	2000	2003	2004	2005
Amount in billions									
Home health expenditures . . . . .	\$ 0.1	\$ 0.2	\$ 2.4	\$ 12.6	\$ 30.5	\$ 30.5	\$ 42.7	\$ 47.9	\$ 52.7
Percent distribution									
All sources of funds . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Out-of-pocket payments . . . . .	12.5	9.4	15.2	17.9	14.8	17.9	12.4	11.4	11.2
Private health insurance . . . . .	2.5	3.0	14.7	22.9	19.2	22.7	12.8	11.6	11.4
Other private funds . . . . .	67.6	38.7	15.6	7.7	4.1	4.0	2.3	2.3	2.1
Government <sup>3</sup> . . . . .	17.4	48.8	54.5	51.6	61.9	55.4	72.5	74.7	75.3
Medicare . . . . .	...	26.7	26.8	26.0	42.5	28.0	36.4	37.9	37.6
Medicaid . . . . .	...	6.7	11.7	17.1	14.1	22.1	31.9	32.9	33.7
SCHIP <sup>4</sup> . . . . .	...	...	...	...	...	0.0	0.0	0.0	0.0
Amount in billions									
Prescription drug expenditures . . . . .	\$ 2.7	\$ 5.5	\$ 12.0	\$ 40.3	\$ 60.9	\$ 120.6	\$ 188.8	\$ 199.7	\$ 216.7
Percent distribution									
All sources of funds . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Out-of-pocket payments . . . . .	96.0	82.4	70.3	55.5	38.4	27.7	24.5	24.4	22.0
Private health insurance . . . . .	1.3	8.8	14.8	26.4	40.1	49.4	47.7	47.9	43.9
Other private funds . . . . .	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Government <sup>3</sup> . . . . .	2.7	8.8	14.9	18.1	21.5	22.9	27.8	27.6	34.2
Medicare . . . . .	...	0.0	0.0	0.5	1.1	1.7	1.7	1.9	18.2
Medicaid . . . . .	...	7.6	11.7	12.6	15.9	16.7	19.2	18.7	8.8
SCHIP <sup>4</sup> . . . . .	...	...	...	...	...	0.3	0.7	0.7	0.7
Amount in billions									
Dental services expenditures . . . . .	\$ 2.0	\$ 4.7	\$ 13.3	\$ 31.5	\$ 44.5	\$ 62.0	\$ 81.5	\$ 86.6	\$ 91.5
Percent distribution									
All sources of funds . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Out-of-pocket payments . . . . .	97.2	91.0	66.4	48.5	43.6	44.6	44.3	44.3	44.4
Private health insurance . . . . .	1.9	4.5	28.6	48.5	51.7	50.5	49.7	49.6	49.6
Other private funds . . . . .	0.0	0.0	0.2	0.2	0.2	0.3	0.1	0.1	0.1
Government <sup>3</sup> . . . . .	0.9	4.5	4.8	2.8	4.6	4.6	6.0	6.0	6.0
Medicare . . . . .	...	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
Medicaid . . . . .	...	3.5	3.8	2.4	4.1	3.7	5.0	4.9	4.8
SCHIP <sup>4</sup> . . . . .	...	...	...	...	...	0.4	0.6	0.6	0.7
Amount in billions									
All other personal health care expenditures <sup>7</sup> . . . . .	\$ 3.3	\$ 6.9	\$ 20.5	\$ 61.4	\$ 92.5	\$ 125.6	\$ 161.5	\$ 170.6	\$ 180.4
Percent distribution									
All sources of funds . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Out-of-pocket payments . . . . .	78.2	73.0	69.2	58.1	45.3	41.3	35.8	35.1	34.3
Private health insurance . . . . .	1.3	2.4	6.7	12.7	13.4	13.1	13.5	13.6	13.5
Other private funds . . . . .	5.6	5.0	5.6	6.4	6.4	5.5	5.0	5.0	5.0
Government <sup>3</sup> . . . . .	15.0	19.6	18.5	22.8	34.8	40.1	45.7	46.3	47.3
Medicare . . . . .	...	1.1	3.5	6.9	9.7	9.9	11.4	11.8	12.0
Medicaid . . . . .	...	3.0	3.0	6.4	16.0	20.4	24.6	25.3	26.7
SCHIP <sup>4</sup> . . . . .	...	...	...	...	...	0.2	0.3	0.4	0.4

... Category not applicable.

<sup>1</sup>Includes all expenditures for specified health services and supplies other than expenses for program administration, net cost of private health insurance, and government public health activities.

<sup>2</sup>Constructed from the Producer Price Index for hospital care, Nursing Home Input Price Index for nursing home care, and Consumer Price Indices specific to each of the remaining personal health care components.

<sup>3</sup>Includes other government expenditures for these health care services, for example, care funded by the Department of Veterans Affairs, and state and locally financed subsidies to hospitals.

<sup>4</sup>State Children's Health Insurance Program (SCHIP). Medicaid SCHIP expansions are included.

<sup>5</sup>Includes expenditures for hospital-based nursing home and home health agency care.

<sup>6</sup>Includes expenditures for care in freestanding nursing homes. Expenditures for care in hospital-based nursing homes are included with hospital care.

<sup>7</sup>Includes expenditures for other professional services, other non-durable medical products, durable medical equipment, and other personal health care, not shown separately. See [Appendix II, Health expenditures, national](#).

NOTES: Percents may not add to totals because of rounding. The Medicare and Medicaid programs began coverage in 1965. The State Children's Health Insurance Program began coverage in 1997. Data have been revised and differ from previous editions of *Health, United States*.

SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group, National Health Expenditure Accounts, National health expenditures, 2006. Available from: <http://www.cms.hhs.gov/NationalHealthExpendData/>.

**Table 129. National health expenditures for mental health services, average annual percent change and percent distribution, by type of expenditure: United States, selected years 1986–2003**

[Data are compiled from various sources by the Substance Abuse and Mental Health Services Administration]

Type of expenditure	1986	1990	1995	2000	2002	2003
Amount in millions						
Total expenditures . . . . .	\$33,125	\$46,456	\$61,763	\$79,203	\$93,135	\$100,321
Total all service providers . . . . .	29,355	40,636	52,163	57,740	65,790	69,918
General non-specialty hospitals . . . . .	5,469	7,613	11,125	12,069	14,729	15,927
General hospital specialty units . . . . .	3,038	5,729	7,953	6,445	6,455	6,568
General hospital non-specialty units . . . . .	2,432	1,885	3,171	5,624	8,274	9,359
Specialty hospitals . . . . .	8,251	11,069	11,473	11,005	11,328	11,673
All physicians . . . . .	3,753	5,827	8,261	10,445	12,541	13,748
Psychiatrists . . . . .	2,681	4,276	5,924	7,569	8,678	9,802
Non-psychiatric physicians . . . . .	1,072	1,551	2,337	2,876	3,863	3,946
Other professionals . . . . .	3,099	4,261	5,191	6,251	7,567	8,370
Freestanding nursing homes . . . . .	4,754	5,496	5,261	5,310	5,964	6,234
Freestanding home health . . . . .	113	221	592	612	749	823
Multi-service mental health organizations . . . . .	3,916	6,148	10,260	12,048	12,913	13,143
Retail prescription drug . . . . .	2,191	3,340	5,754	16,417	20,949	23,259
Insurance administration . . . . .	1,579	2,480	3,847	5,046	6,395	7,145
Amount in inflation-adjusted millions						
Total expenditures, inflation-adjusted dollars . . . . .	\$46,491	\$56,938	\$67,057	\$79,203	\$89,392	\$ 94,284
Deflator (2000=1.00)						
GDP implicit price deflator <sup>1</sup> . . . . .	0.71	0.82	0.92	1.00	1.04	1.06
Average annual percent change from previous year shown						
Total expenditures . . . . .	...	8.8	5.9	5.1	8.4	7.7
Total all service providers . . . . .	...	8.5	5.1	2.1	6.7	6.3
General non-specialty hospitals . . . . .	...	8.6	7.9	1.6	10.5	8.1
General hospital specialty units . . . . .	...	17.2	6.8	-4.1	0.1	1.8
General hospital non-specialty units . . . . .	...	-6.2	11.0	12.1	21.3	13.1
Specialty hospitals . . . . .	...	7.6	0.7	-0.8	1.5	3.0
All physicians . . . . .	...	11.6	7.2	4.8	9.6	9.6
Psychiatrists . . . . .	...	12.4	6.7	5.0	7.1	13.0
Non-psychiatric physicians . . . . .	...	9.7	8.6	4.2	15.9	2.1
Other professionals . . . . .	...	8.3	4.0	3.8	10.0	10.6
Freestanding nursing homes . . . . .	...	3.7	-0.9	0.2	6.0	4.5
Freestanding home health . . . . .	...	18.4	21.7	0.7	10.7	9.9
Multi-service mental health organizations . . . . .	...	11.9	10.8	3.3	3.5	1.8
Retail prescription drug . . . . .	...	11.1	11.5	23.3	13.0	11.0
Insurance administration . . . . .	...	11.9	9.2	5.6	12.6	11.7
Percent distribution						
Total expenditures . . . . .	100.0	100.0	100.0	100.0	100.0	100.0
Total all service providers . . . . .	88.6	87.5	84.5	72.9	70.6	69.7
General non-specialty hospitals . . . . .	16.5	16.4	18.0	15.2	15.8	15.9
General hospital specialty units . . . . .	9.2	12.3	12.9	8.1	6.9	6.5
General hospital non-specialty units . . . . .	7.3	4.1	5.1	7.1	8.9	9.3
Specialty hospitals . . . . .	24.9	23.8	18.6	13.9	12.2	11.6
All physicians . . . . .	11.3	12.5	13.4	13.2	13.5	13.7
Psychiatrists . . . . .	8.1	9.2	9.6	9.6	9.3	9.8
Non-psychiatric physicians . . . . .	3.2	3.3	3.8	3.6	4.1	3.9
Other professionals . . . . .	9.4	9.2	8.4	7.9	8.1	8.3
Freestanding nursing homes . . . . .	14.4	11.8	8.5	6.7	6.4	6.2
Freestanding home health . . . . .	0.3	0.5	1.0	0.8	0.8	0.8
Multi-service mental health organizations . . . . .	11.8	13.2	16.6	15.2	13.9	13.1
Retail prescription drug . . . . .	6.6	7.2	9.3	20.7	22.5	23.2
Insurance administration . . . . .	4.8	5.3	6.2	6.4	6.9	7.1

--- Data not available.

... Category not applicable.

<sup>1</sup>Gross Domestic Product implicit price deflator developed by the U.S. Department of Commerce, Bureau of Economic Analysis. Table 1.1.9 Implicit price deflator for Gross Domestic Product is available from: <http://www.bea.gov/national/nipaweb/SelectTable.asp?Selected=N>, accessed on September 13, 2006.

NOTES: Additional data on specialty and non-specialty providers are available in the Internet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Specialty providers include general hospital specialty units, specialty hospitals, psychiatrists, other professionals, multi-service mental health organizations, and specialty substance abuse centers. Non-specialty providers include general hospital non-specialty units, non-psychiatric physicians, freestanding nursing homes, and freestanding home health providers. Data for additional years are available. See [Appendix III](#).

**SOURCES:** Mark TL, Levit KR, Coffey RM, McKusick DR, Harwood HJ, King EC, et al. National Expenditures for Mental Health Services and Substance Abuse Treatment, 1993–2003. SAMHSA Publication No. SMA 07–4227. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2007 and unpublished data.

**Table 130. National health expenditures for substance abuse treatment, average annual percent change and percent distribution, by type of expenditure: United States, selected years 1986–2003**

[Data are compiled from various sources by the Substance Abuse and Mental Health Services Administration]

Type of expenditure	1986	1990	1995	2000	2002	2003
Amount in millions						
Total expenditures . . . . .	\$ 9,302	\$12,075	\$15,561	\$17,545	\$19,867	\$20,740
Total all service providers . . . . .	8,777	11,378	14,590	16,473	18,558	19,335
General non-specialty hospitals . . . . .	2,995	3,167	3,764	3,649	4,132	4,359
General hospital specialty units . . . . .	2,240	2,089	3,320	2,739	2,859	2,890
General hospital non-specialty units . . . . .	755	1,078	444	911	1,272	1,470
Specialty hospitals . . . . .	1,453	1,346	1,315	736	738	676
All physicians . . . . .	685	904	1,048	1,413	1,554	1,672
Psychiatrists . . . . .	237	328	410	510	428	540
Non-psychiatric physicians . . . . .	448	577	638	902	1,127	1,131
Other professionals . . . . .	1,451	1,685	1,652	2,076	2,372	2,636
Freestanding nursing homes . . . . .	106	126	179	254	292	301
Freestanding home health . . . . .	2	3	16	10	3	4
Multi-service mental health organizations . . . . .	325	657	1,012	1,492	1,312	1,246
Specialty substance abuse centers . . . . .	1,761	3,490	5,605	6,845	8,156	8,441
Retail prescription drug . . . . .	14	19	33	67	89	98
Insurance administration . . . . .	512	679	937	1,005	1,220	1,307
Amount in inflation-adjusted millions						
Total expenditures, inflation-adjusted dollars . . . . .	\$13,056	\$14,800	\$16,895	\$17,545	\$19,068	\$19,492
Deflator (2000=1.00)						
GDP implicit price deflator <sup>1</sup> . . . . .	0.71	0.82	0.92	1.00	1.04	1.06
Average annual percent change from previous year shown						
Total expenditures . . . . .	...	6.7	5.2	2.4	6.4	4.4
Total all service providers . . . . .	...	6.7	5.1	2.5	6.1	4.2
General non-specialty hospitals . . . . .	...	1.4	3.5	-0.6	6.4	5.5
General hospital specialty units . . . . .	...	-1.7	9.7	-3.8	2.2	1.1
General hospital non-specialty units . . . . .	...	9.3	-16.3	15.4	18.2	15.5
Specialty hospitals . . . . .	...	-1.9	-0.5	-11.0	0.1	-8.4
All physicians . . . . .	...	7.2	3.0	6.2	4.9	7.5
Psychiatrists . . . . .	...	8.4	4.6	4.5	-8.4	26.2
Non-psychiatric physicians . . . . .	...	6.5	2.0	7.2	11.7	0.4
Other professionals . . . . .	...	3.8	-17.6	26.6	6.9	11.2
Freestanding nursing homes . . . . .	...	4.3	7.3	7.3	7.3	3.2
Freestanding home health . . . . .	...	15.9	36.6	-9.2	-43.1	11.9
Multi-service mental health organizations . . . . .	...	19.3	9.0	8.1	-6.2	-5.0
Specialty substance abuse centers . . . . .	...	18.7	9.9	4.1	9.2	3.5
Retail prescription drug . . . . .	...	9.0	11.6	15.0	15.0	11.3
Insurance administration . . . . .	...	7.3	6.7	1.4	10.1	7.2
Percent distribution						
Total expenditures . . . . .	100.0	100.0	100.0	100.0	100.0	100.0
Total all service providers . . . . .	94.4	94.2	93.8	93.9	93.4	93.2
General non-specialty hospitals . . . . .	32.2	26.2	24.2	20.8	20.8	21.0
General hospital specialty units . . . . .	24.1	17.3	21.3	15.6	14.4	13.9
General hospital non-specialty units . . . . .	8.1	8.9	2.9	5.2	6.4	7.1
Specialty hospitals . . . . .	15.6	11.1	8.5	4.2	3.7	3.3
All physicians . . . . .	7.4	7.5	6.7	8.1	7.8	8.1
Psychiatrists . . . . .	2.6	2.7	2.6	2.9	2.2	2.6
Non-psychiatric physicians . . . . .	4.8	4.8	4.1	5.1	5.7	5.5
Other professionals . . . . .	15.6	14.0	4.1	11.8	11.9	12.7
Freestanding nursing homes . . . . .	1.1	1.0	1.1	1.4	1.5	1.5
Freestanding home health . . . . .	0.0	0.0	0.1	0.1	0.0	0.0
Multi-service mental health organizations . . . . .	3.5	5.4	6.5	8.5	6.6	6.0
Specialty substance abuse centers . . . . .	18.9	28.9	36.0	39.0	41.1	40.7
Retail prescription drug . . . . .	0.1	0.2	0.2	0.4	0.4	0.5
Insurance administration . . . . .	5.5	5.6	6.0	5.7	6.1	6.3

--- Data not available.

... Category not applicable.

<sup>1</sup>Gross Domestic Product implicit price deflator developed by the U.S. Department of Commerce, Bureau of Economic Analysis. Table 1.1.9 Implicit price deflator for Gross Domestic Product is available from: <http://www.bea.gov/national/nipaweb/SelectTable.asp?Selected=N>, accessed on September 13, 2006.

NOTES: Additional data on specialty and non-specialty providers are available in the internet version of this table. Available from: <http://www.cdc.gov/nchs/hsu.htm>. Specialty providers include general hospital specialty units, specialty hospitals, psychiatrists, other professionals, multi-service mental health organizations, and specialty substance abuse centers. Non-specialty providers include general hospital non-specialty units, non-psychiatric physicians, freestanding nursing homes, and freestanding home health providers. Data for additional years are available. See Appendix III.

SOURCES: Mark TL, Levit KR, Coffey RM, McKusick DR, Harwood HJ, King EC, et al. National Expenditures for Mental Health Services and Substance Abuse Treatment, 1993–2003. SAMHSA Publication No. SMA 07–4227. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2007 and unpublished data.

**Table 131 (page 1 of 3). Expenses for health care and prescribed medicine, by selected population characteristics: United States, selected years 1987–2005**

[Data are based on household interviews of a sample of the noninstitutionalized population and a sample of medical providers]

Characteristic	Total expenses <sup>1</sup>										
	Population in millions <sup>2</sup>			Percent of persons with expense				Mean annual expense per person with expense <sup>3</sup>			
	1997	2000	2005	1987	1997	2000	2005	1987	1997	2000	2005
All ages . . . . .	271.3	278.4	296.2	84.5	84.1	83.5	84.7	\$2,685	\$2,950	\$3,062	\$4,082
Under 65 years:											
Total . . . . .	237.1	243.6	258.7	83.2	82.5	81.8	82.9	2,091	2,237	2,412	3,239
Under 6 years . . . . .	23.8	24.1	23.8	88.9	88.0	86.7	88.9	1,776	1,044	1,275	1,552
6–17 years . . . . .	48.1	48.4	49.7	80.2	81.7	80.0	83.0	1,171	1,172	1,267	1,639
18–44 years . . . . .	108.9	109.0	111.1	81.5	78.3	77.7	77.1	1,838	2,027	2,161	2,880
45–64 years . . . . .	56.3	62.1	74.1	87.0	89.2	88.5	89.7	3,559	3,925	4,040	5,233
Sex											
Male . . . . .	118.0	120.9	129.2	78.8	77.6	76.6	77.5	1,972	2,021	2,309	2,925
Female . . . . .	119.1	122.7	129.6	87.5	87.4	87.0	88.4	2,192	2,426	2,502	3,514
Hispanic origin and race <sup>4</sup>											
Hispanic or Latino . . . . .	29.4	32.0	41.1	71.0	69.5	69.0	69.3	1,668	1,862	1,643	2,200
Not Hispanic or Latino:											
White . . . . .	166.2	169.2	166.5	86.9	87.2	86.6	88.1	2,097	2,400	2,523	3,513
Black or African American . .	31.3	32.1	32.8	72.2	72.1	71.3	76.4	2,529	1,794	2,562	3,299
Other . . . . .	10.2	10.2	18.3	72.8	75.8	76.0	78.0	1,387	1,487	2,056	2,398
Insurance status <sup>5</sup>											
Any private insurance . . . . .	174.0	181.6	180.1	86.5	86.5	85.9	87.9	2,005	2,279	2,298	3,263
Public insurance only . . . . .	29.8	29.7	42.2	82.4	83.3	83.6	84.2	3,363	2,718	3,662	3,939
Uninsured all year . . . . .	33.3	32.3	36.4	61.8	61.1	57.3	56.8	1,307	1,336	1,701	1,856
65 years and over:											
Total . . . . .	34.2	34.8	37.5	93.7	95.2	95.5	96.7	6,633	7,236	6,964	9,074
Sex											
Male . . . . .	14.6	15.0	16.0	92.0	94.5	93.4	95.9	6,787	8,132	7,467	8,879
Female . . . . .	19.6	19.8	21.5	94.9	95.7	97.1	97.2	6,524	6,577	6,597	9,217
Hispanic origin and race <sup>4</sup>											
Hispanic or Latino . . . . .	1.7	1.9	2.4	82.5	94.2	92.5	92.0	6,316	7,572	6,249	7,855
Not Hispanic or Latino:											
White . . . . .	28.8	28.9	30.0	94.9	95.9	95.9	97.3	6,529	7,273	7,069	9,178
Black or African American . .	2.8	2.9	3.1	88.5	92.2	94.0	94.9	7,994	7,127	6,697	10,872
Other . . . . .	*	*	1.9	*	*	*	95.0	*	*	*	5,990
Insurance status <sup>6</sup>											
Medicare only . . . . .	8.8	12.0	10.9	85.9	92.1	94.8	96.2	5,225	6,667	5,979	8,774
Medicare and private insurance . . . . .	21.7	19.2	20.7	95.4	97.0	96.0	97.8	6,562	7,058	7,141	8,717
Medicare and other public coverage . . . . .	3.2	3.2	5.5	94.4	93.2	96.3	95.5	10,191	10,199	9,555	11,148

See footnotes at end of table.

**Table 131 (page 2 of 3). Expenses for health care and prescribed medicine, by selected population characteristics: United States, selected years 1987–2005**

[Data are based on household interviews of a sample of the noninstitutionalized population and a sample of medical providers]

Characteristic	Prescribed medicine expenses							
	Percent of persons with expense				Mean annual out-of-pocket expense per person with out-of-pocket expense <sup>3,7</sup>			
	1987	1997	2000	2005	1987	1997	2000	2005
All ages . . . . .	57.3	62.1	62.3	63.1	\$158	\$246	\$311	\$442
Under 65 years:								
Total . . . . .	54.0	58.7	58.5	59.1	117	174	226	329
Under 6 years . . . . .	61.8	61.3	56.9	54.5	41	43	42	60
6–17 years . . . . .	44.3	48.2	46.2	47.1	77	66	79	99
18–44 years . . . . .	51.3	55.9	56.0	54.9	91	148	171	230
45–64 years . . . . .	65.3	71.8	73.3	74.8	222	324	425	597
Sex								
Male . . . . .	46.5	51.5	51.3	52.0	108	155	198	303
Female . . . . .	61.4	65.8	65.6	66.1	124	189	247	349
Hispanic origin and race <sup>4</sup>								
Hispanic or Latino . . . . .	41.6	47.7	45.0	44.2	84	116	166	231
Not Hispanic or Latino:								
White . . . . .	57.7	63.1	63.8	65.5	122	189	243	358
Black or African American . .	44.1	50.0	47.6	51.1	103	140	186	276
Other . . . . .	41.1	44.8	47.8	48.8	86	151	159	265
Insurance status <sup>5</sup>								
Any private insurance . . . . .	56.5	61.6	61.6	63.4	120	165	194	310
Public insurance only . . . . .	56.5	62.0	62.4	59.4	81	172	323	317
Uninsured all year . . . . .	35.1	40.2	37.6	37.3	129	251	374	506
65 years and over:								
Total . . . . .	81.6	86.0	88.3	91.1	364	588	707	951
Sex								
Male . . . . .	78.0	82.8	83.9	89.8	339	529	530	742
Female . . . . .	84.0	88.3	91.5	92.1	380	628	829	1,103
Hispanic origin and race <sup>4</sup>								
Hispanic or Latino . . . . .	74.7	87.5	83.9	85.8	481	479	595	810
Not Hispanic or Latino:								
White . . . . .	82.3	86.7	89.0	91.9	371	607	733	988
Black or African American . .	79.5	85.3	85.3	90.2	285	488	603	896
Other . . . . .	*	*	*	87.4	*	*	*	616
Insurance status <sup>6</sup>								
Medicare only . . . . .	70.6	82.1	87.7	90.0	402	679	844	1,233
Medicare and private insurance . . . . .	83.4	88.1	89.0	92.6	378	596	653	910
Medicare and other public coverage . . . . .	88.2	85.0	88.5	90.3	138	329	559	571

See footnotes at end of table.

## Table 131 (page 3 of 3). Expenses for health care and prescribed medicine, by selected population characteristics: United States, selected years 1987–2005

[Data are based on household interviews of a sample of the noninstitutionalized population and a sample of medical providers]

\* Estimates are considered unreliable. Estimates based on fewer than 100 sample cases or with a relative standard error of 30% or higher are not shown.

<sup>1</sup>Includes expenses for inpatient hospital and physician services, ambulatory physician and nonphysician services, prescribed medicines, home health services, dental services, and other medical equipment, supplies, and services that were purchased or rented during the year. Excludes expenses for over-the-counter medications, alternative care services, phone contacts with health providers, and premiums for health insurance.

<sup>2</sup>Includes persons in the civilian noninstitutionalized population for all or part of the year. Expenditures for persons in this population for only part of the year are restricted to those incurred during periods of eligibility (e.g., expenses incurred during periods of institutionalization and military service are not included in estimates).

<sup>3</sup>Estimates of expenses were converted to 2005 dollars using the Consumer Price Index (all items) and differ from previous editions of *Health, United States*. See [Appendix II, Consumer Price Index \(CPI\)](#).

<sup>4</sup>Persons of Hispanic origin may be of any race. Starting with 2002 data, MEPS respondents were allowed to report multiple races and these persons are included in the Other category. As a result, there is a slight increase in percentage of persons classified in the Other category in 2002 compared with prior years. Other includes Asian and American Indian race in addition to multiple race.

<sup>5</sup>Any private insurance includes individuals with insurance that provided coverage for hospital and physician care at any time during the year, other than Medicare, Medicaid, or other public coverage for hospital or physician services. Public insurance only includes individuals who were not covered by private insurance at any time during the year but were covered by Medicare, Medicaid, other public coverage for hospital or physician services, and/or CHAMPUS/CHAMPVA (TRICARE) at any point during the year. Individuals with Indian Health Service coverage only are considered uninsured. Uninsured includes persons not covered by either private or public insurance throughout the entire year or period of eligibility for the survey.

<sup>6</sup>Populations do not add to total because uninsured persons and persons with unknown insurance status were excluded.

<sup>7</sup>Includes expenses for all prescribed medications that were purchased or refilled during the survey year.

NOTES: 1987 estimates are based on the National Medical Expenditure Survey (NMES); estimates for other years are based on the Medical Expenditure Panel Survey (MEPS). Because expenditures in NMES were based primarily on charges and those for MEPS were based on payments, NMES data were adjusted to be more comparable to MEPS using estimated charge to payment ratios for 1987. Overall, this resulted in an approximate 11% reduction from the unadjusted 1987 NMES expenditure estimates. For a detailed explanation of this adjustment, see Zuvekas S, Cohen J. A guide to comparing health care expenditures in the 1996 MEPS to the 1987 NMES. *Inquiry* 2002;39(1):76–86. See [Appendix I, Medical Expenditure Panel Survey \(MEPS\)](#). Data for additional years are available. See [Appendix III](#).

**SOURCES:** Agency for Healthcare Research and Quality, Center for Cost and Financing Studies. 1987 National Medical Expenditure Survey and 1996–2005 Medical Expenditure Panel Survey.

**Table 132 (page 1 of 3). Sources of payment for health care, by selected population characteristics: United States, selected years 1987–2005**

[Data are based on household interviews of a sample of the noninstitutionalized population and a sample of medical providers]

Characteristic	All sources	Source of payment for health care							
		Out of pocket				Private insurance <sup>1</sup>			
		1987	1997	2000	2005	1987	1997	2000	2005
		Percent distribution							
All ages . . . . .	100.0	24.8	19.4	19.4	18.8	36.6	40.3	40.3	40.7
Under 65 years:									
Total . . . . .	100.0	26.2	21.1	20.3	19.6	46.6	53.1	52.5	52.1
Under 6 years . . . . .	100.0	18.5	14.2	10.3	10.8	39.5	49.3	51.2	47.8
6–17 years . . . . .	100.0	35.7	29.0	27.7	20.9	47.3	53.2	48.8	51.1
18–44 years . . . . .	100.0	27.4	21.1	19.9	19.6	46.8	52.9	51.2	51.5
45–64 years . . . . .	100.0	24.0	20.1	20.2	20.2	47.8	53.6	54.5	53.2
Sex									
Male . . . . .	100.0	24.5	21.3	18.1	19.0	44.6	50.3	52.2	51.6
Female . . . . .	100.0	27.5	21.0	22.1	20.1	48.1	55.1	52.7	52.5
Hispanic origin and race <sup>2</sup>									
Hispanic or Latino . . . . .	100.0	22.0	18.8	20.5	19.1	36.1	42.3	45.8	35.9
Not Hispanic or Latino:									
White . . . . .	100.0	28.2	21.8	21.7	20.6	50.1	55.8	55.1	55.7
Black or African American . . . . .	100.0	15.5	17.1	11.8	13.0	30.0	42.3	40.5	41.7
Other . . . . .	100.0	27.2	21.2	17.0	21.4	46.7	45.2	51.2	53.0
Insurance status									
Any private insurance <sup>3</sup> . . . . .	100.0	29.0	21.6	21.2	19.7	60.0	67.6	70.2	69.9
Public insurance only <sup>4</sup> . . . . .	100.0	8.9	10.6	9.8	11.1	...	...	...	...
Uninsured all year <sup>5</sup> . . . . .	100.0	40.6	41.3	40.4	49.2	...	...	...	...
65 years and over . . . . .	100.0	22.0	16.3	17.5	17.1	15.8	16.5	14.9	16.5
Sex									
Male . . . . .	100.0	21.7	14.2	14.2	14.9	17.6	20.1	16.8	19.3
Female . . . . .	100.0	22.2	18.1	20.2	18.7	14.4	13.2	13.3	14.5
Hispanic origin and race <sup>2</sup>									
Hispanic or Latino . . . . .	100.0	*13.5	13.6	13.9	17.2	*4.7	5.9	8.4	*13.6
Not Hispanic or Latino:									
White . . . . .	100.0	23.7	17.0	18.3	17.7	16.7	17.9	15.2	18.0
Black or African American . . . . .	100.0	11.2	11.4	13.6	13.1	*11.9	8.8	9.3	8.2
Other . . . . .	100.0	*	*	*	15.3	*	*	*	8.4
Insurance status									
Medicare only . . . . .	100.0	29.8	19.8	22.2	22.3	...	...	...	...
Medicare and private insurance . . . . .	100.0	23.4	17.3	17.0	17.3	18.9	25.7	25.3	27.3
Medicare and other public coverage . . . . .	100.0	*6.2	5.2	9.1	8.3	...	...	...	...

See footnotes at end of table.



**Table 132 (page 2 of 3). Sources of payment for health care, by selected population characteristics: United States, selected years 1987–2005**

[Data are based on household interviews of a sample of the noninstitutionalized population and a sample of medical providers]

Characteristic	Source of payment for health care							
	Public coverage <sup>6</sup>				Other <sup>7</sup>			
	1987	1997	2000	2005	1987	1997	2000	2005
All ages . . . . .	34.1	34.4	35.4	36.7	4.5	5.9	5.0	3.8
Under 65 years:								
Total . . . . .	21.3	18.1	21.3	24.1	6.0	7.7	6.0	4.2
Under 6 years . . . . .	35.8	25.4	33.6	37.0	6.2	11.2	4.9	4.4
6–17 years . . . . .	11.8	14.1	20.1	24.9	5.2	3.7	3.4	3.1
18–44 years . . . . .	19.4	15.7	21.1	24.3	6.4	10.3	7.8	4.5
45–64 years . . . . .	22.4	20.3	20.2	22.5	5.8	6.0	5.2	4.2
Sex								
Male . . . . .	23.9	19.5	23.5	24.1	7.1	8.9	6.3	5.3
Female . . . . .	19.2	17.0	19.5	24.1	5.2	6.8	5.7	3.4
Hispanic origin and race <sup>2</sup>								
Hispanic or Latino . . . . .	35.8	28.9	27.5	36.9	6.0	10.0	6.2	8.1
Not Hispanic or Latino:								
White . . . . .	15.9	15.3	18.0	20.4	5.8	7.1	5.2	3.2
Black or African American . .	47.2	30.7	38.8	38.2	7.3	9.9	8.8	7.2
Other . . . . .	21.0	23.7	19.0	21.3	5.1	9.9	*12.8	4.3
Insurance status								
Any private insurance <sup>3</sup> . . . . .	6.2	6.6	5.3	8.5	4.8	4.2	3.3	1.8
Public insurance only <sup>4</sup> . . . . .	87.2	80.7	84.4	84.7	3.9	8.7	5.8	4.2
Uninsured all year <sup>5</sup> . . . . .	28.6	7.5	*21.2	12.1	30.9	51.1	38.4	38.8
65 years and over . . . . .	60.8	64.8	64.7	63.4	1.5	2.5	2.9	3.0
Sex								
Male . . . . .	58.8	63.4	66.9	63.5	*1.9	2.3	2.2	2.3
Female . . . . .	62.3	65.9	63.0	63.3	1.1	2.7	3.5	3.5
Hispanic origin and race <sup>2</sup>								
Hispanic or Latino . . . . .	80.2	77.8	75.6	67.1	*1.6	*2.7	*2.2	*2.2
Not Hispanic or Latino:								
White . . . . .	58.0	62.6	64.1	61.1	1.6	2.5	2.4	3.2
Black or African American . .	76.3	77.6	68.3	76.7	0.6	2.2	*8.9	2.0
Other . . . . .	*	*	*	73.7	*	*	*	*2.7
Insurance status								
Medicare only . . . . .	68.8	72.4	72.2	68.0	1.4	7.7	5.7	9.7
Medicare and private insurance . . . . .	56.1	56.3	57.1	55.2	1.6	0.6	*0.6	*0.2
Medicare and other public coverage . . . . .	92.9	92.7	87.3	82.8	1.0	*2.1	*3.6	0.8

See footnotes at end of table.

**Table 132 (page 3 of 3). Sources of payment for health care, by selected population characteristics: United States, selected years 1987–2005**

[Data are based on household interviews of a sample of the noninstitutionalized population and a sample of medical providers]

. . . Category not applicable.

\* Estimates are considered unreliable. Estimates based on fewer than 100 sample cases or with a relative standard error of 30% or higher are not shown.

<sup>1</sup>Private insurance includes any type of private insurance payments reported for people with private health insurance coverage during the year.

<sup>2</sup>Persons of Hispanic origin may be of any race. Starting with 2002 data, MEPS respondents were allowed to report multiple races and these persons are included in the Other category. As a result, there is a slight increase in the percent of persons classified in the Other category in 2002 compared with prior years.

<sup>3</sup>Includes individuals with insurance that provided coverage for hospital and physician care at any time during the year, other than Medicare, Medicaid, or other public coverage for hospital or physician services.

<sup>4</sup>Includes individuals who were not covered by private insurance at any time during the year but were covered by Medicare, Medicaid, other public coverage for hospital or physician services, and/or CHAMPUS/CHAMPVA (TRICARE) at any point during the year.

<sup>5</sup>Includes individuals not covered by either private or public insurance throughout the entire year or period of eligibility for the survey. However, some expenses for the uninsured were paid by sources that were not defined as health insurance coverage, such as the Department of Veterans Affairs, community and neighborhood clinics, the Indian Health Service, state and local health departments, state programs other than Medicaid, Workers' Compensation, and other unclassified sources (e.g., automobile, homeowners', or liability insurance). Individuals with Indian Health Service coverage only are considered uninsured.

<sup>6</sup>Public coverage includes payments made by Medicare, Medicaid, the Department of Veterans Affairs, other federal sources (e.g., Indian Health Service, military treatment facilities, and other care provided by the federal government), and various state and local sources (e.g., community and neighborhood clinics, state and local health departments, and state programs other than Medicaid).

<sup>7</sup>Other sources includes Workers' Compensation, unclassified sources (automobile, home, or liability insurance, and other miscellaneous or unknown sources), Medicaid payments reported for people who were not enrolled in the program at any time during the year, and any type of private insurance payments reported for people without private health insurance coverage during the year.

NOTES: 1987 estimates are based on the National Medical Expenditure Survey (NMES); estimates for other years are based on the Medical Expenditure Panel Survey (MEPS). Because expenditures in NMES were based primarily on charges and those for MEPS were based on payments, NMES data were adjusted to be more comparable to MEPS using estimated charge to payment ratios for 1987. Overall, this resulted in an approximate 11% reduction from the unadjusted 1987 NMES expenditure estimates. For a detailed explanation of this adjustment, see Zuvekas S, Cohen J. A guide to comparing health care expenditures in the 1996 MEPS to the 1987 NMES. *Inquiry* 2002;39(1):76–86. See [Appendix I, Medical Expenditure Panel Survey \(MEPS\)](#). Data for additional years are available. See [Appendix III](#).

**SOURCES:** Agency for Healthcare Research and Quality, Center for Cost and Financing Studies. 1987 National Medical Expenditure Survey and 1996–2005 Medical Expenditure Panel Survey.

**Table 133. Out-of-pocket health care expenses among persons with medical expenses, by age: United States, selected years 1987–2005**

[Data are based on household interviews for a sample of the noninstitutionalized population and a sample of medical providers]

Age and year	Percent of persons with expenses	Amount paid out of pocket among persons with expenses <sup>1</sup>						
		Total	\$0	\$1–99	\$100–499	\$500–999	\$1,000–1,999	\$2,000+
All ages		Percent distribution						
1987	84.5	100.0	10.4	21.4	37.6	14.6	9.2	6.8
2000	83.5	100.0	6.9	28.3	34.9	13.9	9.2	6.7
2002	85.2	100.0	7.8	25.0	33.0	15.0	11.0	8.2
2003	85.6	100.0	7.6	23.5	32.8	15.6	11.4	9.2
2004	84.7	100.0	8.8	23.6	32.1	14.6	11.2	9.8
2005	84.7	100.0	8.7	22.7	32.4	15.4	11.5	9.4
Under 6 years								
1987	88.9	100.0	19.2	30.0	39.4	7.4	2.3	1.7
2000	86.7	100.0	16.7	53.7	24.7	3.2	1.2	0.5
2002	88.8	100.0	21.5	44.7	27.9	4.1	1.3	0.4
2003	91.3	100.0	20.6	45.1	27.8	4.7	1.2	0.6
2004	90.0	100.0	26.0	42.7	24.9	4.1	1.8	0.5
2005	88.9	100.0	27.2	38.5	27.0	5.0	1.6	0.7
6–17 years								
1987	80.2	100.0	15.5	28.8	37.2	8.9	5.0	4.6
2000	80.0	100.0	14.7	39.2	31.9	6.6	3.4	4.2
2002	83.6	100.0	16.6	37.9	31.1	7.2	3.3	4.0
2003	84.1	100.0	16.1	34.8	32.4	8.4	4.9	3.3
2004	83.9	100.0	18.7	35.8	29.5	8.0	3.9	4.1
2005	83.0	100.0	18.6	34.6	30.4	8.4	4.3	3.6
18–44 years								
1987	81.5	100.0	10.1	23.9	40.1	13.8	7.5	4.7
2000	77.7	100.0	5.8	31.2	40.4	12.9	6.1	3.7
2002	78.5	100.0	6.7	28.2	38.6	14.2	7.7	4.6
2003	79.0	100.0	6.4	26.3	39.5	14.6	8.3	4.9
2004	77.0	100.0	7.2	26.8	38.7	13.6	8.5	5.3
2005	77.1	100.0	7.0	26.5	38.7	14.2	8.4	5.3
45–64 years								
1987	87.0	100.0	5.7	13.6	37.8	20.0	13.7	9.2
2000	88.5	100.0	2.6	17.1	36.5	20.2	14.5	9.2
2002	90.0	100.0	2.3	15.3	32.8	21.7	16.5	11.4
2003	89.6	100.0	2.4	14.0	31.1	21.6	16.9	13.9
2004	88.9	100.0	2.7	14.1	32.5	21.3	16.1	13.3
2005	89.7	100.0	2.4	14.0	31.3	21.4	18.2	12.7
65–74 years								
1987	92.8	100.0	5.3	10.9	29.3	22.3	17.8	14.3
2000	94.7	100.0	1.5	11.1	29.7	21.2	21.0	15.7
2002	96.1	100.0	1.8	6.9	27.4	22.0	24.7	17.1
2003	95.3	100.0	1.7	6.9	23.6	24.4	22.6	20.8
2004	96.6	100.0	1.5	8.9	24.4	19.1	22.1	24.0
2005	95.9	100.0	1.7	7.2	26.4	21.8	21.5	21.5
75 years and over								
1987	95.1	100.0	5.6	8.1	26.6	20.8	19.0	19.8
2000	96.5	100.0	2.6	10.4	26.7	22.3	19.5	18.4
2002	96.5	100.0	2.2	6.7	22.2	19.9	23.9	25.0
2003	97.5	100.0	1.9	6.9	21.0	20.0	24.0	26.2
2004	97.7	100.0	1.8	6.5	21.2	18.1	24.3	28.1
2005	97.4	100.0	1.6	6.9	23.1	20.6	20.3	27.6

<sup>1</sup>Estimates of expenses were converted to 2005 dollars using the Consumer Price Index (all items) and differ from previous editions of *Health, United States*. See [Appendix II, Consumer Price Index \(CPI\)](#).

NOTES: Includes persons in the civilian noninstitutionalized population for all or part of the year. Expenses for persons in this population for only part of the year are restricted to those incurred during periods of eligibility (e.g., expenses incurred during periods of institutionalization and military service are not included in estimates). Out-of-pocket expenses include expenditures for inpatient hospital and physician services, ambulatory physician and nonphysician services, prescribed medicines, home health services, dental services, and various other medical equipment, supplies, and services that were purchased or rented during the year. Out-of-pocket expenses for over-the-counter medications, alternative care services, phone contacts with health providers, and premiums for health insurance policies are not included in these estimates. 1987 estimates are based on the National Medical Expenditure Survey (NMES); estimates for other years are based on the Medical Expenditure Panel Survey (MEPS). Because expenditures in NMES were based primarily on charges and those for MEPS were based on payments, NMES data were adjusted to be more comparable to MEPS using estimated charge to payment ratios for 1987. Overall, this resulted in an approximate 11% reduction from the unadjusted 1987 NMES expenditure estimates. For a detailed explanation of this adjustment, see Zuvekas S, Cohen J. A guide to comparing health care expenditures in the 1996 MEPS to the 1987 NMES. *Inquiry* 2002;39(1):76–86. See [Appendix I, Medical Expenditure Panel Survey \(MEPS\)](#). Data for additional years are available. See [Appendix III](#).

SOURCES: Agency for Healthcare Research and Quality, Center for Cost and Financing Studies. 1987 National Medical Expenditure Survey and 1998–2005 Medical Expenditure Panel Survey.

**Table 134 (page 1 of 2). Expenditures for health services and supplies and percent distribution, by type of payer: United States, selected years 1987–2006**

[Data are compiled from various sources by the Centers for Medicare & Medicaid Services]

Type of payer	1987	1993	1997	2000	2002	2003	2004	2005	2006
Amount in billions									
Total <sup>1</sup>	\$477.8	\$853.2	\$1,054.2	\$1,264.8	\$1,499.4	\$1,620.7	\$1,730.6	\$1,843.6	\$1,966.2
Private	333.4	545.5	668.1	821.6	929.0	994.7	1,051.5	1,110.5	1,176.5
Private business	122.1	218.9	266.0	342.4	391.3	419.5	444.3	470.1	496.8
Employer contribution to private health insurance premiums	84.2	158.3	191.5	251.1	294.1	318.7	338.5	360.4	381.1
Private employer contribution to Medicare hospital insurance trust fund <sup>2</sup>	24.6	35.8	49.5	62.2	63.1	64.6	68.8	72.5	77.3
Workers compensation and temporary disability insurance	11.6	21.8	21.4	24.8	29.5	31.2	31.8	31.6	32.3
Industrial inplant health services	1.7	2.9	3.6	4.3	4.7	4.9	5.3	5.6	5.9
Household	188.9	290.7	353.4	425.4	482.9	515.3	546.3	575.7	611.6
Employee contribution to private health insurance premiums and individual policy premiums	43.9	89.9	112.4	133.6	167.4	182.4	195.2	203.0	211.3
Employee and self-employment contributions and voluntary premiums paid to Medicare hospital insurance trust fund <sup>2</sup>	29.5	43.7	63.0	82.5	84.3	86.3	91.6	96.5	103.6
Premiums paid by individuals to Medicare supplementary medical insurance trust fund	6.2	11.9	15.5	16.3	19.7	21.7	24.6	29.0	40.1
Out-of-pocket health spending	109.2	145.2	162.5	192.9	211.4	224.9	234.9	247.1	256.5
Other private revenues	22.4	36.0	48.7	53.8	54.8	59.8	60.9	64.8	68.2
Public	144.4	307.7	386.2	443.2	570.4	626.0	679.1	733.1	789.6
Federal government	73.9	176.2	219.9	235.7	316.7	352.0	384.2	411.6	449.5
Employer contributions to private health insurance premiums	4.9	11.5	11.4	14.3	17.7	19.7	21.6	23.1	24.3
Medicaid <sup>3</sup>	28.1	78.1	97.4	119.8	149.5	163.6	174.9	184.0	181.3
Other <sup>4</sup>	40.9	86.6	111.1	101.6	149.5	168.7	187.7	204.5	243.9
State and local government	70.5	131.6	166.3	207.5	253.7	274.0	294.9	321.5	340.2
Employer contributions to private health insurance premiums	16.0	35.8	43.9	56.0	73.3	81.9	90.6	99.0	104.6
Medicaid <sup>3</sup>	22.8	46.5	64.9	85.4	103.9	112.6	122.6	138.0	138.9
Other <sup>5</sup>	31.7	49.3	57.5	66.1	76.5	79.5	81.7	84.5	96.7
Percent distribution									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Private	69.8	63.9	63.4	65.0	62.0	61.4	60.8	60.2	59.8
Private business	25.6	25.7	25.2	27.1	26.1	25.9	25.7	25.5	25.3
Employer contribution to private health insurance premiums	17.6	18.6	18.2	19.9	19.6	19.7	19.6	19.5	19.4
Private employer contribution to Medicare hospital insurance trust fund <sup>2</sup>	5.1	4.2	4.7	4.9	4.2	4.0	4.0	3.9	3.9
Workers compensation and temporary disability insurance	2.4	2.6	2.0	2.0	2.0	1.9	1.8	1.7	1.6
Industrial inplant health services	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Household	39.5	34.1	33.5	33.6	32.2	31.8	31.6	31.2	31.1
Employee contribution to private health insurance premiums and individual policy premiums	9.2	10.5	10.7	10.6	11.2	11.3	11.3	11.0	10.7
Employee and self-employment contributions and voluntary premiums paid to Medicare hospital insurance trust fund <sup>2</sup>	6.2	5.1	6.0	6.5	5.6	5.3	5.3	5.2	5.3
Premiums paid by individuals to Medicare supplementary medical insurance trust fund	1.3	1.4	1.5	1.3	1.3	1.3	1.4	1.6	2.0
Out-of-pocket health spending	22.9	17.0	15.4	15.3	14.1	13.9	13.6	13.4	13.0
Other private revenues	4.7	4.2	4.6	4.3	3.7	3.7	3.5	3.5	3.5

See footnotes at end of table.

**Table 134 (page 2 of 2). Expenditures for health services and supplies and percent distribution, by type of payer: United States, selected years 1987–2006**

[Data are compiled from various sources by the Centers for Medicare & Medicaid Services]

Type of payer	1987	1993	1997	2000	2002	2003	2004	2005	2006
	Percent distribution								
Public . . . . .	30.2	36.1	36.6	35.0	38.0	38.6	39.2	39.8	40.2
Federal government . . . . .	15.5	20.7	20.9	18.6	21.1	21.7	22.2	22.3	22.9
Employer contributions to private health insurance premiums . . . . .	1.0	1.3	1.1	1.1	1.2	1.2	1.2	1.3	1.2
Medicaid <sup>3</sup> . . . . .	5.9	9.2	9.2	9.5	10.0	10.1	10.1	10.0	9.2
Other <sup>4</sup> . . . . .	8.6	10.2	10.5	8.0	10.0	10.4	10.8	11.1	12.4
State and local government . . . . .	14.8	15.4	15.8	16.4	16.9	16.9	17.0	17.4	17.3
Employer contributions to private health insurance premiums . . . . .	3.3	4.2	4.2	4.4	4.9	5.1	5.2	5.4	5.3
Medicaid <sup>3</sup> . . . . .	4.8	5.5	6.2	6.8	6.9	6.9	7.1	7.5	7.1
Other <sup>5</sup> . . . . .	6.6	5.8	5.5	5.2	5.1	4.9	4.7	4.6	4.9

<sup>1</sup>Excludes research and construction.

<sup>2</sup>Includes one-half of self-employment contribution to Medicare hospital insurance trust fund.

<sup>3</sup>Includes Medicaid buy-in premiums for Medicare.

<sup>4</sup>Includes expenditures for Medicare (with adjustments for contributions by employers and individuals and premiums paid to the Medicare insurance trust fund), maternal and child health, vocational rehabilitation, Substance Abuse and Mental Health Services Administration, Indian Health Service, federal workers' compensation, other miscellaneous general hospital and medical programs, public health activities, Department of Defense, Department of Veterans Affairs, and State Children's Health Insurance Program (SCHIP).

<sup>5</sup>Includes other public and general assistance, maternal and child health, vocational rehabilitation, public health activities, hospital subsidies, and employer contributions to Medicare hospital insurance trust fund.

NOTES: This table disaggregates health expenditures according to four classes of payers: businesses, households (individuals), federal government, and state and local governments, with a small amount of revenue coming from nonpatient revenue sources such as philanthropy. Where businesses or households pay dedicated funds into government health programs (for example, Medicare) or employers and employees share in the cost of health premiums, these costs are assigned to businesses or households accordingly. This results in a lower share of expenditures being assigned to the federal government than for tabulations of expenditures by source of funds. Estimates of national health expenditure by source of funds aim to track government-sponsored health programs over time and do not delineate the role of business employers in paying for health care. Estimates may not sum to totals because of rounding. Data have been revised and differ from previous editions of *Health, United States*.

SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group. *Businesses, Households, and Governments, 1987–2006*. Available from: <http://www.cms.hhs.gov/NationalHealthExpendData/>.

**Table 135 (page 1 of 2). Employers' costs per employee-hour worked for total compensation, wages and salaries, and health insurance, by selected characteristics: United States, selected years 1991–2008**

[Data are based on surveys of a sample of employers]

<i>Characteristic</i>	1991	1994	1996	2000	2004	2005	2006	2007	2008
Total compensation per employee-hour worked									
State and local government . . . . .	\$22.31	\$25.27	\$25.73	\$29.05	\$34.21	\$35.50	\$36.96	\$38.66	\$37.84
Total private industry . . . . .	15.40	17.08	17.49	19.85	23.29	24.17	25.09	25.91	26.76
Industry:									
Goods producing . . . . .	18.48	20.85	21.27	23.55	27.19	28.48	29.36	30.12	31.38
Service providing . . . . .	14.31	15.82	16.28	18.72	22.33	23.11	24.05	24.84	25.63
Occupational group: <sup>1</sup>									
White collar . . . . .	18.15	20.26	21.10	24.19	---	---	---	---	---
Blue collar . . . . .	15.15	16.92	17.04	18.73	---	---	---	---	---
Service . . . . .	7.82	8.38	8.61	9.72	---	---	---	---	---
Management, professional, and related . . . . .	---	---	---	---	40.23	42.09	44.32	46.05	47.55
Sales and office . . . . .	---	---	---	---	18.42	19.30	19.93	20.55	21.15
Service . . . . .	---	---	---	---	11.66	12.07	12.3	12.87	13.27
Natural resources, construction, and maintenance . . . . .	---	---	---	---	26.55	27.26	28.07	28.96	30.13
Production, transportation, and material moving . . . . .	---	---	---	---	20.21	20.82	21.19	22.22	23.07
Census region:									
Northeast . . . . .	17.56	20.03	20.57	22.67	26.29	27.09	28.75	29.56	30.56
Midwest . . . . .	15.05	16.26	16.30	19.22	23.26	24.23	24.65	25.16	25.98
South . . . . .	13.68	15.05	15.62	17.81	20.80	21.36	22.35	23.17	23.90
West . . . . .	15.97	18.08	18.78	20.88	24.54	25.98	26.56	27.77	28.70
Union status:									
Union . . . . .	19.76	23.26	23.31	25.88	31.94	33.17	34.07	35.27	36.28
Nonunion . . . . .	14.54	16.04	16.61	19.07	22.28	23.09	24.03	24.82	25.64
Establishment employment size:									
1–99 employees . . . . .	13.38	14.58	14.85	17.16	19.47	20.22	20.43	21.29	22.23
100 or more . . . . .	17.34	19.45	20.09	22.81	27.81	28.94	30.34	30.86	31.68
100–499 . . . . .	14.31	15.88	16.61	19.30	23.91	24.44	25.91	26.31	26.80
500 or more . . . . .	20.60	23.35	24.03	26.93	32.54	34.59	35.94	36.48	37.60
Wages and salaries as a percent of total compensation									
State and local government . . . . .	69.6	69.5	69.8	70.8	69.2	68.3	67.6	67.0	65.9
Total private industry . . . . .	72.3	71.1	71.9	73.0	71.5	71.0	70.7	70.8	70.6
Industry:									
Goods producing . . . . .	68.7	66.5	67.6	69.0	66.7	65.5	66.2	66.8	66.7
Service providing . . . . .	73.9	73.1	73.8	74.5	72.9	72.6	72.0	72.0	71.8
Occupational group: <sup>1</sup>									
White collar . . . . .	73.8	72.7	73.2	74.0	---	---	---	---	---
Blue collar . . . . .	68.4	66.8	68.1	69.4	---	---	---	---	---
Service . . . . .	76.2	75.5	75.8	77.9	---	---	---	---	---
Management, professional, and related . . . . .	---	---	---	---	72.1	71.5	70.9	71.1	71.0
Sales and office . . . . .	---	---	---	---	73.0	72.6	72.2	72.1	72.0
Service . . . . .	---	---	---	---	75.8	75.7	75.3	75.0	74.8
Natural resources, construction, and maintenance . . . . .	---	---	---	---	69.1	68.0	68.0	68.3	68.3
Production, transportation, and material moving . . . . .	---	---	---	---	66.9	66.2	66.7	66.8	66.6
Census region:									
Northeast . . . . .	72.0	70.5	70.9	72.2	70.4	70.4	70.0	69.7	69.8
Midwest . . . . .	71.1	69.7	71.1	72.4	71.1	70.1	69.4	69.9	69.8
South . . . . .	73.3	72.1	72.7	73.5	72.5	72.1	72.1	72.0	71.8
West . . . . .	72.8	72.0	73.1	74.0	71.6	70.9	71.0	71.0	70.8
Union status:									
Union . . . . .	65.9	63.5	64.0	65.2	63.6	62.6	62.3	62.2	61.9
Nonunion . . . . .	74.1	72.9	73.6	74.4	72.8	72.4	72.1	72.2	72.1
Establishment employment size:									
1–99 employees . . . . .	74.7	73.5	74.7	75.5	74.3	73.9	73.7	73.8	73.8
100 or more . . . . .	70.5	69.3	69.9	71.0	69.1	68.5	68.4	68.5	68.2
100–499 . . . . .	72.1	71.6	71.6	72.8	70.7	70.2	70.0	70.1	69.8
500 or more . . . . .	69.3	67.6	68.6	69.4	67.7	67.0	66.9	67.1	66.9

See footnotes at end of table.

**Table 135 (page 2 of 2). Employers' costs per employee-hour worked for total compensation, wages and salaries, and health insurance, by selected characteristics: United States, selected years 1991–2008**

[Data are based on surveys of a sample of employers]

Characteristic	1991	1994	1996	2000	2004	2005	2006	2007	2008
Health insurance as a percent of total compensation									
State and local government . . . . .	6.9	8.2	7.7	7.8	9.8	10.2	10.6	10.9	11.0
Total private industry . . . . .	6.0	6.7	5.9	5.5	6.6	6.8	6.9	7.1	7.2
Industry:									
Goods producing . . . . .	6.9	8.1	7.2	6.9	7.8	8.0	8.4	8.4	8.5
Service providing . . . . .	5.5	6.0	5.4	4.9	6.2	6.4	6.4	6.7	6.8
Occupational group: <sup>1</sup>									
White collar . . . . .	5.6	6.2	5.5	5.0	---	---	---	---	---
Blue collar . . . . .	7.0	8.0	7.2	6.8	---	---	---	---	---
Service . . . . .	4.6	5.4	4.8	4.3	---	---	---	---	---
Management, professional, and related . . . . .	---	---	---	---	5.4	5.5	5.6	5.8	5.8
Sales and office . . . . .	---	---	---	---	7.3	7.5	7.5	7.8	7.9
Service . . . . .	---	---	---	---	6.0	6.1	6.2	6.7	6.8
Natural resources, construction, and maintenance . . . . .	---	---	---	---	6.9	7.5	7.7	7.6	7.6
Production, transportation, and material moving . . . . .	---	---	---	---	8.5	8.9	9.0	9.3	9.6
Census region:									
Northeast . . . . .	6.2	6.9	6.2	5.6	6.5	6.8	6.7	6.9	6.9
Midwest . . . . .	6.3	7.3	6.3	5.8	7.0	7.3	7.6	7.8	7.9
South . . . . .	5.5	6.3	5.9	5.4	6.5	6.6	6.7	6.9	6.9
West . . . . .	5.8	6.1	5.2	5.0	6.3	6.3	6.4	6.7	6.9
Union status:									
Union . . . . .	8.2	9.8	8.8	8.4	9.6	10.3	10.3	10.8	10.9
Nonunion . . . . .	5.4	5.9	5.3	5.0	6.1	6.2	6.3	6.4	6.5
Establishment employment size:									
1–99 employees . . . . .	5.1	5.7	5.0	4.8	5.8	5.9	6.0	6.1	6.1
100 or more . . . . .	6.6	7.3	6.6	6.0	7.2	7.5	7.5	7.8	8.0
100–499 . . . . .	6.3	6.5	6.3	5.6	7.1	7.5	7.4	7.7	7.9
500 or more . . . . .	6.8	7.9	6.9	6.4	7.3	7.6	7.6	7.9	8.0

--- Data not available.

<sup>1</sup>Starting with 2004 data, sample establishments were classified by industry categories based on the North American Industry Classification (NAICS) system, as defined by the U.S. Office of Management and Budget. Within a sample establishment, specific job categories were selected and classified into about 800 occupational classifications according to the 2000 Standard Occupational Classification (SOC) system. Individual occupations were combined to represent one of five higher-level aggregations, such as management, professional, and related occupations. NAICS and SOC have replaced the 1987 Standard Industrial Classification System (SIC) and the Occupational Classification System (OCS). For more detailed information on NAICS and SOC, including background and definitions, see [Appendix I, National Compensation Survey](#) and <http://www.bls.gov/soc/home.htm>.

NOTES: Costs are calculated annually from March survey data. Total compensation includes wages and salaries and benefits. See [Appendix II, Employer costs for employee compensation; Industry of Employment](#). Data for additional years are available. See [Appendix III](#).

SOURCES: U.S. Department of Labor, Bureau of Labor Statistics, National Compensation Survey, Employer Costs for Employee Compensation, March release; News pub no 08–0788, June 11, 2008. Washington, DC. Data are available from the Bureau of Labor Statistics at <http://www.bls.gov/ncs/ect/home.htm>.



**Table 136. Hospital expenses, by type of ownership and size of hospital: United States, selected years 1980–2006**

[Data are based on reporting by a census of hospitals]

Type of ownership and size of hospital	1980	1990	1995	2000	2005	2006	1980–1990	1990–1995	1995–2000	2000–2006
Total expenses	Amount in billions						Average annual percent change <sup>1</sup>			
All hospitals . . . . .	\$ 91.9	\$234.9	\$320.3	\$395.4	\$ 570.5	\$ 607.4	9.8	6.4	4.3	7.4
Federal . . . . .	7.9	15.2	20.2	23.9	36.8	37.6	6.8	5.9	3.4	7.8
Nonfederal <sup>2</sup> . . . . .	84.0	219.6	300.0	371.5	533.7	569.8	10.1	6.4	4.4	7.4
Community <sup>3</sup> . . . . .	76.9	203.7	285.6	356.6	515.7	551.8	10.2	7.0	4.5	7.5
Nonprofit . . . . .	55.8	150.7	209.6	267.1	386.0	412.9	10.4	6.8	5.0	7.5
For profit . . . . .	5.8	18.8	26.7	35.0	51.8	55.0	12.5	7.3	5.6	7.8
State-local government . . . . .	15.2	34.2	49.3	54.5	77.9	84.0	8.4	7.6	2.0	7.5
6–24 beds . . . . .	0.2	0.5	1.1	1.5	3.5	3.6	9.6	17.1	6.4	15.7
25–49 beds . . . . .	1.7	4.0	7.2	10.4	17.4	20.0	8.9	12.5	7.6	11.5
50–99 beds . . . . .	5.4	12.6	17.8	22.3	31.9	33.0	8.8	7.2	4.6	6.8
100–199 beds . . . . .	12.5	33.3	50.7	63.4	84.8	90.7	10.3	8.8	4.6	6.1
200–299 beds . . . . .	13.4	38.7	55.8	67.1	93.4	98.3	11.2	7.6	3.8	6.6
300–399 beds . . . . .	11.5	33.1	43.3	54.3	84.0	83.7	11.2	5.5	4.6	7.5
400–499 beds . . . . .	10.5	25.3	33.7	41.3	60.2	65.1	9.2	5.9	4.2	7.9
500 beds or more . . . . .	21.6	56.2	76.1	96.3	140.6	157.4	10.0	6.3	4.8	8.5
Expenses per inpatient day	Amount									
Community <sup>3</sup> . . . . .	\$ 245	\$ 687	\$ 968	\$1,149	\$ 1,522	\$ 1,612	10.9	7.1	3.5	5.8
Nonprofit . . . . .	246	692	994	1,182	1,585	1,686	10.9	7.5	3.5	6.1
For profit . . . . .	257	752	947	1,057	1,413	1,472	11.3	4.7	2.2	5.7
State-local government . . . . .	239	634	878	1,064	1,330	1,400	10.2	6.7	3.9	4.7
6–24 beds . . . . .	203	526	678	896	1,233	1,240	10.0	5.2	5.7	5.6
25–49 beds . . . . .	197	489	696	891	1,101	1,209	9.5	7.3	5.1	5.2
50–99 beds . . . . .	191	493	647	745	952	1,019	9.9	5.6	2.9	5.4
100–199 beds . . . . .	215	585	796	925	1,205	1,278	10.5	6.4	3.0	5.5
200–299 beds . . . . .	239	665	943	1,122	1,528	1,608	10.8	7.2	3.5	6.2
300–399 beds . . . . .	248	731	1,070	1,277	1,639	1,703	11.4	7.9	3.6	4.9
400–499 beds . . . . .	215	756	1,135	1,353	1,917	1,977	13.4	8.5	3.6	6.5
500 beds or more . . . . .	239	825	1,212	1,468	1,940	2,064	13.2	8.0	3.9	5.8
Expenses per inpatient stay										
Community <sup>3</sup> . . . . .	\$1,851	\$4,947	\$6,216	\$6,649	\$ 8,535	\$ 8,970	10.3	4.7	1.4	5.1
Nonprofit . . . . .	1,902	5,001	6,279	6,717	8,671	9,190	10.2	4.7	1.4	5.4
For profit . . . . .	1,676	4,727	5,425	5,642	7,352	7,421	10.9	2.8	0.8	4.7
State-local government . . . . .	1,750	4,838	6,445	7,106	8,793	9,147	10.7	5.9	2.0	4.3
6–24 beds . . . . .	1,072	2,701	3,578	3,652	5,054	4,615	9.7	5.8	0.4	4.0
25–49 beds . . . . .	1,138	2,967	3,797	4,381	5,374	5,791	10.1	5.1	2.9	4.8
50–99 beds . . . . .	1,271	3,461	4,427	4,760	6,109	6,466	10.5	5.0	1.5	5.2
100–199 beds . . . . .	1,512	4,109	5,103	5,305	6,826	7,233	10.5	4.4	0.8	5.3
200–299 beds . . . . .	1,767	4,618	5,851	6,392	8,120	8,485	10.1	4.8	1.8	4.8
300–399 beds . . . . .	1,881	5,096	6,512	6,988	8,816	9,194	10.5	5.0	1.4	4.7
400–499 beds . . . . .	2,090	5,500	7,164	7,629	10,516	10,662	10.2	5.4	1.3	5.7
500 beds or more . . . . .	2,517	6,667	8,531	9,149	11,621	12,261	10.2	5.1	1.4	5.0

<sup>1</sup>Average annual percent change. See [Appendix II, Average annual rate of change \(percentage change\)](#).

<sup>2</sup>The category of nonfederal hospitals includes psychiatric, tuberculosis and other respiratory diseases hospitals, and long-term and short-term general and other special hospitals. See [Appendix II, Hospital](#).

<sup>3</sup>Community hospitals are nonfederal short-term general and special hospitals whose facilities and services are available to the public. See [Appendix II, Hospital](#).

NOTE: In 2006, employee payroll and benefit expenses comprised 51% of expenses in community hospitals and 61% in federal hospitals.

SOURCES: American Hospital Association (AHA) Annual Survey of Hospitals. Hospital Statistics, 1981, 1991–2008 editions. Chicago, IL. (Copyrights 1981, 1991–2008: Used with the permission of Health Forum LLC, an affiliate of the AHA.)

**Table 137 (page 1 of 2). Private health insurance coverage among persons under 65 years of age, by selected characteristics: United States, selected years 1984–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Private health insurance <sup>1</sup>									
	1984 <sup>2</sup>	1989 <sup>2</sup>	1995 <sup>2</sup>	1997	2000	2002	2003	2004	2005	2006
	Number in millions									
Total <sup>3</sup> . . . . .	157.5	162.7	164.2	165.8	174.0	172.4	173.6	174.5	174.7	171.2
	Percent of population									
Total <sup>3</sup> . . . . .	76.8	75.9	71.3	70.7	71.5	69.4	68.9	68.8	68.2	66.3
Age										
Under 18 years . . . . .	72.6	71.8	65.2	66.1	66.6	63.5	63.0	63.2	62.1	59.4
Under 6 years . . . . .	68.1	67.9	59.5	61.3	62.7	60.2	58.2	58.1	56.6	54.7
6–17 years . . . . .	74.9	74.0	68.3	68.5	68.5	65.1	65.3	65.6	64.7	61.7
18–24 years . . . . .	76.5	75.5	70.9	69.4	70.5	68.7	67.7	67.3	66.6	65.0
25–34 years . . . . .	67.4	64.5	60.8	59.3	60.3	60.2	58.8	58.2	58.0	57.0
35–44 years . . . . .	77.4	75.9	70.1	68.1	70.1	68.0	65.6	65.5	65.1	63.0
45–54 years . . . . .	83.9	82.7	77.7	76.4	77.0	74.6	75.1	74.8	73.7	72.0
55–64 years . . . . .	83.3	82.5	80.1	79.0	78.7	77.3	77.3	77.1	76.9	75.2
65–74 years . . . . .	83.3	83.4	80.9	80.4	80.0	77.5	77.9	77.8	77.4	75.1
75–84 years . . . . .	83.3	81.6	79.0	76.9	76.7	76.9	76.5	76.1	76.2	75.4
Sex										
Male . . . . .	77.3	76.1	71.6	70.9	71.6	69.0	69.0	68.7	68.0	65.9
Female . . . . .	76.2	75.7	70.9	70.5	71.3	69.8	68.9	68.9	68.4	66.7
Sex and marital status <sup>4</sup>										
Male:										
Married . . . . .	85.0	84.2	80.2	81.6	81.5	79.9	79.8	80.0	79.6	78.1
Divorced, separated, widowed . . . . .	65.5	64.6	62.4	59.9	62.2	58.5	59.4	59.0	56.7	55.4
Never married . . . . .	71.3	68.3	65.4	63.3	63.8	61.8	60.8	60.4	60.2	57.8
Female:										
Married . . . . .	83.8	83.5	79.3	81.0	81.0	80.0	79.6	79.7	79.3	78.6
Divorced, separated, widowed . . . . .	63.1	63.6	61.7	59.1	63.2	59.7	58.4	58.6	59.9	56.3
Never married . . . . .	72.2	70.0	66.2	63.8	64.2	64.2	62.6	62.2	61.5	59.0
Race <sup>5</sup>										
White only . . . . .	79.9	79.1	74.5	74.2	75.7	73.4	71.5	71.4	70.9	69.1
Black or African American only . . . . .	58.1	57.7	53.0	54.7	55.9	55.1	54.9	53.9	52.9	51.3
American Indian or Alaska Native only . . . . .	49.1	45.5	45.3	39.4	43.7	37.9	45.0	44.7	43.0	36.3
Asian only . . . . .	69.9	71.9	68.4	68.0	72.1	70.9	71.4	71.6	72.2	72.1
Native Hawaiian or Other Pacific Islander only . . . . .	---	---	---	---	*	*	*	*	*	*
2 or more races . . . . .	---	---	---	---	61.4	57.1	56.3	62.0	57.6	54.0
Hispanic origin and race <sup>5</sup>										
Hispanic or Latino . . . . .	55.7	51.5	46.4	46.4	47.8	44.4	41.9	41.7	42.4	40.0
Mexican . . . . .	53.3	46.8	42.6	42.3	45.4	42.1	39.3	39.1	39.7	36.5
Puerto Rican . . . . .	48.4	45.6	47.6	47.0	51.1	50.0	48.6	47.3	48.5	46.1
Cuban . . . . .	72.5	70.3	63.6	71.0	63.9	62.0	55.9	57.9	58.1	63.4
Other Hispanic or Latino . . . . .	61.6	61.0	51.4	49.9	50.7	46.2	45.3	45.1	45.6	44.3
Not Hispanic or Latino . . . . .	78.7	78.5	74.4	74.0	75.2	73.7	73.7	73.7	73.0	71.3
White only . . . . .	82.4	82.5	78.6	78.1	79.5	77.9	77.8	77.9	77.3	75.6
Black or African American only . . . . .	58.2	57.7	53.4	54.9	56.0	55.2	55.5	54.6	53.1	52.2
Age and percent of poverty level <sup>6</sup>										
All ages:										
Below 100% . . . . .	32.2	27.0	22.6	23.3	25.2	25.2	23.9	21.8	21.4	21.4
100%–less than 150% . . . . .	62.2	55.1	47.8	43.6	41.7	38.4	37.5	39.0	38.1	35.5
150%–less than 200% . . . . .	77.2	71.0	65.1	62.9	58.5	56.2	52.2	52.5	51.3	50.3
200% or more . . . . .	91.5	90.8	88.3	86.4	85.7	83.9	84.6	84.2	83.7	83.1
Under 18 years:										
Below 100% . . . . .	28.5	22.3	16.9	18.3	19.5	16.9	15.9	14.2	14.2	14.0
100%–less than 150% . . . . .	66.2	59.6	48.5	43.5	39.8	35.2	33.9	35.9	35.0	30.4
150%–less than 200% . . . . .	80.9	75.9	67.4	65.7	59.7	55.3	50.9	51.7	48.4	47.8
200% or more . . . . .	92.3	92.5	89.5	87.8	86.7	84.5	85.1	85.2	84.2	84.1

See footnotes at end of table.

**Table 137 (page 2 of 2). Private health insurance coverage among persons under 65 years of age, by selected characteristics: United States, selected years 1984–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Private health insurance <sup>1</sup>									
	1984 <sup>2</sup>	1989 <sup>2</sup>	1995 <sup>2</sup>	1997	2000	2002	2003	2004	2005	2006
Geographic region										
Percent of population										
Northeast . . . . .	80.5	82.0	75.4	74.2	76.3	73.9	74.7	74.0	74.0	70.8
Midwest . . . . .	80.6	81.5	77.3	77.1	78.8	76.4	75.9	76.3	74.6	71.7
South . . . . .	74.3	71.4	66.9	67.3	66.8	64.6	64.0	64.1	62.5	61.8
West . . . . .	71.9	71.2	67.5	65.4	66.5	66.1	64.7	64.1	65.6	64.6
Location of residence										
Within MSA <sup>7</sup> . . . . .	77.5	76.5	72.1	71.2	72.3	70.7	70.2	69.6	69.0	67.5
Outside MSA <sup>7</sup> . . . . .	75.2	73.8	67.9	68.4	67.8	64.2	63.7	65.5	64.6	60.3

\* Estimates are considered unreliable. Data not shown have a relative standard error of greater than 30%.

--- Data not available.

<sup>1</sup>Includes all private health insurance coverage (both individual and insurance obtained through the workplace).

<sup>2</sup>Data prior to 1997 are not strictly comparable with data for later years due to the 1997 questionnaire redesign. See [Appendix I, National Health Interview Survey](#) and [Appendix II, Health insurance coverage](#).

<sup>3</sup>Includes all other races not shown separately, those with unknown marital status, and, in 1984 and 1989, persons with unknown poverty level.

<sup>4</sup>Includes persons 14–64 years of age.

<sup>5</sup>The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category including Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

<sup>6</sup>Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Poverty level was unknown for 10%–11% of persons under 65 years of age in 1984 and 1989. Missing family income data were imputed for 15%–16% of persons under 65 years of age in 1994–1996, 23% in 1997, and 27%–33% in 1998–2006. See [Appendix II, Family income; Poverty](#).

<sup>7</sup>MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health Interview Survey, health insurance supplements (1984, 1989, 1994–1996). Starting with 1997 data, data are from the family core questionnaire.

**Table 138 (page 1 of 2). Private health insurance coverage obtained through the workplace among persons under 65 years of age, by selected characteristics: United States, selected years 1984–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Private insurance obtained through workplace <sup>1</sup>									
	1984 <sup>2</sup>	1989 <sup>2</sup>	1995 <sup>2</sup>	1997	2000	2002	2003	2004	2005	2006
	Number in millions									
Total <sup>3</sup> . . . . .	141.8	146.3	150.7	155.6	162.5	161.3	159.3	161.0	161.7	157.6
	Percent of population									
Total <sup>3</sup> . . . . .	69.1	68.3	65.4	66.3	66.7	65.0	63.3	63.5	63.1	61.0
Age										
Under 18 years . . . . .	66.5	65.8	60.4	62.7	62.7	60.1	58.6	59.2	58.2	55.2
Under 6 years . . . . .	62.1	62.3	55.1	58.2	58.8	57.0	53.9	54.4	53.2	50.6
6–17 years . . . . .	68.7	67.7	63.3	64.9	64.6	61.7	60.9	61.5	60.7	57.4
18–44 years . . . . .	69.6	68.4	65.3	65.5	66.1	64.3	62.2	62.1	61.7	60.1
18–24 years . . . . .	58.7	55.3	53.5	54.7	54.9	54.3	52.3	51.6	51.6	50.9
25–34 years . . . . .	71.2	69.5	65.0	64.5	66.1	63.9	60.3	60.6	60.6	58.9
35–44 years . . . . .	77.4	76.2	72.7	72.6	72.8	70.8	70.0	70.2	69.3	67.2
45–64 years . . . . .	71.8	71.6	72.2	72.6	72.5	71.4	70.0	70.2	70.3	68.3
45–54 years . . . . .	74.6	74.4	74.7	75.4	75.3	72.9	71.5	72.0	72.1	69.6
55–64 years . . . . .	69.0	68.3	68.4	68.3	68.1	69.1	68.0	67.6	67.9	66.4
Sex										
Male . . . . .	69.8	68.7	65.9	66.6	67.0	64.7	63.3	63.6	63.1	60.8
Female . . . . .	68.4	67.9	64.9	66.0	66.5	65.2	63.3	63.4	63.1	61.3
Sex and marital status <sup>4</sup>										
Male:										
Married . . . . .	77.9	76.9	74.9	77.3	77.1	75.7	74.2	74.8	74.8	72.8
Divorced, separated, widowed . . . . .	58.0	57.3	56.4	55.2	57.1	54.6	53.9	53.4	51.5	50.6
Never married . . . . .	61.5	58.8	58.2	58.2	58.4	56.3	54.2	54.4	54.4	52.1
Female:										
Married . . . . .	76.1	75.5	73.2	76.3	76.0	75.2	73.5	73.9	73.7	72.6
Divorced, separated, widowed . . . . .	51.9	54.9	54.6	53.8	57.6	54.4	52.5	52.8	53.9	51.3
Never married . . . . .	63.5	60.9	59.2	59.4	59.6	58.8	57.1	56.2	55.7	53.6
Race <sup>5</sup>										
White only . . . . .	72.0	71.2	68.4	69.6	70.6	68.7	65.6	65.8	65.6	63.6
Black or African American only . . . . .	52.4	52.8	49.3	52.5	53.1	52.4	51.5	51.0	50.2	48.1
American Indian or Alaska Native only . . . . .	45.8	40.9	40.2	37.1	41.6	35.8	40.5	41.9	39.8	33.6
Asian only . . . . .	59.0	61.1	59.6	61.4	65.1	62.5	62.1	64.9	63.6	63.7
Native Hawaiian or Other Pacific Islander only . . . . .	---	---	---	---	*	*	*	*	*	*
2 or more races . . . . .	---	---	---	---	59.7	54.5	53.1	57.9	54.6	50.3
Hispanic origin and race <sup>5</sup>										
Hispanic or Latino . . . . .	52.0	47.3	43.4	43.9	45.0	41.9	38.9	39.0	39.9	37.6
Mexican . . . . .	50.5	44.2	40.9	40.7	43.2	40.1	36.7	37.0	37.4	34.8
Puerto Rican . . . . .	45.9	42.3	44.5	45.1	49.3	48.0	45.0	43.9	46.0	43.0
Cuban . . . . .	57.4	56.5	54.0	58.1	53.4	52.1	51.1	50.7	53.2	56.8
Other Hispanic or Latino . . . . .	57.4	54.7	46.7	46.9	47.0	43.1	41.6	41.3	42.6	40.7
Not Hispanic or Latino . . . . .	70.7	70.5	68.2	69.4	70.2	68.8	67.6	67.9	67.4	65.5
White only . . . . .	74.0	74.1	72.1	73.1	74.1	72.8	71.3	71.6	71.3	69.4
Black or African American only . . . . .	52.5	52.8	49.8	52.8	53.3	52.6	52.0	51.7	50.4	49.0
Age and percent of poverty level <sup>6</sup>										
All ages:										
Below 100% . . . . .	24.1	19.9	17.5	19.9	20.9	21.4	19.9	18.1	17.7	17.5
100%–less than 150% . . . . .	52.4	46.4	42.1	38.8	37.1	34.3	31.8	34.6	33.5	31.8
150%–less than 200% . . . . .	69.5	63.1	58.8	58.3	53.4	50.9	46.8	47.3	46.1	44.6
200% or more . . . . .	85.0	83.7	82.3	81.9	81.0	79.3	78.6	78.5	78.3	77.4
Under 18 years:										
Below 100% . . . . .	23.0	17.5	13.6	16.2	16.5	14.8	14.0	12.8	12.5	11.8
100%–less than 150% . . . . .	58.3	52.5	43.6	39.6	36.3	32.5	30.1	33.5	31.7	28.4
150%–less than 200% . . . . .	75.8	70.1	61.8	62.5	55.6	50.8	47.0	47.9	44.8	43.5
200% or more . . . . .	86.9	86.6	84.4	83.9	82.5	80.8	79.9	80.1	79.5	78.7

See footnotes at end of table.

**Table 138 (page 2 of 2). Private health insurance coverage obtained through the workplace among persons under 65 years of age, by selected characteristics: United States, selected years 1984–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Private insurance obtained through workplace <sup>1</sup>									
	1984 <sup>2</sup>	1989 <sup>2</sup>	1995 <sup>2</sup>	1997	2000	2002	2003	2004	2005	2006
Geographic region										
	Percent of population									
Northeast . . . . .	74.0	75.0	69.8	70.9	72.1	70.5	69.4	69.6	70.2	67.0
Midwest . . . . .	72.0	73.3	71.2	72.4	74.5	72.2	70.4	71.5	69.6	66.7
South . . . . .	66.2	63.6	61.8	62.8	62.2	60.3	58.8	59.1	57.5	56.7
West . . . . .	64.7	63.9	60.4	60.6	60.6	59.9	57.5	57.0	59.2	57.7
Location of residence										
Within MSA <sup>7</sup> . . . . .	70.9	69.6	66.6	67.2	67.8	66.3	64.6	64.4	64.1	62.2
Outside MSA <sup>7</sup> . . . . .	65.3	63.5	60.7	62.7	62.4	59.2	58.0	59.6	59.0	55.0

\* Estimates are considered unreliable. Data not shown have a relative standard error of greater than 30%.

--- Data not available.

<sup>1</sup>Private insurance originally obtained through a present or former employer or union. Starting with 1997 data, also includes private insurance obtained through workplace, self-employment, or professional association.

<sup>2</sup>Data prior to 1997 are not strictly comparable with data for later years due to the 1997 questionnaire redesign. See [Appendix I, National Health Interview Survey](#) and [Appendix II, Health insurance coverage](#).

<sup>3</sup>Includes all other races not shown separately, those with unknown marital status, and, in 1984 and 1989, persons with unknown poverty level.

<sup>4</sup>Includes persons 14–64 years of age.

<sup>5</sup>The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

<sup>6</sup>Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Poverty level was unknown for 10%–11% of persons under 65 years of age in 1984 and 1989. Missing family income data were imputed for 15%–16% of persons under 65 years of age in 1994–1996, 23% in 1997, and 27%–33% in 1998–2006. See [Appendix II, Family income; Poverty](#).

<sup>7</sup>MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health Interview Survey, health insurance supplements (1984, 1989, 1994–1996). Starting with 1997 data, data are from the family core questionnaire.

**Table 139 (page 1 of 2). Medicaid coverage among persons under 65 years of age, by selected characteristics: United States, selected years 1984–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	1984 <sup>1</sup>	1989 <sup>1</sup>	1995 <sup>1</sup>	1997	2000	2003	2004(1) <sup>2</sup>	2004(2) <sup>2</sup>	2005 <sup>2</sup>	2006 <sup>2</sup>
	Number in millions									
Total <sup>3</sup>	14.0	15.4	26.6	22.9	23.2	30.9	31.1	31.6	33.2	36.2
	Percent of population									
Total <sup>3</sup>	6.8	7.2	11.5	9.7	9.5	12.3	12.3	12.5	12.9	14.0
Age										
Under 18 years	11.9	12.6	21.5	18.4	19.6	26.0	25.9	26.4	27.2	29.9
Under 6 years	15.5	15.7	29.3	24.7	24.7	32.3	31.8	32.4	34.0	36.6
6–17 years	10.1	10.9	17.4	15.2	17.2	23.0	23.1	23.4	23.9	26.7
18–44 years	5.1	5.2	7.8	6.6	5.6	7.4	7.5	7.7	8.3	8.6
18–24 years	6.4	6.8	10.4	8.8	8.1	9.6	10.3	10.4	11.3	11.4
25–34 years	5.3	5.2	8.2	6.8	5.5	7.8	7.6	7.8	8.0	8.3
35–44 years	3.5	4.0	5.9	5.2	4.3	5.6	5.7	5.8	6.6	7.1
45–64 years	3.4	4.3	5.6	4.6	4.5	5.3	5.4	5.5	5.5	6.3
45–54 years	3.2	3.8	5.1	4.0	4.2	5.0	5.4	5.5	5.2	6.4
55–64 years	3.6	4.9	6.4	5.6	4.9	5.8	5.4	5.5	5.8	6.1
Sex										
Male	5.4	5.7	9.6	8.4	8.2	10.9	10.8	11.0	11.6	12.6
Female	8.1	8.6	13.4	11.1	10.8	13.6	13.7	13.9	14.3	15.5
Sex and marital status <sup>4</sup>										
Male:										
Married	1.9	1.8	2.9	2.5	2.2	3.0	2.9	3.0	3.5	3.7
Divorced, separated, widowed	4.9	5.4	7.7	5.7	6.1	6.7	6.7	6.8	7.0	7.9
Never married	4.8	5.6	8.1	7.0	7.2	10.2	10.2	10.4	10.4	11.6
Female:										
Married	2.6	3.0	5.2	3.5	3.1	4.3	4.2	4.3	4.7	4.6
Divorced, separated, widowed	16.0	16.1	19.0	14.7	12.7	15.3	14.9	15.2	14.6	16.2
Never married	10.7	11.9	16.5	14.2	13.2	16.0	16.9	17.1	17.3	19.0
Race <sup>5</sup>										
White only	4.6	5.1	8.9	7.4	7.1	10.4	10.2	10.4	11.0	11.8
Black or African American only	20.5	19.0	28.5	22.4	21.2	23.7	24.5	24.9	24.9	26.6
American Indian or Alaska Native only	*28.2	29.7	19.0	19.6	15.1	18.5	18.0	18.4	24.2	24.3
Asian only	*8.7	*8.8	10.5	9.6	7.5	8.0	9.6	9.8	8.2	9.7
Native Hawaiian or Other Pacific Islander only	---	---	---	---	*	*	*	*	*	*
2 or more races	---	---	---	---	19.1	23.5	19.0	19.3	22.0	24.0
Hispanic origin and race <sup>5</sup>										
Hispanic or Latino	13.3	13.5	21.9	17.6	15.5	21.8	21.9	22.5	22.9	23.1
Mexican	12.2	12.4	21.6	17.2	14.0	21.7	21.9	22.4	23.0	23.0
Puerto Rican	31.5	27.3	33.4	31.0	29.4	31.0	28.5	29.1	31.9	35.7
Cuban	*4.8	*7.7	13.4	7.3	9.2	13.8	17.9	17.9	17.7	*11.3
Other Hispanic or Latino	7.9	11.1	18.2	15.3	14.5	19.3	19.9	20.8	19.7	20.2
Not Hispanic or Latino	6.2	6.5	10.2	8.7	8.5	10.6	10.5	10.7	11.1	12.3
White only	3.7	4.1	7.1	6.1	6.1	8.0	7.8	7.9	8.5	9.5
Black or African American only	20.7	19.0	28.1	22.1	21.0	23.4	24.1	24.6	24.8	26.2
Age and percent of poverty level <sup>6</sup>										
All ages:										
Below 100%	33.0	37.6	48.4	40.5	38.4	43.2	44.2	45.0	45.7	45.8
100%–less than 150%	7.7	10.9	19.1	17.9	20.7	26.9	26.5	27.1	28.7	29.4
150%–less than 200%	3.2	5.1	8.3	8.3	11.5	17.1	16.6	16.9	18.1	18.0
200% or more	0.6	1.1	1.7	1.8	2.3	3.3	3.5	3.5	3.7	4.1
Under 18 years:										
Below 100%	43.2	47.9	66.0	58.0	58.5	67.5	69.2	70.7	71.2	72.0
100%–less than 150%	9.0	12.3	27.2	28.7	35.0	49.1	46.6	47.6	49.0	52.1
150%–less than 200%	4.4	6.1	13.1	13.0	21.3	33.6	31.9	32.4	35.3	35.8
200% or more	0.8	1.8	3.3	3.1	5.1	7.6	8.0	8.0	8.3	8.9

See footnotes at end of table.

**Table 139 (page 2 of 2). Medicaid coverage among persons under 65 years of age, by selected characteristics: United States, selected years 1984–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	1984 <sup>1</sup>	1989 <sup>1</sup>	1995 <sup>1</sup>	1997	2000	2003	2004(1) <sup>2</sup>	2004(2) <sup>2</sup>	2005 <sup>2</sup>	2006 <sup>2</sup>
Geographic region										
	Percent of population									
Northeast . . . . .	8.6	6.6	11.7	11.3	10.6	12.9	12.8	13.0	13.3	16.8
Midwest . . . . .	7.4	7.6	10.5	8.4	8.0	10.8	10.2	10.4	12.3	13.9
South . . . . .	5.1	6.5	11.3	8.7	9.4	12.6	12.2	12.4	12.7	12.9
West . . . . .	7.0	8.5	12.9	11.7	10.4	12.8	14.2	14.4	13.8	13.8
Location of residence										
Within MSA <sup>7</sup> . . . . .	7.1	7.0	11.3	9.7	8.9	11.5	11.7	11.9	12.4	13.3
Outside MSA <sup>7</sup> . . . . .	6.1	7.9	12.3	10.1	11.9	15.3	14.8	15.0	15.5	17.7

\* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE of greater than 30%.

--- Data not available.

<sup>1</sup>Data prior to 1997 are not strictly comparable with data for later years due to the 1997 questionnaire redesign. See [Appendix I, National Health Interview Survey](#) and [Appendix II, Health insurance coverage](#).

<sup>2</sup>Beginning in quarter 3 of the 2004 NHIS, persons under 65 years with no reported coverage were asked explicitly about Medicaid coverage. Estimates were calculated without and with the additional information from this question in the columns labeled 2004(1) and 2004(2), respectively, and estimates were calculated with the additional information starting with 2005 data.

<sup>3</sup>Includes all other races not shown separately, those with unknown marital status, and, in 1984 and 1989, persons with unknown poverty level.

<sup>4</sup>Includes persons 14–64 years of age.

<sup>5</sup>The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

<sup>6</sup>Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Poverty level was unknown for 10%–11% of persons under 65 years of age in 1984 and 1989. Missing family income data were imputed for 15%–16% of persons under 65 years of age in 1994–1996, 23% in 1997, and 27%–33% in 1998–2006. See [Appendix II, Family income; Poverty](#).

<sup>7</sup>MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: Medicaid includes other public assistance through 1996. Starting with 1997 data, state-sponsored health plan coverage is included as Medicaid coverage. Starting with 1999 data, coverage by the State Children’s Health Insurance Program (SCHIP) is included as Medicaid coverage. In 2006, 11.3% of persons under 65 years of age were covered by Medicaid, 1.2% by state-sponsored health plans, and 1.6% by SCHIP. Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

**SOURCES:** CDC/NCHS, National Health Interview Survey, health insurance supplements (1984, 1989, 1994–1996). Starting with 1997 data, data are from the family core questionnaire.



**Table 140 (page 1 of 2). No health insurance coverage among persons under 65 years of age, by selected characteristics: United States, selected years 1984–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	1984 <sup>1</sup>	1989 <sup>1</sup>	1995 <sup>1</sup>	1997	2000	2003	2004(1) <sup>2</sup>	2004(2) <sup>2</sup>	2005 <sup>2</sup>	2006 <sup>2</sup>
	Number in millions									
Total <sup>3</sup> . . . . .	29.8	33.4	37.1	41.0	41.4	41.6	42.1	41.6	42.1	43.9
	Percent of population									
Total <sup>3</sup> . . . . .	14.5	15.6	16.1	17.5	17.0	16.5	16.6	16.4	16.4	17.0
Age										
Under 18 years . . . . .	13.9	14.7	13.4	14.0	12.6	9.8	9.7	9.2	9.3	9.5
Under 6 years . . . . .	14.9	15.1	11.8	12.5	11.8	8.2	8.9	8.2	7.7	7.5
6–17 years . . . . .	13.4	14.5	14.3	14.7	13.0	10.6	10.0	9.7	10.1	10.5
18–44 years . . . . .	17.1	18.4	20.4	22.4	22.4	23.5	23.6	23.5	23.5	24.6
18–24 years . . . . .	25.0	27.1	28.0	30.1	30.4	30.1	30.1	30.0	29.1	29.9
25–34 years . . . . .	16.2	18.3	21.1	23.8	23.3	25.4	25.7	25.5	25.6	27.2
35–44 years . . . . .	11.2	12.3	15.1	16.7	16.9	17.5	17.6	17.5	17.9	18.8
45–64 years . . . . .	9.6	10.5	10.9	12.4	12.6	12.5	12.9	12.8	12.9	13.2
45–54 years . . . . .	10.5	11.0	11.6	12.8	12.8	13.6	13.7	13.6	14.2	15.0
55–64 years . . . . .	8.7	10.0	9.9	11.8	12.4	10.9	11.7	11.6	11.1	10.8
Sex										
Male . . . . .	15.3	16.8	17.4	18.7	18.1	17.7	18.1	17.9	17.9	18.8
Female . . . . .	13.8	14.4	14.8	16.3	15.9	15.3	15.2	14.9	15.0	15.3
Sex and marital status <sup>4</sup>										
Male:										
Married . . . . .	11.1	12.5	15.0	13.9	14.1	14.4	14.5	14.4	14.4	15.3
Divorced, separated, widowed . . . . .	24.9	25.0	24.0	28.8	25.8	27.9	27.1	27.0	28.6	29.1
Never married . . . . .	22.4	25.0	25.6	27.9	27.2	27.3	27.6	27.5	27.6	28.6
Female:										
Married . . . . .	11.2	11.8	13.6	13.0	13.3	13.1	13.2	13.1	13.0	13.5
Divorced, separated, widowed . . . . .	19.2	19.1	18.1	23.2	21.3	22.9	23.3	23.0	22.1	23.0
Never married . . . . .	16.3	18.0	17.5	20.5	21.1	20.2	19.6	19.3	20.0	20.4
Race <sup>5</sup>										
White only . . . . .	13.6	14.5	15.5	16.4	15.4	16.0	16.3	16.1	15.9	16.7
Black or African American only . . . . .	19.9	21.6	18.0	20.1	19.5	18.4	18.1	17.6	18.4	18.1
American Indian or Alaska Native only . . . . .	22.5	28.4	34.3	38.1	38.4	35.0	35.0	34.6	32.2	38.0
Asian only . . . . .	18.5	16.9	18.6	19.5	17.6	18.2	16.7	16.5	17.1	15.0
Native Hawaiian or Other Pacific Islander only . . . . .	---	---	---	---	*	*	*	*	*	*
2 or more races . . . . .	---	---	---	---	16.8	15.9	12.6	12.3	16.5	18.4
Hispanic origin and race <sup>5</sup>										
Hispanic or Latino . . . . .	29.5	33.7	31.4	34.5	35.6	34.7	35.1	34.4	33.0	35.0
Mexican . . . . .	33.8	39.9	35.6	39.4	39.9	37.8	38.1	37.6	36.0	38.6
Puerto Rican . . . . .	18.3	24.7	17.6	19.0	16.4	17.7	21.0	20.4	16.3	16.8
Cuban . . . . .	21.6	20.6	22.3	21.1	25.4	29.1	22.8	22.8	23.2	22.8
Other Hispanic or Latino . . . . .	27.4	25.8	30.2	33.0	33.4	33.4	33.3	32.3	32.6	33.2
Not Hispanic or Latino . . . . .	13.2	13.7	14.2	15.2	14.0	13.3	13.3	13.2	13.4	13.6
White only . . . . .	11.9	12.1	13.0	13.8	12.5	11.9	12.1	12.0	12.0	12.5
Black or African American only . . . . .	19.7	21.5	17.9	20.0	19.5	18.1	17.8	17.3	18.3	17.5
Age and percent of poverty level <sup>6</sup>										
All ages:										
Below 100% . . . . .	33.9	35.0	29.6	33.7	34.2	31.1	31.8	31.0	30.6	30.2
100%–less than 150% . . . . .	27.2	31.1	31.6	35.1	34.9	31.9	31.3	30.8	29.9	31.2
150%–less than 200% . . . . .	17.3	21.7	24.0	26.3	27.0	27.6	27.4	27.2	27.3	28.0
200% or more . . . . .	6.0	7.1	8.7	10.1	10.1	10.0	10.2	10.2	10.4	10.5
Under 18 years:										
Below 100% . . . . .	29.0	31.4	20.0	23.2	22.0	16.8	16.5	15.0	14.3	13.9
100%–less than 150% . . . . .	22.8	26.1	24.8	26.5	25.4	16.2	17.0	16.0	15.1	16.7
150%–less than 200% . . . . .	12.7	15.8	18.0	19.9	17.7	14.9	14.5	14.1	15.0	15.2
200% or more . . . . .	4.2	4.5	6.4	7.1	6.5	5.5	5.3	5.2	5.6	5.4

See footnotes at end of table.

**Table 140 (page 2 of 2). No health insurance coverage among persons under 65 years of age, by selected characteristics: United States, selected years 1984–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	1984 <sup>1</sup>	1989 <sup>1</sup>	1995 <sup>1</sup>	1997	2000	2003	2004(1) <sup>2</sup>	2004(2) <sup>2</sup>	2005 <sup>2</sup>	2006 <sup>2</sup>
Geographic region										
	Percent of population									
Northeast . . . . .	10.2	10.9	13.3	13.5	12.2	11.3	11.9	11.8	11.3	11.2
Midwest . . . . .	11.3	10.7	12.2	13.2	12.3	12.4	12.6	12.4	11.9	13.4
South . . . . .	17.7	19.7	19.4	20.9	20.5	19.8	20.2	19.9	21.0	21.1
West . . . . .	18.2	18.8	17.9	20.6	20.7	19.9	19.1	18.9	18.4	18.8
Location of residence										
Within MSA <sup>7</sup> . . . . .	13.6	15.2	15.5	16.9	16.6	16.0	16.4	16.2	16.1	16.6
Outside MSA <sup>7</sup> . . . . .	16.6	17.0	18.6	19.8	18.6	18.7	17.4	17.2	17.8	19.3

\* Estimates are considered unreliable. Data not shown have a relative standard error of greater than 30%.

--- Data not available.

<sup>1</sup>Data prior to 1997 are not strictly comparable with data for later years due to the 1997 questionnaire redesign. See [Appendix I, National Health Interview Survey](#) and [Appendix II, Health insurance coverage](#).

<sup>2</sup>Beginning in quarter 3 of the 2004 NHIS, persons under 65 years with no reported coverage were asked explicitly about Medicaid coverage. Estimates were calculated without and with the additional information from this question in the columns labeled 2004(1) and 2004(2), respectively, and estimates were calculated with the additional information starting with 2005 data.

<sup>3</sup>Includes all other races not shown separately, those with unknown marital status, and, in 1984 and 1989, persons with unknown poverty level.

<sup>4</sup>Includes persons 14–64 years of age.

<sup>5</sup>The race groups, white, black, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and 2 or more races, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Starting with 1999 data, race-specific estimates are tabulated according to the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity and are not strictly comparable with estimates for earlier years. The five single-race categories plus multiple-race categories shown in the table conform to the 1997 Standards. Starting with 1999 data, race-specific estimates are for persons who reported only one racial group; the category 2 or more races includes persons who reported more than one racial group. Prior to 1999, data were tabulated according to the 1977 Standards with four racial groups and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Starting with 2003 data, race responses of other race and unspecified multiple race were treated as missing, and then race was imputed if these were the only race responses. Almost all persons with a race response of other race were of Hispanic origin. See [Appendix II, Hispanic origin; Race](#).

<sup>6</sup>Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Poverty level was unknown for 10%–11% of persons under 65 years of age in 1984 and 1989. Missing family income data were imputed for 15%–16% of persons under 65 years of age in 1994–1996, 23% in 1997, and 27%–33% in 1998–2006. See [Appendix II, Family income; Poverty](#).

<sup>7</sup>MSA is metropolitan statistical area. Starting with 2006 data, MSA status is determined using 2000 census data and the 2000 standards for defining MSAs. For data prior to 2006, see [Appendix II, Metropolitan statistical area \(MSA\)](#) for the applicable standards.

NOTES: Persons not covered by private insurance, Medicaid, State Children’s Health Insurance Program (CHIP), public assistance (through 1996), state-sponsored or other government-sponsored health plans (starting in 1997), Medicare, or military plans are considered to have no health insurance coverage. Persons with only Indian Health Service coverage are considered to have no health insurance coverage. See [Appendix II, Health insurance coverage](#). Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See [Appendix III](#).

SOURCES: CDC/NCHS, National Health Interview Survey, health insurance supplements (1984, 1989, 1994–1996). Starting with 1997 data, data are from the family core questionnaire.

**Table 141 (page 1 of 2). Health insurance coverage of persons 65 years of age and over, by type of coverage and selected characteristics: United States, selected years 1992–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Medicare Health Maintenance Organization <sup>1</sup>					Medicaid <sup>2</sup>				
	1992	1995	2000	2005	2006	1992	1995	2000	2005	2006
Age										
Number in millions										
65 years and over . . . . .	1.1	2.6	5.9	4.6	6.7	2.7	2.8	2.7	3.2	3.3
Percent of population										
65 years and over . . . . .	3.9	8.9	19.3	14.5	19.2	9.4	9.6	9.0	10.1	9.4
65–74 years . . . . .	4.2	9.5	20.6	13.9	19.1	7.9	8.8	8.5	9.9	9.2
75–84 years . . . . .	3.7	8.3	18.5	15.3	19.7	10.6	9.6	8.9	9.9	9.1
85 years and over . . . . .	*	7.3	16.3	13.9	17.7	16.6	13.6	11.2	11.9	10.9
Sex										
Male . . . . .	4.6	9.2	19.3	13.5	18.6	6.3	6.2	6.3	7.2	6.7
Female . . . . .	3.4	8.6	19.3	15.2	19.6	11.6	12.0	10.9	12.3	11.5
Race and Hispanic origin										
White, not Hispanic or Latino . . .	3.6	8.4	18.4	13.2	17.2	5.6	5.4	5.1	6.1	5.9
Black, not Hispanic or Latino . . .	*	7.9	20.7	17.1	24.1	28.5	30.3	23.6	23.6	21.8
Hispanic . . . . .	*	15.5	27.5	27.2	37.0	39.0	40.5	28.7	29.2	23.4
Percent of poverty level <sup>3</sup>										
Below 100% . . . . .	3.6	7.7	18.4	---	---	22.3	17.2	15.9	---	---
100%–less than 200% . . . . .	3.7	9.5	23.4	---	---	6.7	6.3	8.4	---	---
200% or more . . . . .	4.2	10.1	18.0	---	---	*	*	*	---	---
Marital status										
Married . . . . .	4.6	9.5	18.7	13.8	18.9	4.0	4.3	4.3	5.4	4.5
Widowed . . . . .	2.3	7.7	19.4	15.0	17.9	14.9	15.0	13.6	14.9	14.4
Divorced . . . . .	*	9.7	24.4	17.1	23.5	23.4	24.5	20.2	20.0	17.7
Never married . . . . .	*	*	15.8	13.9	21.4	19.2	19.0	17.0	21.3	21.6
Employer-sponsored plan <sup>4</sup>										
Medigap <sup>5</sup>										
Characteristic	1992	1995	2000	2005	2006	1992	1995	2000	2005	2006
Age										
Number in millions										
65 years and over . . . . .	12.5	11.3	10.7	11.6	11.9	9.9	9.5	7.6	8.2	8.2
Percent of population										
65 years and over . . . . .	42.8	38.6	35.2	36.4	34.1	33.9	32.5	25.0	25.7	23.5
65–74 years . . . . .	46.9	41.1	36.6	38.1	35.6	31.4	29.9	21.7	23.2	21.3
75–84 years . . . . .	38.2	37.1	35.0	35.5	33.3	37.5	35.2	27.8	27.3	24.8
85 years and over . . . . .	31.6	30.2	29.4	31.8	30.0	38.3	37.6	31.1	30.8	28.9
Sex										
Male . . . . .	46.3	42.1	37.7	39.4	36.8	30.6	30.0	23.4	23.8	21.9
Female . . . . .	40.4	36.0	33.4	34.2	31.9	36.2	34.4	26.2	27.1	24.8
Race and Hispanic origin										
White, not Hispanic or Latino . . .	45.9	41.3	38.6	39.5	37.1	37.2	36.2	28.3	29.1	26.7
Black, not Hispanic or Latino . . .	25.9	26.7	22.0	27.9	23.7	13.6	10.2	7.5	9.5	8.8
Hispanic . . . . .	20.7	16.9	15.8	18.6	17.1	15.8	10.1	11.3	11.1	8.9
Percent of poverty level <sup>3</sup>										
Below 100% . . . . .	29.0	32.1	28.1	---	---	30.8	29.8	22.6	---	---
100%–less than 200% . . . . .	37.5	32.0	27.0	---	---	39.3	39.1	28.4	---	---
200% or more . . . . .	58.4	52.8	49.0	---	---	32.8	32.2	26.2	---	---
Marital status										
Married . . . . .	49.9	44.6	41.0	41.7	39.7	33.0	32.6	25.6	27.0	24.0
Widowed . . . . .	34.1	30.3	28.7	30.4	28.4	37.5	35.2	26.7	26.2	25.1
Divorced . . . . .	27.3	26.6	22.4	25.1	22.8	27.9	24.1	16.9	19.8	18.1
Never married . . . . .	38.0	35.1	28.5	29.1	25.8	29.1	26.2	21.9	15.4	17.1

See footnotes at end of table.

**Table 141 (page 2 of 2). Health insurance coverage of persons 65 years of age and over, by type of coverage and selected characteristics: United States, selected years 1992–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

Characteristic	Medicare fee-for-service only or Other <sup>6</sup>				
	1992	1995	2000	2005	2006
Age					
Number in millions					
65 years and over . . . . .	2.9	3.1	3.5	4.3	4.9
Percent of population					
65 years and over . . . . .	9.9	10.5	11.5	13.3	13.9
65–74 years . . . . .	9.7	10.7	12.6	14.9	14.8
75–84 years . . . . .	10.1	9.9	9.9	11.9	13.1
85 years and over . . . . .	10.8	11.3	12.1	11.6	12.5
Sex					
Male . . . . .	12.2	12.6	13.3	16.2	16.0
Female . . . . .	8.3	8.9	10.2	11.2	12.2
Race and Hispanic origin					
White, not Hispanic or Latino . . .	7.7	8.7	9.6	12.2	13.1
Black, not Hispanic or Latino . . .	26.7	25.0	26.1	21.9	21.6
Hispanic . . . . .	18.3	17.1	16.7	13.9	13.6
Percent of poverty level <sup>3</sup>					
Below 100% . . . . .	14.3	13.3	15.1	---	---
100%–less than 200% . . . . .	12.9	13.1	12.7	---	---
200% or more . . . . .	4.0	4.5	6.3	---	---
Marital status					
Married . . . . .	8.5	9.0	10.5	12.1	12.9
Widowed . . . . .	11.2	11.9	11.6	13.5	14.3
Divorced . . . . .	15.7	15.1	16.1	17.9	17.9
Never married . . . . .	*	13.1	16.8	20.4	14.1

\* Estimates are considered unreliable if the sample cell size is 50 or fewer.

--- Data not available.

<sup>1</sup>Enrollee has Medicare Health Maintenance Organization (HMO) regardless of other insurance. See [Appendix II, Managed care](#).

<sup>2</sup>Enrolled in Medicaid and not enrolled in a Medicare risk HMO. See [Appendix II, Managed care](#).

<sup>3</sup>Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. See [Appendix II, Family income; Poverty](#).

<sup>4</sup>Private insurance plans purchased through employers (own, current, or former employer, family business, union, or former employer or union of spouse) and not enrolled in a Medicare risk HMO or Medicaid.

<sup>5</sup>Supplemental insurance purchased privately or through organizations such as AARP or professional organizations, and not enrolled in a Medicare risk HMO, Medicaid, or employer-sponsored plan.

<sup>6</sup>Medicare fee-for-service only or other public plans (except Medicaid).

NOTES: Insurance categories are mutually exclusive. Persons with more than one type of coverage are categorized according to the order in which the health insurance categories appear. See [Appendix I, Medicare Current Beneficiary Survey \(MCBS\)](#). Data for additional years are available. See [Appendix III](#).

SOURCES: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey.

**Table 142 (page 1 of 2). Medicare enrollees and expenditures and percent distribution, by Medicare program and type of service: United States and other areas, selected years 1970–2007**

[Data are compiled from various sources by the Centers for Medicare & Medicaid Services]

Medicare program and type of service	1970	1980	1990	1995	2000	2002	2003	2004	2005	2006	2007 <sup>1</sup>
<b>Enrollees</b>											
Number in millions											
Total Medicare <sup>2</sup>	20.4	28.4	34.3	37.6	39.7	40.5	41.2	41.9	42.6	43.4	44.1
Hospital insurance	20.1	28.0	33.7	37.2	39.3	40.1	40.7	41.4	42.2	43.0	43.8
Supplementary medical insurance MN(SMI) <sup>3</sup>	19.5	27.3	32.6	35.6	37.3	38.0	38.6	---	---	---	---
Part B	19.5	27.3	32.6	35.6	37.3	38.0	38.6	39.1	39.7	40.3	40.9
Part D <sup>4</sup>	---	---	---	---	---	---	---	1.2	1.8	27.1	30.9
<b>Expenditures</b>											
Amount in billions											
Total Medicare	\$ 7.5	\$ 36.8	\$ 111.0	\$ 184.2	\$ 221.7	\$ 265.8	\$ 280.8	\$ 308.9	\$ 336.4	\$ 408.3	\$ 431.5
Total hospital insurance (HI)	5.3	25.6	67.0	117.6	131.0	152.7	154.6	170.6	182.9	191.9	203.1
HI payments to managed care organizations <sup>5</sup>	---	0.0	2.7	6.7	21.4	19.2	19.5	20.8	24.9	32.9	39.0
HI payments for fee-for-service utilization	5.1	25.0	63.4	109.5	105.1	129.3	134.5	146.5	155.7	160.0	167.2
Inpatient hospital	4.8	24.1	56.9	82.3	87.1	104.2	109.2	117.0	122.5	124.5	128.6
Skilled nursing facility	0.2	0.4	2.5	9.1	11.1	15.2	14.7	17.2	19.3	20.4	22.4
Home health agency	0.1	0.5	3.7	16.2	4.0	5.0	4.9	5.4	5.9	5.9	6.2
Hospice	---	---	0.3	1.9	2.9	4.9	5.7	6.8	8.0	9.2	10.0
Home health agency transfer <sup>6</sup>	---	---	---	---	1.7	1.2	-2.2	0.0	0.0	0.0	0.0
Administrative expenses <sup>7</sup>	0.2	0.5	0.9	1.4	2.8	3.0	2.8	3.3	3.3	3.3	3.2
Total supplementary medical insurance (SMI) <sup>3</sup>	2.2	11.2	44.0	66.6	90.7	113.2	126.1	138.3	153.5	216.4	228.5
Total Part B	2.2	11.2	44.0	66.6	90.7	113.2	126.1	137.9	152.4	169.0	178.9
Part B payments to managed care organizations <sup>5</sup>	0.0	0.2	2.8	6.6	18.4	17.5	17.3	18.7	22.0	31.5	38.9
Part B payments for fee-for-service utilization <sup>8</sup>	1.9	10.4	39.6	58.4	72.2	94.5	104.3	116.2	126.0	129.8	130.8
Physician/supplies <sup>9</sup>	1.8	8.2	29.6	---	---	---	---	---	---	---	---
Outpatient hospital <sup>10</sup>	0.1	1.9	8.5	---	---	---	---	---	---	---	---
Independent laboratory <sup>11</sup>	0.0	0.1	1.5	---	---	---	---	---	---	---	---
Physician fee schedule	---	---	---	31.7	37.0	44.8	48.3	54.1	57.7	58.1	58.7
Durable medical equipment	---	---	---	3.7	4.7	6.5	7.5	7.7	8.0	8.4	8.2
Laboratory <sup>12</sup>	---	---	---	4.3	4.0	5.0	5.5	6.0	6.4	6.9	6.8
Other <sup>13</sup>	---	---	---	9.9	13.6	19.6	22.6	25.0	27.1	28.0	27.7
Hospital <sup>14</sup>	---	---	---	8.7	8.4	13.6	15.3	17.4	19.7	20.9	20.2
Home health agency	0.0	0.2	0.1	0.2	4.5	5.0	5.1	5.9	7.1	7.8	9.2
Home health agency transfer <sup>6</sup>	---	---	---	---	-1.7	-1.2	2.2	0.0	0.0	0.0	0.0
Administrative expenses <sup>7</sup>	0.2	0.6	1.5	1.6	1.8	2.3	2.4	2.8	2.8	3.1	2.7
Part D Transitional Assistance and Start-up Costs <sup>15</sup>	---	---	---	---	---	---	---	0.2	0.7	0.0	0.0
Total Part D <sup>4</sup>	---	---	---	---	---	---	---	0.4	1.1	47.4	49.5
<b>Percent distribution of expenditures</b>											
Total hospital insurance (HI)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
HI payments to managed care organizations <sup>5</sup>	---	0.0	4.0	5.7	16.3	12.6	12.6	12.2	13.6	17.1	19.2
HI payments for fee-for-service utilization	97.0	97.9	94.6	93.1	80.2	84.7	87.0	85.9	85.1	83.4	82.3
Inpatient hospital	91.4	94.3	85.0	70.0	66.5	68.3	70.6	68.6	67.0	64.9	63.3
Skilled nursing facility	4.7	1.5	3.7	7.8	8.5	10.0	9.5	10.1	10.6	10.6	11.0
Home health agency	1.0	2.1	5.5	13.8	3.1	3.3	3.2	3.2	3.2	3.1	3.1
Hospice	---	---	0.5	1.6	2.2	3.2	3.7	4.4	4.7	4.8	4.9
Home health agency transfer <sup>6</sup>	---	---	---	---	1.3	0.8	-1.4	0.0	0.0	0.0	0.0
Administrative expenses <sup>7</sup>	3.0	2.1	1.4	1.2	2.1	2.0	1.8	2.0	1.8	1.7	1.6

See footnotes at end of table.

**Table 142 (page 2 of 2). Medicare enrollees and expenditures and percent distribution, by Medicare program and type of service: United States and other areas, selected years 1970–2007**

[Data are compiled from various sources by the Centers for Medicare & Medicaid Services]

Medicare program and type of service	1970	1980	1990	1995	2000	2002	2003	2004	2005	2006	2007 <sup>1</sup>
Percent distribution of expenditures											
Total supplementary medical insurance (SMI) <sup>3</sup>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total Part B	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.7	99.3	78.1	78.3
Part B payments to managed care organizations <sup>5</sup>	1.2	1.8	6.4	9.9	20.2	15.5	13.7	13.6	14.4	18.6	21.7
Part B payments for fee-for-service utilization <sup>8</sup>	88.1	92.8	90.1	87.6	79.6	83.5	82.7	84.3	82.7	76.8	73.1
Physician/supplies <sup>9</sup>	80.9	72.8	67.3	---	---	---	---	---	---	---	---
Outpatient hospital <sup>10</sup>	5.2	16.9	19.3	---	---	---	---	---	---	---	---
Independent laboratory <sup>11</sup>	0.5	1.0	3.4	---	---	---	---	---	---	---	---
Physician fee schedule	---	---	---	47.5	40.8	39.6	38.3	39.2	37.9	34.4	32.8
Durable medical equipment	---	---	---	5.5	5.2	5.8	6.0	5.6	5.2	5.0	4.6
Laboratory <sup>10</sup>	---	---	---	6.4	4.4	4.4	4.3	4.4	4.2	4.1	3.8
Other <sup>11</sup>	---	---	---	14.8	15.0	17.3	17.9	18.1	17.8	16.6	15.5
Hospital <sup>12</sup>	---	---	---	13.0	9.3	12.0	12.1	12.6	12.9	12.4	11.3
Home health agency	1.5	2.1	0.2	0.3	4.9	4.5	4.0	4.3	4.7	4.6	5.1
Home health agency transfer <sup>6</sup>	---	---	---	0.0	-1.9	-1.0	1.7	0.0	0.0	0.0	0.0
Administrative expenses <sup>7</sup>	10.7	5.4	3.5	2.4	2.0	2.0	1.9	2.0	1.8	1.8	1.5
Part D Transitional Assistance and Start-up Costs <sup>15</sup>	---	---	---	---	---	---	---	0.2	0.4	0.0	0.0
Total Part D <sup>4</sup>	---	---	---	---	---	---	---	0.3	0.7	21.9	21.7

--- Data not available.

0.0 Quantity greater than 0 but less than 0.05.

<sup>1</sup>Preliminary figures.

<sup>2</sup>Average number enrolled in the hospital insurance (HI) and/or supplementary medical insurance (SMI) programs for the period. See [Appendix II, Medicare](#).

<sup>3</sup>Starting with 2004 data, the SMI trust fund consists of two separate accounts: Part B (which pays for a portion of the costs of physicians' services, outpatient hospital services, and other related medical and health services for voluntarily enrolled aged and disabled individuals) and Part D (Medicare Prescription Drug Account, which pays private plans to provide prescription drug coverage).

<sup>4</sup>The Medicare Modernization Act, enacted on December 8, 2003, established within SMI two Part D accounts related to prescription drug benefits: the Medicare Prescription Drug Account and the Transitional Assistance Account. The Medicare Prescription Drug Account is used in conjunction with the broad, voluntary prescription drug benefits that began in 2006. The Transitional Assistance Account was used to provide transitional assistance benefits, beginning in 2004 and extending through 2005, for certain low-income beneficiaries prior to the start of the new prescription drug benefit.

<sup>5</sup>Medicare-approved managed care organizations.

<sup>6</sup>Starting with 1999 data, reflects annual home health HI to SMI transfer amounts.

<sup>7</sup>Includes research, costs of experiments and demonstration projects, fraud and abuse promotion, and peer review activity (changed to Quality Improvement Organization in 2002).

<sup>8</sup>Type-of-service reporting categories for fee-for-service reimbursement differ before and after 1991.

<sup>9</sup>Includes payment for physicians, practitioners, durable medical equipment, and all suppliers other than independent laboratory through 1990. Starting with 1991 data, physician services subject to the physician fee schedule are shown. Payments for laboratory services paid under the laboratory fee schedule and performed in a physician office are included under Laboratory beginning in 1991. Payments for durable medical equipment are shown separately beginning in 1991. The remaining services from the Physician category are included in Other.

<sup>10</sup>Includes payments for hospital outpatient department services, skilled nursing facility outpatient services, Part B services received as an inpatient in a hospital or skilled nursing facility setting, and other types of outpatient facilities. Starting with 1991 data, payments for hospital outpatient department services, except for laboratory services, are listed under Hospital. Hospital outpatient laboratory services are included in the Laboratory line.

<sup>11</sup>Starting with 1991 data, those independent laboratory services that were paid under the laboratory fee schedule (most of the independent lab category) are included in the Laboratory line; the remaining services are included in the Physician fee schedule and Other lines.

<sup>12</sup>Payments for laboratory services paid under the laboratory fee schedule performed in a physician office, independent lab, or in a hospital outpatient department.

<sup>13</sup>Includes payments for physician-administered drugs; freestanding ambulatory surgical center facility services; ambulance services; supplies; freestanding end-stage renal disease (ESRD) dialysis facility services; rural health clinics; outpatient rehabilitation facilities; psychiatric hospitals; and federally qualified health centers.

<sup>14</sup>Includes the hospital facility costs for Medicare Part B services that are predominantly in the outpatient department, with the exception of hospital outpatient laboratory services, which are included on the Laboratory line. Physician reimbursement is included on the Physician fee schedule line.

<sup>15</sup>Part D Administrative and Transitional Start-Up Costs were funded through the SMI Part B account.

NOTES: Percents are calculated using unrounded data. Percents may not sum to totals because of rounding. Estimates include service disbursements as of February 2006 for Medicare enrollees residing in the United States, Puerto Rico, Virgin Islands, Guam, other outlying areas, foreign countries, and unknown residence. Estimates in this table have been revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, Medicare and Medicaid Cost Estimates Group, Medicare Administrative Data; unpublished data.

**Table 143. Medicare enrollees and program payments among fee-for-service Medicare beneficiaries, by sex and age: United States and other areas, selected years 1994–2006**

[Data are compiled from administrative data by the Centers for Medicare & Medicaid Services]

<i>Sex and age</i>	1994	1995	1999	2000	2001	2002	2003	2004	2005	2006
Fee-for-service enrollees in thousands										
Total . . . . .	34,076	34,062	32,179	32,740	33,860	34,977	35,815	36,345	36,685	35,847
Sex										
Male . . . . .	14,533	14,563	13,872	14,195	14,746	15,314	15,736	16,040	16,251	15,958
Female . . . . .	19,543	19,499	18,307	18,545	19,113	19,664	20,079	20,305	20,433	19,890
Age										
Under 65 years . . . . .	4,031	4,239	4,742	4,907	5,172	5,448	5,732	6,036	6,286	6,225
65–74 years . . . . .	16,713	16,373	14,072	14,230	14,689	15,107	15,390	15,528	15,587	15,179
75–84 years . . . . .	9,845	9,911	9,748	9,919	10,211	10,533	10,701	10,755	10,689	10,298
85 years and over . . . . .	3,486	3,540	3,618	3,684	3,787	3,889	3,991	4,026	4,123	4,146
Fee-for-service program payments in billions										
Total . . . . .	\$ 146.6	\$ 159.0	\$ 166.7	\$ 174.3	\$ 197.5	\$ 215.4	\$ 232.8	\$ 255.3	\$ 274.1	\$ 280.7
Sex										
Male . . . . .	63.9	68.8	73.2	76.2	86.3	94.3	102.2	111.8	121.0	123.6
Female . . . . .	82.6	90.2	93.5	98.0	111.2	121.1	130.6	143.5	153.2	157.0
Age										
Under 65 years . . . . .	18.8	21.0	24.3	25.8	29.7	33.2	37.3	42.3	46.7	48.4
65–74 years . . . . .	55.1	58.1	56.0	57.5	64.6	70.0	75.2	81.6	86.6	87.4
75–84 years . . . . .	50.7	55.3	59.5	62.7	70.9	77.1	82.5	89.9	95.2	96.2
85 years and over . . . . .	21.8	24.6	26.9	28.3	32.3	35.1	37.8	41.5	45.6	48.7
Percent distribution of fee-for-service program payments										
Total . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sex										
Male . . . . .	43.6	43.2	43.9	43.7	43.7	43.8	43.9	43.8	44.1	44.0
Female . . . . .	56.4	56.8	56.1	56.3	56.3	56.2	56.1	56.2	55.9	56.0
Age										
Under 65 years . . . . .	12.9	13.2	14.6	14.8	15.0	15.4	16.0	16.6	17.0	17.2
65–74 years . . . . .	37.6	36.5	33.6	33.0	32.7	32.5	32.3	32.0	31.6	31.1
75–84 years . . . . .	34.6	34.8	35.7	36.0	35.9	35.8	35.4	35.2	34.7	34.3
85 years and over . . . . .	14.9	15.5	16.1	16.2	16.4	16.3	16.2	16.3	16.6	17.3
Average fee-for-service payment per enrollee										
Total . . . . .	\$ 4,301	\$ 4,667	\$ 5,180	\$ 5,323	\$ 5,833	\$ 6,159	\$ 6,501	\$ 7,025	\$ 7,473	\$ 7,830
Sex										
Male . . . . .	4,397	4,721	5,275	5,370	5,853	6,157	6,496	6,972	7,443	7,747
Female . . . . .	4,229	4,627	5,108	5,286	5,818	6,159	6,505	7,067	7,497	7,896
Age										
Under 65 years . . . . .	4,673	4,960	5,117	5,252	5,746	6,102	6,499	7,001	7,435	7,774
65–74 years . . . . .	3,300	3,548	3,982	4,040	4,400	4,635	4,887	5,257	5,558	5,756
75–84 years . . . . .	5,152	5,576	6,106	6,320	6,939	7,317	7,713	8,358	8,904	9,345
85 years and over . . . . .	6,267	6,950	7,428	7,684	8,529	9,019	9,474	10,318	11,061	11,742

NOTES: Table includes data for Medicare enrollees residing in Puerto Rico, U.S. Virgin Islands, Guam, other outlying areas, foreign countries, and unknown residence. Prior to 2004, number of fee-for-service enrollees, fee-for-service program payments, and fee-for-service billing reimbursement were based on a 5% annual Denominator File derived from the Centers for Medicare & Medicaid Services' (CMS) Enrollment Database and the fee-for-service claims for a 5% sample of beneficiaries as recorded in CMS' National Claims History File. Starting with 2004 data, the 100% Denominator File was used. See [Appendix II, Medicare](#). Data for additional years are available. See [Appendix III](#).

SOURCE: Centers for Medicare & Medicaid Services, Office of Research, Development, and Information. Health Care Financing Review: Medicare and Medicaid Statistical Supplements for publication years 1996 to 2007. Available from: <http://www.cms.hhs.gov/MedicareMedicaidStatSupp/LT/list.asp>.



**Table 144 (page 1 of 2). Medicare beneficiaries by race, ethnicity, and selected characteristics: United States, 1992, 2004, and 2005**

[Data are based on household interviews of a sample of current Medicare beneficiaries and Medicare administrative records]

Characteristic	Not Hispanic or Latino											
	All			White			Black or African American			Hispanic or Latino		
	1992	2004	2005	1992	2004	2005	1992	2004	2005	1992	2004	2005
	Number of beneficiaries in millions											
All Medicare beneficiaries . . . . .	36.8	42.9	43.4	30.9	33.5	34.0	3.3	4.1	4.1	1.9	3.2	3.3
	Percent distribution of beneficiaries											
All Medicare beneficiaries . . . . .	100.0	100.0	100.0	84.2	78.2	78.4	8.9	9.6	9.4	5.2	7.5	7.5
	Percent of beneficiaries with at least one service											
All Medicare beneficiaries:												
Long-term care facility stay . . . . .	7.7	8.5	8.5	8.0	9.2	9.1	6.2	8.5	8.6	4.2	5.2	4.8
Community-only residents:												
Inpatient hospital . . . . .	17.9	17.0	17.4	18.1	16.9	17.2	18.4	18.8	19.6	16.6	15.8	17.9
Outpatient hospital . . . . .	57.9	75.4	74.7	57.8	76.4	75.1	61.1	75.1	73.3	53.1	70.2	72.7
Physician/supplier <sup>1</sup> . . . . .	92.4	96.8	96.4	93.0	97.2	96.8	89.1	95.1	94.8	87.9	95.2	94.5
Dental . . . . .	40.4	46.2	45.1	43.1	49.5	49.2	23.5	27.6	22.6	29.1	38.0	33.6
Prescription medicine . . . . .	85.2	93.4	93.4	85.5	93.7	93.6	83.1	90.7	91.9	84.6	91.8	92.8
	Expenditures per beneficiary											
All Medicare beneficiaries:												
Total health care <sup>2</sup> . . . . .	\$6,716	\$13,358	\$14,246	\$6,816	\$13,064	\$14,166	\$7,043	\$18,111	\$16,668	\$5,784	\$12,052	\$13,432
Long-term care facility <sup>3</sup> . . . . .	1,581	2,371	2,440	1,674	2,466	2,578	1,255	2,983	2,797	*758	1,429	1,209
Community-only residents:												
Total personal health care . . . . .	5,054	9,689	10,597	4,988	9,537	10,499	5,530	11,419	11,373	4,938	9,593	10,938
Inpatient hospital . . . . .	2,098	2,425	2,566	2,058	2,383	2,534	2,493	3,298	3,136	1,999	1,889	2,103
Outpatient hospital . . . . .	504	1,122	1,364	478	1,046	1,300	668	1,777	1,578	511	1,126	1,762
Physician/supplier <sup>1</sup> . . . . .	1,524	2,971	3,125	1,525	3,002	3,128	1,398	3,043	3,155	1,587	2,806	3,430
Dental . . . . .	142	327	327	153	353	354	70	141	203	97	261	214
Prescription medicine . . . . .	468	1,894	2,277	481	1,907	2,341	417	1,929	2,118	389	1,769	1,914
Long-term care facility residents only:												
Long-term care facility <sup>4</sup> . . . . .	23,054	35,933	38,277	23,177	35,139	37,597	21,272	42,632	45,594	*25,026	*36,287	*36,913
	Percent distribution of beneficiaries											
Both sexes . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Male . . . . .	42.9	44.1	44.3	42.7	44.2	44.3	42.0	41.8	41.6	46.7	45.8	46.1
Female . . . . .	57.1	55.9	55.7	57.3	55.8	55.7	58.0	58.2	58.4	53.3	54.2	53.9
	Eligibility criteria and age											
All Medicare beneficiaries <sup>5</sup> . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Disabled . . . . .	10.2	15.2	15.6	8.6	12.7	13.1	19.1	29.9	29.3	16.5	20.2	22.6
Under 45 years . . . . .	3.5	3.8	3.8	2.9	3.1	3.0	7.6	8.1	8.2	6.9	4.8	5.6
45-64 years . . . . .	6.5	11.4	11.8	5.8	9.6	10.1	11.5	21.8	21.1	9.6	15.4	17.0
Aged . . . . .	89.8	84.8	84.4	91.4	87.2	86.9	81.0	70.2	70.7	83.5	79.9	77.5
65-74 years . . . . .	51.5	43.8	43.4	52.0	43.8	43.2	48.0	40.2	40.5	49.4	45.0	46.5
75-84 years . . . . .	28.8	29.8	29.8	29.5	31.5	31.6	24.0	21.3	22.0	27.1	26.3	23.4
85 years and over . . . . .	9.7	11.2	11.2	9.9	11.9	12.1	9.0	8.7	8.2	6.9	8.6	7.6
	Living arrangement											
All living arrangements . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Alone . . . . .	27.0	29.0	28.5	27.5	29.8	29.3	27.7	32.2	31.8	20.2	21.4	21.2
With spouse . . . . .	51.2	48.4	48.9	53.3	50.7	51.6	33.3	27.8	26.3	50.4	47.2	46.0
With children . . . . .	9.1	10.5	10.4	7.7	8.5	8.1	16.8	18.8	20.3	16.6	17.8	19.3
With others . . . . .	7.6	7.7	7.8	6.2	6.2	6.2	18.1	17.1	17.0	10.8	11.5	11.4
Long-term care facility . . . . .	5.1	4.4	4.4	5.3	4.8	4.8	4.0	4.1	4.5	*2.0	2.1	*2.1

See footnotes at end of table.

**Table 144 (page 2 of 2). Medicare beneficiaries by race, ethnicity, and selected characteristics: United States, 1992, 2004, and 2005**

[Data are based on household interviews of a sample of current Medicare beneficiaries and Medicare administrative records]

Characteristic	Not Hispanic or Latino											
	All			White			Black or African American			Hispanic or Latino		
	1992	2004	2005	1992	2004	2005	1992	2004	2005	1992	2004	2005
Age and limitation of activity <sup>6</sup>	Percent distribution of beneficiaries											
Disabled, under age 65 . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
None . . . . .	22.7	29.9	29.1	21.8	29.9	28.7	26.2	32.1	35.6	21.2	24.8	22.8
IADL only . . . . .	39.0	35.1	36.3	38.9	34.5	35.9	35.8	37.1	39.6	46.1	38.7	38.8
1 or 2 ADL . . . . .	21.2	21.4	21.2	21.5	21.4	21.2	21.2	20.6	*15.8	*20.9	*20.7	*22.5
3–5 ADL . . . . .	17.2	13.5	13.4	17.9	14.1	14.2	*16.8	*10.2	*9.0	*11.9	*15.8	*16.0
65–74 years . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
None . . . . .	67.0	71.6	72.2	68.7	73.4	73.6	55.1	61.7	65.8	59.2	65.2	66.0
IADL only . . . . .	17.8	15.8	14.7	17.0	15.3	14.1	22.9	17.2	15.7	*20.9	18.9	18.7
1 or 2 ADL . . . . .	10.4	8.7	9.1	9.6	7.9	8.7	14.4	13.0	13.3	*15.7	*10.5	*8.4
3–5 ADL . . . . .	4.8	3.9	4.0	4.6	3.3	3.6	*7.6	*8.2	*5.2	*4.2	*5.4	*6.8
75–84 years . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
None . . . . .	46.6	55.2	55.6	47.5	55.9	56.7	42.0	51.4	46.2	44.3	53.3	53.6
IADL only . . . . .	23.9	21.5	21.6	23.6	21.7	21.0	26.7	*17.8	25.5	*27.8	21.3	21.6
1 or 2 ADL . . . . .	16.5	13.6	13.5	16.8	13.8	13.8	15.3	*13.6	*10.0	*14.9	*11.9	*12.6
3–5 ADL . . . . .	13.0	9.7	9.4	12.2	8.6	8.5	*15.9	17.2	18.3	*13.0	*13.5	*12.2
85 years and over . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
None . . . . .	19.9	27.6	28.1	20.2	28.5	29.1	*19.6	*29.7	*23.4	*19.7	*15.2	*26.5
IADL only . . . . .	20.9	24.3	25.0	20.2	24.5	25.2	*22.1	*24.1	*26.0	*24.7	*23.8	*20.9
1 or 2 ADL . . . . .	23.5	19.5	20.2	23.5	19.1	20.2	*24.3	*15.0	*15.3	*23.7	*24.5	*22.2
3–5 ADL . . . . .	35.8	28.6	26.7	36.1	27.9	25.5	*34.0	*31.1	35.3	*31.8	*36.5	*30.4

\* Estimates are based on 50 persons or fewer or with a relative standard error of 30% or higher and are considered unreliable.

<sup>1</sup>Physician/supplier services include medical and osteopathic doctor and health practitioner visits; diagnostic laboratory and radiology services; medical and surgical services; and durable medical equipment and nondurable medical supplies.

<sup>2</sup>Total health care expenditures by Medicare beneficiaries, including expenses paid by Medicare and all other sources of payment for the following services: inpatient hospital, outpatient hospital, physician/supplier, dental, prescription medicine, home health, and hospice and long-term care facility care. Does not include health insurance premiums.

<sup>3</sup>Expenditures for long-term care in facilities for all beneficiaries include facility room and board expenses for beneficiaries who resided in a facility for the full year, for beneficiaries who resided in a facility for part of the year and in the community for part of the year, and expenditures for short-term facility stays for full-year or part-year community residents. See [Appendix II, Long-term care facility](#).

<sup>4</sup>Expenditures for facility-based long-term care for facility-based beneficiaries include facility room and board expenses for beneficiaries who resided in a facility for the full year and for beneficiaries who resided in a facility for part of the year and in the community for part of the year. It does not include expenditures for short-term facility stays for full-year community residents. See [Appendix II, Long-term care facility](#).

<sup>5</sup>Medicare beneficiaries with end-stage renal disease (ESRD) are included within the subgroups Aged and Disabled.

<sup>6</sup>Includes data for both community and long-term care facility residents. See [Appendix II for definitions of Activities of Daily Living \(ADL\) and Instrumental Activities of Daily Living \(IADL\)](#).

NOTES: Percents and percent distributions are calculated using unrounded numbers. Expenditures include expenses for Medicare beneficiaries paid by Medicare and all other sources of payment. Data for additional years are available. See [Appendix III](#).

SOURCE: Centers for Medicare & Medicaid Services, Medicare Current Beneficiary Survey, Health and Health Care of the Medicare Population. Available from: <http://www.cms.hhs.gov/mcbs>. and unpublished data.

**Table 145. Medicaid recipients and medical vendor payments, by basis of eligibility, and race and ethnicity: United States, selected fiscal years 1972–2005**

[Data are compiled by the Centers for Medicare & Medicaid Services from the Medicaid Data System]

<i>Basis of eligibility and race and ethnicity</i>	1972	1980	1990	1995	2000	2002	2003	2004	2005
Recipients									
Number in millions									
All recipients . . . . .	17.6	21.6	25.3	36.3	42.8	49.3	52.0	55.6	57.3
Percent of recipients									
Basis of eligibility: <sup>1</sup>									
Aged (65 years and over) . . . . .	18.8	15.9	12.7	11.4	8.7	7.9	7.8	7.8	7.6
Blind and disabled . . . . .	9.8	13.5	14.7	16.1	16.1	15.0	14.8	14.6	14.2
Adults in families with dependent children <sup>2</sup> . . . . .	17.8	22.6	23.8	21.0	20.5	22.6	22.2	22.2	21.4
Children under age 21 <sup>3</sup> . . . . .	44.5	43.2	44.4	47.3	46.1	47.1	47.8	47.8	47.2
Other Title XIX <sup>4</sup> . . . . .	9.0	6.9	3.9	1.7	8.6	7.4	7.5	7.6	9.4
Race and ethnicity: <sup>5</sup>									
White . . . . .	---	---	42.8	45.5	---	40.9	41.2	41.1	39.1
Black or African American . . . . .	---	---	25.1	24.7	---	22.8	22.4	22.1	21.6
American Indian or Alaska Native . . . . .	---	---	1.0	0.8	---	1.3	1.4	1.3	1.2
Asian or Pacific Islander . . . . .	---	---	2.0	2.2	---	3.4	3.3	3.3	3.5
Hispanic or Latino . . . . .	---	---	15.2	17.2	---	19.0	19.3	19.4	20.7
Multiple race or unknown . . . . .	---	---	14.0	9.6	---	12.6	12.5	12.7	13.9
Vendor payments <sup>6</sup>									
Amount in billions									
All payments . . . . .	\$ 6.3	\$ 23.3	\$ 64.9	\$ 120.1	\$ 168.3	\$ 213.5	\$ 233.2	\$ 257.7	\$ 273.2
Percent distribution									
Total . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Basis of eligibility: <sup>1</sup>									
Aged (65 years and over) . . . . .	30.6	37.5	33.2	30.4	26.4	24.4	23.7	23.1	23.0
Blind and disabled . . . . .	22.2	32.7	37.6	41.1	43.2	43.3	43.7	43.3	43.4
Adults in families with dependent children <sup>2</sup> . . . . .	15.3	13.9	13.2	11.2	10.6	10.9	11.4	11.8	11.7
Children under age 21 <sup>3</sup> . . . . .	18.1	13.4	14.0	15.0	15.9	16.8	17.1	17.2	17.1
Other Title XIX <sup>4</sup> . . . . .	13.9	2.6	1.6	1.2	3.9	4.6	4.1	4.7	4.7
Race and ethnicity: <sup>5</sup>									
White . . . . .	---	---	53.4	54.3	---	54.1	53.8	53.4	52.7
Black or African American . . . . .	---	---	18.3	19.2	---	19.6	19.7	19.8	20.0
American Indian or Alaska Native . . . . .	---	---	0.6	0.5	---	1.1	1.2	1.2	1.2
Asian or Pacific Islander . . . . .	---	---	1.0	1.2	---	2.8	2.4	2.5	2.7
Hispanic or Latino . . . . .	---	---	5.3	7.3	---	9.7	10.6	10.7	12.2
Multiple race or unknown . . . . .	---	---	21.3	17.6	---	12.6	12.2	12.3	11.2
Vendor payments per recipient <sup>6</sup>									
Amount									
All recipients . . . . .	\$ 358	\$ 1,079	\$ 2,568	\$ 3,311	\$ 3,936	\$ 4,328	\$ 4,487	\$ 4,639	\$ 4,764
Basis of eligibility: <sup>1</sup>									
Aged (65 years and over) . . . . .	580	2,540	6,717	8,868	11,929	13,370	13,677	13,687	14,402
Blind and disabled . . . . .	807	2,618	6,564	8,435	10,559	12,470	13,303	13,714	14,536
Adults in families with dependent children <sup>2</sup> . . . . .	307	662	1,429	1,777	2,030	2,095	2,296	2,475	2,590
Children under age 21 <sup>3</sup> . . . . .	145	335	811	1,047	1,358	1,545	1,606	1,664	1,729
Other Title XIX <sup>4</sup> . . . . .	555	398	1,062	2,380	1,778	2,692	2,458	2,867	2,379
Race and ethnicity: <sup>5</sup>									
White . . . . .	---	---	3,207	3,953	---	5,721	5,869	6,026	6,429
Black or African American . . . . .	---	---	1,878	2,568	---	3,733	3,944	4,158	4,398
American Indian or Alaska Native . . . . .	---	---	1,706	2,142	---	3,774	4,001	4,320	4,627
Asian or Pacific Islander . . . . .	---	---	1,257	1,713	---	3,562	3,328	3,513	3,712
Hispanic or Latino . . . . .	---	---	903	1,400	---	2,215	2,463	2,563	2,822
Multiple race or unknown . . . . .	---	---	3,909	6,099	---	4,338	4,395	4,493	3,816

--- Data not available.

<sup>1</sup>In 1980 and 1985, recipients are included in more than one category. In 1990–1996, 0.2%–2.5% of recipients have unknown basis of eligibility. Starting with 1997 data, unknowns are included in Other Title XIX.

<sup>2</sup>Includes adults in the Aid to Families with Dependent Children (AFDC) program. Starting with 1997 data, includes adults in the Temporary Assistance for Needy Families (TANF) program. Starting with 2001 data, includes women in the Breast and Cervical Cancer Prevention and Treatment Program.

<sup>3</sup>Includes children in the AFDC program. Starting with 1997 data, includes children (including those in the foster care system) in the TANF program. Prior to 1997, foster care children are included in Other Title XIX.

<sup>4</sup>Includes some participants in the Supplemental Security Income program and other people deemed medically needy in participating states. Starting with 1997 data, excludes foster care children and includes unknown eligibility.

<sup>5</sup>Race and ethnicity are as determined on initial Medicaid application. Categories are mutually exclusive. Starting with 2001 data, the Hispanic category included Hispanic persons, regardless of race. Persons indicating more than one race were included in the unknown category.

<sup>6</sup>Vendor payments exclude disproportionate share hospital (DSH) payments (\$13.6 billion in FY2005) and DSH mental health facility payments (\$3.5 billion in FY2005).

NOTES: 1972 data are for fiscal year ending June 30. All other years are for fiscal year ending September 30. Starting with 1999 data, a new Medicaid data system was introduced. Prior to 1999, recipient counts exclude those individuals who only received coverage under prepaid health care and for whom no direct vendor payments were made during the year, and vendor payments exclude payments to health maintenance organizations and other prepaid health plans (\$19 billion in 1998). See [Appendix II, Medicaid; Medical vendor payments](#). See [Appendix I, Medicaid Data System](#). Data for additional years are available. See [Appendix III](#).

SOURCES: Centers for Medicare & Medicaid Services, Office of Information Services, Enterprise Databases Group, Division of Information Distribution, Medicaid Data System. Before 1999, data are from Medicaid Statistical Report HCFA–2082. Starting with 1999, data are calculated from the Medicaid Statistical Information System, MSIS and unpublished data. MSIS data available from: <http://msis.cms.hhs.gov> (accessed May 22, 2008).

**Table 146 (page 1 of 2). Medicaid recipients and medical vendor payments, by type of service: United States, selected fiscal years 1972–2005**

[Data are compiled by the Centers for Medicare & Medicaid Services from the Medicaid Data System]

Type of service	1972	1980	1990	1995	2000	2002	2003	2004	2005
<b>Recipients</b>									
	Number in millions								
All recipients . . . . .	17.6	21.6	25.3	36.3	42.8	49.3	52.0	55.6	57.3
	Percent of recipients								
Inpatient hospital . . . . .	16.1	17.0	18.2	15.3	11.5	10.2	10.0	9.8	9.5
Mental health facility . . . . .	0.2	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.2
Mentally retarded intermediate care facility . . . . .	---	0.6	0.6	0.4	0.3	0.2	0.2	0.2	0.2
Nursing facility . . . . .	---	---	---	4.6	4.0	3.6	3.3	3.1	3.0
Skilled . . . . .	3.1	2.8	2.4	---	---	---	---	---	---
Intermediate care . . . . .	---	3.7	3.4	---	---	---	---	---	---
Physician . . . . .	69.8	63.7	67.6	65.6	44.7	44.7	44.0	43.1	41.9
Dental . . . . .	13.6	21.5	18.0	17.6	13.8	16.0	16.4	16.2	16.1
Other practitioner . . . . .	9.1	15.0	15.3	15.2	11.1	11.3	11.1	10.7	10.2
Outpatient hospital . . . . .	29.6	44.9	49.0	46.1	30.9	30.1	29.8	28.7	28.2
Clinic . . . . .	2.8	7.1	11.1	14.7	17.9	19.2	19.6	20.0	20.6
Laboratory and radiological . . . . .	20.0	14.9	35.5	36.0	26.6	28.5	28.3	28.9	27.7
Home health . . . . .	0.6	1.8	2.8	4.5	2.3	2.2	2.3	2.1	2.1
Prescribed drugs . . . . .	63.3	63.4	68.5	65.4	48.0	49.4	50.2	50.3	49.1
Family planning . . . . .	---	5.2	6.9	6.9	---	---	---	---	---
Early and periodic screening . . . . .	---	---	11.7	18.2	---	---	---	---	---
Rural health clinic . . . . .	---	---	0.9	3.4	---	---	---	---	---
Capitated care . . . . .	---	---	---	---	49.7	51.7	53.1	54.2	58.4
Primary care case management . . . . .	---	---	---	---	13.0	14.6	14.5	15.4	14.9
Personal support . . . . .	---	---	---	---	10.6	11.5	11.6	11.3	11.8
Other care <sup>1</sup> . . . . .	14.4	11.9	20.3	31.5	21.4	22.6	23.1	22.9	21.8
<b>Vendor payments<sup>2</sup></b>									
	Amount in billions								
All payments . . . . .	\$ 6.3	\$ 23.3	\$ 64.9	\$120.1	\$168.3	\$213.5	\$233.2	\$257.7	\$273.2
	Percent distribution								
Total . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Inpatient hospital . . . . .	40.6	27.5	25.7	21.9	14.4	13.6	13.5	13.5	12.8
Mental health facility . . . . .	1.8	3.3	2.6	2.1	1.1	1.0	0.9	0.9	0.8
Mentally retarded intermediate care facility . . . . .	---	8.5	11.3	8.6	5.6	5.0	4.7	4.3	4.3
Nursing facility . . . . .	---	---	---	24.2	20.5	18.4	17.3	16.3	16.3
Skilled . . . . .	23.3	15.8	12.4	---	---	---	---	---	---
Intermediate care . . . . .	---	18.0	14.9	---	---	---	---	---	---
Physician . . . . .	12.6	8.0	6.2	6.1	4.0	3.9	3.9	4.0	4.1
Dental . . . . .	2.7	2.0	0.9	0.8	0.8	1.1	1.1	1.1	1.1
Other practitioner . . . . .	0.9	0.8	0.6	0.8	0.4	0.4	0.4	0.4	0.4
Outpatient hospital . . . . .	5.8	4.7	5.1	5.5	4.2	4.0	4.0	4.0	3.6
Clinic . . . . .	0.7	1.4	2.6	3.6	3.7	3.1	3.1	3.2	3.2
Laboratory and radiological . . . . .	1.3	0.5	1.1	1.0	0.8	1.0	1.0	1.0	1.1
Home health . . . . .	0.4	1.4	5.2	7.8	1.9	1.8	1.9	1.8	2.0
Prescribed drugs . . . . .	8.1	5.7	6.8	8.1	11.9	13.3	14.5	15.3	15.6
Family planning . . . . .	---	0.3	0.4	0.4	---	---	---	---	---
Early and periodic screening . . . . .	---	---	0.3	1.0	---	---	---	---	---
Rural health clinic . . . . .	---	---	0.1	0.2	---	---	---	---	---
Capitated care . . . . .	---	---	---	---	14.5	15.8	16.0	16.5	17.0
Primary care case management . . . . .	---	---	---	---	0.1	0.1	0.1	0.2	0.1
Personal support . . . . .	---	---	---	---	6.9	7.2	7.4	7.2	7.5
Other care <sup>1</sup> . . . . .	1.8	1.9	3.7	7.7	8.8	10.3	10.2	10.3	10.1

See footnotes at end of table.

**Table 146 (page 2 of 2). Medicaid recipients and medical vendor payments, by type of service: United States, selected fiscal years 1972–2005**

[Data are compiled by the Centers for Medicare & Medicaid Services from the Medicaid Data System]

Type of service	1972	1980	1990	1995	2000	2002	2003	2004	2005
Vendor payments per recipient <sup>2</sup>					Amount				
Total payment per recipient . . . . .	\$ 358	\$ 1,079	\$ 2,568	\$ 3,311	\$ 3,936	\$ 4,328	\$ 4,487	\$ 4,639	\$ 4,764
Inpatient hospital . . . . .	903	1,742	3,630	4,735	4,919	5,771	6,047	6,424	6,401
Mental health facility . . . . .	2,825	11,742	18,548	29,847	17,800	21,377	20,503	19,928	19,232
Mentally retarded intermediate care facility . . . . .	---	16,438	50,048	68,613	79,330	91,588	95,287	97,497	107,135
Nursing facility . . . . .	---	---	---	17,424	20,220	22,326	23,882	24,475	26,096
Skilled . . . . .	2,665	6,081	13,356	---	---	---	---	---	---
Intermediate care . . . . .	---	5,326	11,236	---	---	---	---	---	---
Physician . . . . .	65	136	235	309	356	378	403	426	467
Dental . . . . .	71	99	130	160	238	293	305	318	327
Other practitioner . . . . .	37	61	96	178	139	151	154	160	201
Outpatient hospital . . . . .	70	113	269	397	533	571	596	639	615
Clinic . . . . .	82	209	602	804	805	706	720	750	749
Laboratory and radiological . . . . .	23	38	80	90	113	154	161	168	183
Home health . . . . .	229	847	4,733	5,740	3,135	3,689	3,720	3,978	4,493
Prescribed drugs . . . . .	46	96	256	413	975	1,165	1,293	1,411	1,510
Family planning . . . . .	---	72	151	206	---	---	---	---	---
Early and periodic screening . . . . .	---	---	67	177	---	---	---	---	---
Rural health clinic . . . . .	---	---	154	174	---	---	---	---	---
Capitated care . . . . .	---	---	---	---	1,148	1,318	1,357	1,415	1,386
Primary care case management . . . . .	---	---	---	---	30	28	28	58	27
Personal support . . . . .	---	---	---	---	2,543	2,704	2,864	2,946	3,041
Other care <sup>1</sup> . . . . .	44	172	465	807	1,600	1,963	1,975	2,086	2,208

--- Data not available.

. . . Category not applicable.

<sup>1</sup>Unknown services are included with Other care (0.1% of recipients and 0.5% of payments in 2005).

<sup>2</sup>Vendor payments exclude disproportionate share hospital (DSH) payments (\$13.6 billion in FY2005) and DSH mental health facility payments (\$3.5 billion in FY2005).

NOTES: 1972 data are for fiscal year ending June 30. All other years are for fiscal year ending September 30. Starting with 1999 data, a new Medicaid data system was introduced. Prior to 1999, recipient counts exclude those individuals who only received coverage under prepaid health care and for whom no direct vendor payments were made during the year, and vendor payments exclude payments to health maintenance organizations and other prepaid health plans (\$19 billion in 1998). See [Appendix II, Medicaid; Medical vendor payments](#). See [Appendix I, Medicaid Data System](#). Data for additional years are available. See [Appendix III](#).

SOURCES: Centers for Medicare & Medicaid Services, Office of Information Services, Enterprise Databases Group, Division of Information Distribution, Medicaid Data System. Before 1999, data are from Medicaid Statistical Report HCFA–2082. Starting with 1999, data are from Medicaid Statistical Information System, MSIS and unpublished data. MSIS data available from: <http://msis.cms.hhs.gov> (accessed May 22, 2008).

**Table 147. Department of Veterans Affairs health care expenditures and use, and persons treated, by selected characteristics: United States, selected fiscal years 1970–2007**

[Data are compiled from patient records, enrollment information, and budgetary data by the Department of Veterans Affairs]

Type of expenditure and use	1970	1980	1990	1995	2000	2004	2005 <sup>1</sup>	2006 <sup>1</sup>	2007 <sup>1</sup>
Health care expenditures									
All expenditures <sup>2</sup>	\$1,689	\$ 5,981	\$11,500	\$16,126	\$19,327	\$28,346	\$30,291	\$31,909	\$34,025
Amount in millions									
Percent distribution									
All services	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Inpatient hospital	71.3	64.3	57.5	49.0	37.3	31.1	24.3	24.0	24.0
Outpatient care	14.0	19.1	25.3	30.2	45.7	49.5	53.4	55.2	53.5
Nursing home care	5.5	7.1	9.5	10.0	8.2	7.9	8.4	8.2	8.3
All other <sup>3</sup>	9.1	9.6	7.7	10.8	8.8	11.5	13.9	12.6	14.2
Health care use									
Number in thousands									
Inpatient hospital stays <sup>4,5</sup>	787	1,248	1,029	879	579	599	614	601	607
Outpatient visits	7,312	17,971	22,602	27,527	38,370	53,745	57,169	59,132	62,234
Nursing home stays <sup>5</sup>	47	57	75	79	91	93	61	59	63
Inpatients <sup>6</sup>									
Total	---	---	598	527	417	457	488	467	477
Percent distribution									
Total	---	---	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Veterans with service-connected disability	---	---	38.9	39.3	34.4	36.5	37.6	38.8	39.9
Veterans without service-connected disability	---	---	60.3	59.9	64.7	62.6	61.5	60.2	59.1
Low income	---	---	54.8	56.2	41.7	40.9	39.9	37.9	36.9
Veterans receiving aid and attendance or housebound benefits or who are catastrophically disabled <sup>7</sup>	---	---	---	---	16.0	12.9	12.1	11.6	11.3
Veterans receiving medical care subject to copayments <sup>8</sup>	---	---	2.8	2.8	5.2	8.7	8.6	9.7	9.8
Other and unknown <sup>9</sup>	---	---	2.7	0.9	1.8	0.0	1.0	1.0	1.0
Nonveterans	---	---	0.8	0.8	0.9	0.9	0.9	0.9	0.9
Outpatients <sup>6</sup>									
Number in thousands									
Total	---	---	2,564	2,790	3,657	4,894	5,077	5,180	5,221
Percent distribution									
Total	---	---	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Veterans with service-connected disability	---	---	38.3	37.5	30.7	30.8	31.6	32.4	33.8
Veterans without service-connected disability	---	---	49.8	50.5	60.8	63.1	62.7	62.0	60.8
Low income	---	---	41.1	42.2	37.6	32.8	31.8	30.3	28.9
Veterans receiving aid and attendance or housebound benefits or who are catastrophically disabled <sup>7</sup>	---	---	---	---	3.8	3.4	3.5	3.4	3.5
Veterans receiving medical care subject to copayments <sup>8</sup>	---	---	3.6	4.2	15.4	26.9	25.4	25.7	25.5
Other and unknown <sup>9</sup>	---	---	5.1	4.1	4.0	0.0	2.0	2.6	3.0
Nonveterans	---	---	11.8	12.0	8.5	6.1	5.7	5.6	5.4

--- Data not available.

<sup>1</sup>Starting with FY05, the cost report data is taken from a different report than earlier years. The major impact of this change was to assign more cost to outpatient care than inpatient hospital. Also in FY05 the responsibility for residential rehabilitation programs including domiciliary care were reassigned from extended care to mental health care.

<sup>2</sup>Health care expenditures exclude construction, medical administration, and miscellaneous operating expenses at Department of Veterans Affairs headquarters.

<sup>3</sup>Includes miscellaneous benefits and services, contract hospitals, education and training, subsidies to state veterans hospitals, nursing homes and residential rehabilitation treatment programs (formerly domiciliaries), and the Civilian Health and Medical Program of the Department of Veterans Affairs.

<sup>4</sup>One-day dialysis patients were included in 1980. Interfacility transfers were included starting with 1990 data.

<sup>5</sup>Until FY04 includes Department of Veterans Affairs nursing home and residential rehabilitation treatment programs (formerly domiciliary) stays, and community nursing home care stays. Starting with FY05 data, domiciliary care is included with inpatient care.

<sup>6</sup>Individuals. The inpatient and outpatient totals are not additive because most inpatients are also treated as outpatients.

<sup>7</sup>Includes veterans who are receiving aid and attendance or housebound benefit and veterans who have been determined by the Department of Veterans Affairs to be catastrophically disabled.

<sup>8</sup>Includes financial means-tested veterans who receive medical care subject to copayments according to income level.

<sup>9</sup>Includes expenditures for services for veterans who were prisoners of war, exposed to Agent Orange, and other. Prior to FY94, veterans who reported exposure to Agent Orange were classified as having a service-connected disability. Beginning in FY94, those veterans reporting Agent Orange exposure but not treated for it were means tested and placed in the low income or other group depending on income.

NOTES: Estimates may not add to totals because of rounding. In 1970, the fiscal year (FY) ended June 30; in 1980 and subsequent years, the FY ended September 30. The veteran population was estimated at 25.2 million at the end of FY 2003, with 38% age 65 or over, compared with 11% in FY 1980. Seventeen percent had served during World War II, 14% during the Korean conflict, 33% during the Vietnam era, 15% during the Persian Gulf War, and 25% during peacetime. These percentages add to more than 100 due to some veterans serving during more than one war. Starting with FY95 data, categories for health care expenditures and health care use were revised. In FY99, a new data reporting system was introduced. Data have been revised and differ from previous editions of *Health, United States*. Data for additional years are available. See [Appendix III](#).

**SOURCES:** Department of Veterans Affairs (VA), Office of the Assistant Deputy Under Secretary for Health, National Patient Care Database, National Enrollment Database, budgetary data, and unpublished data. Veteran population estimates were provided by the VA's Office of the Actuary.



**Table 148 (page 1 of 2). Per capita personal health care expenditures, by state of residence: United States, selected years 1991–2004**

[Data are compiled from various sources by the Centers for Medicare & Medicaid Services]

<i>Geographic region and state</i> <sup>1</sup>	1991	1995	2000	2001	2002	2003	2004	1991–2004
	Amount per capita							Average annual percent change
United States . . . . .	\$2,645	\$3,244	\$4,039	\$4,344	\$4,655	\$4,973	\$5,283	5.5
New England . . . . .	3,044	3,814	4,814	5,218	5,615	6,003	6,409	5.9
Connecticut . . . . .	3,273	4,025	4,949	5,336	5,693	5,966	6,344	5.2
Maine . . . . .	2,454	3,199	4,539	4,972	5,348	5,858	6,540	7.8
Massachusetts . . . . .	3,249	4,054	5,021	5,458	5,894	6,320	6,683	5.7
New Hampshire . . . . .	2,440	3,124	4,106	4,386	4,708	5,044	5,432	6.3
Rhode Island . . . . .	2,867	3,675	4,610	4,978	5,380	5,735	6,193	6.1
Vermont . . . . .	2,331	3,023	4,261	4,673	5,116	5,683	6,069	7.6
Mideast . . . . .	3,033	3,785	4,701	5,045	5,399	5,798	6,151	5.6
Delaware . . . . .	2,818	3,650	4,689	5,056	5,479	6,058	6,306	6.4
District of Columbia . . . . .	4,742	5,820	6,496	6,819	7,184	7,677	8,295	4.4
Maryland . . . . .	2,763	3,376	4,145	4,480	4,845	5,233	5,590	5.6
New Jersey . . . . .	2,931	3,729	4,584	4,832	5,211	5,493	5,807	5.4
New York . . . . .	3,158	3,969	4,957	5,347	5,710	6,168	6,535	5.8
Pennsylvania . . . . .	2,947	3,625	4,541	4,887	5,201	5,579	5,933	5.5
Great Lakes . . . . .	2,631	3,250	4,096	4,425	4,744	5,062	5,394	5.7
Illinois . . . . .	2,705	3,327	4,137	4,394	4,709	5,002	5,293	5.3
Indiana . . . . .	2,487	3,076	3,947	4,279	4,599	4,940	5,295	6.0
Michigan . . . . .	2,617	3,226	3,928	4,162	4,414	4,705	5,058	5.2
Ohio . . . . .	2,681	3,308	4,198	4,645	4,988	5,356	5,725	6.0
Wisconsin . . . . .	2,539	3,185	4,269	4,683	5,085	5,382	5,670	6.4
Plains . . . . .	2,525	3,187	4,170	4,506	4,866	5,231	5,538	6.2
Iowa . . . . .	2,534	3,127	4,151	4,468	4,737	5,100	5,380	6.0
Kansas . . . . .	2,583	3,207	4,089	4,391	4,655	5,024	5,382	5.8
Minnesota . . . . .	2,566	3,294	4,302	4,683	5,086	5,464	5,795	6.5
Missouri . . . . .	2,504	3,170	4,117	4,404	4,806	5,192	5,444	6.2
Nebraska . . . . .	2,377	2,999	4,144	4,562	4,884	5,209	5,599	6.8
North Dakota . . . . .	2,626	3,379	4,244	4,645	5,161	5,407	5,808	6.3
South Dakota . . . . .	2,418	3,050	4,074	4,416	4,836	5,125	5,327	6.3
Southeast . . . . .	2,527	3,155	3,976	4,267	4,554	4,842	5,172	5.7
Alabama . . . . .	2,538	3,180	3,909	4,166	4,481	4,897	5,135	5.6
Arkansas . . . . .	2,365	2,893	3,765	4,025	4,334	4,597	4,863	5.7
Florida . . . . .	2,918	3,516	4,302	4,599	4,901	5,117	5,483	5.0
Georgia . . . . .	2,513	3,082	3,613	3,807	4,102	4,304	4,600	4.8
Kentucky . . . . .	2,387	3,021	4,166	4,477	4,823	5,117	5,473	6.6
Louisiana . . . . .	2,601	3,284	4,009	4,270	4,532	4,867	5,040	5.2
Mississippi . . . . .	2,174	2,877	3,730	4,084	4,410	4,701	5,059	6.7
North Carolina . . . . .	2,242	2,954	3,895	4,296	4,530	4,833	5,191	6.7
South Carolina . . . . .	2,260	2,923	3,869	4,233	4,537	4,828	5,114	6.5
Tennessee . . . . .	2,555	3,298	4,106	4,460	4,656	5,032	5,464	6.0
Virginia . . . . .	2,374	2,799	3,673	3,839	4,133	4,477	4,822	5.6
West Virginia . . . . .	2,556	3,425	4,457	4,875	5,206	5,582	5,954	6.7
Southwest . . . . .	2,350	2,850	3,508	3,779	4,085	4,303	4,542	5.2
Arizona . . . . .	2,383	2,637	3,064	3,242	3,559	3,827	4,103	4.3
New Mexico . . . . .	2,209	2,724	3,353	3,647	3,936	4,146	4,471	5.6
Oklahoma . . . . .	2,344	2,968	3,701	4,036	4,293	4,680	4,917	5.9
Texas . . . . .	2,356	2,891	3,599	3,882	4,196	4,377	4,601	5.3
Rocky Mountains . . . . .	2,242	2,663	3,454	3,701	3,993	4,304	4,557	5.6
Colorado . . . . .	2,439	2,840	3,629	3,855	4,127	4,471	4,717	5.2
Idaho . . . . .	2,088	2,535	3,354	3,610	3,941	4,196	4,444	6.0
Montana . . . . .	2,331	2,828	3,792	4,162	4,456	4,788	5,080	6.2
Utah . . . . .	1,926	2,290	2,937	3,161	3,450	3,719	3,972	5.7
Wyoming . . . . .	2,212	2,832	3,907	4,220	4,607	4,950	5,265	6.9

See footnotes at end of table.



**Table 148 (page 2 of 2). Per capita personal health care expenditures, by state of residence: United States, selected years 1991–2004**

[Data are compiled from various sources by the Centers for Medicare & Medicaid Services]

<i>Geographic region and state</i> <sup>1</sup>	1991	1995	2000	2001	2002	2003	2004	1991–2004
	Amount per capita							Average annual percent change
Far West . . . . .	2,601	3,025	3,612	3,878	4,151	4,477	4,740	4.7
Alaska . . . . .	2,593	3,152	4,513	5,133	5,666	6,081	6,450	7.3
California . . . . .	2,657	3,050	3,569	3,808	4,058	4,387	4,638	4.4
Hawaii . . . . .	2,597	3,332	3,786	4,044	4,333	4,660	4,941	5.1
Nevada . . . . .	2,370	2,783	3,363	3,620	3,963	4,280	4,569	5.2
Oregon . . . . .	2,282	2,813	3,674	4,079	4,313	4,574	4,880	6.0
Washington . . . . .	2,505	2,990	3,778	4,091	4,465	4,812	5,092	5.6

<sup>1</sup>Data are shown for Bureau of Economic Analysis (BEA) regions that are constructed to show economically interdependent states. These BEA geographic regions differ from U.S. Census Bureau geographic divisions shown in some *Health, United States* tables. See [Appendix II, Geographic region and division](#).

NOTES: Personal health care expenditures are outlays for goods and services relating directly to patient care. Includes all expenditures for specified health services and supplies other than expenses for program administration, net cost of private health insurance, and government public health activities. See [Appendix II, Health expenditures, national](#). Numbers may not add to totals because of rounding. Data for additional years are available. See [Appendix III](#).

SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group. Available from: <http://www.cms.hhs.gov/NationalHealthExpendData/downloads/res-us.pdf>.

**Table 149 (page 1 of 2). Medicare enrollees, enrollees in managed care, payment per enrollee, and short-stay hospital utilization by geographic region and state: United States, 1994 and 2006**

[Data are compiled by the Centers for Medicare & Medicaid Services]

Geographic division and state <sup>1</sup>	Short-stay hospital utilization								
	Enrollment in thousands <sup>2</sup>	Percent of enrollees in managed care <sup>3</sup>		Payment per fee-for-service enrollee		Discharges per 1,000 enrollees <sup>4</sup>		Average length of stay in days <sup>4</sup>	
		2006	1994	2006	1994	2006	1994	2006	1994
United States <sup>5</sup>	42,356	7.9	16.9	\$4,375	\$7,941	345	354	7.5	5.7
New England:									
Connecticut	530	2.6	7.3	4,426	8,554	287	341	8.1	5.9
Maine	241	0.1	1.0	3,464	6,187	322	269	7.6	5.4
Massachusetts	982	6.1	16.7	5,147	8,474	350	365	7.6	5.5
New Hampshire	198	0.2	1.5	3,414	6,949	281	246	7.6	5.7
Rhode Island	174	7.0	34.3	4,148	7,517	312	349	8.1	5.9
Vermont	99	0.1	0.5	3,182	6,564	283	212	7.6	5.5
Mideast:									
Delaware	132	0.2	1.6	4,712	7,548	326	363	8.1	6.0
District of Columbia	74	3.9	7.6	5,655	9,149	376	402	10.1	6.8
Maryland	708	1.4	5.2	4,997	9,427	362	407	7.5	5.2
New Jersey	1,242	2.6	9.0	4,531	9,069	354	382	10.2	6.4
New York	2,805	6.2	22.0	4,855	8,794	334	372	11.2	7.2
Pennsylvania	2,156	3.3	31.0	5,212	7,898	379	393	8.0	5.7
Great Lakes:									
Illinois	1,713	5.5	6.8	4,324	8,193	374	411	7.3	5.4
Indiana	923	2.6	6.5	3,945	7,481	345	340	6.9	5.5
Michigan	1,511	0.7	5.7	4,307	8,486	328	376	7.6	5.5
Ohio	1,778	2.4	15.6	3,982	7,997	350	397	7.1	5.3
Wisconsin	840	2.0	15.7	3,246	6,829	310	310	6.8	5.0
Plains:									
Iowa	495	3.1	9.5	3,080	6,505	322	296	6.6	5.3
Kansas	406	3.3	6.2	3,847	7,252	348	333	6.5	5.2
Minnesota	713	19.6	25.9	3,394	6,961	334	338	5.7	4.8
Missouri	930	3.4	14.7	4,191	7,348	349	379	7.3	5.5
Nebraska	264	2.2	8.0	2,926	6,792	281	288	6.3	5.2
North Dakota	104	0.6	5.2	3,218	5,898	327	266	6.3	5.0
South Dakota	127	0.1	2.6	2,952	5,840	356	264	6.1	4.9
Southeast:									
Alabama	772	0.8	12.5	4,454	7,479	413	420	7.0	5.4
Arkansas	485	0.2	5.4	3,719	6,974	366	355	7.0	5.5
Florida	3,080	13.8	22.9	5,027	9,273	326	366	7.1	5.8
Georgia	1,075	0.4	7.0	4,402	7,363	378	351	6.9	5.6
Kentucky	695	2.3	7.0	3,862	7,367	396	385	7.2	5.4
Louisiana	624	0.4	14.3	5,468	9,234	399	398	7.2	5.8
Mississippi	462	0.1	3.8	4,189	8,025	423	397	7.4	6.0
North Carolina	1,318	0.5	10.9	3,465	7,412	314	352	8.0	5.6
South Carolina	674	0.1	6.3	3,777	7,562	319	355	8.3	6.1
Tennessee	949	0.3	14.6	4,441	7,744	375	393	7.1	5.6
Virginia	1,018	1.5	7.1	3,748	6,709	348	334	7.3	5.7
West Virginia	361	8.3	8.8	3,798	7,204	420	388	7.1	5.5
Southwest:									
Arizona	815	24.8	34.8	4,442	7,202	292	306	5.9	5.1
New Mexico	276	13.6	20.5	3,110	6,245	301	267	6.0	5.1
Oklahoma	554	2.5	10.5	4,098	7,795	355	398	7.0	5.3
Texas	2,626	4.1	12.1	4,703	9,076	333	364	7.2	5.6
Rocky Mountains:									
Colorado	540	17.2	29.7	3,935	7,135	302	300	6.0	4.9
Idaho	200	2.5	17.0	3,045	6,056	274	229	5.2	4.7
Montana	152	0.4	7.9	3,114	5,946	306	270	5.9	4.8
Utah	246	9.4	17.3	3,443	6,477	238	256	5.4	4.7
Wyoming	72	3.3	4.2	3,537	6,276	315	275	5.6	4.8

See footnotes at end of table.

**Table 149 (page 2 of 2). Medicare enrollees, enrollees in managed care, payment per enrollee, and short-stay hospital utilization by geographic region and state: United States, 1994 and 2006**

[Data are compiled by the Centers for Medicare & Medicaid Services]

Geographic division and state <sup>1</sup>	Short-stay hospital utilization								
	Enrollment in thousands <sup>2</sup>	Percent of enrollees in managed care <sup>3</sup>		Payment per fee-for-service enrollee		Discharges per 1,000 enrollees <sup>4</sup>		Average length of stay in days <sup>4</sup>	
		2006	1994	2006	1994	2006	1994	2006	1994
Far West:									
Alaska . . . . .	54	0.6	0.6	3,687	6,625	269	260	6.3	5.4
California . . . . .	4,275	30.0	32.9	5,219	8,088	366	299	6.1	5.9
Hawaii . . . . .	185	29.8	36.0	3,069	4,953	301	215	9.1	7.1
Nevada . . . . .	307	19.0	29.5	4,306	7,448	291	300	7.0	6.0
Oregon . . . . .	553	27.7	37.2	3,285	6,125	305	250	5.2	4.9
Washington . . . . .	847	12.5	17.4	3,401	6,485	269	250	5.3	4.9

0.0 less than 0.05.

<sup>1</sup>Data are shown for Bureau of Economic Analysis (BEA) regions that are constructed to show economically interdependent states. These BEA geographic regions differ from U.S. Census Bureau geographic divisions shown in some *Health, United States* tables. See [Appendix II, Geographic region and division](#).

<sup>2</sup>Total persons enrolled in hospital insurance, supplementary medical insurance, or both, as of July 1. Includes fee-for-service and managed care enrollees.

<sup>3</sup>Includes enrollees in Medicare-approved managed care organizations. See [Appendix II, Managed care](#).

<sup>4</sup>Data are for fee-for-service enrollees only.

<sup>5</sup>Includes residents of any of the 50 states and the District of Columbia.

NOTES: Prior to 2004, enrollment and percent of enrollees in managed care were based on a 5% annual Denominator File derived from the Centers for Medicare & Medicaid Services' (CMS) Enrollment Database. Starting with 2004 data, the 100% Denominator File was used. Payments per fee-for-service enrollee are based on fee-for-service billing reimbursement for a 5% sample of Medicare beneficiaries as recorded in CMS' National Claims History File. Short-stay hospital utilization is based on the Medicare Provider Analysis and Review (MEDPAR) stay records for a 20% sample of Medicare beneficiaries. Estimates may not sum to totals because of rounding. Data for additional years are available. See [Appendix III](#).

SOURCE: Centers for Medicare & Medicaid Services, Office of Research, Development, and Information. Health Care Financing Review: Medicare and Medicaid Statistical Supplements for publication years 1996 to 2007. Available from: <http://www.cms.hhs.gov/MedicareMedicaidStatSupp/LT/list.asp>.

**Table 150 (page 1 of 2). Medicaid recipients, recipients in managed care, payments per recipient, and recipients per 100 persons below the poverty level, by geographic region and state: United States, selected fiscal years 1989–2005**

[Data are compiled by the Centers for Medicare & Medicaid Services from the Medicaid Data System]

Geographic region and state <sup>2</sup>	Recipients in thousands		Percent of recipients in managed care		Payments per recipient <sup>1</sup>			Recipients per 100 persons below the poverty level	
	1996	2005	1996	2005	1990	1996	2005	1989–1990	2004–2005
United States . . . . .	36,118	57,349	40	61	\$2,568	\$3,369	\$4,764	75	153
New England:									
Connecticut . . . . .	329	521	61	75	4,829	6,179	7,273	167	151
Maine . . . . .	167	---	1	62	3,248	4,321	---	88	---
Massachusetts . . . . .	715	1,110	70	62	4,622	5,285	7,482	103	177
New Hampshire . . . . .	100	121	16	2	5,423	5,496	6,773	53	167
Rhode Island . . . . .	130	209	63	69	3,778	5,280	7,822	163	167
Vermont . . . . .	102	151	—	67	2,530	2,954	5,696	108	316
Mideast:									
Delaware . . . . .	82	165	78	76	3,004	3,773	5,350	68	212
District of Columbia . . . . .	143	158	55	65	2,629	4,955	8,343	86	152
Maryland . . . . .	399	750	64	67	3,300	5,138	6,597	74	137
New Jersey . . . . .	714	966	43	69	4,054	5,217	7,258	83	150
New York . . . . .	3,281	4,938	23	61	5,099	6,811	7,969	95	172
Pennsylvania . . . . .	1,168	1,990	53	90	2,449	3,993	5,979	88	139
Great Lakes:									
Illinois . . . . .	1,454	2,239	13	10	2,271	3,689	4,818	69	143
Indiana . . . . .	594	984	31	69	3,859	4,130	4,857	45	130
Michigan . . . . .	1,172	1,856	73	90	2,094	2,867	4,124	85	145
Ohio . . . . .	1,478	1,955	32	31	2,566	3,729	6,197	98	143
Wisconsin . . . . .	434	949	32	46	3,179	4,384	4,827	95	150
Plains:									
Iowa . . . . .	308	400	41	92	2,589	3,534	5,874	80	122
Kansas . . . . .	251	385	32	56	2,524	3,425	5,405	71	117
Minnesota . . . . .	455	708	33	66	3,709	5,342	7,396	70	183
Missouri . . . . .	636	1,156	35	45	2,002	3,171	4,552	63	171
Nebraska . . . . .	191	248	27	71	2,595	3,548	5,853	61	149
North Dakota . . . . .	61	74	55	61	3,955	4,889	7,576	58	116
South Dakota . . . . .	77	131	65	97	3,368	4,114	4,792	51	135
Southeast:									
Alabama . . . . .	546	839	11	60	1,731	2,675	4,953	43	109
Arkansas . . . . .	363	977	39	81	2,267	3,375	2,725	55	212
Florida . . . . .	1,638	3,166	64	66	2,273	2,851	4,155	55	153
Georgia . . . . .	1,185	2,038	32	96	3,190	2,604	3,346	64	163
Kentucky . . . . .	641	857	53	92	2,089	3,014	4,721	81	130
Louisiana . . . . .	778	1,146	6	79	2,247	3,154	3,857	58	151
Mississippi . . . . .	510	716	7	13	1,354	2,633	4,847	67	130
North Carolina . . . . .	1,130	1,549	37	71	2,531	3,255	5,433	66	131
South Carolina . . . . .	503	870	1	10	2,343	3,026	4,883	52	139
Tennessee . . . . .	1,409	1,610	100	100	1,896	2,049	4,782	67	211
Virginia . . . . .	623	778	68	63	2,596	2,849	5,217	53	110
West Virginia . . . . .	395	374	30	47	1,443	2,855	6,262	80	142
Southwest:									
Arizona . . . . .	528	1,203	86	89	---	---	3,699	---	130
New Mexico . . . . .	318	491	45	61	2,120	2,757	4,916	39	146
Oklahoma . . . . .	358	686	19	87	2,516	2,852	3,736	56	146
Texas . . . . .	2,572	3,753	4	48	1,928	2,672	3,828	47	100
Rocky Mountains:									
Colorado . . . . .	271	593	80	95	2,705	3,815	4,375	45	112
Idaho . . . . .	119	201	37	83	2,973	3,402	5,346	36	146
Montana . . . . .	101	116	59	68	2,793	3,478	5,339	47	89
Utah . . . . .	152	314	82	91	2,279	2,775	4,777	72	131
Wyoming . . . . .	51	69	1	0	2,036	3,571	5,769	59	131

See footnotes at end of table.

**Table 150 (page 2 of 2). Medicaid recipients, recipients in managed care, payments per recipient, and recipients per 100 persons below the poverty level, by geographic region and state: United States, selected fiscal years 1989–2005**

[Data are compiled by the Centers for Medicare & Medicaid Services from the Medicaid Data System]

Geographic region and state <sup>1</sup>	Recipients in thousands		Percent of recipients in managed care		Payments per recipient <sup>1</sup>			Recipients per 100 persons below the poverty level	
	1996	2005	1996	2005	1990	1996	2005	1989–1990	2004–2005
Far West:									
Alaska . . . . .	69	125	–	0	3,562	4,027	8,019	70	195
California . . . . .	5,107	10,509	23	50	1,795	2,178	2,725	88	217
Hawaii . . . . .	41	224	80	80	2,252	6,574	4,157	73	205
Nevada . . . . .	109	257	41	100	3,161	3,361	4,243	37	95
Oregon . . . . .	450	547	91	91	2,283	2,915	4,465	74	129
Washington . . . . .	621	1,178	100	85	2,128	2,242	4,529	98	171

– Quantity zero.

– – – Data not available.

<sup>1</sup>Vendor payments exclude disproportionate share hospital (DSH) payments (\$13.6 billion in FY2005) and DSH mental health facility payments (\$3.5 billion in FY2005).

<sup>2</sup>Data are shown for Bureau of Economic Analysis (BEA) regions that are constructed to show economically interdependent states. These BEA geographic regions differ from U.S. Census Bureau geographic divisions shown in some *Health, United States* tables. See [Appendix II, Geographic region and division](#).

NOTES: Starting with 1999 data, a new Medicaid data system was introduced. Prior to 1999, recipient counts exclude individuals who only received coverage under prepaid health care and for whom no direct vendor payments were made during the year, and vendor payments exclude payments to health maintenance organizations and other prepaid health plans (\$19 billion in 1998). Data for additional years are available. See [Appendix III](#).

**SOURCES:** Centers for Medicare & Medicaid Services, Office of Information Services, Enterprise Databases Group, Division of Information Distribution, Medicaid Data System. Before 1999, data are from Medicaid Statistical Report HCFA–2082. Starting with 1999, data are from Medicaid Statistical Information System, MSIS. MSIS data available from: <http://msis.cms.hhs.gov> (accessed May 22, 2008). Poverty populations are available from: Department of Commerce, U.S. Census Bureau, Housing and Household Economic Statistics Division. Available from: [http://pubdb3.census.gov/macro/032006/pov/new46\\_100125\\_01.htm](http://pubdb3.census.gov/macro/032006/pov/new46_100125_01.htm). Managed care enrollment available from 2005 Medicaid Managed Care Enrollment report. Available from: <http://www.cms.hhs.gov/MedicaidDataSourcesGenInfo/Downloads/mmcer05.pdf>.

**Table 151. Persons without health insurance coverage by state: United States, average annual 1995–1997 through 2004–2006**

[Data are based on household interviews of a sample of the civilian noninstitutionalized population]

<i>Geographic region and state</i> <sup>1</sup>	<i>1995–1997</i>	<i>1998–2000</i>	<i>2001–2003</i>	<i>2004–2006</i> <sup>2</sup>
	Percent of population			
United States . . . . .	15.7	14.4	15.1	15.3
New England:				
Connecticut . . . . .	10.6	9.5	10.4	10.4
Maine . . . . .	13.5	11.5	10.7	9.5
Massachusetts . . . . .	12.0	9.2	9.6	10.3
New Hampshire . . . . .	10.4	8.6	9.9	10.4
Rhode Island . . . . .	11.0	6.9	9.3	10.2
Vermont . . . . .	11.3	10.3	9.9	10.8
Mideast:				
Delaware . . . . .	14.1	11.2	10.1	12.5
District of Columbia . . . . .	16.1	14.5	13.3	12.4
Maryland . . . . .	13.4	11.9	13.2	13.5
New Jersey . . . . .	15.8	12.9	13.7	14.6
New York . . . . .	16.6	15.3	15.5	13.2
Pennsylvania . . . . .	9.8	8.3	10.7	10.2
Great Lakes:				
Illinois . . . . .	11.6	13.3	14.0	13.6
Indiana . . . . .	11.5	11.3	12.9	13.1
Michigan . . . . .	10.1	10.6	11.0	10.6
Ohio . . . . .	11.6	10.2	11.7	10.7
Wisconsin . . . . .	7.9	9.3	9.5	9.4
Plains:				
Iowa . . . . .	11.6	8.2	9.5	9.3
Kansas . . . . .	11.8	11.0	10.9	11.1
Minnesota . . . . .	9.1	8.2	8.2	8.5
Missouri . . . . .	13.5	9.0	10.9	12.3
Nebraska . . . . .	10.4	9.5	10.3	11.1
North Dakota . . . . .	11.1	12.1	10.5	11.1
South Dakota . . . . .	10.2	12.0	11.0	11.6
Southeast:				
Alabama . . . . .	14.0	14.2	13.3	14.1
Arkansas . . . . .	21.3	15.3	16.6	17.5
Florida . . . . .	18.9	17.2	17.6	20.3
Georgia . . . . .	17.8	15.2	16.4	17.6
Kentucky . . . . .	15.0	13.1	13.3	13.8
Louisiana . . . . .	18.8	19.5	19.4	18.5
Mississippi . . . . .	19.4	15.7	17.0	18.1
North Carolina . . . . .	15.3	13.7	16.1	16.0
South Carolina . . . . .	16.2	13.8	13.1	16.0
Tennessee . . . . .	14.5	10.8	11.8	13.4
Virginia . . . . .	12.9	12.9	12.5	13.2
West Virginia . . . . .	15.8	15.2	14.8	15.5
Southwest:				
Arizona . . . . .	23.0	19.5	17.3	19.0
New Mexico . . . . .	23.5	22.6	21.3	21.0
Oklahoma . . . . .	18.0	17.7	18.7	18.7
Texas . . . . .	24.4	22.2	24.6	24.1
Rocky Mountains:				
Colorado . . . . .	15.5	14.1	16.3	16.6
Idaho . . . . .	16.1	16.5	17.5	14.9
Montana . . . . .	15.3	18.3	16.1	17.0
Utah . . . . .	12.4	13.2	13.6	15.7
Wyoming . . . . .	15.0	15.1	16.5	14.0
Far West:				
Alaska . . . . .	14.7	18.1	17.8	16.7
California . . . . .	20.7	19.2	18.7	18.5
Hawaii . . . . .	8.3	9.8	9.9	8.6
Nevada . . . . .	17.3	17.5	18.3	18.3
Oregon . . . . .	13.7	13.7	14.8	16.6
Washington . . . . .	12.4	12.8	14.3	12.5

<sup>1</sup>Data are shown for Bureau of Economic Analysis (BEA) regions that are constructed to show economically interdependent states. These BEA geographic regions differ from U.S. Census Bureau geographic divisions shown in some *Health, United States* tables. See [Appendix II, Geographic region and division](#).

<sup>2</sup>The 2004 and 2005 data have been revised since originally published. Available from: <http://www.census.gov/hhes/www/hlthins/usernote/schedule.html>.

NOTES: Starting with 1997 data, people with no coverage other than access to the Indian Health Service are no longer considered covered by health insurance. The effect of this change on the estimate of number uninsured is negligible. Starting with 1999 data, estimates reflect the results of follow-up verification questions which decreased the percent uninsured by 1.2 percentage points. See [Appendix I, Current Population Survey](#).

SOURCES: U.S. Census Bureau, Current Population Survey, DeNavas-Walt C, Proctor BD, Smith J. Income, Poverty, and Health Insurance Coverage in the United States: 2006. Current population reports, series P-60 no 233. This report and reports from earlier years available from: <http://www.census.gov/hhes/www/hlthins/reports.html>.





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# Appendix I

## Data Sources

*Health, United States* consolidates the most current data on the health of the population of the United States, the availability and use of health resources, and health care expenditures. Information was obtained from data files and published reports of many federal government and private and global agencies and organizations. In each case, the sponsoring agency or organization collected data using its own methods and procedures. Therefore, data in this report vary considerably with respect to source, method of collection, definitions, and reference period.

Although a detailed description and comprehensive evaluation of each data source are beyond the scope of this Appendix, users should be aware of the general strengths and weaknesses of the different data collection systems. For example, population-based surveys obtain socioeconomic data, data on family characteristics, and information on the impact of an illness, such as days lost from work or limitation of activity. These data are limited by the amount of information a respondent remembers or is willing to report. A respondent may not know detailed medical information, such as precise diagnoses or the types of operations performed, and therefore cannot report it. In contrast, record-based surveys, which collect data from physician and hospital records, usually have good diagnostic information but little or no information about the socioeconomic characteristics of individuals or the impact of illnesses on individuals.

The populations covered by different data collection systems may not be the same, and understanding the differences is critical to interpreting the data. Data on vital statistics and national expenditures cover the entire population. Most data on morbidity and utilization of health resources cover only the civilian noninstitutionalized population. Such statistics may not include data for military personnel, who are usually young; for institutionalized people including the prison population, who may be any age; or for nursing home residents, who are usually old.

All data collection systems are subject to error, and records may be incomplete or contain inaccurate information. Respondents may not remember essential information, a question may not mean the same thing to different respondents, and some institutions or individuals may not

respond at all. It is not always possible to measure the magnitude of these errors or their effect on the data. Where possible, table notes describe the universe and method of data collection to assist users in evaluating data quality.

Some information is collected in more than one survey, and estimates of the same statistic may vary among surveys because of different survey methodologies, sampling frames, questionnaires, definitions, and tabulation categories. For example, cigarette use is measured by the National Health Interview Survey, the National Survey on Drug Use & Health, the Monitoring the Future Survey, and the Youth Risk Behavior Survey. These surveys use slightly different questions of persons of differing ages and interview in different settings (at school compared with at home), so estimates will differ.

Overall estimates generally have relatively small sampling errors, but estimates for certain population subgroups may be based on a small sample size and have relatively large sampling errors. Numbers of births and deaths from the vital statistics system represent complete counts (except for births in those states where data are based on a 50% sample for certain years). Therefore, they are not subject to sampling error. However, when the figures are used for analytical purposes, such as the comparison of rates over a period, the number of events that actually occurred may be considered as one of a large series of possible results that could have arisen under the same circumstances. When the number of events is small and the probability of such an event is rare, estimates may be unstable and considerable caution must be observed in interpreting the statistics. Estimates that are unreliable because of large sampling errors or small numbers of events are noted with asterisks in selected tables. The criteria used to designate unreliable estimates are indicated in notes to the applicable tables.

Government data sources are listed alphabetically by data set name; private and global sources are listed separately. To the extent possible, government data systems are described using a standard format. The overview is a brief, general statement about the purpose or objectives of the data system. The selected content section lists major data elements that are collected or estimated using interpolation or modeling. The data years section gives the years that the survey or data system has existed or been fielded. The coverage section describes the population that the data system represents; for example, residents of the United States, the noninstitutionalized population, persons in specific population

groups, or other entities that comprise the survey. The methodology section presents a short description of methods used to collect data. Sample size and response rates are given for surveys. The issues affecting interpretation section describes major changes in the data collection methodology or other factors that must be considered when analyzing trends—for example, a major survey redesign that may introduce a discontinuity in the trend. For more information about the methodology, data files, and history of a data source, consult the references and websites at the end of each summary.

## Government Sources

### Abortion Surveillance

#### CDC

#### National Center for Chronic Disease Prevention and Health Promotion

*Overview:* The abortion surveillance program documents the number and characteristics of women obtaining legal induced abortions, monitors unintended pregnancy, and assists efforts to identify and reduce preventable causes of morbidity and mortality associated with abortions.

*Selected Content:* Content includes age, race/ethnicity, marital status, previous live births, period of gestation, and previous induced abortions of women obtaining legal induced abortions.

*Data Years:* Between 1973 and 1997, the number of abortions is based on reporting from 52 reporting areas: 50 states, the District of Columbia, and New York City. In 1998 and 1999, CDC compiled abortion data from 48 reporting areas. Alaska, California, New Hampshire, and Oklahoma did not report, and data for these areas were not estimated. In 2000–2004, CDC compiled data from 49 reporting areas. Alaska, California, and New Hampshire did not report abortion data to CDC in 2000, 2001, and 2002. In 2003 and 2004, California, New Hampshire, and West Virginia did not report.

*Coverage:* The system includes women of all ages, including adolescents, who obtain legal induced abortions.

*Methodology:* Starting with 2000 data, the number and characteristics of women who obtain legal induced abortions are provided for 49 reporting areas by central health

agencies, such as state health departments and the health departments of New York City and the District of Columbia, and by hospitals and other medical facilities. In general, the procedures are reported by the state in which the procedure is performed (i.e., state of occurrence). Although the total number of legal induced abortions is available for those 49 reporting areas, not all areas collect information on the characteristics of women who obtain abortions. The number of areas reporting each characteristic and the number of areas with complete data for each characteristic vary from year to year. For example, in 2004, the number of areas reporting different women's characteristics ranged from 28 areas reporting adequate data for the OMB recommended race categories (accounting for 39% of the total number of reported abortions), 27 areas reporting adequate data on Hispanic ethnicity, and 38 areas reporting marital status, to 48 areas reporting age. Data from reporting areas with more than 15% unknown for a given characteristic are excluded from the analysis of that characteristic.

*Issues Affecting Interpretation:* Mifepristone for medical abortion was approved in September 2000 by the U.S. Food and Drug Administration (FDA) for distribution and use in the United States. The percentage of medical abortions increased from 1% in 2000 to 9% in 2004. Between 1989 and 1997, the total number of abortions reported to CDC was about 10% less than the total estimated independently by the Guttmacher Institute (previously called the Alan Guttmacher Institute, or AGI), a not-for-profit organization for reproductive health research, policy analysis, and public education. Between 1998 and 2004, the total number of abortions reported to CDC was about 34% less than the total estimated by Guttmacher. The three reporting areas (the largest of which was California) that did not report abortions to CDC in 2004 accounted for 18% of all abortions tallied by Guttmacher's 2005 survey. See [Appendix I, Guttmacher Institute Abortion Provider Survey](#).

#### Reference:

Abortion Surveillance—United States, 2004. CDC MMWR Surveillance Summaries, November 23, 2007. MMWR 2007;56(SS09):1–33. Available from: <http://www.cdc.gov/mmwr/preview/mmwrhtml/ss5609a1.htm>.

*For More Information:* See the NCCDPHP surveillance and research website: [http://www.cdc.gov/reproductivehealth/Data\\_Stats/index.htm](http://www.cdc.gov/reproductivehealth/Data_Stats/index.htm).



## AIDS Surveillance

### CDC

#### National Center for HIV, STD, and TB Prevention

*Overview:* Acquired immunodeficiency syndrome (AIDS) surveillance data are used to detect and monitor cases of human immunodeficiency virus (HIV) disease and AIDS in the United States, identify epidemiologic trends, identify unusual cases requiring follow-up, and inform public health efforts to prevent and control the disease.

*Selected Content:* Data collected on cases diagnosed with AIDS include age, sex, race/ethnicity, mode of exposure, and geographic region.

*Data Years:* Reports on AIDS cases are available from the beginning of the epidemic that began in 1981.

*Coverage:* All 50 states, the District of Columbia (D.C.), U.S. dependencies and possessions, and independent nations in free association with the United States report AIDS cases to CDC using a uniform surveillance case definition and case report form.

*Methodology:* AIDS surveillance is conducted by health departments in each state or territory and D.C. Although surveillance activities range from passive to active, most areas employ multifaceted active surveillance programs, which include four major reporting sources of AIDS information: hospitals and hospital-based physicians, physicians in nonhospital practice, public and private clinics, and medical record systems (death certificates, tumor registries, hospital discharge abstracts, and communicable disease reports). Using a standard confidential case report form, the health departments collect information that is then transmitted electronically without personal identifiers to CDC.

Adjustments of the estimated data on HIV infection (not AIDS) and on AIDS to account for reporting delays are calculated by a maximum likelihood statistical procedure that takes into account the differences in reporting delays among exposure, geographic, racial/ethnic, age, sex, and vital status categories and is based on the assumption that reporting delays in these categories have not changed over time. AIDS surveillance data are provisional and are updated annually.

*Issues Affecting Interpretation:* Although completeness of reporting of AIDS cases to state and local health departments differs by geographic region and patient population, studies conducted by state and local health departments indicate that the reporting of AIDS cases in most areas of the United States is more than 85% complete. To assess trends in AIDS cases, deaths, and prevalence, it is preferable to use case data adjusted for reporting delays and presented by year of diagnosis instead of straight counts of cases presented by year of report.

The definition of AIDS was modified in 1985 and 1987. The case definition for adults and adolescents was modified again in 1993. The revisions incorporated a broader range of AIDS-indicator diseases and conditions and used HIV diagnostic tests to improve the sensitivity and specificity of the definition. Laboratory and diagnostic criteria for the 1987 pediatric case definition were updated in 1994. Effective January 2000, the surveillance case definition for HIV infection was revised to reflect advances in laboratory HIV virologic tests. The definition incorporates the reporting criteria for HIV infection and AIDS into a single case definition for adults and children.

Decreases in AIDS incidence and in the number of AIDS deaths, first noted in 1996, have been ascribed to the effect of new treatments, which prevent or delay the onset of AIDS and premature death among HIV-infected persons and result in an increase in the number of persons living with HIV and AIDS. A growing number of states require confidential reporting of persons with HIV infection and participate in CDC's integrated HIV/AIDS surveillance system that compiles information on the population of persons newly diagnosed and living with HIV infection.

#### *Reference:*

CDC. HIV/AIDS Surveillance Report, published annually. Available from: <http://www.cdc.gov/hiv/topics/surveillance/resources/reports/#surveillance>.

*For More Information:* See the NCHSTP website: <http://www.cdc.gov/nchstp/>.



## Annual Survey and Census of Jails

### Bureau of Justice Statistics

*Overview:* The number of jail inmates is determined by a periodic census of jails and a survey of jails in the intervening years. The Census of Jails is taken every 5 to 6 years. In years between the census, the Annual Survey of Jails is conducted. The census and survey provide estimates of the characteristics of U.S. jails and the inmates they house.

*Selected Content:* Data are supplied on facility characteristics, staffing, inmate deaths, jail programs, admissions and releases, number of inmates held, and inmate characteristics. Inmate characteristics collected include number of adult and juvenile inmates, conviction status, sex, and race and ethnicity.

*Data Years:* The first census of jails was conducted in 1970; the annual survey has been conducted every year since 1982, except for years in which the Census of Jails is conducted. Data are requested for activities as of June 30 of the reference year.

*Coverage:* Data are collected on local jails, multijurisdiction (regional) jails, and privately contracted jails in all 50 states and the District of Columbia.

*Methodology:* Local jails are locally operated correctional facilities that confine persons before or after adjudication. Inmates sentenced to jails usually have a sentence of a year or less. The census is based on a facility list maintained by the U.S. Census Bureau. For the Annual Survey of Jails, there have been minor changes in the sample selection over time. For more recent surveys, all multijurisdictional jails (jails operated jointly by two or more jurisdictions) were included in the sample. Other jurisdictions were included automatically in the sample if their jails held juvenile inmates and had an average daily population of 250 or more inmates, or housed only adults and had an average daily population of 500 or more, based on the most recent census. The remaining jurisdictions were stratified into two groups: jurisdictions with jails holding at least one juvenile at last census, and jurisdictions with jails holding adults only. Using stratified probability sampling, jurisdictions were then selected from 8 strata from the juvenile and adult jails and 4 strata based on the average daily population during 2005. All surveys prior to the 1994 survey were based on all jails in jurisdictions with 100 or more jail inmates and a stratified random sample of

jurisdictions with an average daily population of fewer than 100 inmates.

*Sample Size and Response Rate:* Data were obtained by mailed and web-based survey questionnaires. After follow-up phone calls, the response rates for most years approach 100% for critical items such as rated capacity, average daily population, and number of inmates confined.

#### Reference:

Pastore AL, Maguire K, editors. Sourcebook of Criminal Justice Statistics [Online]. Available from: <http://www.albany.edu/sourcebook/app4.html>.

*For More Information:* See the Bureau of Justice Statistics website: <http://www.ojp.usdoj.gov/bjs/correct.htm>.

## Census of Fatal Occupational Injuries (CFOI)

### Bureau of Labor Statistics

*Overview:* The Census of Fatal Occupational Injuries (CFOI) compiles comprehensive and timely information on fatal work injuries occurring in the 50 states and the District of Columbia (D.C.) to monitor workplace safety and to inform private and public health efforts to improve workplace safety.

*Selected Content:* Information is collected about each workplace fatality, including occupation and other worker characteristics, equipment involved, and circumstances of the event.

*Data Years:* Data have been collected annually since 1992.

*Coverage:* The data cover all 50 states and D.C.

*Methodology:* CFOI is administered by the Bureau of Labor Statistics (BLS) in conjunction with participating state agencies to compile counts that are as complete as possible to identify, verify, and profile fatal work injuries. Key information about each workplace fatality (occupation and other worker characteristics, equipment or machinery involved, and circumstances of the event) is obtained by cross-referencing source records. For a fatality to be included in the census, the decedent must have been employed (that is, working for pay, compensation, or profit) at the time of the event, engaged in a legal work activity, or present at the site of the incident as a requirement of his or her job. These criteria are generally broader than those used by federal and

state agencies administering specific laws and regulations. Fatalities that occur during a person's commute to or from work are excluded from the census counts.

Data for the CFOI are compiled from various federal, state, and local administrative sources including death certificates, workers' compensation reports and claims, reports to various regulatory agencies, medical examiner reports, police reports, and news reports. Diverse sources are used because studies have shown that no single source captures all job-related fatalities. Source documents are matched so that each fatality is counted only once. To ensure that a fatality occurred while the decedent was at work, information is verified from two or more independent source documents or from a source document and a follow-up questionnaire.

*Issues Affecting Interpretation:* The number of occupational fatalities and fatality rates are periodically revised. States have up to 1 year to update their initial published state counts. States may identify additional fatal work injuries after data collection has closed for a reference year. Fatalities initially excluded from the published count because of insufficient information to determine work relationship may subsequently be verified as work related and were included. Increases in the published counts based on additional information have averaged less than 100 fatalities per year, or less than 1.5% of the total.

Beginning with 2003 data, CFOI began using the North American Industry Classification System (NAICS) to classify industries. Prior to 2003, the program used the Standard Industrial Classification (SIC) system and the U.S. Census Bureau occupational classification system. Although some titles in SIC and NAICS are similar, there is limited comparability between the two systems because the industry groupings are defined differently. See [Appendix II, Industry of employment](#).

*Reference:*

Bureau of Labor Statistics. National Census of Fatal Occupational Injuries in 2006. Washington, DC: U.S. Department of Labor, August 2007.

*For More Information:* See the CFOI website: <http://www.bls.gov/iif/oshcfoi1.htm>.

## Consumer Price Index (CPI)

### Bureau of Labor Statistics

*Overview:* The Consumer Price Index (CPI) is designed to produce a monthly measure of the average change in the prices paid by urban consumers for a fixed market basket of goods and services.

*Selected Content:* Price indexes are available for the United States, the four census regions, size of city, cross-classifications of regions and size-classes, and 26 local areas. Indexes are available for major groups of consumer expenditures (food and beverages, housing, apparel, transportation, medical care, recreation, education and communications, and other goods and services), for items within each group, and for special categories, such as services. Monthly indexes are available for the United States, the four census regions, and some local areas. More detailed item indexes are available for the United States than for regions and local areas. Indexes are available for two population groups: a CPI for All Urban Consumers (CPI-U), which covers approximately 87% of the total population, and a CPI for Urban Wage Earners and Clerical Workers (CPI-W), which covers 32% of the population.

*Data Years:* The index has been constructed annually since 1978.

*Coverage:* The all-urban index (CPI-U) introduced in 1978 covers residents of metropolitan areas as well as residents of urban parts of nonmetropolitan areas (about 87% of the U.S. population in 2000).

*Methodology:* In calculating the index, price changes for the various items in each location were averaged together with weights that represent their importance in the spending of all urban consumers. Local data were then combined to obtain a U.S. city average.

The index measures price changes from a designated reference date, 1982–1984, which equals 100. An increase of 22, for example, is shown as 122. Change can also be expressed in dollars as follows: the price of a base period market basket of goods and services bought by all urban consumers has risen from \$100 in 1982–1984 to \$207 in 2007.

The current revision of the CPI, completed in 2000, reflects spending patterns based on the Survey of Consumer Expenditures from 1993 to 1995, the 1990 Census of Population, and the ongoing Point-of-Purchase Survey. Using an improved sample design, prices for the goods and services required to calculate the index are collected in urban areas throughout the country and from retail and service establishments. Data on rents are collected from tenants of rented housing and residents of owner-occupied housing units. Food, fuels, and other goods and services are priced monthly in urban locations. Price information is obtained through visits or calls by trained BLS field representatives using computer-assisted telephone interviews.

*Issues Affecting Interpretation:* A 1987 revision changed the treatment of health insurance in the cost-weight definitions for medical care items. This change has no effect on the overall index result but provides a clearer picture of the role of health insurance in the CPI. As part of the revision, three new indexes have been created by separating previously combined items, for example, eye care is separated from other professional services, and inpatient and outpatient treatment is separated from other hospital and medical care services.

Effective January 1997, the hospital index was restructured by combining the three categories—room, inpatient services, and outpatient services—into one category: hospital services. In addition, new procedures for hospital data collection identify a payor, diagnosis, and the payor's reimbursement arrangement from selected hospital bills.

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Bureau of Labor Statistics. Handbook of Methods. BLS Bulletin 2490. Washington: U.S. Department of Labor, April 1997; Revising the Consumer Price Index, Monthly Labor Review, Dec 1996.

Ford IK, Ginsburg DH. Medical care in the consumer price index, in Medical care output and productivity studies in income and wealth, vol 62, Cutler DM, Berndt ER, eds. Chicago, IL: University of Chicago Press, pp. 203–19. 2001.

*For More Information:* See the BLS/CPI website: <http://www.bls.gov/cpi/>.

## Current Population Survey (CPS)

### Bureau of Labor Statistics and U.S. Census Bureau

*Overview:* The Current Population Survey (CPS) provides current estimates and trends in employment, unemployment, and other characteristics of the general labor force, the population as a whole, and various population subgroups.

*Selected Content:* The CPS interview is divided into three basic parts: (1) household and demographic information, (2) labor force information, and (3) supplement information for months that include supplements. Comprehensive work experience information is gathered on the employment status, occupation, and industry of persons interviewed.

Estimates of poverty and health insurance coverage presented in *Health, United States* from the CPS are derived from the Annual Social and Economic Supplement (ASEC), formerly called the Annual Demographic Supplement (ADS), or commonly called the March Supplement. The ASEC collects data on family characteristics, household composition, marital status, migration, income from all sources, information on weeks worked, time spent looking for work or on layoff from a job, occupation and industry classification of the job held longest during the year, health insurance coverage, and receipt of noncash benefits such as food stamps, school lunch program, employer-provided group health insurance plan, employer-provided pension plan, personal health insurance, Medicaid, Medicare, CHAMPUS or military health care, and energy assistance.

*Data Years:* The basic CPS has been conducted since 1945, although some data were collected prior to that time. The U.S. Census Bureau has collected data in the ASEC or ADS since 1947.

*Coverage:* The 2000-based basic CPS sample was introduced in April 2004 through June 2005 and is located in 824 sample areas, with coverage in every state and the District of Columbia. The adult universe (i.e., population of marriageable age) is composed of persons 15 years of age and over in the civilian noninstitutionalized population for CPS labor force data. The sample for the March CPS supplement is expanded to include members of the Armed Forces who are living in a household that includes at least one civilian adult, as well as additional Hispanic households that are not included in the monthly labor force estimates.

*Methodology:* The basic CPS sample is selected from multiple frames using multiple stages of selection. Each unit is selected with a known probability to represent similar units in the universe. The sample design is state-based, with the sample in each state being independent of the others.

One person generally responds for all eligible members of a household. For those who are employed, employment information is collected on the job held in the reference week. The reference week is defined as the 7-day period, Sunday through Saturday, which includes the 12th of the month. In the CPS, a person with two or more jobs is classified according to the job at which he or she worked the greatest number of hours. In general, the BLS publishes labor force data only for persons age 16 years and over, because those under 16 years are substantially limited in their labor market activities by compulsory schooling and child labor laws. No upper age limit is used, and full-time students are treated the same as nonstudents.

The additional Hispanic sample is from the previous November's basic CPS sample. If a person is identified as being of Hispanic origin from the November interview and is still residing at the same address in March, that housing unit is eligible for the March survey. This amounts to a near doubling of the Hispanic sample because there is no overlap of housing units between the basic CPS samples in November and March.

For all CPS data files, a single weight is prepared and used to compute the monthly labor force status estimates. An additional weight is prepared for the earnings universe that roughly corresponds to wage and salary workers in the two outgoing rotations. The final weight is the product of the basic weight, the adjustments for special weighting, the noninterview adjustment, the first-stage ratio adjustment factor, and the second-stage ratio adjustment factor. This final weight should be used when producing estimates from the basic CPS data. Differences in the questionnaire, sample, and data uses for the March CPS supplement result in the need for additional adjustment procedures to produce what is called the March supplement weight.

*Sample Size and Response Rate:* Beginning with 2001, the State Children's Health Insurance Program (SCHIP) sample expansion was introduced. This included an increase in the basic CPS sample to 60,000 households per month. Prior to 2001, estimates were based on 50,000 households per month. The expansion also included an additional 12,000

households that were allocated differentially across states, based on prior information of the number of uninsured children in each state, to produce statistically reliable current state data on the number of low-income children who do not have health insurance coverage. In an average month, the nonresponse rate for the basic CPS is about 7%–8%.

*Issues Affecting Interpretation:* Over the years, the number of income questions has expanded, questions on work experience and other characteristics have been added, and the month of interview was moved to March. In 2002, an ASEC sample increase was implemented requiring more time for data collection. Thus, additional ASEC interviews are now taking place in February and April. However, even with this sample increase, most of the data collection still occurs in March.

In 1994, major changes were introduced, which included a complete redesign of the questionnaire including new health insurance questions and the introduction of computer-assisted interviewing for the entire survey. In addition, there were revisions to some of the labor force concepts and definitions. Prior to the redesign, CPS data were primarily collected using a paper-and-pencil form. Beginning in 1994, population controls were based on the 1990 census and adjusted for the estimated population undercount. Starting with *Health, United States, 2003*, poverty estimates for data years 2000 and beyond were recalculated based on the expanded SCHIP sample, and census 2000-based population controls were implemented. Starting with 2002 health insurance data, 1997 race standards were implemented that allowed respondents to report more than one race.

*Reference:*

U.S. Census Bureau. Technical Paper 63RV.  
Current Population Survey: Design and methodology.  
TP63RV, March 2002. Available from:  
<http://www.census.gov/prod/2002pubs/tp63rv.pdf>.

*For More Information:* See the CPS website:  
<http://www.census.gov/cps/>.

## Department of Veterans Affairs National Patient Care Database and National Enrollment Database

### Department of Veterans Affairs (VA)

*Overview:* The Department of Veterans Affairs (VA) compiles and analyzes multiple data sets on the health and health care of its clients and other veterans to monitor access and quality of care and to conduct program and policy evaluations.

*Selected Content:* The VA maintains the National Patient Care Database (NPCD) and the National Enrollment Database (NED).

The NPCD is a nationwide system that contains a statistical record for each episode of care provided under VA auspices in VA and non-VA hospitals, nursing homes, VA residential rehabilitation treatment programs (formerly called domiciliaries), and VA outpatient clinics. Three major extracts from the NPCD are the patient treatment file (PTF), the patient census file (PCF), and the outpatient clinic file (OPC).

The PTF collects data at the time of the patient's discharge on each episode of inpatient care provided to patients at VA hospitals, VA nursing homes, VA residential rehabilitation treatment programs, community nursing homes, and other non-VA facilities. The PTF record contains the scrambled social security number (SSN), dates of inpatient treatment, date of birth, state and county of residence, type of disposition, place of disposition after discharge, and ICD-9-CM diagnostic and procedure or operative codes for each episode of care.

The PCF collects data on each patient remaining in a VA medical facility at midnight at the end of each quarter of the fiscal year. The census record includes information similar to that reported in the PTF record.

The outpatient clinic file (OPC) collects data on each instance of medical treatment provided to a veteran in an outpatient setting. The OPC record includes the age, scrambled social security number, state and county of residence, VA eligibility code, clinic(s) visited, purpose of visit, and date of visit for each episode of care.

The VA also maintains the National Enrollment Database (NED) as the official repository of enrollment information for each veteran enrolled in the VA health care system.

*Coverage:* U.S. veterans who receive services within the VA medical system are included. Data are available for some nonveterans who receive care at VA facilities.

*Methodology:* The NPCD is the source data for the Veterans Health Administration (VHA) Medical SAS Datasets. NPCD is the VHA's centralized relational database (a data warehouse) that receives encounter data from VHA clinical information systems. It is updated daily. Data are collected locally at each VA medical center and are transmitted electronically to the VA Austin Automation Center for use in providing nationwide statistics, reports, and comparisons.

In all of the medical data sets each patient has a unique identifier, which is a formula-based encryption of the individual's SSN. The identifier is consistent for a given patient across data sets and fiscal years. An extract containing selected information from the NPCD, the NED, and the cost distribution system is produced by the Austin Automation Center.

*Issues Affecting Interpretation:* The databases include users of the VA health care system. VA eligibility is a hierarchy based on service-connected disabilities, income, age, and availability of services. Therefore, different VA programs may serve populations with different sociodemographic characteristics than other health care systems serve.

*For More Information:* See the VA Information Resource Center website: <http://www.virec.research.va.gov/Support/Training-NewUsersToolkit/IntroToVAData.htm>.

## Employee Benefits Survey—See [National Compensation Survey](#)

## Medicaid Data System

### Centers for Medicare & Medicaid Services

*Overview:* The Centers for Medicare & Medicaid Services (CMS) works with its state partners to collect data on persons served by the Medicaid program to monitor and evaluate access and quality of care, trends in program eligibility, characteristics of enrollees, changes in payment policy, and other program-related issues.

*Selected Content:* Data collected include medical vendor payments for Medicaid recipients by type of service and



information on the characteristics of Medicaid recipients, including race/ethnicity, age, and basis of eligibility.

*Data Years:* Selected state data are available starting in 1992 and data for the 50 states and the District of Columbia are available starting in 1999.

*Coverage:* The data include individuals enrolled in the Medicaid program or receiving Medicaid benefits.

*Methodology:* The primary data sources for Medicaid statistical data are the Medicaid Statistical Information System (MSIS) and the CMS-64 reports.

MSIS is the basic source of state-reported eligibility and claims data on the Medicaid population, and their characteristics, utilization, and payments. Beginning in FY 1999, as a result of legislation enacted from the Balanced Budget Act of 1997, states are required to submit individual eligibility and claims data tapes to CMS quarterly through MSIS. Prior to FY 1999, states were required to submit an annual HCFA-2082 report, designed to collect aggregated statistical data on eligibles, recipients, services, and expenditures during a federal fiscal year (October 1 through September 30). The data reported for each year represented people on the Medicaid rolls, recipients of Medicaid services, and payments for claims adjudicated during the year. The data reflected bills adjudicated or processed during the year, rather than services used during the year. States summarized and reported the data processed through their own Medicaid claims processing and payment operations, unless they opted to participate in MSIS, in which case the HCFA-2082 report was produced by the Health Care Financing Administration (the predecessor to CMS).

The CMS-64 is a product of the financial budget and grant system. The CMS-64 is a statement of expenditures for the Medicaid program that states submit to CMS 30 days after each quarter. The report is an accounting statement of actual expenditures made by the states for which they are entitled to receive federal reimbursement under Title XIX for that quarter. The amount claimed on the CMS-64 is a summary of expenditures derived from source documents such as invoices, cost reports, and eligibility records.

The CMS-64 shows the disposition of Medicaid grant funds for the quarter being reported and previous years, the recoupments made or refunds received, and income earned on grant funds. The data on the CMS-64 are used to reconcile the monetary advance made on the basis of states'

funding estimates filed prior to the beginning of the quarter on the CMS-37. As such, the CMS-64 is the primary source for making adjustments for any identified overpayments and underpayments to the states. Also incorporated into this process are disallowance actions forwarded from other federal financial adjustments. Finally, the CMS-64 provides information that forms the basis for a series of Medicaid financial reports and budget analyses. Also included are third party liability (TPL) collections tables. TPL refers to the legal obligation of certain health care sources to pay the medical claims of Medicaid recipients before Medicaid pays these claims. Medicaid pays only after the TPL sources have met their legal obligation to pay.

*Issues Affecting Interpretation:* Health, United States Medicaid tables are based on MSIS data. Users of Medicaid data may note apparent inconsistencies in Medicaid data that are primarily due to the difference in information captured in MSIS compared to CMS-64 reports. The most substantive difference is due to payments made to disproportionate share hospitals. Payments to disproportionate share hospitals do not appear in MSIS because states directly reimburse these hospitals and there is no fee-for-service billing. Other less significant differences between MSIS and CMS-64 occur because adjudicated claims data are used in MSIS versus actual payments reflected in the CMS-64. Differences also may occur because of internal state practices for capturing and reporting these data through two separate systems. Finally, national totals for the CMS-64 are different because they include other jurisdictions, such as the Northern Mariana Islands and American Samoa.

*For More Information:* See the CMS website: [http://www.cms.hhs.gov/medicaiddatasourcesgeninfo/01\\_overview.asp](http://www.cms.hhs.gov/medicaiddatasourcesgeninfo/01_overview.asp) or the Research Data Assistance Center (ResDAC): [http://www.resdac.umn.edu/medicaid/data\\_available.asp](http://www.resdac.umn.edu/medicaid/data_available.asp). Also see [Appendix II, Medicaid](#).

## Medical Expenditure Panel Survey (MEPS)

### Agency for Healthcare Research and Quality

*Overview:* The Medical Expenditure Panel Survey (MEPS) produces nationally representative estimates of health care use, expenditures, sources of payment, insurance coverage, and quality of care for the U.S. civilian noninstitutionalized population.

*Selected Content:* MEPS data in *Health, United States* include total health care expenses and prescribed medicine expenses, presented by sociodemographic characteristics, type of health insurance, and sources of payment.

*Data Years:* The 1977 National Medical Care Expenditure Survey and the 1987 National Medical Expenditure Survey (NMES) are earlier versions of this survey. Since 1996, MEPS has been conducted on an annual basis.

*Coverage:* U.S. civilian noninstitutionalized population is the primary population represented. The 1987 and 1996 surveys also had an institutionalized population component.

*Methodology:* MEPS is a national probability survey conducted on an annual basis since 1996. The panel design of the survey features several rounds of interviewing covering two full calendar years. The MEPS consists of three components: the Household Component (HC), the Medical Provider Component (MPC), and the Insurance Component (IC).

The HC is a nationally representative survey of the civilian noninstitutionalized population drawn from a subsample of households that participated in the prior year's National Health Interview Survey conducted by NCHS. Missing expenditure data are imputed using data collected in the MPC whenever possible.

The MPC collects data from hospitals, physicians, home health care providers, and pharmacies that were reported in the HC as providing care to MEPS sample persons. Data are collected in MPC to improve the accuracy of expenditure estimates derived solely from the HC. The MPC is particularly useful in obtaining expenditure information for persons enrolled in managed care plans and Medicaid recipients. Sample sizes for the MPC vary from year to year depending on the HC sample size and the MPC sampling rates for providers.

The IC consists of two subcomponent samples: a household sample and list sample. The household sample collects detailed information from employers on the health insurance held by and offered to respondents to the MEPS-HC. The list sample collects data on the types and costs of workplace health insurance from a total of about 40,000 business establishments and governments each year.

The MEPS updates the 1987 NMES. The NMES consists of two components: the Household Survey (HS) and the Medical Provider Survey (MPS). The NMES-HS Component was

designed to provide nationally representative estimates of health insurance status, health insurance coverage, and health care use for the U.S. civilian noninstitutionalized population for the calendar year 1987. Data from the NMES-MPS component were used in conjunction with HS data to produce estimates of health care expenditures. The NMES-HS consisted of four rounds of household interviews. Income was collected in a special supplement administered early in 1988. Events under the scope of the NMES-MPS included medical services provided by or under the direction of a physician, all hospital events, and home health care. The sample of events included in the NMES-MPS was all events for persons covered by Medicaid and for a 25% sample of NMES-HS respondents. Missing expenditure data were imputed.

*Sample Size and Response Rate:* For MEPS first core household interview, 17,500 households were selected. The sample sizes for the MEPS-HC are approximately 10,000 families in 1996 and 1998–2000, 13,500 families in 1997 and 2001, and 13,000–15,000 families annually beginning in 2002. The full-year household core response rate has generally been about 66%. The 12-month joint core questionnaire/health questionnaire/access supplement response rate for the household component of the NMES was 80%.

*Issues Affecting Interpretation:* The 1987 estimates are based on the NMES, and 1996 and later years estimates are based on the MEPS. Because expenditures in NMES were based primarily on charges, whereas those for MEPS were based on payments, data for NMES were adjusted to be more comparable to MEPS using estimated charge-to-payment ratios for 1987. For a detailed explanation of this adjustment, see Zuvekas and Cohen, 2002.

#### *References:*

Hahn B, Lefkowitz D. Annual expenses and sources of payment for health care services (AHRQ pub no 93-0007). National Medical Expenditure Survey Research Findings 14, Agency for Healthcare Research and Quality pub no 93-0007. Rockville, MD: Public Health Service, November 1992.

Cohen SB. Sample design of the 1997 Medical Expenditure Panel Survey Household Component. MEPS Methodology Report No 11. AHRQ pub no. 01-0001. Rockville MD: Agency for Healthcare Research and Quality. 2000.



Zuvekas S, Cohen J. A guide to comparing health care expenditures in the 1996 MEPS to the 1987 NMES. *Inquiry* 2002;39(1):76–86.

*For More Information:* See the MEPS website:  
<http://www.meps.ahrq.gov>.

## Medicare Administrative Data

### Centers for Medicare & Medicaid Services

*Overview:* The Centers for Medicare & Medicaid Services (CMS) collects and synthesizes Medicare enrollment, spending, and claims data to monitor and evaluate access to and quality of care, trends in utilization, changes in payment policy, and other program-related issues.

*Selected Content:* Data include claims information for services furnished to Medicare beneficiaries and Medicare enrollment data. Claims data include type of service, procedures, diagnoses, dates of service, charge amounts, and payment amounts. Enrollment data include date of birth, sex, race or ethnicity, and reason for entitlement.

*Data Years:* Some data files are available as far back as 1987, but CMS no longer provides technical support for files with data prior to 1991.

*Coverage:* Enrollment data are for all persons enrolled in the Medicare program. Claims data include data for Medicare beneficiaries who filed claims.

*Methodology:* The claims and utilization data files contain extensive utilization information at various levels of summarization for a variety of providers and services. There are many types and levels of these files, including the National Claims History (NCH) files, the Standard Analytic Files (SAF), Medicare Provider and Analysis Review (MedPAR) files, Medicare enrollment files, and various other files.

The National Claims History 100% Nearline File contains all institutional and noninstitutional claims and provides records of every Medicare claim submitted, including adjustment claims. The Standard Analytical Files (SAFs) contain final action claims data in which all adjustments have been resolved. These files contain information collected by Medicare to pay for health care services provided to a Medicare beneficiary. SAFs are available for each institutional (inpatient, outpatient, skilled nursing facility, hospice, or home

health agency) and noninstitutional (physician and durable medical equipment providers) claim type. The record unit of SAFs is the claim (some episodes of care may have more than one claim). SAF files include the Inpatient SAF, the Skilled Nursing Facility SAF, the Outpatient SAF, the Home Health Agency SAF, the Hospice SAF, the Clinical Laboratory SAF, the Durable Medical Equipment SAF (5%), the physician supplier SAF (5%), and the Durable Medical Equipment SAF.

Medicare Provider and Analysis Review (MedPAR) files contain inpatient hospital and skilled nursing facility (SNF) final action stay records. Each MedPAR record represents a stay in an inpatient hospital or SNF. An inpatient stay record summarizes all services rendered to a beneficiary from the time of admission to a facility through discharge. Each MedPAR record may represent one claim or multiple claims, depending on the length of a beneficiary's stay and the amount of inpatient services used throughout the stay.

The Denominator File contains demographic and enrollment information about each beneficiary enrolled in Medicare during a calendar year. The information in the Denominator File is frozen in March of the following calendar year. Some of the information contained in this file includes the beneficiary unique identifier, state and county codes, ZIP Code, date of birth, date of death, sex, race, age, monthly entitlement indicators (for Medicare Part A, Medicare Part B, or Part A and Part B), reasons for entitlement, state buy-in indicators, and monthly managed care indicators (yes/no). The Denominator File is used to determine beneficiary demographic characteristics, entitlement, and beneficiary participation in Medicare Managed Care Organizations.

The Vital Status File contains demographic information about each beneficiary ever entitled to Medicare. Some of the information contained in this file includes the beneficiary unique identifier, state and county codes, ZIP Code, date of birth, date of death, sex, race, and age. Often the Vital Status File is used to obtain recent death information for a cohort of Medicare beneficiaries.

The Group Health Plan (GHP) Master File contains data on beneficiaries who are currently enrolled or have ever been enrolled in a Managed Care Organization (MCO) under contract with CMS. Each record represents one beneficiary, and each beneficiary has one record. Some of the information contained in this file includes the Beneficiary Unique Identifier number, date of birth, date of death, state and county, and managed care enrollment information such as dates of

membership and MCO contract number. The GHP Master File is used to identify the exact MCO in which beneficiaries were enrolled.

*Issues Affecting Interpretation:* Because Medicare managed care programs may not file claims, files based only on claims data will exclude care for persons enrolled in Medicare managed care programs. In addition, to maintain a manageable file size, some files are based on a sample of enrollees, rather than on all Medicare enrollees. Coding changes and interpretation of Medicare coverage rules have also changed over the life of the Medicare program.

*For More Information:* See the CMS Research Data Assistance Center (ResDAC) website: <http://www.resdac.umn.edu/medicare/index.asp> or the CMS website: <http://www.cms.hhs.gov/home/medicare.asp>. Also see [Appendix II, Medicare](#).

## Medicare Current Beneficiary Survey (MCBS)

### Centers for Medicare & Medicaid Services

*Overview:* The Medicare Current Beneficiary Survey (MCBS) produces nationally representative estimates of health status, health care use and expenditures, health insurance coverage, and socioeconomic and demographic characteristics of Medicare beneficiaries. It is used to estimate expenditures and sources of payment for all services used by Medicare beneficiaries, including co-payments, deductibles, and noncovered services; to ascertain all types of health insurance coverage and relate coverage to sources of payment; and to trace processes over time, such as changes in health status and the effects of program changes.

*Selected Content:* The survey collects data on utilization of health services, health and functional status, health care expenditures, and health insurance and beneficiary information (such as income, living arrangement, family assistance, and quality of life).

*Data Years:* The first round of interviewing was conducted from September through December 1991, and the survey has been continuously in the field since then. The data are designed to support both cross-sectional and longitudinal analyses.

*Coverage:* The MCBS is a continuous survey of a nationally representative sample of aged, institutionalized, and disabled Medicare beneficiaries.

*Methodology:* The overlapping panel design of the survey allows each sample person to be interviewed three times a year for 4 years, whether he or she resides in the community or a facility or moves between the two settings, using the version of the questionnaire appropriate to the setting. Sample persons in the community are interviewed using computer-assisted personal interviewing (CAPI) survey instruments. Because long-term care facility residents often are in poor health, information about institutionalized residents is collected from proxy respondents such as nurses and other primary caregivers affiliated with the facility. The sample is selected from the Medicare enrollment files, with oversampling among disabled persons under age 65 years and among persons 80 years of age and over.

MCBS has two components: the Cost and Use file and the Access to Care file. Medicare claims are linked to survey-reported events to produce the Cost and Use file that provides complete expenditure and source of payment data on all health care services, including those not covered by Medicare. The Access to Care file contains information on beneficiaries' access to health care, satisfaction with care, and usual source of care. The sample for this file represents the always enrolled population—those who participated in the Medicare program for the entire year. In contrast, the Cost and Use file represents the ever enrolled population, including both those who entered Medicare and those who died during the year.

*Sample Size and Response Rate:* Each fall, about one-third of the sample is retired and roughly 6,000 new sample persons are included in the survey—the exact number chosen is based on projections of target samples of 12,000 persons with 3 years of cost and use information distributed appropriately across the sample cells. In the community, response rates for initial interviews range in the mid- to high 80s; once respondents have completed the first interview, their participation in subsequent rounds is 95% or more. In recent rounds, data have been collected from approximately 15,000–19,000 beneficiaries, with the peaks occurring in fall rounds because of the annual and HMO samples. Roughly 90% of the sample is made up of persons who live in the community, with the remaining persons living in long-term care facilities. Response rates for facility interviews approach 100%.

*Issues Affecting Interpretation:* Because only Medicare enrollees are included in the survey, the survey excludes a small proportion of persons age 65 years and over who are not enrolled in Medicare, which should be noted when using the MCBS to make estimates of the entire population age 65 years and over in the United States.

*References:*

Adler GS. A profile of the Medicare Current Beneficiary Survey. *Health Care Financ Rev* 1994;15(4):153–63.

Lo A, Chu A, Apodaca R. Redesign of the Medicare Current Beneficiary Survey sample, Rockville, MD: Westat, Inc., 2003. Available from: <http://www.amstat.org/sections/srms/proceedings/y2002/Files/JSM2002-000662.pdf>.

*For More Information:* See the MCBS website: <http://www.cms.hhs.gov/MCBS>.

## Monitoring the Future Study (MTF)

### National Institute on Drug Abuse

*Overview:* Monitoring the Future (MTF) is an ongoing study of the behaviors, attitudes, and values of American secondary school students, college students, and young adults.

*Selected Content:* Data collected include lifetime, annual, and 30-day prevalence of use of specific illegal drugs and substances, inhalants, tobacco, and alcohol. Data are also collected on usage levels, frequency of use, perceived risks associated with use, opinions about whether use is approved or disapproved by others, and opinions about availability of the substances.

*Data Years:* MTF has been conducted annually since 1975, initially with high school seniors; ongoing panel studies of representative samples from each graduating class have been conducted by mail since 1976; annual surveys of 8th and 10th graders were initiated in 1991.

*Coverage:* MTF surveys a sample of high school seniors, 10th graders, and 8th graders selected to be representative of all seniors, 10th graders, and 8th graders in public and private high schools in the continental United States.

*Methodology:* The survey design is a multistage random sample with stage one being selection of particular geographic areas, stage two selection of one or more schools in each area, and stage three selection of classes within each

school. Data are collected using self-administered questionnaires conducted in the classroom by representatives of the Institute for Social Research. Dropouts and students who are absent on the day of the survey are excluded. Recognizing that the dropout population is at higher risk for drug use, this survey was expanded in 1991 to include similar nationally representative samples of 8th and 10th graders, which have lower dropout rates than seniors and include future high-risk 12th grade dropouts. For more information on MTF adjustments for absentees and dropouts, see: Johnston LD, O'Malley PM, Bachman JG, Schulenberg JE. (2006). *Monitoring the Future national survey results on drug use, 1975–2005: Volume I, Secondary school students* (NIH Publication No. 06–5883). Bethesda, MD: National Institute on Drug Abuse. Appendix A. Available from: <http://www.monitoringthefuture.org/>.

*Sample Size and Response Rates:* In 2007, 48,025, 8th, 10th, and 12th graders in 403 secondary schools were surveyed. The annual senior samples comprised 15,132 seniors in 132 public and private high schools nationwide. The 10th-grade samples involved 16,398 students in 120 schools, and the 8th-grade samples had 16,495 students in 151 schools. Response rates were 81%, 88%, and 91% for 12th, 10th, and 8th graders and have been relatively constant across time. Absentees constitute virtually all of the nonresponding students.

*Issues Affecting Interpretation:* Estimates of substance use for youth based on the National Survey on Drug Use & Health (NSDUH) are not directly comparable with estimates based on the MTF and the Youth Risk Behavior Surveillance System (YRBSS). In addition to the fact that the MTF excludes dropouts and absentees, rates are not directly comparable across these surveys because of differences in populations covered, sample design, questionnaires, interview setting, and statistical approaches to make the survey estimates generalizable to the entire population. The NSDUH survey collects data in residences, whereas the MTF and YRBSS collect data in school classrooms. The NSDUH estimates are tabulated by age, whereas the MTF and YRBSS estimates are tabulated by grade, representing different ages as well as different populations.

*References:*

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Cowan CD. Coverage, sample design, and weighting in three federal surveys. *Journal of Drug Issues* 2001;31(3):599–614.

*For More Information:* See the NIDA website: <http://www.nida.nih.gov/Infifax/HSYouthtrends.html> and the Monitoring the Future website: <http://www.monitoringthefuture.org/>.

## National Ambulatory Medical Care Survey (NAMCS)

### CDC/NCHS

*Overview:* The National Ambulatory Medical Care Survey (NAMCS) is a national survey designed to provide information about the provision and use of medical care services in office-based physician practices in the United States.

*Selected Content:* Data are collected from medical records on type of providers seen; reason for visit; diagnoses; drugs ordered, provided, or continued; and selected procedures and tests ordered or performed during the visit. Patient data include age, sex, race, and expected source of payment. Data are also collected on selected characteristics of physician practices.

*Data Years:* The NAMCS, which began in 1973, was conducted annually until 1981, once in 1985, and resumed an annual schedule in 1989.

*Coverage:* The scope of the survey covers patient encounters in the offices of nonfederally employed physicians classified by the American Medical Association or American Osteopathic Association as office-based, patient care physicians. Patient encounters with physicians engaged in prepaid practices—health maintenance organizations (HMOs), independent

practice organizations (IPAs), and other prepaid practices—are included in NAMCS. Excluded are visits to hospital-based physicians, visits to specialists in anesthesiology, pathology, and radiology, and visits to physicians who are principally engaged in teaching, research, or administration. Telephone contacts and nonoffice visits are also excluded.

*Methodology:* A multistage probability design is employed. The first-stage sample consisted of 84 primary sampling units (PSUs) in 1985, and beginning in 1989, 112 PSUs, which were selected from about 1,900 such units into which the United States had been divided. In each sample PSU, a sample of practicing nonfederal office-based physicians is selected from master files maintained by the American Medical Association and the American Osteopathic Association. The final stage involves systematic random samples of office visits during randomly assigned 7-day reporting periods. In 1985, the survey excluded Alaska and Hawaii. Starting in 1989, the survey included all 50 states and the District of Columbia.

The U.S. Census Bureau acts as the data collection agent for the NAMCS. Screening interviews are conducted by Census field representatives to obtain information about physicians' office-based practices and to ensure that the practice is within the scope of the survey. Field representatives visit eligible physicians prior to their participation in the survey to provide them with survey materials and instruct them on how to sample patient visits and complete patient record forms. Participants are asked to complete forms for a systematic random sample of approximately 30 office visits occurring during a randomly assigned 1-week period, but increasingly patient record forms are abstracted by field representatives.

Sample data are weighted to produce national estimates. The estimation procedure used in the NAMCS has three basic components: inflation by the reciprocal of the probability of selection, adjustment for nonresponse, and ratio adjustment to fixed totals.

*Sample Size and Response Rate:* In 2003, a sample of 3,000 physicians was selected; 2,007 were in scope and 1,407 participated for a response rate of 67%. Data were provided for 25,288 visits. In 2004, a sample of 3,000 physicians was selected; 1,961 were in scope and 1,372 participated for a response rate of 70%. Data were provided for 25,286 visits. In 2005, a sample of 3,000 physicians was selected; 1,936 were in scope and 1,281 participated for a response rate of 66%. Data were provided for 25,665 visits. In 2006, a sample



of 3,500 physicians was selected; 2,268 were in scope and 1,455 participated for a response rate of 64%. Data were provided for 29,392 visits.

*Issues Affecting Interpretation:* The NAMCS patient record form is modified approximately every 2–4 years to reflect changes in physician practice characteristics, patterns of care, and technological innovations. Examples of recent changes include increasing the number of drugs recorded on the patient record form, and adding checkboxes for specific tests or procedures performed. Sample sizes vary by survey year. For some years it is suggested that analysts combine two or more years of data if they wish to examine relatively rare populations or events. Starting with *Health, United States, 2005*, data for survey years 2001–2002 were revised to be consistent with the weighting scheme introduced in the 2003 NAMCS data. For more information on the new weighting scheme, see National Ambulatory Medical Care Survey: 2003 summary, Advance data from vital and health statistics (2005).

*Reference:*

Hing E, Cherry D, Woodwell, DA. National Ambulatory Medical Care Survey, 2003 summary. Advance data from vital and health statistics 2005; no 365. Hyattsville, MD: NCHS. Available from: <http://www.cdc.gov/nchs/data/ad/ad365.pdf>.

*For More Information:* See the Ambulatory Health Care Data website: <http://www.cdc.gov/nchs/about/major/ahcd/ahcd1.htm>.

## National Compensation Survey

### Bureau of Labor Statistics

*Overview:* The National Compensation Survey (NCS) provides comprehensive measures of occupational earnings, compensation cost trends, benefit incidence, and detailed plan provisions.

*Selected Content:* Detailed occupational earnings are collected for metropolitan and nonmetropolitan areas and broad geographic regions, and on a national basis. The Employment Cost Index (ECI) and Employer Costs for Employee Compensation (ECEC) are compensation measures derived from the NCS. ECI measures changes in labor costs. Average hourly employer cost for employee compensation is presented in the ECEC. National benefits data are presented for three broad occupational groupings: professional, technical, and related; clerical and sales; and blue-collar and

service employees. Data are also available by goods- and service-producing occupations, union affiliation, and full- and part-time status.

*Data Years:* The NCS replaces three existing BLS surveys: Employment Cost Index (ECI), Occupational Compensation Survey Program (OCSP), and Employee Benefits Survey (EBS). The ECI and EBS were fully integrated into the NCS in 1999. Prior to 1999, the EBS was collected for small private establishments (those employing fewer than 100 workers) and from state and local governments (regardless of employment size). In odd-numbered years, data were collected for medium and large private establishments (those employing 100 workers or more). The ECI was created in the mid-1970s. The EBS was added to an existing data collection effort, the National Pay Survey, in the late 1970s. The Employer Cost for Employee Compensation product was developed in 1987.

*Coverage:* The NCS provides information for the Nation, for 81 metropolitan areas and 73 nonmetropolitan counties representing the United States, and for the nine census divisions (although not all areas have information for all occupations). It includes both full- and part-time workers who are paid a wage or salary. It excludes agriculture, fishing and forestry industries, private household workers, and the federal government. The NCS only includes establishments with at least 50 workers.

*Methodology:* Conducted quarterly by the Bureau of Labor Statistics' Office of Compensation and Working Conditions, the sample for the NCS is selected using a three-stage design. The first stage involves the selection of areas for the state and local government sample and the private industry sample. In the second stage, establishments are systematically selected with probability of selection proportionate to their relative employment size within the industry. Use of this technique means that the larger an establishment's employment, the greater its chance of selection. The third stage of sampling is a probability sample of occupations within a sampled establishment. This step is performed by the BLS field economist during an interview with the respondent establishment in which selection of an occupation is based on probability of selection proportionate to employment in the establishment and each occupation is classified under its corresponding major occupational group.

Data collection is conducted by the BLS field economists. Data are gathered from each establishment on the primary

business activity of the establishment, types of occupations, number of employees, wages and salaries and benefits, hours of work, and duties and responsibilities. Wage data obtained by occupation and work level allows NCS to publish occupational wage statistics for localities, census divisions, and the Nation.

*Sample:* The 2008 state and local government sample consists of 152 areas that represent the Nation's 361 metropolitan statistical areas and 573 micropolitan statistical areas as defined by the Office of Management and Budget (OMB) in December 2003 and the remaining portions of the 50 states. The private industry sample consists of 151 metropolitan areas and nonmetropolitan areas that represent the Nation's 326 metropolitan statistical areas as defined by OMB in 1994 and the remaining portions of the 50 states. The private industry estimates will begin the conversion to December 2003 OMB area definitions in December 2008.

*Issues Affecting Interpretation:* Because the NCS merges separate surveys, trend analyses prior to 2000 should be interpreted with care. The industrial coverage, establishment size coverage, and geographic coverage for the EBS survey changed since 1990. All surveys conducted from 1979–1989 excluded part-time employees and establishments in Alaska and Hawaii. The surveys conducted from 1979–1986 covered only medium and large private establishments and excluded most of the service industries. Establishments that employed at least 50, 100, or 250 workers, depending on the industry, were included. The survey conducted in 1987 consisted of state and local governments with 50 or more employees. The surveys carried out in 1988 and 1989 included all private-sector establishments that employed 100 or more employees.

The Employer Costs for Employee Compensation (ECEC) switched to new industry and occupation classification systems with the release of the March 2004 data. The North American Industry Classification System (NAICS) is now used to classify industries and the 2000 Standard Occupational Classification (SOC) system is used to classify occupations. ECEC data by the 1987 Standard Industrial Classification System (SIC) and the 1990 Occupational Classification System (OCS) are no longer produced and data classified under these coding schemes are not comparable to data classified under the NAICS or SOC. The 2007 NAICS is gradually replacing the 2002 NAICS but this does not affect trends. Beginning with the March 2004 quarter, historical data are available based on the NAICS and the

2000 SOC. The historical tables are available from: <http://www.bls.gov/ncs/ect/home.htm> or upon request from BLS. For more detailed information on NAICS and SOC, including background definitions and implementation schedules, see the BLS websites: <http://www.bls.gov/bls/naics.htm> and <http://www.bls.gov/soc/home.htm>.

The state and local government sample, which is replaced less frequently than the private industry sample, was replaced in its entirety in September 2007. As a result of this replacement, the number of state and local government occupations and establishments increased substantially. The private industry sample is rotated over approximately 5 years, which makes the sample more representative of the economy and reduces respondent burden. Data are collected for the pay period including the 12th day of the survey months of March, June, September, and December. The sample is replaced on a cross-area, cross-industry basis.

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U.S. Department of Labor, Bureau of Labor Statistics, Employer Costs for Employee Compensation Summary 2008, March release, available June 11, 2008. Available from: <http://www.stats.bls.gov/news.release/pdf/ecec.pdf>.

The National Compensation Survey: Compensation Statistics for the 21st Century. Available from: <http://www.bls.gov/opub/cwc/archive/winter2000art1.pdf>.

*For More Information:* See the National Compensation Survey website: <http://www.bls.gov/ncs>.

## National Health Expenditure Accounts

### Centers for Medicare & Medicaid Services

*Overview:* National Health Expenditure Accounts provide estimates of how much money is spent on different types of health care-related services and programs in the United States.

*Selected Content:* National Health Expenditures measure spending for health care in the United States by type of service delivered (such as hospital care, physician services, nursing home care) and source of funding for those services (such as private health insurance, Medicare, Medicaid, and out-of-pocket spending).

*Data Years:* Expenditure estimates are available starting from 1960 in data files or in published articles.

*Methodology:* The American Hospital Association (AHA) data on hospital finances are the primary source for estimates relating to hospital care. The salaries of physicians and dentists on the staffs of hospitals, hospital outpatient clinics, hospital-based home health agencies, and nursing home care provided in the hospital setting are considered to be components of hospital care. Expenditures for home health care and for services of health professionals (for example, doctors, chiropractors, private duty nurses, therapists, and podiatrists) are estimated primarily using a combination of data from the U.S. Census Bureau Services Annual Survey and the quinquennial Census of Service Industries.

The estimates of retail spending for prescription drugs are based on household and industry data on prescription drug transactions. Expenditures for other medical nondurables and for vision products and other medical durables purchased in retail outlets are based on estimates of personal consumption expenditures prepared by the U.S. Department of Commerce's Bureau of Economic Analysis, U.S. Bureau of Labor Statistics/Consumer Expenditure Survey; the 1987 National Medical Expenditure Survey and the Medical Expenditure Panel Surveys conducted by the Agency for Healthcare Research and Quality; and spending by Medicare and Medicaid. Those durable and nondurable products provided to inpatients in hospitals or nursing homes, and those provided by licensed professionals or through home health agencies are excluded here, but they are included with the expenditure estimates of the provider service category.

Nursing home expenditures cover care rendered in establishments providing inpatient nursing and health-related personal care through active treatment programs for medical and health-related conditions. These establishments cover skilled nursing and intermediate care facilities, including those for the mentally retarded. Spending estimates are primarily based on data from the U.S. Census Bureau's Services Annual Survey and the quinquennial Census of Service Industries.

Expenditures for construction include those spent on the erection or renovation of hospitals, nursing homes, medical clinics, and medical research facilities, but not for private office buildings providing office space for private practitioners. Expenditures for noncommercial research (the cost of commercial research by drug companies is assumed to be

imbedded in the price charged for the product; to include this item again would result in double counting) are developed from information gathered by the National Institutes of Health and the National Science Foundation.

Source of funding estimates likewise come from a multiplicity of sources. Data on the federal health programs are taken from administrative records maintained by the servicing agencies. Among the sources used to estimate state and local government spending for health are the U.S. Census Bureau's Government Finances and the National Academy of Social Insurance reports on state-operated workers' compensation programs. Federal and state and local expenditures for education and training of medical personnel are excluded from these measures where they are separable. For the private financing of health care, data on the financial experience of health insurance organizations come from special Centers for Medicare & Medicaid Services analyses of private health insurers and from the Bureau of Labor Statistics' survey on the cost of employer-sponsored health insurance and on consumer expenditures. Information on out-of-pocket spending from the U.S. Bureau of the Census Services Annual Survey; U.S. Bureau of Labor Statistics Consumer Expenditure Survey; the 1987 National Medical Expenditure Survey and the Medical Expenditure Panel Surveys conducted by the Agency for Healthcare Research and Quality; and from private surveys conducted by the American Hospital Association, American Medical Association, American Dental Association, and IMS Health, an organization that collects data from the pharmaceutical industry, is used to develop estimates of direct spending by customers.

*Reference:*

Catlin A, Cowan C, Hartman M, Heffler S, and the National Health Expenditure Accounts team. National health spending in 2006: A year of change for prescription drugs. *Health Aff (Millwood)* 2008;27(1):14–29.

*For More Information:* See the Centers for Medicare & Medicaid Services National Health Expenditure Accounts website: <http://www.cms.hhs.gov/NationalHealthExpendData/>.



## State Health Expenditure Accounts

*Overview:* Estimates of personal health care spending by state are created using the same definitions of health care sectors used in producing the National Health Expenditure Accounts (NHEA). These estimates are useful in measuring the role of health spending in states' economies.

*Selected Content:* Health Accounts by state of residence present aggregate and per capita estimates of health care spending by type of establishment delivering care (hospitals, physicians and clinics, nursing homes, etc.) and for medical products (prescription drugs, over-the-counter medicines and sundries and durable medical products such as eyeglasses and hearing aids) purchased in retail outlets. Source of funding aggregate and per enrollee estimates by state are also provided for Medicare and Medicaid.

*Data Years:* Annual state health expenditures are available for 1991–2004.

*Methodology:* The health spending estimates by state of residence are based on the National Health Expenditure Accounts, the official government estimates of health spending in the United States. The state health expenditure data provide state-specific personal health care spending trends by service, as well as state-level estimates of Medicare and Medicaid spending by service, using consistent definitions and methodologies that allow for comparisons across time and across states.

In order to construct per capita health spending estimates for each state, interstate border-crossing expenditure flow patterns were used to adjust provider-based data. This adjustment was necessary because health spending estimates by location of provider include spending on both residents and nonresidents, while population estimates are based on residency. Adjustments were not made for Medicaid because Medicaid spending estimates were based on data provided by in-state providers for eligible residents only. States may pay small amounts for services that occur outside of a resident's state; however, these dollars are a small proportion of all Medicaid spending. Therefore, Medicaid spending by state was assumed to be identical on a residence and provider basis.

Medicare fee-for-service claims data were used to adjust Medicare spending from a provider to a residence basis. All non-Medicare and non-Medicaid expenditures—except for prescription drugs and other personal health care spending,

which are assumed to already be based on state of residence—were also adjusted using Medicare claims data. Inpatient hospital and physician services were further adjusted to reflect non-Medicare case mix by reweighting Medicare expenditure flows using private hospital discharge information and physician claims records.

Due to data limitations, these estimates do not adjust for international inflows of health care spending. Additionally, the Census resident population does not include an adjustment for the population undercount by state, which results in slightly overstated per capita spending that do not materially impact finding. For more information on the methodology see: <http://www.cms.hhs.gov/NationalHealthExpendData/downloads/res-methodology.pdf>.

*For More Information:* See the Centers for Medicare & Medicaid Services National Health Expenditure Data website: [http://www.cms.hhs.gov/NationalHealthExpendData/05\\_NationalHealthAccountsStateHealthAccounts.asp](http://www.cms.hhs.gov/NationalHealthExpendData/05_NationalHealthAccountsStateHealthAccounts.asp).

## National Health and Nutrition Examination Survey (NHANES)

### CDC/NCHS

*Overview:* The National Health and Nutrition Examination Survey (NHANES) program includes a series of cross-sectional nationally representative health examination surveys conducted in mobile examination units or clinics (MEC). In the first series of surveys, the National Health Examination Survey (NHES), data were collected on the prevalence of certain chronic diseases, the distributions of various physical and psychological measures, and measures of growth and development. In 1971, a nutrition surveillance component was added and the survey name changed to the National Health and Nutrition Examination Survey (NHANES). See Data Years section for more information on the survey name and years conducted.

*Selected Content:* The NHANES have collected data on chronic disease prevalence and conditions (including undiagnosed conditions) and risk factors such as obesity and smoking, serum cholesterol levels, hypertension, diet and nutritional status, immunization status, infectious disease prevalence, health insurance, and measures of environmental exposures. Other topics addressed include hearing, vision, mental health, anemia, diabetes, cardiovascular disease,

osteoporosis, oral health, mental health, pharmaceuticals and dietary supplements used, and physical fitness.

NHES I data were collected on the prevalence of certain chronic diseases as well as the distributions of various physical and psychological measures, including blood pressure and serum cholesterol levels. NHES II and NHES III focused on factors related to growth and development in children and youth.

For NHANES I, data were collected on indicators of the nutritional and health status of the American people through dietary intake data, biochemical tests, physical measurements, and clinical assessments for evidence of nutritional deficiency. Detailed examinations were given by dentists, ophthalmologists, and dermatologists, with an assessment of need for treatment. In addition, data were obtained for a subsample of adults on overall health care needs and behavior, and more detailed examination data were collected on cardiovascular, respiratory, arthritic, and hearing conditions. For NHANES II, the nutrition component was expanded and the medical area focused on diabetes, kidney and liver functions, allergy, and speech pathology. The third National Health and Nutrition Examination Survey (NHANES III) also included data on antibodies, spirometry, and bone health.

Beginning in 1999 with continuous data collection for NHANES, new topics include cardiorespiratory fitness, physical functioning, lower extremity disease, full body scan (DXA) for body fat as well as bone density, and tuberculosis infection.

*Data Years:* Data have been collected from surveys conducted during 1960–1962 (NHES I), 1963–1965 (NHES II), 1966–1970 (NHES III), 1971–1974 (NHANES I), 1976–1980 (NHANES II), 1982–1984 (HHANES), and 1988–1994 (NHANES III). Beginning in 1999, the survey has been conducted continuously.

*Coverage:* With the exception of the Hispanic Health and Nutrition Examination Survey (see [Methodology](#), below), the NHES and NHANES provide estimates of the health status of the civilian noninstitutionalized population of the United States. NHES II and NHES III examined probability samples of the Nation's noninstitutionalized children ages 6–11 years and 12–17 years, respectively.

The NHANES I target population was the civilian noninstitutionalized population 1–74 years of age residing in the coterminous United States, except for people residing on

any of the reservation lands set aside for the use of American Indians.

The NHANES II target population was the civilian noninstitutionalized population 6 months–74 years of age residing in the United States, including Alaska and Hawaii.

The Hispanic Health and Nutrition Examination Survey (HHANES) studied three geographically and ethnically distinct populations: Mexican Americans living in Texas, New Mexico, Arizona, Colorado, and California; Cuban Americans living in Dade County, Florida; and Puerto Ricans living in parts of New York, New Jersey, and Connecticut.

The NHANES III target population was the civilian noninstitutionalized population 2 months of age and over. The sample design provided for oversampling among children 2 months–5 years of age, persons 60 years of age and over, black persons, and persons of Mexican origin.

Beginning in 1999, NHANES oversampled low-income persons, adolescents 12–19 years of age, persons 60 years of age and over, African Americans, and persons of Mexican origin. The sample is not designed to give a nationally representative sample for the total population of Hispanics residing in the United States.

*Methodology:* The NHANES includes clinical examinations, selected medical and laboratory tests, and self-reported data. The NHANES and previous surveys interviewed persons in their homes and conducted medical examinations, including laboratory analysis of blood, urine, and other tissue samples. Medical examinations and laboratory tests follow very specific protocols and are as standard as possible to ensure comparability across sites and providers. From 1999–2002, as a substitute for the MEC examinations, a small number of survey participants received an abbreviated health examination in their homes if they were unable to come to the MEC.

For the first program or cycle of the NHES I, a highly stratified multistage probability sample was selected to represent the 111 million civilian noninstitutionalized adults 18–79 years of age in the United States at that time. The sample areas consisted of 42 primary sampling units (PSUs) from the 1,900 geographic units. NHES II and NHES III were also multistage stratified probability samples of clusters of households in land-based segments. NHES II and III used the same 40 PSUs.

For NHANES I the sample areas consisted of 65 PSUs. A subsample of persons 25–74 years of age was selected to receive the more detailed health examination. Groups at high risk of malnutrition were oversampled.

NHANES II used a multistage probability design that involved selection of PSUs, segments (clusters of households) within PSUs, households, eligible persons, and finally, sample persons. The sample design provided for oversampling among persons 6 months–5 years of age, 60–74 years of age, and those living in poverty areas.

HHANES was similar in content and design to NHANES I and II. The major difference between HHANES and the previous national surveys is that HHANES used a probability sample of three special subgroups of the population living in selected areas of the United States rather than a national probability sample. The three HHANES universes included approximately 84%, 57%, and 59% of the respective 1980 Mexican-, Cuban-, and Puerto Rican-origin populations in the continental United States.

The survey for the NHANES III was conducted from 1988 to 1994 and consisted of two phases of equal length and sample size. Phase 1 and Phase 2 comprised random samples of the civilian U.S. population living in households. About 40,000 persons 2 months of age and over were selected and asked to complete an extensive interview and an examination. Participants were selected from households in 81 counties across the United States. Children age 2 months–5 years and persons 60 years of age and over were oversampled to provide precise descriptive information on the health status of selected population groups of the United States.

Beginning in 1999, NHANES became a continuous, annual survey, which also allows increased flexibility in survey content. Since April 1999, NHANES collects data every year from a representative sample of the civilian noninstitutionalized U.S. population, newborns and older, by in-home personal interviews and physical examinations in the MEC. The sample design is a complex, multistage, clustered design using unequal probabilities of selection. The first-stage sample frame for continuous NHANES during 1999–2001 was the list of PSUs selected for the design of the National Health Interview Survey (NHIS). Typically, an NHANES PSU is a county. For 2002, an independent sample of PSUs (based on current census data) was selected. This independent design is used for the period 2002–2006. For 1999, because of delay in the start of data collection, 12 distinct PSUs were in

the annual sample. For each year in 2000–2006, 15 PSUs were selected. The within-PSU design involves forming secondary sampling units that are nested within census tracts, selecting dwelling units within secondary units, and then selecting sample persons within dwelling units. The final sample person selection involves differential probabilities of selection according to demographic variables sex (male or female), race/ethnicity (Mexican American, black, all others), and age. Because of the differential probabilities of selection, dwelling units are screened for potential sample persons. Sample weights are available and should be used in estimation of descriptive statistics. The complex design features should be used in estimating standard errors for the descriptive estimates.

The estimation procedure used to produce national statistics for all NHANES involved inflation by the reciprocal of the probability of selection, adjustment for nonresponse, and poststratified ratio adjustment to population totals. Sampling errors also were estimated to measure the reliability of the statistics.

*Sample Size and Response Rates:* NHES I sampled 7,710 adults. The examination response rate was 87%. NHES II sampled 7,417 children and reported a response rate of 96% for the questionnaire sample and 73% for the examination sample. NHES III sampled 7,514 youth and reported a response rate of 90%.

A sample of 28,043 persons was selected for NHANES I. Household interviews were completed for more than 96% of the persons selected, and about 75% (20,749) were examined. A sample of 27,801 persons was selected for NHANES II; 73% (20,322 persons) were examined.

In the HHANES 9,894 persons in the Southwest were selected (75% or 7,462 were examined); in Dade County 2,244 persons were selected (60% or 1,357 were examined); and in the Northeast 3,786 persons were selected (75% or 2,834 were examined). Over the 6-year survey period of NHANES III, 39,695 persons were selected, the household interview response rate was 86%, and the medical examination response rate was 78%.

In the sample selection for NHANES 1999–2000, there were 22,839 dwelling units screened. Of these, 6,005 households had at least one eligible sample person identified for interviewing. A total of 12,160 eligible sample persons were identified. The overall response rate in NHANES 1999–2000 for those interviewed was 82% (9,965 of 12,160), and the

response rate for those examined was 76% (9,282 of 12,160). For NHANES 2001–2002 there were 13,156 persons selected in the sample, of which 84% (11,039) were interviewed and 80% (10,480) of the 13,156 selected completed the health examination component of the survey. For NHANES 2003–2004, 6,410 households had at least one eligible sample person identified for interviewing. A total of 12,761 eligible sample persons were identified, of which 79% (10,115) were interviewed and 76% (9,653) completed the health examination component of the survey. For NHANES 2005–2006, a total of 12,862 persons were identified, of which 80% (10,348) were interviewed and 77% (9,950) completed the health examination component of the survey. For more information on unweighted NHANES response rates and response weights using sample size weighted to Current Population Survey population totals, see: [http://www.cdc.gov/nchs/about/major/nhanes/nhanes\\_cps\\_totals.htm](http://www.cdc.gov/nchs/about/major/nhanes/nhanes_cps_totals.htm).

*Issues Affecting Interpretation:* Data elements, lab tests performed, and the technological sophistication of medical examination and laboratory equipment have changed over time. Therefore, trend analyses should carefully examine how specific data elements were collected across the different NHANES and NHES surveys.

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For More Information: See the NHANES website: <http://www.cdc.gov/nchs/nhanes.htm>.

## National Health Interview Survey (NHIS)

### CDC/NCHS

*Overview:* The National Health Interview Survey (NHIS) monitors the health of the U.S. population through the collection and analysis of data on a broad range of health topics. A major strength of this survey lies in the ability to analyze health measures by many demographic and socioeconomic characteristics.

*Selected Content:* The NHIS obtains information during household interviews on illnesses, injuries, activity limitation, chronic conditions, health insurance coverage, utilization of health care, and other health topics. Demographic data include age, sex, education, race/ethnicity (reported by respondent or proxy), place of birth, income, and place of residence. Other data collected include risk factors such as lack of exercise, smoking, alcohol consumption, and use of prevention services such as vaccinations, mammography, and pap smears. Special modules and supplements focus on different issues each year and have included topics such as HIV/AIDS, aging, cancer screening, prevention, alternative and complementary medicine, and many other topics.



*Data Years:* The NHIS has been conducted annually since 1957 with a major redesign every 10–15 years.

*Coverage:* The NHIS covers the civilian noninstitutionalized population of the United States. Excluded are patients in long-term care facilities, persons on active duty with the Armed Forces (although their dependents are included), and U.S. nationals living in foreign countries.

*Methodology:* The NHIS is a cross-sectional household interview survey. Sampling and interviewing are continuous throughout each year. The sampling plan follows a multistage area probability design that permits the representative sampling of households. Traditionally, the sample for the NHIS is redesigned and redrawn about every 10 years to better measure the changing U.S. population and to meet new survey objectives. A new sample design was implemented in the 2006 survey. The fundamental structure of the new design is very similar to the previous design for the 1995–2005 surveys. Information for only the current sampling plan covering the design years of 2006–2014 is presented. The first stage of the current sampling plan consists of a sample of 428 primary sampling units (PSUs) drawn from approximately 1,900 geographically defined PSUs that cover the 50 states and the District of Columbia. A PSU consists of a county, a small group of contiguous counties, or a metropolitan statistical area.

Within a PSU, two types of second-stage units are used: area segments and permit segments. Area segments are defined geographically and contain an expected 8, 12, or 16 addresses. Permit segments cover housing units built after the 2000 census. The permit segments are defined using updated lists of building permits issued in the PSU since 2000 and contain an expected four addresses. Within each segment all occupied households at the sample addresses are targeted for interview.

The total NHIS sample of PSUs is subdivided into four separate panels, or subdesigns, such that each panel is a representative sample of the U.S. population. This design feature has a number of advantages, including flexibility for the total sample size. The households selected for interview each week in the NHIS are a probability sample representative of the target population.

The NHIS sample was reduced by 13% in the 2006 redesign. In addition, the NHIS sample was reduced by approximately 50% during the third quarter of 2006, cutting about 13% of the sample size of the 2006 sample. This cutback was in

addition to the 13% reduction introduced in the 2006–2014 sample.

Oversampling of the black and Hispanic populations was retained in 2006 to allow for more precise estimation of health characteristics in these growing minority populations. The new sample design also oversamples the Asian population. In addition, the sample adult selection process was revised so that when black, Hispanic, or Asian persons age 65 years and over are present, they have an increased chance of being selected as the sample adult.

The NHIS that was fielded from 1982–1996 consisted of two parts: (1) a set of basic health and demographic items (known as the Core questionnaire), and (2) one or more sets of questions on current health topics (known as Supplements). The Core questionnaire remained the same over that time period whereas the current health topics changed depending on data needs.

The NHIS questionnaire revision, implemented in 1997, has two basic parts: a Core module and one or more supplements that vary by year. The Core remains largely unchanged from year to year and allows for trend analysis and for data from more than 1 year to be pooled to increase the sample size for analytic purposes. The Core contains three components: the Family, the Sample Adult, and the Sample Child. The Family component collects information on everyone in the family and allows the NHIS to serve as a sampling frame for additional integrated surveys as needed. Information collected on the Family section for all family members includes household composition and sociodemographic characteristics, tracking information, information for matches to administrative data bases, health insurance coverage, and basic indicators of health status and utilization of health care services. From each family in the NHIS, one sample adult and, for families with children under 18 years of age, one sample child are randomly selected to participate in the Sample Adult and the Sample Child questionnaires. Because some health issues are different for children and adults, these two questionnaires differ in some items but both collect basic information on health status, use of health care services, health conditions, and health behaviors.

*Sample Size and Response Rates:* Between 1997 and 2005, the sample numbered about 100,000 persons with about 30–36,000 persons participating in the sample adult and about 12–14,000 persons in the sample child questionnaire.

In 2006, the sample numbered about 75,700 with about 24,000 persons participating in the sample adult and about 10,000 persons in the sample child questionnaire. In 2006, the total household response rate was 87%. Since 1997, the final response rate for the sample adult supplement was 70%–80% and 78%–84% for the sample child supplement. Response rates for special health topics (supplements) have generally been lower. For example, the response rate was 80% for the 1994 Year 2000 Supplement, which included questions about cigarette smoking and use of such preventive services as mammography.

*Issues Affecting Interpretation:* In 1997, the questionnaire was redesigned and some basic concepts were changed and other concepts were measured in different ways. For some questions there was a change in the reference period. Also in 1997, the collection methodology changed from paper and pencil questionnaires to computer-assisted personal interviewing (CAPI). Because of the major redesigns of the questionnaire in 1997, most NHIS trend tables in *Health, United States* begin with 1997 data. Starting with *Health, United States, 2005*, estimates for 2000 and later years use weights derived from the 2000 census. In 2006, the sample size was reduced; and this is associated with slightly larger variance estimates than in previous years when the full sample was fielded.

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*For More Information:* See the NHIS website: <http://www.cdc.gov/nchs/nhis.htm>.

## National Hospital Ambulatory Medical Care Survey (NHAMCS)

### CDC/NCHS

*Overview:* The National Hospital Ambulatory Medical Care Survey (NHAMCS) collects data on the utilization and provision of medical care services provided in hospital emergency and outpatient departments.

*Selected Content:* Data are collected from medical records on type of providers seen; reason for visit; diagnoses; drugs ordered, provided, or continued; and selected procedures and tests performed during the visit. Patient data include age, sex, race, and expected source of payment. Data are also collected on selected characteristics of hospitals included in the survey.

*Data Years:* Annual data collection began in 1992.

*Coverage:* The survey is a representative sample of visits to emergency departments (EDs) and outpatient departments (OPDs) of nonfederal, short-stay, or general hospitals. Telephone contacts are excluded.

*Methodology:* A four-stage probability sample design is used in NHAMCS, involving samples of geographically defined primary sampling units (PSUs), hospitals within PSUs, clinics within OPDs, and patient visits within clinics. Emergency departments are treated as their own stratum and all service areas within EDs are included. In the rare event that a sample hospital has more than five emergency service areas, a sample of five areas is selected. The first stage sample of the NHAMCS consists of 112 PSUs selected from 1,900 such units comprising the United States. Within PSUs, 600 general and short-stay hospitals were sampled and assigned to 1 of 16 panels. In any given year, 13 panels are included. Each panel is assigned to a 4-week reporting period during the calendar year.

In the NHAMCS outpatient department survey, a clinic is defined as an administrative unit of the OPD in which ambulatory medical care is provided under the supervision of a physician. Clinics where only ancillary services, such as radiology, laboratory services, physical rehabilitation, renal dialysis, and pharmacy, are provided, or other settings in which physician services are not typically provided, are considered out of scope. If a hospital OPD has five or fewer in-scope clinics, all are included in the sample. For hospital

OPDs with more than five clinics, a systematic sample of clinics proportional to size is included in the survey.

The U.S. Census Bureau acts as the data collection agent for the NHAMCS. Census field representatives contact sample hospitals to determine whether they have a 24-hour ED or an OPD that offers physician services. Visits to eligible EDs and OPDs are systematically sampled over the 4-week reporting period such that about 100 ED encounters and about 200 OPD encounters are selected. Hospital staff are asked to complete patient record forms (PRFs) for each sampled visit, but census field representatives typically abstract data for more than one-half of these visits.

Sample data are weighted to produce national estimates. The estimation procedure used in the NHAMCS has three basic components: inflation by the reciprocal of the probability of selection, adjustment for nonresponse, and ratio adjustment to fixed totals.

*Sample Size and Response Rates:* In any given year, the hospital sample consists of approximately 500 hospitals, of which 80% have EDs and about one-half have eligible OPDs. Typically, about 1,000 clinics are selected from participating hospital OPDs. In 2002, the number of PRFs completed for EDs was 37,337 and for OPDs 35,586. In 2003, the number of PRFs completed for EDs was 40,253 and for OPDs 34,492. In 2004, the number of PRFs completed for EDs was 36,589 and for OPDs 31,783. In 2005, the number of PRFs completed for EDs was 33,605 and for OPDs 29,975. In 2006, the number of PRFs completed for EDs was 35,849 and for OPDs 31,505. In 2002, the hospital response rate for NHAMCS was 92% for EDs and 75% for OPDs. In 2003, the hospital response rate was 85% for EDs and 73% for OPDs. In 2004, the hospital response rate was 89% for EDs and 75% for OPDs. In 2005, the hospital response rate was 89% for EDs and 80% for OPDs. In 2006, the hospital response rate was 83% for EDs and 73% for OPDs.

*Issues Affecting Interpretation:* The NHAMCS PRF is modified approximately every 2 to 4 years to reflect changes in physician practice characteristics, patterns of care, and technological innovations. Examples of recent changes are the number of drugs recorded on the PRF form, and checkboxes of specific tests or procedures performed.

*Reference:*

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[http://www.cdc.gov/nchs/data/series/sr\\_01/sr01\\_034acc.pdf](http://www.cdc.gov/nchs/data/series/sr_01/sr01_034acc.pdf).

*For More Information:* See the National Health Care Survey (NHCS) website: <http://www.cdc.gov/nchs/nhcs.htm> or the Ambulatory Health Care website: <http://www.cdc.gov/nchs/about/major/ahcd/ahcd1.htm>.

## National Hospital Discharge Survey (NHDS)

### CDC/NCHS

*Overview:* The National Hospital Discharge Survey (NHDS) collects and produces national estimates on characteristics of inpatient stays in nonfederal short-stay hospitals in the United States.

*Selected Content:* Patient information collected includes demographics, length of stay, diagnoses, and procedures. Hospital characteristics collected include region, ownership, and bedsize.

*Data Years:* The NHDS has been conducted annually since 1965.

*Coverage:* The survey design covers the 50 states and the District of Columbia. Included in the survey are hospitals with an average length of stay of less than 30 days for all inpatients, general hospitals, and children's general hospitals. Excluded are federal, military, and Department of Veterans Affairs hospitals, as well as hospital units of institutions (such as prison hospitals), and hospitals with fewer than six beds staffed for patient use. All discharged patients from in-scope hospitals are included in the survey; however, data for newborns are not included in *Health, United States*.

*Methodology:* The design implemented in 1965 continued through 1987, and a redesign with a new sample of hospitals, fielded in 1988, is currently in place. The sample for the 1965 NHDS was selected in 1964 from a frame of short-stay hospitals listed in the National Master Facility Inventory. A two-stage stratified sample design was used, with hospitals stratified according to bedsize and geographic region. Sample hospitals were selected with probabilities ranging from certainty for the largest hospitals to 1 in 40 for the smallest hospitals. Within each participating hospital, a systematic random sample was selected from a daily listing sheet of discharges. Within-hospital sampling rates for discharges varied inversely with the probability of hospital selection, so



the overall probability of selecting a discharge was approximately the same across the sample.

Data collection was conducted by means of manual abstraction of patient information from sampled medical records. Sample selection and transcription of information from inpatient medical records to NHDS survey forms were performed by hospital staff, representatives of NCHS, or both. In 1985, a second data collection procedure was introduced. The procedure involved the purchase of computer data tapes from commercial abstracting services that contained automated discharge data for some hospitals participating in the NHDS. This procedure was used in approximately 17% of the sample hospitals for 1985–1987. Discharges on these computer files were subjected to the NHDS sampling specifications as well as the computer edits and estimation procedures. Two data collection methods, manual and automated, continue to be used in the NHDS.

A redesign of the NHDS was implemented for the 1988 survey. Under the redesign, hospitals were selected using a modified three-stage stratified design. Units selected at the first stage consisted of either hospitals or geographic areas. The geographic areas were Primary Sample Units (PSUs) used for the 1985–1994 National Health Interview Survey, which are geographic areas such as counties or townships. Hospitals within PSUs were then selected at the second stage. Strata at this stage were defined by geographic region, PSU size, abstracting service status, and hospital specialty-size groups. Within these strata, hospitals were selected with probabilities proportional to their annual number of discharges. At the third stage, a sample of discharges was selected by a systematic random sampling technique. The sampling rate was determined by the hospital's sampling stratum and the type of data collection system (manual or automated) used. Discharge records from hospitals submitting data via commercial abstracting services and selected state data systems (approximately 44% of sample hospitals) were arrayed by primary diagnoses, patient sex and age group, and date of discharge, before sampling.

The NHDS hospital sample is updated every 3 years by continuing the sampling process among hospitals that become eligible for the survey during the intervening years and by deleting hospitals that were no longer eligible. This process was conducted in 1991, 1994, 1997, 2000, 2003, and 2006.

The basic unit of estimation for NHDS is a sampled discharge. The basic estimation procedure involves inflation

by the reciprocal of the probability of selection. There are adjustments for nonresponding hospitals and discharges; a poststratification adjustment to fixed totals is employed.

*Sample Size and Response Rate:* In 2005, 501 hospitals were selected: 473 were within scope, 444 participated (94%), and data were collected from medical records for approximately 375,000 discharges.

*Issues Affecting Interpretation:* In 1988, the NHDS was redesigned. Caution is required in comparing trend data from before and after the redesign. There are also annual modifications to the ICD–9–CM affecting diagnoses and procedure categories. See [Appendix II, ICD–9–CM; Tables X and XI](#).

Hospital utilization rates per 10,000 population were computed using estimates of the civilian population of the United States as of July 1 of each year. Rates for 1990 through 1999 use postcensal estimates of the civilian population based on the 1990 census adjusted for net underenumeration using the 1990 National Population Adjustment Matrix from the U.S. Census Bureau. The estimates for 2000 and beyond that appear in *Health, United States, 2003* and later editions were calculated using estimates of the civilian population based on census 2000, and therefore are not strictly comparable with postcensal rates calculated for the 1990s. See [Appendix I, Population Census and Population Estimates](#).

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For More Information: See the National Health Care Surveys website: <http://www.cdc.gov/nchs/nhcs.htm> or the National Hospital Discharge Survey website: <http://www.cdc.gov/nchs/about/major/hdasd/nhds.htm>.

## National Immunization Survey (NIS)

### CDC, National Center for Immunization and Respiratory Diseases, and NCHS

*Overview:* The National Immunization Survey (NIS) is a continuing nationwide telephone sample survey to monitor vaccination coverage rates among children 19–35 months of age.

*Selected Content:* Data collected include vaccination status and timing for Diphtheria, Tetanus toxoids, and acellular Pertussis vaccine (DTP/DT/DTaP); Polio vaccine; Measles, Mumps, and Rubella vaccine (MMR); Haemophilus influenzae type b vaccine (Hib); Hepatitis B vaccine (Hep B); Varicella zoster vaccine; Pneumococcal conjugate vaccine (PCV); Hepatitis A (Hep A); and influenza by race and ethnicity, poverty level, location of residence, geographic division, state, and selected urban areas.

*Data Years:* Annual data collection was initiated beginning with the data year 1994. Data collection for Varicella began in July 1996; data collection for PCV began in July 2001.

*Coverage:* Children 19–35 months of age in the civilian noninstitutionalized population are represented in this survey. Estimates of vaccine-specific coverage are available for the Nation, states, and selected urban areas.

*Methodology:* The NIS is a nationwide telephone sample survey of households with age-eligible children. The NIS uses a two-phase sample design. First, a random-digit-dialing (RDD) sample of telephone numbers is drawn. When households with age-eligible children are contacted, the interviewer collects information on the vaccinations received by all age-eligible children and obtains permission to contact the children's immunization providers. In the second phase, immunization providers are sent vaccination history questionnaires by mail. Providers' responses are compared with information obtained from households to provide a more accurate estimate of vaccination coverage levels. Final estimates are adjusted for households without telephones and nonresponse.

*Sample Size and Response Rates:* In 2006, vaccination data were collected for 29,880 children age 19–35 months. In 2006, the overall interview response rate was 65%. Vaccination information from providers was obtained for 70% of all children who were eligible for provider follow-up in 2006.

*Issues Affecting Interpretation:* For data years 1998, 2002, 2004, and 2005, slight modifications to the estimation procedure were implemented to obtain vaccination coverage rates from the provider data. Published estimates of vaccination coverage based on the NIS data for years prior to 1998 (e.g., estimates published in MMWR articles) may differ slightly from estimates published in *Health, United States* and on the NIS website for the same NIS data. All released public-use data files include the sampling weight for the revised estimation procedure.

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*For More Information:* See the NIS website: <http://www.cdc.gov/nis>.

## National Medical Expenditure Survey (NMES)—See [Medical Expenditure Panel Survey](#)

## National Notifiable Disease Surveillance System (NNDSS)

### CDC

*Overview:* This system provides weekly provisional information on the occurrence of diseases defined as notifiable by the Council of State and Territorial Epidemiologists.

*Selected Content:* Data include incidence of reportable diseases using uniform case definitions.

*Data Years:* The first annual summary of The Notifiable Diseases in 1912 included reports of 10 diseases from 19 states, the District of Columbia, and Hawaii. By 1928, all states, the District of Columbia, Hawaii, and Puerto Rico were participating in national reporting of 29 specified diseases. At their annual meeting in 1950, the State and Territorial Health Officers authorized a conference of state and territorial epidemiologists whose purpose was to determine which diseases should be reported to Public Health Service. In 1961, CDC assumed responsibility for the collection and publication of data concerning nationally notifiable diseases.

*Coverage:* Notifiable disease reports are received from health departments in the 50 states, five territories, New York City, and the District of Columbia. Policies for reporting notifiable disease cases can vary by disease or reporting jurisdiction, depending on case status classification (i.e., confirmed, probable, or suspect).

*Methodology:* CDC, in partnership with the Council of State and Territorial Epidemiologists (CSTE), operates the National Notifiable Diseases Surveillance System (NNDSS). Notifiable disease surveillance is conducted by public health practitioners at local, state, and national levels to support disease prevention and control activities. The system also provides annual summaries of the data. CSTE and CDC annually review the status of national infectious disease surveillance and recommend additions or deletions to the list of nationally notifiable diseases based on the need to respond to emerging priorities. For example, Q fever and tularemia became nationally notifiable in 2000. However, reporting nationally notifiable diseases to CDC is voluntary. Reporting is currently mandated by law or regulation only at the local and state level. Therefore, the list of diseases that are considered notifiable varies slightly by state. For example, reporting of cyclosporiasis to CDC is not done by some states in which this disease is not notifiable to local or state authorities.

State epidemiologists report cases of notifiable diseases to CDC, which tabulates and publishes these data in the *Morbidity and Mortality Weekly Report (MMWR)* and the *Summary of Notifiable Diseases, United States* (titled *Annual Summary* before 1985).

*Issues Affecting Interpretation:* These data must be interpreted in light of reporting practices. Some diseases that cause severe clinical illness (for example, plague and rabies) are most likely reported accurately if diagnosed by a clinician.

However, persons who have diseases that are clinically mild and infrequently associated with serious consequences (for example, salmonellosis) might not seek medical care from a health care provider. Even if these less severe diseases are diagnosed, they are less likely to be reported.

The degree of completeness of data reporting also is influenced by the diagnostic facilities available, the control measures in effect, public awareness of a specific disease, and the interests, resources, and priorities of state and local officials responsible for disease control and public health surveillance. Finally, factors such as changes in case definitions for public health surveillance, introduction of new diagnostic tests, or discovery of new disease entities can cause changes in disease reporting that are independent of the true incidence of disease.

*Reference:*

CDC. Summary of notifiable diseases—United States, 2005. *MMWR* 2007; 54 (53). Available from: <http://www.cdc.gov/mmwr/summary.html>.

*For More Information:* See the NNDSS website: <http://www.cdc.gov/ncphi/diss/nndss/nndsshis.htm>.

## National Nursing Home Survey (NNHS)

### CDC/NCHS

*Overview:* The National Nursing Home Survey (NNHS) collects and provides national estimates on characteristics of nursing homes and their residents and staff.

*Selected Content:* The NNHS provides information on nursing homes from two perspectives—that of the provider of services and that of the recipient. Data about the facilities include characteristics such as bedsize, ownership, affiliation, Medicare/Medicaid certification, specialty units, services offered, number and characteristics of staff, expenses, and charges. Data about the current residents and discharges include demographic characteristics, health status, level of assistance needed with activities of daily living, vision and hearing impairment, continence, services received, sources of payment, and discharge disposition (for discharges). The redesigned NNHS conducted in 2004 included new facility data items on Joint Commission on Accreditation of Healthcare Organization accreditation, electronic information systems, cultural competency, immunization policies and

practices, end-of-life practices, special service programs, and new patient-level data items on hospitalizations and emergency department admissions, pain assessment and pain relief, medications, family and caregiver services, end-of-life care and advance directives, pressure ulcers, behavior or mood symptoms, falls, and out-of-pocket charges. In addition to these facility and resident data items, data on nurse staffing and a supplemental survey on nursing assistants working in nursing homes were also collected.

*Data Years:* NCHS conducted seven NNHS: the first survey August 1973–April 1974; the second May–December 1977; the third August 1985–January 1986; the fourth July–December 1995; the fifth July–December 1997; the sixth July–December 1999, and the seventh and most recent NNHS, which has undergone a major redesign, was conducted August–January 2004.

*Coverage:* The initial NNHS, conducted in 1973–1974, included the universe of nursing homes that provided some level of nursing care and excluded homes providing only personal or domiciliary care. The 1977 NNHS encompassed all types of nursing homes, including personal care and domiciliary care homes. The 1985 NNHS was designed to be similar to the 1973–1974 survey in that it excluded personal or domiciliary care homes. However in 1985, an unknown number of residential care facilities were present in the sampling frame. These facilities were identified in the 1986 inventory survey and can be removed from the estimate of facilities and beds for 1985. The 1995, 1997, 1999, and 2004 NNHS also included only nursing homes that provided some level of nursing care and excluded homes providing only personal or domiciliary care, similar to the 1985 and 1973–1974 surveys.

*Methodology:* The survey uses a stratified two-stage probability design. The first stage is the selection of facilities, and the second stage is the selection of residents and discharges. Prior to the 2004 NNHS, up to six current residents and/or six discharges were selected. The 2004 survey was designed to select only 12 current residents from each facility to participate in the survey. Information on the facility is collected through a personal interview with the administrator or staff designated by the administrator. Resident data were provided by staff familiar with the care provided to the resident. Staff relied on the medical record and personal knowledge of the resident. In addition to employee data that were collected during the interview with

the administrator, in several years staffing data were collected via a self-administered questionnaire. Discharge data, when collected, were based on information recorded in the medical record.

Current residents are those on the facility's roster as of the night before the survey. Included are all residents for whom beds are maintained even though they may be away on an overnight leave or in the hospital. People residing in personal care or domiciliary care homes are excluded. Discharges are those who are formally discharged from care by the facility during a designated reference period randomly selected for each facility before data collection. Both live and deceased discharges are included. Residents were counted more than once if they were discharged more than once during the reference period. Resident rates are calculated using estimates of the civilian population of the United States including institutionalized persons. Population data are from unpublished tabulations provided by the U.S. Census Bureau. The 2004 population estimates are postcensal estimates as of July 1, 2004, based on the 2000 census. For more information about the 2004 population estimates, see the Technical Notes in Kozak LJ, DeFrances CJ, Hall MJ. National Hospital Discharge Survey: 2004 annual summary with detailed diagnosis and procedure data. NCHS. Vital Health Stat 13(162). 2006. Available from: [http://www.cdc.gov/nchs/data/series/sr\\_13/sr13\\_162acc.pdf](http://www.cdc.gov/nchs/data/series/sr_13/sr13_162acc.pdf).

Statistics for the NNHS are derived by a multistage estimation procedure that has three major components: (a) inflation by the reciprocals of the probabilities of sample selection; (b) adjustment for nonresponse; and (c) ratio adjustment to fixed totals. The surveys are adjusted for four types of nonresponse: (1) when an eligible nursing facility did not respond; (2) when the facility failed to complete the sampling lists; (3) when the facility did not complete the facility questionnaire but did complete the questionnaire for residents in the facility; and (4) when the facility did not provide information to complete the questionnaire for the sample resident or discharge.

*Sample Size and Response Rates:* In 1973–1974 the sample of 2,118 homes was selected from the 1971 National Master Facility Inventory (NMFI) and from those that opened for business in 1972. For the 1977 NNHS the sample of 1,698 facilities was selected from nursing homes in the sampling frame, which consisted of all homes listed in the 1973 NMFI and those opening for business between 1973 and December

1976. The sample for the 1985 survey consisted of the 1,220 facilities selected from the 1982 NMFI, data for homes identified in the 1982 Complement Survey of the NMFI, data on hospital-based nursing homes obtained from the Health Care Financing Administration (now known as the Centers for Medicare & Medicaid Services), and data on nursing homes open for business between 1982 and June 1, 1984. The 1995 sample of 1,500 homes was selected from a sampling frame consisting of nursing homes from the 1991 National Health Provider Inventory (NHPI) and updated lists from the Agency Reporting System (ARS). The ARS was an ongoing system designed to periodically update the NHPI and consisted primarily of lists or directories of facilities from state agencies, federal agencies, and national voluntary organizations. For the 1997 survey, data were obtained from about 1,488 nursing homes from a sampling frame consisting of nursing homes listed on the 1991 NHPI that was updated with a current listing of nursing facilities supplied by the Health Care Finance Administration and other national organizations. The facility frame for the 1999 NNHS consisted of all nursing homes identified in the 1997 NNHS and updated with current nursing facilities listed by the Centers for Medicare & Medicaid Services and other national organizations. The 1999 sample consisted of 1,496 nursing homes. In 1995, 1997, and 1999, facility-level response rates were over 93%. For the 2004 redesigned and expanded NNHS, 1,500 nursing homes were selected and a facility response rate of 81% was achieved.

*Issues Affecting Interpretation:* Samples of discharges and residents contain different populations with different characteristics. The resident sample is more likely to contain long-term nursing home residents and, conversely, to underestimate short nursing home stays. Because short-term residents are less likely to be on the nursing home rolls on a given night, they are less likely to be sampled. Estimates of discharges underestimate long nursing home stays. In addition, analysts should ensure that the underlying populations are similar across survey years—for example, whether the survey includes personal or domiciliary care homes.

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*For More Information:* See the National Health Care Surveys website: <http://www.cdc.gov/nchs/nhcs.htm> and the NNHS website: <http://www.cdc.gov/nchs/nnhs.htm>.



## National Prisoner Statistics (NPS)

### Bureau of Justice Statistics

*Overview:* National Prisoner Statistics (NPS) produces semiannual national- and state-level data on the numbers of prisoners in state and federal prison facilities. The NPS provides information on prisoners incarcerated in state and federal correctional institutions, including their characteristics, movements, and locations.

*Data Years:* Since 1926, the federal government has published data annually on the prisoner count in each state and the federal prison system.

*Coverage:* Data are collected from all 50 states. The prisoner count in the District of Columbia was included until 2001, when the District ceased operating a prison system.

*Methodology:* NPS obtains prisoner information from a census of prisons in the United States, conducted by the U.S. Census Bureau. The census is based on a facility list maintained by the Census Bureau. Prisons are mailed the NPS forms that may be returned by mail or facsimile. Starting with 2003 data, respondents were provided with an internet reporting option. NPS distinguishes between prisoners in custody from those under jurisdiction. To have custody of a prisoner, a state must hold that person in one of its facilities. To have jurisdiction, a state has legal authority over the prisoner. Prisoners under a state's jurisdiction may be in the custody of a local jail, another state's prison, or other correctional facility such as a privately-operated institution. NPS collects data on both prisoners in custody and under jurisdiction, though some states are unable to provide both custody and jurisdiction counts. NPS counts include all inmates in state-operated facilities in Alaska, Connecticut, Delaware, Hawaii, Rhode Island, and Vermont, which have combined jail-prison systems.

*Sample Size and Response Rate:* Data were obtained by mailed and website-based survey questionnaires. After follow-up phone calls, the response rates for most years approach 100%.

*For More Information:* See the Bureau of Justice Statistics website: <http://www.ojp.usdoj.gov/bjs/correct.htm>.

## National Survey on Drug Use & Health (NSDUH)

### Substance Abuse and Mental Health Services Administration

*Overview:* The National Survey on Drug Use & Health (NSDUH), formerly called the National Household Survey on Drug Abuse (NHSDA), collects data on substance abuse and dependence, mental health problems, and receipt of substance abuse and mental health treatment.

*Selected Content:* NSDUH reports on the prevalence, patterns, and consequences of drug and alcohol use and abuse in the general U.S. civilian noninstitutionalized population age 12 and over. Data are collected on the use of illicit drugs, the nonmedical use of licit drugs, and use of alcohol and tobacco products. The survey is conducted annually and is designed to produce drug and alcohol use incidence and prevalence estimates. Data are also collected periodically on special topics of interest such as criminal behavior, treatment, mental health, and attitudes about drugs.

*Data Years:* The NHSDA survey has been conducted since 1971. In 1999, the NHSDA underwent a major redesign affecting the method of data collection, sample design, sample size, and oversampling. In 2002 the survey underwent a name change to NSDUH as well as additional improvements and modifications to the survey.

*Coverage:* The survey is representative of persons 12 years of age and over in the civilian noninstitutionalized population in the United States. This includes civilians living on military bases and persons living in noninstitutionalized group quarters, such as college dormitories, rooming houses, and shelters. Persons excluded from the survey include homeless people who do not use shelters, active military personnel, and residents of institutional group quarters, such as jails and hospitals.

*Methodology:* The data collection method is in-person interviews conducted with a sample of individuals at their place of residence. Prior to 1999, the NSDUH used a paper-and-pencil interviewing (PAPI) methodology. Since 1999, the interview has been carried out with computer assisted interviewing (CAI) methodology. The survey uses a combination of computer-assisted personal-interviewing (CAPI), conducted by the interviewer for some basic demographic information, and audio computer-assisted

self-interviewing (ACASI) for most of the questions. ACASI provides a highly private and confidential means of responding to questions to increase the level of honest reporting of illicit drug use and other sensitive behavior. The 2005 NSDUH is the first survey in a coordinated 5-year sample design providing estimates for all 50 states plus the District of Columbia for the years 2005–2009. For the 50-state design, 8 states were designated as large sample states (California, Florida, Illinois, Michigan, New York, Ohio, Pennsylvania, and Texas) with samples large enough to support direct state estimates. States were first stratified into a total of 900 state sampling (SS) regions (48 regions in each large sample state and 12 regions in each small sample state). These regions were contiguous geographic areas designed to yield the same number of interviews on average. Unlike the 1999–2001 NHSDAs and the 2002–2004 NSDUHs in which the first-stage sampling units were clusters of census blocks called area segments, the first stage of selection for the 2005–2009 NSDUHs was census tracts. This stage was included to contain sample segments within a single census tract to the extent possible. A total of 48 census tracts per SS region were selected with probability proportional to size. Within sampled census tracts, adjacent census blocks were combined to form the second-stage sampling units or area segments. One segment was selected within each sampled census tract with probability proportional to population size to support the 5-year sample and any supplemental studies that the Substance Abuse and Mental Health Services Administration (SAMHSA) may choose to field. Of these segments, 24 were designated for the coordinated 5-year sample and 24 were designated as reserve segments. Eight sample segments per SS region were fielded during the 2005 survey year. These sampled segments were allocated equally into four separate samples, one for each 3-month period (calendar quarter) during the year, so that the survey was essentially continuous in the field.

The design also oversampled youths and young adults, so that each state's sample was approximately equally distributed among three major age groups: 12–17 years, 18–25 years, and 26 years or over.

*Sample Size and Response Rate:* Nationally, of the 151,288 eligible households sampled, 137,057 addresses were successfully screened for the 2006 survey, and in these screened households, a total of 85,034 sample persons were selected from which 67,802 completed interviews were obtained. The survey was conducted from January to

December 2006. Weighted response rates for household screening and for interviewing were 91% and 74%, respectively.

*Issues Affecting Interpretation:* Several improvements to the survey were implemented in 2002. In addition to the name change, respondents were offered a \$30 incentive payment for participation in the survey starting in 2002, and quality control procedures for data collection were enhanced in 2001 and 2002. Because of these improvements and modifications, estimates from the NSDUH completed in 2002 and later should not be compared with estimates from the 2001 or earlier versions of the survey. The data collected in 2002 represent a new baseline for tracking trends in substance use and other measures. Estimates of substance use for youth based on the NSDUH are not directly comparable with estimates based on Monitoring the Future (MTF) and Youth Risk Behavior Surveillance System (YRBSS). In addition to the fact that the MTF excludes dropouts and absentees, rates are not directly comparable across these surveys because of differences in populations covered, sample design, questionnaires, interview setting, and statistical approaches to make the survey estimates generalizable to the entire population. The NSDUH survey collects data in residences, whereas the MTF and YRBSS collect data in school classrooms. The NSDUH estimates are tabulated by age, whereas the MTF and YRBSS estimates are tabulated by grade, representing different ages as well as different populations.

#### *References:*

Substance Abuse and Mental Health Services Administration. 2007. Results from the 2006 National Survey on Drug Use & Health: National Findings Office of Applied Studies, NSDUH Series H-32, DHHS Publication No. SMA 07-4293. Rockville, MD. 2007.

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Cowan CD. Coverage, Sample Design, and Weighting in Three Federal Surveys. *Journal of Drug Issues* 2001; 31(3):599–614.



*For More Information:* See the NSDUH website: <http://nsduhweb.rti.org/> or the SAMHSA Office of Applied Studies website: <http://oas.samhsa.gov/>.

## National Survey of Family Growth (NSFG)

### CDC/NCHS

*Overview:* The National Survey of Family Growth (NSFG) provides national data on factors affecting birth and pregnancy rates, adoption, and maternal and infant health.

*Selected Content:* Data elements include sexual activity, marriage, divorce and remarriage, unmarried cohabitation, forced sexual intercourse, contraception and sterilization, infertility, breastfeeding, pregnancy loss, low birthweight, and use of medical care for family planning and infertility.

*Data Years:* Six cycles of the survey have been completed: 1973, 1976, 1982, 1988, 1995, and 2002.

*Coverage:* The 1973–1995 cycles of the National Survey of Family Growth (NSFG) were based on samples of women ages 15–44 years in the civilian noninstitutionalized population of the United States. The first and second cycles (1973 and 1976) excluded most women who had never been married. The third, fourth, and fifth cycles (1982, 1988, and 1995) included all women ages 15–44 years in the civilian noninstitutional population of the United States. The sixth cycle (2002) included men and women 15–44 years of age in the household population of the United States.

*Methodology:* Interviews are conducted in person by professional female interviewers using a standardized questionnaire. In all cycles black women were sampled at higher rates than white women so that detailed statistics for black women could be produced. In cycles 5 and 6 (1995 and 2002) Hispanic persons were also oversampled.

In order to make national estimates from the sample for the millions of women age 15–44 years in the United States, data for the interviewed sample women were (a) inflated by the reciprocal of the probability of selection at each stage of sampling (for example, if there was a 1 in 5,000 chance that a woman would be selected for the sample, her sampling weight was 5,000); (b) adjusted for nonresponse; and (c) poststratified, or forced to agree with benchmark population values based on data from the U.S. Census Bureau.

*Sample Size and Response Rates:* For cycle 1, from 101 PSUs, 10,879 women 15–44 years of age were selected, 9,797 of these were interviewed. In cycle 2, from 79 PSUs, 10,202 eligible women were identified; of these, 8,611 were interviewed. In cycle 3 household screener interviews were completed in 29,511 households (95%). Of the 9,964 eligible women identified, 7,969 were interviewed. In cycle 4, 10,566 eligible women age 15–44 years were sampled. Interviews were completed with 8,450 women. The response rate for the 1990 telephone reinterview was 68% of those responding to the 1988 survey and still eligible for the 1990 survey. In cycle 5, of the 13,795 eligible women in the sample, 10,847 were interviewed. In cycle 6, from 120 PSUs, 7,643 (about 80%) interviews were completed with eligible women and 4,928 (78%) interviews were completed with men.

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*For More Information:* See the NSFG website: <http://www.cdc.gov/nchs/nsfg.htm>.

## National Vital Statistics System (NVSS)

### CDC/NCHS

*Overview:* The National Vital Statistics System (NVSS) collects and publishes official national statistics on births, deaths, fetal deaths, and prior to 1996, marriages and divorces occurring in the United States based on U.S. Standard Certificates. Fetal deaths are classified and tabulated separately from other deaths. Detailed descriptions of the five Vital Statistics files (birth file, mortality file, multiple cause-of-death file, linked birth/infant death data set, and compressed mortality file) are presented separately below.

*Data Years:* The death registration area for 1900 consisted of 10 states, the District of Columbia, and a number of cities located in nonregistration states; it covered 40% of the continental U.S. population. The birth registration area was established in 1915 with 10 states and the District of Columbia. The birth and death registration areas continued to expand until 1933, when they included all 48 states and the District of Columbia. Alaska and Hawaii were added to both registration areas in 1959 and 1960, the years in which they gained statehood.

*Coverage:* The NVSS collects and presents U.S. resident data for the aggregate of 50 states, New York City, and the District of Columbia, as well as for each individual state and the District of Columbia. Vital events occurring in the United States to non-U.S. residents and vital events occurring abroad to U.S. residents are excluded.

*Methodology:* NCHS's Division of Vital Statistics obtains information on births and deaths from the registration offices

of each of the 50 states, New York City, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, and Northern Mariana Islands. Until 1972 microfilm copies of all death certificates and a 50% sample of birth certificates were received from all registration areas and processed by NCHS. In 1972 some states began sending their data to NCHS through the Cooperative Health Statistics System (CHSS). States that participated in the CHSS program processed 100% of their death and birth records and sent the entire data file to NCHS on computer tapes. Currently, data are sent to NCHS through the Vital Statistics Cooperative Program (VSCP), following the same procedures as CHSS. The number of participating states grew from 6 in 1972 to 46 in 1984. Starting in 1985 all 50 states and the District of Columbia participated in VSCP.

*U.S. Standard Certificates—*U.S. Standard Live Birth and Death Certificates and Fetal Death Reports are revised periodically, allowing evaluation and addition, modification, and deletion of items. Beginning with 1989 revised standard certificates replaced the 1978 versions. The 1989 revision of the birth certificate included items to identify the Hispanic parentage of newborns and to expand information about maternal and infant health characteristics. The 1989 revision of the death certificate included items on educational attainment and Hispanic origin of decedents, as well as changes to improve the medical certification of cause of death. Standard certificates recommended by NCHS are modified in each registration area to serve the area's needs. However, most certificates conform closely in content and arrangement to the standard certificate, and all certificates contain a minimum data set specified by NCHS. Following 1989, the next revisions of vital records went into effect in some states beginning in 2003, but full implementation in all states will be phased in over several years.

### Birth File

*Overview:* Vital statistics natality data are a fundamental source of demographic, geographic, and medical and health information on all births occurring in the United States. This is one of the few sources of comparable health-related data for small geographic areas over an extended time period. The data are used to present the characteristics of babies and their mothers, track trends such as birth rates for teenagers, and compare natality trends with other countries.

*Selected Content:* The natality file includes characteristics about the baby such as sex, birthweight, weeks of gestation; demographic information about the parents such as age, race, Hispanic origin, parity, educational attainment, marital status, and state of residence; medical and health information such as prenatal care based on hospital records; and behavioral risk factors for the birth such as mother's tobacco use during pregnancy.

*Data Years:* The birth registration area began in 1915 with 10 states and the District of Columbia.

*Methodology:* In the United States, state laws require birth certificates to be completed for all births. The registration of births is the responsibility of the professional attendant at birth, generally a physician or midwife. The birth certificate must be filed with the local registrar of the district in which the birth occurs. Each birth must be reported promptly—the reporting requirements vary from state to state, ranging from 24 hours after the birth to as much as 10 days.

Federal law mandates national collection and publication of birth and other vital statistics data. The National Vital Statistics System is the result of cooperation between NCHS and the states to provide access to statistical information from birth certificates. Standard forms for the collection of the data and model procedures for the uniform registration of the events are developed and recommended for state use through cooperative activities of the states and NCHS. NCHS shares the costs incurred by the states in providing vital statistics data for national use.

*Issues Affecting Interpretation:* Data on mother's educational attainment, tobacco use during pregnancy, and prenatal care based on the 2003 revision of the U.S. Standard Certificate of Live Birth are not comparable with data based on the 1989 revision of the U.S. Standard Certificate of Live Birth. For 2004 and 2005, data on mother's educational attainment, tobacco use during pregnancy, and prenatal care are shown separately for the reporting area that continued to use the 1989 revision in 2005 and for the reporting area (7 states) that implemented the 2003 revision by 2004, in order to provide 2 years of comparable data. The states that implemented the 2003 revision of the U.S. Standard Certificate of Live Birth are: starting in 2003, Pennsylvania and Washington, and starting in 2004, Idaho, Kentucky, New York state (excluding New York City), South Carolina, and Tennessee. Starting in 2005, the reporting area using the 2003 revision expanded to 13 states (data not shown in

tables), adding Florida, Kansas, Nebraska, New Hampshire, Texas, and Vermont (midyear). Prior to 2003, the number of states reporting information on maternal education, Hispanic origin, marital status, and tobacco use during pregnancy increased over the years. Interpretation of trend data should take into consideration changes to reporting areas and immigration. For methodological and reporting area changes for the following birth certificate items, see [Appendix II: Age \(maternal age\); Cigarette smoking; Education \(maternal education\); Hispanic origin; Marital status; Prenatal care; Race.](#)

*Reference:*

NCHS, Vital Statistics of the United States 2000, Vol. I Natality, Technical Appendix. Available from: <http://www.cdc.gov/nchs/data/techap00.pdf>.

*For More Information:* See the Birth Data website: <http://www.cdc.gov/nchs/births.htm>.

## Mortality File

*Overview:* Vital statistics mortality data are a fundamental source of demographic, geographic, and cause-of-death information. This is one of the few sources of comparable health-related data for small geographic areas over an extended time period. The data are used to present the characteristics of those dying in the United States, to determine life expectancy, and to compare mortality trends with other countries.

*Selected Content:* The mortality file includes demographic information on age, sex, race, Hispanic origin, state of residence, educational attainment, and medical information on cause of death.

*Data Years:* The death registration area began in 1900 with 10 states and the District of Columbia.

*Methodology:* By law, the registration of deaths is the responsibility of the funeral director. The funeral director obtains demographic data for the death certificate from an informant. The physician in attendance at the death is required to certify the cause of death. Where death is from other than natural causes, a coroner or medical examiner may be required to examine the body and certify the cause of death. Data for the entire United States refer to events occurring within the United States; data for geographic areas are by place of residence. For methodological and reporting

area changes for the following death certificate items, see [Appendix II](#); [Education](#); [Hispanic origin](#); [Race](#).

*Issues Affecting Interpretation: International Classification of Diseases (ICD)*, by which cause of death is coded and classified, is revised approximately every 10 to 15 years. Revisions of the ICD may cause discontinuities in trend data by cause of death. Comparing death rates by cause of death across ICD revisions should be conducted with caution and with reference to the comparability ratio. (See [Appendix II, Comparability ratio](#).) The death certificate has been revised periodically. A revised U.S. Standard Certificate of Death was recommended for state use beginning on January 1, 1989. Among the changes were the addition of a new item on educational attainment and Hispanic origin of decedent and changes to improve the medical certification of cause of death. The U.S. Standard Certificate of Death was revised again in 2003; states are adopting this new certificate on a rolling basis. The 2003 revision included significant revisions in the way that information on educational attainment, maternal mortality, and race are collected and coded. The educational attainment item was changed to be consistent with the U.S. Census Bureau data and to improve the ability to identify specific degrees. Educational attainment data collected using the 2003 revision are not compatible with data collected using the 1989 revision. Because of different education profiles of the excluded states compared with the remaining reporting areas, mortality data by educational attainment in 2003 and subsequent years are not directly comparable to earlier years. The 2003 revision introduced a standard question on pregnancy status of female decedents. This change, in addition to changes in classification of maternal death under ICD-10, allows for more complete reporting of deaths associated with pregnancy, childbirth, and the puerperium. These changes may affect trends of maternal mortality. The 2003 revision also permits reporting of more than one race (multiple races). This change was implemented to reflect the increasing diversity of the U.S. population and to be consistent with the decennial census. Many states, however, are still using the 1989 revision of the U.S. Standard Certificate of Death which allows only a single race to be reported. Until all states adopt the new death certificate, the race data reported using the 2003 revision were “bridged” for those whom more than one race was reported (multiple race) to one, single race to provide comparability with race data reported on the 1989 revision. For more information on the impact of the 2003 certificate revisions on mortality data presented in *Health, United States*, including a list of which

states have adopted the 2003 certificate, see [Appendix II, Education](#); [Maternal death](#); [Race](#).

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Kung H-C, Hoyert DL, Xu JQ, Murphy SL. Deaths: Final data for 2005. National vital statistics reports 2008;56(10). Hyattsville, MD: NCHS.

NCHS, Vital Statistics of the United States, Vol II: Mortality part A, Technical Appendix. Available from: <http://www.cdc.gov/nchs/datawh/statab/pubd/ta.htm>.

*For More Information:* See the Mortality Data website: <http://www.cdc.gov/nchs/deaths.htm>.

#### Multiple Cause-of-Death File

*Overview:* Multiple cause-of-death data reflect all medical information reported on death certificates and complement traditional underlying cause-of-death data. Multiple cause data give information on diseases that are a factor in death whether or not they are the underlying cause of death; on associations among diseases; and on injuries leading to death.

*Selected Content:* In addition to the same demographic variables listed for the mortality file, the multiple cause-of-death file includes record axis and entity axis cause-of-death data (see [Methodology](#) section).

*Data Years:* Multiple cause-of-death data files are available for every data year since 1968.

*Methodology:* NCHS is responsible for compiling and publishing annual national statistics on causes of death. In carrying out this responsibility, NCHS adheres to the World Health Organization Nomenclature Regulations. These Regulations require that (1) cause of death be coded in accordance with the applicable revision of the *International Classification of Diseases (ICD)* (see [Appendix II, Table IV and ICD](#)); and (2) underlying cause of death be selected in accordance with international rules. Traditionally, national mortality statistics have been based on a count of deaths, with one underlying cause assigned for each death.

Starting with data year 1968, electronic files exist with multiple cause-of-death information. These files contain codes



for all diagnostic terms and related codable information recorded on the death certificate. These codes make up the entity axis and are the input for a software program called TRANSAX. The TRANSAX program eliminates redundant entity axis codes and combines other entity axis codes to create the best set of ICD codes for a record. The output of the TRANSAX program is the record axis. Record axis data are generally used for research and analysis of multiple or nonunderlying cause of death. Because the function of the TRANSAX program is not to select a single underlying cause of death, record axis data may or may not include the underlying cause. Tabulations of underlying and nonunderlying cause of death in [Table 47](#) (selected occupational diseases) are compiled by searching both underlying cause of death and record axis data.

*Issues Affecting Interpretation:* *International Classification of Diseases* (ICD), by which cause of death is coded and classified, is revised approximately every 10 to 15 years. Revisions of the ICD may cause discontinuities in trend data by cause of death. Comparing death rates by cause of death across ICD revisions should be conducted with caution and with reference to the comparability ratio. (See [Appendix II, Comparability ratio](#).) Data were obtained from all certificates for 1968–1971, 1973–1980, and 1983–present. Data were obtained from a 50-percent sample of certificates for 1972. Multiple-cause data for 1981 and 1982 were obtained from a 50-percent sample of certificates from 19 registration areas. For the other states, data were obtained from all certificates.

*Reference:*

Multiple Causes of Death in the United States. Monthly vital statistics report; vol 32 no 10, supp 2. Hyattsville, MD: NCHS. February 17, 1984. Available from: [http://www.cdc.gov/nchs/data/mvsr/supp/mv32\\_10s2.pdf](http://www.cdc.gov/nchs/data/mvsr/supp/mv32_10s2.pdf).

*For More Information:* See the Mortality Multiple Cause-of-Death Data File website: [http://www.cdc.gov/nchs/products/elec\\_prods/subject/mortmcd.htm](http://www.cdc.gov/nchs/products/elec_prods/subject/mortmcd.htm).

## Linked Birth/Infant Death Data Set

*Overview:* National linked files of live births and infant deaths are used for research on infant mortality.

*Selected Content:* The linked birth/infant death data set includes all variables on the natality (birth) file, including racial and ethnic information, birthweight, and maternal smoking, as

well as variables on the mortality file, including cause of death and age at death.

*Data Years:* National linked files of live births and infant deaths were first produced for the 1983 birth cohort. Birth cohort linked file data are available for 1983–1991 and both period linked files and birth cohort linked files starting with 1995. National linked files do not exist for 1992–1994.

*Coverage:* To be included in the United States linked file, both the birth and death must occur in the 50 states and the District of Columbia.

*Methodology:* Infant mortality rates are based on infant deaths per 100,000 live births. Infant deaths are defined as a death before the infant's first birthday. About 97%–99% of files can be linked. The linkage makes available extensive information about the pregnancy, maternal risk factors, infant characteristics, and health items at birth that can be used in analyses of infant mortality.

Starting with data year 1995, more timely linked file data are produced in a period data format preceding the release of the corresponding birth cohort format. The 2005 period linked file contains a numerator file that consists of all infant deaths occurring in 2005 that have been linked to their corresponding birth certificates, whether the birth occurred in 2004 or 2005. In contrast, the 2005 birth cohort linked file will contain a numerator file that consists of all infant deaths to babies born in 2005 whether the death occurred in 2005 or 2006. Starting with 1995 data, period linked files are used for infant mortality rates tables using the linked file data in *Health, United States*. For the 2005 file, NCHS accepted birth records that could be linked to infant deaths even if registered after the closure of the 2005 birth file (fewer than 100 cases). This improved the infant birth/death linkage and made the denominator file distinctly different from the official 2005 birth file.

Other changes to the data set starting with 1995 data include addition of record weights to correct for the 1.0%–1.41% of records that could not be linked in 2000–2005 (2% in 1995–1999) and for the addition of an imputation for not stated birthweight. The 1995–2005 weighted mortality rates range from less than 1% to 4% higher than the unweighted rates for the same period. The 1995–2005 weighted mortality rates with imputed birthweights are less than 1%–7.1% higher than unweighted rates with imputed birthweight for the same period.

*Issues Affecting Interpretation:* Period linked file data starting with 1995 are not strictly comparable with birth cohort data for 1983–1991. While birth cohort linked files have methodological advantages, their production incurs substantial delays in data availability, because it is necessary to wait until the close of a second data year to include all infant deaths to the birth cohort. Data on mother’s educational attainment, tobacco use during pregnancy, and prenatal care based on the 2003 revision are not comparable with data based on the 1989 revision of the U.S. Standard Certificate of Live Birth, and are currently excluded from the *Health, United States* statistics on infant mortality by mother’s educational attainment. States that have implemented the 2003 revision include two states in 2003, seven additional states in 2004, and four states in 2005. See [Appendix II, Education](#).

*Reference:*

Mathews TJ, MacDorman MF. Infant mortality statistics from the 2005 period linked birth/infant death data set. National vital statistics report; vol 57 no 2. Hyattsville, MD: NCHS. 2008. Available from: [http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57\\_02.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_02.pdf).

*For More Information:* See the NCHS Linked Birth and Infant Death Data website: <http://www.cdc.gov/nchs/linked.htm>.

### Compressed Mortality File

*Overview:* The Compressed Mortality File (CMF) is a county-level national mortality and population database.

*Selected Content:* The CMF contains mortality data derived from the detailed mortality files of the National Vital Statistics System and estimates of U.S. national, state, and county resident populations from the U.S. Census Bureau. Number of deaths, crude death rates, and age-adjusted death rates can be obtained by place of residence (total U.S., state, and county), age group, race (white, black, and other), sex, year of death, and underlying cause of death. The population estimates on the CMF are based on Bureau of the Census estimates of total U.S., state, and county resident populations.

*Data Years:* The CMF spans the years 1968–2005. On CDC WONDER, data are available starting with 1979.

*Methodology:* In *Health, United States*, the CMF is used to compute death rates by urbanization level of decedent’s county of residence. Counties are categorized according to level of urbanization based on the 2006 NCHS Urban-Rural

Classification Scheme for Counties. This scheme assigns counties and county equivalents to one of six urbanization levels, four metropolitan and two nonmetropolitan.

*For More Information:* See the Compressed Mortality File website: [http://www.cdc.gov/nchs/products/elec\\_prods/subject/mcompres.htm](http://www.cdc.gov/nchs/products/elec_prods/subject/mcompres.htm) or the CDC Wonder website: <http://wonder.cdc.gov/mortSQL.html>. See [Appendix II, Urbanization](#).

## Occupational Employment Statistics (OES)

### Bureau of Labor Statistics

*Overview:* The Occupational Employment Statistics (OES) program conducts a semiannual survey designed to produce estimates of employment and wages for specific occupations.

*Selected Content:* The OES survey produces estimates of occupational employment and wages for most sector, 3-, 4-, and 5-digit industrial groups in these industrial sectors: Forestry and logging; Mining; Utilities; Construction; Manufacturing; Wholesale trade; Retail trade; Transportation and warehousing; Information; Finance and insurance; Real estate and rental and leasing; Professional, scientific, and technical services; Management of companies and enterprises; Administrative and support and waste management and remediation services; Educational services; Health care and social assistance; Arts, entertainment, and recreation; Accommodation and food services; Other services (except public administration); and Government.

*Data Years:* Prior to 1996, the OES program collected only occupational employment data for selected industries in each year of the 3-year survey cycle, and produced only industry-specific estimates of occupational employment. The 1996 survey round was the first year that the OES program began collecting occupational employment and wage data in every state. In addition, the program’s 3-year survey cycle was modified to collect data from all covered industries each year. 1997 is the earliest year available for which the OES program produced estimates of cross-industry as well as industry-specific occupational employment and wages.

*Coverage:* The OES survey covers all full-time and part-time wage and salary workers in nonfarm industries. Surveys collect data for the payroll period including the 12th day of May or November, depending upon the industry surveyed. The survey does not cover the self-employed, owners and

partners in unincorporated firms, household workers, or unpaid family workers.

*Methodology:* The OES survey is a federal-state cooperative program between the Bureau of Labor Statistics (BLS) and State Workforce Agencies (SWAs). The OES program surveys approximately 200,000 establishments per panel (every 6 months), taking 3 years to fully collect the sample of 1.2 million establishments. Mail surveys collect data for the payroll period including the 12th day of May or November, depending upon the industry surveyed. The estimates for occupations in nonfarm establishments are based on OES data collected for the reference months of May and November. BLS provides the procedures and technical support, draws the sample, and produces the survey materials, while the SWAs collect the data. SWAs from all 50 states, plus the District of Columbia, Puerto Rico, Guam, and the U.S. Virgin Islands participate in the survey. Occupational employment and wage rate estimates at the national level are produced by BLS using data from the 50 states and the District of Columbia. Employers who respond to states' requests to participate in the OES survey make these estimates possible. The nationwide response rate for the May 2007 survey was 78% for establishments, covering 74% of employment. The survey included establishments sampled in the May 2007, November 2006, May 2006, November 2005, May 2005, and November 2004 semiannual panels.

*Issues Affecting Interpretation:* The OES survey began using the North American Industrial Classification System (NAICS) in 2002. Data prior to 2002 are based on the Standard Industrial Classification (SIC) system. In 1999, the OES survey began using the new Office of Management and Budget (OMB) Standard Occupational Classification (SOC) system. The new SOC system, which will be used by all federal statistical agencies for reporting occupational data, consists of 821 detailed occupations, grouped into 449 broad occupations, 96 minor groups, and 23 major groups. The OES program provides occupational employment and wage estimates at the major group and detailed occupation level. Due to the OES survey's transition to the SOC system, 1999 and 2000 OES estimates are not directly comparable with previous years' OES estimates, which were based on a classification system having seven major occupational groups and 770 detailed occupations. Approximately one-half of the detailed occupations were unchanged under the new SOC system, with the other half being SOC occupations or occupations that are slightly different from similar occupations

in the old OES classification system. Guam, Puerto Rico, and the U.S. Virgin Islands were surveyed, but their data were not included in the May 2007 survey.

*Reference:*

Bureau of Labor Statistics. Occupational Employment and Wages, May 2007. Washington, DC: Department of Labor. May 2008.

*For More Information:* See the Occupational Statistics website: <http://www.bls.gov/OES/#overview>.

## Online Survey Certification and Reporting Database (OSCAR)

### Centers for Medicare & Medicaid Services

*Overview:* The Online Survey Certification and Reporting (OSCAR) is an administrative database containing detailed information on all Medicare- and Medicaid-certified institutional health care providers, including all currently and previously certified Medicare and Medicaid nursing homes in the United States and territories. (Data for the territories are not shown in *Health, United States*.) The purpose of the nursing home survey certification process is to ensure that nursing facilities meet the current Centers for Medicare & Medicaid Services (CMS) care requirements and thus can be reimbursed for services furnished to Medicare and Medicaid beneficiaries.

*Selected Content:* OSCAR contains information on facility and patient characteristics and health deficiencies issued by the government during state surveys.

*Data Years:* OSCAR has been maintained by CMS, formerly the Health Care Financing Administration (HCFA), since 1992. OSCAR is an updated version of the Medicare and Medicaid Automated Certification System that had been in existence since 1972.

*Coverage:* All nursing homes in the United States that receive Medicare or Medicaid payments are included. Nursing homes that are intermediate care facilities for the mentally retarded and Department of Veterans Affairs nursing homes are excluded.

*Methodology:* Information on the number of beds and other facility characteristics comes from HCFA form 671, and information on residents and resident characteristics is collected on HCFA form 672. A nursing home representative



fills out the forms, and they are submitted to CMS. The information provided on HCFA forms 671 and 672 can be audited at any time.

All certified nursing homes are inspected by representatives of the state survey agency (generally the department of health) at least once every 15 months. Therefore, a complete census must be based on a 15-month reporting cycle rather than a 12-month cycle. Some nursing homes are inspected twice or more often during any given reporting cycle. To avoid overcounting, the data must be edited and duplicates removed. Data editing and compilation were performed by Cowles Research Group and published in the group's *Nursing Home Statistical Yearbook* series.

#### References:

Cowles CM. 1995, 1996, 1997. *Nursing Home Statistical Yearbook*. Anacortes, WA: Cowles Research Group (CRG). 1995, 1997, 1998.

Cowles CM, ed. 1998, 1999, 2000, 2001, 2002. *Nursing Home Statistical Yearbook*. Washington, DC: American Association of Homes and Services for the Aging (AAHSA). 1999, 2000, 2001, 2002, 2003.

Cowles CM, ed. 2003, 2004, 2005, 2006, 2007. *Nursing Home Statistical Yearbook*. McMinnville, OR: Cowles Research Group (CRG). 2004, 2005, 2006, 2007, 2008.

For More Information: See the CRG website:

<http://www.longtermcareinfo.com/index.html> or the CMS website: <http://www.cms.hhs.gov/NonIdentifiableDataFiles/>.

## Population Census and Population Estimates

### U.S. Census Bureau

#### Decennial Census

The census of population (decennial census) has been held in the United States every 10 years since 1790. The decennial census has enumerated the resident population as of April 1 of the census year ever since 1930. Data on sex, race, age, and marital status are collected from 100% of the enumerated population. More detailed information such as income, education, housing, occupation, and industry are collected from a representative sample of the population.

### Race Data on the 1990 Census

The question on race on the 1990 census was based on the Office of Management and Budget's (OMB) 1977 Statistical Policy Directive 15, Race and Ethnicity Standards for Federal Statistics and Administrative Reporting. This document specified rules for the collection, tabulation, and reporting of race and ethnicity data within the federal statistical system. The 1977 standards required federal agencies to report race-specific tabulations using four single-race categories: American Indian or Alaska Native, Asian or Pacific Islander, black, and white. Under the 1977 standards, race and ethnicity were considered to be two separate and distinct concepts. Thus, persons of Hispanic origin may be of any race.

### Race Data on the 2000 Census

The question on race on the 2000 census was based on OMB's 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity (see Appendix II, Race and Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity. *Fed Regist* 1997 October 30;62:58781-90). The 1997 Standards incorporated two major changes in the collection, tabulation, and presentation of race data. First, the 1997 standards increased from four to five the minimum set of categories to be used by federal agencies for identification of race: American Indian or Alaska Native, Asian, black or African American, Native Hawaiian or Other Pacific Islander, and white. Second, the 1997 standards included the requirement that federal data collection programs allow respondents to select one or more race categories when responding to a query on their racial identity. This provision means that there are potentially 31 race groups, depending on whether an individual selects one, two, three, four, or all five of the race categories. The 1997 standards continue to call for use, when possible, of a separate question on Hispanic or Latino ethnicity and specify that the ethnicity question should appear before the question on race. Thus, under the 1997 standards, as under the 1977 standards, Hispanics may be of any race.

### Modified Decennial Census Files

For several decades the U.S. Census Bureau has produced modified decennial census files. These modified files incorporate adjustments to the 100% April 1 count data for

1) errors in the census data discovered subsequent to publication, 2) misreported age data, and 3) nonspecified race.

For the 1990 census, the U.S. Census Bureau modified the age, race, and sex data on the census and produced the Modified Age Race Sex (MARS) file. The differences between the population counts on the original census file and the MARS file are primarily due to modification of the race data. Of the 248.7 million persons enumerated in 1990, 9.8 million persons did not specify their race (over 95% were of Hispanic origin). For the 1990 MARS file, these persons were assigned the race reported by a nearby person with an identical response to the Hispanic origin question.

For the 2000 census, the U.S. Census Bureau modified the race data on the census and produced the Modified Race Data Summary File. For this file, persons who reported the category, Some other race, as part of their race response were assigned to one of the 31 race groups, which are the single- and multiple-race combinations of the five race categories specified in the 1997 race and ethnicity standards. Persons who did not specify their race were assigned to one of the 31 race groups using imputation. Of the 18.5 million persons who reported the category, Some other race, as part of their race response, or who did not specify their race, 16.8 million (90.4%) were of Hispanic origin.

### **Bridged-Race Population Estimates for Census 2000**

Race data on the 2000 census are not comparable with race data on other data systems that are continuing to collect data using the 1977 standards on race and ethnicity during the transition to full implementation of the 1997 standards. For example, most of the states in the Vital Statistics Cooperative Program will revise their birth and death certificates to conform to the 1997 standards after 2000. Thus, population estimates for 2000 and beyond with race categories comparable to the 1977 categories are needed so that race-specific birth and death rates can be calculated. To meet this need, NCHS, in collaboration with the U.S. Census Bureau, developed methodology to bridge the 31 race groups in census 2000 to the four single-race categories specified under the 1977 standards.

The bridging methodology was developed using information from the 1997–2000 National Health Interview Survey (NHIS). The NHIS provides a unique opportunity to investigate multiple-race groups because since 1982, the NHIS has allowed respondents to choose more than one race but has

also asked respondents reporting multiple races to choose a primary race. The bridging methodology developed by NCHS involved the application of regression models relating person-level and county-level covariates to the selection of a particular primary race by the multiple-race respondents. Bridging proportions derived from these models were applied by the U.S. Census Bureau to the Census 2000 Modified Race Data Summary File. This application resulted in bridged counts of the April 1, 2000, resident single-race populations for four racial groups, American Indian or Alaska Native, Asian or Pacific Islander, black, and white. As bridged-race population estimates continue to be needed for the calculation of vital rates, the Census Bureau annually produces postcensal bridged-race estimates of the July 1 resident single-race populations.

For More Information about bridged-race population estimates, see Ingram DD, Parker JD, Schenker N, et al. United States Census 2000 population with bridged race categories. NCHS. Vital Health Stat 2(135). 2003; and the NCHS website for U.S. Census Populations with Bridged Race Categories: <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>.

### **Postcensal Population Estimates**

Postcensal population estimates are estimates made for the years following a census, before the next census has been taken. National postcensal population estimates are derived annually by updating the resident population enumerated in the decennial census using a components of population change approach. Each annual series includes estimates for the current data year and revised estimates for the earlier years in the decade. The following formula is used to derive the estimates for a given year from those for the previous year, starting with the decennial census enumerated resident population as the base:

- (1) resident population,
- (2) + births to U.S. resident women,
- (3) – deaths to U.S. residents,
- (4) + net international migration,
- (5) + net movement of U.S. Armed Forces and U.S. civilian citizens.

Estimates for the earlier years in a given series are revised to reflect changes in the components of change data sets (for example, births to U.S. resident women from a preliminary natality file are replaced with counts from a final natality file). To help users keep track of which postcensal estimate is

being used, each annual series is referred to as a vintage and the last year in the series is used to name the series. For example, the Vintage 2001 postcensal series has estimates for July 1, 2000, and July 1, 2001, and the Vintage 2002 postcensal series has revised estimates for July 1, 2000, and July 1, 2001, as well as estimates for July 1, 2002. The estimates for July 1, 2000, and for July 1, 2001, from the Vintage 2001 and Vintage 2002 postcensal series differ.

State postcensal estimates are based on similar data and on a variety of other data series, including school statistics from state departments of education and parochial school systems. The postcensal estimates are consistent with official decennial census figures and do not reflect estimated decennial census underenumeration.

The Census Bureau has annually produced a postcensal series of estimates of the July 1 resident population of the United States based on census 2000 by applying the components of change methodology to the Modified Race Data Summary File. These series of postcensal estimates have race data for 31 race groups, in accordance with the 1997 race and ethnicity standards. So that the race data for 2000-based postcensal estimates will be comparable with race data on vital records, the Census Bureau has applied the NHIS bridging methodology to each 31-race group postcensal series of population estimates to obtain bridged-race postcensal estimates (estimates for the four single-race categories: American Indian or Alaska Native, Asian or Pacific Islander, black, and white). Bridged-race postcensal population estimates are available from: <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>.

Vital rates for 2000 were calculated using the bridged-race April 1, 2000 census counts, and vital rates for 2001 and beyond were calculated using bridged-race estimates of the July 1, population from the corresponding postcensal vintage.

### Intercensal Population Estimates

The further from the census year on which the postcensal estimates are based, the less accurate are the postcensal estimates. With the completion of the decennial census at the end of the decade, intercensal estimates for the preceding decade were prepared to replace the less accurate postcensal estimates. Intercensal population estimates take into account the census of population at the beginning and end of the decade. Thus intercensal estimates are more

accurate than postcensal estimates as they correct for the error of closure or difference between the estimated population at the end of the decade and the census count for that date. The error of closure at the national level was quite small for the 1960s (379,000). However, for the 1970s it amounted to almost 5 million; for the 1980s, 1.5 million; for the 1990s, about 6 million. The error of closure differentially affects age, race, sex, and Hispanic origin subgroup populations as well as the rates based on these populations. Vital rates that were calculated using postcensal population estimates are routinely revised when intercensal estimates become available because the intercensal estimates correct for the error of closure.

Intercensal estimates for the 1990s with race data comparable to the 1977 standards have been derived so that vital rates for the 1990s could be revised to reflect census 2000. Calculation of the intercensal population estimates for the 1990s was complicated by the incomparability of the race data on the 1990 and 2000 censuses. The Census Bureau, in collaboration with National Cancer Institute and NCHS, derived race-specific intercensal population estimates for the 1990s using the 1990 MARS file as the beginning population base and the bridged-race population estimates for April 1, 2000, as the ending population base. Bridged-race intercensal population estimates are available from: <http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm>.

### Special Population Estimates

Special population estimates are prepared for the education reporting area for mortality statistics because educational attainment of decedent is not reported by all 50 states. The Housing and Household Economics Statistics Division of the U.S. Census Bureau currently produces unpublished estimates of populations by age, race, sex, and educational attainment for NCHS. These population estimates are based on the Current Population Survey, adjusted to resident population controls. The control totals are based on July 1 estimates for the relevant year. 1994–1996 data are 1990-based population estimates for 45 reporting states and the District of Columbia (D.C.); 1997–2000 data use 1990-based postcensal population estimates for 46 reporting states and D.C.; 2001–2002 data use 2000-based postcensal population estimates for 47 reporting states and D.C.; 2003 data use 2000-based postcensal population estimates for 46 reporting states and D.C.; 2004 data use 2000-based postcensal population estimates for 36 reporting states and

D.C.; 2005 data use 2000-based postcensal population estimates for D.C. and 31 reporting states. See [Appendix II, Education](#).

*For More Information:* See the U.S. Census Bureau website: <http://www.census.gov/>.

## Sexually Transmitted Disease (STD) Surveillance

CDC

### National Center of HIV, STD, and TB Prevention

*Overview:* Surveillance information on incidence and prevalence of sexually transmitted diseases (STDs) is used to inform public and private health efforts to control these diseases.

*Selected Content:* Case reporting data are available for nationally notifiable chancroid, chlamydia, gonorrhea, and syphilis; surveillance of other STDs, such as genital herpes simplex virus (HSV), genital warts or other human papillomavirus infections, and trichomoniasis are based on estimates of office visits in physicians' office practices provided by the National Disease and Therapeutic Index (NDTI).

*Data Years:* STD national surveillance data have been collected since 1941.

*Coverage:* Case reports of STDs are reported to CDC by STD surveillance systems operated by state and local STD control programs and health departments in 50 states, the District of Columbia, selected cities, 3,139 U.S. counties, and outlying areas comprised of U.S. dependencies, possessions, and independent nations in free association with the United States. Data from outlying areas are not included in *Health, United States*.

*Methodology:* Information is obtained from the following sources of data: (1) case reports from STD project areas; (2) prevalence data from the Regional Infertility Prevention Project, the National Job Training Program (formerly the Job Corps), the Corrections STD Prevalence Monitoring Projects, and the Men Who Have Sex With Men (MSM) Prevalence Monitoring Project; (3) sentinel surveillance of gonococcal antimicrobial resistance from the Gonococcal Isolate Surveillance Project (GISP); and (4) national sample surveys implemented by federal and private organizations. STD data

are submitted to CDC on a variety of hard-copy summary reporting forms (monthly, quarterly, and annually) and in electronic summary or individual case-specific (line-listed) formats via the National Electronic Telecommunications System for Surveillance (NETSS).

*Issues Affecting Interpretation:* Because of incomplete diagnosis and reporting, the number of STD cases reported to CDC undercounts the actual number of cases occurring among the U.S. population.

*Reference:*

CDC. Sexually Transmitted Disease Surveillance, 2006. Atlanta, GA: Department of Health and Human Services. 2007.

*For More Information:* See the STD Surveillance Report website: <http://www.cdc.gov/std/stats/> or the STD Prevention website: <http://www.cdc.gov/std/default.htm>.

## Surveillance, Epidemiology, and End Results Program (SEER)

National Cancer Institute

*Overview:* The Surveillance, Epidemiology, and End Results (SEER) program tracks incidence of persons diagnosed with cancer during the year as well as follow-up information on all previously diagnosed patients until death.

*Selected Content:* SEER registries routinely collect data on patient demographics, primary tumor site, morphology, stage at diagnosis, first course of treatment, and follow-up for vital status.

*Data Years:* Case ascertainment for SEER began on January 1, 1973, and has continued for more than 30 years. The most recent data available are for 2005.

*Coverage:* SEER cancer registries were initiated in 1973 in Connecticut, Iowa, New Mexico, Utah, Hawaii, Detroit, and San Francisco-Oakland. Registries were added as follows: in 1974–1975, Atlanta and Seattle-Puget Sound; in 1978, 10 predominantly black rural counties in Georgia; in 1980, American Indians in Arizona; New Orleans, Louisiana (1974–1977, rejoined 2001); New Jersey (1979–1989, rejoined 2001); and Puerto Rico (1973–1989); in 1992, Los Angeles and San Jose-Monterey counties and Alaska Native populations in Alaska; in 2001, Kentucky, Greater California,



New Jersey, and Louisiana. The SEER Program currently collects and publishes cancer incidence and survival data from 17 population-based cancer registries covering approximately 26% of the U.S. population.

To ensure continuity in reporting areas for trend data, the following combination of SEER registries are commonly used for statistical analyses and are used for analysis of cancer survival rates in *Health, United States*: the SEER 9 registries of Atlanta, Connecticut, Detroit, Hawaii, Iowa, New Mexico, San Francisco-Oakland, Seattle-Puget Sound, and Utah. Analysis of cancer incidence by expanded racial and ethnic groups covers residents in the following SEER 13 registries: the SEER 9 registries plus Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Tumor Registry.

*Methodology:* A cancer registry (or tumor registry) collects and stores data on cancers diagnosed in a specific hospital or medical facility (hospital-based registry) or in a defined geographic area (population-based registry). A population-based registry includes, but is not limited to, a number of hospital-based registries. In SEER registry areas, trained coders abstract medical records using the International Classification of Diseases for Oncology, Third Edition (ICD-O-3), which provides a coding system for site and tumor morphology. The third edition, implemented in 2001, is the first complete review and revision of the text and guidelines since its original publication in 1988. The major staging systems used by cancer registries are American Joint Committee on Cancer (AJCC) TNM staging and SEER Summary Stage. SEER Extent of Disease (EOD) and TNM stage include schemes for all sites and morphologies. These are used by the NCI to derive SEER Summary Stage and Collaborative Staging.

Population estimates used to calculate incidence rates are obtained from the U.S. Census Bureau. NCI uses estimation procedures as needed to obtain estimates for years and races not included in data provided by the U.S. Census Bureau. Life tables used to determine general population life expectancy when calculating relative survival rates were obtained from NCHS and in-house calculations. Separate life tables are used for each race-sex-specific group included in the SEER Program.

*Issues Affecting Interpretation:* Because of the addition of registries over time, analysis of long-term incidence and survival trends is limited to those registries that have been in SEER for similar lengths of time. Analysis of Hispanic and

American Indian and Alaska Native data is limited to shorter trends. Starting with *Health, United States, 2006*, the NAACCR Hispanic Identification Algorithm was used on a combination of variables to classify cases as Hispanic for analytic purposes. Starting with *Health, United States, 2007*, Hispanic incidence data exclude data for Alaska. Earlier editions of *Health, United States* also excluded Hispanic data for Hawaii and Seattle. Starting with *Health, United States, 2007*, incidence estimates for the American Indian or Alaska Native population are limited to Contract Health Service Delivery Area (CHSDA) counties within SEER reporting areas. This change is believed to produce estimates that more accurately reflect the incidence rates for this population group. More information on CHSDA is available from: <http://www.ihs.gov/NonMedicalPrograms/dqwg/dqwg-section1-home.asp>.

For more information on SEER estimates by race and ethnicity, see [http://seer.cancer.gov/seerstat/variables/seer/yr1973\\_2005/race\\_ethnicity/](http://seer.cancer.gov/seerstat/variables/seer/yr1973_2005/race_ethnicity/). Rates presented in this report may differ somewhat from previous reports due to revised population estimates and the addition and deletion of small numbers of incidence cases.

*Reference:*

Ries LAG, Melbert D, Krapcho M, Stinchcomb DG, Howlader N, Horner MJ, et al. (eds). SEER Cancer Statistics Review, 1975–2005. Bethesda, MD: National Cancer Institute, 2007; based on November 2007 SEER data submission, posted to the SEER website, 2008. Available from: [http://seer.cancer.gov/csr/1975\\_2005/](http://seer.cancer.gov/csr/1975_2005/).

*For More Information:* See the SEER website: <http://www.seer.cancer.gov>.

## Survey of Mental Health Organizations (SMHO)

### Substance Abuse and Mental Health Services Administration (SAMHSA)

*Overview:* The Survey of Mental Health Organizations and General Hospital Mental Health Services (SMHO/GHMHS) collects data on the number and characteristics of specialty mental health organizations in the United States.

*Selected Content:* The inventory collects basic information such as types of mental health organizations, ownership, number of additions and residents, and number of beds. The sample survey is a more detailed questionnaire that covers types of services provided, revenues and expenditures, staffing, and many items addressed to managed behavioral health care.

*Data Years:* The Inventory of Mental Health Organizations (IMHO/GHMHS) was conducted biannually from 1986 until 1994. The SMHO replaced the IMHO/GHMHS in 1998. The SMHO and the inventory used as its sampling frame have been conducted biannually starting in 1998.

*Coverage:* Organizations included are state and county mental hospitals, private psychiatric hospitals, nonfederal general hospitals with separate psychiatric services, Department of Veterans Affairs medical centers, residential treatment centers for emotionally disturbed children, freestanding outpatient psychiatric clinics, partial care organizations, freestanding day-night organizations, and multiservice mental health organizations not elsewhere classified.

*Methodology:* The IMHO was an inventory of all mental health organizations. Its core questionnaire included versions designed for specialty mental health organizations and another for non-federal general hospitals with separate psychiatric services. The data system was based on questionnaires mailed every other year to mental health organizations in the United States. In 1998, the IMHO was replaced by the SMHO. The SMHO is made up of two parts. A complete inventory is done by postcard gathering a limited amount of information. The inventory is used as a sampling frame for the SMHO, which contains most of the information from the IMHO core questionnaire as well as new items about managed behavioral health care.

*Sample Size and Response Rate:* In Phase I, all organizations were inventoried by postcard (about 10,000). A complete enumeration was needed to define the sampling frame for the sample survey. In Phase II, general hospitals without separate mental health units, community residential organizations, and managed behavioral health care organizations are dropped from the sampling frame. From this number, approximately 1,600–2,200 organizations are drawn for the sample survey and sent a questionnaire with a response rate of approximately 90%.

*Issues Affecting Interpretation:* Revisions to definitions of providers include phasing out Community Mental Health Centers as a category after 1981–1982; increasing the number of multiservice mental health organizations from 1981–1986; increasing the number of psychiatric outpatient clinics in 1981–1982, but decreasing the number in 1983–1984, 1986, 1990, and 1992; and increasing the number of partial care services in 1983–1984. These changes should be noted when interyear comparisons for the affected organizations and service types are made. The increase in the number of general hospitals with separate psychiatric services was partially due to a more concerted effort to identify these organizations. Forms had been sent only to those hospitals previously identified as having a separate psychiatric service. Beginning in 1980–1981, a screener form was sent to general hospitals not previously identified as providing a separate psychiatric service to determine whether they had such a service.

#### *Reference:*

Center for Mental Health Services. Mental Health, United States, 2004. Manderscheid RW, Berry JT, eds. DHHS pub no (SMA) 06–4195. Rockville, MD: Substance Abuse and Mental Health Services Administration. 2006. Available from: <http://mentalhealth.samhsa.gov/publications/allpubs/SMA06-4195/>.

*For More Information:* See the Center for Mental Health Services website: <http://mentalhealth.samhsa.gov/cmhs>.

## Survey of Occupational Injuries and Illnesses (SOII)

### Bureau of Labor Statistics

*Overview:* The Survey of Occupational Injuries and Illnesses (SOII) is a federal/state program that collects statistics used to identify problems with workplace safety and develop programs to improve workplace safety.

*Selected Content:* Data include the number of new nonfatal injuries and illnesses by industry. The case and demographic data provide additional details on workers injured, the nature of the disabling condition, and the event and source producing that condition for those cases that involve one or more days away from work.

*Data Years:* The Bureau of Labor Statistics (BLS) has conducted an annual survey since 1971.

*Coverage:* The data represent persons employed in private industry establishments in the United States. The survey excludes the self-employed, farms with fewer than 11 employees, private households, federal government agencies, and state and local government agencies.

*Methodology:* Survey estimates of occupational injuries and illnesses are based on a scientifically selected probability sample of establishments, rather than a census of all establishments. An independent sample is selected for each state and the District of Columbia that represents industries in that jurisdiction. BLS includes all the state samples in the national sample.

Establishments included in the survey are instructed in a mailed questionnaire to provide summary totals of all entries for the previous calendar year to its Log and Summary of Occupational Injuries and Illnesses (OSHA No. 200 form). An occupational injury is any injury such as a cut, fracture, sprain, or amputation that results from a work-related event or from a single instantaneous exposure in the work environment. An occupational illness is any abnormal condition or disorder other than one resulting from an occupational injury, caused by exposure to factors associated with employment. It includes acute and chronic illnesses or diseases that may be caused by inhalation, absorption, ingestion, or direct contact. Prior to 2002, injury and illness cases involved days away from work, days of restricted work activity, or both (lost workday cases). Starting in 2002, injury and illness cases may involve days away from work, job

transfer, or restricted work activity. Restriction may involve shortened hours, a temporary job change, or temporary restrictions on certain duties (for example, no heavy lifting) of a worker's regular job.

*Sample Size and Response Rates:* Employer reports were collected from about 195,200 private industry establishments in 2006. The survey response rate was 100% in 2006.

*Issues Affecting Interpretation:* The number of new injuries and illnesses reported in any given year can be influenced by the level of economic activity, working conditions and work practices, worker experience and training, and number of hours worked. Long-term latent illnesses caused by exposure to carcinogens are believed to be understated in the survey's illness measures. In contrast, new illnesses such as contact dermatitis and carpal tunnel syndrome are easier to relate directly to workplace activity.

Effective January 1, 2002, the Occupational Safety and Health Administration (OSHA) revised its requirement for recording occupational injuries and illnesses. Because of the revised recordkeeping rule, the estimates from the 2002 survey and beyond are not comparable with those from previous years. See <http://www.osha.gov/recordkeeping/index.html> for details about the revised recordkeeping requirements.

Data for the mining industry and for railroad activities are provided by the Department of Labor's Mine Safety and Health Administration and the Department of Transportation's Federal Railroad Administration. Neither of these agencies adopted the revised OSHA recordkeeping requirements for 2002. Therefore, estimates for these industries for 2002 and beyond are not comparable with estimates for other industries but are comparable with estimates for prior years. Excluded from the survey are self-employed individuals, farmers with fewer than 11 employees, private households, federal government agencies, and employees in state and local government agencies.

Starting with 2003 data, SOII began using the North American Industry Classification System (NAICS) to classify industries. Prior to 2003, the program used the Standard Industrial Classification (SIC) system and the Bureau of the Census occupational classification system. Although some titles in SIC and NAICS are similar, there is limited compatibility because industry groupings are defined differently between the two systems. See [Appendix II, Industry of employment](#).



*Reference:*

Bureau of Labor Statistics. Workplace Injuries and Illnesses in 2006. Washington, DC: Department of Labor. October 2007.

*For More Information:* See the BLS occupational safety and health website: <http://www.bls.gov/iif/home.htm>.

## United States Renal Data System (USRDS)

### National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) in conjunction with the Centers for Medicare & Medicaid Services

*Overview:* The USRDS is a national data system that collects, analyzes, and distributes information about end-stage renal disease (ESRD) in the United States. USRDS staff collaborates with members of CMS, the United Network for Organ Sharing (UNOS), and the ESRD networks, sharing datasets and actively working to improve the accuracy of ESRD patient information. The USRDS has five goals: to characterize the ESRD population; to describe the prevalence and incidence of ESRD along with trends in mortality and disease rates; to investigate relationships among patient demographics, treatment modalities, and morbidity; to identify new areas for special renal studies and support investigator-initiated research; and to provide data sets and samples of national data to support research by the Special Studies Centers.

*Selected Content:* The USRDS maintains a stand-alone database with data on diagnoses and demographic characteristics of ESRD patients, along with biochemical data, dialysis claims, and information on treatment and payor histories, hospitalization events, deaths, physician/supplier services, and providers.

*Data Years:* Data have been compiled annually since 1988.

*Coverage:* Individuals with End Stage Renal Disease (ESRD) who are entitled to receive Social Security benefits, regardless of age, are eligible for Medicare. A person is identified as having ESRD when a physician certifies the disease on the CMS Medical Evidence (ME) form, or when there is other evidence of chronic dialysis or a kidney transplant. Patient treatment histories compiled by the USRDS rely on Medicare dialysis billing records, which contain no information on dialysis therapy or modality changes in non-Medicare patients. Starting with the 2003 Annual Data

Report, the USRDS incorporated treatment-specific information from the ESRD Networks' SIMS event database to improve the tracking of these patients in the USRDS database, and of patients who are considered lost-to-followup. The consolidation efforts from database integration among USRDS, SIMS, and REMIS have reduced the number of lost-to-followup patients—17,641 in 2002 (2006 Annual Data Report), compared to 24,726 in 2002 (2004 Annual Data Report).

*Methodology:* Data for the USRDS Database are compiled from existing data sources including the Centers for Medicare and Medicaid Services (CMS) Renal Management Information System (REMIS), CMS claims data, facility survey data, CDC survey data (NHANES), Standard Information Management System (SIMS), Medicare Evidence Form (CMS-2728), ESRD Death Notification Form (CMS-2746), and UNOS transplant and wait-list data. The CMS data files are supplemented by CMS with enrollment, payer history, and other administrative data to provide utilization and demographic information on ESRD patients.

*Sample Size and Response Rate:* Response or coverage rates are 100% of people treated for ESRD since May of 1995 because the amended ESRD entitlement policy requires a Medicare Evidence form to be submitted for all ESRD patients regardless of their insurance and eligibility status. However, the payment data for non-Medicare ESRD patients may be absent during the 30-month coordination period. Ascertainment of incident cases may also be incomplete because the data are for persons receiving ESRD treatment as reported to CMS and do not include patients who die of ESRD before receiving treatment and those who are not reported to CMS.

*For More Information:* See the USRDS website: <http://www.usrds.org/>.

## Youth Risk Behavior Survey (YRBS)

### CDC

### National Center for Chronic Disease Prevention and Health Promotion

*Overview:* The national Youth Risk Behavior Survey (YRBS) monitors health risk behaviors among students in grades 9–12 that contribute to morbidity and mortality in both adolescence and adulthood.

*Selected Content:* Data are collected on tobacco use, dietary behaviors, physical activity, alcohol and other drug use, sexual behaviors that contribute to unintended pregnancy and sexually transmitted diseases including HIV infection, and behaviors that contribute to unintentional injuries and violence.

*Data Years:* The national YRBS of high school students was conducted in 1990, 1991, 1993, 1995, 1997, 1999, 2001, 2003, 2005, and 2007.

*Coverage:* Data are representative of high school students in public and private schools in the United States.

*Methodology:* The national YRBS school-based surveys employ a three-stage cluster sample design to produce a nationally representative sample of students in grades 9–12 attending public and private high schools. The first-stage sampling frame contains primary sampling units (PSUs) consisting of large counties or groups of smaller, adjacent counties. The PSUs are then stratified based on degree of urbanization and relative percentage of black and Hispanic students in the PSU. The PSUs are selected from these strata with probability proportional to school enrollment size. At the second sampling stage, schools are selected with probability proportional to school enrollment size. To enable separate analysis of data for black and Hispanic students, schools with substantial numbers of black and Hispanic students are sampled at higher rates than all other schools. The third stage of sampling consists of randomly selecting one or two intact classes of a required subject from grades 9–12 at each chosen school. All students in the selected classes are eligible to participate in the survey. A weighting factor is applied to each student record to adjust for nonresponse and for the varying probabilities of selection, including those resulting from the oversampling of black and Hispanic students.

*Sample Size and Response Rate:* The sample size for the 2007 YRBS was 14,041 students in 157 schools. The school response rate was 81% and the student response rate was 84%, for an overall response rate of 68%.

*Issues Affecting Interpretation:* National YRBS data are subject to at least two limitations. First, these data apply only to adolescents who attend regular high school. These students may not be representative of all persons in this age group because those who have dropped out of high school or attend an alternative high school are not surveyed. Second, the extent of underreporting or overreporting cannot be

determined, although the survey questions demonstrate good test-retest reliability.

Estimates of substance use for youth based on the YRBS differ from the National Survey on Drug Use & Health (NSDUH) and Monitoring the Future (MTF). Rates are not directly comparable across these surveys because of differences in populations covered, sample design, questionnaires, interview setting, and statistical approaches to make the survey estimates generalizable to the entire population. The NSDUH survey collects data in residences, whereas the MTF and YRBS collect data in school classrooms. The NSDUH estimates are tabulated by age, whereas the MTF and YRBS estimates are tabulated by grade, representing different ages as well as different populations.

#### *References:*

Brener ND, Kann L, Kinchen S, et al. Methodology of the Youth Risk Behavior Surveillance System. *MMWR* 2004;53(RR-12):1–13.

Eaton DK, Kann L, Kinchen S, et al. Youth Risk Behavior Surveillance—United States, 2005. In: *Surveillance Summaries June 9, 2006*. *MMWR* 2006;55(SS-5):1–108.

Cowan CD. Coverage, Sample Design, and Weighting in Three Federal Surveys. *Journal of Drug Issues* 2004;1(3):599–614.

*For More Information:* See the Division of Adolescent and School Health website: <http://www.cdc.gov/HealthyYouth/index.htm>.

## Private and Global Sources

### American Association of Colleges of Nursing

The American Association of Colleges of Nursing (AACN), was established in 1969 to serve the need for a national organization dedicated exclusively to furthering nursing education in America's universities and colleges. Annually, the Research Center reports the most current statistics available on student enrollment, graduations, and faculty salaries. In 2006, survey forms and instructions for accessing the survey website were mailed to 722 institutions with baccalaureate and higher degree program in nursing.

Responses to the enrollment and graduation surveys were received from 628 institutions. The overall response rate was 87% percent for the enrollment and graduation surveys in 2006.

*For More Information:* See the 2006–2007 Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing. 2007. American Association of Colleges of Nursing, One Dupont Circle, Suite 530, Washington, D.C. 20036; or see the AACN website: <http://www.aacn.nche.edu>.

### **American Association of Colleges of Osteopathic Medicine**

The American Association of Colleges of Osteopathic Medicine (AACOM), founded in 1898, compiles data on various aspects of osteopathic medical education for distribution to the profession, the government, and the public. Questionnaires are sent annually to schools of osteopathic medicine requesting information on characteristics of applicants, students and graduates, faculty, curriculum, contract and grant activity, revenues and expenditures, and clinical facilities. The response rate is 100%.

*For More Information:* See 2006 Annual Statistical Report on Osteopathic Medical Education, 2007. American Association of Colleges of Osteopathic Medicine, 5550 Friendship Boulevard, Suite 310, Chevy Chase, Maryland 20815; or see the AACOM website: <http://www.aacom.org>.

### **American Association of Colleges of Pharmacy**

The American Association of Colleges of Pharmacy (AACP) compiles data on the Colleges of Pharmacy, including information on student enrollment and types of degrees conferred. Data are collected through an annual survey; the response rate is 100%.

*For More Information:* See Fall 2006 Profile of Pharmacy Students. The American Association of Colleges of Pharmacy, 1426 Prince Street, Alexandria, VA; or the AACP website: <http://www.aacp.org>.

### **American Association of Colleges of Podiatric Medicine**

The American Association of Colleges of Podiatric Medicine (AACPM) compiles data on the Colleges of Podiatric Medicine, including information on the schools and enrollment. Data are collected annually through written questionnaires. The response rate is 100%.

*For More Information:* Write to The American Association of Colleges of Podiatric Medicine, 15850 Crabbs Branch Way, Suite 320, Rockville, MD 20855; or see the AACPM website: <http://www.aacpm.org>.

### **American Dental Association**

The Division of Educational Measurement of the American Dental Association (ADA) conducts annual surveys of predoctoral dental educational institutions. The questionnaire, mailed to all dental schools, collects information on academic programs, admissions, enrollment, attrition, graduates, educational expenses and financial assistance, patient care, advanced dental education, and faculty positions.

*For More Information:* See the American Dental Association, 2006–2007 Survey of Dental Education, vol.1, Academic Programs, Enrollments, and Graduates, Chicago. 2008; or the ADA website: <http://www.ada.org>.

### **American Hospital Association Annual Survey of Hospitals**

Data from the American Hospital Association (AHA) annual survey are based on questionnaires sent to all AHA-registered and nonregistered hospitals in the United States and its associated areas. U.S. government hospitals located outside the United States are excluded. Overall, the average response rate over the past 5 years has been approximately 83%. For nonreporting hospitals and for the survey questionnaires of reporting hospitals on which some information was missing, estimates are made for all data except those on beds, bassinets, and facilities. Data for beds and bassinets of nonreporting hospitals are based on the most recent information available from those hospitals. Data for facilities and services are based only on reporting hospitals.

Estimates of other types of missing data are based on data reported the previous year, if available. When unavailable, estimates are based on data furnished by reporting hospitals similar in size, control, major service provided, length of stay, and geographic and demographic characteristics.

*For More Information:* Write to the AHA Annual Survey of Hospitals, Health Forum, LLC, an American Hospital Association Company, One North Franklin Street, Chicago, IL 60606; or see the AHA website: [http://www.aha.org/aha\\_app/index.jsp](http://www.aha.org/aha_app/index.jsp).

## American Medical Association Physician Masterfile

A masterfile of physicians has been maintained by the American Medical Association (AMA) since 1906. The Physician Masterfile contains data on all physicians in the United States, both members and nonmembers of the AMA, and on those graduates of American medical schools temporarily practicing overseas. The file also includes information on international medical graduates (IMGs), who are graduates of foreign medical schools who reside in the United States and who meet education standards for primary recognition as physicians.

A file is initiated on each individual upon entry into medical school or, in the case of IMGs, upon entry into the United States. Between 1965 and 1985, a mail questionnaire survey was conducted every 4 years to update the file information on professional activities, self-designated area of specialization, and present employment status. Since 1985, approximately one-third of all physicians are surveyed each year.

*For More Information:* See Division of Survey and Data Resources, American Medical Association, Physician Characteristics and Distribution in the U.S., 2008 ed., Chicago 2008 AMA; or the AMA website: <http://www.ama-assn.org/>.

## American Osteopathic Association

The American Osteopathic Association (AOA) was established to promote the public health, to encourage scientific research, and to maintain and improve high standards of medical education in osteopathic colleges. The Department of Educational Affairs sets the standards for and accredits osteopathic medical colleges and hospitals, postdoctoral

training and board certification programs. The AOA publishes both professional and public information materials. Professional publications include information on osteopathic education, accreditation of hospitals and other health care delivery facilities, and physician licensing. Public information materials include introductory materials on osteopathic medicine, brochures on osteopathic physicians and osteopathic medicine, and patient education materials. The AOA compiles the number of osteopathic physicals (DOs), the number of active DOs by gender, age, specialty, and by 50 states and the District of Columbia, and the number of osteopathic medical students by selected characteristics. These statistics are available annually from: [http://www.osteopathic.org/pdf/ost\\_factsheet.pdf](http://www.osteopathic.org/pdf/ost_factsheet.pdf).

*For More Information:* See the AOA website: <http://www.osteopathic.org>.

## Association of American Medical Colleges

The Association of American Medical Colleges (AAMC) collects information on student enrollment in medical schools through the annual Liaison Committee on Medical Education questionnaire, the fall enrollment questionnaire, and the American Medical College Application Service (AMCAS) data system. Other data sources are the institutional profile system, the premedical students questionnaire, the minority student opportunities in medicine questionnaire, the faculty roster system, data from the Medical College Admission Test, and one-time surveys developed for special projects.

*For More Information:* See the Association of American Medical Colleges, Statistical Information Related to Medical Schools and Teaching Hospitals, Washington, DC. 2008; or the AAMC website: <http://www.aamc.org>.

## Association of Schools and Colleges of Optometry

The Association of Schools and Colleges of Optometry (ASCO) compiles data on various aspects of optometric education including data on schools and enrollment. Questionnaires are sent annually to all schools and colleges of optometry. The response rate is 100%.

*For More Information:* Write to the Annual Survey of Optometric Educational Institutions, Association of Schools

and Colleges of Optometry, 6110 Executive Blvd., Suite 510, Rockville, MD 20852; or see the ASCO website:

<http://www.opted.org>.

## Association of Schools of Public Health

The Association of Schools of Public Health (ASPH) compiles data on schools of public health in the United States and Puerto Rico. Questionnaires are sent annually to all member schools. The response rate is 100%.

Unlike health professional schools that emphasize specific clinical occupations, schools of public health offer study in specialty areas such as biostatistics, epidemiology, environmental health, occupational health, health administration, health planning, nutrition, maternal and child health, social and behavioral sciences, and other population-based sciences.

*For More Information:* Write to the Association of Schools of Public Health, 1101 15th Street, NW, Suite 910, Washington, DC 20005; or see the ASPH website: <http://www.asph.org>.

## Computed Tomography (CT) and Magnetic Resonance Imaging (MRI) Census

CT/MRI Census is a biennial telephone survey used to query all hospital and non-hospital sites in the United States performing CT and MRI procedures. The Census details the types of procedures being performed, procedure volumes, staffing and productivity, installed equipment, planned equipment purchases and annual budgets for consumables including contrast media.

Candidate sites for MRI/CT procedures are identified in the American Hospital Association's AHA guide—The AHA Guide to the Health Care Field. U.S. territories are not included.

*For More Information:* See 2004 Computed Tomography (CT) and Magnetic Resonance Imaging (MRI) Census. Market Summary Report: IMV, Limited, Medical Information Division. 2004 Section B: Installed Base of CT Scanners: Installed Base of MRI Scanners; or the website: <http://www.imvlimited.com/>.

## European Health for All Database

### World Health Organization Regional Office for Europe

The WHO Regional Office for Europe (WHO/Europe) provides country-specific and topic-specific health information via the Internet for people who influence health policy in the WHO European Region and the media.

WHO/Europe collects statistics on health and makes them widely available through:

- European Health for all Database (<http://www.euro.who.int/hfadb>) (HFA-DB), which contains data on about 600 health indicators collected from national counterparts in 52 European countries, and data from other WHO technical programs and some international organizations.
- Highlights on Health ([http://www.euro.who.int/InformationSources/Evidence/20011015\\_1](http://www.euro.who.int/InformationSources/Evidence/20011015_1)) from countries in the WHO European Region that give an overview of the health situation in each country in comparison with other countries. Highlights complement the public health reports produced by a number of member states in the region.
- Health Status Overview for Countries of Central and Eastern Europe (<http://www.euro.who.int/Document/E76888.pdf>) that are candidates for accession to the European Union (Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia).

WHO/Europe helps countries strengthen their national health information systems, particularly by supporting:

- development of National Health Indicator Databases ([http://www.euro.who.int/eprise/main/WHO/Progs/HIS/products/20020514\\_2](http://www.euro.who.int/eprise/main/WHO/Progs/HIS/products/20020514_2))
- exchange of experience on national public health reports between countries; a database of public health reports is maintained and available for consultation and networking
- implementation of International Classifications (<http://www.who.int/whosis/en/>) and definitions in countries
- Regional Networks (<http://www.euro.who.int/main/WHO/Home/TopPage>) of health information professionals.

*For More Information:* See the European health for all database: <http://data.euro.who.int/hfadb/>.



## Guttmacher Institute Abortion Provider Survey

The Guttmacher Institute, formerly called the Alan Guttmacher Institute (AGI), is a not-for-profit organization focused on reproductive health research, policy analysis, and public education. The Institute conducts periodic surveys of abortion providers to provide nationally representative statistics on abortion incidence.

Number of induced abortions; number, types, and locations of providers; and types of procedures performed are presented by state and region. Health, United States presents the total for each data year. Thirteen provider surveys have been conducted for selected data years 1973 to midyear 2001. Data were collected from clinics, physicians, and hospitals identified as potential providers of abortion services. Mailed questionnaires were sent to all potential providers, with two additional mailings and telephone follow-up for nonresponse. No surveys were conducted in 1983, 1986, 1989, 1990, 1993, 1994, 1997, or 1998. For 1999–2000, a version of the survey questionnaire was created for each of the three major categories of providers, modeled on the survey questionnaire used for Guttmacher's data collection in 1997. All surveys asked the number of induced abortions performed at the provider's location. State health statistics agencies were contacted, requesting all available data reported by providers to each state health agency on the number of abortions performed in the survey year. For states that provided data to the Guttmacher Institute, the health agency figures were used for providers who did not respond to the survey. Estimates of the number of abortions performed by some providers were ascertained from knowledgeable sources in the community.

Of the 2,442 potential providers surveyed for 1999–2000, 1,931 performed abortions between January 1999 and June 2001. Of abortions reported for data year 2000, 77% were reported by providers, 10% came from health department data, 11% were estimated by knowledgeable sources, and 2% were projections or other estimates.

To estimate the number of abortions performed in 2001, 2002, and 2003, the Guttmacher Institute first estimated the change in the number of abortions between 2000 and 2001, beginning with the number of abortions occurring in each state, as reported by the CDC, in each of those two years. The three states without reporting systems were excluded. Guttmacher also eliminated the states with very incomplete or inconsistent reporting (Arizona, Maryland, Nevada, and the

District of Columbia). Guttmacher summed the number of abortions that took place in the 44 remaining states for each year. The percentage change between 2000 and 2001 was then applied to Guttmacher's more complete nationwide count of 1,312,990 abortions in 2000 to arrive at the national estimate for 2001. The same procedure was used to estimate the change in the number of abortions between 2001 and 2002 and between 2002 and 2003, except that the data for both years were collected directly from state health departments because the CDC abortion surveillance report for the latest year was not yet available. The states without reporting systems were not included, and as before, Guttmacher excluded states with incomplete or inconsistent reporting.

For 2004 data, the Guttmacher Institute fielded a new survey of abortion providers modeled on the previous survey. Of the 2,310 potential providers surveyed, 1,552 responded directly or in follow-up; health department data were used for 274 providers; knowledgeable sources were used for 59 providers; and Guttmacher made their own estimates for 330 facilities. The level of internal estimation was higher than in previous years because health department data in New York and California were less complete.

The number of abortions estimated by the Guttmacher Institute through the mid-to-late 1980s was about 20% higher than the number reported to CDC. Between 1989 and 1997 the Guttmacher estimates were about 12% higher than those reported by CDC. Beginning in 1998, health departments of four states did not report abortion data to CDC. The four reporting areas (the largest of which is California) that did not report abortions to CDC in 1998 accounted for 18% of all abortions tallied by Guttmacher's 1995–1996 survey. As a result, the number of abortions estimated by Guttmacher for 2000 was 53% higher than reported by CDC. The number of abortions estimated by Guttmacher for 2004 was 46% higher than those reported by CDC. Following FDA approval of Mifepristone (medical abortion) in September of 2000, approximately 70,500 U.S. women had an early medical abortion in 2001. That number increased to 161,100 for 2005.

### References:

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Jones RK, Zolna MRS, Henshaw SK, Finer LB. Abortion in the United States: Incidence and Access to Services, 2005. *Perspect Sex Reprod Health* 2008;40(1):6–16. Available from: <http://www.guttmacher.org/journals/toc/psrh4001toc.html>.

*For More Information:* See the Guttmacher Institute website: <http://www.guttmacher.org> or write to Guttmacher Institute, 120 Wall Street, New York, NY 10005.

## Organisation for Economic Co-operation and Development Health Data

The Organisation for Economic Co-operation and Development (OECD) provides annual data on statistical indicators on health and health systems collected from 30 member countries, with some time series going back to 1960. The international comparability of health expenditure estimates depends on the quality of national health accounts in OECD member countries. In recent years, an increasing number of countries have adopted the standards for health accounting defined by OECD, greatly increasing the comparability of national health expenditure data reporting. Additional limitations in international comparisons include differing boundaries between health care and other social care, particularly for the disabled and elderly, and underestimation of private expenditures on health.

The OECD was established in 1961 with a mandate to promote policies to achieve the highest sustainable economic growth and a rising standard of living among member countries. The Organisation now comprises 30 member countries: Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.

As part of its mission, the OECD has developed a number of activities in relation to health and health care systems. The main aim of OECD work on health policy is to conduct cross-national studies of the performance of OECD health systems and to facilitate exchanges between member countries of their experiences of financing, delivering, and managing health services. To support this work, each year the

OECD compiles cross-country data in OECD Health Data, one of the most comprehensive sources of comparable health-related statistics. OECD Health Data is an essential tool to carry out comparative analyses and draw lessons from international comparisons of diverse health care systems. This international database now incorporates the first results arising from the implementation of the OECD manual, A System of Health Accounts (2000), which provides a standard framework for producing a set of comprehensive, consistent, and internationally comparable data on health spending. The OECD collaborates with other international organizations such as the WHO.

*For More Information:* See the OECD website: <http://www.oecd.org/health>.

## United Nations Demographic Yearbook

The Statistical Office of the United Nations prepares the *Demographic Yearbook*, a comprehensive collection of international demographic statistics.

Questionnaires are sent annually and monthly to more than 220 national statistical services and other appropriate government offices. Data from these questionnaires are supplemented, to the extent possible, by data taken from official national publications, and by correspondence with the national statistical services. To ensure comparability, rates, ratios, and percents have been calculated in the statistical office of the United Nations.

Lack of international comparability among estimates arises from differences in concepts, definitions, and time of data collection. The comparability of population data is affected by several factors, including (a) definitions of the total population, (b) definitions used to classify the population into its urban and rural components, (c) difficulties relating to age reporting, (d) extent of over- or underenumeration, and (e) quality of population estimates. The completeness and accuracy of vital statistics data also vary from one country to another. Differences in statistical definitions of vital events may also influence comparability.

International demographic trend data are available on a CD-ROM entitled *United Nations, 2000. Demographic Yearbook—Historical Supplement 1948–1997*. CD-ROM Special Issue. United Nations publication sales number E/F.99.XIII.12.



*For More Information:* See the United Nations, Statistics Division website: <http://unstats.un.org/unsd/demographic/products/dyb/dyb2.htm>.

## **World Health Organization Statistical Information System (WHOSIS)**

### **World Health Organization**

WHO Statistical Information System (WHOSIS) is a guide to health and health-related epidemiological and statistical information from the World Health Organization. Statistics are listed by country or region and by topic. WHOSIS contains the following databases: Core Health Indicators for 193 countries; World Health Statistics 2008; Statistics from WHO Regional Offices; Statistics by country or region; Burden of Disease statistics; and Family of International Classifications.

*For More Information:* See the World Health Organization, *World Health Statistics Annual 2008*: <http://www3.who.int/statistics/> or the WHO website: <http://www.who.int/en/>.

## Appendix II

### Definitions and Methods

Appendix II is an alphabetical listing of terms used in *Health, United States*. It includes cross-references to related terms and synonyms. It also describes the methods used for calculating age-adjusted rates, average annual rates of change, relative standard errors, birth rates, death rates, and years of potential life lost. Appendix II includes standard populations used for age adjustment (Tables I, II, and III); *International Classification of Diseases* (ICD) codes for cause of death from the Sixth through Tenth Revisions and the years when the Revisions were in effect (Tables IV and V); comparability ratios between ICD-9 and ICD-10 for selected causes (Table VI); ICD-9-CM codes for external cause of injury, diagnostic, and procedure categories (Tables VII, X, and XI); an analysis of the effects of adding probe questions for Medicare and Medicaid coverage on health insurance rates in the National Health Interview Survey (Table VIII); classification of generic analgesic drugs (Table XII); and industry codes from the North American Industry Classification System (NAICS) (Table IX). Standards for presenting federal data on race and ethnicity are described, and sample tabulations of National Health Interview Survey (NHIS) data comparing the 1977 and 1997 Standards for the Classification of Federal Data on Race and Ethnicity are presented in Tables XIII and XIV.

**Acquired immunodeficiency syndrome (AIDS)**—Human immunodeficiency virus (HIV) is the pathogen that causes AIDS and HIV disease is the term that encompasses all the condition's stages, from infection to the deterioration of the immune system and the onset of opportunistic diseases. However, AIDS is still the name that most people use to refer to the immune deficiency caused by HIV. An AIDS diagnosis (indicating that the person has reached the late stages of the disease) is given to people with HIV who have counts below 200 CD4+ cells/mm<sup>3</sup> (also known as T cells or T4 cells, which are the main target of HIV) or when they become diagnosed with at least one of a set of opportunistic diseases. All 50 states and the District of Columbia report AIDS cases to CDC using a uniform surveillance case definition and case report form. The case reporting definitions were expanded in 1985 (MMWR 1985; 34:373–5); 1987 (MMWR 1987; 36 (No. SS-1):1S–15S); 1993 for adults and adolescents (MMWR

1992; 41 (no. RR-17):1–19); and 1994 for pediatric cases (MMWR 1994; 43 (no. RR-12):1–19). The revisions incorporated a broader range of AIDS-indicator diseases and conditions and used HIV diagnostic tests to improve the sensitivity and specificity of the definition. The 1993 expansion of the case definition caused a temporary distortion of AIDS incidence trends. In 1995, new treatments (protease inhibitors) for HIV and AIDS were approved. These therapies have prevented or delayed the onset of AIDS and premature death among many HIV-infected persons, which should be considered when interpreting trend data. AIDS surveillance data are published annually by CDC in the HIV/AIDS Surveillance Report. Available from: <http://www.cdc.gov/hiv/topics/surveillance/resources/reports/index.htm>. See related [Human immunodeficiency virus \(HIV\) disease](#).

**Active physician**—See [Physician](#).

**Activities of daily living (ADL)**—Activities of daily living are activities related to personal care and include bathing or showering, dressing, getting in or out of bed or a chair, using the toilet, and eating. In the National Health Interview Survey, respondents were asked whether they or family members 3 years of age and over need the help of another person with personal care because of a physical, mental, or emotional problem. Persons are considered to have an ADL limitation if any condition(s) causing the respondent to need help with the specific activities was chronic.

In the Medicare Current Beneficiary Survey, if a sample person had any difficulty performing an activity by him or herself and without special equipment, or did not perform the activity at all because of health problems, the person was categorized as having a limitation in that activity. The limitation may have been temporary or chronic at the time of the interview. Sampled people who were administered a community interview answered health status and functioning questions themselves, if able to do so. A proxy such as a nurse answered questions about the sample person's health status and functioning for those in a long-term care facility. Beginning in 1997, interview questions for people residing in long-term care facilities were changed slightly from those administered to people living in the community to differentiate residents who were independent from those who received supervision or assistance with transferring, locomotion on unit, dressing, eating, toilet use, and bathing. See related [Condition; Instrumental activities of daily living \(IADL\); Limitation of activity](#).

**Table I. United States year 2000 standard population and age groups used to age adjust data**

<i>Data system and age</i>	<i>Number</i>
DVS mortality data	
Total . . . . .	274,633,642
Under 1 year . . . . .	3,794,901
1–4 years . . . . .	15,191,619
5–14 years . . . . .	39,976,619
15–24 years . . . . .	38,076,743
25–34 years . . . . .	37,233,437
35–44 years . . . . .	44,659,185
45–54 years . . . . .	37,030,152
55–64 years . . . . .	23,961,506
65–74 years . . . . .	18,135,514
75–84 years . . . . .	12,314,793
85 years and over . . . . .	4,259,173
NHIS, NAMCS, NHAMCS, NNHS, and NHDS	
All ages . . . . .	274,633,642
18 years and over . . . . .	203,852,188
25 years and over . . . . .	177,593,760
40 years and over . . . . .	118,180,367
65 years and over . . . . .	34,709,480
Under 18 years . . . . .	70,781,454
2–17 years . . . . .	63,227,991
18–44 years . . . . .	108,151,050
18–24 years . . . . .	26,258,428
25–34 years . . . . .	37,233,437
35–44 years . . . . .	44,659,185
45–64 years . . . . .	60,991,658
45–54 years . . . . .	37,030,152
55–64 years . . . . .	23,961,506
65–74 years . . . . .	18,135,514
75 years and over . . . . .	16,573,966
18–49 years . . . . .	127,956,843
40–64 years:	
40–49 years . . . . .	42,285,022
50–64 years . . . . .	41,185,865
NHES and NHANES	
20 years and over . . . . .	195,850,985
20–74 years . . . . .	179,277,019
20–34 years . . . . .	55,490,662
35–44 years . . . . .	44,659,185
45–54 years . . . . .	37,030,152
55–64 years . . . . .	23,961,506
65–74 years . . . . .	18,135,514
or	
65 years and over . . . . .	34,709,480

See footnotes at end of table.

**Table I. United States year 2000 standard population and age groups used to age adjust data—Con.**

<i>Data system and age</i>	<i>Number</i>
NHANES (Tables 54 and 70)	
20–39 years . . . . .	77,670,618
40–59 years . . . . .	72,816,615
60 years and over . . . . .	45,363,782
NHANES (Table 98 only)	
Under 18 years . . . . .	70,781,454
18–44 years . . . . .	108,151,050
45–64 years . . . . .	60,991,658
65 years and over . . . . .	34,709,480

**SOURCE:** National Institutes of Health, National Cancer Institute, Surveillance, Epidemiology, and End Results (SEER). Standard population—single ages. Available from: <http://seer.cancer.gov/stdpopulations>.

**Addition—**See [Admission](#).

**Admission—**The American Hospital Association defines admissions as persons, excluding newborns, accepted for inpatient services during the survey reporting period. See related [Days of care](#); [Discharge](#); [Inpatient](#).

An admission (also sometimes referred to as an addition) to a mental health organization is defined by the Substance Abuse and Mental Health Services Administration's Center for Mental Health Services as a new admission, a re-admission, a return from long-term leave, or a transfer from another service of the same organization or another organization. See related [Mental health organization](#); [Mental health service type](#).

**Age—**Age is reported as age at last birthday, that is, age in completed years, often calculated by subtracting date of birth from the reference date, with the reference date being the date of the examination, interview, or other contact with an individual.

Mother's (maternal) age is reported on the birth certificate by all states. Birth statistics are presented for mothers age 10–49 years through 1996 and 10–54 years starting in 1997, based on mother's date of birth or age as reported on the birth certificate. The age of mother is edited for upper and lower limits. When the age of the mother is computed to be under 10 years or 55 years or over (50 years or over in 1964–1996), it is considered not stated and imputed according to the age of the mother from the previous birth record of the same race and total birth order (total of fetal deaths and live births). Before 1963, not stated ages were distributed in proportion to the known ages for each racial

group. Beginning in 1997, the birth rate for the maternal age group 45–49 years includes data for mother's age 50–54 years in the numerator and is based on the population of women 45–49 years in the denominator.

**Age adjustment**—Age adjustment is used to compare risks of two or more populations at one point in time or one population at two or more points in time. Age-adjusted rates are computed by the direct method by applying age-specific rates in a population of interest to a standardized age distribution, to eliminate differences in observed rates that result from age differences in population composition. Age-adjusted rates should be viewed as relative indexes rather than actual measures of risk.

Age-adjusted rates are calculated by the direct method as follows:

$$\sum_{i=1}^n r_i \times (p_i / P)$$

where  $r_i$  = rate in age group  $i$  in the population of interest

$p_i$  = standard population in age group  $i$

$$P = \sum_{i=1}^n p_i$$

$n$  = total number of age groups over the age range of the age-adjusted rate

Age adjustment by the direct method requires use of a standard age distribution. The standard for age adjusting death rates and estimates from surveys in *Health, United States* is the projected year 2000 U.S. resident population. Starting with *Health, United States*, 2000, the year 2000 U.S. standard population replaced the 1970 civilian non-institutionalized population for age adjusting estimates from most NCHS surveys; and starting with *Health, United States*, 2001 it was used uniformly and replaced the 1940 U.S. population for age adjusting mortality statistics and the 1980 U.S. resident population, which previously had been used for age adjusting estimates from the NHANES surveys.

Changing the standard population has implications for racial and ethnic differentials in mortality. For example, the mortality ratio for the black to white populations is reduced from 1.6

using the 1940 standard to 1.4 using the 2000 standard, reflecting the greater weight that the 2000 standard gives to the older population where race differentials in mortality are smaller.

Age-adjusted estimates from any data source presented in *Health, United States* may differ from age-adjusted estimates based on the same data presented in other reports if different age groups are used in the adjustment procedure.

For more information on implementing the 2000 population standard for age adjusting death rates, see Anderson RN, Rosenberg HM. Age standardization of death rates: Implementation of the year 2000 standard. National vital statistics reports; vol 47 no 3. Hyattsville, MD: NCHS. 1998. For more information on the derivation of age adjustment weights for use with NCHS survey data, see Klein RJ, Schoenborn CA. Age adjustment using the 2000 projected U.S. population. Healthy People Statistical Notes no. 20. Hyattsville, MD: NCHS. 2001. Both reports are available from the NCHS home page: <http://www.cdc.gov/nchs>. The year 2000 U.S. standard population is available from the National Cancer Institute, Surveillance, Epidemiology, and End Results, <http://seer.cancer.gov/stdpopulations/stdpop.singleages.html>.

*Mortality data*—Death rates are age adjusted to the year 2000 U.S. standard population (Table I). Prior to 2003 data, age-adjusted rates were calculated using standard million proportions based on rounded population numbers (Table II). Starting with 2003 data, unrounded population numbers are used to age adjust. Adjustment is based on 11 age groups with two exceptions. First, age-adjusted death rates for black males and black females in 1950 are based on nine age groups, with under 1 year and 1–4 years of age combined as one group and 75–84 years and 85 years of age and over combined as one group. Second, age-adjusted death rates by educational attainment for the age group 25–64 years are based on four 10-year age groups (25–34 years, 35–44 years, 45–54 years, and 55–64 years).

Age-adjusted rates for years of potential life lost before age 75 years also use the year 2000 standard population and are based on eight age groups (under 1 year, 1–14 years, 15–24 years, and 10-year age groups through 65–74 years).

Maternal mortality rates for pregnancy, childbirth, and the puerperium are calculated as the number of deaths per

**Table II. United States year 2000 standard population and proportion distribution by age, for age adjusting death rates prior to 2003**

Age	Population	Proportion distribution (weights)	Standard million
Total . . . . .	274,634,000	1.000000	1,000,000
Under 1 year . . . . .	3,795,000	0.013818	13,818
1–4 years . . . . .	15,192,000	0.055317	55,317
5–14 years . . . . .	39,977,000	0.145565	145,565
15–24 years. . . . .	38,077,000	0.138646	138,646
25–34 years. . . . .	37,233,000	0.135573	135,573
35–44 years. . . . .	44,659,000	0.162613	162,613
45–54 years. . . . .	37,030,000	0.134834	134,834
55–64 years. . . . .	23,961,000	0.087247	87,247
65–74 years. . . . .	18,136,000	0.066037	66,037
75–84 years. . . . .	12,315,000	*0.044842	44,842
85 years and over. . . . .	4,259,000	0.015508	15,508

\* Figure is rounded up instead of down to force total to 1.0.

SOURCE: Anderson RN, Rosenberg HM. Age standardization of death rates: Implementation of the year 2000 standard. National vital statistics reports; vol 47 no 3. Hyattsville, MD: NCHS. 1998.

100,000 live births. These rates are age adjusted to the 1970 distribution of live births by mother’s age in the United States as shown in [Table III](#). See related [Rate: Death and related rates](#); [Years of potential life lost](#).

*National Health and Nutrition Examination Survey*—Estimates based on the National Health Examination Survey and the National Health and Nutrition Examination Survey are age adjusted to the year 2000 U.S. standard population generally using five age groups: 20–34 years, 35–44 years, 45–54 years, 55–64 years, and 65–74 years or 65 years and over (see [Table I](#)). Prior to *Health, United States, 2001*, these estimates were age adjusted to the 1980 U.S. resident population.

*National Health Care Surveys*—Estimates based on the National Hospital Discharge Survey, the National Ambulatory Medical Care Survey, the National Hospital Ambulatory Medical Care Survey, and the National Nursing Home Survey are age adjusted to the year 2000 U.S. standard population ([Table I](#)). Information on the age groups used in the age adjustment procedure is contained in the footnotes to the relevant tables.

*National Health Interview Survey*—Estimates based on the National Health Interview Survey are age adjusted to the year 2000 U.S. standard population ([Table I](#)). Prior to the 2000 edition of *Health, United States*, National

Health Interview Survey estimates were age adjusted to the 1970 civilian noninstitutionalized population. Information on the age groups used in the age adjustment procedure is contained in the footnotes to the relevant tables.

**AIDS**—See [Acquired immunodeficiency syndrome](#).

**Alcohol consumption**—Alcohol consumption is measured differently in various data systems. See related [Binge drinking](#).

*Monitoring the Future Study*—This school-based survey of secondary school students collects information on alcohol use using self-completed questionnaires. Information on consumption of alcoholic beverages, defined as beer, wine, wine coolers, and liquor, is based on the following question: “On how many occasions (if any) have you had alcohol to drink—more than just a few sips—in the last 30 days?” Students responding affirmatively are then asked “How many times have you had five or more drinks in a row in the last 2 weeks?” For this question, a “drink” means a 12-ounce can (or bottle) of beer, a 4-ounce glass of wine, a 12-ounce bottle or can of wine cooler, or a mixed drink or a shot of liquor.

*National Health Interview Survey (NHIS)*—Starting with the 1997 NHIS, information on alcohol consumption is

**Table III. Number of live births and mother's age group used to adjust maternal mortality rates to live births in the United States in 1970**

<i>Mother's age</i>	<i>Number</i>
All ages. . . . .	3,731,386
Under 20 years . . . . .	656,460
20–24 years. . . . .	1,418,874
25–29 years. . . . .	994,904
30–34 years. . . . .	427,806
35 years and over . . . . .	233,342

**SOURCE:** Summary report final natality statistics, 1970. Monthly vital statistics report; vol 22 no 12, supp. Hyattsville, MD: NCHS. 1974.

collected in the sample adult questionnaire. Adult respondents are asked two screening questions about their lifetime alcohol consumption: "In any one year, have you had at least 12 drinks of any type of alcoholic beverage? In your entire life, have you had at least 12 drinks of any type of alcoholic beverage?" Persons who report at least 12 drinks in a lifetime are then asked a series of questions about alcohol consumption in the past year: "In the past year, how often did you drink any type of alcoholic beverage? In the past year, on those days that you drank alcoholic beverages, on the average, how many drinks did you have?" Adult respondents were also asked: "In the past year, on how many days did you have five or more drinks of any alcoholic beverage?"

Levels of alcohol consumption are defined as follows: light drinkers: three drinks or fewer per week; moderate drinkers: more than three drinks and up to 14 drinks per week for men and more than three drinks and up to seven drinks per week for women; heavier drinkers: more than 14 drinks per week for men and more than seven drinks per week for women, on average.

*National Survey on Drug Use and Health (NSDUH)*—Starting in 1999, NSDUH information about the frequency of the consumption of alcoholic beverages in the past 30 days has been obtained for all persons surveyed who are 12 years of age and over. An extensive list of examples of the kinds of beverages covered was given to respondents prior to the question administration. A drink is defined as a can or bottle of beer, a glass of wine or a wine cooler, a shot of liquor, or a mixed drink with liquor in it. Those times when the respondent had only a sip or two from a drink are not

considered consumption. Alcohol use is based on the following questions: "During the past 30 days, on how many days did you drink one or more drinks of an alcoholic beverage?" "On the days that you drank during the past 30 days, how many drinks did you usually have?" and "During the past 30 days, on how many days did you have five or more drinks on the same occasion?"

*Youth Risk Behavior Survey (YRBS)* Starting in 1991, the YRBS has collected information on alcohol use among high school students. Questions on alcohol use have the following introduction: "The next five questions ask about drinking alcohol. This includes drinking beer, wine, wine coolers, and liquor such as rum, gin, vodka, or whiskey. For these questions, drinking alcohol does not include drinking a few sips of wine for religious purposes." Alcohol use is based on the questions that follow, including: "During the past 30 days, on how many days did you have at least one drink of alcohol?"

**Any-listed diagnosis**—See [Diagnosis](#).

**Average annual rate of change (percentage change)**—In *Health, United States* average annual rates of change or growth rates are calculated as follows:

$$[(P_n / P_o)^{1/N} - 1] \times 100$$

where  $P_n$  = later time period

$P_o$  = earlier time period

$N$  = number of years in interval.

This geometric rate of change assumes that a variable increases or decreases at the same rate during each year between the two time periods.

**Average length of stay**—In the National Health Interview Survey, average length of stay in a hospital per discharged inpatient is computed by dividing the total number of hospital days for a specified group by the total number of discharges for that group. Similarly, in the National Hospital Discharge Survey, average length of stay is computed by dividing the total number of hospital days of care, counting the date of admission but not the date of discharge, by the number of patients discharged. The American Hospital Association computes average length of stay by dividing the number of



inpatient days by the number of admissions. See related [Days of care](#); [Discharge](#); [Inpatient](#).

**Bed, health facility**—The American Hospital Association defines the bed count as the number of beds, cribs, and pediatric bassinets that are set up and staffed for use by inpatients on the last day of the reporting period. In the Center for Medicare & Medicaid Service's Online Survey Certification and Reporting (OSCAR) database, all beds in certified facilities are counted on the day of certification inspection. The World Health Organization defines a hospital bed as one regularly maintained and staffed for the accommodation and full-time care of a succession of inpatients and situated in a part of the hospital where continuous medical care for inpatients is provided. The Center for Mental Health Services within the Substance Abuse and Mental Health Services Administration counts the number of beds set up and staffed for use in inpatient and residential treatment services on the last day of the survey reporting period. See related [Hospital](#); [Mental health organization](#); [Mental health service type](#); [Occupancy rate](#).

**Binge drinking**—Binge drinking is measured in the following data systems. See related [Alcohol consumption](#).

*Monitoring the Future Survey*—This school-based survey of secondary school students collects information on alcohol use using self-completed questionnaires. Information on binge drinking is obtained for high school seniors (starting in 1975) and 8th and 10th graders (starting in 1991) based on the following question for the prior 2-week period: "How many times have you had five or more drinks in a row?" among students who first responded affirmatively to the question: "On how many occasions (if any) have you had alcohol to drink—more than just a few sips—in the last 30 days?" Alcoholic beverages are defined as beer, wine, wine coolers, and liquor.

*National Survey on Drug Use and Health (NSDUH)*—Information about binge alcohol use, defined as "Five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) at least once in the past 30 days." Heavy alcohol use is defined as "Five or more drinks on the same occasion (binge drinking) on at least 5 different days in the past 30 days."

**Birth cohort**—A birth cohort consists of all persons born within a given period of time, such as a calendar year.

**Birth rate**—See [Rate: Birth and related rates](#).

**Birthweight**—Birthweight is the first weight of the newborn obtained after birth. Low birthweight is defined as less than 2,500 grams or 5 pounds 8 ounces. Very low birthweight is defined as less than 1,500 grams or 3 pounds 4 ounces. Before 1979, low birthweight was defined as 2,500 grams or less and very low birthweight as 1,500 grams or less.

**Blood pressure, elevated**—In *Health, United States*, elevated blood pressure is defined as having an average systolic blood pressure reading of at least 140 mmHg or diastolic pressure of at least 90 mmHg, which is consistent with the Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (available from: <http://www.nhlbi.nih.gov/guidelines/hypertension/jnc7full.pdf>). Those with elevated blood pressure also may be taking prescribed medicine for high blood pressure. Data on hypertension also are presented in *Health, United States*. People are considered to have hypertension if they have measured elevated blood pressure or if they report that they are taking a prescription medicine for high blood pressure, even if their blood pressure readings are within the normal range.

Blood pressure is measured by averaging the blood pressure readings taken. Blood pressure readings of 0 mmHg are assumed to be in error and are not included in the estimates. The methods to measure the blood pressure of NHANES participants have changed over the different NHANES survey years. Changes include:

- Number of BP measures taken (from 1 to 4)
- Equipment maintenance procedures
- Training of persons taking readings (physician, nurse, interviewer)
- Proportion zero end digits for systolic and diastolic readings
- Published diastolic definition
- Location where the measurements were taken (Mobile Examination Component (MEC) or home)

Blood pressure is measured in 1999 and subsequent years in the MEC of the NHANES. Participants who are 50 years and older or less than 1 year of age who are unable to travel to



the MEC are offered an abbreviated examination in their homes. Blood pressure measurements are taken by one of the MEC examiners. For people age 20 and over, three consecutive blood pressure readings are obtained, using the same arm. If a blood pressure measurement was interrupted or the measurer was unable to get one or more of the readings, a fourth attempt may be made. Both systolic and diastolic measurements are recorded to the nearest even number.

In NHANES III, three sets of blood pressure measurements were taken in the examination center on examinees age 5 years and over. Blood pressure measurements were also taken by trained interviewers during the household interview, on sample persons age 17 years and over. Systolic and diastolic average blood pressure were computed as the arithmetic mean of six or fewer measurements obtained at the household interview (maximum of three) and the MEC examination (maximum of three). If the examinee did not have blood pressure measurements taken in the examination center, this variable was calculated from measurements taken at the household interview. Both systolic and diastolic measurements were recorded to the nearest even number.

See Burt VL, Cutler JA, Higgings M, Horan MJ, Labarthe D, Whelton P, et al. Trends in the prevalence, awareness, treatment, and control of hypertension in the adult US population. *Hypertension* 1995;26(1):60–9, for more information on changes in high blood pressure measurement in the NHANES up to 1991.

**Body mass index (BMI)**—BMI is a measure that adjusts bodyweight for height. It is calculated as weight in kilograms divided by height in meters squared.

Overweight for children and adolescents is defined as BMI at or above the sex- and age-specific 95th percentile BMI cut points from the 2000 CDC Growth Charts (<http://www.cdc.gov/growthcharts/>).

Healthy weight for adults is defined as a BMI of 18.5 to less than 25; overweight, as greater than or equal to a BMI of 25; and obesity, as greater than or equal to a BMI of 30. BMI cut points are defined in the Report of the Dietary Guidelines Advisory Committee on the Dietary Guidelines for Americans, 2000. U.S. Department of Agriculture, Agricultural Research Service, Dietary Guidelines Advisory Committee, p. 23. Available from: <http://www.health.gov/dietaryguidelines/dgac/>; NHLBI Obesity Education Initiative Expert Panel on the

Identification, Evaluation, and Treatment of Overweight and Obesity in Adults. Clinical guidelines on the identification, evaluation, and treatment of overweight and obesity in adults—The evidence report. *Obes Res* 1998;6:51S–209S. Available from: [http://www.nhlbi.nih.gov/guidelines/obesity/ob\\_gdlns.htm](http://www.nhlbi.nih.gov/guidelines/obesity/ob_gdlns.htm); and in U.S. Department of Health and Human Services. Tracking Healthy People 2010. Washington, DC: U.S. Government Printing Office, November 2000, Objectives 19.1, 19.2, and 19.3. Available from: <http://www.healthypeople.gov/document/html/volume2/19nutrition.htm>.

**Cause of death**—For the purpose of national mortality statistics, every death is attributed to one underlying condition, based on information reported on the death certificate and using the international rules for selecting the underlying cause of death from the conditions stated on the death certificate. The underlying cause is defined by the World Health Organization (WHO) as the disease or injury that initiated the train of events leading directly to death, or the circumstances of the accident or violence that produced the fatal injury. Generally more medical information is reported on death certificates than is directly reflected in the underlying cause of death. The conditions that are not selected as underlying cause of death constitute the nonunderlying causes of death, also known as multiple cause of death.

Cause of death is coded according to the appropriate revision of the *International Classification of Diseases* (ICD) (see [Table IV](#)). Effective with deaths occurring in 1999, the United States began using the Tenth Revision of the ICD (ICD–10); during the period 1979–1998, causes of death were coded and classified according to the Ninth Revision (ICD–9). [Table V](#) lists ICD codes for the Sixth through Tenth Revisions for causes of death shown in *Health, United States*.

Each of these revisions has produced discontinuities in cause-of-death trends. These discontinuities are measured using comparability ratios that are essential to the interpretation of mortality trends. For further discussion, see the Mortality Technical Appendix on the NCHS website, Available from: <http://www.cdc.gov/nchs/deaths.htm>. See related [Comparability ratio](#); [International Classification of Diseases \(ICD\)](#); [Appendix I, National Vital Statistics System, Multiple Cause-of-Death File](#).

**Cause-of-death ranking**—Selected causes of death of public health and medical importance comprise tabulation lists and are ranked according to the number of deaths assigned to

**Table IV. Revision of the *International Classification of Diseases (ICD)* by year of conference by which adopted and years in use in the United States**

<i>Revision of the International Classification of Diseases</i>	<i>Year of conference by which adopted</i>	<i>Years in use in United States</i>
First . . . . .	1900	1900–1909
Second . . . . .	1909	1910–1920
Third . . . . .	1920	1921–1929
Fourth . . . . .	1929	1930–1938
Fifth . . . . .	1938	1939–1948
Sixth . . . . .	1948	1949–1957
Seventh . . . . .	1955	1958–1967
Eighth . . . . .	1965	1968–1978
Ninth . . . . .	1975	1979–1998
Tenth . . . . .	1990	1999–present

SOURCE: NCHS. Available from: <http://www.cdc.gov/nchs/about/major/dvs/icd9des.htm>.

these causes. The top-ranking causes determine the leading causes of death. Certain causes on the tabulation lists are not ranked if, for example, the category title represents a group title (such as Major cardiovascular diseases and Symptoms, signs, and abnormal clinical and laboratory findings, not elsewhere classified); or the category title begins with the words Other and All other. In addition, when one of the titles that represents a subtotal (such as malignant neoplasms) is ranked, its component parts are not ranked. The tabulation lists used for ranking in the *Tenth Revision of the International Classification of Diseases (ICD)* include the List of 113 Selected Causes of Death, which replaces the ICD-9 List of 72 Selected Causes, HIV infection and Alzheimer's disease; and the ICD-10 List of 130 Selected Causes of Infant Death, which replaces the ICD-9 List of 60 Selected Causes of Infant Death and HIV infection. Causes that are tied receive the same rank; the next cause is assigned the rank it would have received had the lower-ranked causes not been tied, that is, a rank is skipped. See related [International Classification of Diseases \(ICD\)](#).

**Cholesterol, serum**—Serum cholesterol is a measure of the total blood cholesterol. Elevated total blood cholesterol—a combination of high-density lipoproteins (HDL), low-density lipoproteins (LDL), and very-low density lipoproteins (VLDL)—is a risk factor for cardiovascular disease. According to the National Cholesterol Education Program, high serum cholesterol is defined as greater than or equal to 240 mg/dL (6.20 mmol/L). Borderline high serum cholesterol is defined as greater than or equal to 200 mg/dL and less than 240 mg/dL. Assessments of the components of total cholesterol or lower

thresholds for high total cholesterol may be used for individuals with other risk factors for cardiovascular disease. (For more information on high cholesterol guidelines, see the Third Report of the Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III) Full Report. Available from: [http://www.nhlbi.nih.gov/guidelines/cholesterol/atp3\\_rpt.htm](http://www.nhlbi.nih.gov/guidelines/cholesterol/atp3_rpt.htm).) In *Health, United States*, the conservative threshold of 240 mg/dL is used to define high total serum cholesterol. Individuals who take medication to lower their serum cholesterol levels and whose measured total serum cholesterol levels are below the cut-offs for high and borderline high cholesterol, are not defined as having high or borderline cholesterol, respectively.

Venous blood serum samples that are collected from National Health and Nutrition Examination Survey (NHANES) participants at mobile examination centers are frozen and shipped on dry ice to the laboratory conducting the lipid analyses. Serum total cholesterol was measured on all examined adults regardless of whether they had fasted and data were analyzed regardless of fasting status. Cholesterol measurements are standardized according to the criteria of the CDC and later the CDC-National Heart, Lung, and Blood Institute Cholesterol Standardization Program to ensure comparable and accurate measurements (for more information, see Myers GL, Cooper GR, Winn CL, Smith SJ. The CDC-National, Heart, Lung, and Blood Institute Lipid Standardization Program. *Clin Lab Med* 1989;9(1):105–35). A detailed summary of the procedures used for measurement of total cholesterol in the earlier NHANES survey years has been published (see Johnson CL, Rifkind BM, Sempos CT,

**Table V. Cause-of-death codes, by applicable revision of *International Classification of Diseases (ICD)***

<i>Cause of death (Tenth Revision titles)</i>	<i>Sixth and Seventh Revisions</i>	<i>Eighth Revision</i>	<i>Ninth Revision</i>	<i>Tenth Revision</i>
Communicable diseases . . . . .	...	...	001–139, 460–466, 480–487, 771.3	A00–B99, J00–J22
Chronic and noncommunicable diseases . . . . .	...	...	140–459, 470–478, 490–799	C00–I99, J30–R99
Meningococcal Infection . . . . .	...	...	036	A39
Septicemia . . . . .	...	...	038	A40–A41
Human immunodeficiency virus (HIV) disease <sup>1</sup> . . . . .	...	...	*042–*044	B20–B24
Malignant neoplasms . . . . .	140–205	140–209	140–208	C00–C97
Colon, rectum, and anus . . . . .	153–154	153–154	153, 154	C18–C21
Trachea, bronchus, and lung . . . . .	162–163	162	162	C33–C34
Breast . . . . .	170	174	174–175	C50
Prostate . . . . .	177	185	185	C61
In situ neoplasms and benign neoplasms . . . . .	...	...	210–239	D00–D48
Diabetes mellitus . . . . .	260	250	250	E10–E14
Anemias . . . . .	...	...	280–285	D50–D64
Meningitis . . . . .	...	...	320–322	G00, G03
Alzheimer's disease . . . . .	...	...	331	G30
Diseases of heart . . . . .	6th: 410–443 7th: 400–402, 410–443	390–398, 402, 404, 410–429	390–398, 402, 404, 410–429	I00–I09, I11, I13, I20–I51
Ischemic heart disease . . . . .	...	...	410–414, 429.2	I20–I25
Cerebrovascular diseases . . . . .	330–334	430–438	430–434, 436–438	I60–I69
Atherosclerosis . . . . .	...	...	440	I70
Influenza and pneumonia . . . . .	480–483, 490–493	470–474, 480–486	480–487	J10–J18
Chronic lower respiratory diseases . . . . .	241, 501, 502, 527.1	490–493, 519.3	490–494, 496	J40–J47
Chronic liver disease and cirrhosis . . . . .	581	571	571	K70, K73–K74
Nephritis, nephrotic syndrome, and nephrosis . . . . .	...	...	580–589	N00–N07, N17–N19, N25–N27
Pregnancy, childbirth, and the puerperium . . . . .	640–689	630–678	630–676	A34, O00–O95, O98–O99
Congenital malformations, deformations, and chromosomal abnormalities . . . . .	...	...	740–759	Q00–Q99
Certain conditions originating in the perinatal period . . . . .	...	...	760–779	P00–P96
Newborn affected by maternal complications of pregnancy . . . . .	...	...	761	P01
Newborn affected by complications of placenta, cord, and membranes . . . . .	...	...	762	P02
Disorders related to short gestation and low birthweight, not elsewhere classified . . . . .	...	...	765	P07
Birth trauma . . . . .	...	...	767	P10–P15
Intrauterine hypoxia and birth asphyxia . . . . .	...	...	768	P20–P21
Respiratory distress of newborn . . . . .	...	...	769	P22
Sudden infant death syndrome . . . . .	...	...	798.0	R95
Injuries <sup>2</sup> . . . . .	...	...	E800–E869, E880–E929, E950–E999	*U01–*U03, V01–Y36, Y85–Y87, Y89

See footnotes at end of table.

**Table V. Cause-of-death codes, by applicable revision of *International Classification of Diseases (ICD)*—Con.**

Cause of death (Tenth Revision titles)	Sixth and Seventh Revisions	Eighth Revision	Ninth Revision	Tenth Revision
Unintentional injuries <sup>3</sup> . . . . .	E800–E936, E960–E965	E800–E929, E940–E946	E800–E869, E880–E929	V01–X59, Y85–Y86
Motor vehicle-related injuries <sup>3</sup> . . . . .	E810–E835	E810–E823	E810–E825	V02–V04, V09.0, V09.2, V12–V14, V19.0–V19.2, V19.4–V19.6, V20–V79, V80.3–V80.5, V81.0–V81.1, V82.0–V82.1, V83–V86, V87.0–V87.8, V88.0–V88.8, V89.0, V89.2
Suicide <sup>2</sup> . . . . .	E963, E970–E979	E950–E959	E950–E959	*U03, X60–X84, Y87.0
Homicide <sup>2</sup> . . . . .	E964, E980–E983	E960–E969	E960–E969	*U01–*U02, X85–Y09, Y87.1
Injury by firearms . . . . .		E922, E955, E965, E970, E985	E922, E955.0–E955.4, E965.0–E965.4, E970, E985.0–E985.4	*U01.4, W32–W34, X72–X74, X93–X95, Y22–Y24, Y35.0

. . . Cause-of-death code numbers are not provided for causes not shown in *Health, United States*.  
<sup>1</sup>Categories for coding human immunodeficiency virus infection were introduced in 1987. The asterisk (\*) indicates codes are not part of the Ninth Revision.  
<sup>2</sup>Starting with 2001 data, NCHS introduced categories \*U01–\*U03 for classifying and coding deaths due to acts of terrorism. The asterisk (\*) indicates codes are not part of the Tenth Revision.  
<sup>3</sup>In the public health community, the term unintentional injuries is preferred to accidents and motor vehicle-related injuries to motor vehicle accidents.  
**SOURCE:** Advance report of final mortality statistics, 1976. Monthly vital statistics report; vol 24 no 11, supp. Hyattsville, MD: NCHS. 1976. Available from: [http://www.cdc.gov/nchs/data/mvsr/supp/mv24\\_11sacc.pdf](http://www.cdc.gov/nchs/data/mvsr/supp/mv24_11sacc.pdf).  
Hoyert DL, Kochanek KD, Murphy SL. Deaths: Final Data for 1997. National vital statistics reports; vol 47 no. 19. Hyattsville, MD: NCHS. 1999. Available from: [http://www.cdc.gov/nchs/data/nvsr/nvsr47/nvs47\\_19.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr47/nvs47_19.pdf).  
Hoyert DL, Heron MP, Murphy SL, Kung H. Deaths: Final Data for 2003. National vital statistics reports; vol 54 no 13. Hyattsville, MD: NCHS. 2006. Available from: [http://www.cdc.gov/nchs/data/nvsr/nvsr54/nvsr54\\_13.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr54/nvsr54_13.pdf).

Carroll MD, Bachorik PS, Briefel RR, et al. Declining serum total cholesterol levels among U.S. adults: The National Health and Nutrition Examination Surveys. *JAMA* 1993;269(23):3002–8.) A description of the laboratory procedures for the total cholesterol measurement for different NHANES survey years is published by NCHS. Available from: <http://www.cdc.gov/nchs/nhanes.htm>.

**Chronic condition**—See [Condition](#).

**Cigarette smoking**—Cigarette smoking and related tobacco use are measured in several different data systems.

*Birth File*—Information on cigarette smoking by the mother during pregnancy is based on Yes/No responses to the birth certificate item “Other risk factors for this pregnancy: Tobacco use during pregnancy” and the average number of cigarettes per day with no specificity on timing during pregnancy. This information became available for the first time in 1989 with revision of the U.S. Standard Certificate of Live Birth. In 1989, 43 states and the District of Columbia (D.C.) collected data on

tobacco use. The following states did not require the reporting of tobacco use in the standard format on the birth certificate: California, Indiana, Louisiana, Nebraska, New York, Oklahoma, and South Dakota. In 1990, information on tobacco use became available from Louisiana and Nebraska, increasing the number of reporting states to 45 and D.C. In 1991–1993, with the addition of Oklahoma to the reporting area, information on tobacco use was available for 46 states and D.C.; in 1994–1998, 46 states, D.C., and New York City reported tobacco use; in 1999, information on tobacco use became available from Indiana and New York, increasing the number of reporting states to 48 and D.C.; starting in 2000, with the addition of South Dakota, the reporting area includes 49 states and D.C. During 1989–2005, California did not require the reporting of tobacco use. The area reporting tobacco use comprised 87% of U.S. births in 1999–2002. Starting in 2003, some states began implementation of the 2003 revision of the U.S. Standard Certificate of Live Birth. The 2003 revision asked for the number of cigarettes smoked at different

intervals before and during pregnancy. Tobacco use during pregnancy data from the 2003 revision of the birth certificate are not comparable with data from the 1989 revision. Therefore, 2004 and 2005 data on smoking are shown separately for the 38 state reporting area that continued to use the 1989 revision in 2005 and for the 7 state reporting area that implemented the 2003 revision by 2004, in order to provide 2 years of comparable data. The states that implemented the 2003 revision of the U.S. Standard Certificate of Live Birth are: starting in 2003, Pennsylvania and Washington, and starting in 2004, Idaho, Kentucky, New York state (excluding New York City), South Carolina, and Tennessee. Starting in 2005, the reporting area using the 2003 revision expanded to 13 states (data not shown), adding Florida, Kansas, Nebraska, New Hampshire, Texas, and Vermont (mid-year).

*Monitoring the Future Survey*—Information on current cigarette smoking is obtained for high school seniors (starting in 1975) and 8th and 10th graders (starting in 1991) based on the following question: “How frequently have you smoked cigarettes during the past 30 days?”

*National Health Interview Survey (NHIS)*—Information about cigarette smoking is obtained for adults 18 years of age and over. Starting in 1993, current smokers are identified by asking the following two questions: “Have you smoked at least 100 cigarettes in your entire life?” and “Do you now smoke cigarettes every day, some days, or not at all?” Persons who smoked 100 cigarettes and who now smoke every day or some days are defined as current smokers. Before 1992, current smokers were identified based on positive responses to the following two questions: “Have you smoked 100 cigarettes in your entire life?” and “Do you smoke now?” (traditional definition). In 1992, the definition of current smoker in the NHIS was modified to specifically include persons who smoked on some days (revised definition). In 1992, cigarette smoking data were collected for a half-sample with half the respondents (one-quarter sample) using the traditional smoking questions and the other half of respondents (one-quarter sample) using the revised smoking question (“Do you smoke every day, some days, or not at all?”). An unpublished analysis of the 1992 traditional smoking measure revealed that the crude percentage of current smokers 18 years of age and over remained the same as for 1991. The estimates

for 1992 combine data collected using the traditional and the revised questions.

In 1993–1995, estimates of cigarette smoking prevalence were based on a half-sample. Smoking data were not collected in 1996. Starting in 1997, smoking data were collected in the sample adult questionnaire. For further information on survey methodology and sample sizes pertaining to the NHIS cigarette smoking data for data years 1965–1992 and other sources of cigarette smoking data available from the NCHS, see NCHS. *Bibliographies and Data Sources, Smoking Data Guide*, no 1, DHHS pub no (PHS) 91–1308–1, Public Health Service. Washington, DC: U.S. Government Printing Office. 1991; and the National Health Interview Survey tobacco information website, available from: [http://www.cdc.gov/nchs/about/major/nhis/tobacco/nhis\\_tobhoma.htm](http://www.cdc.gov/nchs/about/major/nhis/tobacco/nhis_tobhoma.htm).

*National Survey on Drug Use & Health (NSDUH)*—Information on current cigarette smoking is obtained for all persons surveyed who are 12 years of age and over based on the following question: “During the past 30 days, have you smoked part or all of a cigarette?”

*Youth Risk Behavior Survey*—Information on current cigarette smoking is obtained from high school students (starting in 1991) based on the following question: “During the past 30 days, on how many days did you smoke cigarettes?”

**Civilian noninstitutionalized population; Civilian population**—See [Population](#).

**Community hospital**—See [Hospital](#).

**Comparability ratio**—About every 10–20 years the *International Classification of Diseases (ICD)* is revised to stay abreast of advances in medical science and changes in medical terminology. Each of these revisions produces breaks in the continuity of cause-of-death statistics. Discontinuities across revisions are due to changes in classification and rules for selecting underlying cause of death. Classification and rule changes affect cause-of-death trend data by shifting deaths away from some cause-of-death categories and into others. Comparability ratios measure the effect of changes in classification and coding rules. For causes shown in [Table VI](#), comparability ratios range between 0.6974 and 1.1404. Influenza and pneumonia had the lowest comparability ratio (0.6974), indicating that influenza and pneumonia is about



30% less likely to be selected as the underlying cause of death in ICD-10 than in ICD-9. Pregnancy, childbirth, and the puerperium had the highest comparability ratio (1.1404), indicating that pregnancy is more than 14% more likely to be selected as the underlying cause using ICD-10 coding.

For selected causes of death, the ICD-9 codes used to calculate death rates for 1980 through 1998 differ from the ICD-9 codes most nearly comparable with the corresponding ICD-10 cause-of-death category, which also affects the ability to compare death rates across ICD revisions. Examples of these causes are ischemic heart disease; cerebrovascular diseases; trachea, bronchus and lung cancer; unintentional injuries; and homicide. To address this source of discontinuity, mortality trends for 1980–1998 were recalculated, using ICD-9 codes that are more comparable with codes for corresponding ICD-10 categories. [Table V](#) shows the ICD-9 codes used for these causes. This modification may lessen the discontinuity between the Ninth and Tenth Revisions, but the effect on the discontinuity between the Eighth and Ninth Revisions is not measured.

Comparability ratios shown in [Table VI](#) are based on a comparability study in which the same deaths were coded by both the Ninth and Tenth Revisions. The comparability ratio was calculated by dividing the number of deaths classified by ICD-10 by the number of deaths classified by ICD-9. The resulting ratios represent the net effect of the Tenth Revision on cause-of-death statistics and can be used to adjust mortality statistics for causes of death classified by the Ninth Revision to be comparable with cause-specific mortality statistics classified by the Tenth Revision.

The application of comparability ratios to mortality statistics helps make the analysis of change between 1998 and 1999 more accurate and complete. The 1998 comparability-modified death rate is calculated by multiplying the comparability ratio by the 1998 death rate. Comparability-modified rates should be used to estimate mortality change between 1998 and 1999.

Caution should be taken when applying the comparability ratios presented in [Table VI](#) to age-, race-, and sex-specific mortality data. Demographic subgroups may sometimes differ with regard to their cause-of-death distribution, and this would result in demographic variation in cause-specific comparability ratios.

For more information, see Anderson RN, Miniño AM, Hoyert DL, Rosenberg HM. Comparability of cause of death between

**Table VI. Comparability of selected causes of death between the Ninth and Tenth Revisions of the *International Classification of Diseases (ICD)***

<i>Cause of death</i> <sup>1</sup>	<i>Final comparability ratio</i> <sup>2</sup>
Human immunodeficiency virus (HIV) disease . . .	1.0821
Malignant neoplasms . . . . .	1.0093
Colon, rectum, and anus . . . . .	0.9988
Trachea, bronchus, and lung . . . . .	0.9844
Breast . . . . .	1.0073
Prostate . . . . .	1.0144
Diabetes mellitus . . . . .	1.0193
Diseases of heart . . . . .	0.9852
Ischemic heart diseases . . . . .	1.0006
Cerebrovascular diseases . . . . .	1.0502
Influenza and pneumonia . . . . .	0.6974
Chronic lower respiratory diseases . . . . .	1.0411
Chronic liver disease and cirrhosis . . . . .	1.0321
Pregnancy, childbirth, and the puerperium . . . . .	1.1404
Unintentional injuries . . . . .	1.0251
Motor vehicle-related injuries . . . . .	0.9527
Suicide . . . . .	1.0022
Homicide . . . . .	1.0020
Injury by firearms . . . . .	1.0012
Chronic and noncommunicable diseases . . . . .	1.0100
Injuries . . . . .	1.0159
Communicable diseases . . . . .	0.8582
HIV disease . . . . .	1.0821
Other communicable diseases . . . . .	0.7997

<sup>1</sup>See [Table V](#) for ICD-9 and ICD-10 cause-of-death codes.

<sup>2</sup>Ratio of number of deaths classified by ICD-10 to number of deaths classified by ICD-9.

**SOURCE:** NCHS. Final comparability ratios for 113 selected causes of death. Available from: [ftp://ftp.cdc.gov/pub/Health\\_Statistics/NCHS/Datasets/Comparability/icd9\\_icd10/Comparability\\_Ratio\\_tables.xls](ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Datasets/Comparability/icd9_icd10/Comparability_Ratio_tables.xls).

ICD-9 and ICD-10: Preliminary estimates; Kochanek KD, Smith BL, Anderson RN. Deaths: Preliminary data for 1999. National vital statistics reports; vol 49 no 2 and vol 49 no 3. Hyattsville, MD: NCHS. 2001; and Final ratios for 113 selected causes of death. Available from: [ftp://ftp.cdc.gov/pub/Health\\_Statistics/NCHS/Datasets/Comparability/icd9\\_icd10/](ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Datasets/Comparability/icd9_icd10/). See related [Cause of death; International Classification of Diseases \(ICD\); Tables IV, V, and VI](#).

**Compensation**—See [Employer costs for employee compensation](#).

**Computed tomography scanner**—A CT or CAT scanner is an x-ray machine that combines many x-ray images with the aid of a computer to generate cross-sectional views and, if

needed, three-dimensional images of the internal organs and structures of the body.

**Condition**—A health condition is a departure from a state of physical or mental well-being. In the National Health Interview Survey, each condition reported as a cause of an individual's activity limitation has been classified as chronic, not chronic, or unknown if chronic, based on the nature and duration of the condition. Conditions that are not cured once acquired (such as heart disease, diabetes, and birth defects in the original response categories, and amputee and old age in the ad hoc categories) are considered chronic, whereas conditions related to pregnancy are always considered not chronic. In addition, other conditions must have been present 3 months or longer to be considered chronic. An exception is made for children less than 1 year of age who have had a condition since birth, as these conditions are always considered chronic.

**Consumer Price Index (CPI)**—The CPI is prepared by the U.S. Bureau of Labor Statistics. It is a monthly measure of the average change in the prices paid by urban consumers for a fixed market basket of goods and services. The medical care component of CPI shows trends in medical care prices based on specific indicators of hospital, medical, dental, and drug prices. A revision of the definition of CPI has been in use since January 1988. See related [Gross domestic product \(GDP\)](#); [Health expenditures, national](#); [Appendix I, Consumer Price Index](#).

**Contraception**—The National Survey of Family Growth collects information on contraceptive use as reported by women 15–44 years of age, during heterosexual vaginal intercourse. For current contraceptive use, women were asked about contraceptive use during the month of interview. Women were classified by whether they reported using each of 19 methods of contraception at any time in the month of interview. Contraceptive methods listed as other methods include the following: for 2002, the female condom, foam, cervical cap, Today Sponge®, suppository or insert, jelly or cream, or other method; for 1995, the female condom or vaginal pouch, foam, cervical cap, Today Sponge®, suppository or insert, jelly or cream, or other method; for 1988, foam, douche, Today Sponge®, suppository or insert, jelly or cream, or other method; and for 1982, foam, douche, suppository or insert, or other method.

**Crude birth rate; Crude death rate**—See [Rate: Birth and related rates](#); [Rate: Death and related rates](#).

**Days of care**—Days of care is defined similarly in different data systems. See related [Admission](#); [Average length of stay](#); [Discharge](#); [Hospital](#); [Hospital utilization](#); [Inpatient](#).

*American Hospital Association*—Days, hospital days, or inpatient days are the number of adult and pediatric days of care rendered during the entire reporting period. Days of care for newborns are excluded.

*National Health Interview Survey (NHIS)*—Hospital days during the year refer to the total number of hospital days occurring in the 12-month period before the interview week. A hospital day is a night spent in the hospital for persons admitted as inpatients. Starting in 1997, hospitalization data from NHIS are for all inpatient stays, whereas estimates for prior years published in previous editions of *Health, United States* excluded hospitalizations for deliveries and newborns.

*National Hospital Discharge Survey*—Days of care refers to the total number of patient days accumulated by inpatients at the time of discharge from nonfederal short-stay hospitals during a reporting period. All days from and including the date of admission but not including the date of discharge are counted.

**Death rate**—See [Rate: Death and related rates](#).

**Dental caries**—Dental caries is evidence of dental decay on any surface of a tooth. Untreated dental caries was determined by an oral examination conducted by a trained dentist as part of the National Health and Nutrition Examination Survey. In *Health, United States*, untreated dental caries refers to coronal caries, that is, caries on the crown or enamel surface of the tooth. Treated dental caries and root caries are not included. Study participants 2 years of age and over were eligible for the examination, as long as they did not meet other exclusion criteria. Both permanent and primary (or baby) teeth were evaluated, depending on the age of the participant. For children 2–5 years of age, only caries in primary teeth was included. For children 6–11 years of age, caries in both primary and permanent teeth was included. For children 12 years of age and over, and for adults, only caries in permanent teeth was included.



**Dental visit**—Starting in 1997, National Health Interview Survey respondents were asked “About how long has it been since you last saw or talked to a dentist? Include all types of dentists, such as orthodontists, oral surgeons, and all other dental specialists as well as hygienists.” Starting in 2001, the question was modified slightly to ask respondents how long it had been since they last saw a dentist. Questions about dental visits were not asked for children under 2 years of age for years 1997–1999 and under 1 year of age for 2000 and beyond. Starting with 1997 data, estimates are presented for people with a dental visit in the past year. Prior to 1997, dental visit estimates were based on a 2-week recall period.

**Diagnosis**—Diagnosis is the act or process of identifying or determining the nature and cause of a disease or injury through evaluation of patient history, examination, and review of laboratory data. Diagnoses in the National Hospital Discharge Survey, the National Ambulatory Medical Care Survey, the National Hospital Ambulatory Medical Care Survey, and the National Nursing Home Survey are abstracted from medical records and coded to the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD–9–CM). For a given medical care encounter, the first-listed diagnosis can be used to categorize the visit, or if more than one diagnosis is recorded on the medical record, the visit can be categorized based on all diagnoses recorded. Analyzing first-listed diagnoses avoids double-counting events such as visits or hospitalizations; the first-listed diagnosis is often, but not always, considered the most important or dominant condition among all comorbid conditions. For example, a hospital discharge would be considered a first-listed stroke discharge if the ICD–9–CM diagnosis code for stroke was recorded in the first diagnosis field on the hospital record. An any-listed stroke discharge would classify all diagnoses of stroke recorded regardless of the order in which they are listed on the hospital face sheet. Any-listed diagnoses double count events such as visits or hospitalizations with more than one recorded diagnosis but provide information on the burden a specific diagnosis presents to the health care system. See related [External cause of injury](#); [Injury](#); [Injury-related visit](#).

**Diagnostic and other nonsurgical procedure**—See [Procedure](#).

**Dietary supplement**—A dietary supplement is a product that contains one or more dietary ingredients, such as vitamins, minerals, botanicals, or amino acids. Data on dietary

supplement use come from the National Health and Nutrition Examination Survey (NHANES). During the in-person household interviews, participants were asked about their use of vitamins, minerals, herbals, or other dietary supplements (including prescription and non-prescription products) in the past month. Participants reporting supplement use were asked to show the supplement containers to the interviewer. If no container was available, the interviewer asked the participant for a detailed name of the supplement. For each supplement reported, the interviewer recorded the supplement's name and manufacturer. Trained nutritionists at NCHS match the product names entered by the interviewer to a known dietary supplement product. NCHS attempts to obtain a label for each supplement reported by a participant from sources such as the manufacturer or retailer, the internet, company catalogs, and the Physician's Desk Reference. In *Health, United States*, three measures of dietary supplement use are included: taking any supplement, taking any supplement containing folate or folic acid, and taking any supplement containing vitamin D (or cholecalciferol, calciferol, ergocalciferol, or calcitriol).

For more information on dietary supplement data in NHANES, see <http://www.cdc.gov/nchs/nhanes.htm> or [http://www.cdc.gov/nchs/data/nhanes/nhanes\\_01\\_02/dsq\\_b\\_doc.pdf](http://www.cdc.gov/nchs/data/nhanes/nhanes_01_02/dsq_b_doc.pdf).

For more information on dietary supplements, see the web page for the Office of Dietary Supplements, National Institutes of Health, <http://ods.od.nih.gov/index.aspx>.

**Discharge**—The National Health Interview Survey defines a hospital discharge as the completion of any continuous period of stay of one night or more in a hospital as an inpatient. According to the National Hospital Discharge Survey, a discharge is a completed inpatient hospitalization. A hospitalization may be completed by death or by releasing the patient to the customary place of residence, a nursing home, another hospital, or other locations. See related [Admission](#); [Average length of stay](#); [Days of care](#); [Inpatient](#).

**Domiciliary care home**—See [Long-term care facility](#); [Nursing home](#).

**Drug abuse**—See [Illicit drug use](#).

**Drug**—Drugs are pharmaceutical agents—by any route of administration—for prevention, diagnosis, or treatment of medical conditions or diseases. Data on specific drug use are collected in three NCHS surveys.

*National Ambulatory Medical Care Survey (NAMCS)* and *National Hospital Ambulatory Medical Care Survey (NHAMCS)*—Data collection in the NAMCS and NHAMCS outpatient and emergency department components is from the medical record of an in person physician office, or hospital outpatient or emergency department visit, rather than from the patient. Generic or brand name drugs are abstracted from the medical record, including prescription and over-the-counter drugs, immunizations, allergy shots, and anesthetics that were prescribed, ordered, supplied, administered, or continued during the visit. Prior to 1995, up to five drugs per visit could be reported on the patient record form; in data years 1995 and beyond, up to six drugs could be reported. Starting with data year 2003, up to eight drugs could be reported, as well as a count of the total number of drugs prescribed, ordered, supplied, administered, or continued during the visit.

For more information on drugs collected by the NAMCS and NHAMCS, see the NAMCS drug database, available from: <http://www.cdc.gov/nchs/about/major/ahcd/ambulatory.htm>, or [ftp://ftp.cdc.gov/pub/Health\\_Statistics/NCHS/Dataset\\_Documentation/NAMCS/doc01.pdf](ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/NAMCS/doc01.pdf). For more information on how drugs are classified into therapeutic use categories, See [National Drug Code \(NDC\) Directory therapeutic class](#). See related [Appendix I, National Ambulatory Medical Care Survey](#) and [National Hospital Ambulatory Medical Care Survey](#).

*National Health and Nutrition Examination Survey (NHANES)*—Drug information from NHANES III and 1999–2004 NHANES was collected during an in person interview conducted in the participant's home.

Participants were asked whether they had taken a medication in the past month for which they needed a prescription. Those who answered “yes” were asked to produce the prescription medication containers for the interviewer. For each medication reported, the interviewer entered the product's complete name from the container. If no container was available, the interviewer asked the participant to verbally report the name of the medication. In addition, participants were asked how long they had been taking the medication and the main reason for use.

All reported medication names were converted to their standard generic ingredient name. For multi-ingredient products, the ingredients were listed in alphabetical order

and counted as one drug (e.g., Tylenol #3 was listed as Acetaminophen; Codeine). No trade or proprietary names are provided on the data file.

Drug data from NHANES provide a snapshot of all prescribed drugs reported by a sample of the civilian noninstitutionalized population for a 1-month period. Drugs taken on an irregular basis such as every other day, once per week, or for a 10 day period, etc. were captured in the 1-month recall period. Data shown in *Health, United States* for the percentage of the population reporting three or more prescription drugs during the past month include a range of drug utilization patterns—for example, persons who took three or more drugs on a daily basis during the past month or persons who took a different drug three separate times—as long as at least three different drugs were taken during the past month.

For more information on prescription drug data collection and coding in the NHANES 1999–2004, see: [http://www.cdc.gov/nchs/data/nhanes/frequency/rxq\\_rxdoc.pdf](http://www.cdc.gov/nchs/data/nhanes/frequency/rxq_rxdoc.pdf). For more information on NHANES III prescription drug data collection and coding, see: <http://www.cdc.gov/nchs/data/nhanes/nhanes3/PUPREMED-acc.pdf>. See related [Appendix I, National Health and Nutrition Examination Survey](#).

**Education**—Several approaches to defining educational categories are used in this report. In survey data, educational categories are based on information about educational credentials, such as diplomas and degrees. In vital statistics, educational attainment is based on years of school completed.

*Birth File*—Information on educational attainment of mother is based on number of years of school completed, as reported by the mother on the birth certificate. Between 1970 and 1992, the reporting area for maternal education expanded.

Mother's education was reported on the birth certificate by 38 states in 1970. Data were not available from Alabama, Arkansas, California, Connecticut, Delaware, the District of Columbia (D.C.), Georgia, Idaho, Maryland, New Mexico, Pennsylvania, Texas, and Washington. In 1975, these data became available from Connecticut, Delaware, Georgia, Maryland, and D.C., increasing the number of states reporting mother's education to 42 and

D.C. Between 1980 and 1988, only three states, California, Texas, and Washington, did not report mother's education. In 1988, mother's education was also missing from New York state outside New York City. In 1989–1991, mother's education was missing only from Washington and New York state outside New York City. During 1992–2002, mother's education was reported by all 50 states and D.C. Starting in 2003, some states began implementation of the 2003 revision of the U.S. Standard Certificate of Live Birth. The education item on the 2003 revision asks for the highest degree or level of school completed whereas the education item on the 1989 revision asks for highest grade completed. Data from the 1989 and 2003 certificate items on educational attainment are too dissimilar to be reliably combined. Therefore, 2004 and 2005 data on mother's education are shown separately for the 39 state reporting area that continued to use the 1989 revision in 2005 and for the 7 state reporting area that implemented the 2003 revision by 2004, in order to provide 2 years of comparable data. The states that implemented the 2003 revision of the U.S. Standard Certificate of Live Birth are: starting in 2003, Pennsylvania and Washington, and starting in 2004, Idaho, Kentucky, New York state (excluding New York City), South Carolina, and Tennessee. Starting in 2005, the reporting area using the 2003 revision expanded to 13 states (data not shown in tables), adding Florida, Kansas, Nebraska, New Hampshire, Texas, and Vermont (mid-year).

*Mortality File*—Information on educational attainment of decedent became available for the first time in 1989 because of a revision of the U.S. Standard Certificate of Death. Decedent's educational attainment is reported on the death certificate by the funeral director based on information provided by an informant such as next of kin. Mortality data by educational attainment for 1989 were based on data from 20 states and by 1994–1996, increased to 45 states and the District of Columbia (D.C.). In 1994–1996, either the following states did not report educational attainment on the death certificate or the information was more than 20% incomplete: Georgia, Kentucky, Oklahoma, Rhode Island, and South Dakota. In 1997–2000, information on decedent's education was available from Oklahoma, increasing the reporting area to 46 states and D.C. With the addition of Kentucky, the reporting area increased to 47 states and D.C. in 2001

and 2002. The U.S. Standard Certificate of Death was revised in 2003; states are adopting this new certificate on a rolling basis. Starting with 2003 data, California, Idaho, Montana, and New York implemented the 2003 revision. In addition to these four states, starting with 2004 data, Connecticut, Georgia, Michigan, New Hampshire, New Jersey, Oklahoma, Rhode Island, South Dakota, Washington, and Wyoming have adopted the 2003 certificate. Starting with 2005 data, the District of Columbia, Florida, Kansas, Nebraska, South Carolina, and Utah are excluded, in addition to the 12 states already listed. Data for Georgia and Rhode Island are excluded because the educational attainment item was not on their certificates. Data for South Dakota were excluded prior to its adoption of the 2003 revision because the educational attainment item was not on its death certificate. Educational attainment data from the revised death certificate are not comparable with educational attainment data collected using the 1989 revision of the U.S. Standard Certificate of Death. Therefore, deaths in states adopting the revised death certificate are excluded from educational attainment mortality data beginning with 2003. Because of different education profiles of the excluded states compared with the remaining states and D.C., 2003 and subsequent data are not directly comparable to earlier years. For more information on the revised educational attainment item, see the technical notes of Kung H-C, Hoyert DL, Xu JQ, Murphy SL. Deaths: Final data for 2005. National vital statistics reports; vol 56 no 10. Hyattsville, MD: NCHS. 2008. Available from: [http://www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56\\_10.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56_10.pdf).

Calculation of unbiased death rates by educational attainment based on the National Vital Statistics System requires that the reporting of education on the death certificate be complete and consistent with the reporting of education on the Current Population Survey (CPS), the source of population estimates for denominators for death rates. Death records that are missing information about decedent's education are not included in the calculation of rates. Therefore, the levels of death rates by educational attainment shown in this report are underestimated by approximately the percentage with not stated education, which ranges from 2%–9%.

The validity of information about the decedent's education was evaluated by comparing self-reported

education obtained in the CPS with education on the death certificate for decedents in the National Longitudinal Mortality Survey (NLMS). (Sorlie PD, Johnson NJ. Validity of education information on the death certificate. *Epidemiology* 1996;7(4):437–9.) Another analysis compared self-reported education collected in the first National Health and Nutrition Examination Survey (NHANES I) with education on the death certificate for decedents in the NHANES I Epidemiologic Followup Study. (Makuc DM, Feldman JJ, Mussolino ME. Validity of education and age as reported on death certificates. *American Statistical Association*. 1996 Proceedings of the Social Statistics Section 102–6.) Results of both studies indicated that there is a tendency for some people who did not graduate from high school to be reported as high school graduates on the death certificate. This tendency results in overstating the death rate for high school graduates and understating the death rate for the group with less than 12 years of education. The bias was greater among older than younger decedents and somewhat greater among black than white decedents.

In addition, educational gradients in death rates based on the National Vital Statistics System were compared with those based on the NLMS, a prospective study of persons in the CPS. Results of these comparisons indicate that educational gradients in death rates based on the National Vital Statistics System were reasonably similar to those based on NLMS for white persons 25–64 years of age and black persons 25–44 years of age. The number of deaths for persons of Hispanic origin in NLMS was too small to permit comparison for this ethnic group. For further information on measurement of education, see Kominski R, Siegel PM. Measuring education in the Current Population Survey. *Monthly Labor Review* September 1993; 34–8.

*National Health Interview Survey (NHIS)*—Starting in 1997, the NHIS questionnaire was changed to ask “What is the highest level of school \_\_\_ has completed or the highest degree received?” Responses were used to categorize adults according to educational credentials (e.g., no high school diploma or general educational development (GED) high school equivalency diploma; high school diploma or GED; some college, no bachelor’s degree; bachelor’s degree or higher).

Prior to 1997, the education variable in NHIS was measured by asking, “What is the highest grade or year of regular school \_\_\_ has ever attended?” and “Did \_\_\_ finish the grade/year?” Responses were used to categorize adults according to years of education completed (e.g., less than 12 years, 12 years, 13–15 years, and 16 or more years).

Data from the 1996 and 1997 NHIS were used to compare distributions of educational attainment for adults 25 years of age and over using categories based on educational credentials (1997) with categories based on years of education completed (1996). A larger percentage of persons reported some college than 13–15 years of education and a correspondingly smaller percentage reported high school diploma or GED than 12 years of education. In 1997, 19% of adults reported no high school diploma, 31% a high school diploma or GED, 26% some college, and 24% a bachelor’s degree or higher. In 1996, 18% of adults reported less than 12 years of education, 37% reported 12 years of education, 20% 13–15 years, and 25% 16 or more years of education.

**Emergency department**—According to the National Hospital Ambulatory Medical Care Survey, an emergency department is a hospital facility that provides unscheduled outpatient services to patients whose conditions require immediate care and is staffed 24 hours a day. Off-site emergency departments open less than 24 hours are included if staffed by the hospital’s emergency department. See related [Emergency department or emergency room visit](#); [Outpatient department](#).

**Emergency department or emergency room visit**—Starting with the 1997 National Health Interview Survey, respondents to the sample adult and sample child questionnaires (generally the parent) were asked about the number of visits to hospital emergency rooms during the past 12 months, including visits that resulted in hospitalization. In the National Hospital Ambulatory Medical Care Survey, an emergency department visit is a direct personal exchange between a patient and a physician or other health care providers working under the physician’s supervision, for the purpose of seeking care and receiving personal health services. See related [Emergency department](#); [Injury-related visit](#).



**Employer costs for employee compensation**—This is a measure of the average cost per employee hour worked to employers for wages and salaries and benefits. Wages and salaries are defined as the hourly straight-time wage rate or, for workers not paid on an hourly basis, straight-time earnings divided by the corresponding hours. Straight-time wage and salary rates are total earnings before payroll deductions, excluding premium pay for overtime and for work on weekends and holidays, shift differentials, nonproduction bonuses, and lump-sum payments provided in lieu of wage increases. Production bonuses, incentive earnings, commission payments, and cost-of-living adjustments are included in straight-time wage and salary rates. Benefits covered are paid leave—paid vacations, holidays, sick leave, and other leave; supplemental pay—premium pay for overtime and work on weekends and holidays, shift differentials, nonproduction bonuses, and lump-sum payments provided in lieu of wage increases; insurance benefits—life, health, and sickness and accident insurance; retirement and savings benefits—pension and other retirement plans and savings and thrift plans; legally required benefits—Social Security, railroad retirement and supplemental retirement, railroad unemployment insurance, federal and state unemployment insurance, workers' compensation, and other benefits required by law, such as state temporary disability insurance; and other benefits—severance pay and supplemental unemployment plans. See related [Appendix I, National Compensation Survey](#).

**End-stage renal disease**—End-stage renal disease (ESRD) or end-stage kidney disease is a complete or near complete failure of the kidneys to function to excrete wastes, concentrate urine, and regulate electrolytes. End-stage renal disease occurs when the kidneys are no longer able to function at a level that is necessary for day to day life. It usually occurs as chronic renal failure worsens to the point where kidney function is less than 10% of normal. At this point, the kidney function is so low that without dialysis or kidney transplantation, complications are multiple and severe, and death will occur from accumulation of fluids and waste products in the body. Without treatment, the loss of kidney function in ESRD is usually irreversible and permanent, and death follows.

Although the Medicare program covers the majority of ESRD-certified patients, not all individuals with ESRD are eligible for Medicare. In addition to ESRD, one of the following criteria must be met:

1. The individual must meet the required work credits under Social Security, Railroad Retirement, or as a government employee
2. The individual is receiving Social Security or Railroad Retirement benefits
3. The individual is the spouse or dependent child of a person who has met the required work credits or is receiving Social Security or Railroad Retirement benefit.

The United States Renal Data Network has tracked both Medicare-eligible and ineligible ESRD patients since May, 1995.

See [Appendix I, United States Renal Data System](#).

**Ethnicity**—See [Hispanic origin](#).

**Exercise**—See [Physical activity, leisure-time](#).

**Expenditures**—See [Health expenditures, national](#); [Appendix I, National Health Expenditure Accounts](#).

**External cause of injury**—The external cause of injury is used for classifying the circumstances in which injuries occur. The ICD-9 External Cause Matrix is a two-dimensional array describing both the mechanism or external cause of the injury (e.g., fall, motor vehicle traffic) and the manner or intent of the injury (e.g., self inflicted or assault). Although this matrix was originally developed for mortality, it has been adapted for use with the ICD-9-CM. For more information, see the NCHS website: <http://www.cdc.gov/nchs/about/otheract/injury/tools.htm>; and Bergen G, Chen LH, Warner M, Fingerhut LA. Injury in the United States: 2007 Chartbook. Hyattsville, MD: NCHS. 2008. Available from: <http://www.cdc.gov/nchs/data/misc/injury2007.pdf>.

**Family income**—For purposes of the National Health Interview Survey and the National Health and Nutrition Examination Survey, all people within a household related to each other by blood, marriage, or adoption constitute a family. Each member of a family is classified according to the total income of the family. Unrelated individuals are classified according to their own income.

*National Health Interview Survey (NHIS)*—In the NHIS (prior to 1997), family income was the total income received by members of a family (or by an unrelated individual) in the 12 months before the interview. Starting in 1997, the NHIS collected family income data for the

calendar year prior to the interview (e.g., 2006 family income data were based on calendar year 2005 information). Family income includes wages, salaries, rents from property, interest, dividends, profits and fees from their own businesses, pensions, and help from relatives. Family income data are used in the computation of poverty level. Starting with *Health, United States, 2004* a new methodology for imputing family income data for NHIS data was implemented for data years 1997 and beyond. Multiple imputations were performed for survey years 1997 and beyond with five sets of imputed values created to allow for the assessment of variability caused by imputation. Family income was missing for 24%–29% of persons in 1997–1998 and 31%–35% in 1999–2006. A detailed description of the multiple imputation procedure and data files for 1997 and beyond are available from: [http://www.cdc.gov/nchs/about/major/nhis/quest\\_data\\_related\\_1997\\_forward.htm](http://www.cdc.gov/nchs/about/major/nhis/quest_data_related_1997_forward.htm) via the data release or imputed income files link under that year. For data years 1990–1996, about 16%–18% of persons had missing data for family income. In those years, missing values were imputed for family income using a sequential hot deck within matrix cells imputation approach. A detailed description of the imputation procedure and data files with imputed annual family income for 1990–1996 are available from: [ftp://ftp.cdc.gov/pub/Health\\_Statistics/NCHS/Datasets/NHIS/1990-96\\_Family\\_Income/](ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Datasets/NHIS/1990-96_Family_Income/) and [ftp://ftp.cdc.gov/pub/Health\\_Statistics/NCHS/Dataset\\_Documentation/NHIS/1990-96\\_Family\\_Income/](ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/NHIS/1990-96_Family_Income/).

*National Health and Nutrition Examination Survey (NHANES)*—In the NHANES 1999 and onward, family income is asked in a series of questions about possible sources of income, including wages, salaries, interest and dividends, federal programs, child support, rents, royalties, and other possible sources of income. After the information about sources of income was obtained in the family interview income section of the questionnaire, the respondent was asked to report total combined family income for themselves and the other members of their family, in dollars. If the respondent did not provide an answer or did not know the total combined family income, they were asked if the total family income was less than \$20,000 or \$20,000 or more. If the respondent answered, a follow-up question asked the respondent to

select an income range from a list on a printed hand card. The midpoint of the income range was then used as the total family income value. Family income values were used to calculate the poverty income ratio. NHANES III did not ask the detailed components of income questions but asked respondents to identify their income based on a set of ranges provided on a flash card, whereas NHANES II did include questions on components of income. Family income was not imputed for individuals or families with no reported income information in any of the NHANES survey years. See related [Poverty](#).

**Federal hospital**—See [Hospital](#).

**Fee-for-service health insurance**—This is private (commercial) health insurance that reimburses health care providers on the basis of a fee for each health service provided to the insured person. It is also known as indemnity health insurance. Medicare Parts A and B are sometimes referred to as Medicare fee-for-service. See related [Health insurance coverage](#); [Medicare](#).

**Fertility rate**—See [Rate: Birth and related rates](#).

**Foreign-born population**—The U.S. Census Bureau uses the term foreign born to refer to anyone who is not a U. S. citizen at birth. This includes naturalized U.S. citizens, lawful permanent residents (immigrants), temporary migrants (such as foreign students), humanitarian migrants (such as refugees), and persons illegally present in the United States. Prior to 1994, the foreign-born population data were enumerated from the decennial census, which was the sole source for the foreign-born population data. In order to obtain more timely data, starting with 1994, the basic and monthly Current Population Survey (CPS) began including questions on nativity of respondent and parental nativity, citizenship status, and year of entry into the United States. Whereas the universe for the decennial census is the entire resident population of the United States., the universe for the CPS is the civilian noninstitutionalized population plus Armed Forces living off post or with their families on post. Therefore, foreign-born persons in institutional settings such as nursing homes or prisons are not included in the CPS count. Estimates of the foreign-born population data starting with data year 1994 are not directly comparable to the foreign-born population data estimated from the decennial census (1970, 1980, and 1990 data in this report) because of

these differences in the population denominators. See related [Population](#); [Appendix I, Current Population Survey](#); [Population Census and Population Estimates](#).

**General hospital**—See [Hospital](#).

**General hospital providing separate psychiatric services**—See [Mental health organization](#).

**Geographic region and division**—The U.S. Census Bureau groups the 50 states and the District of Columbia for statistical purposes into four geographic regions—Northeast, Midwest, South, and West—and nine divisions, based on geographic proximity. See [Figure I](#).

The Department of Commerce's Bureau of Economic Analysis (BEA) groups states into eight regions based on their homogeneity with respect to income characteristics, industrial composition of the employed labor force, and such noneconomic factors as demographic, social, and cultural characteristics. See [Figure II](#).

Three U.S. Census Bureau divisions—West North Central, East North Central, and New England—and three BEA regions—Plains, Great Lakes, and New England—are composed of the same states. The states composing the remaining Census Bureau divisions differ from those composing the corresponding BEA regions.

**Gestation**—For the National Vital Statistics System and the CDC's Abortion Surveillance, the period of gestation is defined as beginning with the first day of the last normal menstrual period and ending with the day of birth or day of termination of pregnancy.

**Gross domestic product (GDP)**—GDP is the market value of the goods and services produced by labor and property located in the United States. As long as the labor and property are located in the United States, the suppliers (i.e., the workers and, for property, the owners) may be U.S. residents or residents of other countries. See related [Consumer Price Index \(CPI\)](#); [Health expenditures, national](#).

**Health care contact**—Starting in 1997, the National Health Interview Survey collects information on health care contacts with doctors and other health care professionals using the following questions: "During the past 12 months, how many times have you gone to a hospital emergency room about your own health?", "During the past 12 months, did you receive care at home from a nurse or other health care

professional? What was the total number of home visits received?", and "During the past 12 months, how many times have you seen a doctor or other health care professional about your own health at a doctor's office, a clinic, or some other place? Do not include times you were hospitalized overnight, visits to hospital emergency rooms, home visits, or telephone calls." Starting with 2000 data, this question was amended to exclude dental visits also. For each question respondents were shown a flash card with response categories of 0, 1, 2–3, 4–9, 10–12, or 13 or more visits in 1997–1999. Starting with 2000 data, response categories were expanded to 0, 1, 2–3, 4–5, 6–7, 8–9, 10–12, 13–15, or 16 or more. Analyses of the percentage of persons with health care visits were tabulated as follows: For tabulation of the 1997–1999 data, responses of 2–3 were recoded to 2, and responses of 4–9 were recoded to 6. Starting with 2000 data, tabulation of responses of 2–3 were recoded to 2, and other responses were recoded to the midpoint of the range. A summary measure of health care visits was constructed by adding recoded responses for these questions and categorizing the sum as none, 1–3, 4–9, or 10 or more health care visits in the past 12 months.

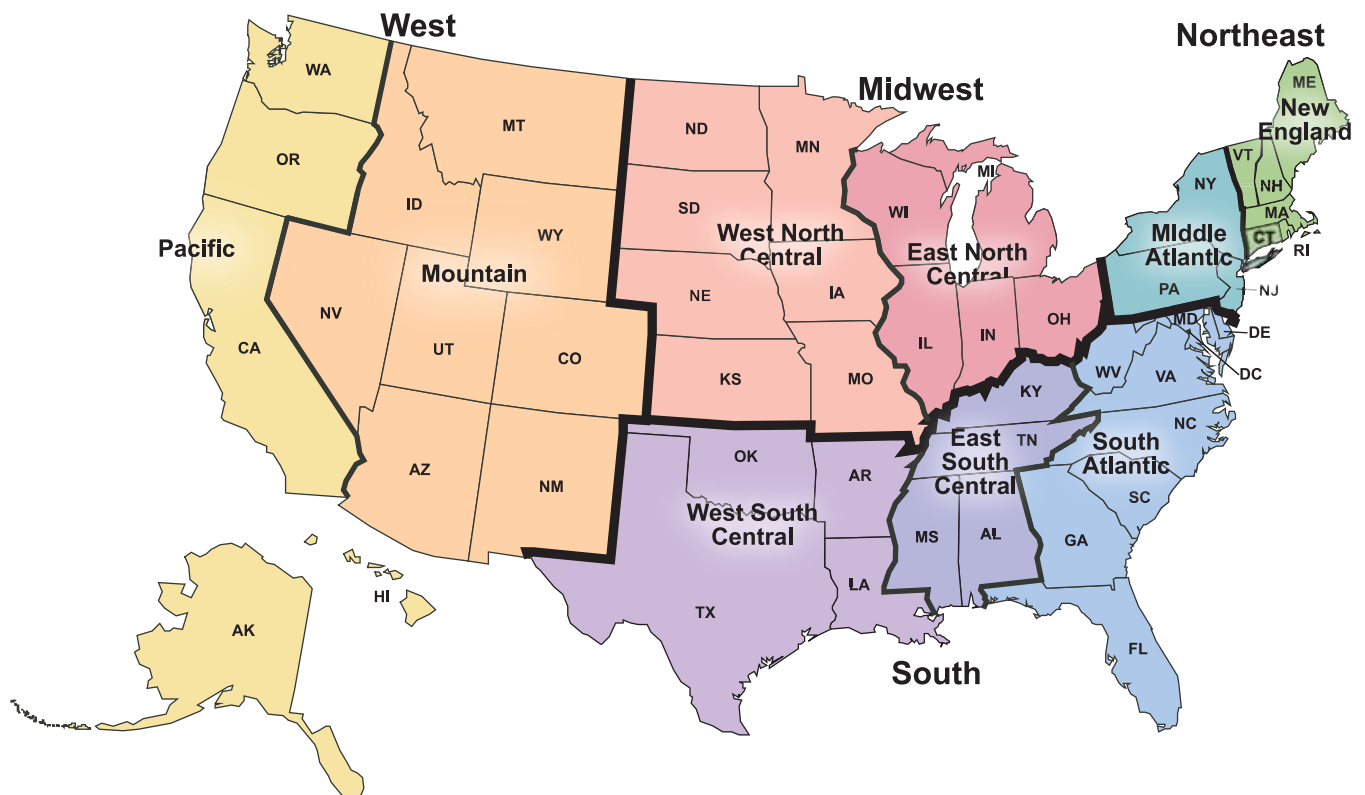
Analyses of the percentage of children without a health care visit are based upon the following question: "During the past 12 months, how many times has \_\_\_ seen a doctor or other health care professional about (his/her) health at a doctor's office, a clinic, or some other place? Do not include times \_\_\_ was hospitalized overnight, visits to hospital emergency rooms, home visits, or telephone calls." See related [Emergency department or emergency room visit](#); [Home visit](#).

**Health expenditures, national**—National Health Expenditures are estimated by the Centers for Medicare & Medicaid Services (CMS) and measure spending for health care in the United States by type of service delivered (e.g., hospital care, physician services, nursing home care) and source of funding for those services (e.g., private health insurance, Medicare, Medicaid, out-of-pocket spending). CMS produces both historical and projected estimates of health expenditures by category. See related [Consumer price index \(CPI\)](#); [Gross domestic product \(GDP\)](#).

*Health services and supplies expenditures*—These are outlays for goods and services relating directly to patient care plus expenses for administering health insurance programs and government public health activities. This category is equivalent to total national health



**Figure I. Census Bureau: Four Geographic Regions and 9 Divisions of the United States**



expenditures minus expenditures for research and construction.

*National health expenditures*—This measure estimates the amount spent for all health services and supplies and health-related research and construction activities consumed in the United States during the calendar year. Detailed estimates are available by source of expenditures (e.g., out-of-pocket payments, private health insurance, and government programs) and by type of expenditures (e.g., hospital care, physician services, and drugs) and are in current dollars for the year of report. Data are compiled from a variety of sources.

*Nursing home expenditures*—These cover care rendered in establishments primarily engaged in providing inpatient nursing and rehabilitative services and continuous personal care services to persons requiring nursing care (skilled nursing and intermediate care facilities, including those for the mentally retarded) and continuing care

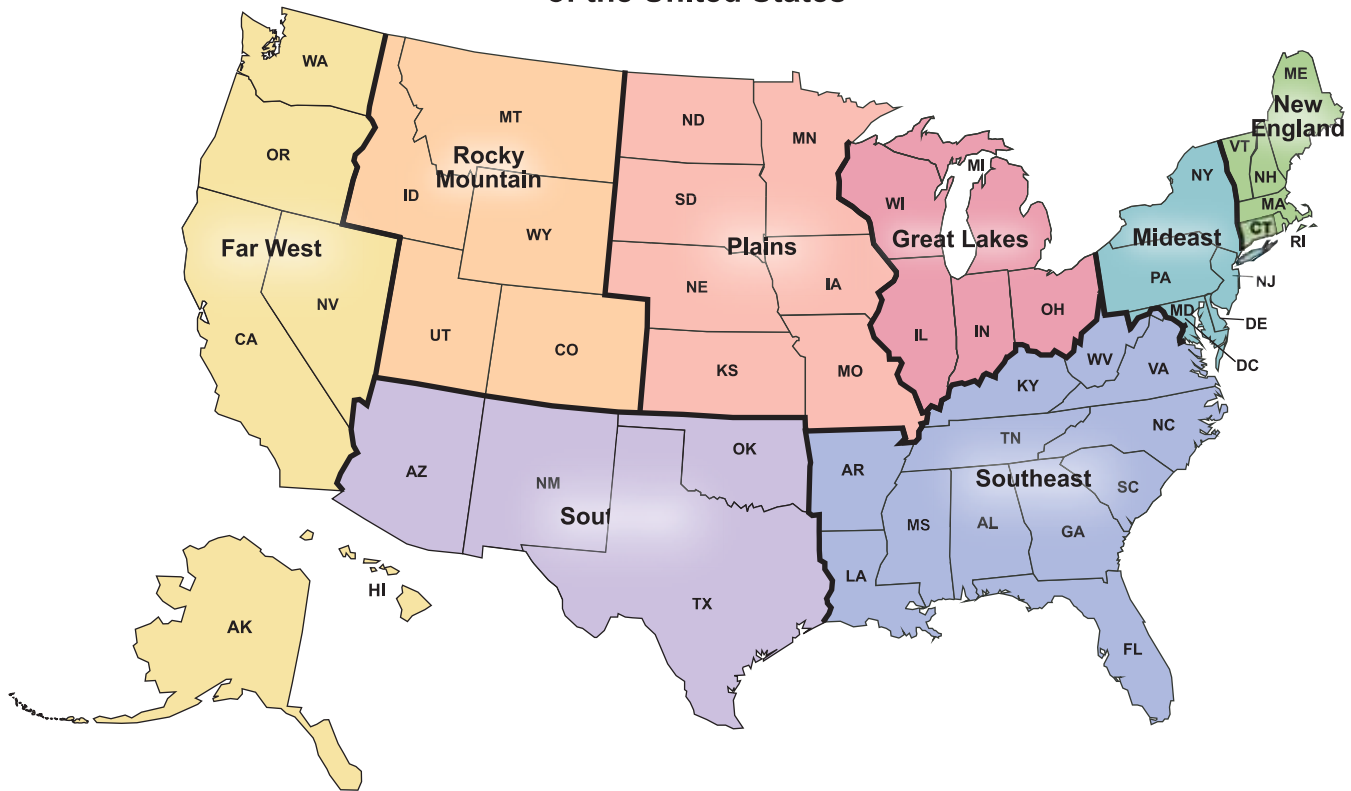
retirement communities with on-site nursing care facilities. The costs of long-term care provided by hospitals are excluded.

*Personal health care expenditures*—These are outlays for goods and services relating directly to patient care. The expenditures in this category are total national health expenditures minus expenditures for research and construction, health insurance program administration, and government public health activities.

*Private expenditures*—These are outlays for services provided or paid for by nongovernmental sources—consumers, insurance companies, private industry, and philanthropic and other nonpatient care sources.

*Public expenditures*—These are outlays for services provided or paid for by federal, state, and local government agencies or expenditures required by governmental mandate (such as worker's compensation insurance payments).

**Figure II. Bureau of Economic Analysis: Eight Geographic Regions of the United States**



**Health insurance coverage**—Health insurance is broadly defined to include both public and private payors who cover medical expenditures incurred by a defined population in a variety of settings.

*National Health Interview Survey (NHIS)*—For point-in-time health insurance estimates, NHIS respondents were asked about their coverage in the previous month in 1993–1996 and at the time of the interview in other years. Questions on health insurance coverage were expanded starting in 1993 compared with previous years. In 1997, the entire questionnaire was redesigned and data were collected using a computer-assisted personal interview (CAPI).

Respondents were considered to be covered by private health insurance if they indicated private health insurance or, prior to 1997, if they were covered by a single-service hospital plan. Private health insurance includes managed care such as health maintenance organizations (HMOs).

Until 1996, persons were defined as having Medicaid or other public assistance coverage if they indicated that they had either Medicaid or other public assistance or if they reported receiving Aid to Families with Dependent Children (AFDC) or Supplemental Security Income (SSI). After welfare reform in late 1996, Medicaid was delinked from AFDC and SSI. Starting in 1997, persons were considered to be covered by Medicaid if they reported Medicaid or a state-sponsored health program. Starting in 1999, persons were considered covered by Medicaid if they reported coverage by the State Children's Health Insurance Program (SCHIP). Medicare or military health plan coverage was also determined in the interview, and starting in 1997 other government-sponsored program coverage was determined as well.

If respondents did not report coverage under one of the above types of plans and they had unknown coverage under either private health insurance or Medicaid, they were considered to have unknown coverage.

The remaining respondents without any indicated coverage were considered uninsured. The uninsured are persons who did not have coverage under private health insurance, Medicare, Medicaid, public assistance, a state-sponsored health plan, other government-sponsored programs, or a military health plan. Persons with only Indian Health Service coverage were considered uninsured. Estimates of the percentage of persons who were uninsured based on the NHIS may differ slightly from those based on the March Current Population Survey (CPS) because of differences in survey questions, recall period, and other aspects of survey methodology.

In the NHIS less than 2% of people age 65 years and over reported no current health insurance coverage, but the small sample size precludes the presentation of separate estimates for this population. Therefore, the term uninsured refers only to the population under age 65.

Two additional questions were added to the health insurance section of the NHIS beginning with the third quarter of 2004 (Table VIII). One question was asked of persons 65 years and over who had not indicated that they had Medicare: "People covered by Medicare have a card which looks like this. [Are/Is] [person] covered by Medicare?" The other question was asked of persons under age 65 who had not indicated any type of coverage: "There is a program called Medicaid that pays for health care for persons in need. In this state it is also called [state name]. [Are/Is] [person] covered by Medicaid?"

Respondents who originally classified themselves as uninsured, but whose classification was changed to Medicare or Medicaid on the basis of a yes response to either question, subsequently received appropriate follow-up questions concerning periods of noncoverage for insured respondents. Of the 892 people (unweighted) who were eligible to receive the Medicare probe question in the third and fourth quarter of 2004, 55% indicated that they were covered by Medicare. Of the 9,146 people (unweighted) who were eligible to receive the Medicaid probe question in the third and fourth quarter of 2004, 3% indicated that they were covered by Medicaid. Estimates for this report are calculated using the responses to the two additional probe questions. For a

complete discussion of the implications of the addition of these two probe questions on the estimates for insurance coverage, see Cohen RA, Martinez ME. Impact of Medicare and Medicaid probe questions on health insurance estimates from the National Health Interview Survey, 2004. *Health E-Stat*, 2005. Available from: <http://www.cdc.gov/nchs/products/pubs/pubd/hestats/impact04/impact04.htm>.

Survey respondents may be covered by health insurance at the time of the interview, but may have experienced one or more lapses in coverage during the 12 months prior to the interview. Starting with *Health United States, 2006*, NHIS estimates are presented for the following three exhaustive categories: people with health insurance continuously for the full 12 months prior to the interview, those who had a period of up to 12 months prior to the interview without coverage, and those who were uninsured for more than 12 months prior to interview. This stub variable has been added to selected tables. Two additional NHIS questions were used to determine the appropriate category for the survey respondents: all persons without known comprehensive health insurance plan were asked, "About how long has it been since [person] last had health care coverage?" and all persons with known health insurance coverage were asked, "In the past 12 months, was there any time when [person] did NOT have ANY health insurance coverage?"

See related [Fee-for-service health insurance](#); [Health maintenance organization \(HMO\)](#); [Managed care](#); [Medicaid](#); [Medicare](#); [State Children's Health Insurance Program \(SCHIP\)](#); [Uninsured](#).

**Health maintenance organization (HMO)**—An HMO is a health care system that assumes or shares both the financial risks and the delivery risks associated with providing comprehensive medical services to a voluntarily enrolled population in a particular geographic area, usually in return for a fixed, prepaid fee. Pure HMO enrollees use only the prepaid capitated health services of the HMO panel of medical care providers. Open-ended HMO enrollees use the prepaid HMO health services but, in addition, may receive medical care from providers who are not part of the HMO panel. There is usually a substantial deductible, copayment, or coinsurance associated with use of nonpanel providers.

HMO model types are these:

*Group model HMO*—A group model HMO is an HMO that contracts with a single multispecialty medical group to provide care to the HMO's membership. The group practice may work exclusively with the HMO, or it may provide services to non-HMO patients as well. The HMO pays the medical group a negotiated per capita rate, which the group distributes among its physicians, usually on a salaried basis.

*Staff model HMO*—A staff model HMO is a closed-panel HMO (where patients can receive services only through a limited number of providers) in which physicians are HMO employees. The providers see members in the HMO's own facilities.

*Network model HMO*—A network model HMO is an HMO that contracts with multiple physician groups to provide services to HMO members and may include single or multispecialty groups.

*Individual practice association (IPA)*—An individual practice association is a healthcare provider organization composed of a group of independent practicing physicians who maintain their own offices and band together for the purpose of contracting their services to HMOs, preferred provider organizations (PPOs), and insurance companies. An IPA may contract with and provide services to both HMO and non-HMO plan participants.

*Mixed model HMO*—A mixed model HMO combines features of more than one HMO model.

See related [Managed care; Preferred provider organization \(PPO\)](#).

**Health services and supplies expenditures**—See [Health expenditures, national](#).

**Health status, respondent-assessed**—Health status was measured in the National Health Interview Survey by asking the family respondent about his or her health or the health of a family member: "Would you say \_\_\_\_\_'s health is excellent, very good, good, fair, or poor?"

**Hispanic origin**—Hispanic or Latino origin includes persons of Mexican, Puerto Rican, Cuban, Central and South

American, and other or unknown Latin American or Spanish origins. Persons of Hispanic origin may be of any race.

*Birth File*—The reporting area for an Hispanic-origin item on the birth certificate expanded between 1980 and 1993. Trend data on births of Hispanic and non-Hispanic parentage in this report are affected by expansion of the reporting area and by immigration. These two factors affect numbers of events, composition of the Hispanic population, and maternal and infant health characteristics.

In 1980 and 1981, information on births of Hispanic parentage was reported on the birth certificate by the following 22 states: Arizona, Arkansas, California, Colorado, Florida, Georgia, Hawaii, Illinois, Indiana, Kansas, Maine, Mississippi, Nebraska, Nevada, New Jersey, New Mexico, New York, North Dakota, Ohio, Texas, Utah, and Wyoming. In 1982 Tennessee, and in 1983 the District of Columbia, began reporting this information. Between 1983 and 1987, information on births of Hispanic parentage was available for 23 states and the District of Columbia (D.C.). In 1988, this information became available for Alabama, Connecticut, Kentucky, Massachusetts, Montana, North Carolina, and Washington, increasing the number of states reporting information on births of Hispanic parentage to 30 states and D.C. In 1989, this information became available from an additional 17 states, increasing the number of Hispanic-reporting states to 47 and D.C. In 1989, only Louisiana, New Hampshire, and Oklahoma did not report Hispanic parentage on the birth certificate. With the inclusion of Oklahoma in 1989 and Louisiana in 1990 as Hispanic-reporting states, 99% of birth records included information on mother's origin. Hispanic origin of the mother was reported on the birth certificates of 49 states and D.C. in 1991 and 1992; only New Hampshire did not provide this information. Starting in 1993, Hispanic origin of mother was reported by all 50 states and D.C.

*Mortality File*—The reporting area for an Hispanic-origin item on the death certificate expanded between 1985 and 1997. In 1985, mortality data by Hispanic origin of decedent were based on deaths to residents of the following 17 states and the District of Columbia (D.C.) whose data on the death certificate were at least 90% complete on a place-of-occurrence basis and of comparable format: Arizona, Arkansas, California,

Colorado, Georgia, Hawaii, Illinois, Indiana, Kansas, Mississippi, Nebraska, New York, North Dakota, Ohio, Texas, Utah, and Wyoming. In 1986 New Jersey began reporting Hispanic origin of decedent, increasing the number of reporting states to 18 and D.C. in 1986 and 1987. In 1988, Alabama, Kentucky, Maine, Montana, North Carolina, Oregon, Rhode Island, and Washington were added to the reporting area, increasing the number of states to 26 and D.C. In 1989, an additional 18 states were added, increasing the Hispanic reporting area to 44 states and D.C.; only Connecticut, Louisiana, Maryland, New Hampshire, Oklahoma, and Virginia were not included in the reporting area. Starting with 1990 data in this book, the criterion was changed to include states whose data were at least 80% complete. In 1990, Maryland, Virginia, and Connecticut, in 1991 Louisiana, and in 1993 New Hampshire were added, increasing the reporting area for Hispanic origin of decedent to 47 states and D.C. in 1990, 48 states and D.C. in 1991 and 1992, and 49 states and D.C. in 1993–1996. Only Oklahoma did not provide this information in 1993–1996. Starting in 1997, Hispanic origin of decedent was reported by all 50 states and D.C. Based on data from the U.S. Census Bureau, the 1990 reporting area encompassed 99.6% of the U.S. Hispanic population. In 1990, more than 96% of death records included information on Hispanic origin of decedent.

Starting with 2003 data, some states began using the 2003 revision of the U.S. Standard Certificate of Death, which allows the reporting of more than one race (multiple races) and includes some revisions in the item reporting Hispanic origin. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data, and in 2005, 21 states reported multiple-race data. The effect of the 2003 revisions on the Hispanic origin item on reporting of Hispanic origin on death certificates is presumed to be minor. For more information, see [Appendix II, Race](#), and Kung H-C, Hoyert DL, Xu JQ, Murphy SL. Deaths: Final data for 2005. National vital statistics reports. Vol 56 no 10. Hyattsville, MD: NCHS. 2008. Available from: [http://www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56\\_10.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56_10.pdf).

NCHS. NCHS Procedures for Multiple-Race and Hispanic Origin Data: Collection, Coding, Editing, and Transmitting. 2004. Available from: [http://www.cdc.gov/nchs/data/dvs/Multiple\\_race\\_documentation\\_5-10-04.pdf](http://www.cdc.gov/nchs/data/dvs/Multiple_race_documentation_5-10-04.pdf).

*National Health Interview Survey (NHIS) and National Health and Nutrition Examination Survey (NHANES)*—Questions on Hispanic origin are self-reported in the NHANES III and subsequent years and all years of the NHIS and precede questions on race. The NHANES sample was designed to provide estimates specifically for persons of Mexican origin and not for all Hispanic-origin persons in the United States. Persons of Hispanic origin other than Mexicans were entered into the sample with different selection probabilities that are not nationally representative of the total U.S. Hispanic population.

*Surveillance, Epidemiology, and End Results (SEER) Program*—Data are available from the National Institutes of Health, National Cancer Institute. SEER Hispanic data used in *Health, United States* tables exclude data from Alaska. The North American Association of Central Cancer Registries, Inc. (NAACCR) Hispanic Identification Algorithm was used on a combination of variables to classify incidence cases as Hispanic for analytic purposes. See the report, NAACCR Guideline for Enhancing Hispanic-Latino Identification. Available from: [http://seer.cancer.gov/seerstat/variables/seer/yr1973\\_2004/race\\_ethnicity/](http://seer.cancer.gov/seerstat/variables/seer/yr1973_2004/race_ethnicity/).

*Youth Risk Behavior Survey (YRBS)*—Prior to 1999, a single question was asked about race and Hispanic origin with the option of selecting one of the following categories: white not Hispanic, black not Hispanic, Hispanic or Latino, Asian or Other Pacific Islander, American Indian or Alaska Native, or other. Between 1999 and 2003, respondents were asked a single question about race and Hispanic origin with the option of choosing one or more of the following categories: white, black or African American, Hispanic or Latino, Asian, Native Hawaiian or Other Pacific Islander, or American Indian or Alaska Native. In 2005, respondents were asked a question about Hispanic origin (Are you Hispanic or Latino?) and a second separate question about race that included the option of selecting one or more of the following categories: American Indian or Alaska Native, Asian, black or African American, Native Hawaiian or Other Pacific Islander, or white. Because of the differences between questions, the data about race and Hispanic ethnicity for the years prior to 1999 are not strictly comparable with estimates for the later years. However, analyses of data collected between 1991 and 2003 have indicated that the data are comparable across



years and can be used to study trends. See related [Race](#).

See Brender ND, Kann L, McManus, T. A comparison of two survey questions on race and ethnicity among high school students. *Public opinion quarterly* 2003;67(2):227–36.

**HIV**—See [Human immunodeficiency virus \(HIV\) disease](#).

**Home visit**—Starting in 1997, the National Health Interview Survey has been collecting information on home visits received during the past 12 months. Respondents are asked “During the past 12 months, did you receive care at home from a nurse or other health care professional? What was the total number of home visits received?” These data are combined with data on visits to doctors’ offices, clinics, and emergency departments to provide a summary measure of health care visits. See related [Emergency department or emergency room visit](#); [Health care contact](#).

**Hospital**—According to the American Hospital Association, hospitals are licensed institutions with at least six beds whose primary function is to provide diagnostic and therapeutic patient services for medical conditions by an organized physician staff and that have continuous nursing services under the supervision of registered nurses. The World Health Organization considers an establishment to be a hospital if it is permanently staffed by at least one physician, can offer inpatient accommodation, and can provide active medical and nursing care. Hospitals may be classified by type of service, ownership, size in terms of number of beds, and length of stay. In the National Hospital Ambulatory Medical Care Survey, hospitals include all those with an average length of stay for all patients of less than 30 days (short-stay) or hospitals whose specialty is general (medical or surgical) or children’s general. Federal hospitals and hospital units of institutions and hospitals with fewer than six beds staffed for patient use are excluded. See related [Average length of stay](#); [Bed, health facility](#); [Days of care](#); [Emergency department](#); [Inpatient](#); [Outpatient department](#).

*Community hospital*—Community hospitals based on the American Hospital Association definition include all nonfederal short-term general and special hospitals whose facilities and services are available to the public. Special hospitals include obstetrics and gynecology; eye, ear, nose, and throat; rehabilitation; orthopedic; and other specialty services. Short-term general and special

childrens hospitals are also considered to be community hospitals. A hospital may include a nursing-home-type unit and still be classified as short-term, provided that the majority of its patients are admitted to units where the average length of stay is less than 30 days. Hospital units of institutions such as prisons and college infirmaries that are not open to the public and are contained within a nonhospital facility are not included in the category of community hospitals. Traditionally the definition included all nonfederal short-stay hospitals except facilities for the mentally retarded. In a revised definition, the following additional sites were excluded: hospital units of institutions, and alcoholism and chemical dependency facilities.

*Federal hospital*—Federal hospitals are operated by the federal government.

*For-profit hospital*—For-profit hospitals are operated for profit by individuals, partnerships, or corporations.

*General hospital*—General hospitals provide diagnostic, treatment, and surgical services for patients with a variety of medical conditions. According to the World Health Organization, these hospitals provide medical and nursing care for more than one category of medical discipline (e.g., general medicine, specialized medicine, general surgery, specialized surgery, and obstetrics). Excluded are hospitals, usually in rural areas, that provide a more limited range of care.

*Nonprofit hospital*—Nonprofit hospitals are controlled by nonprofit organizations, including religious organizations, fraternal societies, and others.

*Psychiatric hospital*—Psychiatric hospitals are ones whose major type of service is psychiatric care. See related [Mental health organization](#).

*Registered hospital*—Registered hospitals are registered with the American Hospital Association. About 98% of hospitals are registered.

*Short-stay hospital*—Short-stay hospitals in the National Hospital Discharge Survey are those in which the average length of stay is less than 30 days. The National Health Interview Survey defines short-stay hospitals as any hospital or hospital department in which

the type of service provided is general; maternity; eye, ear, nose, and throat; children's; or osteopathic.

*Specialty hospital*—Specialty hospitals such as psychiatric, tuberculosis, chronic disease, rehabilitation, maternity, and alcoholic or narcotic provide a particular type of service to the majority of their patients.

**Hospital-based physician**—See [Physician](#).

**Hospital day**—See [Days of care](#).

**Hospital utilization**—Estimates of hospital utilization (such as hospital discharge rate, days of care rate, average length of stay, and percentage of the population with a hospitalization) presented in *Health, United States* are based on data from three different sources—the National Health Interview Survey (NHIS), the National Hospital Discharge Survey (NHDS), and the American Hospital Association. NHIS data are based on household interviews of the civilian noninstitutionalized population and thus exclude hospitalizations for institutionalized persons and those who died while hospitalized. NHDS data are based on hospital discharge records of all persons who have an inpatient stay in a nonfederal short-stay hospital. NHDS includes hospital discharge records for all persons discharged alive or deceased and institutionalized persons. NHDS tables shown in *Health, United States* exclude data for newborn infants. Estimates for average length of stay between the NHDS and the AHA presented in *Health, United States* differ because of different methods for counting days of care. See related [Average length of stay](#); [Days of care](#); [Discharge](#); [Appendix I, National Health Interview Survey, National Hospital Discharge Survey](#).

**Human immunodeficiency virus (HIV) disease**—HIV disease is a serious disease caused by a cytopathic retrovirus that is the cause of Acquired Immunodeficiency Syndrome (AIDS). It is also called AIDS-related virus, human T-cell leukemia virus type III, human T-cell lymphotropic virus type III, and lymphadenopathy-associated virus. Mortality and morbidity coding for HIV disease are similar and have evolved over time.

*Mortality coding*—Starting with 1999 data, and the introduction of the Tenth Revision of the *International Classification of Diseases* (ICD-10), the title for this cause of death was changed to HIV disease from HIV

infection and the ICD codes changed to B20–B24. Starting with 1987 data, NCHS introduced category numbers \*042–\*044 for classifying and coding HIV infection as a cause of death in ICD-9. The asterisk before the category numbers indicates that these codes were not part of the original ICD-9. HIV infection was formerly referred to as human T-cell lymphotropic virus-III/lymphadenopathy-associated virus (HTLV-III/LAV) infection. Before 1987, deaths involving HIV infection were classified to Deficiency of cell-mediated immunity (ICD-9 279.1) contained in the title All other diseases; to Pneumocystosis (ICD-9 136.3) contained in the title All other infectious and parasitic diseases; to Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues; and to a number of other causes. Therefore, before 1987, death statistics for HIV infection are not strictly comparable with data for 1987 and later years and are not shown in this report.

*Morbidity coding*—The National Hospital Discharge Survey codes diagnosis data using the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD-9-CM). During 1984 and 1985 only data for AIDS (ICD-9-CM 279.19) were included. In 1986–1994, discharges with the following diagnoses were included: Acquired immunodeficiency syndrome (AIDS), Human immunodeficiency virus (HIV) infection and associated conditions, and Positive serological or viral culture findings for HIV (ICD-9-CM 042–044, 279.19, and 795.8). Beginning in 1995, discharges with the following diagnoses were included: Human immunodeficiency virus (HIV) disease and Asymptomatic human immunodeficiency virus (HIV) infection status (ICD-9-CM 042 and V08).

See related [Acquired immunodeficiency syndrome \(AIDS\)](#); [Cause of death](#); [International Classification of Diseases \(ICD\)](#); [International Classification of Diseases, Ninth Revision, Clinical Modification \(ICD-9-CM\)](#).

**Hypertension**—See [Blood pressure, elevated](#).

**ICD; ICD codes**—See [Cause of death](#); [International Classification of Diseases \(ICD\)](#).

**Illicit drug use**—Illicit drug use refers to use and misuse of illegal and controlled drugs.



*Monitoring the Future Study*—In this school-based survey of secondary school students, information on marijuana use is collected using self-completed questionnaires. The information is based on the following questions: “On how many occasions (if any) have you used marijuana in the last 30 days?” and “On how many occasions (if any) have you used hashish in the last 30 days?” Questions on cocaine use include the following: “On how many occasions (if any) have you taken crack (cocaine in chunk or rock form) during the last 30 days?” and “On how many occasions (if any) have you taken cocaine in any other form during the last 30 days?”

*National Survey on Drug Use & Health (NSDUH)*—Information on illicit drug use is collected for survey participants 12 years of age and over. Information on any illicit drug use, including marijuana or hashish, cocaine, heroin, hallucinogens, and nonmedical use of prescription drugs is based on the following question: “During the past 30 days, on how many days did you use (specific illicit drug)?” See related [Substance use](#).

**Immunization**—see [Vaccination](#).

**Incidence**—Incidence is the number of cases of disease having their onset during a prescribed period of time. It is often expressed as a rate (e.g., the incidence of measles per 1,000 children 5–15 years of age during a specified year). Incidence is a measure of morbidity or other events that occur within a specified period of time. Measuring incidence may be complicated because the population at risk for the disease may change during the period of interest, for example, due to births, deaths, or migration. In addition, determining that a case is new—that is, that its onset occurred during the prescribed period of time—may be difficult. Because of these difficulties in measuring incidence, many health statistics are measured using prevalence. See related [Prevalence](#).

**Income**—See [Family income](#).

**Individual practice association (IPA)**—See [Health maintenance organization \(HMO\)](#).

**Industry of employment**—Starting with 2003 data, industries are classified according to the North American Industry Classification System (NAICS) for the presentation of health data in *Health, United States*. For each year of data

presented, the most recent version of NAICS was used. The NAICS classification system groups establishments into industries based on their production or supply function—establishments using similar raw material inputs, capital equipment, and labor are classified in the same industry. This approach creates homogeneous categories well suited for economic analysis. NAICS uses a six-digit hierarchical coding system to classify all economic activity into 20 industry sectors. The first two digits of the six-digit code designate the highest level of aggregation, with 20 such two-digit industry sectors ([Table IX](#)). Five sectors are primarily goods-producing sectors, and 15 are entirely services-providing sectors. NAICS allows for the classification of 1,170 industries. For more information on NAICS, see <http://www.census.gov/epcd/www/naics.html>.

NAICS replaces the Standard Industrial Classification (SIC) system, originally designed in the 1930s and revised and updated periodically to reflect changes in the U.S. economy. The last SIC revision was in 1987. The SIC system focused on the manufacturing sector of the economy and provided significantly less detail for the now dominant service sector, including newly developed industries in information services, health care delivery, and high-tech manufacturing. Although some titles in SIC and NAICS are similar, there is little comparability between the two systems because industry groupings are defined differently. Estimates of deaths, injuries, and illnesses classified by NAICS industry should not be compared with earlier estimates that used the SIC.

Starting with *Health United States, 2005*, health data by industry from the Bureau of Labor Statistics' Census of Fatal Occupational Injuries (CFOI) and Survey of Occupational Injuries and Illnesses (SOII) data systems are classified using the NAICS system and replace trends in occupational health data based on the SIC system in previous editions of *Health, United States*.

**Infant death**—An infant death is the death of a live-born child before his or her first birthday. Age at death may be further classified according to neonatal and postneonatal. Neonatal deaths are those that occur before the 28th day of life; postneonatal deaths are those that occur between 28 and 365 days of age. See related [Rate: Death and related rates](#).

**Injury**—The International Classification of External Causes of Injuries (ICECI) Coordination and Maintenance Group defines injury as a (suspected) bodily lesion resulting from acute overexposure to energy (this can be mechanical, thermal,

electrical, chemical, or radiant) interacting with the body in amounts or rates that exceed the threshold of physiological tolerance. The time between exposure to the energy and the appearance of an injury is short. In some cases an injury results from an insufficiency of any of the vital elements (i.e., air, water, or warmth), such as strangulation, drowning, or freezing. Acute poisonings and toxic effects, including overdoses of substances and wrong substances given or taken in error are included, as are adverse effects and complications of therapeutic, surgical, and medical care. Psychological harm is excluded. Injuries can be intentional or unintentional (i.e., accidental). External causes of nonfatal injuries in NCHS data systems are coded to the *International Classification of Diseases, Ninth Revision, Clinical Modification* Supplementary Classification of External Causes of Injury and Poisoning, often referred to as E codes. See [Table VII](#) for a list of external causes of injury categories and E codes used in *Health, United States*. See related [Diagnosis](#); [Injury-related visit](#). See ICECI Coordination and Maintenance Group (2004). *International Classification of External Causes of Injuries (ICECI)*, version 1.2. Consumer Safety Institute, Amsterdam, and AIHW National Injury Surveillance Unit, Adelaide. Available from: <http://www.iceci.org>.

**Injury-related visit**—In the National Hospital Ambulatory Medical Care Survey (NHAMCS) an emergency department visit was considered injury-related if the physician's diagnosis was injury-related (ICD-9-CM code of 800-999), an external cause-of-injury code was present (ICD-9-CM E800-E999), or the patient's reason for visit code was injury-related. Starting with *Health, United States, 2008*, the definition of an injury-related visit was redefined as an initial injury visit. In the 2001-2005 NHAMCS, an initial injury visit is the first visit to an emergency department for an injury that is characterized by either the first-listed diagnosis being a valid injury diagnosis or by a valid first-listed external cause of injury code regardless of the diagnosis code. Visits for which the first-listed diagnosis or the first-listed external cause code was for a complication of medical care or for an adverse event are not counted as injury visits. For 2001-2004 data, the patient record form had a specific question on whether or not the visit was the initial one for that condition. In the 2005 and 2006 surveys, this variable was dropped, and in its place, an imputed variable indicating that the visit was or was not the initial visit was included on the public use file. For an explanation of the methodology used to create the initial visit

**Table VII. Codes for first-listed external causes of injury from the *International Classification of Diseases, Ninth Revision, Clinical Modification***

<i>External cause of injury category</i>	<i>E-code numbers</i>
Unintentional . . . . .	E800-E869, E880-E929
Motor vehicle traffic . . . . .	E810-E819
Falls . . . . .	E880-E886, E888
Struck by or against objects or persons . . . . .	E916-E917
Caused by cutting and piercing instruments or objects . . . . .	E920
Intentional (suicide and homicide) . . .	E950-E969, E979, E999.1

variable, see <http://www.cdc.gov/nchs/data/ahcd/initialvisit.pdf>. For more information see <http://www.cdc.gov/nchs/products/pubs/pubd/hestats/injury/injury.htm>. See related [Emergency department or emergency room visit](#); [External cause of injury](#); [Injury](#).

**Inpatient**—An inpatient is a person who is formally admitted to the inpatient service of a hospital for observation, care, diagnosis, or treatment. See related [Admission](#); [Average length of stay](#); [Days of care](#); [Discharge](#); [Hospital](#).

**Inpatient care**—See [Hospital utilization](#); [Mental health service type](#).

**Inpatient day**—See [Days of care](#).

**Instrumental activities of daily living (IADL)**—Instrumental activities of daily living are activities related to independent living and include preparing meals, managing money, shopping for groceries or personal items, performing light or heavy housework, and using a telephone. In the National Health Interview Survey (NHIS) respondents are asked whether they or family members 18 years of age and over need the help of another person for handling routine IADL needs because of a physical, mental, or emotional problem. Persons are considered to have an IADL limitation in the NHIS if any causal condition is chronic.

In the Medicare Current Beneficiary Survey, if a sample person had any difficulty performing an activity by him- or herself and without special equipment, or did not perform the activity at all because of health problems, the person was categorized as having a limitation in that activity. The limitation may have been temporary or chronic at the time of the interview. Sample persons in the community answered

**Table VIII. Percentage of persons under 65 years of age with Medicaid or who are uninsured, by selected demographic characteristics using Method 1 and Method 2 estimation procedures: United States, 2004**

Characteristic	Medicaid <sup>1</sup>		Uninsured <sup>2</sup>	
	Method 2 <sup>3</sup>	Method 1 <sup>3</sup>	Method 2 <sup>3</sup>	Method 1 <sup>3</sup>
Percent (standard error)				
Age				
Under 65 years . . . . .	12.0 (0.24)	11.8 (0.24)	16.4 (0.23)	16.6 (0.23)
Under 18 years . . . . .	25.4 (0.49)	24.9 (0.49)	9.2 (0.30)	9.7 (0.29)
18–64 years . . . . .	6.6 (0.17)	6.5 (0.17)	19.3 (0.26)	19.4 (0.26)
Percent of poverty level <sup>4</sup>				
Below 100% . . . . .	47.5 (1.03)	46.6 (1.03)	29.6 (0.89)	30.5 (0.92)
100%–less than 200% . . . . .	22.0 (0.59)	21.5 (0.60)	28.9 (0.66)	29.4 (0.66)
200% or more . . . . .	2.9 (0.13)	2.8 (0.13)	9.4 (0.23)	9.5 (0.23)
Age and percent of poverty level <sup>4</sup>				
Under 18 years . . . . .				
Below 100% . . . . .	71.9 (1.35)	70.2 (1.35)	14.5 (1.15)	16.2 (1.22)
100%–less than 200% . . . . .	39.2 (1.13)	38.4 (1.14)	15.0 (0.81)	15.8 (0.82)
200% or more . . . . .	6.2 (0.33)	6.1 (0.33)	4.9 (0.30)	4.9 (0.30)
18–64 years . . . . .				
Below 100% . . . . .	31.2 (1.02)	30.8 (1.02)	39.7 (1.09)	40.1 (1.09)
100%–less than 200% . . . . .	12.0 (0.48)	11.8 (0.48)	37.0 (0.72)	37.2 (0.72)
200% or more . . . . .	1.7 (0.11)	1.7 (0.10)	11.0 (0.26)	11.1 (0.26)
Hispanic origin and race <sup>5</sup>				
Hispanic or Latino . . . . .	22.2 (0.55)	21.5 (0.55)	34.4 (0.64)	35.1 (0.65)
Mexican . . . . .	22.0 (0.63)	21.5 (0.63)	37.6 (0.82)	38.1 (0.83)
Not Hispanic or Latino . . . . .	10.2 (0.25)	10.1 (0.25)	13.2 (0.23)	13.3 (0.23)
White only . . . . .	7.4 (0.26)	7.4 (0.26)	12.0 (0.25)	12.1 (0.25)
Black or African American only . . . . .	23.9 (0.80)	23.5 (0.79)	17.3 (0.58)	17.8 (0.58)

<sup>1</sup>The category Medicaid includes persons who do not have private coverage, but who have Medicaid or other state-sponsored health plans, including the State Children's Health Insurance Program (SCHIP).

<sup>2</sup>The category Uninsured includes persons who have not indicated that they are covered at the time of interview under private health insurance, Medicare, Medicaid, SCHIP, a state-sponsored health plan, other government programs, or military health plan (includes VA, TRICARE, and CHAMP-VA). This category includes persons who are only covered by Indian Health Service (IHS) or only have a plan that pays for one type of service, such as accidents or dental care.

<sup>3</sup>Starting with the third quarter of 2004, two additional questions were added to the NHIS insurance section to reduce potential errors in reporting of Medicare and Medicaid status. Persons 65 years of age and over not reporting Medicare coverage were asked explicitly about Medicare coverage, and persons under 65 years of age with no reported coverage were asked explicitly about Medicaid coverage. Estimates calculated without using the additional information from these questions are noted as Method 1. Estimates calculated using the additional information from these questions are noted as Method 2.

<sup>4</sup>Percent of poverty level is based on family income and family size and composition using the U.S. Census Bureau's poverty thresholds. The percentage of respondents with unknown poverty level was 28.2% in 2004. See the NHIS Survey Description Document for 2004. Available from: <http://www.cdc.gov/nchs/nhis.htm>.

<sup>5</sup>Persons of Hispanic origin may be of any race or combination of races. Similarly, the category Not Hispanic or Latino refers to all persons who are not of Hispanic or Latino origin, regardless of race.

**SOURCE:** Family Core component of the 2004 National Health Interview Survey. Data are based on household interviews of a sample of the civilian noninstitutionalized population. Available from: <http://www.cdc.gov/nchs/products/pubs/pubd/hestats/impact04/impact04.htm>.

health status and functioning questions themselves, if able to do so. For sample persons in a long-term care facility, a proxy such as a nurse answered questions about the sample person's health status and functioning. See related [Activities of daily living \(ADL\)](#); [Limitation of activity](#).

**Insurance**—See [Health insurance coverage](#).

**Intermediate care facility**—See [Nursing home](#).

**International Classification of Diseases (ICD)**—The ICD is used to code and classify cause-of-death data. The ICD is developed collaboratively by the World Health Organization (WHO) and 10 international centers, one of which is housed at NCHS. The purpose of the ICD is to promote

**Table IX. Codes for industries, by the 2007 North American Industry Classification System (NAICS)**

<i>Private industry</i>	<i>Code numbers</i>
Agriculture, forestry, fishing and hunting . . . . .	11
Mining. . . . .	21
Utilities . . . . .	22
Construction . . . . .	23
Manufacturing . . . . .	31–33
Wholesale trade. . . . .	42
Retail trade . . . . .	44–45
Transportation and warehousing . . . . .	48–49
Information . . . . .	51
Finance and insurance . . . . .	52
Real estate and rental and leasing. . . . .	53
Professional, scientific, and technical services . . . .	54
Management of companies and enterprises . . . . .	55
Administrative and support and waste management services. . . . .	56
Educational services. . . . .	61
Health care and social assistance . . . . .	62
Arts, entertainment, and recreation . . . . .	71
Accommodation and food services. . . . .	72
Other services, except public administration . . . . .	81

**SOURCE:** Bureau of Labor Statistics. Available from: <http://www.census.gov/eos/www/naics/index.html>.

international comparability in the collection, classification, processing, and presentation of health statistics. Since 1900, the ICD has been modified about once every 10 years, except for the 20-year interval between ICD-9 and ICD-10 (see [Table IV](#)). The purpose of the revisions is to stay abreast with advances in medical science. New revisions usually introduce major disruptions in time series of mortality statistics (see [Tables V](#) and [VI](#)). For more information, see the NCHS website. Available from: <http://www.cdc.gov/nchs/about/major/dvs/icd10des.htm>. See related [Cause of death](#); [Comparability ratio](#); [International Classification of Diseases, Ninth Revision, Clinical Modification \(ICD-9-CM\)](#).

**International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM)**—The ICD-9-CM is based on and is compatible with the World Health Organization's *International Classification of Diseases, Ninth Revision (ICD-9)*. The United States currently uses ICD-9-CM to code morbidity diagnoses and inpatient procedures. ICD-9-CM consists of three volumes. Volumes 1 and 2 contain the diagnosis tabular list and index. Volume 3 contains the procedure classification (tabular and index combined).

ICD-9-CM is divided into 17 chapters and two supplemental classifications. The chapters are arranged primarily by body system. In addition, there are chapters for Infectious and parasitic diseases; Neoplasms; Endocrine, nutritional, and metabolic diseases; Mental disorders; Complications of pregnancy, childbirth, and puerperium; Certain conditions originating in the perinatal period; Congenital anomalies; and Symptoms, signs, and ill-defined conditions. The two supplemental classifications are for factors influencing health status and contact with health services (V codes), and external causes of injury and poisoning (E codes).

In *Health, United States*, morbidity data are classified using ICD-9-CM. Diagnostic categories and codes for ICD-9-CM are shown in [Table X](#); ICD-9-CM procedure categories and codes are shown in [Table XI](#). For additional information about ICD-9-CM, see the NCHS website. Available from: <http://www.cdc.gov/nchs/icd9.htm>. See related [International Classification of Diseases \(ICD\)](#).

**Late fetal death rate**—See [Rate: Death and related rates](#).

**Leading causes of death**—See [Cause-of-death ranking](#).

**Length of stay**—See [Average length of stay](#).

**Life expectancy**—Life expectancy is the average number of years of life remaining to a person at a particular age and is based on a given set of age-specific death rates, generally the mortality conditions existing in the period mentioned. Life expectancy may be determined by race, sex, or other characteristics using age-specific death rates for the population with that characteristic. See related [Rate: Death and related rates](#).

**Limitation of activity**—Limitation of activity may be defined different ways, depending on the conceptual framework. In the National Health Interview Survey, limitation of activity refers to a long-term reduction in a person's capacity to perform the usual kind or amount of activities associated with his or her age group as a result of a chronic condition. Limitation of activity is assessed by asking persons a series of questions about limitations in their or household members' ability to perform activities usual for their age group because of a physical, mental, or emotional problem. Persons are asked about limitations in activities of daily living, instrumental activities of daily living, play, school, work, difficulty walking or remembering, and any other activity limitations. For reported limitations, the causal health conditions are determined, and

**Table X. Codes for diagnostic categories from the *International Classification of Diseases, Ninth Revision, Clinical Modification***

<i>Diagnostic category</i>	<i>Code numbers</i>
Childbirth . . . . .	V27
Septicemia . . . . .	038
Human immunodeficiency virus (HIV/AIDS) (1990–1994 data) . . . . .	042–044, 279.19, 795.8
(Starting with 1995 data) . . . . .	042
Cancer, all . . . . .	140–208, 230–234
Colorectal cancer . . . . .	153–154, 197.5, 230.3–230.6
Lung/bronchus/tracheal cancer . . . . .	162, 176.4, 197.0, 197.3, 231.1–231.2
Breast . . . . .	174–175, 198.81, 233.0
Prostate . . . . .	185, 233.4
Uterine fibroids . . . . .	218
Diabetes . . . . .	250
Dehydration . . . . .	276.5
(Starting with 2006 data) . . . . .	276.50–276.52
Alcohol and drug . . . . .	291–292, 303–304, 305.0, 305.2–305.9
Schizophrenia, mood disorders, delusional disorders, nonorganic psychoses . . . . .	295–298
Schizophrenia . . . . .	295
Mood disorders . . . . .	296
Dementia and Alzheimer’s disease . . . . .	290, 294, 331.0
Heart disease . . . . .	391–392.0, 393–398, 402, 404, 410–416, 420–429
Ischemic heart disease . . . . .	410–414
Heart attack . . . . .	410
Arrhythmias . . . . .	427
Heart failure . . . . .	428
Hypertension . . . . .	401
Stroke . . . . .	430–438
Acute bronchitis and bronchiolitis . . . . .	466
Pneumonia . . . . .	480–486, 487.0
Chronic obstructive pulmonary disease . . . . .	490–492
Asthma . . . . .	493
Appendicitis . . . . .	540–543
Gallstones . . . . .	574
Kidney disease . . . . .	580–589
Urinary tract infection . . . . .	599.0
Hyperplasia of the prostate . . . . .	600
Osteoarthritis . . . . .	715, 721
Intervertebral disc disorders . . . . .	722
Injury . . . . .	800–909.2, 909.4, 909.9, 910–994.9, 995.5, 995.80–995.85
Fracture . . . . .	800–829
Hip fracture . . . . .	820
Internal organ injury . . . . .	850–854, 860–869, 952, 995.55
Poisoning and toxic effects . . . . .	960–989
Complications of care and adverse effects . . . . .	996–999, 909.3, 909.5, 995.0–995.4, 995.6–995.7, 995.86, 995.89



persons are considered limited if one or more of these conditions is chronic. Children under 18 years of age who receive special education or early intervention services are considered to have a limitation of activity. See related [Activities of daily living; Condition; Instrumental activities of daily living](#).

**Long-term care facility**—A long-term care facility is a residence that provides a specific level of personal or medical care or supervision to residents. In the Medicare Current Beneficiary Survey, a residence is considered a long-term care facility if it has three or more long-term care beds and provides personal care services to residents, continuous supervision of residents, or long-term care services throughout the facility or in a separately identifiable unit. Types of long-term care facilities include licensed nursing homes, skilled nursing homes, intermediate care facilities, retirement homes (that provide services), domiciliary or personal care facilities, distinct long-term care units in a hospital complex, mental health facilities and centers, assisted and foster care homes, and institutions for the mentally retarded and developmentally disabled. See related [Nursing home](#).

**Low birthweight**—See [Birthweight](#).

**Magnetic resonance imaging (MRI) unit**—MRI is an imaging technique designed to visualize internal structures of the body using magnetic and electromagnetic fields that induce a resonance effect of hydrogen atoms. The electromagnetic emission created by these atoms is registered and processed by a dedicated computer to produce the images of the body structures.

**Mammography**—A mammogram is an x-ray image of the breast used to detect irregularities in breast tissue. In the National Health Interview Survey, questions concerning use of mammography were asked on an intermittent schedule, and question content differed across years. In 1987 and 1990, women were asked to report when they had their last mammogram. In 1991, women were asked whether they had a mammogram in the past 2 years. In 1993 and 1994, women were asked whether they had a mammogram within the past year, between 1 and 2 years ago, or over 2 years ago. In 1998, women were asked whether they had a mammogram a year ago or less, more than 1 year but not more than 2 years, or more than 2 years ago.

In 1999, women were asked when they had their most recent mammogram in days, weeks, months, or years. In 1999, 10% of women in the sample responded 2 years ago, and in this analysis these women were coded as within the past 2 years although a response of 2 years ago may include women whose last mammogram was more than 2 but less than 3 years ago. Thus, estimates for 1999 are overestimated to some degree in comparison with estimates in previous years.

In 2000 and 2003, women were asked when they had their most recent mammogram (give month and year). Women who did not respond were given a follow-up question that used the 1999 wording, and women who did not answer the question with the 1999 wording were asked a second follow-up question that used the 1998 wording. In 2000 and 2003, 2% of women in the sample answered 2 years ago using the 1999 wording, and they were coded as within the past 2 years. Thus, estimates for 2000 and 2003 may be slightly overestimated in comparison with estimates for years prior to 1999.

In 2005, women were asked the same series of mammography questions as in the 2000 and 2003 surveys but the skip pattern was modified so that more women were asked the follow-up question using the 1998 wording. Because additional information was available for women who replied their last mammogram was 2 years ago, these women were not uniformly coded as having had a mammogram within the past 2 years. Thus, estimates for 2005 are more precise compared with estimates for 1999, 2000, and 2003 and are slightly lower than they would have been without this additional information. For example, using the improved methodology instituted in 2005, 66.8% of women 40 years of age and over reported a mammogram in the past 2 years compared with an estimate of 68.7% in 2005 using the method employed in 2000 and 2003. SAS code to categorize mammography data for 2000–2005 is available from: [http://www.cdc.gov/nchs/about/major/nhis/nhis\\_2005\\_data\\_release.htm](http://www.cdc.gov/nchs/about/major/nhis/nhis_2005_data_release.htm).

Mammography screening recommendations have changed over time and vary in the recommended age to begin screening and the interval for screening. For a summary of the current and historic recommendations see: U.S. Preventive Services Task Force. Screening for breast cancer: Recommendations and rationale. February, 2002. Agency for Healthcare Research and Quality, Rockville, MD. Available at: <http://www.ahrq.gov/clinc/3rduspstf/breastcancer/brcanrr.htm>

and U.S. Preventive Services Task Force. The guide to clinical preventive services, 2007. Agency for Healthcare Research and Quality, Rockville, MD. Available at: <http://www.ahrq.gov/clinic/pocketgd07/pocketgd07.pdf>.

**Managed care**—Managed care is a term originally used to refer to the prepaid health care sector (health maintenance organizations or HMOs) where care is provided under a fixed budget and costs are therein capable of being managed. Increasingly, the term is being used to include preferred provider organizations (PPOs) and even forms of indemnity insurance coverage (or fee-for-service insurance) that incorporate preadmission certification and other utilization controls.

Medicare managed care, begun in 1985, has included a combination of risk-based and cost-based plans. Risk-based plans receive a fixed prepayment per beneficiary per month to cover the cost of all services that a beneficiary would receive. The Centers for Medicare & Medicaid Services (CMS) sets the per-member-per-month rate to reimburse risk-based plans based on the fee-for-service equivalent cost adjusted for certain demographic factors. Cost-based plans are offered by a Health Maintenance Organization (HMO) or a Competitive Medical Plan (CMP) and receive payment on a fee-for-service basis, similar to the traditional Medicare plan. While the payment system under cost-based plans is similar to the traditional Medicare plan, the cost-based plans generally cover more preventative services than the traditional Medicare plan. For current definitions of the various Medicare managed care plans, refer to the Medicare Managed Care Manual, (100–16) Chapter 1, Section 30—Types of MA Plans. Available from: <http://www.cms.hhs.gov/manuals/downloads/mc86c01.pdf>. Medicare enrollees have the choice to enroll in a managed care program (if available) or receive services on a fee-for-service basis.

The two major Medicaid managed care categories are risk-based plans and primary care case management (PCCM) arrangements. In risk-based plans, managed care organizations (MCO) are paid a fixed monthly fee per enrollee. The MCOs assume some or all of the financial risk for providing care. PCCM providers are usually physicians, physician group practices, or entities employing or having other arrangements with such physicians, but sometimes also including nurse practitioners, nurse midwives, or physician assistants. These PCCM providers, sometimes called

gatekeepers, contract directly with the state to locate, coordinate, and monitor covered primary care (and sometimes additional services). PCCM providers are paid a per-patient case management fee and usually do not assume financial risk for the provision of services. Some states allow Medicaid enrollees to voluntarily enroll in managed care plans; other states require that certain categories of Medicaid beneficiaries join managed care plans. Within both risk-based plans and PCCM arrangements there are plans that provide specialized services to certain categories of Medicaid beneficiaries. For more information on state Medicaid managed care plans, see <http://www.cms.hhs.gov/home/medicaid.asp>.

See related [Health maintenance organization \(HMO\)](#); [Medicare](#); [Medicaid](#); [Preferred provider organization \(PPO\)](#).

**Marital status**—Marital status is classified through self-reporting into the categories married and unmarried. The term married encompasses all married people including those separated from their spouses. Unmarried includes those who are single (never married), divorced, or widowed. Prior to 1978, the Center for Disease Control and Prevention's Abortion Surveillance Program classified separated people as unmarried.

*Birth File*—In 1970, 39 states and the District of Columbia (D.C.) and in 1975, 38 states and D.C. included a direct question about mother's marital status on the birth certificate. Since 1980, national estimates of births to unmarried women have been based on two methods for determining marital status, a direct question in the birth registration process and inferential procedures. In 1980–1996, marital status was reported on the birth certificates of 41–45 states and D.C.; with the addition of California in 1997, 46 states and D.C.; and in 1998–2001, 48 states and D.C. In 1997, all but four states (Connecticut, Michigan, Nevada, and New York), and in 1998, all but two states (Michigan and New York) included a direct question about mother's marital status on their birth certificates. In 1998–2004, marital status was imputed as married on those 0.03–0.05% of birth records with missing information in the 48 states and D.C. where this information was obtained by a direct question.

For states lacking a direct question, marital status was inferred. Before 1980, the incidence of births to unmarried women in states with no direct question on marital status was assumed to be the same as the



incidence in reporting states in the same geographic division. Starting in 1980, for states without a direct question, marital status was inferred by comparing the parents' and child's surnames. Inferential procedures in current use depend on the presence of a paternity acknowledgment or missing information on the father. Changes in reporting procedures by some states in 1995 and 1997 had little effect on national totals, but they did affect trends for age groups and some state trends. Details of the changes in reporting procedures are described in Ventura SJ, Bachrach CA. Nonmarital childbearing in the United States, 1940–1999. National vital statistics reports; vol 48 no 16. Hyattsville, MD: NCHS. 2000. Available from: <http://www.cdc.gov/nchs/births.htm>.

*National Health Interview Survey*—In the National Health Interview Survey, marital status is asked of, or about, all persons age 14 and over. Respondents were asked: Are you now married, widowed, divorced, separated, never married, or living with a partner?

**Maternal age**—See [Age](#).

**Maternal death**—Maternal death is defined by the World Health Organization as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes. A maternal death is one for which the certifying physician has designated a maternal condition as the underlying cause of death. Maternal conditions are those assigned to pregnancy, childbirth, and the puerperium, ICD–10 codes A34, O00–O95, O98–O99 ([Table V](#)). Changes have been made in the classification and coding of maternal deaths between ICD–9 and ICD–10, effective with mortality data for 1999. ICD–10 changes pertain to indirect maternal causes and timing of death relative to pregnancy. If only indirect maternal causes of death (i.e., a previously existing disease or a disease that developed during pregnancy that was not due to direct obstetric causes but was aggravated by physiologic effects of pregnancy) are reported in Part I of the death certificate and pregnancy is reported in either Part I or Part II, ICD–10 classifies this as a maternal death. ICD–9 only classified the death as maternal if pregnancy was reported in Part I. Some state death certificates include a separate question regarding pregnancy status. A positive response to the question is

interpreted as, pregnant, being reported in Part II of the cause-of-death section of the death certificate. If the medical certifier did not specify when death occurred relative to the pregnancy, it is assumed that the pregnancy terminated 42 days or less prior to death.

In 2003, 21 states had a separate question related to pregnancy status of female decedents around the time of their death, and two states had a prompt encouraging certifiers to report recent pregnancies on the death certificate; however, there were at least six different questions used. The 2003 revision of the U.S. Standard Certificate of Death introduced a standard question format with categories designed to utilize additional codes available in ICD–10 for deaths associated with pregnancy, childbirth, and the puerperium. As states revise their certificates, most states are expected to introduce the standard item or replace preexisting questions with the standard item, so that there will be wider adoption of a pregnancy status item across the country and greater standardization of the particular item used. See related [Rate: Death and related rates](#).

**Maternal education**—See [Education](#).

**Maternal mortality rate**—See [Rate: Death and related rates](#).

**Medicaid**—Medicaid was authorized by Title XIX of the Social Security Act in 1965 as a jointly funded cooperative venture between the federal and state governments to assist states in the provision of adequate medical care to eligible needy persons. Within broad federal guidelines, each of the states establishes its own eligibility standards; determines the type, amount, duration, and scope of services; sets the rate of payment for services; and administers its own program.

Medicaid is the largest program providing medical and health-related services to America's poorest people. However, Medicaid does not provide medical assistance to all poor persons. Under the broadest provisions of the federal statute, Medicaid does not provide health care services even for very poor childless adults under age 65 years unless they are disabled. Except as noted, all states must provide Medicaid coverage to the following:

- Individuals who meet the requirements for the Aid to Families with Dependent Children (AFDC) program that were in effect in their state on July 16, 1996, or, at state option, more liberal criteria (with some exceptions).

- Children under age 6 whose family income is at or below 133% of the federal poverty level.
- Pregnant women whose family income is below 133% of the federal poverty level (services to these women are limited to those related to pregnancy, complications of pregnancy, delivery, and postpartum care).
- Supplemental Security Income (SSI) recipients in most states (some states use more restrictive Medicaid eligibility requirements that predate SSI).
- Recipients of adoption or foster care assistance under Title IV of the Social Security Act.
- Special protected groups (typically individuals who lose their cash assistance because of earnings from work or from increased Social Security benefits but who may keep Medicaid for a period of time).
- Children age 6–18 years in families with incomes at or below the federal poverty level.
- Certain Medicare beneficiaries (low income is only one test for Medicaid eligibility for those within these groups; their resources also are tested against threshold levels, as determined by each state within federal guidelines).

States also have the option of providing Medicaid coverage for other groups.

Medicaid operates as a vendor payment program. States may pay health care providers directly on a fee-for-service basis, or states may pay for Medicaid services through various prepayment arrangements, such as health maintenance organizations (HMOs) or other forms of managed care. Within federally imposed upper limits and specific restrictions, each state for the most part has broad discretion in determining the payment methodology and payment rate for services. Thus, the Medicaid program varies considerably from state to state, as well as within each state over time. For more information see <http://www.cms.hhs.gov/MedicaidEligibility/>. See related [Health expenditures, national](#); [Health insurance coverage](#); [Health maintenance organization \(HMO\)](#); [Managed care](#); [Appendix I, Medicaid Data System](#).

**Medical specialty**—See [Physician specialty](#).

**Medical vendor payments**—Under the Medicaid program, medical vendor payments are payments (expenditures) to medical vendors from the state through a fiscal agent or to a health insurance plan. Adjustments are made for Indian Health Service payments to Medicaid, cost settlements, third

party recoupments, refunds, voided checks, and other financial settlements that cannot be related to specific provided claims. Excluded are payments made for medical care under the emergency assistance provisions, payments made from state medical assistance funds that are not federally matchable, disproportionate share hospital payments, cost sharing, or enrollment fees collected from recipients or a third party, and administration and training costs.

**Medicare**—This is a nationwide health insurance program providing health insurance protection to people 65 years of age and over, people entitled to Social Security disability payments for 2 years or more (with limited exceptions for people with specific diagnoses), and people with end-stage renal disease, regardless of income. The program was enacted July 30, 1965, as Title XVIII, Health Insurance for the Aged of the Social Security Act, and became effective on July 1, 1966. From its inception, it has included two separate but coordinated programs: hospital insurance (Part A) and supplementary medical insurance (Part B). In 1999, additional choices were allowed for delivering Medicare Part A and Part B benefits. Medicare Advantage, previously Medicare+Choice, (Part C) is an expanded set of options for the delivery of health care under Medicare, created in the Balanced Budget Act passed by Congress in 1997. The term Medicare Advantage refers to options other than original Medicare. While all Medicare beneficiaries can receive their benefits through the original fee-for-service (FFS) program, most beneficiaries enrolled in both Part A and Part B can choose to participate in a Medicare Advantage plan instead. Organizations that seek to contract as Medicare Advantage plans must meet specific organizational, financial, and other requirements. Most Medicare Advantage plans are coordinated care plans, which include health maintenance organizations (HMOs), preferred provider organizations (PPOs), private fee-for-service plans (PFFS), medical savings account (MSA) plans, which provide benefits after a single high deductible is met, and special needs plans (SNP). These programs are available in only a limited number of states. For those providers who agree to accept the plan's payment terms and conditions, this option does not place the providers at risk, nor does it vary payment rates based on utilization. Only the coordinated care plans are considered managed care plans. Except for MSA plans, all Medicare Advantage plans are required to provide at least the current Medicare benefit package, excluding hospice services. Plans may offer additional covered services and are required to do so (or

return excess payments) if plan costs are lower than the Medicare payments received by the plan.

The Medicare Prescription Drug, Improvement, and Modernization Act (MMA) was passed on December 8, 2003. The MMA established a voluntary drug benefit for Medicare beneficiaries and created a new Medicare Part D. People eligible for Medicare could begin to enroll in Part D beginning in January of 2006. For more information see <http://www.medicare.gov/publications/pubs/pdf/10050.pdf>.

See related [Fee-for-service health insurance](#); [Health insurance coverage](#); [Health maintenance organization \(HMO\)](#); [Managed care](#); [Appendix I, Medicare Administrative Data](#).

**Mental health organization**—The Center for Mental Health Services of the Substance Abuse and Mental Health Services Administration defines a mental health organization as an administratively distinct public or private agency or institution whose primary concern is provision of direct mental health services to the mentally ill or emotionally disturbed. Excluded are private office-based practices of psychiatrists, psychologists, and other mental health providers; psychiatric services of all types of hospitals or outpatient clinics operated by federal agencies other than the Department of Veterans Affairs (e.g., Public Health Service, Indian Health Service, Department of Defense, and Bureau of Prisons); general hospitals that have no separate psychiatric services but admit psychiatric patients to nonpsychiatric units; and psychiatric services of schools, colleges, halfway houses, community residential organizations, local and county jails, state prisons, and other human services providers. The major types of mental health organizations are described below.

*Freestanding psychiatric outpatient clinic*—These clinics provide only outpatient mental health services on either a regular or emergency basis. A psychiatrist generally assumes the medical responsibility for services.

*Psychiatric hospital*—These hospitals (public or private) primarily provide 24-hour inpatient care and treatment in a hospital setting to persons with mental illnesses. Psychiatric hospitals may be under state, county, private for profit, or private nonprofit auspices.

*General hospital psychiatric service*—These are organizations that provide psychiatric services with assigned staff for 24-hour inpatient or residential care

and/or less than 24-hour outpatient care in a separate ward, unit, floor, or wing of the hospital.

*Department of Veterans Affairs medical center*—These are hospitals operated by the Department of Veterans Affairs (formerly Veterans Administration) and include Department of Veterans Affairs general hospital psychiatric services (including large neuropsychiatric units) and Department of Veterans Affairs psychiatric outpatient clinics.

*Residential treatment center for emotionally disturbed children*—These centers must meet all of the following criteria: (a) provide 24-hour residential services; (b) are not licensed as a psychiatric hospital and have the primary purpose of providing individually planned mental health treatment services in conjunction with residential care; (c) include a clinical program directed by a psychiatrist, psychologist, social worker, or psychiatric nurse with a graduate degree; (d) serve children and youth primarily under the age of 18; and (e) have the primary diagnosis as mental illness, classified as other than mental retardation, developmental disability, or substance-related disorders, according to DSM-III/ICDA-8 or DSM-III-R/ICD-9-CM codes, for the majority of admissions.

*Multiservice mental health organization*—These organizations provide services in both 24-hour and less than 24-hour settings and are not classifiable as a psychiatric hospital, general hospital, or residential treatment center for emotionally disturbed children. (The classification of a psychiatric or general hospital or residential treatment center for emotionally disturbed children takes precedence over a multiservice classification, even if two or more services are offered.)

*Partial care organization*—These organizations provide a program of ambulatory mental health services or rehabilitation, habitation, or education programs.

See related [Admission](#); [Mental health service type](#).

**Mental health service type**—This term refers to the following types of mental health services:

*24-hour mental health care*, formerly called inpatient care, provides care in a mental health hospital setting.

*Less than 24-hour care*, formerly called outpatient or partial care treatment, provides mental health services on an ambulatory basis.

*Residential treatment care* provides overnight mental health care in conjunction with an intensive treatment program in a setting other than a hospital. Facilities may offer care to emotionally disturbed children or mentally ill adults.

See related [Admission](#); [Mental health organization](#).

**Metropolitan statistical area (MSA)**—The Office of Management and Budget (OMB) defines metropolitan statistical areas according to published standards that are applied to U.S. Census Bureau data. The standards are periodically revised, generally prior to the decennial census. In the 2000 standards, an MSA is a county or group of contiguous counties that contains at least one urbanized area of 50,000 or more population. In addition to the county or counties that contain all or part of the urbanized area, an MSA may contain other counties that are economically and socially integrated with the central county or counties as measured by commuting. Counties that are not within an MSA are considered to be nonmetropolitan. For additional information, see: <http://www.census.gov/population/www/estimates/metrodef.html> and [http://www.whitehouse.gov/omb/bulletins/b03-04\\_attach.pdf](http://www.whitehouse.gov/omb/bulletins/b03-04_attach.pdf). See related [Urbanization](#).

Designation of place of residence as metropolitan or nonmetropolitan for respondents to the National Health Interview Survey (NHIS) is based on the following OMB standards and census data: for 2006 and beyond on 2000 census data and the 2000 standards; for 1995–2005 on 1990 census data and the 1990 standards; for 1985–1994 on 1980 census data and the 1980 standards; and for years prior to 1985 shown in *Health, United States*, on 1970 census data and the 1970 standards. For estimates based on 2006 NHIS data combined with earlier years of NHIS, metropolitan status of residence for all years involved is based on 2000 census data and 2000 standards. Introduction of each set of standards may create a discontinuity in trends. For example, when coding is based on the 2000 census data and the 2000 standards, the percent of the population under 65 years of age obtaining private insurance through the workplace in 2005 was 63.8% for persons residing within MSAs and 59.2% for persons living outside MSAs; when coding is based on the

1990 standards and 1990 census data the percents are 64.1% and 59.0%.

**Micropolitan statistical area**—The Office of Management and Budget (OMB) defines micropolitan statistical areas based on published standards that are applied to U.S. Census Bureau data. A micropolitan statistical area is a nonmetropolitan county or group of contiguous nonmetropolitan counties that contains an urban cluster of 10,000 to 49,999 persons. A micropolitan statistical area may include surrounding counties if there are strong economic ties with the central county or counties as measured by commuting. Nonmetropolitan counties that are not classified as part of a micropolitan statistical area are considered nonmicropolitan. For additional information about micropolitan statistical areas, see <http://www.census.gov/population/www/estimates/metrodef.html>. See related [Urbanization](#).

**Multiservice mental health organization**—See [Mental health organization](#).

**National Drug Code (NDC) Directory therapeutic class**—The NDC system was originally established as an essential part of an out-of-hospital drug reimbursement program under Medicare. The NDC serves as a universal product identifier for human drugs. The current edition of the NDC is limited to prescription drugs and a few selected over-the-counter (OTC) products. The directory consists of prescription and selected OTC insulin and domestic and foreign drug products that are in commercial distribution in the United States. The products have been listed in accordance with the Drug Listing Act and applicable Code of Federal Regulations for submitting drug product information to the Food and Drug Administration (FDA). NDC therapeutic class codes are used to identify each of 20 major drug classes to which the drug entry may belong, adapted from Standard Drug Classifications in the NDC Directory, 1995. The two-digit categories are general and represent all subcategories (e.g., Antimicrobial agents), and the specific four-digit categories represent the breakouts of the general category (e.g., Penicillin). The general two-digit codes include medications that do not fit into any of the subcategories (four-digit codes). Starting in 1995, the NDC four-digit classes were changed to include more classes than the previous classification in 1985. Therefore, some drugs switched from a general two-digit class into a more specific four-digit class. In



addition, drugs may be approved for several different therapeutic classes. Some drugs receive approval for additional therapeutic uses after their initial approval, so the same drug can change classes because of new uses.

Numerous drug products have many uses or indications. In an effort to categorize the vast number of the broad analgesic or pain-relief individual products in the marketplace into manageable and nonoverlapping categories, all four-digit categories within the analgesic two-digit therapeutic class were recoded by staff of the FDA's Center for Drug Evaluation and Research. Thus, the codes presented in *Health, United States* do not match the published NDC codes for analgesic therapeutic categories. The NDC contains the following four-digit analgesic therapeutic categories: 1720—general analgesic, 1721—narcotic analgesic, 1722—nonnarcotic analgesic, 1724—antiarthritics, 1723—antimigraine/headache, 1726—central pain syndrome, 1727—nonsteroidal anti-inflammatory drugs (NSAID), 1728—antipyretic, and 1729—menstrual products. These categories were collapsed into broader and mutually exclusive categories of narcotic analgesics, nonnarcotic analgesics, and NSAIDs. Under the NDC system, aspirin is coded as an NSAID because of its anti-inflammatory properties, but also as an analgesic, an antiarthritic, and an antipyretic. In this report aspirin has been recoded into the nonnarcotic analgesic category. Aspirin was not included as an NSAID because of its common use for cardiac therapy and its many other indications.

[Table XII](#) shows how generic analgesic drugs were reclassified for *Health, United States*. Analgesic drugs were reclassified based on the product's main ingredients or indication of use. For example, Robitussin AC contains several ingredients, one of which is codeine, a narcotic. However, its main use is not for pain but for cough suppression; and it is therefore categorized as a cough and cold product as opposed to a narcotic analgesic product.

**Neonatal mortality rate**—See [Rate: Death and related rates](#).

**Nonprofit hospital**—See [Hospital](#).

**North American Industry Classification System (NAICS)**  
—See [Industry of employment](#).

**Notifiable disease**—A notifiable disease is one that, when diagnosed, health providers are required, usually by law, to report to state or local public health officials. Notifiable

diseases are those of public interest by reason of their contagiousness, severity, or frequency.

**Nursing home**—In the Online Survey Certification and Reporting database, a nursing home is a facility that is certified and meets the Center for Medicare & Medicaid Services' long-term care requirements for Medicare and Medicaid eligibility.

In the National Master Facility Inventory (NMFI), which provided the sampling frame for the 1973–1974, 1977, and 1985 National Nursing Home Surveys, a nursing home was an establishment with three or more beds that provided nursing or personal care services to the aged, infirm, or chronically ill. The 1977 National Nursing Home Survey included personal care homes and domiciliary care homes, whereas the National Nursing Home Surveys of 1973–1974, 1985, 1995, 1997, 1999, and 2004 excluded them. The following definitions of nursing home types applied to facilities listed in the NMFI:

*Nursing care home*—These homes employ one or more full-time registered or licensed practical nurses and provide nursing care to at least one-half the residents.

*Personal care home with nursing*—These homes have fewer than one-half the residents receiving nursing care. In addition, such homes employ one or more registered or licensed practical nurses or provided administration of medications and treatments in accordance with physicians' orders, supervision of self-administered medications, or three or more personal services.

*Personal care home without nursing*—These homes have no residents who receive nursing care. These homes provide administration of medications and treatments in accordance with physicians' orders, supervise self-administered medications, or provide three or more personal services.

*Domiciliary care home*—These homes primarily provide supervisory care and one or two personal services.

The following definitions of certification levels apply to data collected in the National Nursing Home Surveys of 1973–1974, 1977, and 1985:

*Skilled nursing facility*—These facilities provide the most intensive nursing care available outside a hospital.

**Table XI. Codes for procedure categories from the *International Classification of Diseases, Ninth Revision, Clinical Modification***

<i>Procedure category</i>	<i>Code numbers</i>
Operations on vessels of heart . . . . .	36
Coronary angioplasty or arthroectomy (Through 2005 data) . . . . .	36.01, 36.02, 36.05
(Starting with 2006 data) . . . . .	00.66
Coronary artery stent insertion . . . . .	36.06, 36.07
Drug-eluting stent insertion . . . . .	36.07
Coronary artery bypass graft (CABG) . . . . .	36.1
Cardiac catheterization . . . . .	37.21–37.23
Pacemaker . . . . .	37.7–37.8
(Starting with 2003 data) . . . . .	37.7–37.8, 00.50, 00.52, 00.53
Carotid (neck arteries) endarterectomy . . . . .	38.12
Endoscopy of small intestine . . . . .	45.11–45.14, 45.16
Endoscopy of large intestine . . . . .	45.21–45.25
Gall bladder removal . . . . .	51.2
Laparoscopic gall bladder removal . . . . .	51.23, 51.24
Treatment of intra-abdominal scar tissue . . . . .	54.5
Removal of prostate . . . . .	60.2–60.6
Transurethral prostatectomy . . . . .	60.2
Hysterectomy . . . . .	68.3–68.5
Abdominal hysterectomy . . . . .	68.4
Vaginal hysterectomy . . . . .	68.5
Forceps, vacuum, and breech delivery . . . . .	72
Episiotomy . . . . .	72.1, 72.21, 72.31, 72.71, 73.6
Other procedures inducing or assisting delivery . . . . .	73
Medical induction of labor . . . . .	73.4
Cesarean section . . . . .	74.0–74.2, 74.4, 74.99
Reduction of fracture . . . . .	79.0–79.5, 76.7, 21.7, 02.02, 03.53
Excision of intervertebral disc and spinal fusion . . . . .	80.5 and 81.0
Total hip replacement . . . . .	81.51
Partial hip replacement . . . . .	81.52
Total knee replacement . . . . .	81.54
Mastectomy . . . . .	85.4
CAT scan . . . . .	87.03, 87.41, 87.71, 88.01, 88.38
Arteriography and angiocardiology with contrast . . . . .	88.4– 88.5
Diagnostic ultrasound . . . . .	00.2, 37.28, 88.7, 95.13
Magnetic resonance imaging . . . . .	88.91–88.97
Mechanical ventilation (1990–1991 data) . . . . .	93.92
(Starting with 1992 data) . . . . .	96.7

Facilities certified by Medicare provide posthospital care to eligible Medicare enrollees. Facilities certified by Medicaid as skilled nursing facilities provide skilled nursing services on a daily basis to individuals eligible for Medicaid benefits.

*Intermediate care facility*—These facilities are certified by the Medicaid program to provide health-related services on a regular basis to Medicaid eligibles who do not require hospital or skilled nursing facility care but do

require institutional care above the level of room and board.

*Not certified facility*—These facilities are not certified as providers of care by Medicare or Medicaid.

Beginning with the 1995 National Nursing Home Survey, nursing homes have been defined as facilities that routinely provide nursing care services and have three or more beds set up for residents. Facilities may be certified by Medicare or Medicaid or not certified but licensed by the state as a

**Table XII. National Drug Code (NDC) therapeutic class analgesic drug recodes**

<i>Narcotic analgesics</i>	<i>Nonnarcotic analgesics</i>	<i>Nonsteroidal anti-inflammatory drugs (NSAIDs)</i>
Alfentanil Hydrochloride	Acetaminophen	Bromfenac Sodium
Alphaprodine	Acetylsalicylic Acid	Celecoxib
Bupernorphine	Aminobenzoic Acid	Diclofenac Potassium
Butorphanol	Aspirin	Diclofenac Sodium
Codeine	Auranofin	Difunisal
Dihydrocodeine	Aurothioglucose	Etodolac
Fentanyl	Butalbital	Fenoprofen
Hydrocodone Bitartrate	Capsaicin	Flurbiprofen Sodium
Hydromorphone	Carbaspirin Calcium	Ibuprofen
Levorphanol	Choline Salicylate	Indomethacin
Meperidine	Etanercept	Ketoprofen
Meperidine HCl	Fluprednisolone	Ketorolac Tromethamine
Methadone	Gold Sodium Thiomalate	Meclofenamate
Morphine	Gold Sodium Thiosulfate	Meclofenamic Acid
Morphine Sulfate	Hyaluronic Acid	Mefenamic Acid
Nalbuphine	Leflunomide	Meloxicam
Opium	Magnesium Salicylate	Nabumetone
Oxycodone	Menthol	Naproxen
Oxycodone HCl	Methotrexate	Oxaprozin
Pentazocine	Methylprednisolone	Piroxicam
Propoxyphene	Methylsulfonylmethane	Rofecoxib
Remifentanyl	Oxyphenbutazone	Sulindac
	Phenyl Salicylate	Suprofen
	Phenylbutazone	Tolmetin
	Prednisolone	Valdecoxib
	Salicylamide	
	Salsalate	
	Sodium Hyaluronate	
	Sodium Salicylate	
	Sodium Thiosalicylate	
	Tramadol	
	Triamcinilone	
	Zomepirac	

NOTE: Drugs originally classified as National Drug Code (NDC) therapeutic category 1720 (general analgesics); 1721 (narcotic analgesics); 1722 (nonnarcotic analgesics); 1724 (antiarthritics); 1727 (NSAIDs); 1728 (antipyretics); and 1729 (menstrual products) were recoded into the three mutually exclusive categories shown above. NDC codes for the analgesic categories 1723 (antimigraine) and 1725 (antigout) were not recoded.

nursing home. The facilities may be freestanding or a distinct unit of a larger facility.

After October 1, 1990, long-term care facilities that met the Omnibus Budget Reconciliation Act of 1987 (OBRA 87) nursing home reform requirements that were formerly certified under the Medicaid program as skilled nursing, nursing home, or intermediate care facilities were reclassified as nursing facilities. The Medicare program continues to certify skilled nursing facilities, but not intermediate care facilities. State Medicaid programs can certify intermediate care facilities for the mentally retarded or developmentally disabled. Nursing

facilities must also be certified to participate in the Medicare program to be certified for participation in Medicaid except those facilities that have obtained waivers. Thus, most nursing home care is now provided in skilled care facilities.

See related [Long-term care facility](#); [Nursing home](#); [Resident, health facility](#).

**Nursing home expenditures**—See [Health expenditures, national](#).

**Obesity**—See [Body mass index \(BMI\)](#).



**Occupancy rate**—In American Hospital Association statistics, hospital occupancy rate is calculated as the average daily census divided by the number of hospital beds, cribs, and pediatric bassinets set up and staffed on the last day of the reporting period, expressed as a percentage. Average daily census is calculated by dividing the total annual number of inpatients, excluding newborns, by 365 days to derive the number of inpatients receiving care on an average day during the annual reporting period. The occupancy rate for facilities other than hospitals is calculated as the number of residents at the facility reported on the day of the interview divided by the number of reported beds. In the Online Survey Certification and Reporting database, occupancy is determined as of the day of certification inspection as the total number of residents on that day divided by the total number of beds on that day.

**Office-based physician**—See [Physician](#).

**Office visit**—In the National Ambulatory Medical Care Survey, a physician's ambulatory practice (office) can be in any location other than in a hospital, nursing home, other extended care facility, patient's home, industrial clinic, college clinic, or family planning clinic. Offices in health maintenance organizations and private offices in hospitals are included. An office visit is any direct personal exchange between an ambulatory patient and a physician or members of his or her staff for the purposes of seeking care and rendering health services. See related [Outpatient visit](#).

**Operation**—See [Procedure](#).

**Outpatient department**—According to the National Hospital Ambulatory Medical Care Survey (NHAMCS), an outpatient department (OPD) is a hospital facility where nonurgent ambulatory medical care is provided. The following types of OPDs are excluded from the NHAMCS: ambulatory surgical centers, chemotherapy, employee health services, renal dialysis, methadone maintenance, and radiology. See related [Emergency department](#); [Outpatient visit](#).

**Outpatient surgery**—According to the American Hospital Association, outpatient surgery is a surgical operation, whether major or minor, performed on patients who do not remain in the hospital overnight. Outpatient surgery may be performed in inpatient operating suites, outpatient surgery suites, or procedure rooms within an outpatient care facility. A

surgical operation involving more than one surgical procedure is considered one surgical operation. See related [Procedure](#).

**Outpatient visit**—The American Hospital Association defines outpatient visits as visits for receipt of medical, dental, or other services at a hospital by patients who are not lodged in the hospital. Each appearance by an outpatient to each unit of the hospital is counted individually as an outpatient visit, including all clinic visits, referred visits, observation services, outpatient surgeries, and emergency department visits. In the National Hospital Ambulatory Medical Care Survey, an outpatient department visit is a direct personal exchange between a patient and a physician or other health care provider working under the physician's supervision for the purpose of seeking care and receiving personal health services. See related [Emergency department or emergency room visit](#); [Outpatient department](#).

**Overweight**—See [Body mass index \(BMI\)](#).

**Pap smear**—A Pap smear (also known as a Papanicolaou smear or Pap test) is a microscopic examination of cells scraped from the cervix that is used to detect cancerous or precancerous conditions of the cervix or other medical conditions.

In the National Health Interview Survey questions concerning Pap smear use were asked on an intermittent schedule, and the question content differed slightly across years. In 1987, women were asked to report when they had their most recent Pap smear in days, weeks, months, or years. Women who did not respond were asked a follow-up question, "Was it 3 years ago or less, between 3 and 5 years, or 5 years or more ago?" Pap smear data in the past 3 years were not available in 1990 and 1991. In 1993 and 1994, women were asked whether they had a Pap smear within the past year, between 1 and 3 years ago, or more than 3 years ago. In 1998, women were asked whether they had a Pap smear 1 year ago or less, more than 1 year but not more than 2 years, more than 2 years but not more than 3 years, more than 3 years but not more than 5 years, or more than 5 years ago.

In 1999, women were asked when they had their most recent Pap smear in days, weeks, months, or years. In 1999, 4% of women in the sample responded 3 years ago. In *Health, United States*, these women were coded as within the past 3 years, although a response of 3 years

ago may include women whose last Pap smear was more than 3 but less than 4 years ago. Thus, estimates for 1999 are overestimated to some degree in comparison with estimates for previous years.

In 2000 and 2003, women were asked when they had their most recent Pap smear (give month and year). Women who did not respond were given a follow-up question that used the 1999 wording and women who did not answer the follow-up question were asked a second follow-up question that used the 1998 wording. In 2000 and 2003, less than 1% of women in the sample answered 3 years ago using the 1999 wording, and they were coded as within the past 3 years. Therefore estimates for 2000 and 2003 may be slightly overestimated in comparison with estimates for years prior to 1999.

In 2005, women were asked the same series of questions about Pap smear use as in the 2000 and 2003 surveys but the skip pattern was modified so that more women were asked the follow-up question using the 1998 wording. Because additional information was available for women who replied their last Pap smear was 3 years ago, these women were not uniformly coded as having had a Pap smear within the past 3 years. Thus, estimates for 2005 are more precise compared with estimates for 1999, 2000, and 2003 and are slightly lower than they would have been without this additional information. For example, using the improved methodology instituted in 2005, 77.7% of women 18 years of age and over reported a Pap smear in the past 3 years compared with an estimate of 78.3% in 2005 using the method employed in 2000 and 2003. SAS code to categorize Pap smear data for 2000–2005 is available from: [http://www.cdc.gov/nchs/about/major/nhis/nhis\\_2005\\_data\\_release.htm](http://www.cdc.gov/nchs/about/major/nhis/nhis_2005_data_release.htm).

All women age 18 and over are asked the Pap smear question(s). In some data years a series of questions was asked that also included information about hysterectomy. Women who report having had a hysterectomy (removal of the uterus, with or out removal of the ovaries and cervix) were still asked the Pap smear questions because a woman who has had a hysterectomy may still have Pap smear tests.

Pap smear screening recommendations have changed over time and vary in the recommended age to begin and end screening, and the interval for screening. For a summary of the current and historic recommendations see: U.S. Preventive Services Task Force. Screening for cervical cancer: Recommendations and rationale. January, 2003.

Agency for Healthcare Research and Quality, Rockville, MD. Available at: <http://www.ahrq.gov/clinic/3rduspstf/cervcan/cervcanrr.htm> and U.S. Preventive Services Task Force. The guide to clinical preventive services, 2007. Agency for Healthcare Research and Quality, Rockville, MD. Available at: <http://www.ahrq.gov/clinic/pocketgd.htm>.

**Partial care organization**—See [Mental health organization](#).

**Partial care treatment**—See [Mental health service type](#).

**Patient**—See [Inpatient](#); [Office visit](#); [Outpatient visit](#).

**Percent change/percentage change** —See [Average annual rate of change](#).

**Perinatal mortality rate; ratio**—See [Rate: Death and related rates](#).

**Personal care home with or without nursing**—See [Nursing home](#).

**Personal health care expenditures**—See [Health expenditures, national](#).

**Physical activity, leisure-time**—All questions related to leisure-time physical activity were phrased in terms of current behavior and lack a specific reference period. Starting with 1998 data, leisure-time physical activity is assessed in the National Health Interview Survey by asking adults a series of questions about how often they do vigorous or light/moderate physical activity of at least 10 minutes duration and for about how long these sessions generally last. Vigorous physical activity is described as causing heavy sweating or a large increase in breathing or heart rate and light/moderate as causing light sweating or a slight to moderate increase in breathing or heart rate. Adults classified as inactive did not report any sessions of light/moderate or vigorous leisure-time physical activity of at least 10 minutes or reported they were unable to perform leisure-time physical activity. Adults who engaged in some leisure-time activity reported at least one session of light/moderate or vigorous activity of at least 10 minutes duration but did not meet the requirement for regular leisure-time activity. Adults who engaged in regular leisure-time activity reported at least three sessions per week of vigorous leisure-time physical activity lasting at least 20 minutes or at least five sessions per week of light/moderate physical activity lasting at least 30 minutes.

**Physician**—Data on physician characteristics are obtained through physician self-report from the American Medical Association's (AMA) Physician Masterfile. The AMA tabulates data only for doctors of medicine (MDs), but some tables in *Health, United States* include data for both MDs and doctors of osteopathy (DOs).

*Active (or professionally active) physician*—These physicians are currently engaged in patient care or other professional activity for a minimum of 20 hours per week. Other professional activity includes administration, medical teaching, research, and other activities, such as employment with insurance carriers, pharmaceutical companies, corporations, voluntary organizations, medical societies, and the like. Physicians who are retired, semiretired, working part-time, or not practicing are classified as inactive and are excluded. Also excluded are physicians with address unknown and physicians who did not provide information on type of practice or present employment (not classified).

*Hospital-based physician*—These physicians are employed under contract with hospitals to provide direct patient care and include physicians in residency training (including clinical fellows) and full-time members of the hospital staff.

*Office-based physician*—These physicians are engaged in seeing patients in solo practice, group practice, two-physician practice, other patient care employment, or inpatient services such as those provided by pathologists and radiologists.

Data for physicians are presented by type of education (doctors of medicine and doctors of osteopathy); place of education (U.S. medical graduates and international medical graduates); activity status (professionally active and inactive); area of specialty; and geographic area. See related [Physician specialty](#).

**Physician specialty**—A physician specialty is any specific branch of medicine in which a physician may concentrate. Data are based on physician self-reports of their primary area of specialty. Physician data are broadly categorized into two areas of practice: those who provide primary care, and those who provide specialty care.

*Primary care generalist*—These physicians practice in the general fields of family medicine, general practice, internal medicine, obstetrics and gynecology, and pediatrics. They specifically exclude primary care specialists associated with these generalist fields.

*Primary care specialist*—These specialists practice in the primary care subspecialties of family medicine, internal medicine, obstetrics and gynecology, and pediatrics. Family medicine subspecialties include geriatric medicine and sports medicine. Internal medicine subspecialties include adolescent medicine, critical care medicine, diabetes, endocrinology, diabetes and metabolism, hematology, hepatology, hematology/oncology, cardiac electrophysiology, infectious diseases, clinical and laboratory immunology, geriatric medicine, sports medicine, nephrology, nutrition, medical oncology, pulmonary critical care medicine, and rheumatology. Obstetrics and gynecology subspecialties include gynecological oncology, gynecology, maternal and fetal medicine, obstetrics, critical care medicine, and reproductive endocrinology. Pediatric subspecialties include adolescent medicine, pediatric critical care medicine, pediatrics/internal medicine, neonatal-perinatal medicine, pediatric allergy, pediatric cardiology, pediatric endocrinology, pediatric infectious disease, pediatric pulmonology, medical toxicology (pediatrics), pediatric emergency medicine, pediatric gastroenterology, pediatric hematology/oncology, clinical and laboratory immunology (pediatrics), pediatric nephrology, pediatric rheumatology, and sports medicine (pediatrics).

*Specialty care physician*—These physicians are sometimes called specialists, and include primary care specialists listed above in addition to all other physicians not included in the generalist definition. Specialty fields include allergy and immunology, aerospace medicine, anesthesiology, cardiovascular diseases, child and adolescent psychiatry, colon and rectal surgery, dermatology, diagnostic radiology, forensic pathology, gastroenterology, general surgery, medical genetics, neurology, nuclear medicine, neurological surgery, occupational medicine, ophthalmology, orthopedic surgery, otolaryngology, psychiatry, public health and general preventive medicine, physical medicine and rehabilitation, plastic surgery, anatomic and clinical

pathology, pulmonary diseases, radiation oncology, thoracic surgery, urology, addiction medicine, critical care medicine, legal medicine, and clinical pharmacology.

See related [Physician](#).

**Population**—The U.S. Census Bureau collects and publishes data on populations in the United States according to several different definitions. Various statistical systems then use the appropriate population for calculating rates. See related [Appendix I, Population Census and Population Estimates](#).

*Total population*—This is the population of the United States, including all members of the Armed Forces living in foreign countries, Puerto Rico, Guam, and the U.S. Virgin Islands. Other Americans abroad (e.g., civilian federal employees and dependents of members of the Armed Forces or other federal employees) are not included.

*Resident population*—This population includes persons whose usual place of residence (i.e., the place where one usually lives and sleeps) is in one of the 50 states or the District of Columbia. It includes members of the Armed Forces stationed in the United States and their families. It excludes international military, naval, and diplomatic personnel and their families located in this country and residing in embassies or similar quarters. Also excluded are international workers and international students in this country and Americans living abroad. The resident population is the denominator for calculating birth and death rates and incidence of disease.

*Civilian population*—The civilian population is the resident population excluding members of the Armed Forces, though families of members of the Armed Forces are included. The civilian population includes both the noninstitutionalized and institutionalized population. The institutionalized population includes persons living in institutions such as correctional institutions, detention homes, and training schools for juvenile delinquents; homes for aged and dependent persons (e.g., nursing homes and convalescent homes); homes for dependent and neglected children; homes and schools for mentally or physically handicapped persons; homes for unwed mothers; psychiatric, tuberculosis, and chronic disease hospitals; and residential treatment centers. The civilian population is the denominator in rates calculated for the

National Hospital Discharge Survey, the National Nursing Home Survey, and for emergency department visit rates using the National Hospital Ambulatory Medical Care Survey—Emergency Department Component.

*Civilian noninstitutionalized population*—This is the civilian population excluding persons residing in institutions (such as correctional institutions and nursing homes). U.S. Census Bureau estimates of the civilian noninstitutionalized population are used to calculate sample weights for the National Health Interview Survey, National Health and Nutrition Examination Survey, and National Survey of Family Growth, and as denominators in rates calculated for the National Ambulatory Medical Care Survey and the National Hospital Ambulatory Medical Care Survey—Outpatient Department Component.

*Introduction of census 2000 population estimates*—*Health United States, 2003* marked the transition to the use of year 2000 resident population estimates based on the 2000 census for calculation of rates. Previously, 1991–2000 rates were based on post-1990 population estimates. Birth rates and death rates for 1991–1999 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were revised using Census 2000 counts. Data systems and surveys that use civilian and civilian noninstitutionalized population estimates as denominators for computation of rates for the period 1991–1999 have not been updated with intercensal estimates based on the 2000 civilian and civilian noninstitutionalized populations. See related [Appendix I, Population Census and Population Estimates](#).

**Postneonatal mortality rate**—See [Rate: Death and related rates](#).

**Poverty**—Poverty statistics are based on definitions originally developed by the Social Security Administration. These include a set of money income thresholds that vary by family size and composition. Families or individuals with income below their appropriate thresholds are classified as below poverty. These thresholds are updated annually by the U.S. Census Bureau to reflect changes in the Consumer Price Index for all urban consumers (CPI-U). For example, the average poverty threshold for a family of four was \$20,614 in 2006, \$17,603 in 2000, and \$13,359 in 1990. For more information, see [Income, poverty and](#)



health insurance coverage in the United States: 2006. Series P-60 No 233. Washington, DC. U.S. Government Printing Office. 2007 and the Census website. Available from: <http://www.census.gov/hhes/www/poverty.html>.

*National Health Interview Survey (NHIS) and National Health and Nutrition Examination Survey (NHANES)*—Percent of poverty level, for years prior to 1997, was based on family income and family size using U.S. Census Bureau poverty thresholds. Starting with 1997 data, percent of poverty level is based on family income, family size, number of children in the family, and for families with two or fewer adults, the age of the adults in the family. Percent of poverty level in the NHANES is also based on family income and family size and composition. See related [Consumer Price Index \(CPI\)](#); [Family income](#); [Appendix I, Current Population Survey](#); [National Health Interview Survey](#); [National Health and Nutrition Examination Survey](#).

**Preferred provider organization (PPO)**—A PPO is a type of medical plan where coverage is provided to participants through a network of selected health care providers (such as hospitals and physicians). The enrollees may go outside the network, but they would pay a greater percentage of the cost of coverage than within the network. See related [Health maintenance organization \(HMO\)](#); [Managed care](#).

**Prenatal care**—Prenatal care is medical care provided to a pregnant woman to prevent complications and decrease the incidence of maternal and prenatal mortality. Information on when pregnancy care began is recorded on the birth certificate. Between 1970 and 1980, the reporting area for prenatal care expanded. In 1970, 39 states and the District of Columbia (D.C.) reported prenatal care on the birth certificate. Data were not available from Alabama, Alaska, Arkansas, Connecticut, Delaware, Georgia, Idaho, Massachusetts, New Mexico, Pennsylvania, and Virginia. In 1975, these data were available from three additional states—Connecticut, Delaware, and Georgia—increasing the number of states reporting prenatal care to 42 and D.C. During 1980–2002, prenatal care information was available for the entire United States. Starting in 2003, some states began implementation of the 2003 revision of the U.S. Standard Certificate of Live Birth. While all states collected information on prenatal care, the prenatal care item on the 2003 revision of the certificate, Date of first prenatal visit, is not comparable with the prenatal care item on the 1989 revision, Month prenatal care began.

In addition, the 2003 revision recommends that information on prenatal care be gathered from prenatal care or medical records whereas the 1989 revision did not recommend a source for these data. Therefore, 2004 and 2005 data on prenatal care are shown separately for the 39 state reporting area that continued to use the 1989 revision in 2005 and for the 7 state reporting area that implemented the 2003 revision by 2004, in order to provide 2 years of comparable data. The states that implemented the 2003 revision of the U.S. Standard Certificate of Live Birth are: starting in 2003, Pennsylvania and Washington, and starting in 2004, Idaho, Kentucky, New York state (excluding New York City), South Carolina, and Tennessee. Starting in 2005, the reporting area using the 2003 revision expanded to 13 states (data not shown in tables), adding Florida, Kansas, Nebraska, New Hampshire, Texas, and Vermont (mid-year).

**Prevalence**—Prevalence is the number of cases of a disease, infected persons, or persons with some other attribute present during a particular interval of time. It is often expressed as a rate (e.g., the prevalence of diabetes per 1,000 persons during a year). See related [Incidence](#).

**Primary care specialty**—See [Physician specialty](#).

**Private expenditures**—See [Health expenditures, national](#).

**Procedure**—The National Hospital Discharge Survey (NHDS) used to classify a procedure as a surgical or nonsurgical operation, diagnostic procedure, or therapeutic procedure (such as respiratory therapy); however, the distinction between types of procedures has become less meaningful because of the development of minimally invasive and noninvasive surgery. Thus, the practice of classifying the type of procedure has been discontinued. Procedures are coded according to the *International Classification of Diseases, Ninth Revision, Clinical Modification* (see [Table XI](#)). Up to four different procedures are coded in the NHDS. Procedures per hospital stay can be classified as any-listed—that is, if more than one procedure with the same code is performed it is counted only once—or all-listed where multiple occurrences of the same procedure would be counted the number of times it appears on the medical record up to the maximum of four available codes. All-listed procedures double-count the number of procedures of a given type that are performed, thus all-listed procedure counts are greater than the number of hospital stays that occurred. Any-listed procedure counts approximate the number of hospital stays where a procedure

was performed at any time during the stay. See related [Outpatient surgery](#).

**Proprietary hospital**—See [Hospital](#).

**Psychiatric hospital**—See [Hospital](#); [Mental health organization](#).

**Public expenditures**—See [Health expenditures, national](#).

**Purchasing power parities**—Purchasing power parities (PPP) are calculated rates of currency conversion that equalize the purchasing power of different currencies by eliminating the differences in price levels between countries. PPP show the ratio of prices in national currencies of the same good or service in different countries. PPP can be used to make inter-country comparisons of the gross domestic product (GDP) and its component expenditures. See related [Gross domestic product](#).

**Race**—In 1977, the Office of Management and Budget (OMB) issued Race and Ethnic Standards for Federal Statistics and Administrative Reporting to promote comparability of data among federal data systems. The 1977 Standards called for the federal government's data systems to classify individuals into the following four racial groups: American Indian or Alaska Native, Asian or Pacific Islander, black, and white. Depending on the data source, the classification by race was based on self-classification or on observation by an interviewer or other person filling out the questionnaire.

In 1997, revisions were announced for classification of individuals by race within the federal government's data systems (Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity. Fed Regist 1997 October 30;62:58781–90). The 1997 Standards have five racial groups: American Indian or Alaska Native, Asian, black or African American, Native Hawaiian or Other Pacific Islander, and white. These five categories are the minimum set for data on race in federal statistics. The 1997 Standards also offer an opportunity for respondents to select more than one of the five groups, leading to many possible multiple-race categories. As with the single-race groups, data for the multiple-race groups are to be reported when estimates meet agency requirements for reliability and confidentiality. The 1997 Standards allow for observer or proxy identification of race but clearly state a preference for self-classification. The federal government considers race and Hispanic origin to be two separate and distinct concepts. Thus, Hispanics may be

of any race. Federal data systems were required to comply with the 1997 Standards by 2003.

*National Health Interview Survey (NHIS)*—Starting with *Health, United States, 2002*, race-specific estimates based on the NHIS were tabulated using the 1997 Standards for data year 1999 and beyond and are not strictly comparable with estimates for earlier years. The 1997 Standards specify five single-race categories plus multiple-race categories. Estimates for specific race groups are shown when they meet requirements for statistical reliability and confidentiality. The race categories white only, black or African American only, American Indian or Alaska Native only, Asian only, and Native Hawaiian or Other Pacific Islander only include persons who reported only one racial group; the category 2 or more races includes persons who reported more than one of the five racial groups in the 1997 Standards or one of the five racial groups and “some other race.” Prior to data year 1999, data were tabulated according to the 1977 Standards with four racial groups, and the Asian only category included Native Hawaiian or Other Pacific Islander. Estimates for single-race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Differences between estimates tabulated using the two standards for data year 1999 are discussed in the footnotes for each NHIS table in the *Health, United States, 2002, 2003, and 2004* editions.

[Tables XIII](#) and [XIV](#) illustrate NHIS data tabulated by race and Hispanic origin according to the 1997 and 1977 Standards for two health statistics (cigarette smoking and private health insurance coverage). In these illustrations, three separate tabulations using the 1997 Standards are shown: 1) Race: mutually exclusive race groups, including several multiple-race combinations; 2) Race, any mention: race groups that are not mutually exclusive because each race category includes all persons who mention that race; and 3) Hispanic origin and race: detailed race and Hispanic origin with a multiple-race total category. Where applicable, comparison tabulations by race and Hispanic origin are shown based on the 1977 Standards. Because there are more race groups with the 1997 Standards, the sample size of each race group under the 1997 Standards is slightly smaller than the sample size under the 1977 Standards. Only those

**Table XIII. Current cigarette smoking among persons 18 years of age and over, by race and Hispanic origin under the 1997 and 1977 Standards for federal data on race and ethnicity: United States, average annual 1993–1995**

1997 Standards	Sample size	Percent	Standard error	1977 Standards	Sample size	Percent	Standard error
White only . . . . .	46,228	25.2	0.26	White . . . . .	46,664	25.3	0.26
Black or African American only . . . . .	7,208	26.6	0.64	Black . . . . .	7,334	26.5	0.63
American Indian or Alaska Native only . . . . .	416	32.9	2.53	American Indian or Alaska Native . . . . .	480	33.9	2.38
Asian only . . . . .	1,370	15.0	1.19	Asian or Pacific Islander . . . . .	1,411	15.5	1.22
2 or more races total . . . . .	786	34.5	2.00				
Black or African American; white . . . . .	83	*21.7	6.05				
American Indian or Alaska Native; white . . . . .	461	40.0	2.58				
Race, any mention							
White, any mention . . . . .	46,882	25.3	0.26				
Black or African American, any mention . . . . .	7,382	26.6	0.63				
American Indian or Alaska Native, any mention . . . . .	965	36.3	1.71				
Asian, any mention . . . . .	1,458	15.7	1.20				
Native Hawaiian or Other Pacific Islander, any mention . . . . .	53	*17.5	5.10				
Hispanic origin and race							
Not Hispanic or Latino:				Non-Hispanic:			
White only . . . . .	42,421	25.8	0.27	White . . . . .	42,976	25.9	0.27
Black or African American only . . . . .	7,053	26.7	0.65	Black . . . . .	7,203	26.7	0.64
American Indian or Alaska Native only . . . . .	358	33.5	2.69	American Indian or Alaska Native . . . . .	407	35.4	2.53
Asian only . . . . .	1,320	14.8	1.21	Asian or Pacific Islander . . . . .	1,397	15.3	1.24
2 or more races total . . . . .	687	35.6	2.15				
Hispanic or Latino . . . . .	5,175	17.8	0.65	Hispanic . . . . .	5,175	17.8	0.65

\* Relative standard error is 20%–30%.

NOTES: The 1997 Standards for the Classification of Federal Data on Race and Ethnicity specified five race groups (white, black or African American, American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander) and allow respondents to report one or more race groups. Estimates for single-race and multiple-race groups not shown above do not meet standards for statistical reliability or confidentiality (relative standard error greater than 30%). Race groups under the 1997 Standards were based on the question, "What is the group or groups which represents \_\_\_\_\_ race?" For persons who selected multiple groups, race groups under the 1977 Standards were based on the additional question, "Which of those groups would you say best represents \_\_\_\_\_ race?" Race-specific estimates in this table were calculated after excluding respondents of other and unknown race. Other published race-specific estimates are based on files in which such responses have been edited. Estimates are age adjusted to the year 2000 standard population using five age groups: 18–24 years, 25–34 years, 35–44 years, 45–64 years, and 65 years and over. See [Appendix II, Age adjustment](#).

SOURCE: Centers for Disease Control and Prevention, NCHS. National Health Interview Survey.

few multiple-race groups with sufficient numbers of observations to meet standards of statistical reliability are shown. [Tables XIII](#) and [XIV](#) also illustrate changes in labels and group categories in the 1997 Standards. The race designation of black was changed to black or African American, and the ethnicity designation of Hispanic was changed to Hispanic or Latino.

Data systems included in *Health, United States*, other than the NHIS, the National Survey of Drug Use & Health (NSDUH), and the National Health and Nutrition

Examination Survey (NHANES), generally do not permit tabulation of estimates for the detailed race and ethnicity categories shown in [Tables XIII](#) and [XIV](#), either because race data based on the 1997 standard categories are not yet available or because there are insufficient numbers of observations in certain subpopulation groups to meet statistical reliability or confidentiality requirements.

In an effort to improve the quality of data on ethnicity and race in the NHIS, hot-deck imputation of selected race and ethnicity variables was done for the first time in



**Table XIV. Private health care coverage among persons under 65 years of age, by race and Hispanic origin under the 1997 and 1977 Standards for federal data on race and ethnicity: United States, average annual 1993–1995**

1997 Standards	Sample size	Percent	Standard error	1977 Standards	Sample size	Percent	Standard error
White only . . . . .	168,256	76.1	0.28	White . . . . .	170,472	75.9	0.28
Black or African American only . . . . .	30,048	53.5	0.63	Black . . . . .	30,690	53.6	0.63
American Indian or Alaska Native only . . . . .	2,003	44.2	1.97	American Indian or Alaska Native . . . . .	2,316	43.5	1.85
Asian only . . . . .	6,896	68.0	1.39	Asian and Pacific Islander . . . . .	7,146	68.2	1.34
Native Hawaiian or Other Pacific Islander only . . . . .	173	75.0	7.43				
2 or more races total . . . . .	4,203	60.9	1.17				
Black or African American; white . . . . .	686	59.5	3.21				
American Indian or Alaska Native; white . . . . .	2,022	60.0	1.71				
Asian; white . . . . .	590	71.9	3.39				
Native Hawaiian or Other Pacific Islander; white . . . . .	56	59.2	10.65				
Race, any mention							
White, any mention . . . . .	171,817	75.8	0.28				
Black or African American, any mention . . . . .	31,147	53.6	0.62				
American Indian or Alaska Native, any mention . . . . .	4,365	52.4	1.40				
Asian, any mention . . . . .	7,639	68.4	1.27				
Native Hawaiian or Other Pacific Islander, any mention . . . . .	283	68.7	6.23				
Hispanic origin and race							
Not Hispanic or Latino:				Non-Hispanic:			
White only . . . . .	146,109	78.9	0.27	White . . . . .	149,057	78.6	0.27
Black or African American only . . . . .	29,250	53.9	0.64	Black . . . . .	29,877	54.0	0.63
American Indian or Alaska Native only . . . . .	1,620	45.2	2.15	American Indian or Alaska Native . . . . .	1,859	44.6	2.05
Asian only . . . . .	6,623	68.2	1.43	Asian and Pacific Islander . . . . .	6,999	68.4	1.40
Native Hawaiian or Other Pacific Islander only . . . . .	145	76.4	7.79				
2 or more races total . . . . .	3,365	62.6	1.18				
Hispanic or Latino . . . . .	31,040	48.8	0.74	Hispanic . . . . .	31,040	48.8	0.74

NOTES: The 1997 Standards for the Classification of Federal Data on Race and Ethnicity specified five race groups (white, black or African American, American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander) and allow respondents to report one or more race groups. Estimates for single-race and multiple-race groups not shown above do not meet standards for statistical reliability or confidentiality (relative standard error greater than 30%). Race groups under the 1997 Standards were based on the question, "What is the group or groups which represents \_\_\_\_\_ race?" For persons who selected multiple groups, race groups under the 1977 Standards were based on the additional question, "Which of those groups would you say best represents \_\_\_\_\_ race?" Race-specific estimates in this table were calculated after excluding respondents of other and unknown race. Other published race-specific estimates are based on files in which such responses have been edited. Estimates are age adjusted to the year 2000 standard population using three age groups: Under 18 years, 18–44 years, and 45–64 years of age. See [Appendix II, Age adjustment](#).

SOURCE: Centers for Disease Control and Prevention, NCHS. National Health Interview Survey.

the 2000 NHIS and continued to be used for subsequent data years. Starting with 2003 data, records for persons for whom "other race" was the only race response were treated as having missing data on race, and were added to the pool of records for which selected race and ethnicity variables were imputed. Prior to the 2000 NHIS,

a crude imputation method that assigned a race to persons with missing values for the variable MAINRACE (the respondent's classification of the race he or she most identified with) was used. Under these procedures, if an observed race was recorded by the interviewer, it was used to code a race value. If there was no

observed race value, all persons who had a missing value for MAINRACE and were identified as Hispanic on the Hispanic origin question were coded as white. In all other cases, non-Hispanic persons were coded as "other race." Additional information on the NHIS methodology for imputing race and ethnicity is available from the survey documentation: [http://www.cdc.gov/nchs/about/major/nhis/quest\\_data\\_related\\_1997\\_forward.htm](http://www.cdc.gov/nchs/about/major/nhis/quest_data_related_1997_forward.htm) and from the NHIS race and Hispanic origin home page at: <http://www.cdc.gov/nchs/about/major/nhis/rhoi/rhoi.htm>.

*National Health and Nutrition Examination Survey (NHANES)*—Starting with *Health, United States, 2003* race-specific estimates based on NHANES were tabulated using the 1997 Standards for data years 1999 and beyond. Prior to data year 1999, the 1977 Standards were used. Because of the differences between the two standards, the race-specific estimates shown in trend tables based on the NHANES for 1999–2004 are not strictly comparable with estimates for earlier years. Race in NHANES I and II was determined primarily by interviewer observation; starting with NHANES III, race was self-reported by survey participants.

The NHANES sample was designed to provide estimates specifically for persons of Mexican origin and not for all Hispanic-origin persons in the United States. Persons of Hispanic origin other than Mexicans were entered into the sample with different selection probabilities that are not nationally representative of the total U.S. Hispanic population. Estimates are shown for non-Hispanic white, non-Hispanic black, and Mexican-origin persons. Although data were collected according to the 1997 Standards, there are insufficient numbers of observations to meet statistical reliability or confidentiality requirements for reporting estimates for additional race categories.

*National Survey on Drug Use & Health (NSDUH)*—Race-specific estimates based on NSDUH are tabulated using the 1997 Standards. Estimates in the NSDUH trend table begin with the data year 1999. Estimates for specific race groups are shown when they meet requirements for statistical reliability and confidentiality. The race categories white only, black or African American only, American Indian or Alaska Native only, Asian only, and Native Hawaiian or Other Pacific Islander only include persons who reported only one racial group; and the

category 2 or more races includes persons who reported more than one of the five racial groups in the 1997 Standards or one of the five racial groups and "some other race."

*National Vital Statistics System*—Most of the states in the Vital Statistics Cooperative Program are still revising their birth and death records to conform to the 1997 standards on race and ethnicity. During the transition to full implementation of the 1997 Standards, vital statistics data will continue to be presented for the four major race groups—white, black or African American, American Indian or Alaska Native, and Asian or Pacific Islander—in accordance with 1977 Standards.

*Birth File*—Information about the race and Hispanic ethnicity of the mother and father are provided by the mother at the time of birth and recorded on the birth certificate and fetal death record. Since 1980, birth rates, birth characteristics, and fetal death rates for live-born infants and fetal deaths are presented in this report according to race of mother. Before 1980, data were tabulated by race of newborn and fetus, taking into account the race of both parents. If the parents were of different races and one parent was white, the child was classified according to the race of the other parent. When neither parent was white, the child was classified according to father's race, with one exception: if either parent was Hawaiian, the child was classified Hawaiian. Before 1964, if race was unknown, the birth was classified as white. Starting in 1964, unknown race was classified according to information on the birth record. Starting with 2000 data, the race and ethnicity data used for denominators (population) to calculate birth rates are collected in accordance with 1997 revised OMB standards for race and ethnicity. However, the numerators (births) will not be compatible with the denominators until all the states revise their birth certificates to reflect the new standards. In order to compute rates, it is necessary to bridge population data for multiple-race persons to single-race categories. See related [Appendix I, Population Census and Population Estimates, Bridged-Race Population Estimates for Census 2000](#).

Starting with 2003 data, multiple-race data were reported by both Pennsylvania and Washington, which used the 2003 revision of the U.S. Standard Certificate of Live

Birth, as well as California, Hawaii, Ohio (for births occurring in December only), and Utah, which used the 1989 revision of the U.S. Standard Certificate of Live Birth. In 2004, multiple race was reported on the revised birth certificates of Florida, Idaho, Kentucky, New Hampshire, New York state (excluding New York City), Pennsylvania, South Carolina, Tennessee, and Washington, as well as on the unrevised certificates of California, Hawaii, Michigan (for births at selected facilities only), Minnesota, Ohio, and Utah (a total of 15 states). These 15 states, which account for 43% of births in the United States in 2004, reported 3% of the mothers as multiracial. Data from the vital records of the remaining 35 states, New York City, and the District of Columbia followed the 1977 OMB standards in which a single race is reported. For the 2005 data year, multiple race was also reported by those 15 states that reported multiple race data in 2004 and additionally by Kansas, Nebraska, Texas, and Vermont (for births occurring from July 1, 2005, only) using the 2003 revision of the U.S. Standard Certificate of Live Birth. The 19 states with complete reporting of multiple race represent 50.9 percent of all U.S. resident births in 2005. Data from the vital records of the remaining states, the District of Columbia, New York City, and the territories followed the 1977 OMB standards. In addition, these areas also report the minimum set of four race categories as stipulated in the 1977 standards, compared with the minimum of five race categories for the 1997 standards. In order to provide uniformity and comparability of the data during the transition period, before multiple-race data are available for all reporting areas, it is necessary to bridge the responses of those who reported more than one race to a single race. See Martin JA, Hamilton BE, et al. Births: Final data for 2003. National vital statistics report; vol 54 no 2. Hyattsville, MD: NCHS. 2005. Although the bridging procedure imputes multiple-race of mothers to one of the four minimum races stipulated in the 1977 race and ethnicity standards, mothers of a specified Asian or Pacific Islander (API) subgroup (Chinese, Japanese, Hawaiian, or Filipino) in combination with another race (American Indian or Alaska Native, black, and/or white) or another API subgroup cannot be imputed to a single Asian or Pacific Islander subgroup. In 2003, API mothers were disproportionately represented in the six states reporting multiple-race (44%). Data are not shown for the API subgroups or reported alone or in

combination with other races or other API subgroups because the bridging technique cannot be applied in this detail. These data are available in the 2003 Natality public-use data file, which can be found at <http://www.cdc.gov/nchs/births.htm>.

*Mortality File*—Information about the race and Hispanic ethnicity of the decedent is reported by the funeral director as provided by an informant, often the surviving next of kin, or, in the absence of an informant, on the basis of observation. Death rates by race and Hispanic origin are based on information from death certificates (numerators of the rates) and on population estimates from the Census Bureau (denominators). Race and ethnicity information from the census is by self-report. To the extent that race and Hispanic origin are inconsistent between these two data sources, death rates will be biased. Studies have shown that persons self-reported as American Indian, Asian, or Hispanic on census and survey records may sometimes be reported as white or non-Hispanic on the death certificate, resulting in an underestimation of deaths and death rates for the American Indian, Asian, and Hispanic groups. Bias also results from undercounts of some population groups in the census, particularly young black males, young white males, and elderly persons, resulting in an overestimation of death rates. The net effects of misclassification and undercoverage result in overstated death rates for the white population and black population are estimated to be 1% and 5%, respectively; understated death rates for other population groups are estimated as follows: American Indians, 21%; Asian or Pacific Islanders, 11%; and Hispanics, 2%. For more information, see Rosenberg HM, Maurer JD, Sorlie PD, et al. Quality of death rates by race and Hispanic origin: A summary of current research, 1999. NCHS. Vital Health Stat 2(128). 1999.

Denominators for infant and maternal mortality rates are based on number of live births rather than population estimates. Race information for the denominator is supplied from the birth certificate. Before 1980, race of child for the denominator took into account the races of both parents. Starting in 1980, race information for the denominator was based solely on race of mother. Race information for the numerator is supplied from the death certificate. For the infant mortality rate, race information

for the numerator is race of the deceased child; for the maternal mortality rate, it is race of the mother.

Vital event rates for the American Indian or Alaska Native population shown in this book are based on the total U.S. resident population of American Indians and Alaska Natives, as enumerated by the U.S. Census Bureau. In contrast, the Indian Health Service calculates vital event rates for this population based on U.S. Census Bureau county data for American Indians and Alaska Natives who reside on or near reservations. Interpretation of trends for the American Indian and Alaska Native population should take into account that population estimates for these groups increased by 45% between 1980 and 1990, partly because of better enumeration techniques in the 1990 decennial census and the increased tendency for people to identify themselves as American Indian in 1990.

Interpretation of trends for the Asian population in the United States should take into account that this population more than doubled between 1980 and 1990, primarily because of immigration. Between 1990 and 2000, the increase in the Asian population was 48% for persons reporting that they were Asian alone, and 72% for persons who reported they were either Asian alone or in combination with another race.

For more information on coding race using vital statistics, see NCHS, Technical Appendix. Vital Statistics of the United States, Vol. I, Natality, and Vol. II, Mortality, Part A. Available from: <http://www.cdc.gov/nchs/nvss.htm>.

Starting with 2003 data, some states began using the 2003 revision of the U.S. Standard Certificate of Death, which allows the reporting of more than one race (multiple races). This change was implemented to reflect the increasing diversity of the U.S. population and to be consistent with the decennial census. Most states, however, are still using the 1989 revision of the U.S. Standard Certificate of Death which allows only a single race to be reported.

In order to provide uniformity and comparability of the data until all states are reporting multiple-race data, it was necessary to “bridge” the responses of those for whom more than one race was reported (multiple race) to one, single race. In 2003, seven states reported multiple-race data. In 2004, 15 states reported multiple-race data, and in 2005, 21 states reported

multiple-race data. The states using the new death certificate and reporting multiple-race data from 2003 onwards were California, Idaho, Montana, and New York; in addition, Hawaii, Maine, and Wisconsin reported multiple-race data using the 1989 revision of the death certificate. Starting with 2004, multiple-race data were reported for those seven states and Michigan, Minnesota, New Hampshire, New Jersey, Oklahoma, South Dakota, Washington, and Wyoming. Starting with 2005, the seven additional reporting areas providing multiple-race data were Connecticut, District of Columbia, Florida, Kansas, Nebraska, South Carolina, and Utah.

For more information on coding race using vital statistics, see: Kung H-C, Hoyert DL, Xu JQ, Murphy SL. Deaths: Final data for 2005. National vital statistics reports. Vol 56 no 10. Hyattsville, MD: NCHS. 2008. Available from: [http://www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56\\_10.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56_10.pdf).

NCHS. NCHS Procedures for Multiple-Race and Hispanic Origin Data: Collection, Coding, Editing, and Transmitting. 2004. Available from: [http://www.cdc.gov/nchs/data/dvs/Multiple\\_race\\_documentation\\_5-10-04.pdf](http://www.cdc.gov/nchs/data/dvs/Multiple_race_documentation_5-10-04.pdf).

NCHS. Technical Appendix. Vital Statistics of the United States, Vol. I, Natality, and Vol. II, Mortality, Part A. Available from: <http://www.cdc.gov/nchs/nvss.htm>.

*Youth Risk Behavior Survey (YRBS)*—Prior to 1999, the 1977 Standards were used. Respondents could select only one of the following categories: white (not Hispanic), black (not Hispanic), Hispanic or Latino, Asian or Pacific Islander, American Indian or Alaska Native, or other. Beginning in 1999, the 1997 Standards were used for race-specific estimates and respondents were given the option of selecting more than one category to describe their race and ethnicity. Between 1999 and 2003, students were asked a single question about race and Hispanic origin with the option of choosing more than one of the following responses: white, black or African American, Hispanic or Latino, Asian, Native Hawaiian or Other Pacific Islander, or American Indian or Alaska Native. In 2005, students were asked a question about Hispanic origin (Are you Hispanic or Latino?) and a second separate question about race that included the option of selecting more than one of the following categories: American Indian or Alaska Native, Asian, black or African American, Native Hawaiian or Other Pacific Islander, or white. Because of the differences

between questions, the data about race and Hispanic ethnicity for the years prior to 1999 are not strictly comparable with estimates for the later years. However, analyses of data collected between 1991 and 2003 have indicated that the data are comparable across years and can be used to study trends.

See Brender ND, Kann L, McManus, T. A comparison of two survey questions on race and ethnicity among high school students. *Public opinion quarterly*. 2003;67(2):227–36.

See related Hispanic origin; [Appendix I, Population Census and Population Estimates](#).

**Rate**—A rate is a measure of some event, disease, or condition in relation to a unit of population, along with some specification of time. See related [Age adjustment](#); [Population](#).

■ *Birth and related rates*

*Birth rate* is calculated by dividing the number of live births in a population in a year by the midyear resident population. For census years, rates are based on unrounded census counts of the resident population, as of April 1. For the noncensus years 1981–1989, rates were based on national estimates of the resident population, as of July 1, rounded to 1,000s. Rounded population estimates for 5-year age groups were calculated by summing unrounded population estimates before rounding to 1,000s. Starting in 1991, rates were based on unrounded national population estimates. Beginning in 1997, the birth rate for the maternal age group 45–49 years includes data for mothers age 50–54 years in the numerator and is based on the population of women age 45–49 years in the denominator. Birth rates are expressed as the number of live births per 1,000 population. The rate may be restricted to births to women of specific age, race, marital status, or geographic location (specific rate), or it may be related to the entire population (crude rate).

*Fertility rate* is the total number of live births, regardless of age of mother, per 1,000 women of reproductive age, 15–44 years.

■ *Death and related rates*

*Death rate* is calculated by dividing the number of deaths in a population in a year by the midyear resident

population. For census years, rates are based on unrounded census counts of the resident population, as of April 1. For the noncensus years 1981–1989, rates were based on national estimates of the resident population, as of July 1, rounded to thousands. Rounded population estimates for 10-year age groups were calculated by summing unrounded population estimates before rounding to 1,000s. Starting in 1991 rates were based on unrounded national population estimates. Rates for the Hispanic and non-Hispanic white populations in each year are based on unrounded state population estimates for states in the Hispanic reporting area. Death rates are expressed as the number of deaths per 100,000 population. The rate may be restricted to deaths in specific age, race, sex, or geographic groups or from specific causes of death (specific rate), or it may be related to the entire population (crude rate).

*Birth cohort infant mortality rates* are based on linked birth and infant death files. In contrast to period rates in which the births and infant deaths occur in the same period or calendar year, infant deaths constituting the numerator of a birth cohort rate may have occurred in the same year as, or in the year following, the year of birth. The birth cohort infant mortality rate is expressed as the number of infant deaths per 1,000 live births. See related [Birth cohort](#).

*Fetal death rate* is the number of fetal deaths with stated or presumed gestation of 20 weeks or more divided by the sum of live births plus fetal deaths, per 1,000 live births plus fetal deaths.

*Infant mortality rate* based on period files is calculated by dividing the number of infant deaths during a calendar year by the number of live births reported in the same year. It is expressed as the number of infant deaths per 1,000 live births. *Neonatal mortality rate* is the number of deaths of children under 28 days of age, per 1,000 live births. *Postneonatal mortality rate* is the number of deaths of children that occur between 28 days and 365 days after birth, per 1,000 live births. See related [Infant death](#).

*Late fetal death rate* is the number of fetal deaths with stated or presumed gestation of 28 weeks or more divided by the sum of live births plus late fetal deaths,



per 1,000 live births plus late fetal deaths. See related [Gestation](#).

*Maternal mortality rate* is defined as the number of maternal deaths per 100,000 live births. The maternal mortality rate is a measure of the likelihood that a pregnant woman will die from maternal causes. The number of live births used in the denominator is a proxy for the population of pregnant women who are at risk of a maternal death. See related [Maternal death](#).

*Perinatal rates* relate to the period surrounding the birth event. Rates and ratios are based on events reported in a calendar year. *Perinatal mortality rate* is the sum of late fetal deaths plus infant deaths within 7 days of birth divided by the sum of live births plus late fetal deaths, per 1,000 live births plus late fetal deaths. *Perinatal mortality ratio* is the sum of late fetal deaths plus infant deaths within 7 days of birth divided by the number of live births, per 1,000 live births.

*Visit rate* is a basic measure of service utilization for event-based data. Examples of events include physician office visits with drugs provided or hospital discharges. In the visit rate calculation, the numerator is the number of estimated events, and the denominator is the corresponding U.S. population estimate for those who possibly could have had events during a given period of time. The interpretation is that for every person in the population there were, on average,  $x$  events. It does not mean that  $x$  percentage of the population had events, because some persons in the population had no events while others had multiple events. The only exception is when an event can occur just once for a person (e.g., if an appendectomy were performed during a hospital stay). The visit rate is best used to compare utilization across various subgroups of interest such as age or race groups or geographic regions.

**Region**—See [Geographic region and division](#).

**Registered hospital**—See [Hospital](#).

**Registration area**—The United States has separate registration areas for birth, death, marriage, and divorce statistics. In general, registration areas correspond to states and include two separate registration areas for the District of Columbia (D.C.) and New York City. The term reporting area may be used interchangeably for the term registration area.

All states have adopted laws that require registration of births and deaths and reporting of fetal deaths. It is believed that more than 99% of births and deaths occurring in this country are registered.

The death registration area was established in 1900 with 10 states and D.C., and the birth registration area was established in 1915, also with 10 states and D.C. Beginning in 1933, all states were included in the birth and death registration areas. The specific states added year by year are shown in History and Organization of the Vital Statistics System. Reprinted from Vital Statistics of the United States Vol. I, 1950, chapter 1. NCHS, 1978. Currently, Puerto Rico, U.S. Virgin Islands, and Guam each constitutes a separate registration area, although their data are not included in statistical tabulations of U.S. resident data. See related [Reporting area](#).

**Relative standard error**—The relative standard error (RSE) is a measure of an estimate's reliability. The RSE of an estimate is obtained by dividing the standard error of the estimate (SE( $r$ )) by the estimate itself ( $r$ ). This quantity is expressed as a percentage of the estimate and is calculated as follows:  $RSE = 100 \times (SE(r)/r)$ . Estimates with large RSEs are considered unreliable. In *Health, United States*, most statistics with large RSEs are preceded by an asterisk or are not presented.

**Relative survival rate**—The relative survival rate is the ratio of the observed survival rate for the patient group to the expected survival rate for persons in the general population similar to the patient group with respect to age, sex, race, and calendar year of observation. The 5-year relative survival rate is used to estimate the proportion of cancer patients potentially curable. Because over one-half of all cancers occur in persons 65 years of age and over, many of these individuals die of other causes with no evidence of recurrence of their cancer. Thus, because it is obtained by adjusting observed survival for the normal life expectancy of the general population of the same age, the relative survival rate is an estimate of the chance of surviving the effects of cancer.

**Reporting area**—In the National Vital Statistics System, the reporting area for such basic items on the birth and death certificates as age, race, and sex is based on data from residents of all 50 states in the United States, the District of Columbia (D.C.), and New York City (NYC). The term reporting area may be used interchangeably for the term

registration area. The reporting area for selected items such as Hispanic origin, educational attainment, and marital status is based on data from those states that require the item to be reported, whose data meet a minimum level of completeness (such as 80% or 90%), and are considered to be sufficiently comparable to be used for analysis. In 1993–1996, the reporting area for Hispanic origin of decedent on the death certificate included 49 states and D.C. Starting in 1997, the Hispanic reporting area includes all 50 states and D.C. See related [Registration area](#); [Appendix I, National Vital Statistics System](#).

**Resident, health facility**—In the Online Survey Certification and Reporting database, all residents in certified facilities are counted on the day of certification inspection. In the National Nursing Home Survey, a resident is a person on the roster of the nursing home as of the night before the survey. Included are all residents for whom beds are maintained even though they may be on overnight leave or in a hospital. See related [Nursing home](#).

**Resident population**—See [Population](#).

**Residential treatment care**—See [Mental health service type](#).

**Residential treatment center for emotionally disturbed children**—See [Mental health organization](#).

**Rural**—See [Urbanization](#).

**Self-assessment of health**—See [Health status, respondent-assessed](#).

**Serious psychological distress**—The K6 instrument is a measure of psychological distress associated with unspecified but potentially diagnosable mental illness that may result in a higher risk for disability and higher utilization of health services. The K6 was asked of adults 18 years of age and older. The K6 is designed to identify persons with serious psychological distress using as few questions as possible. The six items included in the K6 are as follows:

During the past 30 days, how often did you feel:

- So sad that nothing could cheer you up?
- Nervous?
- Restless or fidgety?
- Hopeless?
- That everything was an effort?
- Worthless?

Possible answers are all of the time (4 points), most of the time (3 points), some of the time (2 points), a little of the time (1 point), and none of the time (0 points).

To score the K6, the points are added together yielding a possible total of 0 to 24 points. A threshold of 13 or more is used to define serious psychological distress. Persons answering some of the time to all six questions would not reach the threshold for serious psychological distress, because to achieve a score of 13 they would need to answer most of the time to at least one item. The version of the K6 used in the NHIS provides one-month prevalence rates because the reference period is the past 30 days.

For more information, see Kessler RC, Barker PR, Colpe LJ, et al. Screening for serious mental illness in the general population. *Arch Gen Psychiatry* 2003;60:184–189.

**Short-stay hospital**—See [Hospital](#).

**Skilled nursing facility**—See [Nursing home](#).

**Smoker**—See [Cigarette smoking](#).

**Specialty hospital**—See [Hospital](#).

**State Children's Health Insurance Program (SCHIP)**—Title XXI of the Social Security Act, known as the State Children's Health Insurance Program (SCHIP), is a program initiated by the Balanced Budget Act of 1997 (BBA). SCHIP provides more federal funds for states to provide health care coverage to low-income, uninsured children. SCHIP gives states broad flexibility in program design while protecting beneficiaries through federal standards. Funds from SCHIP may be used to expand Medicaid or to provide medical assistance to children during a presumptive eligibility period for Medicaid. This is one of several options from which states may select to provide health care coverage for more children, as prescribed within the BBA's Title XXI program. See related [Health insurance coverage](#); [Medicaid](#).

**State mental health agency**—Refers to the agency or department within state government, headed by the state or territorial health official, dealing with mental health issues. Generally, the state mental health agency is responsible for setting statewide mental health priorities, carrying out national and state mandates, responding to mental health hazards, and assuring access to mental health care for underserved state residents.



**Substance use**—refers to the use of selected substances including alcohol, tobacco products, drugs, inhalants, and other substances that can be consumed, inhaled, injected, or otherwise absorbed into the body with possible detrimental effects.

*The Monitoring the Future Study (MTF)*—The MTF collects information on use of selected substances using self-completed questionnaires to a school-based survey of secondary school students. MTF has tracked 12th graders' illicit drug use and attitudes towards drugs since 1975. In 1991, 8th and 10th graders were added to the study. The survey includes questions on abuse of substances including (but not limited to) marijuana, inhalants, illegal drugs, alcohol, cigarettes, and other tobacco products. A standard set of three questions is used to assess use of the substances in the past month. Past month refers to an individual's use of a substance at least once during the month preceding their response to the survey. See related [Appendix I, Monitoring the Future Study](#).

*National Survey on Drug Use & Health (NSDUH)*—The NSDUH conducts in-person interviews of a sample of individuals 12 years of age and older at their place of residence. For illicit drug use, alcohol use, and tobacco use, information is collected about use in past month. For information on illicit drug use, respondents in the NSDUH are asked about use of marijuana/hashish, cocaine (including crack), inhalants, hallucinogens, heroin, and prescription-type drugs used nonmedically (pain relievers, tranquilizers, stimulants, and sedatives). A series of questions is asked about each substance: "Have you ever, even once, used [e.g., Ecstasy, also known as MDMA/substance]?" "Think specifically about the past 30 days, from [date] up to and including today. During the past 30 days, on how many days did you use [substance]?" Numerous probes and checks are included in the computer-assisted interview system. Nonprescription medications and legitimate uses under a doctor's supervision are not included in the survey. Summary measures, such as, any illicit drug use, are produced. See related [Alcohol consumption](#); [Cigarette smoking](#); [Illicit drug use](#); [Appendix I, National Survey on Drug Use & Health](#).

**Suicidal ideation**—Suicidal ideation is having thoughts of suicide or of taking action to end one's own life. Suicidal

ideation includes all thoughts of suicide, both when the thoughts include a plan to commit suicide and when they do not include a plan. Suicidal ideation is measured in the Youth Risk Behavior Survey by the question "During the past 12 months, did you ever seriously consider attempting suicide?"

**Surgery**—See [Outpatient surgery](#); [Procedure](#).

**Surgical specialty**—See [Physician specialty](#).

**Tobacco use**—See [Cigarette smoking](#).

**Uninsured**—In the Current Population Survey (CPS) persons are considered uninsured if they do not have coverage through private health insurance, Medicare, Medicaid, State Children's Health Insurance Program, military or Veterans coverage, another government program, a plan of someone outside the household, or other insurance. Persons with only Indian Health Service coverage are considered uninsured. In addition, if the respondent has missing Medicaid information but has income from certain low-income public programs, then Medicaid coverage is imputed. The questions on health insurance are administered in March and refer to the previous calendar year.

In the National Health Interview Survey (NHIS), the uninsured are persons who do not have coverage under private health insurance, Medicare, Medicaid, public assistance, a state-sponsored health plan, other government-sponsored programs, or a military health plan. Persons with only Indian Health Service coverage are considered uninsured. Estimates of the percentage of persons who are uninsured based on the NHIS ([Table 139](#)) may differ slightly from those based on the March CPS ([Table 151](#)) because of differences in survey questions, recall period, and other aspects of survey methodology. Estimates for the uninsured are shown only for the population under age 65.

Survey respondents may be covered by health insurance at the time of the interview, but may have experienced one or more lapses in coverage during the year prior to the interview. Starting in *Health United States, 2006*, NHIS estimates for people with health insurance coverage for all 12 months prior to the interview, for those who were uninsured for any period up to 12 months, and for those who were uninsured for more than 12 months were added as stub variables to selected tables. See related [Health insurance coverage](#); [Appendix I, Current Population Survey](#).

**Urbanization**—Urbanization is the degree of urban (city-like) character of a particular geographic area. Urbanization can be measured in a variety of ways. In this report, the two measures used to categorize counties by urbanization level are the Office of Management and Budget's (OMB) metropolitan statistical area (MSA) classification and the 2006 NCHS Urban-Rural Classification Scheme for Counties. For more information on the OMB classification of counties, see related [Metropolitan statistical area \(MSA\); Micropolitan statistical area](#).

The 2006 NCHS Urban-Rural Classification Scheme for Counties is a six-level classification scheme developed by NCHS to categorize the 3,141 U.S. counties and county-equivalents based on their urban and rural characteristics. The classification scheme includes four metropolitan (or urban) categories and two nonmetropolitan (or rural) categories. The county classifications are based on the following information: (1) the 2003 OMB definitions of metropolitan and nonmetropolitan counties (with revisions through 2005); (2) the 2003 Rural-Urban Continuum Codes developed by the Economic Research Service of the U.S. Department of Agriculture; (3) 2004 postcensal county population estimates; and (4) county-level data on several settlement density, socioeconomic, and demographic variables from Census 2000. The six categories of the 2006 NCHS Urban-Rural Classification Scheme for Counties are large central metro (central counties of metro areas of 1 million or more population), large fringe metro (outlying counties of metro areas of 1 million or more population), medium metro (metro areas of 250,000 to 999,999 population), small metro (metro areas of 50,000 to 249,000 population), nonmetropolitan micropolitan, and nonmetropolitan noncore. For more information on this classification scheme, see [http://www.cdc.gov/nchs/r&d/rdc\\_urbanrural.htm](http://www.cdc.gov/nchs/r&d/rdc_urbanrural.htm).

**Usual source of care**—Usual source of care was measured in the National Health Interview Survey (NHIS) in 1993 and 1994 by asking the respondent "Is there a particular person or place that \_\_\_ usually goes to when \_\_\_ is sick or needs advice about \_\_\_ health?" In the 1995 and 1996 NHIS, the respondent was asked "Is there one doctor, person, or place that \_\_\_ usually goes to when \_\_\_ is sick or needs advice about health?" Starting in 1997 the respondent was asked "Is there a place that \_\_\_ usually goes when he/she is sick or you need advice about (his/her) health?" Persons who report the emergency department as their usual source

of care are defined as having no usual source of care in this report.

**Vaccination**—Vaccinations, or immunizations, work by stimulating the immune system, the natural disease-fighting system of the body. A healthy immune system is able to recognize invading bacteria and viruses and produce substances (antibodies) to destroy or disable these invaders. Vaccinations prepare the immune system to ward off a disease. In addition to the initial immunization process, the effectiveness of some immunizations can be improved by periodic repeat injections or "boosters." Vaccines are among the most successful and cost-effective public health tools available for reducing morbidity and mortality from vaccine-preventable diseases. For a comprehensive list of vaccine-preventable diseases, see <http://www.cdc.gov/vaccines/vpd-vac/vpd-list.htm>.

The currently recommended childhood vaccination schedule includes vaccines that prevent infectious diseases including hepatitis A and B, diphtheria, tetanus toxoids, acellular pertussis (whooping cough), measles, mumps, rubella (German measles), polio, varicella (chicken pox), and some forms of meningitis, influenza, and pneumonia. In February 2006, a rotavirus vaccine (RotaTeq®) was licensed for use among U.S. infants. For more information on the 2008 recommended childhood vaccinations and schedules, see [http://www.cispimmunize.org/IZSchedule\\_Childhood.pdf](http://www.cispimmunize.org/IZSchedule_Childhood.pdf). and [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5701a8.htm?s\\_cid=mm5701a8\\_e](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5701a8.htm?s_cid=mm5701a8_e).

A vaccine that protects against the four types of human papillomavirus (HPV) that cause most cervical cancers and genital warts began to be marketed in 2006 and is now available for females. The vaccine is recommended for 11 and 12 year-old girls. It is also recommended for girls and women age 13 through 26 who have not yet been vaccinated or completed the vaccine series.

Boosters (revaccination) of vaccinations received during childhood or adulthood are necessary for some vaccines, such as tetanus and diphtheria toxoids. In addition to keeping current with the vaccines listed above, some additional vaccinations are recommended for older adults, persons with specific health conditions, or health care workers who are likely to be exposed to infectious persons. Influenza vaccination is recommended annually for adults age 50 years and over, zoster vaccination is recommended one time for

adults 60 years and over, and pneumococcal vaccination is recommended one time for adults 65 years and over.

For a full discussion of recommended vaccination schedules by age and/or population, see the CDC's Vaccination and Immunization website: <http://www.cdc.gov/vaccines/spec-grps/default.htm>.

**Wages and salaries**—See [Employer costs for employee compensation](#).

**Years of potential life lost (YPLL)**—YPLL is a measure of premature mortality. Starting with *Health, United States, 1996–1997*, YPLL is presented for persons under 75 years of age because the average life expectancy in the United States is over 75 years. YPLL–75 is calculated using the following eight age groups: under 1 year, 1–14 years, 15–24 years, 25–34 years, 35–44 years, 45–54 years, 55–64 years, and 65–74 years. The number of deaths for each age group is multiplied by years of life lost, calculated as the difference between age 75 years and the midpoint of the age group. For the eight age groups, the midpoints are 0.5, 7.5, 19.5, 29.5, 39.5, 49.5, 59.5, and 69.5. For example, the death of a person 15–24 years of age counts as 55.5 years of life lost. Years of potential life lost is derived by summing years of life lost over all age groups. In *Health, United States, 1995* and earlier editions, YPLL was presented for persons under 65 years of age. For more information, see Centers for Disease Control. MMWR 35(2S):suppl. 1986. Available from: <http://www.cdc.gov/mmwr/preview/mmwrhtml/00001773.htm>.

## Appendix III

### Additional Data Years Available

For trend tables spanning long periods, only selected data years are shown to highlight major trends. Additional years of data are available for some of the tables in electronic spreadsheets available through the Internet and on CD-ROM.

To access spreadsheet files on the Internet, go to the Health, United States website at <http://www.cdc.gov/nchs/hus.htm>, scroll down to "Spreadsheet Files," and click on 2008 Edition.

Downloadable spreadsheet files for trend tables, many of which include more data years than are shown in the printed report, are available in Excel. Standard errors are included in spreadsheet files for trend tables based on the National Health Interview Survey (NHIS), National Health and Nutrition Examination Survey (NHANES), and National Survey of Family Growth (NSFG).

Spreadsheet files in Excel are also available on a CD-ROM. A limited supply of CD-ROMs are available from the National Center for Health Statistics upon request, while supplies last, or CD-ROMs may be purchased from the Government Printing Office.

Table number	Table topic	Additional data years available
1	Resident population	2001–2003
2	Inmates in state or federal prisons and local jails	2001–2003
3	Poverty	1986–1989, 1991–1994, 1996–1999, 2001–2003
4	Fertility rates and birth rates	1981–1984, 1986–1989, 1991–1994, 1996–1999, 2001–2002
5	Live births	1972–1974, 1976–1979, 1981–1984, 1986–1989, 1991–1994, 1996–1999, 2001–2003
6	Twin births	1972–1974, 1976–1979, 1981–1984, 1986–1989, 1991–1994, 1996, 1998–1999, 2001–2002
7	Prenatal care	1981–1984, 1986–1989, 1991–1994, 1996–1999, 2001
9	Teenage childbearing	1981–1984, 1986–1989, 1991–1994, 1996–1999, 2001
10	Nonmarital childbearing	1981–1984, 1986–1989, 1991–1994, 1996–1999, 2001
11	Maternal smoking	1991–1994, 1996–1999, 2001
12	Low birthweight	1981–1984, 1986–1989, 1991–1994, 1996–1998, 2001–2002
13	Low birthweight	1991–1994, 1996–1999, 2001
15	Abortions	1981–1984, 1986–1989, 1991–1994, 1996–1998, 2001
17	Breastfeeding	1972–1974
18	Infant mortality rates	1996–1999, 2001–2002; (3 year data: 1996–1998, 1997–1999, 1998–2000, 2000–2002, 2001–2003, 2002–2004)
19	Infant mortality rates	1984, 1986–1989, 1991, 1996–1999, 2001–2002; (3 year data: 1998–2000)
20	Infant mortality rates	1984, 1986–1989, 1991, 1996–1999, 2001–2002
21	Infant mortality rates	1981–1989, 1991–1994, 1996–1998
24	International mortality rates and rankings	2001, 2002, 2003; ranking 2003, 2004
25	International life expectancy	1999, 2001, 2003; ranking 2002, 2003
26	Life expectancy	1975, 1981–1989, 1991–1994, 1996
28	Age-adjusted death rates for selected causes	1981–1989, 1991–1999, 2001–2002
29	Years of potential life lost	1991–1999, 2001; crude 1999–2003
32	Urbanization level	2002–2004
34	Death rates for all causes	1981–1989, 1991–1999, 2001–2003
35	Diseases of heart	1981–1989, 1991–1999, 2001–2003
36	Cerebrovascular diseases	1981–1989, 1991–1999, 2001–2003
37	Malignant neoplasms	1981–1989, 1991–1999, 2001–2003
38	Malignant neoplasms of trachea, bronchus, and lung	1981–1989, 1991–1999, 2001–2003
39	Malignant neoplasm of breast	1981–1989, 1991–1999, 2001–2003
40	Chronic lower respiratory diseases	1981–1989, 1991–1994, 1996–1999
41	Human immunodeficiency virus (HIV) disease	1988–1989, 1991–1994, 1996–1999

Table number	Table topic	Additional data years available
42	Maternal mortality	1981–1989, 1991–1999, 2001–2002
43	Motor vehicle-related injuries	1981–1989, 1991–1999, 2001–2003
44	Homicide	1981–1989, 1991–1999, 2001–2003
45	Suicide	1981–1989, 1991–1999, 2001–2003
46	Firearm-related injuries	1981–1989, 1991–1994, 1996–1999, 2001–2002
47	Occupational diseases	1981–1984, 1986–1989, 1991–1994, 1996–1999, 2001–2002
48	Occupational injury deaths	1994, 1996–1999, 2002
50	Notifiable diseases	1985, 1988–1989, 1991–1999, 2001–2003
52	Cancer incidence rates	1991–1994, 1996–1999
53	Five-year relative cancer survival rates	1978–1980, 1984–1986
54	Diabetes	2001–2004,
56	Severe headache or migraine, low back pain, and neck pain	1998–2004
57	Joint pain	2003–2004
58	Limitation of activity	1999–2002
59	Vision and hearing limitations	1998–1999, 2001–2003
60	Respondent-assessed health status	1998–1999, 2001–2002
61	Serious psychological distress	1998–1999, 2000–2001, 2002–2003, 2004–2005
63	Cigarette smoking	1983, 1987–1988, 1991–1994, 1997–1999, 2001
64	Cigarette smoking	1983, 1987–1988, 1991–1994, 1997–1999, 2001
65	Cigarette smoking	1993–1995, 1994–1997, 2002–2004, 2003–2005
66	Use of selected substances	2003–2004
67	Use of selected substances	1981–1984, 1986–1989, 1992–1994, 1996–1999, 2001–2003
68	Lifetime alcohol drinking status	1998–1999, 2001–2004
69	Heavier drinking and drinking five or more drinks in a day	1998–1999, 2001–2004
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81	Reduced access to medical care	2000–2001, 2004–2005
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83	Health care visits	1998–2004
85	Vaccinations	1996–1999, 2001
87	Influenza vaccination	1991, 1993–1994, 1997–1999, 2001
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100	Additions to mental health organizations	1992, 1994, 1998, 2000
101	Discharges	1998–2004
102	Discharges	1991–1994, 1996–1999, 2001–2003
103	Discharges	1991–1999, 2001–2005

Table number	Table topic	Additional data years available
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105	Discharges	1991–1999, 2001–2005
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113	Health professions schools	1996, 1998–1999, 2001–2002, 2004–2005
114	Total enrollment of minorities in schools	2000–2001, 2001–2002, 2002–2003, 2003–2004, 2004–2005
115	Enrollment of women in schools	2000–2001, 2001–2002, 2002–2003, 2003–2004, 2004–2005
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144	Medicare	All: 1999–2002; 1993–2003
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Dental visits	96, 144
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Dietary supplements	99
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Dietary supplements	99
Drugs, prescription, use in past month	98
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## H—Con.

## Table and Figure

Hispanic subgroups (Central and South American; Cuban; Mexican; Puerto Rican) (see also Mexican; Puerto Rican)—Con.	
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Infant mortality	18, 19
Overweight and obesity	75, 76
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Smoking status of mother	11
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Unmarried mothers	10
Unmet need	80
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## J

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Cancer incidence rates	52
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Cholesterol, serum	72
Cigarette smoking	63, 64, 65, 66, 67, Figures 6, 31
Death rates, all causes	28, 34
Death rates, educational attainment	33
Death rates, selected causes	28, 35, 36, 37, 38, 40, 41 43, 44, 45, 46
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## M—Con.

## Table and Figure

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Death rates . . . . .	32
Dental visits . . . . .	96
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Health status, respondent-assessed . . . . .	60
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Neck pain . . . . .	56
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Serious psychological distress . . . . .	61
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## M—Con.

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Cigarette smoking . . . . .	65
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Diabetes . . . . .	54
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Health insurance . . . . .	137, 138, 139, 140
Health status, respondent-assessed . . . . .	60
Hearing trouble . . . . .	59
Hypertension . . . . .	71
Joint pain . . . . .	57
Limitation of activity . . . . .	58
Medical students . . . . .	114
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## O—Con.

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Bed, health facility	120
Cholesterol, serum	72
Cigarette smoking	63, 65
Death rates, all causes	34
Death rates, selected causes	35, 36, 37, 38, 39, 40, 41, 43, 44, 45, 46
Deaths, leading causes	31
Dental caries (cavities), untreated	77
Dental visits	96, 144, Figure 23
Dietary supplements	99
Drugs prescribed during medical visits	97
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Emergency department visits	83, 92, 93, Figure 22
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Headache, severe or migraine	56
Hearing trouble	59
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Health status, respondent-assessed	60
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Injury	93
Joint pain	57
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Cholesterol, serum	72
Dental caries (cavities), untreated	77
Dental visits	96, Figure 23
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## P—Con.

## Table and Figure

Poverty—Con.	
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Health care visits	83
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Health status, respondent-assessed	60
Hearing trouble	59
Hospital utilization, inpatient	101
Human papillomavirus (HPV) infection	Figure 33
Hypertension	71
Joint pain	57
Limitation of activity	58
Mammography	89
Medicaid	139, 141
Neck pain	56
Overweight and obesity	75, 76
Pap smear	90
Physical activity	74
Serious psychological distress	61
Sexual intercourse, forced	Figure 34
Unmet need	80
Vaccinations	85, 87, 88
Vision trouble	59
Prenatal care	7, 8
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## T

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## V

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Cancer survival, 5-year relative . . . . .	53
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Death rates, all causes . . . . .	28, 34
Death rates, educational attainment . . . . .	33
Death rates, selected causes . . . . .	28, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46
Death rates, urbanization . . . . .	32
Deaths, leading causes . . . . .	30
Dental caries (cavities), untreated . . . . .	77
Dental visits . . . . .	96, Figures 23, 40
Diabetes . . . . .	54
Dietary supplements . . . . .	99
Drugs prescribed during medical visits . . . . .	97
Drugs, prescription, use in past month . . . . .	98, Figure 40
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## W—Con.

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Illicit drug use . . . . .	66
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