

Health United States

and Prevention **Profile**

1991



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Health Service

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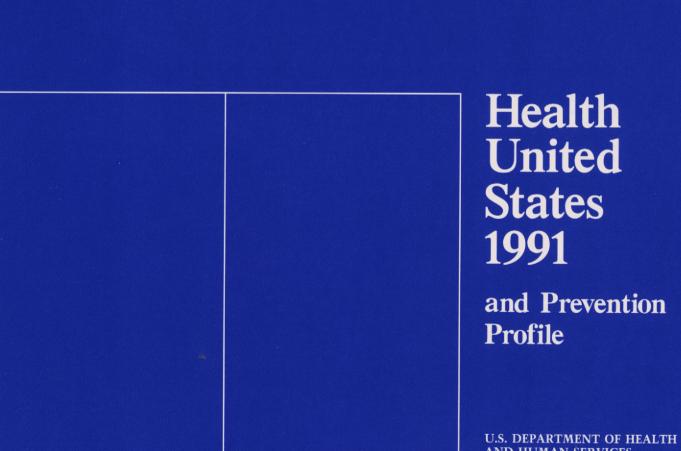
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Preface

Health, United States, 1991 is the 16th report on the health status of the Nation submitted by the Secretary of Health and Human Services to the President and Congress of the United States in compliance with Section 308 of the Public Health Service Act. This volume also contains the 1991 Prevention Profile, fifth in a series of profiles, 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 the Health Services and Centers Amendments of 1978 (Public Law 95-626). These reports were compiled by the National Center for Health Statistics, Centers for Disease Control. The National Committee on Vital and Health Statistics served in a review capacity.

The 1991 Prevention Profile serves as an integral part of the Department's overall disease prevention and health promotion initiatives. It has provided data in past years (1980, 1983, 1986, and 1989) to chart progress toward the five broad goals for 1990 published in Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention and to track the 1990 objectives first delineated in Promoting Health/Preventing Disease: Objectives for the Nation.

In this transition year, the report bridges the 1990 and year 2000 initiatives. The year 2000 initiative was unveiled in September 1990, by the Secretary of the U.S. Department of Health and Human Services, when he released Healthy People 2000: National Health Promotion and Disease Prevention Objectives.

This profile highlights the final status of each of the 1990 objectives as well as several components of the three broad goals for the year 2000. Beginning

with the 1992 profile, the year 2000 objectives will be tracked annually.

Health, United States, 1991 presents statistics concerning recent trends in the health care sector. The 143 detailed tables in this year's report are organized around four major subject areas-health status and determinants, utilization of health resources, health care resources, and health care expenditures. The detailed tables are designed to show continuing trends in health statistics. A major criterion used in selecting the detailed tables is the availability of comparable national data over a period of several years. Similar tables appear in each volume of *Health*, United States, to enhance the use of this publication as a standard reference source. Data are reported for selected years to highlight major trends.

To use Health, United States, 1991 most effectively, the reader should become familiar with the two appendixes. Appendix I describes each data source used in this report and provides references for further information about the sources. Appendix II defines the terms used in the report. It also contains the standard populations used for age adjustment and International Classification of Diseases codes for cause of death and diagnostic and

procedure categories.

Acknowledgments

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Overall responsibility for planning and coordinating the content of this volume rested with the Office of Analysis and Epidemiology, National Center for Health Statistics, under the general direction of Jacob J. Feldman.

The Prevention Profile was prepared by Kathleen M. Turczyn and Laura E. Montgomery under the guidance of Mary Ann Freedman, Patricia M. Golden, and Ronald W. Wilson. Peter C. Velarde provided statistical assistance.

Health, United States was prepared under the direction of Diane M. Makuc and Joel C. Kleinman. Detailed tables were prepared by Margaret A. Cooke, Virginia M. Freid, Mitchell B. Pierre, Jr., Rebecca A. Placek, Ildy I. Shannon, Kate Prager, Lois A. Fingerhut, Jennifer D. Parker, and Diane K. Wagener. Mavis B. Prather, Peter C. Davis, and Jennifer A. Harris provided statistical assistance. Production planning and coordination were managed by Rebecca A. Placek with typing assistance from Carole J. Hunt.

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Publication of Health, United States and Prevention Profile would not have been possible without the contributions of numerous staff members throughout the National Center for Health Statistics and several other agencies. These people gave generously of their time and knowledge, providing data from their surveys and programs; their

This volume is dedicated to Joel C. Kleinman, Ph.D. 1946-1991



Dr. Kleinman guided the production of this publication for more than a decade. His extraordinary ability to identify and communicate important public health issues through data is reflected in every volume.

His counsel and insights will be deeply missed.

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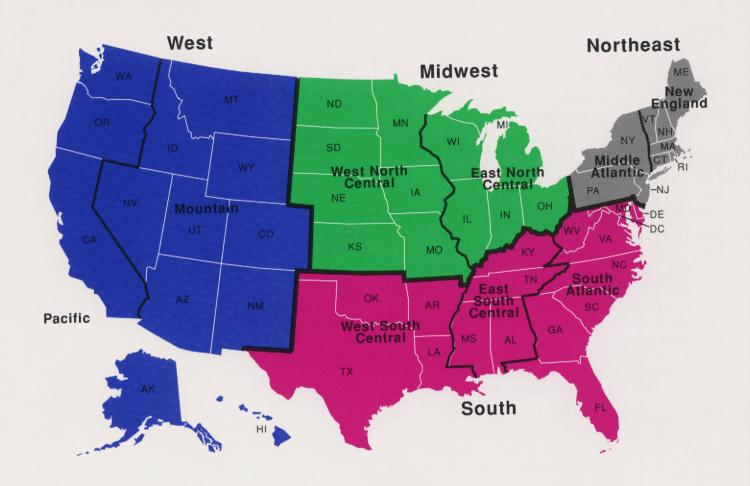
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Symbols

Data not available
 Category not applicable
 Quantity zero
 Quantity more than zero but less than 0.05
 Figure does not meet standard of reliability or precision

Geographic Regions and Divisions of the United States



Health, United States, Highlights

Health Status and Determinants

- In 1989 the **fertility rate** was 69.2 live births per 1,000 women 15–44 years of age, 3 percent higher than in 1988. The largest increases (6–8 percent) occurred in the birth rates for teenagers and for women aged 35–44 years. The increase in 1989 was a continuation of an upward trend in the fertility rate since 1987, and provisional data show another 3 percent increase in 1990 (tables 3 and 4).
- The overall percent of live-born infants weighing less than 2,500 grams has remained generally stable during the 1980's at 7 percent. However, the percent of live-born infants weighing less than 1,500 grams (those at greatest risk of death and disability) steadily increased between 1980 and 1989 from 1.15 to 1.28 percent of births. Among black mothers, the group at greatest risk of having a very low birth weight infant, the percent very low birth weight increased from 2.48 to 2.95 percent of live births between 1980 and 1989 (table 7).
- During the 1980's the percent of mothers who began prenatal care in the first trimester of pregnancy has remained stable at 75–76 percent. Large differences among racial and ethnic groups in use of early prenatal care continued in 1989. Early prenatal care was used by only 57-58 percent of Mexican American and American Indian mothers and 60-63 percent of black, Central and South American, and Puerto Rican mothers compared with 82–86 percent of Chinese, non-Hispanic white, Cuban, and Japanese mothers (table 8).
- Between 1970 and 1989 the percent of live births to unmarried mothers has increased

- steadily from 11 to 27 percent. In 1989 the majority of black, Puerto Rican, and American Indian mothers of live-born infants were unmarried (66, 55, and 53 percent of live births, respectively) (table 9).
- In 1990 the **poverty** rate for black children (45 percent) was almost 3 times that for white children (16 percent) and poverty among Hispanic children (38 percent) was 2.4 times that for white children (table 2).
- Between 1988 and 1989 overall life expectancy at birth increased from 74.9 to 75.3 years. Life expectancy for black males was 64.8 years, continuing the downward trend observed since 1984. Life expectancy for black females was 73.5 years, up slightly from the previous year. Provisional data show an increase in life expectancy for black males and black females between 1989
- and 1990 (table 17).

 In 1989 the infant mortality rate was 9.8 deaths per 1,000 live births. Between 1988 and 1989 infant mortality decreased by 4 percent for white infants to 8.1 deaths per 1,000 live births, and remained about the same for black infants at 18.6 deaths per 1,000 live births. Provisional data show that overall infant mortality declined by 6 percent to 9.1 deaths per 1,000 live births in 1990 (table 18).
- For the 1986 birth cohort the infant mortality rate for very low birth weight infants (less than 1,500 grams) was nearly 90 times higher than that for normal weight infants (2,500 grams or more). Between 1960 and 1986 the risk of dying in infancy declined by 70 percent for infants of moderately low birth weight (1,500–2,499 grams), by 63 percent for normal weight infants; and by 52 percent for very low birth weight infants (table 20).
- In 1988 the **infant mortality** rate in the United States was more than twice as great as in

Japan. The U.S. feto-infant mortality rate was nearly 60 percent higher than in Japan; and postneonatal mortality in the United States was 80 percent higher than in Japan (table 25).

- In 1988 life expectancy at birth in Japan was 4.3 years longer than in the United States for males and 3.6 years longer for females. These differences have increased since 1983 when life expectancy in Japan exceeded that in the United States by 3.5 years for males and 2.2 years for females (table 26).
- In 1989 Asian persons in the United States had lower death rates than other racial and ethnic groups. Among persons under 65 years of age black persons and American Indians had the highest death rates. At ages 25-44 years the death rate for black persons was 2.5 times that for white persons and the death rate for American Indians was almost twice the rate for white persons. With increasing age these differences narrowed and for persons 65 years and over, the death rate for white persons exceeded that for American Indians (table 28).
- In 1989 death rates at ages 15–44 years for the Hispanic population were one-third greater than those for the white population. Among persons ages 1–14 years and 45 years and over, death rates for Hispanic persons were similar to or lower than those for white persons in 1989 (table 28).
- In 1989 years of potential life lost per 100,000 population under 65 years of age, a measure of premature mortality, was more than twice as high for males and females of the black population as for males and females of the white population. Premature mortality was almost twice as high for males as for females of both races (table 32).
- Between 1970 and 1989 the age-adjusted death rate for heart disease, the leading cause of death for both men and women,

declined by 39 percent. Since 1970 heart disease mortality has declined by 41 percent for white males, 36 percent for white females, 31 percent for black females, and 27 percent for black males. In 1989 heart disease mortality was almost twice as great for white males as for white females and almost 60 percent greater for black males than for black females (table 33).

- Between 1970 and 1989 the age-adjusted death rate for **stroke**, the third leading cause of death, declined by 58 percent. Stroke mortality has declined at about the same rate for white and black persons of both sexes. In 1989 the age-adjusted death rate for black men and black women remained almost twice as great as for white men and white women (table 34).
- Between 1980 and 1989 the age-adjusted death rate for lung cancer increased by 42 percent for white women and 30 percent for black women. During this period lung cancer mortality remained fairly stable for men of both races. In 1989 age-adjusted death rates for lung cancer were 50 percent higher for black men than for white men (84.6 and 57.4 deaths per 100,000) and were much lower for black women and white women (25.4 and 25.8 deaths per 100,000) (table 36).
- Between 1980 and 1989 the age-adjusted death rate for breast cancer increased by 12 percent for black women while remaining stable for white women. In 1989 breast cancer mortality was 14 percent higher for black women than for white women (26.0 and 22.9 deaths per 100,000, respectively) (table 37).
- Between 1980 and 1989 the age-adjusted death rate for prostate cancer increased by 9 percent. In 1989 prostate cancer mortality was more than twice as great for black men as for white men (30.9 and 14.5 deaths per 100,000, respectively) (table 30).
- Between 1985 and 1989 the age-adjusted homicide rate

increased by 13 percent to 9.4 deaths per 100,000, and homicide rose from the 12th to the 10th leading cause of death in the United States. During this period the homicide rate for black males aged 15–24 years increased by 74 percent to 114.8 deaths per 100,000, the highest level ever for this group. In 1989 the age-adjusted homicide rate for black males 15–24 years was almost 9 times that for white males 15–24 years (table 40).

- Between 1988 and 1989 the age-adjusted death rate for human immunodeficiency virus (HIV) infection increased by 32 percent, and HIV infection rose from the 15th to the 11th leading cause of death in the United States. In 1989 the age-adjusted HIV infection death rate for black men was 3 times that for white men (40.3 and 13.1 deaths per 100,000) and the HIV death rate for black women was 9 times that for white women (8.1 and 0.9 deaths per 100,000) (table 42).
- Between 1980 and 1986 the death rate for occupational injuries decreased 34 percent with declines occurring in all industries. In 1986 the industries with the highest death rates were mining and construction (22 deaths per 100,000 workers), and transportation, communication and public utilities (20 deaths per 100,000 workers) (table 44).
- In 1989 private sector employers reported 74 lost workdays from injuries per 100 full-time employees. The 1990 national health objective was 55. The lost workday rate for occupational injuries decreased from 1979 to 1983, but has increased at an average annual rate of 4 percent from 1983 to 1989. Industries reporting the highest lost workday rates were construction, mining, and transportation, communication and public utilities (table 73).
- In 1990 there were 28,000 measles cases reported, an 8-fold

increase over the 1988 level and 56 times the 1990 objective of 500 cases (table 50).

- Between 1984 and 1990 the proportion of persons reported with AIDS who were women almost doubled from 6 to 11 percent. During this period the proportion of AIDS cases among women that were transmitted through heterosexual contact increased from 17 to 31 percent of female cases reported. Fifty-six percent of all AIDS cases reported among women as of September 30, 1991 were black women (tables 51 and 53).
- In 1990 the percent of noninstitutionalized persons with limitation of activity caused by chronic conditions was 38 percent for those 65 years of age and over, 22 percent for those 45–64 years of age, 9 percent for those 15–44 years of age, and only 5 percent at ages under 15 years (table 59).
- In 1991, 20 percent of youth 12–17 years of age reported alcohol consumption in the past month, with similar levels reported by white, black, and Hispanic youth. During the period 1985 to 1991 alcohol consumption among white youth declined from 34 to 20 percent while remaining fairly stable for black and Hispanic youth (table 64).
- Between 1989 and 1990 the number of cocaine-related emergency room episodes decreased by 27 percent, following a period of steep annual increases between 1985 and 1988 and a slight decline from 1988 to 1989. However, preliminary data for 1991 show an increase in cocaine-related emergency room episodes, with similar trends observed for the black, white, and Hispanic populations (table 66).

Utilization of Health Resources

Between 1985 and 1990 the average annual number of ambulatory **physician contacts** per person increased slightly from 5.2 to 5.5 contacts. In 1990 the

age-adjusted average number of physician contacts per person was 10 percent higher for white persons than for black persons (5.6 compared with 5.1 contacts). Ambulatory care for black persons was twice as likely to occur in hospital outpatient and clinic settings as care for white persons (24 compared with 12 percent of physician contacts in 1990) (table 76).

- Between 1985 and 1990 the age-adjusted hospital discharge rate declined by 15 percent for noninstitutionalized white persons and by 3 percent for noninstitutionalized black persons. In 1990 the hospital discharge rate was 25 percent higher for black than white persons (112.0) compared with 89.5 per 1,000 population) and average length of stay was 1.3 days longer for black than white persons (table 81). The age-adjusted proportion of persons in fair or poor health continued to be almost twice as great for black as for white persons in 1990 (15 percent compared with 8 percent) (table 61).
- Between 1985 and 1989 the age-adjusted proportion of office visits to physicians involving the administration or prescription of medications remained at 60 percent (table 79).
- In 1989 use of dental care continued to vary substantially by family income. The age-adjusted percent of persons with a dental visit within the past year rose steadily with family income from 42 percent for those with the lowest family incomes to 76 percent for those with the highest family incomes (table 80).
- Between 1988 and 1990 the number of discharges from short-stay hospitals with a diagnosis of HIV infection increased 54 percent to 146,000 discharges. Men 20–49 years of age accounted for 70 percent of all HIV discharges in 1990, down from 77 percent in 1988. The average length of stay for patients

with HIV infection was twice that for all discharges (14.9 days compared with 6.4 days in 1990) (table 83).

- In 1990 there were 30.8 million discharges from non-Federal short-stay hospitals. Among men the most common first-listed diagnoses were diseases of the heart (1.9 million), malignant neoplasms (730 thousand), and pneumonia (530 thousand). Among women the most common first-listed diagnoses were delivery (4.0 million), diseases of the heart (1.6 million), and malignant neoplasms (841 thousand) (table 85).
- in 1989 one-half of all surgery in short-stay hospitals was performed on an outpatient basis, 3 times the proportion of outpatient surgery in 1980. The proportion of outpatient surgery was inversely related to hospital size, ranging from 42 percent for hospitals with 500 beds or more to 54 percent for hospitals with fewer than 100 beds (table 88).
- Throughout the 1980's average length of stay has been shorter in smaller hospitals than larger hospitals but the gap has narrowed. In 1980 patients in short-stay hospitals with fewer than 100 beds had an average length of stay 3.3 days shorter than patients in hospitals with 500 beds or more. By 1989 the difference in average length of stay between small and large hospitals had declined by a full day to 2.3 days (table 88).
- In 1985 the percent of persons institutionalized in **nursing homes** rose sharply with age from 1 percent for those 65–74 years to 6 percent at 75–84 years and 22 percent for those 85 years and over (table 89).

Health Care Resources

■ Between 1985 and 1990 the number of civilians employed in the **health service industry** grew by 19 percent to 9.4 million, compared with a 9 percent

increase for other industries. In 1990 half of all health service industry workers were employed in hospitals, down from 54 percent in 1985 (table 95).

- Between 1985 and 1989 the number of active non-Federal physicians per 10,000 population grew by 6 percent to 21.9. Increases in physician supply during this period ranged from 4 percent in the Pacific Division to 9 percent in the East South Central Division. In 1989 physician supply was lowest in the East South Central Division (16.4 per 10,000) and highest in New England (28.6 per 10,000) (table 96).
- Between 1981 and 1989 the total number of nursing personnel in community hospitals increased slightly from 1.1 to 1.2 million full-time equivalent employees (FTEs). During this period the mix of nursing staff changed. Among all nursing FTEs the proportion who were registered nurses increased from 55 to 65 percent; the proportion who were licensed practical nurses declined from 20 to 14 percent; and the proportion who were ancillary nursing personnel declined from 25 to 21 percent (table 100).
- Between 1985 and 1989 the number of registered nursing (RN) graduates declined by 25 percent to 62 thousand, after increasing by 11 percent from 1981 to 1985. Between 1981 and 1989 the proportion of RN graduates receiving baccalaureate degrees remained fairly stable (33 to 31 percent), while associate degree graduates increased from 50 to 61 percent and those receiving diplomas declined from 17 to 8 percent (table 102).
- Between academic years 1979–80 and 1989–90 total minority enrollment in medical schools increased from 14 to 25 percent of all medical students. Much of the increase was accounted for by rising enrollment of Asian students. In

1989–90, 12 percent of medical students were Asian, 6 percent were black, and 5 percent were Hispanic (table 103).

- occupancy rates in short-stay hospitals have remained fairly stable at 65–67 percent, after declining from 76 percent occupancy in 1980. Smaller hospitals continue to have lower occupancy rates than larger hospitals. In 1989 the occupancy rate was 49 percent for hospitals with fewer than 100 beds, compared with 77 percent for hospitals with 500 beds or more (table 105).
- Between 1980 and 1988 the number of **psychiatric beds** in State and county mental hospitals fell 32 percent to 107 thousand while beds in private psychiatric hospitals increased 2½ fold to 42 thousand (table 107).

Health Care Expenditures

- In 1990 national health care expenditures in the United States totaled \$666 billion, an average of \$2,566 per person. Health expenditures comprised 12.2 percent of the gross national product in 1990, a record high. Federal Government health expenditures rose from 3.1 percent of total Federal Government expenditures in 1960 to 15.3 percent in 1990 (table 112).
- In 1990 health spending in the United States accounted for a larger share of gross domestic product (GDP) than in other major industrialized countries and the gap continued to widen. The United States devoted 12.4 percent of GDP to health in 1990, up from 9.3 percent in 1980. Canada, the country with the second highest health share of GDP, devoted 9.0 percent of GDP to health in 1990 (table 113).
- National health expenditures increased by 10.5 percent in 1990, compared with a 5.1 percent

increase in the GNP. Expenditures for hospital care (38 percent of the total) and physician services (19 percent of the total) increased at about the overall level. Home health care costs (1 percent of the total) increased by 22.5 percent in 1990. (tables 112 and 114).

- In 1990 rising prices continued to explain the largest portion (63 percent) of growth in personal health care expenditures. Ten percent of the growth was attributed to population increase and 27 percent to changes in the use or kinds of services and supplies (table 115).
- In 1990 the rate of increase in the medical care component of the Consumer Price Index (CPI) was 9.0 percent compared with an overall inflation rate of 5.4 percent. During the last decade the medical care component of the CPI has grown at an average annual rate of 8.1 percent compared with 4.7 percent for the overall CPI. The hospital component of the CPI increased by 10.9 percent in 1990, physicians' services by 7.1 percent and prescription drugs by 10.0 percent (tables 116 and 117).
- From 1965 to 1980 the share of health care expenditures paid by households declined from 61 to 38 percent, while the shares paid by private business and government increased. However, for the past decade these shares have remained relatively stable. In 1990, 35 percent of health care expenditures were paid by households, 33 percent by government, and 29 percent by private business including, for example, employer contributions to health insurance premiums and Medicare (table 122).
- In 1990 the major sources of funds for hospital care were the government (55 percent) and private health insurance (35 percent). Medicare provided almost half of government funds for hospital care. Nursing home

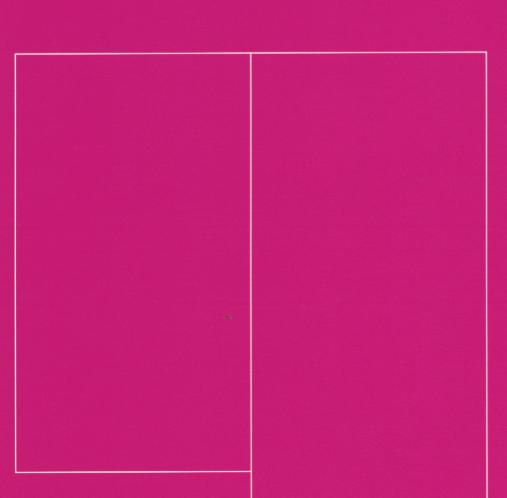
care was financed almost equally by Medicaid and out-of-pocket payments (45 percent each). Physician services were primarily funded by private health insurance (46 percent) and the government (35 percent) with Medicare providing nearly 70 percent of government funds (table 123).

- Expenditures for HIV-related activities by the Federal government increased from \$8 million in 1982 to almost \$3 billion in 1990. The Health Care Financing Administration accounted for 26 percent of these expenditures in 1990, the National Institutes of Health for a quarter, and the Centers for Disease Control for 15 percent. The Alcohol, Drug Abuse, and Mental Health Administration and the Department of Veterans Affairs accounted for 7 percent of expenditures each. Of the total in 1990, 39 percent was for research, 38 percent for medical care, 16 percent for education and prevention, and 7 percent for cash assistance (disability insurance and supplemental security income) (table 128).
- In 1989 total public health expenditures by State and territorial health agencies increased by 13 percent compared with 5 percent the previous year. Expenditures for the supplemental food program for women, infants, and children (WIC) increased by 17 percent in 1989. This growth in the WIC program was similar to that experienced from 1980 to 1984 (18 percent per year) after which annual increases slowed to 9 percent from 1984 to 1987 and only 2 percent in 1988. WIC has accounted for one-fifth of public health expenditures by State and territorial health agencies since the mid-1980's (table 129).
- maintenance organizations
 (HMOs) continued to increase
 slowly to 34 million in 1991. The
 growth in enrollment has slowed
 after a period of rapid expansion
 during the early to mid-1980's.

Despite the increase in enrollment, the number of plans continued to decline in 1991 to 553 after reaching a high of 647 in 1987 (table 135).

- In 1990 Medicare expenditures totaled \$67 billion under Hospital Insurance (HI) and \$44 billion under Supplementary Medical Insurance (SMI). HI expenditures increased by 14 percent in 1989 and 10 percent in 1990. Average annual increases in HI expenditures had slowed from 14 percent between 1980 and 1985 to 3 percent between 1985 and 1988. SMI expenditures grew by 11 percent in 1990 compared with an average annual increase of 15 percent from 1980 to 1989 (table 136).
- The proportion of Medicare enrollees age 85 years and over increased from 6.7 percent in 1967 to 10.5 percent in 1989. In 1989 payments per enrollee averaged \$3,809 for those 85 years and over, compared with \$1,737 for those 65–66 years of age (table 137).
- In 1990 children in families receiving Aid to Families with Dependent Children (AFDC) comprised 44 percent of Medicaid recipients but accounted for only 14 percent of expenditures. The aged, blind, and disabled accounted for 27 percent of recipients and 71 percent of expenditures. Payment per recipient ranged from \$811 for children in AFDC families to more than \$6,500 per recipient for the aged, blind, and disabled (table 139).
- Medicaid payments went to general hospitals, another quarter to intermediate care facilities, and an eighth to skilled nursing facilities. Prescribed drugs, physician services, home health services, and outpatient hospital services each accounted for 5–7 percent of Medicaid payments. Early and periodic screening, rural health clinics, and family planning services combined received less

- than 1 percent of Medicaid funds. Payments per recipient ranged from \$67 for early and periodic screening for children to \$50,000 for intermediate care facility services for the mentally retarded (table 140).
- Of the \$11.5 billion that the Department of Veterans Affairs spent on health care in 1990, 58 percent was for inpatient hospital care, 25 percent for outpatient care, and 10 percent for nursing home care. Nearly 40 percent of both inpatients and outpatients were veterans with service-connected disabilities. Fifty-five percent of inpatients and 41 percent of outpatients were low income veterans with no service-connected disability (table 141).



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Introduction

Background

By the late 1970's, lifestyle and environmental factors had gained national recognition for their role in the promotion of health and the prevention of disease. The landmark 1979 publication, *Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention* (1), provided the foundation for the first national health promotion and disease prevention initiative. Five broad national goals were set, one for each of the five major stages of life; premature mortality and morbidity were highlighted. To plan a course of action for the Nation, *Promoting Health/Preventing Disease: Objectives for the Nation* (2), produced in 1980, identified 15 priority areas to target efforts by a wide range of public and private groups, as well as individuals.

In September 1990, Department of Health and Human Services Secretary, Dr. Louis Sullivan, unveiled a second national prevention initiative when he released *Healthy People 2000: National Health Promotion and Disease Prevention*

Objectives (3).

The Year 2000 initiative builds on not only the lessons learned from progress made toward the 1990 objectives, but also the decade's scientific research on health promotion and disease prevention. *Healthy People 2000* aims to significantly improve the Nation's health over the next 10 years through a comprehensive approach to three broad goals: 1) to increase the span of healthy life of Americans, 2) to reduce health disparities among Americans, and 3) to achieve access to preventive services for all Americans. *Healthy People 2000* also sets forth 300 specific and measurable objectives which, when accomplished by the year 2000, should lead to the achievement of these goals.

During the 3 years of its formulation, more than 10,000 people commented on *Healthy People 2000*, including national, State, and local agencies and communities, private and voluntary groups, consumers, and other individuals. This broad-based input was obtained through 8 regional hearings and testimonies from over 750 individuals and organizations that were assembled since work on *Healthy People 2000* began in 1987.

Implicit throughout the *Healthy People 2000* initiative is the principle that long life without good health is not enough. The prevention of disability, as well as the prevention of further impairment or morbidity for those people with disabilities, is an important aim. The *Healthy People 2000* initiative emphasizes the full range of functional capacity from infancy through old age, including measures of health outcomes.

Substantial health improvements are needed for populations who have been disadvantaged economically and educationally. This new initiative includes special targets for reducing the disparities in death, disease, and disability rates of these groups as compared to the majority population. The specific groups targeted are racial and ethnic minority populations, people with low income, and people with disabilities.

Prevention Profile, 1991

The Healthy People 2000 initiative also recognizes that many Americans lack access to an ongoing source of primary care and therefore to essential clinical preventive services. The initiative addresses the many barriers to access to health care. These barriers include inadequate health insurance, low numbers of primary care providers, geographic barriers (for example, distance in rural areas), language and cultural barriers, restrictive hours of service availability, inadequate child care options, and lack of transportation. Even when people have access to primary care, they may not be offered clinical preventive services at recommended intervals; thus, many individuals do not receive all of the services that would benefit them. This initiative emphasizes the need for access to preventive services as an important factor in achieving many of the objectives of Healthy People 2000.

All of the 300 objectives for the year 2000 are designed to have quantifiable and realistic targets. The objectives are organized into 22 separate priority areas. The first 21 priority areas focus on health promotion activities related to individual lifestyle, health protection strategies related to environmental or regulatory measures, and preventive services such as counseling, screening, and immunization. Priority area 22, "Surveillance and Data Systems," addresses the critical need for data to monitor progress toward the objectives at the national, State, and local levels, as well as to enhance the public health data systems.

Health Promotion

- 1. Physical activity and fitness
- 2. Nutrition
- 3. Tobacco
- 4. Alcohol and other drugs
- 5. Family planning
- 6. Mental health and mental disorders
- 7. Violent and abusive behavior
- 8. Educational and community-based programs

Health Protection

- 9. Unintentional injuries
- 10. Occupational safety and health
- 11. Environmental health
- 12. Food and drug safety
- 13. Oral health

Preventive Services

- 14. Maternal and infant health
- 15. Heart disease and stroke
- 16. Cancer
- 17. Diabetes and chronic disabling conditions
- 18. HIV infection
- 19. Sexually transmitted diseases
- 20. Immunization and infectious diseases
- 21. Clinical preventive services

Surveillance and Data Systems

22. Surveillance and data systems

The 1991 Prevention Profile, fifth in a series of profiles, was prepared in response to legislation enacted in 1978 (Public Law 95–626) that called for the triennial preparation of a national disease prevention data profile. The first four profiles have appeared with Health, United States, 1980; 1983; 1986; and 1989. With the exception of the first profile, each profile has provided both baseline data and data for subsequent time periods for a substantial number of the 1990 objectives in Promoting Health/Preventing Disease: Objectives for the Nation. Thus, these profiles have measured and documented the cumulative effects of the strategies to alleviate or avoid the problems that were faced in moving toward the five Healthy People health promotion and disease prevention goals.

This report will highlight the goals for the year 2000, as well as the endpoint status of the 1990 objectives. Beginning with the 1992 profile, the year 2000 objectives will be tracked annually.

Organization and Scope of This Profile

This profile is divided into three major sections—(1) a section of figures and text bridging the two initiatives by addressing both the 1990 and the year 2000 goals, (2) a section monitoring the 1990 objectives with final status tables and notes, and (3) a 3-part section of summary and information tables.

The first section of figures and accompanying text highlights the final outcome of the progress toward the five broad 1990 goals set for the five major life stages (see also detailed table 48). This section also serves as a transition to the year 2000 objectives by providing data related to the three overall goals of *Healthy People 2000*. Subsequent *Prevention Profiles* will focus entirely on the year 2000 goals and objectives.

Following the figures, the final status of each of the components of the fifteen subject areas identified in *Objectives for the Nation* is presented. A statement of each 1990 objective is followed either by tables displaying data for the baseline and subsequent years where tracking data were available, or by notes providing additional data or information where tracking data were not available. Sources for tracking data appear with the tables and notes. Provisional vital statistics data have been presented where necessary. The limitations of these data are detailed in the introduction to the section.

The summary and information tables show (1) a summary of the final status of the 1990 objectives, (2) a list of the similarities between the 1990 objectives and the 2000 objectives, and (3) the data points used in the construction of the figures.

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1. U.S. Department of Health, Education, and Welfare. Healthy people: The surgeon general's report on health promotion and disease prevention. Washington: Public Health Service. 1979.

Prevention Profile, 1991

- 2. U.S. Department of Health and Human Services. Promoting health/preventing disease: Objectives for the Nation. Washington: Public Health Service. 1984.
- 3. U.S. Department of Health and Human Services. Healthy people 2000: National health promotion and disease prevention objectives. Washington: Public Health Service. 1991.

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The 1979 Surgeon General's Report on Health Promotion and Disease Prevention, *Healthy People*, targeted five broad national goals for 1990, one for each of the five major stages of life. Specific objectives were developed to achieve these goals, and are presented in a later section of this profile. The goals, which concentrated on premature mortality and morbidity, were:

1. To continue to improve infant health, and, by 1990, to reduce infant mortality by at least 35 percent, to fewer than 9 deaths per 1,000 live births.

2. To improve child health, foster optimal childhood development, and, by 1990, reduce deaths among children ages 1 to 14 years by at least 20 percent, to fewer than 34 per 100,000.

3. To improve the health and health habits of adolescents and young adults, and, by 1990, to reduce deaths among people ages 15 to 24 years by at least 20 percent, to fewer than 93 per 100,000.

4. To improve the health of adults, and, by 1990, to reduce deaths among people ages 25 years to 64 by at least 25 percent, to fewer than 400 per 100,000.

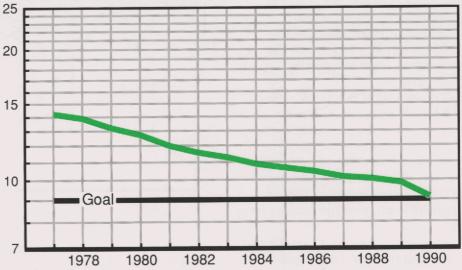
5. To improve the health and quality of life for older adults, and, by 1990, to reduce the average annual number of days of restricted activity due to acute and chronic conditions by 20 percent, to fewer than 30 days per year for people aged 65 years and over.

Infants (Under 1 year of age)

The infant mortality rate has steadily declined during the 20th century. Between 1950 and 1989, the mortality rate for U.S. infants dropped from 29.2 per 1,000 live

Figure 1. Infant mortality rates: United States, 1977-90 and 1990 goal





NOTE: 1990 data are provisional. Related detailed tables are 18-23, 25, and 48.

SOURCE: National Center for Health Statistics, National Vital Statistics System.

births to 9.8 per 1,000 births (detailed table 18). Provisional data for 1990 estimate the infant mortality rate to be 9.1—very close to the 1990 goal of 9.0 deaths per 1,000 live births (figure 1 and detailed table 48). However, the U.S. infant mortality rate continues to compare poorly with that of other industrialized nations. The United States ranked 23rd among industrialized countries in 1988 (detailed table 25).

The overall infant mortality rate masks the significant discrepancy between mortality of white babies and that of black babies (figure 2). Black babies are twice as likely as white babies to die before their first birthday. In 1977, the white infant mortality rate was 12.2 per 1,000 live births; in 1989 the rate was 8.1. The comparable rates for black infants were 24.4 and 18.6. From 1977 to 1989, the ratio of black to white infant mortality increased,

reflecting a more rapid average annual decline for white babies .(3.4 percent) than for black babies (2.2 percent). Overall, the infant mortality rates for white and for black infants declined 34 percent and 24 percent, respectively, between 1977 and 1989.

The five leading causes of infant death in 1989 were (1) congenital anomalies, (2) sudden infant death syndrome, (3) disorders relating to short gestation and unspecified low birth weight, (4) respiratory distress syndrome, and (5) newborn affected by maternal complications of pregnancy. Low birth weight (less than 2,500 grams or 5 pounds, 8 ounces) occurs in about 7 percent of all live births and is the greatest single hazard to infant health (detailed tables 7 and 20). Of all infants who die, about 60 percent are of low birth weight; of these, about 40 percent are of very low

birth weight (weighing less than 1,500 grams at birth).

Black babies are more than twice as likely as white babies to be born weighing less than 2,500 grams. In 1989, 13.5 percent of black babies (live births) were of low birth weight compared with 5.7 percent of white babies. The proportion of very low-birth-weight infants for black births (2.95 percent) was 3 times the proportion for white births (.95 percent).

Black infant mortality rates are higher not only in the first month of life, but also between 1 month and 1 year of age. The major killer in this period is sudden infant death syndrome (SIDS). Other major causes of death that are more prevalent for black infants than for all live births include disorders relating to short gestation and unspecified low birth weight, respiratory distress syndrome, infections, and injuries.

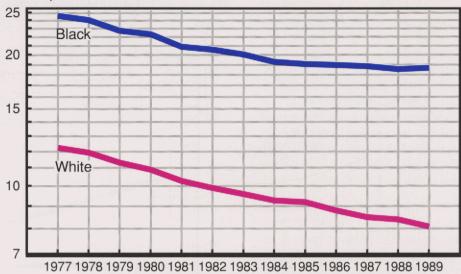
Some of the maternal factors associated with low birth weight and other major causes of infant death and disability are lack of prenatal care, smoking, alcohol and drug use, age, and socioeconomic background. These issues are addressed in Healthy People 2000. The Year 2000 target is to reduce the infant mortality rate to no more than 7 per 1,000 live births. Related objectives address smoking, alcohol and drug use by expectant mothers, and age-related preconception counseling.

Children (1–14 years of age)

The 1990 goal of limiting death among children aged 1–14 years to 34.0 deaths per 100,000 population has been reached and surpassed since 1985. In 1977, the death rate for children 1–14 years of age was 42.3 per 100,000; in 1989, it was 32.4, with a provisional estimate of 30.1 deaths per 100,000 in 1990 (figure 3). As

Figure 2. Infant mortality rates, according to race of mother: United States, 1977-89

Deaths per 1,000 live births

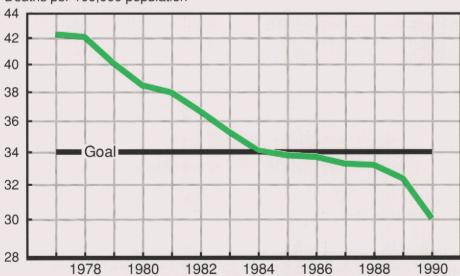


NOTE: Related detailed tables are 18-23.

SOURCE: National Center for Health Statistics, National Vital Statistics System.

Figure 3. Death rates for children 1–14 years of age: United States, 1977–90 and 1990 goal

Deaths per 100,000 population



NOTE: 1990 data are provisional. Related detailed tables are 27–29, 33–35, 39–42, 45, 47, and 48. SOURCE: National Center for Health Statistics, National Vital Statistics System.

in the past, the leading cause of death for children is unintentional injuries, including deaths from motor vehicle crashes, drowning, fire and flames, and suffocation. Nearly half of all childhood deaths are from unintentional injuries; just less than half of these are from motor vehicle crashes, although this proportion has decreased from about 47 percent in 1978 to 42 percent in 1989. Declines in childhood deaths from motor vehicle crashes are due in part to increasing use of child safety seats and safer automobile design.

In 1989, among young children (aged 1–4 years), 18.7 per 100,000 population died from unintentional injuries; among these deaths, 6.8 per 100,000 were from motor vehicle crashes (detailed table 39). The second leading cause of death, congenital anomalies, caused 6.3 deaths per 100,000; the third leading cause of death was cancer, killing 3.4 children per 100,000 population (detailed table 35).

In 1989, among children aged 5-14 years, 11.6 per 100,000 died from unintentional injuries, of which 6.4 deaths per 100,000 were caused by motor vehicle accidents (detailed table 39). Cancer was the second leading cause of death in this age group, with 3.3 deaths per 100,000 (detailed table 35). Childhood homicides have been increasing. Homicide was the third leading cause of death in this age group in 1989, surpassing congenital anomalies as a cause of death. Homicide caused 1.5 deaths per 100,000 (detailed table 40), and congenital anomalies caused 1.4 deaths per 100,000.

The Healthy People 2000 age-related objective for children aged 1–14 years is to reduce the death rate to no more than 28 per 100,000 population.

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Adolescents and Young Adults (15–24 years of age)

In 1977, the death rate for adolescents and young adults aged 15–24 years was 114.8 per 100,000 population. In 1981, the rate began to decline rapidly, and between 1983 and 1985, the death rate approached the 1990 goal of 93.0 deaths per 100,000 in this age group. However, the rate has leveled off and slowly increased to 99.9 in 1989, with a provisional estimate of 104.1 in 1990 (figure 4 and detailed table 48).

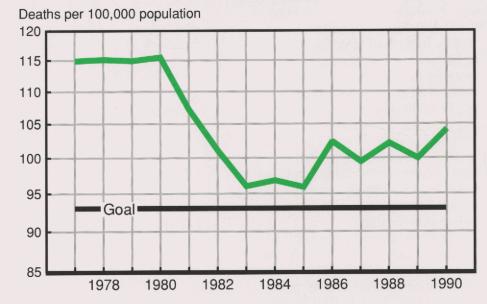
The leading cause of death in this age group was unintentional injuries, accounting for about one-half of all deaths (45.8 per 100,000); three-quarters of these deaths involved motor vehicles (35.4 deaths per 100,000 in 1989, detailed table 39). Homicide and suicide were the second and third leading causes of death to adolescents and young adults (16.9 and 13.3 per 100,000 in 1989, detailed tables 40 and 41).

The Healthy People 2000 age-related objective is to reduce the death rate for adolescents and young adults to no more than 85 per 100,000 people aged 15–24 years.

Adults (25–64 years of age)

In 1977, the death rate for adults 25-64 years of age was 532.9 per 100,000 population; by 1989, it had declined 30 percent to 409.8 (figure 5 and detailed table 48). Provisional data show the estimated death rate in this age group to be 400.4 in 1990, essentially reaching the 1990 goal of 400 per 100,000 population. Changes in personal lifestyle account for much of the decline in mortality. Since 1970, behaviorally related changes such as reduced rates of cigarette smoking, lower mean blood cholesterol, and increased control

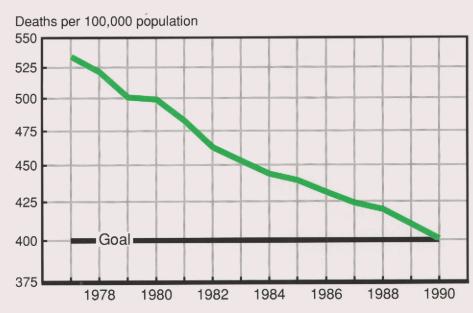
Figure 4. Death rates for adolescents and young adults 15-24 years of age: United States, 1977-90 and 1990 goal



NOTE: 1990 data are provisional. Related detailed tables are 39-42, 45, 47, and 48.

SOURCE: National Center for Health Statistics, National Vital Statistics System.

Figure 5. Death rates for adults 25–64 years of age: United States, 1977–90 and 1990 goal



NOTE: 1990 data are provisional. Related detailed tables are 27–29, 33–37, 39–42, 45, 47, and 48. SOURCE: National Center for Health Statistics, National Vital Statistics System.

of high blood pressure have contributed to substantial declines in mortality from heart disease and stroke. In the same period, mortality from motor vehicle crashes also declined substantially. Lower rates of alcohol use, increased seat belt use, and changes in speed limits have contributed to this reduction.

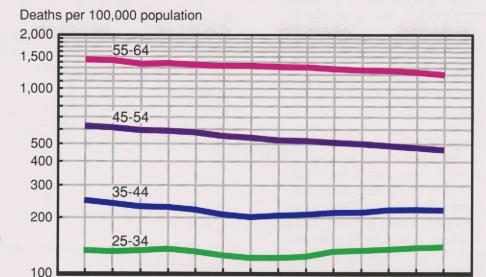
In 1978, the leading cause of death for adults 25-64 years of age was heart disease. Since 1983, however, cancer has ranked number one for this age group. This shift represents not so much a change in the death rates for cancer, but more notably a decline in the death rates for heart disease - particularly among persons 55-64 years of age (figure 6) among whom the rate dropped 41 percent (from 530.8 per 100,000 population in 1978 to 376.7 in 1989). In contrast, the death rate for cancer among persons 55-64 years of age was slightly higher in 1989 than in 1978 (445.1 compared with 440.5).

The five leading causes of death for persons aged 25–44 years in 1989 were unintentional injuries (35.4 deaths per 100,000 population), among which motor vehicle crashes accounted for 20.6 deaths per 100,000; cancer (26.2 per 100,000); HIV infections (20.3); heart disease (19.0); and suicide (14.8). As of 1989, deaths from HIV infection surpassed heart disease to become the third leading cause of death in this age group.

The five leading causes of death for persons aged 45–64 years in 1989 were cancer (290.9 deaths per 100,000); heart disease (241.5); stroke (32.5); unintentional injuries (32.4); and chronic obstructive pulmonary diseases and allied conditions (28.0 deaths per 100,000).

The Healthy People 2000 age-related objective for adults aged 25–64 years is to reduce the death rate to no more than 340 per 100,000 population.

Figure 6. Death rates for adults 25-64 years of age, according to age: United States, 1977-90



NOTE: 1990 data are provisional. Related detailed tables are 27–29, 33–37, 39–42, 45, 47, and 48. SOURCE: National Center for Health Statistics, National Vital Statistics System.

1984

1986

1988

1990

1982

1980

1978

Elderly

(65 years of age and over)

This century has seen a profound change in the proportion of the US population aged 65 and over. In 1900, people over 65 years of age constituted 4 percent of the population. By 1988, that proportion was up to 12.4 percent; by 2000 it will be 13 percent and by 2030, 22 percent (1).

People who reach the age of 65 can expect to live into their eighties. In 1978, people who

reached age 65 years could expect to live another 16.3 years. By 1989, life expectancy at age 65 years had increased to 17.2, for a total of 82.2 years (detailed table 17). However, it is likely that not all those years will be active and independent ones. Thus, improving functional independence in later life is an important element in promoting the health of older adults.

Heart disease, cancer, stroke, chronic obstructive pulmonary disease, and pneumonia and influenza are the major causes of death in people over 65 years of age. Chronic problems, such as arthritis, osteoporosis,

incontinence, visual and hearing impairments, and dementia, are also of great concern, since they have such a significant impact on day to day living

day-to-day living.

Restricted-activity days and bed-disability days due to acute and chronic conditions are two measures that have been used to gauge the health and functioning of older people. In 1977, on average, adults 65 years of age and over had to cut down on things they usually did for 36.5 days per person (figure 7). After reaching a high of an estimated 41.9 days in 1979, the rate decreased to about 30.3 in 1987, close to the 1990 goal of fewer than 30 restricted-activity days per year (detailed table 48). In more recent years, however, the number of days of restricted activity spent by older adults has hovered around 31 to 32; in 1990, older people reported experiencing about 31.4 days of restricted activity per year. Because of difficulties in interpreting the meaning of restricted-activity days, the average annual number of bed-disability days per person is also tracked.

In 1977, adults aged 65 years and over spent about 14.5 days in bed due to acute and chronic conditions. In 1990, the number of days was approximately 13.6 (figure 8). Since 1977, the number of bed-disability days spent by older adults has varied between 14 and 17 days (detailed table 48).

The Healthy People 2000 age-related objective for older adults is to reduce the proportion of people aged 65 years and over who have difficulty performing 2 or more personal care activities to 90 per 100,000 population.

Reference

1. Institute of Medicine. The second fifty years: Promoting health and preventing disability. Washington, DC. National Academy Press. 1990.

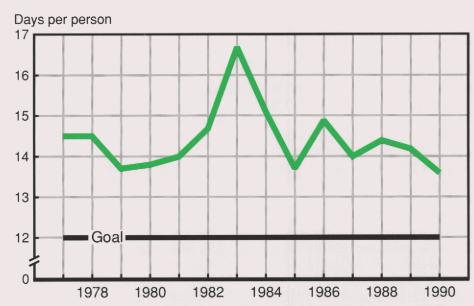
Figure 7. Restricted-activity days for persons 65 years of age and over: United States, 1977-90 and 1990 goal



NOTE: Data are for the civilian noninstitutionalized population. Levels of estimates for 1982–90 may not be comparable to estimates for previous years because the 1982–90 data are based on a revised questionnaire and field procedures. Related detailed tables are 48 and 60.

SOURCE: National Center for Health Statistics, National Health Interview Survey.

Figure 8. Bed-disability days for persons 65 years of age and over: United States, 1977–90 and 1990 goal



NOTE: Data are for the civilian, noninstitutionalized population. Levels of estimates for 1982–90 may not be comparable to estimates for previous years because the 1982–90 data are based on a revised questionnaire and field procedures. Related detailed tables are 48 and 60.

SOURCE: National Center for Health Statistics, National Health Interview Survey.

Year 2000 Goals

The Year 2000 initiative aims to significantly improve the Nation's health in the next decade. The initiative is organized into three broad goals. The first goal, to increase the span of healthy life of Americans, reflects the essential elements of health promotion and disease prevention, including prevention of premature death, disability, and disease, and enhancement of the quality of life. The second goal, to reduce health disparities among Americans, targets disparities in death, disease, and disability rates between racial and ethnic populations, people with different income levels, and disabled people when compared with the total population. The third goal, to achieve access to preventive services for all Americans, addresses the barriers to primary health care and clinical preventive services.

Increase the Span of Healthy Life for Americans

A central purpose of *Healthy People 2000* is to increase the number of Americans who live long and healthy lives. If the toll from premature death, disability, and disease can be lessened, then we can begin to realize the first goal of the Year 2000 initiative.

In the figures to follow, a number of subjects relevant to this first goal are highlighted.

Americans are living longer; the average life expectancy at birth has increased to 75 years in 1989. Increasing the span of healthy life thus becomes more important as the population ages. People can accurately describe their own health status, and these descriptions are associated with other measures of health status and use of health-care services. A

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major indicator of dysfunction is the inability to carry on one's major activity due to chronic conditions. Personal behaviors such as smoking, seat belt use, and weight control can affect health and longevity.

Life Expectancy at Birth

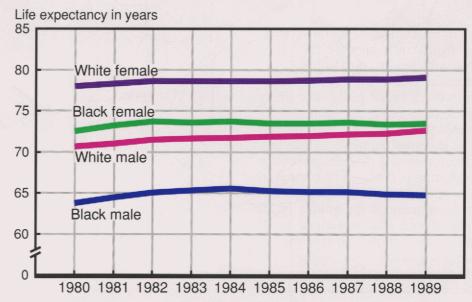
The average life expectancy at birth has increased by 28 years since the beginning of the 20th century. Much of the early progress resulted from medical science and public health's conquering of life-threatening infectious diseases. Life-style issues have become more relevant as the population has aged. The leading causes of death have been heart disease, cancer, and stroke for about the past 50 years, and in the past 25 years these chronic diseases have been found to be responsive to prevention strategies.

- The average life expectancy at birth increased among all four major sex-race groups during the decade of the 80's (figure 9). However, the expected life span increased less for blacks than for whites, and has actually decreased for black American male babies born after 1984.
- Life expectancy for blacks has remained behind that for the total population throughout this century. Since the mid-1980's the gap has widened, with the life expectancy rising to 75.3 years for the overall population while falling slightly for blacks, from a high of 69.7 years in 1984 to 69.2 in 1989.

Self-Assessed Health Status

Self-assessed health status (figure 10 and detailed table 61) correlates with an individual's actual health status and with utilization of health-care services (1); it is also a predictor of mortality among the elderly (2). People who are black, who live in poverty, or have little education, are far more likely to describe

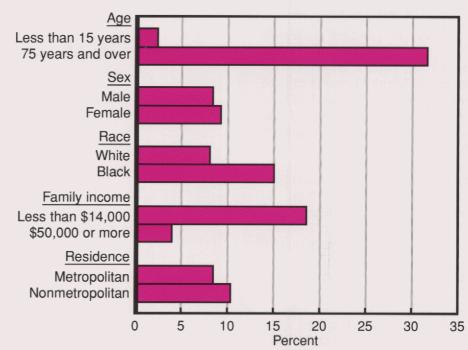
Figure 9. Life expectancy at birth, according to race and sex: United States, 1980-89



NOTE: Related detailed tables are 17 and 26.

SOURCE: National Center for Health Statistics, National Health Interview Survey.

Figure 10. Fair or poor self-assessed health status, according to selected characteristics: United States, 1990



NOTE: Percents are age adjusted. A related detailed table is 61.

SOURCE: National Center for Health Statistics, National Health Interview Survey.

their health as fair or poor than people who are white, do not live in poverty, or have more education (3).

- Among persons aged 75 years and over in 1990, about 32 percent assessed their health to be fair or poor; about 2 percent of those aged under 15 years had their health status assessed as fair or poor.
- Among males, about 8 percent considered themselves to be in fair or poor health compared with about 9 percent of females.
- Black Americans were almost twice as likely to assess their health as fair or poor compared with white Americans (about 15 and 8 percent, respectively).
- In 1990, people with annual family incomes of less than \$14,000 were about four and one-half times as likely to assess their health as fair or poor than people with incomes of \$50,000 or more (about 19 percent compared with 4 percent).
- In 1990, about 10 percent of Americans living in nonmetropolitan areas reported their health to be fair or poor compared with about 9 percent of people living in metropolitan areas.

Unable to Carry on Major Activity

Activity limitations are most common among older people, poor people, and less educated Americans. The major causes of activity limitation vary with age. People under age 18 years are most likely to have disabilities associated with mental impairment, asthma, mental illness, deafness and other ear disorders, and speech impairments. Among young adults, orthopedic impairments, such as spinal curvature and other back impairments, are most common, while at older ages degenerative diseases, led by arthritis and heart disease, predominate (4).

Prevention Profile, 1991

- From 1983 to 1990, the percent of Americans unable to carry on their major activity remained stable, in the 4-percent range (figure 11 and detailed table 59).
- During the past 8 years, the percent of black Americans unable to carry on their major activity remained approximately 80 to 90 percent higher than that of white Americans.

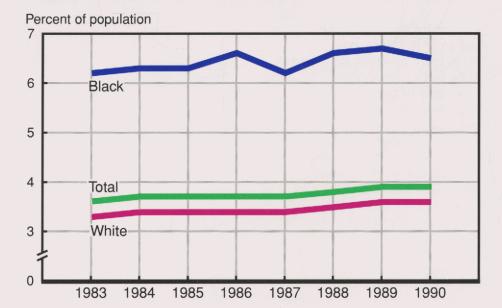
Current Cigarette Smokers

Cigarette smoking (figure 12) has been identified as the largest risk factor for mortality in the United States. Over 400,000 lives are lost each year from smoking, primarily from lung cancer, cardiovascular disease, and chronic obstructive lung disease. The adverse effects of cigarette smoking on pregnancy and infant health are also well documented.

Healthy People 2000 objectives include reducing the prevalence of cigarette smoking to no more than 15 percent among people aged 20 years and over (objective 3.4). Among the special target populations are people aged 20 years and over with an education of 12 years or less (reduction to 20 percent), blacks aged 20 years and over (to 18 percent), Hispanics aged 20 years and over (to 18 percent), women of reproductive age (to 12 percent), and pregnant women (to 10 percent).

- A total of about 26 percent of the American population 25 years of age and over smoked in 1990. Among men, about 28 percent smoked; among women, the percentage was about 23.
- Current smoking is inversely related to educational attainment. Among men who did not finish high school, about 42 percent currently smoked in 1990 (no difference by race); among women who did not finish high school, 32 percent currently smoked in 1990. In comparison, among men and women who graduated from

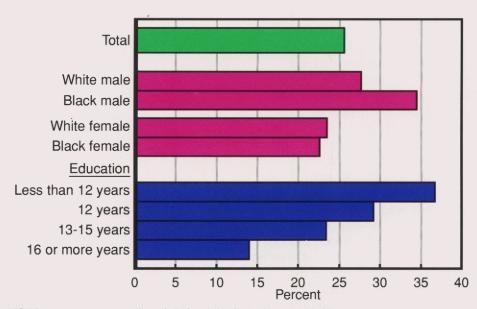
Figure 11. Persons unable to carry on major activity because of chronic conditions, according to race: United States, 1983–90



NOTE: Percents are age adjusted. A related detailed table is 59.

SOURCE: National Center for Health Statistics, National Health Interview Survey.

Figure 12. Current cigarette smokers among persons 25 years of age and over, according to selected characteristics: United States, 1990



NOTE: Percents are age adjusted. Related detailed tables are 62-65.

SOURCE: National Center for Health Statistics, National Health Interview Survey.

college, about 15 percent and 14 percent, respectively, smoked cigarettes in 1990.

- In 1990, about 35 percent of black men smoked, compared with 28 percent of white men. Among the college-educated, the proportion of black men who smoked was about 40 percent higher than the proportion of white men who smoked (21 percent compared with 15 percent).
- Among men in the middle years, a larger proportion of black men smoked compared with white men. About 42 percent of black men aged 35–44 years smoked, and about 37 percent of black men aged 45–64 years smoked. Comparable percents among white men were about 34 percent and 29 percent.

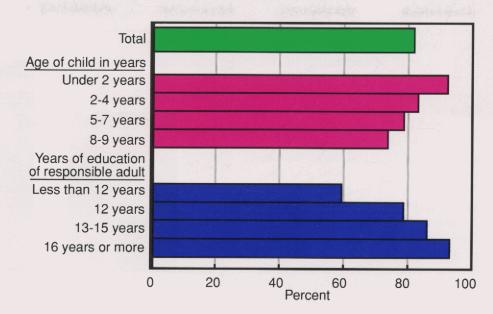
Use of Seat Belts or Car Seats by Children Under 10 Years of Age

Nearly half of all childhood deaths are due to unintentional injuries; about half of these are from motor vehicle crashes. Increasing use of child safety seats and seat belts contributed to the decline in deaths to children from motor vehicle crashes. While all 50 States now require safety restraints for young children. many States still do not mandate child restraints for children over age 5 years, and some States have no requirement after age 3 or 4 years (4). The National Highway Traffic Safety Administration estimates that in 1990 about 15 percent of automobiles had automatic restraint protection.

Healthy People 2000 objectives include increasing the percent of children aged 4 years and younger in occupant restraint systems to 95 percent (objective 9.12a).

In 1990, about 92 percent of children under age 2 years and about 83 percent of children aged 4 years and under used safety restraints (figure 13).

Figure 13. Use of seatbelts or car seats among children under 10 years of age, according to age of child and education of responsible adult: United States, 1990



SOURCE: National Center for Health Statistics, National Health Interview Survey.

- In 1990, about 82 percent of children under the age of 10 years were reported to wear seat belts or use car safety seats all or most of the time. The percent of children using safety restraints declined with increasing age, however. Among children under 2 years of age, about 92 percent used safety restraints, but among children aged 8 or 9 years only about 74 percent used them.
- The percent of children under age 10 years who use seat belts or safety seats all or most of the time

increased as the years of education of the adult responsible for the child increased. Among children whose responsible adult had not completed high school, only about 59 percent were reported to use car safety restraints all or most of the time. The percentage was about 79 percent among children whose responsible adult was a high school graduate, and was about 93 percent among children whose responsible adult had a college or higher degree.

Overweight Adults

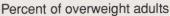
Being overweight is associated with high blood pressure, elevated blood cholesterol, diabetes, heart disease, stroke, some cancers, and gall bladder disease. It also may be a factor in osteoarthritis of the weight-bearing joints. About one-quarter of American adults, both men and women, are overweight (detailed table 71). Overweight is defined as body mass index (BMI) at or above the sex-specific 85th percentile of the National Health and Nutrition Examination Survey (NHANES) II reference population aged 20-29 years. The data presented in figure 14 were derived from self-reported weight and height in the National Health Interview Survey. Using self-reported weight and height to determine overweight means that some overweight men and women are likely to be incorrectly categorized as not overweight because of reporting errors.

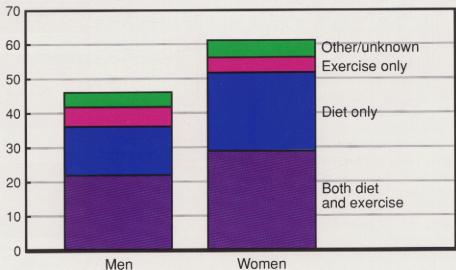
- Although the percent of men and women who are overweight is about the same (about 26 percent), only about 46 percent of overweight men and 61 percent of overweight women reported trying to lose weight in 1990.
- Among the overweight men trying to lose weight, about 34 percent were using diet alone and about 14 percent were only exercising to lose weight. Among overweight women trying to lose weight, about 41 percent were using diet only and about 8 percent were using exercise only to lose weight. Among all overweight adults who were trying to lose weight, about half of both men and women were both dieting and exercising (data not shown).

Reduce Health Disparities Among Americans

Achieving a healthier America depends on significant improvements in the health of

Figure 14. Overweight adults who are trying to lose weight, according to method of weight loss and sex: United States, 1990





NOTE: Overweight is defined for men as body mass index greater than or equal to 27.8 kilograms/meter² and for women as 27.3 kilograms/meter². Weights and heights were self-reported. A related detailed table is 71.

SOURCE: National Center for Health Statistics, National Health Interview Survey.

population groups that now are at highest risk of premature death, disease, and disability. In most cases and for virtually all health risks, they are members of certain racial and ethnic groups, people with low income, and people with disabilities. Birth rates for adolescent girls, death rates for selected major causes of mortality,

and years of potential life lost before age 65 years are presented in this section, comparing, for the most part, the experiences of white and black Americans. Future Prevention Profiles will extend the scope of these comparisons to other minority population groups.

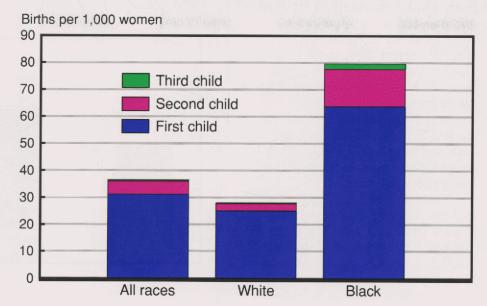
Birth Rates for Women Ages 15-17 Years

Adolescent childbearing (figure 15) is a major concern for its social and economic consequences as much as for its health effects. There are higher risks of infant mortality and low birth weight, especially for infants born to very young mothers. Other risks indirectly threaten the health of both mother and baby because of the poverty and low educational attainment that often accompany early childbearing. Although data for girls aged 15-17 years are unavailable, of the approximately 1.1 million girls aged 15–19 years who become pregnant each year, an estimated 84 percent did not intend to get pregnant (4). Among black teenagers, rates of childbirth dropped between 1970 and the mid-1980's. However, between 1986 and 1989, the birth rate for black teenagers aged 15-17 years increased by 18 percent, as did the birth rate for white teenagers (detailed table 3).

Healthy People 2000 objectives include reducing pregnancies among girls aged 17 years and younger to no more than 50 per 1,000 adolescents (objective 5.1). As baseline data for girls aged 15-17 years was unavailable, special population targets include black adolescent girls aged 15-19 years and Hispanic adolescent girls aged 15-19 years, with reductions in pregnancies to no more than 120 and 105 per 1,000 adolescents, respectively. A 35-percent reduction from baseline figures is targeted, should more complete data become available. Data on pregnancies will be presented in future Prevention Profiles.

■ In 1989, the birth rate for teenagers aged 15–17 years was 36.5 live births per 1,000 teenagers. Births among girls in this age group were almost 3 times as likely among black girls as among white girls (80.0

Figure 15. Birth rates for women 15-17 years of age, according to live birth order and race of mother: United States, 1989



NOTE: Related detailed tables are 3 and 4.

SOURCE: National Center for Health Statistics, National Vital Statistics System.

compared with 28.3). The birth rate among black girls younger than 15 years of age was 7 times higher than the rate for white girls in 1989 (detailed table 3).

■ In 1989, black girls aged 15–17 years were almost 5 times as likely to have a second baby, and 7 times as likely to have a third

baby as were white girls in the same age group. Among white girls having their second child, the birth rate was 2.9 per 1,000 girls compared with a rate of 13.7 among black girls. Among white girls having their third child, the birth rate was 0.3, compared with a rate of 2.1 among black girls.

Heart Disease Deaths

Despite a dramatic decline in heart disease mortality in the past two decades, about 7 million Americans are affected by coronary artery disease (4). Despite reductions in major risk factors—high blood pressure, high blood cholesterol, and smoking—heart disease is still the leading cause of death for both men and women. In 1989, 733,867 people died from diseases of the heart (detailed table 31).

Healthy People 2000 objectives include reducing coronary heart disease deaths to no more than 100 per 100,000 people (objectives 1.1, 2.1, 3.1, and 5.1). Because of their higher rates of heart disease, the black population is a special population targeted to reduce deaths due to coronary heart disease to 115 per 100,000 population. Related objectives target a number of preventive behaviors and services (objectives 15.4–15.17).

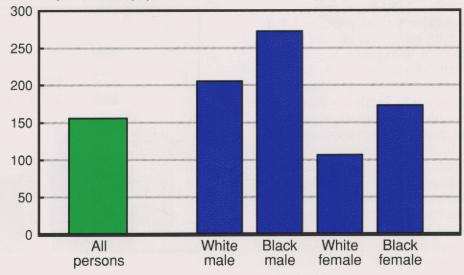
- In 1989 the age-adjusted death rate from diseases of the heart was 155.9 per 100,000 persons (figure 16). Black males were about one-third more likely than white males to die from heart disease, with a death rate of 272.6 per 100,000 persons compared with a death rate of 205.9 for white males.
- Black females were about 60 percent more likely to die from heart disease than white females, with a death rate of 172.9 per 100,000 persons compared with a death rate of 106.6 for white females.

Stroke Deaths

In 1989, 145,551 Americans died from stroke, an age-adjusted death rate of 28.0 per 100,000 people (detailed table 34). Healthy People 2000 objectives include reducing stroke deaths to no more than 20 per 100,000 people. Because of the higher death rates for blacks, the year

Figure 16. Death rates for heart disease, according to race and sex: United States, 1989





NOTE: Death rates are age adjusted. Related detailed tables are 29-33, 46, and 47.

SOURCE: National Center for Health Statistics, National Vital Statistics System.

2000 target for this population is 27 deaths per 100,000 people.

- Black males have the highest rate of stroke among all population groups (figure 17). In 1989, the stroke death rate for black males (54.1 per 100,000 persons) was almost twice as great as the rate for white males (28.0 per 100,000 persons). Black males were about 20 percent more likely to die from stroke than black females.
- In 1989, black females were about 86 percent more likely to die from stroke than white females, with death rates of 44.9 and 24.1 per 100,000 persons, respectively.

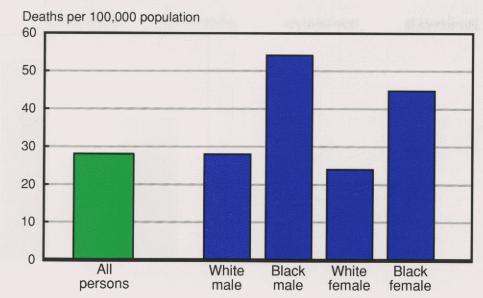
Cancer Deaths

Cancer accounts for about one of every five deaths in the United States each year. In 1989, 496,152 Americans died from cancer; the age-adjusted death rate per 100,000 people was 133.0 (figure 18 and detailed table 35). Cancer mortality rates overall have changed little since 1950, when the death rate was 125.3 per 100,000 people.

In 1988, black males experienced an 18-percent higher risk of cancer compared with white males, and 41-percent lower 5-year survival rates (detailed tables 57 and 58). Black males had a 48-percent higher age-adjusted incidence of lung cancer, and slightly lower survival rates than did white males. Black males also had a 33-percent higher incidence of prostate cancer, with a 20-percent lower survival rate than that of white males.

Among females, although breast cancer incidence was 17 percent lower for black than for white women, 5-year relative survival rates were 24 percent lower for black than white females. Lung cancer incidence rates were almost identical for black and white females in 1988; however, relative survival rates

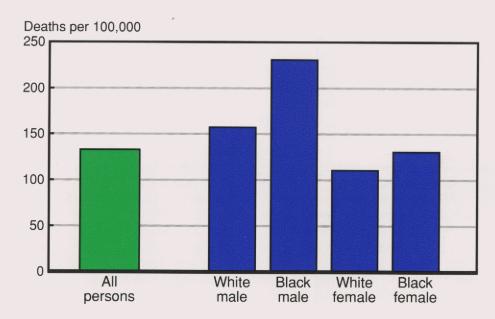
Figure 17. Death rates for stroke, according to race and sex: United States, 1989



NOTE: Death rates are age adjusted. Related detailed tables are 30-32, 34, 46, and 47.

SOURCE: National Center for Health Statistics, National Vital Statistics System.

Figure 18. Death rates for cancer, according to race and sex: United States, 1989



NOTE: Death rates are age adjusted. Related detailed tables are 29-32, 35, 46, and 47.

SOURCE: National Center for Health Statistics, National Vital Statistics System.

were 25 percent lower for black than for white women.

Healthy People 2000 objectives include reversing the rise in cancer deaths to achieve a rate of no more than 130 per 100,000 people (objectives 2.2 and 16.1). There are also objectives for specific cancers, including lung (3.2 and 16.2), breast (16.3), uterine cervix (16.4), oral cavity and pharynx (13.7), and colorectal cancer (16.1). Other objectives for cancer focus on issues related to prevention and detection (16.11-16.14). Targets include smoking reduction, dietary changes, and increases in screening procedures and early detection.

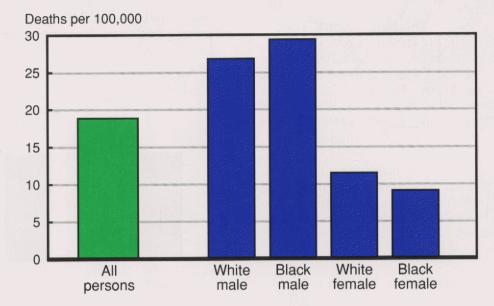
In 1989, the death rate for cancer for black males was higher than for any other race-sex group. Their death rate was 230.6 deaths per 100,000 persons, 47 percent higher than that for white males (157.2 deaths per 100,000), 76 percent higher than that for black females (130.9 deaths per 100,000), and more than twice as high as that for white females (110.7 deaths per 100,000).

Motor Vehicle Crash Deaths

In 1989, 47,575 persons died, and an estimated 5.3 million persons were injured as a result of motor vehicle crashes. By themselves, motor vehicle crashes rank as the sixth leading cause of death in the United States, and approximately half of these are alcohol-related. Among Americans under the age of 25 years, alcohol-related traffic crashes are the leading cause of death and spinal cord injury (4).

Healthy People 2000 objectives include reducing deaths caused by motor vehicle crashes to no more than 1.9 per 100 million vehicle miles traveled and 16.8 per 100,000 people (objective 9.3). Special population targets include children aged 14 years and younger (5.5 deaths per 100,000), youth aged 15–24 years (33 per

Figure 19. Death rates for motor vehicle crashes, according to race and sex: United States, 1989



NOTE: Death rates are age adjusted. Related detailed tables are 30, 32, 39, and 46.

SOURCE: National Center for Health Statistics, National Vital Statistics System.

100,000), people aged 70 years and over (20 per 100,000), and American Indians/Alaskan Natives (39.2 per 100,000). Type-specific targets include motorcyclists and pedestrians. Additional objectives address reduction of nonfatal head and spinal cord injuries and related secondary disabilities (objectives 9.9-9.11), and increased use of occupant protection systems and helmets (9.12). The year 2000 objectives also call for a reduction in deaths caused by alcohol-related motor vehicle crashes to no more than 8.5 per 100,000 people (objective 4.1).

In 1989, the age-adjusted death rate for motor vehicle crashes was 18.9 per 100,000 Americans (figure 19 and detailed table 39). Males were more than twice as likely as females to die in motor vehicle crashes. Black males and white males experienced age-adjusted death rates for motor vehicle crashes in 1989 of 29.4 and 26.8 deaths per 100,000 persons. In contrast,

deaths per 100,000 persons were 11.5 and 9.1 for white females and black females, respectively.

Homicide and Legal Intervention

Homicide was the 10th leading cause of death in the United States in 1989, accounting for nearly 23,000 deaths. Homicide was the second leading cause of death among all persons 15–24 years of age. The homicide rate in the United States continues to be 3–8 times higher than rates in most other industrialized countries (5). Homicide was the leading cause of death among black males 15–24 and 25–34 years of age.

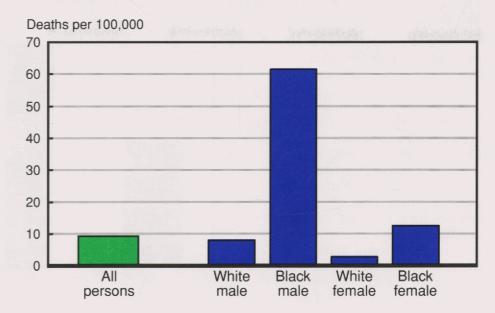
Firearms were involved in 64 percent of all homicides in the United States in 1989. During that year, 81 percent of homicides among teenagers 15–19 years of age were associated with firearm use (90 percent among black males); at 20–24 years of age, 73 percent of homicides resulted from firearm use (83 percent among black males) (7).

As with motor vehicle fatalities, about half of all homicides are associated with alcohol use. Nationwide, it is estimated that about 10 percent of homicides are related to the use of illegal drugs, but in many cities this rate is substantially higher (4). Over half of all homicide victims are relatives or acquaintances of the perpetrators (4).

Healthy People 2000 objectives include reducing homicides to no more than 7.2 per 100,000 people (objective 7.1). Special population targets include children aged 3 years and younger (to 3.1 per 100,000 population), spouses aged 15-34 years (to 1.4), black men aged 15-34 years (to 72.4), Hispanic men aged 15-34 years (to 42.5), black women aged 15-34 years (to 16.0), and American Indians/Alaskan Natives in Reservation States (to 11.3 deaths per 100,000). The objectives also include reducing weapon-related deaths to no more than 12.6 per 100,000 people (objective 7.3).

- In 1989, the age-adjusted homicide rate was 9.4 deaths per 100,000 persons in the United States (figure 20 and detailed table 40). Among black males the death rate from homicide of 61.5 per 100,000 people was almost 8 times the rate for white males (8.1). Black females died from homicide at the rate of 12.5 per 100,000, which was 1.5 times the rate among white males. Of these four race-sex groups, white females were the least likely to be homicide victims (2.8 deaths per 100,000).
- Among all young people aged 15–24 years, the homicide rate was 16.9 per 100,000 people in 1989. This death rate masks the death rate among young black males, which was 114.8 per 100,000 in 1989, almost 9 times the homicide rate for white males in this age group (figure 21). The homicide rate among young black males increased rapidly beginning

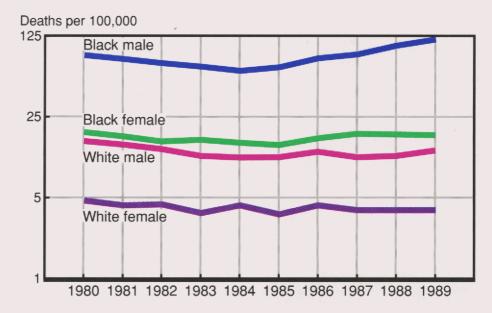
Figure 20. Death rates for homicide and legal intervention, according to race and sex: United States, 1989



NOTE: Death rates are age adjusted. Related detailed tables are 30-32, and 40.

SOURCE: National Center for Health Statistics, National Vital Statistics System.

Figure 21. Death rates for homicide and legal intervention among persons 15-24 years of age: United States, 1989



NOTE: A related detailed table is 40.

in 1985 to the present all-time high.

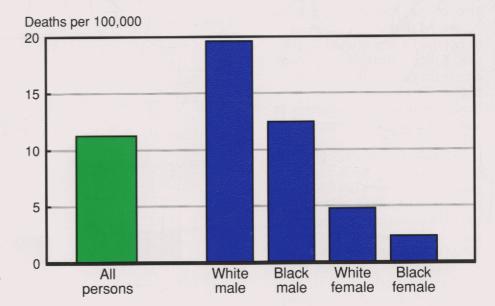
Suicide

Suicide is the eighth leading cause of death in the United States, but ranks third among youth aged 15-24 years, and second among white males in this age group. More than 30,000 lives are lost through suicide each year (30,232 deaths in 1989), with death rates fairly constant at ages 15-64 years and peaking for the older population age groups. Injuries from firearms are directly responsible for a majority of suicidal deaths, and much of the increase in suicide that has taken place since the 1950's is specific to firearm deaths (4). The suicide rate has more than doubled since 1968 among youth aged 15 to 19 years. Firearm suicides in this age group increased by 31 percent among white males and doubled among black males between 1984 and 1988 (6).

Healthy People 2000 objectives include reducing suicides to no more than 10.5 per 100,000 people (objectives 6.1 and 7.2). Special population targets include youth aged 15 to 19 years (a reduction to 8.2 deaths per 100,000 people), men aged 20-34 years (to 21.4), white men aged 65 years and older (to 39.2), and American Indian/Alaskan Native men in Reservation States (to 12.8 deaths per 100,000). Related objectives include reducing the incidence of injurious suicide attempts among adolescents aged 14-17 years by 15 percent (6.2 and 7.8) and establishing protocols to prevent suicide by jail inmates (6.10 and 7.18).

Among all Americans, the age-adjusted death rate due to suicide was 11.3 deaths per 100,000 population in 1989 (figure 22 and detailed table 41). The rate for white males (19.6 per 100,000 persons) was 1.6 times that of black males (12.5), 4 times that for white females (4.8), and

Figure 22. Death rates for suicide, according to race and sex: United States, 1989



NOTE: Death rates are age adjusted. Related detailed tables are 30-32, and 41.

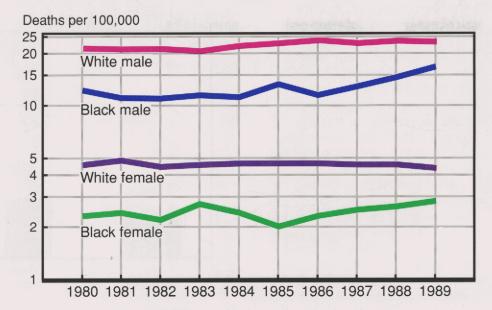
8.2 times that for black females (2.4).

- Among adolescents and young adults aged 15 to 24 years, the suicide rate was 13.3 per 100,000 population in 1989, 8 percent higher than in 1980 (figure 23). White males aged 15 to 24 years have been most likely to be at risk for suicide throughout the 1980's, with suicide rates exceeding 20 per 100,000 persons every year.
- In 1989, among white youth aged 15–24 years the suicide rate was five times higher for males than for females (23.2 compared with 4.4 per 100,000). In this age group, the rate for suicide among black males was 5 times higher than the suicide rate among black females (16.7 compared with 2.8).
- The suicide rate among white males aged 15 to 24 years has increased about 10 percent in the past decade, with most of the increase taking place since 1983. Among black males in this age group the suicide rate increased 49 percent from 1984 to 1989.
- Since the mid-1980's, the suicide rate among adolescent black males has been increasing faster than the rate among adolescent white males. Whereas in 1985 the rate for white males exceeded that for black males by 70 percent, by 1989 the difference had narrowed to about 40 percent.
- In the past decade the suicide rate for white females aged 15 to 24 years has decreased slightly, but it has increased by 40 percent among black females in this age group since 1986. Suicide rates have declined from 4.7 in 1986 to 4.4 per 100,000 people in 1989 among white females, and increased from 2.3 in 1986 to 2.8 per 100,000 in 1989 among black females.

Human Immunodeficiency Virus (HIV) Infection Deaths

Since 1981 more than 189,000 cases of acquired immunodeficiency syndrome

Figure 23. Death rates for suicide among persons 15-24 years of age: United States, 1989



NOTE: A related detailed table is 41.

(AIDS) have been reported to the Centers for Disease Control. During 1990 over 41,000 AIDS cases were reported. In 1988, human immunodeficiency virus (HIV) infection was the fourth leading cause of death among persons 25–44 years of age. One year later, HIV infection ranks third among leading causes of death for persons in this age group. Over 22,000 Americans died from HIV infection in 1989.

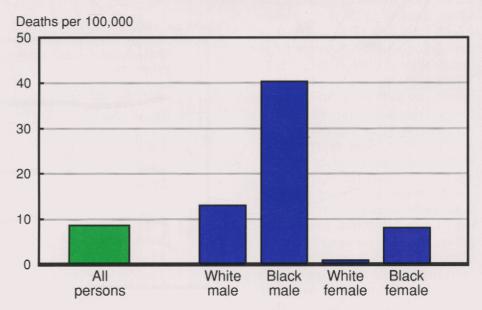
Healthy People 2000 objectives for HIV and AIDS include confining the annual incidence of diagnosed AIDS cases to no more than 98,000, and confining the prevalence of HIV to no more than 800 per 100,000 population (objectives 18.1 and 18.2). Risk reduction objectives and objectives related to services and protection are also included in priority area 18. It is currently estimated that about 1 million persons in the United States are infected with HIV.

- Among the total population, the age-adjusted death rate for human immunodeficiency virus was 8.7 per 100,000 in 1989 (figure 24 and detailed table 42). Males were far more likely to die of HIV infection than females.
- The age-adjusted death rate among black males was 3 times that of white males at 40.3 deaths per 100,000 persons compared with 13.1 deaths per 100,000 among white males. Black females were nine times more likely to die from HIV infection than white females, with a death rate of 8.1 per 100,000 compared with 0.9 per 100,000 among white females.

Years of Potential Life Lost Before Age 65 Years

Reducing health disparities among Americans is the second of the three goals set forth in the health initiative for the year 2000. One measure of the disparity in health status between population groups is years of potential life

Figure 24. Death rates for human immunodeficiency virus (HIV) infection, according to race and sex: United States, 1989



NOTE: Death rates are age adjusted. Related detailed tables are 30-32, and 42.

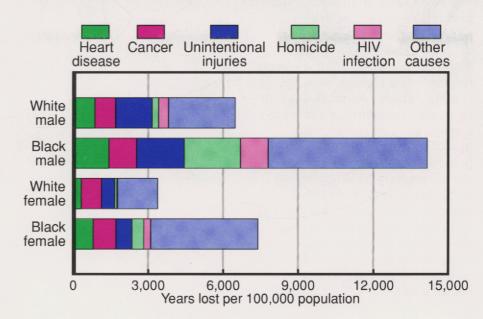
lost before age 65 years, calculated as years lost per 100,000 population (figure 25 and detailed table 32).

- In 1989, black males lost over twice (2.2) as many years per 100,000 population as white males for all causes of death (14,186.5 compared with 6,525.1). Black females also lost 2.2 times as many years per 100,000 population as white females for all causes of death (7,431.5 compared with 3,403).
- In 1989, years lost per 100,000 population for black males compared with white males were 65 percent higher for heart disease, 32 percent higher for cancer, and 31 percent higher for unintentinal injuries. For HIV infection, years of potential life lost were 177 percent higher, and for homicide, 709 percent higher for black males than for white males.
- For black females, lost years of life per 100,000 population before age 65 years were 154 percent higher than for white females for heart disease, 12 percent higher for cancer, and 23 percent higher for unintentional injuries. For HIV infection, years of potential life lost were 796 percent higher, and for homicide, 390 percent higher for black females compared with white females.

Improve Access to Preventive Health Services

Prevention, a large part of the strategy for achieving the health improvements of *Healthy People* 2000, has three major components: health promotion, health protection, and preventive services. Making preventive services available to all Americans could provide the foundation for achievement of the other two parts. Prenatal health care is vital and fundamental for the birth of healthy babies. Early detection of breast cancer and cervical cancer significantly improves the chance

Figure 25. Years of potential life lost before age 65 for selected causes of death, according to race and sex: United States, 1989



NOTE: A related detailed table is 32.

of survival. Approximately one-half of all heart attack victims and two-thirds of all stroke victims have high blood pressure, underlining the importance of detection and control of high blood pressure. To achieve access to preventive services over the coming decade, we must not only focus on availability of preventive services such as monitoring, immunizations, screening, and patient education and counseling, but on primary health care as well. The year 2000 health initiative responds to this need by including objectives to increase the number of people who have adequate insurance coverage and who have a primary source of health care.

Prenatal Care

Numerous studies have demonstrated that early and comprehensive prenatal care reduces rates of infant death, low birth weight, and other perinatal complications. The effect of early prenatal care is particularly evident in studies of high-risk groups, such as adolescents and poor women, and can save not only thousands of medical-care dollars per each low-birth-weight baby, but also incalculable human suffering. Prenatal health care services can also serve as a resource and a reinforcer for health promotion efforts that are equally important to healthy pregnancies. While about 76 percent of women receive early prenatal care, rates are considerably lower for many minority groups.

Healthy People 2000 objectives include increasing to at least 90 percent the proportion of all pregnant women who receive prenatal care in the first trimester of pregnancy (objective 14.11). There are wide variations in the percent receiving early prenatal care among mothers of different racial and ethnic groups; these differences have not changed in the past decade. Special

population targets for the year 2000 include black women, American Indian/Alaskan Native women, and Hispanic women.

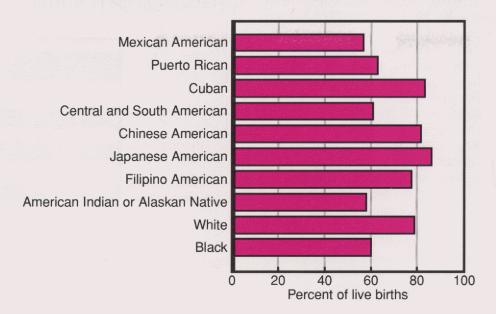
- In 1989, only about 57 percent of Mexican American mothers received early prenatal care (figure 26 and detailed table 8). Similarly, only about 58 percent of American Indian or Alaskan Native mothers, 60 percent of black mothers, 61 percent of Central and South American mothers, and 63 percent of Puerto Rican mothers received early care.
- The proportions of American mothers who received early prenatal care were highest among Japanese mothers (about 86 percent), followed by mothers who were Cuban (83 percent), Chinese (82 percent), white (79 percent), and Filipino (78 percent).
- Mexican American mothers were most likely to receive late or no prenatal care (about 15 percent, figure 27), followed by American Indian or Alaskan Native mothers (13 percent), and black and Central and South American mothers (12 percent).

Clinical Breast Examinations and Mammograms

In 1990, an estimated 150,000 new cases of breast cancer were diagnosed among women. Breast cancer is the leading cause of cancer for females and the third leading site overall. It is estimated that approximately 1 in 9 women will develop breast cancer in their lifetime. The incidence of breast cancer has increased more than 1 percent per year since the early 1970's (detailed table 57). The most recent increases are believed to be related, in part, to early detection of breast cancer as a result of increased use of mammography and breast self-examination (5).

In 1989, 42,837 women died of breast cancer, an age-adjusted death rate of 23.0 per 100,000

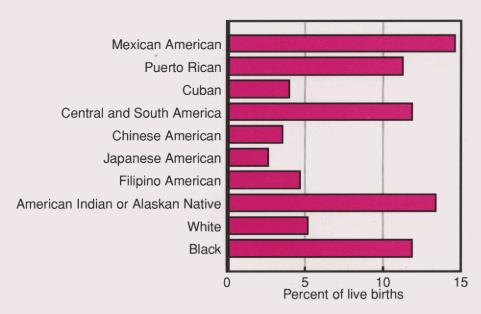
Figure 26. Proportion of mothers with early prenatal care, according to race and ethnicity of mother: United States, 1989



NOTE: Early prenatal care is defined as care beginning in the first trimester of pregnancy. Late prenatal care is defined as care beginning in the third trimester. Data on Hispanic origin of mother are from 30 States and the District of Columbia. A related detailed table is 8.

SOURCE: National Center for Health Statistics, National Vital Statistics System.

Figure 27. Proportion of mothers with late or no prenatal care, according to race and ethnicity of mother: United States, 1989



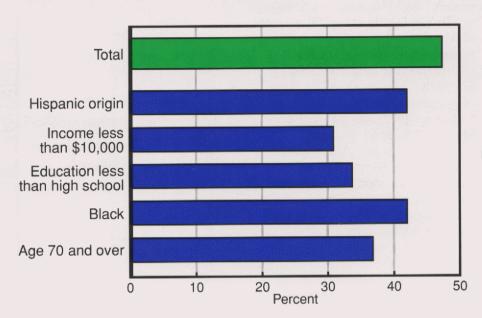
NOTE: Early prenatal care is defined as care beginning in the first trimester of pregnancy. Late prenatal care is defined as care beginning in the third trimester. Data on Hispanic origin of mother are from 30 States and the District of Columbia. A related detailed table is 8.

population (detailed table 37). Among white females the rate was 22.9 per 100,000 and among black females, 26.0 per 100,000. Breast cancer has become the second most common cause of cancer deaths among women, having been surpassed by lung cancer in the past decade. However, the incidence of breast cancer is more than twice that of lung cancer in women. Early diagnosis of breast cancer improves the chance of survival significantly; 90 percent of women diagnosed when the cancer was localized reach the 5-year survival mark, Regular screening could reduce breast cancer death rates by 30 percent.

Healthy People 2000 objectives include increasing to at least 80 percent the proportion of women aged 40 years and over who have ever received a clinical breast examination and a mammogram, and to at least 60 percent those aged 50 and over who have received them within the preceding 1 to 2 years (objective 16.11). Special population subgroups with the fewest clinical breast examinations and mammograms have been targeted. These subgroups include Hispanics, women with annual family incomes of less than \$10,000 women with less than a high school education, black women, and women aged 70 years and over.

In 1990 about 47 percent of women aged 50 years and over had received a clinical breast examination and a mammogram within the past 2 years (figure 28). Among the population groups of women aged 50 years and over targeted by Healthy People 2000, about 42 percent of those of Hispanic origin, about 31 percent with annual family incomes of less than \$10,000, about 34 percent of those who had not finished high school, about 42 percent of blacks, and about 37 percent of those ages 70 years and over, had received a clinical breast

Figure 28. Women 50 years of age and over who have received a clinical breast examination and a mammogram within the past 2 years, according to selected characteristics: United States, 1990



SOURCE: National Center for Health Statistics, National Health Interview Survey.

examination and a mammogram within the past 2 years.

Pap Tests

Cervical cancer can be cured if detected early. Increased use of the Pap test has contributed to a 50-percent drop in cervical cancer deaths since 1969, although 4,487 women died of this disease in 1989.

Healthy People 2000 objectives include increasing the proportion of women ages 18 years and over

with a uterine cervix who have ever had a Pap test to at least 95 percent, and to at least 85 percent those who received one within the preceding 1 to 3 years (objective 16.12). Special population targets are Hispanic women ages 18 years and over, women ages 70 years and over, women ages 18 years and over with less than a high school education, and low-income women ages 18 years and over (annual family income less than \$10,000).

- In 1990, about 93 percent of all women ages 18 years and over had ever had a Pap test (figure 29); about 81 percent had a Pap test within the past 3 years. This is by far the highest proportion of adults screened for any type of cancer.
- Among the targeted population groups, about 77 percent of Hispanic women, 69 percent of women ages 70 years and over, 70 percent of women who did not finish high school, and 72 percent of women with low annual family incomes had a Pap test within the past 3 years.

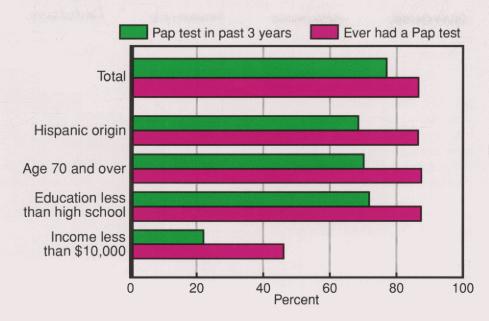
Blood Pressure Readings

High blood pressure is a well-known risk factor for both heart disease and stroke among adults. Approximately half of all heart attack victims and two-thirds of all stroke victims have high blood pressure. People are classified as hypertensive if their average systolic blood pressure is greater than or equal to 140 mm mercury or their average diastolic blood pressure is greater than or equal to 90 mm mercury or they report taking antihypertensive medication.

About 30 percent of American adults have high blood pressure. It is about one-third more common among blacks than among whites (38 percent compared with 29 percent) (7). Severe high blood pressure (diastolic pressure greater than or equal to 115mm mercury) is present 4 times more often among black men than among white men (7). Most American adults with high blood pressure do not have it under control.

Healthy People 2000 objectives include increasing to at least 50 percent the proportion of adults with high blood pressure whose blood pressure is under control, and to at least 90 percent the proportion of people with high

Figure 29. Women 18 years and over who have ever received a Pap test, and who received one in the past 3 years, according to selected characteristics: United States, 1990



SOURCE: National Center for Health Statistics, National Health Interview Survey.

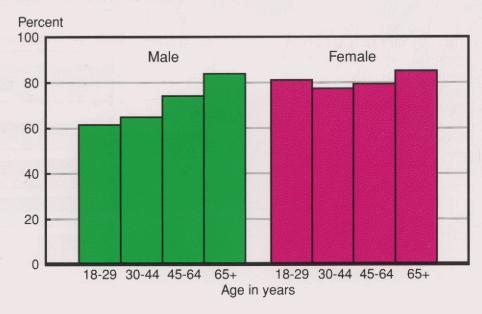
blood pressure who are taking action to help control it (objectives 15.4 and 15.5).

In 1990, about 69 percent of men and 80 percent of women had their blood pressure checked. The proportion of women having their blood pressure checked did not vary much with age (78–85 percent, figure 30); in contrast, the proportion among men increased with age. In 1990 among men aged 18–29 years, about 62 percent had their blood pressure checked; in age groups 30–44 years, 45–64 years, and 65 years and over, the percents were about 65, 74, and 84 percent.

Health Care Coverage Among Persons Under 65 Years of Age

Health care coverage is associated with age, health, and socioeconomic status. Among persons under 65 years of age, those who are older, those with more education, those with higher incomes and those in better health, are more likely than others to have some form of private health insurance. In 1989, the age-adjusted percent of all Americans under the age of 65 years who had private health insurance was approximately 77 percent; about 6 percent were covered by Medicaid; and about 1 percent were covered by Medicare, the military, or had no data available (detailed table 133). Health care coverage through Medicare is available to nearly all persons 65 years of age and over (5). Between 1980 and 1989, the age-adjusted percent of persons under the age of 65 years who had no health care coverage rose from about 13 to 16 percent (detailed table 133). In 1989, the three reasons most frequently given for not having health care coverage were cost (mentioned by 70 percent of people without health insurance), unemployment (8 percent), and being healthy (5 percent) (8).

Figure 30. Adults who had their blood pressure checked in the past year, according to sex and age: United States, 1990



NOTE: Related detailed tables are 68 and 69.

SOURCE: National Center for Health Statistics, National Health Interview Survey.

not only what proportion of the population is covered by health insurance, but what proportion has coverage for clinical preventive services. Healthy People 2000 objectives target clinical preventive services and include the elimination of financial barriers to these services for all Americans (priority area 21). In 1989, about 16 percent of people under age 65 years had neither public nor private health insurance coverage (figure 31). Among those persons most likely to be uninsured were blacks (about 22 percent), people with incomes below the poverty threshold (36 percent), the unemployed (39 percent), and persons with less than 12 years of

For prevention, the issue is

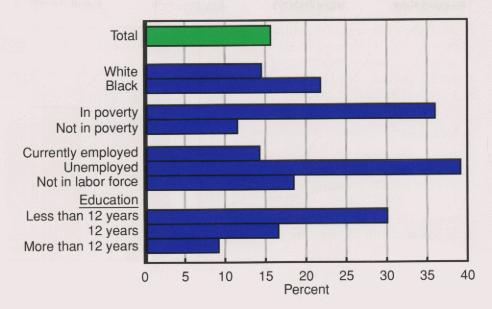
Usual Source of Medical Care

education (30 percent).

About 78 percent of white Americans aged 18 years and over, and 76 percent of black Americans aged 18 years and over, had a usual source of medical care in 1990 (9). Men were less likely than women to have a usual source of medical care. Among white men, about 72 percent had a usual source of care whereas among black men, the proportion was about 65 percent. Among white and black females, about 85 percent had a usual source of care. Among all adults who had a usual source of medical care, about 94 percent used a doctor's office, although among Americans with incomes below the poverty threshold, about 85 percent used a doctor's office, while about 12 percent used a health center or a hospital emergency room (9).

Healthy People 2000 objectives include increasing to at least 95 percent the proportion of people who have a specific source of ongoing primary care for coordination of their preventive and episodic health care (objective 21.3). Special population targets

Figure 31. Persons under 65 years of age without health care coverage, according to selected characteristics: United States, 1989



NOTE: Related detailed tables are 133 and 134.

SOURCE: National Center for Health Statistics, National Health Interview Survey.

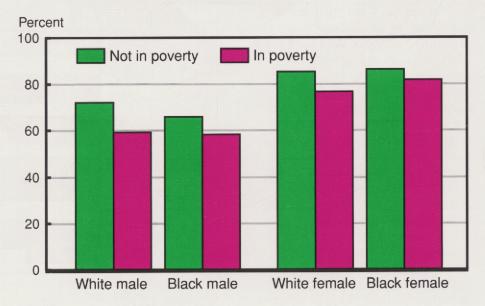
include Hispanics, blacks, and people with low incomes.

Only about three in five men with incomes below the poverty threshold had a usual source of medical care (figure 32). Among women living in poverty, about 77 percent of white women and about 82 percent of black women had a usual source of care.

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Figure 32. Adults with a usual source of medical care, according to race, sex and poverty status: United States, 1990



NOTE: Related detailed tables are 76 and 77.

SOURCE: National Center for Health Statistics, National Health Interview Survey.

1990 Objectives for the Nation: **Final Status**

In this section, the final attainment status of each of the objectives in the fifteen subject areas of Objectives for the Nation is presented. The text of each objective is accompanied either by tables displaying data for the baseline and subsequent years where tracking data were available, or by notes providing additional data or information where tracking data were not available. For the objectives for which there were no data available, the space for text or a table is left blank. Sources for tracking data appear with the tables and notes. Provisional vital statistics data have been presented where necessary.

Following this section are three summary and information tables. Table A summarizes the final attainment status of each of the 1990 objectives. Table B compares the content of the 1990 objectives with the year 2000 objectives, and table C contains the data points used in the construction of figures

1 - 32.

Background

The 1979 Surgeon General's report, Healthy People, delineated five broad national goals for 1990, one for each of the five major stages of life, concentrating on premature mortality and morbidity. These goals were:

To continue to improve infant health, and, by 1990, to reduce infant mortality by at least 35 percent, to fewer than 9 deaths per 1,000 live births.

To improve child health, foster optimal childhood development, and, by 1990, to reduce deaths among children ages 1 to 14 years by at least 20 percent, to fewer than 34

per 100,000.

To improve the health and health habits of adolescents and young adults, and, by 1990, to reduce deaths among people ages 15 to 24 years by at least 20 percent, to fewer than 93 per 100,000.

To improve the health of adults, and, by 1990, to reduce deaths among people 25 to 64 years by at least 25 percent, to

fewer than 400 per 100,000.

To improve the health and quality of life for older adults, and, by 1990, to reduce the average annual number of days of restricted activity due to acute and chronic conditions by 20 percent, to fewer than 30 days per year for people aged 65 years and over.

Subsequently, 15 broad areas to be given priority attention were identified in Promoting Health/Preventing Disease: Objectives for the Nation because they represented areas in which health promotion and disease prevention measures might be expected to achieve further gains through

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public, private, and individual health promotion and disease prevention strategies. These broad areas were:

- High blood pressure control
- Family planning
- Pregnancy and infant health
- Immunization
- Sexually transmitted diseases
- Toxic agent and radiation control
- Occupational safety and health
- Injury prevention
- Fluoridation and dental health
- Surveillance and control of infectious diseases
- Smoking and health
- Alcohol and drug misuse
- Improved nutrition
- Physical fitness and exercise
- Control of stress and violent behavior

Within each of these 15 areas a set of specific and measurable objectives for 1990 was identified to provide focus for the achievement of the five *Healthy People* health promotion and disease prevention goals. The Public Health Service, other parts of the Department of Health and Human Services, other departments in the Federal Government, State and local governments, and the private sector were aggressively involved in the drive toward the attainment of these objectives. Of 266 measured targets among the 226 health objectives, 23 percent could not be evaluated because data were unavailable. Thirty-two percent of the measured targets were attained, progress was made for 34 percent of the targets, and for 11 percent of the targets the attained value was in the opposite direction of the target from the baseline.

	Percent of target attained				
Priority area	100 percent and greater	50–99 percent	0–49 percent	Regression	No data
A High blood pressure control	70	0	0	20	10
B Family planning	33	0	0	67	0
C Pregnancy and infant health	38	19	25	6	13
D Immunization	39	21	29	11	0
E Sexually transmitted diseases F Toxic agent and radiation	25	25	0	17	33
control	5	5	10	5	75
G Occupational safety and health	25	5	15	5	50
H Injury prevention	35	35	24	0	6
Fluoridation and dental health Surveillance and control of	31	8	8	23	31
infectious diseases	15	8	23	15	38
K Smoking and health	33	24	24	5	14
L Alcohol and drug misuse	57	13	13	4	13
M Improved nutrition	5	27	41	5	23
N Physical fitness and exercise O Control of stress and violent	42	17	33	0	8
behavior	36	0	7	21	36
Totals	32	15	19	11	23

NOTE: Percents are based on 266 measured targets among the 226 objectives, and may not add to 100 due to rounding.

It must be recognized that this was the first time national health objectives had been set. While adequate past trend data existed to set realistic attainable objectives for 1990, in many cases objectives were set in the absence of data or on idealistic expectations. Much has been learned from this

process. The objectives set forth in *Healthy People 2000* are for the most part based on a better understanding of past trends and realistic expectations of future achievements.

The pursuit of the 1990 objectives has been well-documented by the Public Health Service. A series of implementation plans that outlined the actions to be taken by agencies of the federal government was described in a special supplement (1). Prevention Profiles were published triennially from 1980-89, appearing with the Health, United States volumes (2-5). The results of an in depth review of the progress achieved midway toward the 1990 objectives were published (6). A continuing review of the health promotion and disease prevention activities of the Department of Health and Human Services was published periodically in the Public Health Service series Prevention. Other data related to the objectives can be found in other publications, such as data from the 1985 National Health Interview Survey (7). The November-December 1986 and the January-February 1987 issues of Public Health Reports contained a number of research reports prepared by the staffs of agencies with lead responsibility for particular 1990 objectives.

In some cases, estimates shown in the publications referenced above as well as others differ slightly from those shown in Prevention Profile. Minor differences in estimates for similar variables can result from differences in the conceptualization and tabulation of variables that are based on a combination of several questions, from differences in computation and rounding techniques or from computations based on different universes (as in data on smoking for persons 18 years of age and over and for persons 20 years of

age and over).

Limitations and Qualifications of the Data

Over the decade in which these objectives have been pursued, a number of data sources were never developed (for example, objectives identified on the following pages as Ed; Ee, Ei, Fb, Fi, Fj, Jg, Lr, Mn, and Oi); data sources have changed (such as Dj), or ceased to exist (such as Je and Jf); a new understanding of certain diseases has led to the documentation of trends which had not been foreseen when the objectives were first drawn up (for example, Eb); and new case definitions have led to increased numbers of cases (such as Ec, Ib and Ic). In some cases, the information on the attainment of an objective paints a false picture: For example, for objectives Ib and Ic, although the changes in methods of measuring periodontal diseases have resulted in the detection of more cases, the periodontal health of the U.S. population is improving.

These data contain a number of additional modifications and limitations which are detailed below.

■ Baseline data for some of the objectives as they appear in Prevention Profile have been modified from those in Objectives for the Nation. In some instances, population figures from the 1980 decennial census have been used to recompute rates that had been computed from earlier population estimates.

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- More appropriate data sources have been found for some areas, and in others the earlier baseline data have been modified.
- The profile includes objectives for which no data, baseline or otherwise, are available. The nature of the problem and possible approaches have been discussed at some length (8).
- The data used for tracking the objectives are essentially national in nature and may mask regional differences.
- In some cases the objectives were specified using age or other classifications different from those commonly used in collecting and displaying certain types of data.
- Because of limitations imposed by the periodicity cycles within which different data are collected, the year for which the most current data are available may vary from objective to objective.

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High Blood Pressure Control

Improved Health Status

A.a. By 1990, at least 60 percent of the estimated population having definite high blood pressure should have attained successful long-term blood pressure control, that is, a blood pressure at or below 140/90 mmHg for 2 years or more. (Based on 1979 data, high blood pressure control rates vary among communities and States, with a general range from 25 to 60 percent.)

¹At the time this objective was written, high blood pressure was defined as a measurement of 160/95 mmHg or higher. The results of the Hypertension Detection and Follow-up Program, released since this objective was written, demonstrated the value of treating mild hypertension, as did a number of subsequent clinical trials. As a result, the definition of high blood pressure was changed to a measurement of 140/90 mmHg or higher. It also should be noted that the term "definite" high blood pressure is no longer used.

The 1976–80 National Health and Nutrition Examination Survey found that 11 percent of people with a blood pressure equal to or greater than 140/90 mmHg had their high blood pressure under control. Approximately one-third of people with a blood pressure equal to or greater than 160/95 mmHg had their high blood pressure under control. Data from the 1982–84 Hispanic Health and Nutrition Examination Survey show noticeable differences between Mexican Americans, Cuban Americans and Puerto Ricans with hypertension.²

rei	rcent with bloo	u pressur	e under con	1101, 1302	-04
	exican erican	Cuban American		Puerto Rican	
Male	Female	Male	Female	Male	Female
10.2	28.4	15.7	22.5	7.5	29.4

²Blood pressure equal to or greater than 140 over 90 or on anti-hypertensive medication.

Reduced Risk Factors

A.b. By 1990, the average daily sodium ingestion (as measured by excretion) for adults should be reduced at least to the 3–6-gram range.^{3,4} (Baseline data unavailable.)

³Same objective in Improved Nutrition.

A.c. By 1990, the prevalence of significant overweight (120 percent of "desired" weight) among the U.S. adult population should be decreased to 10 percent of men and 17 percent of women, without nutritional impairment.^{5,6} (In 1971–74, 23.7 percent of men and 26.0 percent of women 20–74 years of age were overweight.)

⁵Same objective in Improved Nutrition.

⁶Overweight is defined for men as body mass index (BMI) greater than or equal to 27.8 kilograms/meter² and for women, as 27.3 kilograms/meter². These cut points were used because they represent the sex-specific 85th percentiles of BMI based on measured weight and height for persons 20–29 years of age in the 1976–80 National Health and Nutrition Examination Survey. The language for this objective in terms of BMI would be: By 1990, the prevalence of overweight (BMI of 27.8 or higher for men and 27.3 or higher for women) among the U.S. adult population should be reduced, without impairment of nutritional status, to approximately 18 percent of men and 21 percent of women.

Data from the first 4 years of the revised FDA Total Diet Study (1982–86) indicate that average sodium intakes for adults, excluding salt added at the table, were within the Established Safe and Adequate Daily Dietary Intake range of 1,100–3,300 milligrams established by the National Academy of Sciences in 1980.

		Percent of persons 18 years and over who are overweight, 1990 ^a		
Race	Male	Female		
Total ^b	25.7	25.9		
White Black	25.5 31.8	24.3 40.1		

^aData are calculated from self-reported height and weight in the 1990 National Health Interview Survey.

⁴³⁻⁶ grams of salt correspond roughly to 1.2-2.4 grams of sodium.

blncludes persons of races other than white or black.

Increased Public and Professional Awareness

A.d. By 1990, at least 50 percent of adults should be able to state the principal risk factors for coronary heart disease and stroke, that is, high blood pressure, cigarette smoking, elevated blood cholesterol levels, and diabetes. (Data from the survey The Public and High Blood Pressure, conducted in 1979, show that 24 percent of the public knew that high blood pressure is a likely cause of heart trouble, 32 percent reported that cigarette smoking is a cause, and 11 percent cited cholesterol and fatty foods as a cause of heart trouble.)

A.e. By 1990, at least 90 percent of adults should be able to state whether their current blood pressure is normal (below 140/90 mmHg) or elevated, based on a reading taken at the most recent visit to a medical or dental professional or other trained reader. (Of persons 17 years of age and over interviewed in 1974, 47 percent reported that their blood pressure was normal, high, low, or other based on a reading taken within the past year; 21 percent had not been told; and 32 percent had not had their blood pressure taken.)

A.f. By 1990, no geopolitical area of the United States should be without an effective public program to identify persons with high blood pressure and to follow up on their treatment. (Baseline data unavailable.)

A.g. By 1985, at least 50 percent of processed food sold in grocery stores should be labeled to inform the consumer of sodium and caloric content, employing understandable, standardized, quantitative terms. (In 1979, labeling for sodium was rare; the extent of calorie labeling was about 50 percent in the marketplace.)

Improved Surveillance and Evaluation Systems

A.h. By 1985, a system should be developed to determine the incidence of high blood pressure, coronary heart disease, congestive heart failure, and hemorrhagic and occlusive strokes. After demonstrated feasibility, by 1990, ongoing sets of these data should be developed.

A.i. By 1985, a methodology should be developed to assess categories of high blood pressure control, and a national baseline study of this status should be completed. Five categories are suggested: (1) Unaware; (2) aware, not under care; (3) aware, under care, not controlled; (4) aware, under care, controlled; and (5) aware, monitored without therapy.

Percent who report the following
as definitely or probably
risk factors for heart disease

1985	1990	1990 objective
91	89	50
90	91	50
86	90	50
61	61	50
_	94	_
_	89	_
•••	87	-
	91 90 86	91 89 90 91 86 90 61 61 - 94 - 89

SOURCE: Data from National Center for Health Statistics, National Health Interview Survey.

The 1990 National Health Interview Survey estimated that about 97 percent of adults could state whether their blood pressure was normal, high, or low based on the most recent visit to a medical professional. Among all adults, about 76 percent had their blood pressure taken by a physician within the past year, and about 89 percent had their blood pressure measured within the past 24 months. Of those whose blood pressure was taken within the past 24 months, 76 percent (or approximately 74 percent of the total population) were given the numbers measuring systolic and diastolic pressure.

As of 1985, all State health departments had coordinated hypertension control programs.

Based on sales dollars, it is estimated that in 1983, 30 percent of processed food sold in grocery stores had sodium labeling. This increased to 60 percent in 1986 and 65 percent in 1988, according to the Food and Drug Administration's Food Label and Package Survey.

Data from the National Health and Nutrition Examination Survey Epidemiologic Followup Study are being used to estimate the incidence of hypertension, heart disease, stroke, and associated health effects.

The methodology is being developed and data are being collected in the National Health and Nutrition Examination Survey (1988–93), using the five suggested categories.

Family Planning

Reduced Risk Factors

B.a. By 1990, there should be virtually no unintended births to girls 14 years of age and under. Fulfilling this objective would probably reduce births to this age group to near zero. (In 1978, there were 10,772 births in this age group.)

Year	Births
1978	10,772
1979	10,699
1980	10,169
1981	9,632
1982	9,773
1983	9,752
1984	9,965
1985	10,220
1986	10,176
1987	10,311
1988	10,588
1989	11,486
1990 objective	0

SOURCE: Data from National Center for Health Statistics, Division of Vital Statistics.

B.b. By 1990, the birth rate¹ for girls 15 years of age should be reduced to 10 per 1,000. (In 1978, there were 14.0 births per 1,000 for this age group.)

¹The birth rate is the number of children born alive to women in an age group per 1,000 women in the age group.

Year	Birth rate
1978	14.0
1979	14.0
1980	14.2
1981	14.1
1982	14.0
1983	14.0
1984	13.4
1985	13.6
1986	13.8
1987	14.7
1988	15.6
1989	16.7
1990 objective	10.0

SOURCE: Data from National Center for Health Statistics, Division of Vital Statistics.

B.c. By 1990, the birth rate² for girls 16 years of age should be reduced to 25 per 1,000. (In 1978, there were 31.0 births per 1,000 for this age group.)

²The birth rate is the number of children born alive to women in an age group per 1,000 women in the age group.

Year	Birth rate
1978	31.0
1979	30.9
1980	30.9
1981	30.4
1982	31.1
1983	30.6
1984	30.1
1985	29.7
1986	29.5
1987	30.1
1988	31.9
1989	35.0
1990 objective	25.0

SOURCE: Data from National Center for Health Statistics, Division of Vital Statistics.

B.d. By 1990, the birth rate³ for girls 17 years of age should be reduced to 45 per 1,000. (In 1978, there were 51.0 births per 1,000 for this age group.)

³The birth rate is the number of children born alive to women in an age group expressed as a rate per 1,000 women in the age group.

B.e. By 1990, reductions in unintended births among single American women (15–44 years of age) should reduce the birth rate⁴ in this group to 18 per 1,000. (In 1978, there were 25.7 births per 1,000 unmarried women⁵ 15–44 years of age.)

⁴The birth rate for unmarried women is the number of children born alive to unmarried women, regardless of age of mother, per 1,000 unmarried women aged 15–44 years.

⁵Women unmarried at the birth of the child include single, widowed, and divorced women.

B.f. By 1990, the availability of family-planning information and methods (education, counseling, and medical services) to all women and men should have sufficiently increased to reduce by 50 percent the disparity between Americans of different economic levels in their ability to avoid unplanned births. (In 1976, 52.5 percent of births that occurred during the previous 5 years reported by ever-married women with family incomes below the poverty level were unintended compared with 29.6 percent for women with family incomes of 150 percent of poverty level or higher.)

Increased Public and Professional Awareness

B.g. By 1990, at least 75 percent of men and women over 14 years of age should be able to describe accurately the various contraceptive methods, including the relative safety and effectiveness of one method versus the others. (Baseline data unavailable.)

Year	Birth rate		
1978	51.0		
1979	51.4		
1980	51.8		
1981	49.8		
1982	50.2		
1983	50.6		
1984	49.8		
1985	50.8		
1986	49.4		
1987	49.6		
1988	51.4		
1989	56.4		
1990 objective	45.0		

SOURCE: Data from National Center for Health Statistics, Division of Vital Statistics.

Year	Birth rate		
1978	25.7		
1979	27.2		
1980 ^a	28.4		
1980	29.4		
1981	29.6		
1982	30.0		
1983	30.4		
1984	31.0		
1985	32.8		
1986	34.3		
1987	36.1		
1988	38.6		
1989	41.8		
1990 objective	18.0		

^aThe method of deriving data by marital status of the mother was changed in 1980. The rate of 28.4 represents the rate that would be obtained using the same methodology as 1978 and 1979.

SOURCE: Data from National Center for Health Statistics, Division of Vital Statistics.

	Percent of unintended births to ever-married women			
Poverty status	1976	1982	1988	1990 obj.
Below poverty level 100–149 percent of	52.5	43.4	55.0	41.1
poverty	41.4	46.1	46.4	35.5
150 percent of poverty or more	29.6	26.5	29.6	29.6

SOURCE: Data from National Center for Health Statistics, National Survey of Family Growth.

Race and marital status	Percent of women 15–44 years of age who identified the oral contraceptive pill as the most effective contraceptive method, 1988
Total	78.6
Race White Black Marital status Never married Currently married Formerly married	81.3 69.5 74.3 82.7 75.0

SOURCE: Data from National Center for Health Statistics, 1988 National Survey of Family Growth.

Improved Services and Protection

B.h. By 1985, sales of oral contraceptives containing more than 50 micrograms of estrogen should have been reduced to 15 percent of total sales. (In 1978, 23.9 percent of tablets dispensed contained this level.)

Year	Percent of tablets dispensed	Percent of prescriptions filled
1978	23.9	
1979	20.6	
1980	17.1	
1981	13.6	
1982	10.6	
1983		8.8
1984		7.1
1985		5.5
1986		3.8
1987		2.7
1990 objective		15.0

SOURCE: Data from Food and Drug Administration. Based on data from the National Prescription Audit, IMS America, Ambler,

B.i. By 1985, 100 percent of federally funded family-planning programs should have an established routine for providing an initial infertility assessment, either directly or through referral. (Baseline data unavailable.)

Federally funded programs authorized by Title X of the Public Health Service Act are required to make basic infertility services available to clients desiring such services. (Office of Assistant Secretary for Health, Office of Population Affairs.)

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Pregnancy and Infant Health

Improved Health Status

C.a. By 1990, the infant mortality rate¹ should be reduced to no more than 9 deaths per 1,000 live births. (In 1978, the infant mortality rate was 13.8 per 1,000 live births.)

¹The infant mortality rate is the number of deaths of infants under 1 year of age expressed as a rate per 1,000 live births.

C.b. By 1990, no county and no racial or ethnic group of the population (for example, black people, American Indians, people of Hispanic origin) should have an infant mortality rate in excess of 12 deaths per 1,000 live births. (In 1978, the infant mortality rate for white people was 12.0 per 1,000 live births; for black people, 23.1 per 1,000 live births; for American Indians, 13.7 per 1,000 live births;² and the rate for people of Hispanic origin was not available separately.)

²The American Indian infant mortality rate of 13.7 per 1,000 live births in 1978 is too low due to inconsistencies between birth and death certificates in classifying race and origin.

Year	Infant mortality rate
1978	13.8
1979	13.1
1980	12.6
1981	11.9
1982	11.5
1983	11.2
1984	10.8
1985	10.6
1986	10.4
1987	10.1
1988	10.0
1989	9.8
1990 ^a	9.1
1990 objective	9.0

aprovisional data.

SOURCE: Data from National Center for Health Statistics, Division of Vital Statistics.

		Infant mortality rate				
Year	White ^a	Black ^a	American Indian ^b	Hispanic ^{b,c}		
1978	12.0	23.1				
1979	11.4	21.8				
1980	11.0	21.4				
1981	10.5	20.0				
1982	10.1	19.6				
1983	9.7	19.2	15.2	9.5		
1984	9.4	18.4	13.4	9.3		
1985	9.3	18.2	13.1	8.8		
1986	8.9	18.0	13.9	8.4		
1987	8.6	17.9				
1988	8.5	17.6				
1989	8.2	17.7				
1990 obj.	12.0	12.0	12.0	12.0		

^aRates for white and black infant deaths are by race of child. Detailed tables 18 and 19 show data by race of mother (see Appendix II). Detailed table 19 shows rates according to race and Hispanic origin of mother based on the national linked files of births and infant deaths.

^bData for American Indians and Hispanics are from the national linked files of births and infant deaths and are tabulated by race and Hispanic origin of mother.

^cData for people of Hispanic origin are available only for States with an Hispanic origin item on their birth certificates. In 1983 and 1984, there were 15 reporting States and the District of Columbia; in 1988, there were 23 reporting States and the District of Columbia, and in 1989, 43 reporting States and the District of Columbia.

SOURCE: Data from National Center for Health Statistics, Division of Vital Statistics.

C.c. By 1990, the neonatal mortality rate³ should be reduced to no more than 6.5 deaths per 1,000 live births. (In 1978, the neonatal mortality rate was 9.5 per 1,000 live births.)

³The neonatal mortality rate is the number of deaths of infants under 28 days of age expressed as a rate per 1,000 live births.

C.d. By 1990, the perinatal mortality rate⁴ should be reduced to no more than 5.5 per 1,000. (In 1977, the perinatal mortality rate was 15.4 per 1,000.)

⁴The perinatal mortality rate is the number of fetal deaths at 28 weeks' gestation or more (late fetal deaths) plus the number of infant deaths at under 7 days old expressed as a rate per 1,000 live births plus late fetal deaths.

C.e. By 1990, the maternal mortality rate⁵ should not exceed 5 per 100,000 live births for any county or for any racial or ethnic group (for example, black people, American Indians, people of Hispanic origin). (In 1978, the overall rate was 9.6, the rate for white people was 6.4, the rate for black people was 25.0, the rate for American Indians was 12.1,⁶ and the rate for people of Hispanic origin was not available separately.)

⁵The maternal mortality rate is the number of deaths to women from complications of pregnancy, childbirth, and the puerperium expressed as a rate per 100,000 live births.

⁶This rate and other previously published rates are not considered to be accurate due to inconsistencies between birth and death certificates in classifying race and origin. Additionally, rates were based on very small frequencies.

Year	Neonatal mortality rate
1978	9.5
1979	8.9
1980	8.5
1981	8.0
1982	7.7
1983	7.3
1984	7.0
1985	7.0
1986	6.7
1987	6.5
1988	6.3
1989	6.2
1990 ^a	5.7
1990 objective	6.5

aProvisional data.

SOURCE: Data from National Center for Health Statistics, Division of Vital Statistics.

Year	Perinatal mortality rate
1977	15.4
1978	14.6
1979	13.8
1980	13.2
1981	12.6
1982	12.3
1983	11.5
1984	11.0
1985	10.7
1986	10.3
1987	10.0
1988	9.7
1989	9.6
1990 objective	5.5

SOURCE: Data from National Center for Health Statistics, Division of Vital Statistics.

	Maternal mortality rate			
Year	Total	White	Black	Hispanic
1978	9.6	6.4	25.0	
1979	9.6	6.4	25.1	
1980	9.2	6.7	21.5	
1981	8.5	6.3	20.4	
1982	7.9	5.8	18.2	
1983	8.0	5.9	18.3	~ ~ ~
1984	7.8	5.4	19.7	
1985	7.8	5.2	20.4	8.8
1986	7.2	4.9	18.8	8.9
1987	6.6	5.1	14.2	8.0
1988	8.4	5.9	19.5	8.7
1989	7.9	5.6	18.4	9.2
1990 ^b	7.9			
1990 obj.	5.0	5.0	5.0	5.0

^aData for people of Hispanic origin available only for States with an Hispanic origin item on their birth and death certificates. In 1985–1987, there were 18 reporting States and the District of Columbia; in 1988, there were 23 reporting States and the District of Columbia, and in 1989, 43 reporting States and the District of Columbia.

bProvisional data.

SOURCE: Data from National Center for Health Statistics, Division of Vital Statistics.

C.f. By 1990, the incidence of the two major forms of neural tube defects, anencephaly and spina bifida without anencephaly, should be reduced to 0.60 per 1,000 live births. (In 1979, the rate was 0.90 per 1,000.) (Baseline and objective revised from those originally published.)

	Incidence rate of major neural tube defects		
Year	Total	Anencephaly	Spina bifida without anencephaly
1979	0.90		
1980	0.85	0.33	0.52
1981	0.86	0.35	0.51
1982	0.81	0.33	0.48
1983	0.77	0.30	0.47
1984	0.76	0.26	0.50
1985	0.72	0.27	0.45
1986	0.71	0.26	0.45
1987	0.63	0.20	0.43
1988	0.68	0.31	0.37
1989	0.57	0.17	0.40
1990	0.53	0.11	0.42
1990 objective	0.60		

SOURCE: Data from National Center for Environmental Health and Injury Control, Division of Birth Defects and Developmental Disabilities.

Year	Rate
1980	1.8
1981	1.4
1982	1.5
1983	1.6
1984	1.8
1985	1.6
1986	1.4
1987	1.4
1988	1.4
1989	1.3
1990	1.1
1990 objective	1.3

SOURCE: Data from National Center for Environmental Health and Injury Control, Division of Birth Defects and Developmental Disabilities.

	Incidence rate of fetal
Year	alcohol syndrome ^a
1980	0.12
1981	0.12
1982	0.12
1983	0.17
1984	0.17
1985	0.19
1986	0.23
1987	0.22
1988	0.30
1989	0.32
1990	0.40
1990 objective	0.38

^aRates are per 1,000 live births and reflect over time both improved diagnostic and assessment techniques and increased familiarity with the ICD code.

SOURCE: Data from National Center for Environmental Health and Injury Control, Division of Birth Defects and Developmental Disabilities.

C.g. By 1990, Rhesus hemolytic disease of the newborn should be reduced to below a rate of 1.3 per 1,000 live births. (In 1977, the rate was 1.8 per 1,000.)

C.h. By 1990, the incidence of infants born with fetal alcohol syndrome should be reduced by 25 percent. (In 1977, the rate was 1 per 2,000 births, or approximately 1,650 cases. 8)

⁷Same objective in Alcohol and Drug Misuse. ⁸Baseline data are estimated; the ICD code for fetal alcohol syndrome was introduced in 1979.

Reduced Risk Factors

C.i. By 1990, low-birth-weight babies (weighing less than 2,500 grams) should constitute no more than 5 percent of all live births. (In 1978, the proportion was 7.1 percent of all births.)

Year	Percent low birth weight	
1978 ^a	7.1	
1979	6.9	
1980	6.8	
1981	6.8	
1982	6.8	
1983	6.8	
1984	6.7	
1985	6.8	
1986	6.8	
1987	6.9	
1988	6.9	
1989	7.0	
1990 objective	5.0	

^aIncludes babies weighing 2,500 grams.

SOURCE: Data from National Center for Health Statistics, Division of Vital Statistics.

C.j. By 1990, no county and no racial or ethnic group of the population (for example, black people, American Indians, people of Hispanic origin) should have a rate of low-birth-weight infants (weighing less than 2,500 grams) that exceeds 9 percent of all live births. (In 1978, the rate for white people was 5.9 percent; for black people, 12.9 percent; for American Indians, 6.7 percent; and for people of Hispanic origin, 6.7 percent.⁸)

⁸Data for people of Hispanic origin available only for States with an Hispanic origin item on their birth certificates. In 1978, there were 17 States; in 1979, 19 States; in 1980, 22 States; in 1982, 23 States; in 1983–87, 23 States and the District of Columbia; in 1988, 30 States and the District of Columbia; and in 1989, 47 States and the District of Columbia.

C.k. By 1990, the majority of infants should leave hospitals in car safety carriers. (Baseline data unavailable.)

Year	Percent low birth weight			
	White	Black	American Indian	Hispanic
1978 ^a	5.9	12.9	6.7	6.7
1979	5.8	12.6	6.4	6.1
1980	5.7	12.5	6.5	6.1
1981	5.7	12.5	6.3	6.1
1982	5.6	12.4	6.2	6.2
1983	5.7	12.6	6.4	6.3
1984	5.6	12.4	6.2	6.2
1985	5.6	12.4	5.9	6.2
1986	5.6	12.5	6.2	6.1
1987	5.7	12.7	6.2	6.2
1988	5.6	13.0	6.1	6.2
1989	5.7	13.2	6.4	6.2
1990 obj.	9.0	9.0	9.0	9.0

^aIncludes babies weighing 2,500 grams.

SOURCE: Data from National Center for Health Statistics, Division of Vital Statistics.

In 1990, 91 percent of children under 5 years of age had been brought home from the hospital in car safety seats after birth. This figure was 61 percent in 1985. (National Center for Health Statistics, National Health Interview Survey.)

Increased Public and Professional Awareness

C.I. By 1990, 85 percent of women of childbearing age should be able to choose foods wisely (state special nutritional needs of pregnancy) and understand the hazards of smoking, alcohol, pharmaceutical products, and other drugs during pregnancy and lactation. (Baseline data unavailable.)

Percent of women 18–44 years of age who state that heavy drinking during pregnancy is a risk factor		
1985	1990	1990 objective
54	64	85
52	60	85
52	61	85
51	57	85
	of age drinki 1985 54 52 52	of age who state drinking during p is a risk fa 1985 1990 54 64 52 60 52 61

Percent of women 18–44 years of age who state that smoking during pregnancy is a risk factor

Condition	1985	1990	1990 objective
Low birth weight	52	60	85
Stillbirth	30	37	85
Premature birth	38	48	85
Miscarriage	36	43	85

In 1985, 62 percent of women 18–44 years of age had ever heard of fetal alcohol syndrome; in 1990, this increased to 71 percent. (National Center for Health Statistics, National Health Interview Survey.)

Improved Services and Protection

C.m. By 1990, virtually all women and infants should be served at levels appropriate to their need by a regionalized system of primary, secondary, and tertiary care for prenatal, maternal, and perinatal health services.

C.n. By 1990, the proportion of women in any county or racial or ethnic group (for example, white people, black people, American Indians, people of Hispanic origin) who obtain no prenatal care during the first trimester of pregnancy should not exceed 10 percent. (In 1978, 21.8 percent of white mothers, 39.8 percent of black mothers, 43.7 percent of American Indian mothers, and 43.0 percent of Hispanic mothers⁹ received no prenatal care during the first trimester.)

⁹Data for people of Hispanic origin available only for States with an Hispanic-origin item on their birth certificates. In 1978, there were 17 States; in 1979, 19 States; in 1980, 22 States; in 1982, 23 States; in 1983–87, 23 States and the District of Columbia; in 1988, 30 States and the District of Columbia; and in 1989, 47 States and the District of Columbia.

C.o. By 1990, virtually all pregnant women at high risk of having a fetus with a condition diagnosable *in utero* should have access to counseling and information on amniocentesis and prenatal diagnosis, as well as therapy as indicated. (In 1978, about 10 percent of women 35 years of age and over received amniocentesis. Baseline data are unavailable for other high-risk groups.)

Percent with no prenatal care during 1st trimester American Year White Black Hispanic 1978 21.8 39.8 43.7 43.0 1979 20.9 38.4 41.3 39.5 1980 20.7 37.3 41.3 39.8 1981 20.6 37.6 40.7 39.4 1982 20.7 38.5 39.5 39.0 1983 20.6 38.5 40.3 39.0 20.4 37.8 1984 40.0 38.5 1985 20.6 38.2 38.8 1986 38.4 39.3 39.7 1987 20.6 38.9 39.8 39.0 1988 20.6 38.8 39.4 38.8 1989 21.0 39.6 42.1 40.5 1990 obj. 10.0 10.0 10.0 10.0

SOURCE: Data from National Center for Health Statistics, Division of Vital Statistics.

	Percent of women 35 years of age and over who had amniocentesis		
Year	All races	White	Black
1980	29.0	30.0	16.7

SOURCE: National Center for Health Statistics, Division of Vital Statistics.

C.p. By 1990, virtually all women who give birth should have appropriately attended safe delivery provided in ways acceptable to them and their families. (In 1977, less than 0.2 percent of all births were out of hospital and unattended by a physician or midwife.)

C.q. By 1990, virtually all newborns should be provided
neonatal screening for metabolic disorders for which effective
and efficient tests and treatments are available (for example,
phenylketonuria (PKU) and congenital hypothyroidism). (In
1978, about 75 percent of newborns were screened for PKU;
about 3 percent were screened for hypothyroidism in the
early 1970's.)

C.r. By 1990, virtually all infants should be able to participate in primary health care that includes well-child care; growth development assessment; immunization; screening, diagnosis, and treatment for conditions requiring special services; appropriate counseling regarding nutrition, automobile safety, and prevention of other accidents such as poisonings. (Baseline data unavailable.)

Improved Surveillance and Evaluation Systems

C.s. By 1990, a system should be in place for comprehensive and longitudinal assessment of the impact of a range of prenatal factors (for example, maternal exposure to radiation, ultrasound, dramatic temperature change, toxic agents, smoking, use of alcohol or drugs, exercise, or stress) on infant and child physical and psychological development. (Baseline data unavailable.)

Year	Percent of births out-of- hospital and unattended
1977	0.2
1978	0.3
1979	0.3
1980	0.3
1981	0.3
1982	0.3
1983	0.3
1984	0.3
1985	0.3
1986	0.3
1987	0.3
1988	0.3
1989	0.3
1990 objective	0.0

SOURCE: Data from National Center for Health Statistics, Division of Vital Statistics.

Genetic or metabolic disorder	Jurisdictions providing screening, 1990
41507467	Screening, 1990
Phenylketonuria	
(PKÚ)	52
Hypothyroidism	52
Hemoglobinopathy	42
Galatosemia	38
Maple syrup urine	
disease	22
Homocystinuria	21
Biotinidase	
deficiency	14
Adrenal	
hyperplasia	8
Tyrosinemia	5
Cystic fibrosis	3
Toxoplasmosis	2

SOURCE: Data from Council of Regional Networks for Genetic Services.

The National Maternal and Infant Health Survey (NMIHS) addresses maternal smoking, drinking, and drug use, as well as maternal exposure to ultrasound. In combination with the Longitudinal Followup, which collects information on child development through the first 3 years of life, some assessment of the impact of prenatal factors on child development can be made. A 1996 NMIHS is being planned with subsequent followups at 2-to-3-year intervals.

Immunization

Improved Health Status

D.a. By 1990, reported measles incidence should be reduced to less than 500 cases per year—all imported or within two generations of importation. (In 1979, 13,597 measles cases were reported.)

Year	Cases of measles
1979	13,597
1980	13,506
1981	3,124
1982	1,714
1983	1,497
1984	2,587
1985	2,822
1986	6,282
1987	3,655
1988	3,396
1989	18,193
1990	27,786
1990 objective	500

SOURCE: Data from Centers for Disease Control, National Center for Prevention Services.

D.b. By 1990, reported mumps incidence should be reduced to less than 1,000 cases per year. (In 1979, 14,225 mumps cases were reported.)

Year	Cases of mumps
1979	14,225
1980	8,576
1981	4,941
1982	5,270
1983	3,355
1984	3,021
1985	2,982
1986	7,790
1987	12,848
1988	4,866
1989	7,712
1990	5,292
1990 objective	1,000

SOURCE: Data from Centers for Disease Control, National Center for Prevention Services.

D.c. By 1990, reported rubella incidence should be reduced to less than 1,000 cases per year. (In 1979, 11,795 rubella cases were reported.)

Year	Cases of rubella
1979	11,795
1980	3,904
1981	2,077
1982	2,325
1983	970
1984	752
1985	630
1986	551
1987	306
1988	225
1989	396
1990	1,125
1990 objective	1,000

SOURCE: Data from Centers for Disease Control, National Center for Prevention Services. **D.d.** By 1990, reported congenital rubella syndrome incidence should be reduced to less than 10 cases per year. (In 1979, 62 new cases of congenital rubella syndrome were reported.)

Year	New cases of congenital rubella syndrome
1979	62
1980	50
1981	19
1982	7
1983	22
1984	5
1985	0
1986	14
1987	5
1988	6
1989	3
1990	11
1990 objective	10

SOURCE: Data from Centers for Disease Control, National Center for Prevention Services.

Year	Cases of diphtheria
1979	¹ 59
1980	3
1981	5
1982	2
1983	5
1984	1
1985	3
1986	0
1987	3
1988	2
1989	3
1990	4
1990 objective	50

SOURCE: Data from Centers for Disease Control, National Center for Prevention Services.

Year	Cases of pertussis
1979	1,623
1980	1,730
1981	1,248
1982	1,895
1983	2,463
1984	2,276
1985	3,589
1986	4,195
1987	2,823
1988	3,450
1989	4,157
1990	4,570
1990 objective	1,000

SOURCE: Data from Centers for Disease Control, National Center for Prevention Services.

Year	Cases of tetanus
1979	81
1980	95
1981	72
1982	88
1983	91
1984	74
1985	83
1986	64
1987	48
1988	53
1989	53
1990	64
1990 objective	50

SOURCE: Data from Centers for Disease Control, National Center for Prevention Services.

D.e. By 1990, reported diphtheria incidence should be reduced to less than 50 cases per year. (In 1979, 59 diphtheria cases were reported.)¹

¹The Conference of State and Territorial Epidemiologists and the Centers for Disease Control changed the diphtheria disease reporting definition in 1979, and since that time only noncutaneous diphtheria has been reported.

D.f. By 1990, reported pertussis incidence should be reduced to less than 1,000 cases per year. (In 1979, 1,623 pertussis cases were reported.)

D.g. By 1990, reported tetanus incidence should be reduced to less than 50 cases per year. (In 1979, 81 tetanus cases were reported.)

D.h. By 1990, reported polio incidence should be less than 10 cases per year. (In 1979, 26 paralytic polio cases were reported.)

Year	Cases of paralytic polio
1979	26
1980	8
1981	6
1982	8
1983	15
1984	8
1985	7
1986	10
1987	6
1988	9
1989	5
1990	4
1990 objective	10

SOURCE: Data from Centers for Disease Control, National Center for Prevention Services.

Increased Public and Professional Awareness

D.i. By 1990, all mothers of newborns should receive instruction prior to leaving the hospital or after home births on immunization schedules for their babies. (Of 52 reporting areas in fiscal year 1981, 14 had projects with education programs in which mothers receive such instruction. These projects cover mothers receiving services from public programs.)

Fiscal year	Federally funded projects
1981	14
1982	35
1983	43
1984	44
1985	46
1986	51
1987	51
1988	51
1989	51
1990	51
1990 objective	52

SOURCE: Data from Centers for Disease Control, National Center for Prevention Services.

Improved Services and Protection

D.j. By 1990, at least 90 percent of all children should have completed their basic immunization series by age 2—measles, mumps, rubella, polio, diphtheria, tetanus, and pertussis. (In 1979 over 50 percent of children 2 years of age had received vaccinations for each of the diseases.²)

Data not available for 1986–1990. Data for 1991 are currently being collected by the National Center for Health Statistics, Health Interview Survey. These data will be available in Autumn 1992.

²Data for each disease are collected independently.

Year		Percent vaccinated ^a				
	Measles	Rubella	Mumps	Polio ^b	<i>DTP</i> b	
1979	80.8	80.0	70.1	76.3	82.1	
1980	83.0	83.2	80.2	80.7	87.0	
1981	81.5	83.9	79 <i>.</i> 1	80.9	87.6	
1982	84.3	81.1	79.0	78.6	88.4	
1983	83.9	81.9	78.1	78.6	88.4	
1984	81.7	76.7	78.4	74.2	85.8	
1985	81.7	77.3	78.9	76.7	85.8	
1990 obj.	90.0	90.0	90.0	90.0	90.0	

^aBased on a subsample of respondents in the U.S. Immunization Survey of 1979–1985. The subsample includes only respondents stating that they used immunization records as a reference. The subsample size is approximately one-third of the total sample size.

^b3 or more vaccinations.

SOURCE: Data from Centers for Disease Control, National Center for Prevention Services.

D.k. By 1990, at least 95 percent of children attending licensed day care facilities and kindergarten through 12th grade should be fully immunized. (Based on data collected during the 1978–79 school year, the immunization level for measles, rubella, polio, and DTP was about 90 percent for first school entrants and lower overall.³)

³Data for each disease are collected independently; however, because of current school laws the percents probably reflect the general level of fully immunized students at the kindergarten and first grade levels.

D.I. By 1990, at least 60 percent of people in high-risk populations⁴ as defined by the Immunization Practices Advisory Committee of the Public Health Service should be receiving annual immunization against influenza. (In 1979, about 19 percent of people in high-risk populations were immunized.)

⁴The high-risk population includes older persons, particularly those 65 years of age and over, and others, including children, with certain predisposing chronic conditions.

D.m. By 1990, at least 60 percent of high-risk populations⁵ as defined by the Immunization Practices Advisory Committee of the Public Health Service should have received vaccination against pneumococcal pneumonia. (Baseline data unavailable.)

⁵The high-risk population includes children under 2 years of age with splenic dysfunction or anatomic asplenia and adults and children over 2 years of age with certain predisposing chronic conditions.

D.n. By 1990, at least 50 percent of people in populations designated as targets by the Immunization Practices Advisory Committee of the Public Health Service should be immunized within 5 years of licensure of new vaccines for routine clinical use.^{6,7}

⁶Vaccines may be developed for people at risk of getting hepatitis A; otitis media (*S. pneumoniae* and *H. influenzae*); selected respiratory and enteric viruses; meningitis (group B *N. meningitides, S. pneumoniae, H. influenzae*). ⁷Same objective in Surveillance and Control of Infectious Diseases.

D.o. By 1985, the Nation should have a plan in place to mount mass immunization programs in the face of possible epidemics of influenza or other epidemic diseases for which vaccines may exist.

School year	Percent of new entrants vaccinated a				
	Measles	Rubella	Mumps	Polio	DTP
1978–79	93	91	83	92	92
1979-80	94	93	86	93	94
1980-81	96	96	92	95	96
1981-82	97	97	95	96	96
1982-83	97	97	96	97	96
1983-84	98	98	97	97	97
1984-85	98	98	97	97	97
1985-86	97	97	96	96	96
1986–87	97	97	97	97	97
1987-88	98	98	98	97	97
1988-89	98	98	98	97	97
1989-90	98	98	98	97	97
1990–91	98	98	98	97	97
1990–91 obj.	95	95	95	95	95

^aKindergarten or first grade.

SOURCE: Data from Centers for Disease Control, National Center for Prevention Services.

Year	Percent of high-risk population immunized	
1979	19	
1980	17	
1981	17	
1982	18	
1983	17	
1984	17	
1985	18	
1989 ^a	30	
1990 objective	60	

^aData are for persons 65 years of age and over; there are no current estimates for high-risk persons under 65 years of age.

SOURCE: Centers for Disease Control, National Center for Prevention Services.

An estimated 10.3 percent of the entire high-risk population had ever received pneumococcal polysaccharide vaccine by 1985. In addition, an estimated 14.1 percent of persons 65 years of age and older had ever received pneumococcal polysaccharide vaccine by 1989. (Centers for Disease Control, National Center for Prevention Services.)

Data indicate that coverage for high-risk groups varies from 2–50 percent. (Centers for Disease Control.)

A plan for controlling influenza pandemics has been developed as has a Mass Immunization Guide. (Centers for Disease Control.) **D.p.** By 1990, no comprehensive health insurance policies should exclude immunizations. (Baseline data unavailable.)

Financial coverage for immunizations were included in 45 percent of employment-based insurance plans with conventional insurance; 62 percent with Preferred Provider Organization plans; and 98 percent with Health Maintenance Organization plans in 1989. Medicaid covered basic immunizations for eligible children, and Medicare covered pneumococcal immunizations for eligible older adults in 1990. (Centers for Disease Control.)

Improved Surveillance and Evaluation Systems

D.q. By 1990, at least 95 percent of all children 18 years of age and under should have up-to-date official immunization records in a uniform format using common guidelines for completion of immunization. (Baseline data unavailable.)

D.r. By 1990, surveillance systems should be sufficiently improved so that (1) at least 90 percent of those hospitalized and 50 percent of those not hospitalized with vaccine-preventable diseases of childhood are reported, and (2) uniform case definitions are used nationwide. (Baseline data unavailable.)

Standardized immunization records are now available in all States. The definition of "complete series" may vary due to varying school immunization requirements. (Centers for Disease Control.)

(1) The target for reporting vaccine preventable childhood diseases was not met. Although probably 100 percent of infrequent severe diseases, including tetanus, diptheria, and acute paralytic illness suspected to be poliomyelitis, are reported, the more common milder diseases, including pertussis, rubella, and mumps, are probably reported less than half the time. A 1985–88 study found that 32 percent of pertussis hospitalizations were reported. Unpublished data from New York City indicate that about 46 percent of all patients seen in emergency rooms and outpatients clinics for measles were reported to the Centers for Disease Control. (2) Uniform case definitions exist for measles, mumps, rubella, congenital rubella syndrome, poliomyelitis, diphtheria, tetanus, pertussis, and Haemophilus influenzae type b. (Centers for Disease Control, National Center for Preventive Services.)

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Sexually Transmitted Diseases

Improved Health Status

E.a. By 1990, reported gonorrhea incidence should be reduced to a rate of 280 cases per 100,000 population. (In 1979, the reported incidence was 459 cases per 100,000 population.)

E.b. By 1990, reported incidence of gonococcal pelvic
inflammatory disease should be reduced to a rate of 60 cases
per 100,000 females. (In 1978, the estimated incidence was
133.8 cases per 100,000 females.)

Year	Reported incidence of gonorrhea
1978	459.7
1979	450.3
1980	445.1
1981	435.2
1982	417.9
1983	387.6
1984	374.8
1985	384.3
1986	370.1
1987	329.4
1988	300.3
1989	295.7
1990	276.6
1990 objective	280.0

SOURCE: Data from Centers for Disease Control, National Center for Prevention Services.

Year	Estimated incidence of pelvic inflammatory disease		
	Gonococcal	Total a	
1978	133.9		
1979	131.7		
1980	127.1		
1981	123.1		
1982	116.0		
1983	106.0		
1984	103.7	768.0	
1985	107.3	691.6	
1986	106.3	624.8	
1987	94.6	628.2	
1988	84.1	511.6	
1989	81.7	484.6	
1990 ^b	79.4	473.0	
1990 objective	60.0	560.0	

^aTotal pelvic inflammatory disease (PID) is also shown because gonococcal PID accounts for less than half of all PID. In some areas, *Chlamydia trachomatis* infection accounts for the majority of all symptomatic PID cases occurring each year. Additionally, current data indicate that the initial measure of gonococcal pelvic inflammatory disease was underestimated. In 1985 the original emphasis of this objective was broadened to include all diagnosed cases of PID, and a target of 560 total cases was set.

^bProvisional data.

SOURCE: Data from Centers for Disease Control, National Center for Prevention Services.

E.c. By 1990, reported incidence of primary and secondary syphilis should be reduced to a rate of 7 cases per 100,000 population per year, with a reduction in congenital syphilis to 1.5 cases per 100,000 live births. (In 1979, the reported incidence of primary and secondary syphilis was 11 cases per 100,000 population and of congenital syphilis, 3.5 cases per 100,000 live births.)

	Reported incidence of—		
Year	Primary and secondary syphilis	Congenital syphilis	
1979	11.2	3.5	
1980	12.1	3.0	
1981	13.7	4.4	
1982	14.6	4.3	
1983	14.1	4.3	
1984	12.2	6.7	
1985	11.5	7.0	
1986	11.5	9.5	
1987	14.8	11.6	
1988	16.5	16.8	
1989 ^a	18.5	43.4	
1990	20.1	68.6	
1990 objective	7.0	1.5	

^aChanges in the case definition during 1989 which were designed to more accurately reflect congenital syphilis prevalence account for the vast majority of the increase of congenital syphilis cases in 1989 and 1990. The new case definition identifies births to women with untreated syphilis. Investigations have shown that previous surveillance underestimated the number of cases by four- to fivefold. The increases noted reflect both the rising incidence of syphilis in reproductive-age women and a more sensitive case definition.

SOURCE: Data from Centers for Disease Control, National Center for Prevention Services.

An accurate system to measure this objective is not available. (Centers for Disease Control, National Center for Prevention Services.)

E.d. By 1990, the incidence of serious neonatal infection from sexually transmitted agents, especially herpes and chlamydia, should be reduced to a rate of 8.5 cases of neonatal disseminated herpes per 100,000 children under 1 year of age and a rate of 360 cases of chlamydial pneumonia per 100,000 children under 1 year of age. (In 1979, about 16.8 cases of neonatal disseminated herpes per 100,000 children under 1 year of age and about 720 cases of chlamydial pneumonia per 100,000 children under 1 year of age were estimated to have occurred.)

E.e. By 1990, the incidence of nongonococcal urethritis and chlamydial infections should be reduced to a rate of 770 cases per 100,000 population. (In 1979, the case rate was estimated to be 1,140 per 100,000 population.)

Results from the National Disease and Therapeutic Index indicate that there were approximately 350,000 visits to physician offices for nonspecific urethritis. Other national estimates are not available. (Centers for Disease Control, National Center for Prevention Services.)

Reduced Risk Factors

E.f. By 1990, the proportion of sexually active men and women protected by properly used condoms should increase to 25 percent of those at high risk of acquiring sexually transmitted diseases. (In 1979, the estimated proportion was less than 10 percent.)

Results from the National Survey of Family Growth showed that in 1988 the use of condoms among sexually active, unmarried women ages 15–44 years (by their partners) was 19 percent; among sexually active young women ages 15–19 (by their partners) it was 25 percent; and among sexually active young men ages 15–19 it was reported to be 57 percent.

Increased Public and Professional Awareness

E.g. By 1990, every junior and senior high school student in the United States should receive accurate, timely education about sexually transmitted diseases. (Currently, 70 percent of school systems provide some information about sexually transmitted diseases, but the quality and timing of the communication varies greatly.)

E.h. By 1985, at least 95 percent of health care providers seeing suspected cases of sexually transmitted diseases should be capable of diagnosing and treating all currently recognized sexually transmitted diseases, including genital herpes diagnosis by culture, therapy (if available), and patient education; hepatitis B diagnosis among homosexual men, prevention through a vaccine, and patient education; and nongonococcal urethritis diagnosis, therapy, and patient education. (Baseline data unavailable.)

Improved Services and Protection

E.i. By 1990, at least 50 percent of major industries and governmental agencies offering screening and health promotion programs at the worksite should be providing sexually transmitted disease services (education and appropriate testing) within those programs. (Baseline data unavailable.)

Improved Surveillance and Evaluation Systems

E.j. By 1985, data should be available in adequate detail (but in statistical aggregates to preserve confidentiality) to determine the occurrence of nongonococcal urethritis, genital herpes, and other sexually transmitted diseases in each local area and to recommend approaches for preventing sexually transmitted diseases and their complications.

E.k. By 1990, surveillance systems should be sufficiently improved so that at least 25 percent of sexually transmitted diseases diagnosed in medical facilities are reported and uniform definitions are used nationwide. (Baseline data unavailable.)

Due to the concern about AIDS and HIV, expanded sex education curricula have been developed, introduced, evaluated, and "mainstreamed" in many American communities. A recent survey of high school administrators found 95 percent offered at least one class on STD as part of their standard curricula. However, in a 1988 survey of teenagers, only 77 percent reported having received STD education by age 18. In addition, awareness by students of STD symptoms, signs, and approaches to prevention is relatively low, especially compared with their knowledge of AIDS and HIV. (Centers for Disease Control, National Center for Prevention Services.)

To effectively prevent the spread of sexually transmitted diseases, clinicians must be skilled in sexual history-taking, diagnositic procedures, and current treatment regimens. Although the proficiency of health care providers in STD management has improved in recent years, it is far short of the necessary quality and scope to provide adequate clinical services. A CDC survey found that nearly half of medical schools offered no clinical curricula on sexually transmitted diseases. Efforts to improve the training of clinicians during the 1980's include the development of STD curricula in medical schools and of instructional packages and the establishment of STD Prevention/Training Centers. (Centers for Disease Control, National Center for Prevention Services.)

In 1984, CDC began implementation of a surveillance system for collecting and monitoring reported cases of a variety of STD. In August 1989, a national STD conference was conducted to redefine and solidify surveillance systems for collecting and monitoring reported cases of a variety of STD by each State.

Centers for Disease Control data indicate that at least 25 percent of treated STD is being reported. In 1990 uniform surveillance case definitions for sexually transmitted diseases were published by CDC and the Council of State and Territorial Epidemiologists.

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Toxic Agent and Radiation Control

Improved Health Status

F.a. By 1990, 80 percent of communities should experience a prevalence rate of lead toxicity of less than 500 per 100,000 among children 1–5 years of age. (In 1976–80, the estimated prevalence of lead toxicity among children 6 months–5 years of age was 4,000 per 100,000 nationally.)

F.b. By 1990, significant progress should have been made toward preventing birth defects or miscarriages resulting from exposure to toxic substances through environmental interventions based on current information and expansion of the knowledge base related to hazardous substances and their effects on reproduction. (Baseline data unavailable.)

In 1989, 65.3 percent of the U.S. population lived in counties that had not exceeded any Environmental Protection Agency standard for air quality in the past year. (Environmental Protection Agency, Office of Air Quality.)

In 1988, 80 percent of the population was served by community water systems that met safe drinking water standards established by the Environmental Protection Agency. (Environmental Protection Agency, Office of Drinking Water.)

Reduced Risk Factors

F.c. By 1990, virtually all communities should experience no more than 1 day per year when air quality exceeds ambient air quality standards for sulfur dioxide, nitrous dioxide, carbon monoxide, lead, hydrocarbons, and particulate matter. (In 1979, the level was estimated at about 50 percent.)

F.d. By 1990, at least 95 percent of the population should be served by community water systems that meet Federal and State standards for safe drinking water. (In 1979, the level was 85–90 percent for the National Interim Primary Drinking Water Standards.)

F.e. By 1990, there should be virtually no preventable contamination of ground water, surface water, or the soil from industrial toxins associated with wastewater management systems established after 1980. (Baseline data unavailable.)

The 1976-80 data from the National Health And Nutrition Examination Survey II, showed 8.4 million children with blood lead levels greater than 15 micrograms per deciliter and 1.5 million children with levels greater than 25 micrograms per deciliter. The Agency for Toxic Substances and Disease Registry's report "The Nature and Extent of Lead Poisoning in Children" used these data, as well as data from lead screening programs, to project the 1984 prevalence of more than 3 million and 200,000, respectively. This 1988 report states that these are underestimates because they are for black and white children only and exclude sizable national population segments of Hispanics, Asian, and other ethnic origin children for which no reliable prevalences could be calculated.

F.f. By 1990, there should be no pesticides, herbicides, fungicides, or rodenticides available for sale that are known to be carcinogenic, teratogenic, or mutagenic in humans, unless determined to be vital to the national interest under certain conditions. (Baseline data unavailable.)

F.g. By 1990, inhalation of fumes from toxic materials during transport should be eliminated. (Baseline data unavailable.)

F.h. By 1990, the number of medically unnecessary diagnostic x-ray examinations should be reduced by some 50 million examinations annually. (In 1980, the number of diagnostic x-ray examinations performed in the United States was 260 million, of which 80 million were estimated to be medically unnecessary.)

Increased Public and Professional Awareness

F.i. By 1990, at least 75 percent of all city council members in urban communities should be able to report accurately whether the quality of their air and water has improved or worsened over the decade and to identify the principal substances of concern. (Baseline data unavailable.)

F.j. By 1990, at least half of all adults should be able to accurately report an accessible source of information on toxic substances to which they may be exposed, including information on interactions with other factors such as smoking and medications. (Baseline data unavailable.)

F.k. By 1990, at least half of all people 15 years of age and over should be able to identify the major categories of environmental threats to health and note some of the health consequences of those threats. (Baseline data unavailable.)

F.I. By 1990, at least 70 percent of all primary care physicians should be able to identify the principal health consequences of exposure to each of the major categories of environmental threats to health. (Baseline data unavailable.)

Improved Services and Protection

F.m. By 1990, at least 90 percent of all children 1–5 years of age identified with lead toxicity should have been brought under medical and environmental management. (Baseline data unavailable.)

F.n. By 1990, the Toxic Substances Control Act and the Resource Conservation and Recovery Act should be fully implemented to protect the U.S. population against hazards resulting from production, use, and disposal of toxic chemicals. (Baseline data unavailable.)

As mandated under the provisions of the Federal Insecticide, Fungicide, and Rodenticide Act of 1972, the Environmental Protection Agency considers both the risks and benefits of a new or existing product when evaluating whether it should be approved for use or continued use. Although risk and benefit assessments are continually being made, comprehensive data are not available to evaluate the final attainment status of this objective.

By 1990, 1,000 health assessments had been made among 1,082 National Priority List hazardous waste sites. The two acts stated in the objective as well as additional ones enacted during the 1980's have served to minimize public risk from exposure to toxic substances. (Agency for Toxic Substances and Disease Registry.)

F.o. By 1990, individuals purchasing a potentially toxic product sold commercially or used industrially should be protected by clear labeling as to content, direction for proper use and disposal, and factors that may make that individual especially susceptible (health status, age, sex, medications, genetic traits). (Baseline data unavailable.)

F.p. By 1990, every individual should have access to an acute care facility with the capability to provide or make appropriate referrals for screening, diagnosis, and treatment of suspected exposure to toxic agents. (Baseline data unavailable.)

F.q. By 1990, every individual residing in an area of a population density greater than 20 per square mile, or in an area of particularly high risk, should be protected by an early warning system designed to detect the most serious environmental hazards posing imminent threats to health. (Baseline data unavailable.)

F.r. By 1990, every populated area of the country should be able to be reached within 6 hours by an emergency response team in the event of exposure to an environmental hazard posing acute threats to health from a toxic agent, chemical, and/or radiation. (Baseline data unavailable.)

Improved Surveillance and Evaluation Systems

F.s. By 1990, a broad scale surveillance and monitoring system should have been planned to discern and measure known environmental hazards of a continuing nature as well as those resulting from isolated incidents. Such activities should be continuously carried out at both Federal and State levels.

F.t. By 1990, a central clearinghouse for observations of agent-disease relationships and host susceptibility factors should be fully operational, as well as a national environmental data registry to collect and catalog information on concentrations of hazardous agents in air, food, and water.

A 24-hour notification system is in place (telephone number 404/639-0615) and an emergency response team can be on site of an environmental hazard within 6–8 hours of notification within the continental United States. (Centers for Disease Control, National Center for Environmental Health and Injury Control.)

This objective has not been met. However, the Environmental Protection Agency has made considerable progress establishing systems to track certain hazardous substances, including polychlorinated byphenyls (PCB's) and pesticides. (Office of Disease Prevention and Health Promotion.)

This objective has not yet been reached; the issues involved in the attainment of this objective are not technical, however, but administrative, involving a number of disparate sources at the federal, State, and local levels. (National Library of Medicine, Office of Hazardous Substances Information.)

Occupational Safety and Health

Improved Health Status

G.a. By 1990, workplace accident deaths for firms or employers with 11 or more employees should be reduced to less than 3,750 per year. (In 1978, there were 4,590 work-related deaths for firms or employers with 11 or more employees.)

G.b. By 1990, the rate of work-related injuries should be reduced to 8.3 cases per 100 full-time workers. (In 1978, there were 9.2 cases per 100 workers.)

G.c. By 1990, lost workdays from injuries should be reduced to 55 per 100 workers annually. (In 1978, 62.1 days per 100 workers were lost.)

Year	Work-related deaths
1978	4,590
1979	4,950
1980	4,400
1981	4,370
1982	4,090
1983	3,100
1984	3,740
1985	3,750
1986	3,610
1987	3,400
1988	3,300
1989	3,600
1990 objective	3,750

SOURCE: Data from Bureau of Labor Statistics.

Year	Work-related injuries rate
1978	9.2
1979	9.2
1980	8.5
1981	8.1
1982	7.6
1983	7.5
1984	7.8
1985	7.7
1986	7.7
1987	8.0
1988	8.3
1989	8.2
1990 objective	8.3
1983 1984 1985 1986 1987 1988 1989	7.5 7.8 7.7 7.7 8.0 8.3 8.2

SOURCE: Data from Bureau of Labor Statistics.

Year	Lost workdays rate
1978	62.1
1979	66.2
1980	63.7
1981	60.4
1982	57.5
1983	57.2
1984	61.8
1985	63.3
1986	63.9
1987	67.3
1988	72.5
1989	74.2
1990 objective	55.0

SOURCE: Data from Bureau of Labor Statistics.

G.d. By 1990, the incidence of compensable occupational dermatitis should be reduced to about 60,000 cases. (In 1978, there were approximately 65,900 cases of occupation-related skin diseases or disorders.¹)

¹Data include all cases of occupation-related skin diseases or disorders, regardless of whether compensation was involved.

G.e. By 1990, among workers newly exposed after 1985, there should be virtually no new cases of four preventable
occupational diseases – asbestosis, byssinosis, silicosis, and
coal workers' pneumoconiosis. (In 1979, there were an
estimated 5,000 cases of asbestosis; in 1977, an estimated
84,000 cases of byssinosis were expected in active workers; in
1979, an estimated 60,000 cases of silicosis were expected
among active workers in mining, foundries, stone, clay and
glass products, and abrasive blasting; in 1974, there were an
estimated 19,400 cases of coal workers' pneumoconiosis.
(Baseline data on incidence unavailable.)

G.f. By 1990, the prevalence of occupational noise-induced hearing loss should be reduced to 415,000 cases. (In 1975, there were an estimated 462,000 cases of work-related hearing loss.)

G.g. By 1990, occupational heavy metal poisoning (lead, arsenic, zinc) should be virtually eliminated. (Baseline data unavailable.)

Reduced Risk Factors

G.h. By 1985, 50 percent of all firms with more than 500 employees should have an approved plan of hazard control for all new processes, new equipment, and new installations. (Baseline data unavailable.)

G.i. By 1990, all firms with more than 500 employees should have an approved plan of hazard control for all new processes, new equipment, and new installations. (Baseline data unavailable.)

Increased Public and Professional Awareness

G.j. By 1990, at least 25 percent of workers should be able, prior to employment, to state the nature of their occupational health and safety risks and their potential consequences, as well as be informed of changes in these risks while employed. (In 1979, an estimated 5 percent of workers were fully informed.)

Year	Cases of occupation- related skin disease or disorders
1978	65,900
1979	67,900
1980	56,200
1981	51,200
1982	41,900
1983	39,500
1984	42,500
1985	41,800
1986	41,900
1987	54,200
1988	58,000
1989	62,100
1990 objective	60,000

SOURCE: Data from Bureau of Labor Statistics

The Bureau of Labor Statistics Supplementary Data System reports 1,791 cases in 1988 for 14 States, based on Workers' Compensation First Reports.

In 1985, 40 percent of currently employed workers perceived exposure to risk of injuries, 35 percent perceived exposure to health-endangering work conditions, and 34 percent perceived exposure to health-endangering substances. (National Center for Health Statistics, National Health Interview Survey.)

- G.k. By 1985, workers should be routinely informed of lifestyle behaviors and health factors that interact with factors in the work environment to increase risks of occupational illness and injuries. (Baseline data unavailable.)
- G.I. By 1985, all workers should receive routine notification in a timely manner of all health examinations or personal exposure measurements taken on work environments directly related to them. (Baseline data unavailable.)
- G.m. By 1990, all managers of industrial firms should be fully informed about the importance of and methods for controlling human exposure to the important toxic agents in their work environments. (Baseline data unavailable.)
- G.n. By 1990, at least 70 percent of primary health care providers should routinely elicit occupational health exposures as part of patient history and should know how to interpret the information for patients in an understandable manner. (Baseline data unavailable.)
- **G.o.** By 1990, at least 70 percent of all graduate engineers should be skilled in the design of plants and processes that incorporate occupational safety and health control technologies. (Baseline data unavailable.)

Improved Services and Protection

G.p. By 1990, generic standards and other forms of technology transfer should be established, where possible, for standardized employer attention to such major common problems as chronic lung hazards, neurological hazards, carcinogenic hazards, mutagenic hazards, teratogenic hazards, and medical monitoring requirements.

Beginning in August 1988, the National Institute for Occupational Safety and Health worked closely with the Occupational Safety and Health Administration (OSHA) in updating permissible exposure limits (PELs). On January 19, 1989, OSHA published, in the Federal Register, an update of the OSHA PELs. The approach was different from the past substance by substance approach through the new use of generic rulemaking. The amendment made 212 PELs more protective and set new PELs for 164 substances not previously regulated by OSHA bringing the total to 595 PELs. A wide variety of health effects were considered during this rulemaking including cancer, cardiovascular, liver and kidney damage, as well as lung diseases, central nervous system damage, narcosis, respiratory effects, and sensory irritation.

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G.q. By 1990, the number of health hazard evaluations being performed annually should increase tenfold; the number of industrywide studies being performed annually should increase threefold. (In 1979, the National Institute for Occupational Safety and Health performed approximately 152 general industry health hazard evaluations.)

Year	Health hazard evaluations ^b	
	Total ^a	Mining
1979	152	8
1980	277	15
1981	390	28
1982	464	32
1983	460	29
1984	509	20
1985	536	17
1986	544	12
1987	436	5
1988	394	14
1989	380	7
1990	396	6
1990 objective	1,500	80

^aExcludes mining.

SOURCE: Data from National Institute for Occupational Safety and Health.

Improved Surveillance and Evaluation Systems

G.r. By 1985, an ongoing occupational health hazard-illness-injury coding scheme, survey, and surveillance capability should be developed, including identification of workplace hazards and related health effects, including cancer, coronary heart disease, and reproductive effects. This system should include adequate measurements of the severity of work-related disabling injuries.

G.s. By 1985, at least one question about lifetime work history and known exposures to hazardous substances should be added to all appropriate existing health data reporting systems, for example, cancer registries, hospital discharge abstracts, and death certificates.²

²Usual occupation has been on the Standard Death Certificate since 1939, but this information is currently not coded by all States.

G.t. By 1985, a program should be developed to (1) follow up individual findings from health hazard and health evaluation, reports from unions and management, and other existing surveillance sources of clinical and epidemiological data; and (2) use the findings to determine the etiology, natural history, and mechanisms of suspected occupational disease and injury.

In 1987 and 1988, the National Institute for Occupational Safety and Health evaluated and published strategies for surveillance and prevention of 10 leading work-related diseases and injuries.

This objective was not achieved by 1985. However, inclusion of occupational information in hospital records remains a high priority and a number of efforts have been undertaken to gather data on exposure to health hazards via death certificates. The 1986 National Mortality Followback Survey and the 1986 National Health Interview Survey contained questions about the subject's longest job. (Office of Disease Prevention and Health Promotion.)

This objective, as it relates to injuries, was achieved in 1985. A computerized tracking system for new information on emerging health problems was developed by the National Institute for Occupational Safety and Health (NIOSH). Also in operation is a NIOSH project on Occupational Sentinel Health Events. In response to the specific problem of occupational fatalities, the Fatal Accident Circumstances and Epidemiology (FACE) project was developed and implemented. (Office of Disease Prevention and Health Promotion.)

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bThese numbers do not include requests for technical assistance or information which are received from employers, workers, or others, and for which a site visit is not required. The NIOSH Health Hazard Evaluation and Technical Assistance Program responds to approximately 600 such requests each year, in addition to the numbers shown.

Injury Prevention

Improved Health Status

H.a. By 1990, the motor vehicle death rate should be reduced to no greater than 18 per 100,000 population. (In 1978, it was 23.6 per 100,000 population.)

Year	Death rate
1978	23.6
1979	23.8
1980	23.5
1981	22.4
1982	19.8
1983	19.0
1984	19.6
1985	19.2
1986	19.9
1987	19.8
1988	20.0
1989	19.2
1990 ^a	19.1
1990 objective	18.0

^aProvisional data.

SOURCE: Data from National Center for Health Statistics, Division of Vital Statistics.

H.b. By 1990, the motor vehicle death rate for children under 15 years of age should be reduced to no greater than 5.5 per 100,000 children. (In 1978, it was 9.0 per 100,000.)

Year	Death rate
1978	9.0
1979	8.6
1980	8.1
1981	7.5
1982	7.0
1983	6.7
1984	6.6
1985	6.8
1986	6.8
1987	6.8
1988	6.9
1989	6.5
1990 objective	5.5

SOURCE: Data from National Center for Health Statistics, Division of Vital Statistics.

H.c. By 1990, the home accident death rate for children
under 15 years of age should be no greater than 5.0 per 100,000 children. (In 1978, it was 6.0 per 100,000.)
200,000 c m. d.c m. (211 25 7 6, 11 m.n.c 610 per 200,000)

Year	Death rate
1978	6.0
1979	5.7
1980	5.7
1981	
1982	
1983	5.0
1984	4.9
1985	4.8
1986	5.0
1987	5.0
1988	5.0
1989	4.9
1990 objective	5.0

SOURCE: Data from National Center for Health Statistics, Division of Vital Statistics.

H.d. By 1990, the death rate from falls should be reduced to no more than 2 per 100,000 population. (In 1978, it was 6.2 per 100,000 population.)

Year	Death rate
1978	6.2
1979	5.9
1980	5.9
1981	5.5
1982	5.2
1983	5.1
1984	5.0
1985	5.0
1986	4.7
1987	4.8
1988	4.9
1989	4.9
1990 objective	2.0

SOURCE: Data from National Center for Health Statistics, Division of Vital Statistics.

H.e. By 1990, the death rate from drowning should be
reduced to no more than 1.5 per 100,000 population. (In
1978, it was 2.6 per 100,000 population.)
• • • • • • • • • • • • • • • • • • • •

V	Death
Year	rate
1978	2.6
1979	2.5
1980	2.7
1981	2.3
1982	2.3
1983	2.2
1984	1.9
1985	1.8
1986	2.0
1987	1.8
1988	1.7
1989	1.6
1990 objective	1.5

SOURCE: Data from National Center for Health Statistics, Division of Vital Statistics.

H.f. By 1990, the number of tapwater scald injuries requiring hospital care should be reduced to no more than 2,000 per year. (In 1978, there were 4,000 tapwater scald injuries per year.)

H.g. By 1990, residential fire deaths should be reduced to no more than 4,500 per year. (In 1978, there were 5,401 deaths.)

1990 estimates from the National Electronic Injury Surveillance System indicate that about 2,940 scald injuries requiring hospital care were related to faucet water heaters, bathtubs or showers, sinks, faucets, or spigots.

Year	Residential fire deaths
1978	5,401
1979	5,299
1980	5,083
1981	
1982	
1983	4,512
1984	4,466
1985	4,385
1986	4,364
1987	4,274
1988	4,464
1989	
1990 objective	4,500

SOURCE: Data from National Center for Health Statistics, Division of Vital Statistics.

H.h. By 1990, the number of accidental deaths from firearms should be held to no more than 1,700. (In 1978, there were 1,806.)

Year	Unintentional deaths from firearms ^a
1978	1,806
1979	2,004
1980	1,955
1981	1,871
1982	1,756
1983	1,695
1984	1,668
1985	1,649
1986	1,452
1987	1,440
1988	1,501
1989	1,489
1990 objective	1,700

^aExcludes deaths with intention unknown. SOURCE: Data from National Center for Health Statistics, Division of Vital Statistics.

Reduced Risk Factors

H.i. By 1990, the proportion of automobiles containing automatic restraint protection should be greater than 75 percent. (In 1979, the proportion was 1 percent.)

H.j. By 1990, all birthing centers, physicians, and hospitals should ensure that at least 50 percent of newborns return home in certified child passenger carriers. (Baseline data unavailable.)

H.k. By 1990, at least 75 percent of residential units should have a properly placed and functioning smoke detector. (In 1979, there were approximately 30 million systems.)

Increased Public and Professional Awareness

H.I. By 1990, the proportion of parents of children under 10 years of age who can identify appropriate measures to address the three major risks for serious injury to their children (motor vehicle accidents, burns, poisonings) should be greater than 80 percent. (Baseline data unavailable.)

The National Highway Traffic Safety Administration estimates that in 1990 about 15 percent of automobiles had automatic restraint protection.

No data on newborns are available. In 1990, 83 percent of infants were restrained in safety seats. (National Highway Traffic Safety Administration.)

In 1990, 76 percent of persons 18 years of age and over reported at least one working smoke detector in their homes. In 1985 this figure was 60 percent. (National Center for Health Statistics, National Health Interview Survey.)

	Percent of children under 10 years of age	
Measure	1985	1990
Have telephone number of a poison		
control center	62	58
Have ipecac syrup	27	31
		of children ears of age
Measure	1985	1990
Wear seatbelts or carseats all or most of the time	82	87

SOURCE: Data from National Center for Health Statistics, National Health Interview Survey.

Came home from hospital in carseats

after birth

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H.m. By 1990, virtually all primary health care providers should advise patients about the importance of safety belts and should include instruction about use of child restraints to prevent injuries from motor vehicle accidents as part of their routine interaction with parents. (Baseline data unavailable.)

In 1985, 45 percent of families with children under 5 years of age were advised by health professionals of the importance of using seatbelts. (National Center for Health Statistics, National Health Interview Survey.)

Improved Services and Protection

H.n. By 1990, at least 75 percent of communities with a population over 10,000 should have the capability for ambulance response and transport within 20 minutes of a call. (Baseline data unavailable.)

H.o. By 1990, virtually all injured persons in need should have access to regionalized systems of trauma centers, burn centers, and spinal cord injury centers. (In 1979, about 25 percent of the population lived in areas served by regionalized trauma centers.)

H.p. By 1990, at least 90 percent of the population should be living in areas with access to regionalized or metropolitan area poison control centers¹ that provide information on the clinical management of toxic substance exposures in the home or work environment. (In 1979, about 30 percent of the population lived in such areas.)

¹Data limited to poison control centers certified by the American Association of Poison Control Centers.

The only available data are for 28 States reporting through the Fatal Accident Reporting System. In 1989, the average response time for urban accidents was 5.70 minutes and for rural accidents, 11.27 minutes. (National Highway Traffic Safety Administration.)

According to several past presidents of the National Association for State Emergency Medical System Directors, a 20-minute response time is a very modest standard and no longer acceptable. In each State, a variety of public and private entities, such as cities, counties, fire departments, ambulance companies, volunteer groups, and hospitals, provide prehospital personnel and services. There are over 17,000 network provider organizations and one-half million paid and volunteer emergency medical technicians across the country. Although the standard response times vary among States and localities, the average response time in urban areas is less than 6 minutes; in surburban and small town areas, it is 6-10 minutes, and in rural and frontier areas, it is 10-15 minutes.

The Office of Emergency Preparedness, Health Resources and Services Administration, reports that there are at least 408 trauma centers representing all 50 States; there are 179 burn centers in 38 States and 53 spinal cord injury centers in 23 States.

In 1988 there were 36 regional poison control centers certified by the American Association of Poison Control Centers, compared with fewer than 10 in 1980.

Year	Percent o populatior	
1979	30	
1982	40	
1984	55	
1988	59	
1990 objective	90	

SOURCE: Data from American Association of Poison Control Centers, National Data Collection System.

Improved Surveillance and Evaluation Systems

H.q. By 1990, at least 75 percent of the States should have developed a detailed plan for the uniform reporting of injuries. (In 1981, there were seven States with detailed plans for the uniform reporting of injuries.)

In 1987, 22 States had developed not only detailed plans for the uniform reporting of injuries, but also injury-reporting surveillance systems.

Year	States
1981	7
1982	9
1987	22
1990 objective	38

SOURCE: Data from Harvard University School of Public Health, Injury Prevention Research Center.

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Fluoridation and Dental Health

Improved Health Status

I.a. By 1990, the proportion of 9-year-old children who have experienced dental caries in their permanent teeth should decrease to 60 percent. (In 1971–74, 71 percent of 9-year-old children had at least one filled, missing due to caries, or untreated decayed tooth.)¹

¹In 9-year-olds, the permanent first molars are generally the only permanent teeth at significant risk of decay.

I.b. By 1990, the prevalence of gingivitis in children 6–17 years of age should decrease to 18 percent. (In 1971–74, prevalence was about 23 percent.)

I.c. By 1990, in adults the prevalence of gingivitis and destructive periodontal disease should decrease to 20 percent and 21 percent, respectively. (In 1971–74, for adults 18–74 years of age, 25 percent had gingivitis and 23 percent had destructive periodontal disease.)

	Percent of children with dental caries		
Year	9 years	12 years	17 years
1979–80	49.4	73.1	89.3
1986-87	34.5	58.3	84.4

SOURCE: Data from Centers for Disease Control, National Center for Preventive Services.

National data are insufficient to assess progress on this objective as written. (Baseline data were determined by observation only.) A 1986–87 national survey of the oral health of school children 14–17 years of age determined the presence or absence of gingival bleeding on gentle probing of gums. Prevalence of gingival bleeding was estimated to be about 58.8 percent. (National Institute of Dental Research.)

Changing methods of measuring gingivitis infections and the results of these infections make it impossible to make direct comparisons between the baseline and data from the most recent survey (1985-86). Results from this survey, which used measures which detected even early evidence of the disease, showed the estimated prevalence of overall gingival bleeding to be about 43.6 percent among adults. Prevalence of periodontal pockets measuring greater than 4 millimeters was about 14.3 percent; prevalence of pockets greater than 6 millimeters was about 1.7 percent. Although no trend data exist, the general impression among dental researchers is that the more serious types of periodontal infection are not as wide spread as previously believed (National Institute of Dental Research.)

Reduced Risk Factors

I.d. By 1990, no public elementary or secondary school (and no medical facility) should offer highly cariogenic foods or snacks in vending machines or in school breakfast or lunch programs.

I.e. By 1990, virtually all students in secondary schools and colleges who participate in organized contact sports should routinely wear proper mouth guards. (Baseline data unavailable.)

during sports is more prevalent than previously reported and that mouth guard use could reduce such injuries significantly. A 3-year study of 2,470 adolescent athletes, who participated in varying forms of sports activity, found that 9 percent experienced some form of oral injury. In 75 percent of these injuries, mouth guards were not worn. Mandatory football and ice hockey mouth guard rules exist through the National High School Federation, National Collegiate Athletic Association (which also requires them for men's lacrosse), and the Amateur Hockey Association of the United States. Mouthguards are also required in organized amateur boxing. In 1986-87, the proportion of cranial/facial injuries relative to all bodily injuries sustained from seven reported sports was 5.5-16.5 percent. (Centers for Disease Control, National Center for Prevention Services.)

Some recent data suggest that oral trauma

Increased Public and Professional Awareness

I.f. By 1990, at least 95 percent of school children and their parents should be able to identify the principal risk factors related to dental diseases and be aware of the importance of fluoridation and other measures in controlling these diseases. (Baseline data unavailable.)

I.g. By 1990, at least 75 percent of adults should be aware of the necessity for both thorough personal oral hygiene and regular professional care in the prevention and control of periodontal disease. (In 1972, only 52 percent knew of the need for personal oral hygiene, and only 28 percent were aware of the need for dental checkups.)

In 1990, 69 percent of the population 18 years of age and over said that brushing and flossing the teeth was the one best method for preventing tooth decay; 11 percent said that visiting the dentist every 6 months was the one best method, and 8 percent said that limiting surgary snacks was the one best method for preventing tooth decay. In 1985, 78 percent of respondents said that fluoridated water, and 89 percent said that fluoride toothpaste or rinse were "definitely" or "probably" important in preventing tooth decay. (National Center for Health Statistics, National Health Interview Survey.)

In 1985, 88 percent of the population 18 years of age and over thought that regular brushing and flossing of teeth was "definitely" important to preventing gum disease, and 82 percent thought that seeing a dentist regularly was definitely important. (National Center for Health Statistics, National Health Interview Survey.)

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Improved Services and Protection

I.h. By 1990, at least 95 percent of the population on community water systems should be receiving the benefits of optimally fluoridated water. (In 1975, the proportion of the population on community water systems who were receiving fluoridated water was 60 percent.)

I.i. By 1990, at least 50 percent of school children living in
fluoride-deficient areas that do not have community water
systems should be served by an optimally fluoridated school
water supply. (In 1977, it was about 6 percent.)

I.j. By 1990, at least 65 percent of school children should be proficient in personal oral hygiene practices and should receive other needed preventive dental services in addition to fluoridation. (Baseline data unavailable.)

Ir	nproved	Surveillance	and	Evaluation	Systems

I.k. By 1990, a comprehensive and integrated system should be in place for periodic determination of the oral health status, dental treatment needs, and utilization of dental services (including reasons for and costs of dental visits) of the U.S. population.

I.I. By 1985, systems should be in place for determining coverage of all major dental public health preventive measures and activities to reduce consumption of highly cariogenic foods.

Year	Percent on fluoridated community water systems
1975	60.0
1980 1984	59.3 61.4
1985 1988	61.3 61.0
1990 objective	95.0

SOURCE: Data from Centers for Disease Control, National Center for Prevention Services.

Over the past several years, the number of schools with fluoridated water systems has declined, mainly due to their incorporation into public water systems. (National Institute of Dental Research.)

Two-thirds of school-age children brush their teeth twice a day; an additional 26 percent brush once a day. In 1986, 9 of 10 children aged 2–16 years used fluoride toothpaste. About 8 percent used fluoride supplements (about 13 percent among children aged 2–8). About 13 percent reported using ä fluoride mouthrinse at home and about 10 percent reported using one at school. (National Center for Health Statistics, National Health Interview Survey.) Of school children examined in 1986–87, 7.6 percent had had sealants applied. (National Institute of Dental Research.)

Numerous oral health surveys conducted by Federal, State, and private agencies and organizations monitor oral health status, treatment needs, care utilization, and costs. Continuing efforts at the Federal level are needed to coordinate information from these surveys.

Specific national reporting systems and surveys provide public health programs with an indication of the extent of preventive dental activities. The focus on reduction of cariogenic foods has been deemphasized because of the complexity of issues involved and the difficulty in quantifying the cariogenicity of foods.

Surveillance and Control of Infectious Diseases

Improved Health Status

J.a. By 1990, the annual estimated incidence of hepatitis B should be reduced to 20 per 100,000 population. (In 1978, the estimated incidence was 41 cases per 100,000 population.)

J.b. By 1990, the annual reported incidence of tuberculosis should be reduced to 8 per 100,000 population. (In 1978, the reported incidence was 13.1 cases per 100,000 population.)

Hepatitis B vaccine was licensed in 1982.

Year	Estimated incidence of hepatitis B
1978	41
1979	42
1980	50
1981	55
1982	57
1983	63
1984	67
1985	69
1986	67
1987	64
1988	56
1989	56
1990 ^a	48
1990 objective	20

aProvisional data.

SOURCE: Data from Centers for Disease Control, National Center for Infectious Diseases.

In 1990 about 36 percent of reported tuberculosis cases occurred in people 55 years of age and older; about 33 percent of total cases were in people under age 35, and less than 9 percent occurred in people under 20 years of age. In 1987 more than 40 percent of cases occurred in people 55 years of age and over.

Year	Reported incidence of tuberculosis
1978	13.1
1979	12.6
1980	12.3
1981	11.9
1982	11.0
1983	10.2
1984	9.4
1985	9.3
1986	9.4
1987	9.3
1988	9.1
1989	9.5
1990	10.3
1990 objective	8.0

SOURCE: Data from Centers for Disease Control, National Center for Prevention Services. J.c. By 1990, the annual estimated incidence of pneumococcal pneumonia should be reduced to 115 per 100,000 population, and the estimated incidence of pneumococcal bacteremia should be reduced to 7 per 100,000. (In 1979, the incidence of pneumococcal bacteremia was estimated to be 9 cases per 100,000 population.)¹

¹The incidence of pneumococcal bacteremia is used as an indicator of the incidence of pneumococcal pneumonia. Therefore, the objective and baseline have been revised from those previously published.

J.d. By 1990, the annual reported incidence of bacterial meningitis should be reduced to 2 per 100,000 population.² (In 1979, the reported incidence was 3 cases per 100,000 population.)

²Objective and baseline revised from those previously published. The 1990 goal was not achieved because licensure of a vaccine to prevent *Haemophilus influenzae* type b disease *in infants* did not occur until the end of 1990.

J.e. By 1990, the incidence of nosocomial infection in acute care hospitals should be reduced by 20 percent of what otherwise would pertain in the absence of hospital control programs. (In 1976, an estimated 6 percent of hospital infections were prevented.)

J.f. By 1990, the annual estimated incidence of legionellosis should be reduced to 17 per 100,000 population. (In 1980, it was estimated to be 20 per 100,000 population.)³

³Objective added since publication of *Objectives for the Nation*. Although data on the estimated incidence of legionellosis were previously published, rates used in the past were crude estimates. Studies have recently begun to determine a more accurate baseline rate.

Year	Estimated incidence of pneumococcal bacteremia
1979	9
1980	9
1981	9
1982	9
1983	9
1984	9
1985	9
1986	9
1987	^a 19
1988	19
1989	19
1990 ^b	19
1990 objective	7

^aIncreased use of blood cultures beginning in the late 1980's increased the diagnosis of pneumococcal bacteremia. ^bProvisional data.

SOURCE: Data from Centers for Disease Control, National Center for Infectious Diseases.

Year	Reported incidence of bacterial meningitis	
1979	3.0	
1980	3.0	
1981	3.0	
1982	3.0	
1983	3.0	
1984	3.9	
1985	3.0	
1986	3.0	
1987	3.0	
1988	3.0	
1989	3.0	
1990	3.0	
1990 objective	2.0	

SOURCE: Data from Centers for Disease Control, National Center for Infectious Diseases.

No data exist since 1983 for the objective as written. In 1987, 90 hospitals submitted data to the Centers for Disease Control through a surveillance component system. Each component is a self-contained surveillance protocol that focuses on a particular group of patients. These components now allow collection of data on both infected and uninfected patients.

Year	Percent reduction
1976 1983	6
1990 objective	20

SOURCE: Data from Centers for Disease Control, National Center for Infectious Diseases.

Improved Services and Protection

J.g. By 1990, 95 percent of licensed patient care facilities should be applying the recommended practices for controlling nosocomial infections. (Baseline data unavailable.)

J.h. By 1990, surveillance and control systems should be capable of responding to and containing (1) newly recognized diseases and unexpected epidemics of public health significance; and (2) infections introduced from foreign countries.

J.i. By 1990, at least 50 percent of people in populations designated as targets by the Immunization Practices Advisory Committee of the Public Health Service should be immunized within 5 years of licensure of new vaccines for routine clinical use.⁴

⁴Same objective in Immunization.

The Centers for Disease Control (CDC)
Division of Surveillance and Epidemiology
National Electronic Telecommunication System
for Surveillance is operational in all States to
respond to and contain newly recognized disease
and unexpected epidemics. Within the CDC
National Center for Infectious Diseases, systems
are capable of responding to infections
introduced from foreign countries. (Centers for
Disease Control, Epidemiology Program Office.)

Three recently licensed vaccines are: hepatitis B vaccine (licensed in 1982), Haemophilus influenzae type b polysaccharide vaccine (HbPV, licensed in 1985), and Haemophilus influenzae type b conjugate vaccine (HbCV, licensed in 1987). Hepatitis B vaccine is recommended for persons who are at risk of contact with blood or blood products (primarily health care and public safety workers), homosexual men, and heterosexually active persons with multiple partners or other sexually transmitted diseases, household contacts of carriers of hepatitis B surface antigen, and users of illicit injectable drugs. Available data suggest that coverage for at-risk groups varies from less than 1 percent to 50 percent for different risk groups. With the development of the Occupational Safety and Health Administration regulations for prevention of blood-borne diseases in the workplace, which mandates hepatitis B vaccine be offered to all exposed health care and public safety workers, the objective of at least 50 percent coverage is likely to be met for these groups. However, it is unlikely to be met for most of the other high risk groups. HbCV is recommended for all children with a 3 or 4 dose series beginning at 2 months of age and has replaced HbPV. Evaluating progress toward the objective for HbCV is not possible at this time because of a lack of national data on vaccine coverage. Such data will be collected during the 1991 Health Interview Survey. Nevertheless, data from purchase of HbCV through the federal consolidated contract suggest marked increases in use. In 1990, 1.5 million doses were purchased compared to 0.3 million doses in 1988. (Centers for Disease Control, National Center for Prevention Services.)

Improved Surveillance and Evaluation Systems

J.j. By 1990, data-reporting systems in all States should be able to monitor trends of common infectious agents not now subject to traditional public health surveillance (respiratory illnesses, gastrointestinal illnesses, otitis media).

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J.k. By 1990, the extent of epidemics of respiratory and enteric viral illnesses should be determined within 2 weeks after they appear, through communitywide sentinel surveillance systems.

J.l. By 1990, all State health departments and appropriate Federal health agencies should have a computer-based telecommunications capacity for routine collection, analysis, and dissemination of surveillance data; rapid communication of messages; and epidemic aid investigations. (As of June 1983, three demonstration systems had been established.)

J.m. By 1990, laboratories throughout the country should be linked for monitoring infectious agents and antibiotic resistance patterns and for disseminating information.

Respiratory and enteric viral illnesses are winter and spring diseases of local distribution; they are not notifiable and are generally identified through laboratory tests rather than by physicians. Surveillance of respiratory syncytial viruses, parainfluenza viruses, and adenoviruses is accomplished weekly through computerized telephone reports (National Respiratory Virus Surveillance System) from participating laboratories in 12 to 48 States, varying with the virus and the technique of detection or isolation. Surveillance of enteric viral illnesses is less wide spread. (Centers for Disease Control, National Center for Infectious Diseases.)

The National Electronic Telecommunications System for Surveillance links all 50 States, the Virgin Islands, Puerto Rico, New York City, and the District of Columbia with the Centers for Disease Control. (Centers for Disease Control, Epidemiology Program Office.)

Smoking and Health

Reduced Risk Factors

K.a. By 1990, the proportion of adults who smoke should be reduced to below 25 percent. (In 1979, 34 percent of the population 18 years of age and over smoked.)

K.b. By 1990, the proportion of women who smoke during pregnancy should be no greater than one-half the proportion of all women who smoke. (Baseline data unavailable.)

K.c. By 1990, the proportion of children and youth 12–18 years of age who smoke should be reduced to below 6 percent. (In 1979, 11.7 percent smoked.)

K.d. By 1990, the sales-weighted average tar yield of cigarettes should be reduced to below 10 milligrams. The other components of cigarette smoke known to cause disease should also be reduced proportionately. (In 1978, the sales-weighted average yield was 16.1 milligrams.)

Year		Percent smokers
1979		33.5
1980		33.2
1983		32.1
1985		30.1
1987		28.8
1990		25.5
1990 objectiv	/e	25.0

SOURCE: Data from National Center for Health Statistics, National Health Interview Survey.

In 1990, approximately 26 percent of women aged 18–44 years smoked cigarettes, compared with 31 percent in 1985. In 1990, 24 percent of women who had given birth in the preceding 5 years reported smoking in the 12 months preceding the birth; 23 percent of these mothers who smoked reported that they quit after learning they were pregnant. Of the 32 percent of women who in 1985 reported smoking in the 12 months preceding the birth of their child, 21 percent said they quit after learning they were pregnant. This indirect evidence indicates that the smoking prevalence among pregnant women was greater than half the prevalence among nonpregnant women in the 1980's.

		Percent smokers aged –				
Year	12-17 years	12–13 years	14–15 years	16–17 years		
1982	15	a ₃	10	30		
1985	15	6	14	25		
1988	12	3	11	20		
1990	12	2	14	18		
1990 obj.	6	6	6	6		

^aRelative standard error greater than 30 percent.

SOURCE: Data from Alcohol, Drug Abuse, and Mental Health Administration.

Year	Milligrams of tar
1978	16.1
1979	15.1
1980	14.1
1981	13.2
1982	13.5
1983	13.4
1984	13.0
1985	13.2
1986	13.4
1987	13.3
1990 objective	10.0

SOURCE: Data from Federal Trade Commission and the Office of Smoking and Health.

Increased Public and Professional Awareness

K.e. By 1990, the proportion of the adult population aware that smoking is one of the major risk factors for heart disease should be increased to at least 85 percent. (In 1975, the proportion was 53 percent.)

K.f. By 1990, at least 90 percent of the adult population should be aware that smoking is a major cause of lung cancer, as well as multiple other cancers including laryngeal, esophageal, and bladder cancer. (Baseline data unavailable.)

K.g. By 1990, at least 85 percent of the adult population should be aware of the special risk of developing and worsening chronic obstructive lung disease, including bronchitis and emphysema, among smokers. (Baseline data unavailable.)

K.h. By 1990, at least 85 percent of women should be aware of the special health risks for women who smoke, including the effect on outcomes of pregnancy and the excess risk of cardiovascular disease with oral contraceptive use. (Baseline data unavailable.)

K.i. By 1990, at least 65 percent of children 12 years of age should be able to identify smoking cigarettes with increased risk of serious disease of the heart and lungs. (Baseline data unavailable.)

Year	Percent aware of risk factors	
1975	53	
1977	68	
1981	74	
1985	90	
1990	91	
1990 objective	85	

SOURCE: Data from Federal Trade Commission; 1985 and 1990 data from National Center for Health Statistics, National Health Interview Survey.

	Percent of adults 18 years of age and over who state that cigarette smoking definitely or probably increases the risk of getting—		
Condition	1985	1990	1990 objective
Lung cancer Cancer of larynx Cancer of esophagus Bladder cancer	95 88 80 36	95 90 86 36	90 90 90

SOURCE: Data from National Center for Health Statistics, National Health Interview Survey.

In 1990, 92 percent of adults 18 years of age and over stated that cigarette smoking definitely or probably increases the risk of getting emphysema, compared with 91 percent in 1985. In 1990 the percent of the population who said that cigarette smoking definitely or probably increases the risk of developing chronic bronchitis was 89 percent, compared with 86 percent in 1985. (National Center for Health Statistics, National Health Interview Survey.)

Condition	Percent of women 18–44 years of age who state that smoking during pregnancy is a risk factor for—		
	1985	1990	1990 objective
Low birth weight	52	60	85
Stillbirth	30	37	85
Premature birth	38	48	85
Miscarriage	36	43	85

In 1990, 73 percent of women 18-44 years of age said that smoking while taking birth control pills increases the risk of stroke. (National Center for Health Statistics, National Health Interview Survey.)

Improved Services and Protection

K.j. By 1990, at least 35 percent of all workers should be offered smoking cessation programs sponsored or supported by employers-employees, either at the worksite or in the community. (In 1979, 15 percent of U.S. business firms had programs to encourage or assist their employees to stop smoking.)

K.k. By 1985, tar, nicotine, and carbon monoxide yields should be prominently displayed on each cigarette package and on promotional material. (Tar and nicotine yields appear in advertising as a result of a voluntary agreement between the Federal Trade Commission and the cigarette manufacturing industry; tar, nicotine, and carbon monoxide levels are currently not required on packaging.)

K.I. By 1985, the present cigarette warning should be strengthened to increase its visibility and impact and to give the consumer additional needed information on the specific multiple health risks of smoking. Special consideration should be given to rotational warnings and to identification of especially vulnerable groups.

K.m. By 1990, laws should exist in all 50 States and all jurisdictions prohibiting smoking in enclosed public places and establishing separate smoking areas at work and in dining establishments. (In 1978, 31 States had some form of smoking restriction laws.)

K.n. By 1990, major health and life insurers should offer differential insurance premiums to smokers and nonsmokers. (In 1979 approximately 30 major companies were offering differential premiums.)

Improved Surveillance and Evaluation Systems

K.o. By 1985, insurance companies should have collected, reviewed, and made public their actuarial experience on the differential life experience and hospital utilization by specific cause and sex of smokers and nonsmokers.

K.p. By 1990, continuing epidemiologic research should have delineated the unanswered research questions regarding low-yield cigarettes, and preliminary partial answers to these questions should have been generated by research efforts.

K.q. By 1990, in addition to biomedical hazard surveillance, continuing examination of the changing tobacco product and the sociologic phenomena resulting from those changes should have been accomplished.

In 1985, approximately 36 percent of worksites with 50 or more employees (approximately 58 percent of the U.S. workforce) offered some kind of smoking cessation program. (Office of Disease Prevention and Health Promotion.)

Disclosure of tar and nicotine content on cigarette packages is often made voluntarily for cigarettes yielding 8 milligrams or less of tar, but rarely for higher tar brands. The level of carbon monoxide is not disclosed on packages nor in advertisements. (Centers for Disease Control, Office on Smoking and Health.)

The Comprehensive Smoking Education Act of 1984 requires that the single health warning be replaced with four rotating labels on cigarette packages and in cigarette advertising. The rotating warnings do not provide consolidated information regarding the major health effects of smoking, nor is basic information provided on the health effects of exposure to tobacco smoke.

By the end of 1990, 45 States and the District of Columbia had laws restricting smoking in at least one public place. (Centers for Disease Control, Office on Smoking and Health.)

In 1987, smoker-nonsmoker premium differentials were offered by about 9 in 10 life insurance companies for individual policies and about 1 in 7 for group policies. Only about one in seven health insurers offered nonsmoker discounts on individual policies; only a few commercial health insurance carriers offered discounts on group policies. (American Council of Life Insurance and the National Association of Insurance Commissioners.)

In 1983, a Society of Actuaries task force examined the smoking-related mortality data of life insurance companies. In 1987, the National Association of Insurance Commissioners compiled smoking-related health insurance claims data.

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Alcohol and Drug Misuse

Improved Health Status

L.a. By 1990, the alcohol-related death rate from motor vehicle accidents should be reduced to less than 9.5 per 100,000 population per year. (In 1977, there were 11.5 deaths per 100,000 population.)

L.b. By 1990, deaths from accidents other than motor vehicle (for example, falls, fires, drownings, skimobile, and aircraft accidents) indirectly attributable to alcohol use should be reduced to 5 per 100,000 population per year. (In 1975, there were 7 per 100,000 population.)

L.c. By 1990, the cirrhosis¹ death rate should be reduced to 12 per 100,000 population per year. (In 1978, the rate was 13.5 per 100,000 population.)

¹Effective in 1979, the cause-of-death category is "chronic liver disease and cirrhosis."

Year	Death rate	Percent of fatalities alcohol related ^a
1977	11.5	
1978	11.5	
1979	11.5	
1980	11.5	
1981	10.5	
1982	10.8	57.3
1983	10.1	55.5
1984	10.0	53.7
1985	9.5	51.8
1986	10.0	52.2
1987	9.7	50.9
1988	9.6	50.2
1989	9.0	49.2
1990 objective	9.5	

^aSince 1984, the Fatal Accident Reporting System of the National Highway Traffic Safety Administration has used an additional methodology to track alcohol-related traffic fatalities. Data for 1982 and 1983 were calculated for comparison purposes.

SOURCE: Data from National Highway Traffic Safety Administration.

In 1987, there were an estimated 4.1 fatalities indirectly attributable to alcohol use per 100,000 population.

SOURCE: National Institute on Alcohol Abuse and Alcoholism.

Year	Chronic liver disease and cirrhosis death rate	
1978	13.5	
1979	13.2	
1980	13.5	
1981	12.8	
1982	11.9	
1983	11.7	
1984	11.6	
1985	11.2	
1986	10.9	
1987	10.8	
1988	10.7	
1989	10.8	
1990 ^a	10.2	
1990 objective	12.0	

aprovisional data.

SOURCE: Data from National Center for Health Statistics, Division of Vital Statistics.

L.d. By 1990, the incidence of infants born with fetal alcohol syndrome should be reduced by 25 percent.² (In 1977, the rate was 1 per 2,000 births, or approximately 1,650 cases.³)

²Same objective in Pregnancy and Infant Health.

L.e. By 1990, drug-related deaths should be reduced to 2 per 100,000 population per year. (In 1978, the rate was 2.7 per 100,000 population.)⁴

⁴Drug-related mortality excludes deaths from alcohol. The definition, however, is affected by a revision in the *International Classification of Diseases*. The 1978 data are defined by categories in the Eighth Revision, Adapted for Use in the United States. The 1979 data are defined by categories in the Ninth Revision. The change in the death rate for these causes between 1978 and 1979 reflects, to a degree, the change in the classification of diseases between these two years. The baseline has also been revised to take into account calculation results from the 1980 Census.

L.f. By 1990, adverse reactions from medical drug use sufficiently severe to require hospital admission should be reduced to 25 percent fewer admissions per year. (In 1979, estimates ranged from 105,000 to 350,000 admissions per year.)

Reduced Risk Factors

L.g. By 1990, per capita consumption of alcohol should not exceed current levels. (In 1978, about 2.71 gallons of absolute alcohol per capita were consumed by persons 14 years of age and over.)

Year	Incidence rate of Fetal Alcohol Syndrome ^a
1980	0.12
1981	0.12
1982	0.12
1983	0.17
1984	0.17
1985	0.19
1986	0.23
1987	0.22
1988	0.30
1989	0.32
1990	0.40
1990 objective	0.38

^aRates are per 1,000 live births and reflect over time both improved diagnostic and assessment techniques and increased familiarity using the ICD code.

SOURCE: Data from National Center for Environmental Health and Injury Control, Division of Birth Defects and Development Disabilities.

Year	Death rate
1978	2.7
1979	3.2
1980	3.0
1981	3.1
1982	3.2
1983	3.2
1984	3.3
1985	3.6
1986	4.1
1987	4.0
1988	4.4
1989	4.3
1990 objective	2.0

SOURCE: Data from National Center for Health Statistics, Division of Vital Statistics.

Year	Per capita consumption in gallons
1978	2.71
1979	2.75
1980	2.76
1981	2.76
1982	2.72
1983	2.69
1984	2.65
1985	2.62
1986	2.58
1987	2.54
1988	2.49
1990 objective	2.71

SOURCE: Data from National Institute on Alcohol Abuse and Alcoholism.

³Baseline data are estimated; the ICD code for fetal alcohol syndrome was introduced in 1979.

L.h. By 1990, the proportion of adolescents 12–17 years of age who abstain from using alcohol or other drugs⁵ should not fall below 1977 levels. (In 1977, the proportion of abstainers was 69 percent for alcohol; for other drugs, the proportion ranged from 83 percent for marijuana to 99.9 percent for heroin.)

⁵A person is considered as not using alcohol or other drugs if he or she has never used the substance or if the last use of the substance was more than 1 month prior to the survey in which the data were collected.

L.i. By 1990, the proportion of adolescents 14–17 years of age who report acute drinking-related problems⁶ during the past year should be reduced to below 17 percent. (In 1978, the estimate was 19 percent based on 1974 survey data.)

⁶Acute drinking-related problems have been defined as problems such as episodes of drunkenness, driving while intoxicated, or drinking-related problems with school authorities.

L.j. By 1990, the proportion of problem drinkers among all adults 18 years of age and over should be reduced to 8 percent. (In 1979, it was about 10 percent.)

L.k. By 1990, the proportion of young adults 18–25 years of age reporting frequent use⁷ of drugs other than alcohol should not exceed 1977 levels. (In 1977, it was less than 1 percent for drugs other than marijuana and 19 percent for marijuana.)

⁷Frequent use of other drugs means the nonmedical use of any specific drug on 5 days or more during the previous month.

L.I. By 1990, the proportion of adolescents 12–17 years of age reporting frequent use⁸ of drugs other than alcohol should not exceed 1977 levels. (In 1977, the percentages were less than 1 percent for drugs other than marijuana and 9 percent for marijuana.)

⁸Frequent use of other drugs means the nonmedical use of any specific drug on 5 days or more during the previous month.

	Percent of abstainers in past month			
Year	Alcohol	Marijuana	Cocaine	
1977 ^a	69	83	99.2	
1979	63	83	98.6	
1982	74	89	98.4	
1985	69	88	98.5	
1988	75	94	98.9	
1990	76	95	99.4	
1990 objective	69	83	99.2	

^aIn 1979, the design of the questionnaire was changed. Consequently, 1977 data are not comparable to those of later years.

SOURCE: Data from National Institute on Drug Abuse.

The proportion of problem drinkers remains at about 10 percent according to 1988 estimates. (National Institute on Alcohol Abuse and Alcoholism.)

	Percent reporting frequent use		
Year	Marijuana	Other drugs ^a	
1977	19	0.8	
1979	22	2.4	
1982	16	2.3	
1985	11	1.8	
1988	7	1.3	
1990	5	0.6	
1990 objective	19	0.8	

^aCocaine.

SOURCE: Data from National Institute on Drug Abuse.

	Percent reporting frequent use		
Year	Marijuana	Other drugs ^b	
1977	9	(^a)	
1979	8	(a)	
1982	6	0.9	
1985	5	1.2	
1988	2	0.8	
1990	1	(^a)	
1990 objective	9	(^a)	

^aQuantity more than zero but less than 0.5. ^bCocaine

SOURCE: Data from National Institute on Drug Abuse.

Increased Public and Professional Awareness

L.m. By 1990, the proportion of women of childbearing age aware of risks associated with pregnancy and drinking, in particular, the fetal alcohol syndrome, should be greater than 90 percent. (In 1979, it was 73 percent.)

L.n. By 1990, the proportion of adults who are aware of the added risk of head and neck cancers for people with excessive alcohol consumption should exceed 75 percent. (Baseline data unavailable.)

L.o. By 1990, 80 percent of high school seniors should state that they perceive great risk associated with frequent regular cigarette smoking, marijuana use, barbiturate use, or alcohol intoxication. (In 1979, 63 percent of high school seniors perceived great risk from one or two packs of cigarettes smoked daily, 42 percent from regular marijuana use, 72 percent from regular barbiturate use, and only 35 percent from having five or more drinks per occasion once or twice each weekend.)

L.p. By 1990, pharmacists filling prescriptions should routinely counsel patients on the proper use of drugs designated as high priority by the Food and Drug Administration, with particular attention to prescriptions for pediatric and geriatric patients and to the problems of drinking alcoholic beverages while taking certain prescription drugs. (Baseline data unavailable.)

Percent of women 18-44 years of age
who said that heavy drinking
during pregnancy is a risk factor

Condition	1985	1990	1990 objective
Birth defects	54	64	90
Low birthweight	52	60	90
Mental retardation	52	61	90
Miscarriage	51	57	90

In 1985, 62 percent of women 18–44 years of age had ever heard of fetal alcohol syndrome; in 1990 this increased to 71 percent. (National Center for Health Statistics, National Health Interview Survey.)

Condition	Percent of adults who said that heavy alcohol use definitely or probably increases risk		
	1985	1990	1990 objective
Throat cancer Cancer of mouth	40 32	43 39	75 75

SOURCE: Data from National Center for Health Statistics, National Health Interview Survey.

	Percent perceiving great risk with frequent use			
Year	Cigarettes	Marijuana	Barbiturates	Alcohol ^a
1979	63	42	72	35
1980	64	50	72	36
1981	63	58	70	36
1982	61	60	68	36
1983	61	63	68	39
1984	64	67	69	42
1985	67	70	68	43
1986	66	71	67	39
1987	69	74	69	42
1988	68	77	70	43
1989	67	78	71	44
1990	68	78	70	47
1990 obj	80	80	80	80

^a5 or more drinks once or twice each weekend.

SOURCE: Data from National Institute on Drug Abuse.

Improved Services and Protection

L.q. By 1990, the proportion of major firms that provide a substance abuse prevention and referral program should be greater than 70 percent. (In 1976, 50 percent of a sample of the Fortune 500 firms offered some type of employee assistance program.)

L.r. By 1990, standard medical and pharmaceutical practice
should include drug profiles on 90 percent of adults covered
under the Medicare program and on 75 percent of other
patients with acute and chronic illnesses being cared for in all
private and organized medical settings. (Baseline data
unavailable.)

Year	Percent of firms
1976	50
1979	57
1988	70
1990 objective	70

SOURCE: Data from National Institute on Alcohol Abuse and Alcoholism, and from Association of Labor Management Consultants and Administrators.

Drug profiles are not yet included in standard medical and pharmaceutical practice.

Demonstration projects involving Medicaid recipients and automated prospective drug utilization review at the pharmacy are scheduled to begin operation by January 1, 1992. (National Council for Prescription Drug Programs.)

Improved Surveillance and Evaluation Systems

L.s. By 1990, a comprehensive data capability should be established to monitor and evaluate the status and impact of misuse of alcohol and drugs on health status, motor vehicle accidents, accidental injuries in addition to those from motor vehicles, interpersonal aggression and violence, sexual assault, vandalism and property damage, pregnancy outcomes, and emotional and physical development of infants and children.

The National Institute on Alcohol Abuse and Alcoholism's Alcohol Epidemiologic Data System (AEDS) contains 14 national survey data sets as of 1990.

92 Prevention Profile, 1991

Improved Nutrition

Improved Health Status

M.a. By 1990, the proportion of pregnant women with iron deficiency anemia (as estimated by hemoglobin concentrations early in pregnancy) should be reduced to 3.5 percent. (In 1971–74, the proportion of pregnant women with low hemoglobin levels was 31.9; the proportion with low hemoglobin levels and low transferrin saturation was 6.5.)

M.b. By 1990, growth retardation of infants and children caused by inadequate diets should have been eliminated in the United States as a public health problem. (In 1972-73, an estimated 10-15 percent of infants and children among migratory workers and certain poor rural populations suffered growth retardation from dietary inadequacies.)

Reduced Risk Factors

M.c. By 1990, the prevalence of significant overweight (120 percent of "desired" weight) among the U.S. adult population should be decreased to 10 percent of men and 17 percent of women, without nutritional impairment.^{1,2} (In 1971-74, 23.7 percent of men and 26.0 percent of women 20–74 years of age were overweight.)

¹Same objective in High Blood Pressure Control.

²Overweight is defined for men as body mass index (BMI) greater than or equal to 27.8 kilograms/meter² and for women as 27.3 kilograms/meter². These cut points were used because they represent the sex-specific 85th percentiles of BMI based on measured weight and height for persons 20-29 years of age in the 1976-80 National Health and Nutrition Examination Survey. The language for this objective in terms of BMI would be: By 1990, the prevalence of overweight (BMI of 27.8 or higher for men and 27.3 or higher for women) among the U.S. adult population should be reduced, without impairment of nutritional status, to approximately 18 percent of men and 21 percent of women.

M.d. By 1990, 50 percent of the overweight population should have adopted weight loss regimens, combining an appropriate balance of diet and physical activity. (Baseline data unavailable.)

Race	18 year and ove	of persons is of age ir who are ht, 1990 ^a
	Male	Female
Totalb	25.7	25.9
White Black	25.5 31.8	24.3 40.1

aData are calculated from self-reported height and weight in the 1990 National Health Interview Survey.

blncludes persons of races other than white or black.

In 1990, 30 percent of women 18 years of age and over who were overweight and 22 percent of men who were overweight were both dieting and exercising to lose weight. In 1985, the corresponding percents were 27 and 21, respectively. (Based on body mass index calculated from self-reported height and weight in the 1990 and 1985 National Health Interview Surveys.)

Prevention Profile, 1991 93 M.e. By 1990, the mean serum cholesterol level in the adult population 18–74 years of age should be at or below 200 milligrams per deciliter. (In 1971–74, for adults 20–74 years of age, the mean serum cholesterol level was 214 milligrams/deciliter for men and 217 milligrams/deciliter for women.)³

³All values referenced to Abell-Kendall method. Abell, L. L., et al.: A simplified method for the estimation of total cholesterol in serum and demonstration of its specificity. *J. Biol. Chem.* 195:357–66, 1952.

M.f. By 1990, the mean serum cholesterol level in children 1–14 years of age should be at or below 150 milligrams/deciliter. (In 1971–74, for children 1–17 years of age, the mean serum cholesterol level was 176 milligrams/deciliter.)

M.g. By 1990, the average daily sodium ingestion (as measured by excretion) for adults should be reduced at least to the 3-6-gram range.^{4,5} (Baseline data unavailable.)

⁴Same objective in High Blood Pressure Control. ⁵3–6 grams of salt correspond roughly to 1.2–2.4 grams of sodium.

M.h. By 1990, the proportion of women who breast feed their babies should be increased to 75 percent at hospital discharge and to 35 percent at 6 months of age. (In 1978, the proportion of infants breast fed⁶ at 1 week was 45.1; the proportion of infants breast fed at 6 months was 18.9.)

⁶Data include infants who may receive formulas in addition to breast feeding. Excludes unwed mothers.

Race or ethnicity	Mean serum cholesterol level for adults 20–74 years of age ^a		
	Male	Female	
Total	211	214	
Non-Hispanic white	211	214	
Non-Hispanic black	208	213	
Mexican-American	207	207	
Cuban	204	199	
Puerto Rican	203	209	

^aData are age adjusted. Total and Non-Hispanic data cover 1976–80; Hispanic data cover 1982–84.

SOURCE: Data from National Center for Health Statistics, Division of Health Examination Statistics.

Data from the first 4 years of the revised FDA Total Diet Study (1982–86) indicate that average sodium intakes for adults, excluding salt added at the table, were within the Established Safe and Adequate Daily Dietary Intake range of 1,100–3,300 milligrams established by the National Academy of Sciences in 1980.

Data from the 1990 National Health Interview Survey show that of all children under the age of 5 years, 52 percent were ever breastfed. (National Center for Health Statistics, National Health Interview Survey.)

Year	Percent of infants		
	1 week	6 months	
1978	45.1	18.9	
1979	49.7	21.3	
1980	54.0	23.2	
1981	56.4	25.1	
1982	60.5	27.1	
1983	57.0	23.3	
1984	58.0	23.8	
1985	56.4	22.1	
1986	55.4	21.6	
1987	54.1	20.2	
1988	52.7	19.5	
1990 objective	75.0	35.0	

SOURCE: Data from Ross Laboratories, National Mothers' Surveys. (Copyright; used with permission.)

Increased Public and Professional Awareness

M.i. By 1990, the proportion of the population able to identify the principal dietary factors known or strongly suspected to be related to disease should exceed 75 percent for each of the following diseases: heart disease, high blood pressure, dental caries, and cancer. (Baseline data largely unavailable. About 12 percent of adults are aware of the relationship between high blood pressure and sodium intake.)

M.j. By 1990, 70 percent of adults should be able to identify the major foods that are: low in fat content, low in sodium content, high in calories, good sources of fiber. (Baseline data unavailable.)

M.k. By 1990, 90 percent of adults should understand that to lose weight people must either consume foods that contain fewer calories or increase physical activity or both. (Baseline data unavailable.)

Improved Services and Protection

M.l. By 1990, the labels of all packaged foods should contain useful calorie and nutrient information to enable consumers to select diets that promote and protect good health. Similar information should be displayed where nonpackaged foods are obtained or purchased. (In 1978, 7.5 percent of the national sales from FDA regulated foods bore sodium labeling.)

In 1988, 74 percent of the population 12 years of age and older were aware of the relationship between fat and heart disease; 70 percent were aware of the relationship between cholesterol and heart disease; 64 percent, the relationship between sodium and hypertension; and 25 percent, the relationship between fiber and cancer. In 1985, 88 percent identified avoiding between-meal sweets as being important to preventing tooth decay. (Food and Drug Administration; National Center for Health Statistics, National Health Interview Survey.)

In 1990, 92 percent of adults 18 years and over reported that sodium or salt intake was strongly or somewhat associated with hypertension; 76 percent said that alcohol was strongly or somewhat associated with hypertension; and 83 percent said that cholesterol was strongly or somewhat associated with hypertension. (National Center for Health Statistics, National Health Interview Survey.)

In 1988, less than half of the population 12 years of age and older correctly mentioned specific foods as good sources of fiber. (Food and Drug Administration, Health and Diet Survey.)

In 1990, 69 percent of the population 18 years of age and over reported "eating fewer calories" as one of the two best ways to lose weight; 76 percent said "increasing physical activity," and 54 percent said both. In 1985, 73 percent cited either "eating fewer calories" or "increasing physical activity" as one of the two best ways to lose weight; 55 percent cited both. (National Center for Health Statistics, National Health Interview Survey.)

Year	Percent of sales dollars for products ^a with—		
	Sodium labeling	Nutrition labeling	
1978	7.5	41.9	
1980	13.9	44.3	
1982	18.9	54.5	
1983	30.1	55.2	
1984	40.0	55.0	
1986	59.0	55.0	
1988	65.0	61.0	
1990 objective	100.0	100.0	

^aBased on national sales volume of brands in a sample of approximately 1,700 packaged-processed foods regulated by the Food and Drug Administration and sold in grocery stores in the United States. Excludes fresh and processed meat, bread, fluid milk, ice cream, chip-type snacks, cookies, and carbonated soft drinks

SOURCE: Data from Food and Drug Administration, Division of Consumer Studies.

M.m. By 1990, sodium levels in processed food should be reduced by 20 percent from present levels. (Baseline data unavailable.)

Among established food product lines declaring sodium content, there has been no reduction of sodium after the 1981 implementation of FDA's voluntary sodium initiative. However, the greater availability of sodium-reduced foods since 1981, in conjunction with the mandatory addition of sodium to the nutrition label in 1984, has resulted in a 20 percent reduction in declared sodium content among foods bearing sodium labeling. (Food and Drug Administration's Food Label and Package Survey.)

M.n. By 1985, the proportion of employee and school cafeteria managers who are aware of and actively promoting U.S. Department of Agriculture and Department of Health and Human Services dietary guidelines should be greater than 50 percent. (Baseline data unavailable.)

M.o. By 1990, all States should include nutrition education as part of required comprehensive school health education at elementary and secondary levels. (In 1979, only 10 States mandated nutrition as a core content area in school health education.)

M.p. By 1990, virtually all routine health contacts with health professionals should include some element of nutrition education and nutrition counseling. (Baseline data unavailable.)

In 1989, 19 States mandated nutrition as a core content area in school health education. (American School Health Association.)

Frequency	Percent of adults reporting nutrition counseling during routine care			
	1985	1990	1990 objective	
Often Sometimes	10 16	12 20	100 100	

SOURCE: National Center for Health Statistics, National Health Interview Survey.

Improved Surveillance and Evaluation Systems

M.q. Before 1990, a comprehensive national nutrition status monitoring system should have the capability for detecting nutritional problems in special population groups, as well as for obtaining baseline data for decisions on national nutrition policies.

In 1988, a governmentwide Interagency Committee on Nutrition Monitoring (ICNM), co-chaired by the Assistant Secretary for Health, U.S. Department of Health and Human Services, and the Assistant Secretary for Food and Consumer Services, U.S. Department of Agriculture, was established with oversight responsibility for implementation of the National Nutrition Monitoring System activities.

Physical Fitness and Exercise

Reduced Risk Factors

N.a. By 1990, the proportion of children and adolescents 10–17 years of age participating regularly in appropriate physical activities, particularly cardiorespiratory fitness programs that can be carried into adulthood, should be greater than 90 percent. (Baseline data unavailable.)

N.b. By 1990, the proportion of children and adolescents 10–17 years of age participating in daily school physical education programs should be greater than 60 percent. (In 1974–75, the proportion was 33 percent.)

N.c. By 1990, the proportion of adults 18–64 years of age participating regularly in vigorous physical exercise should be greater than 60 percent. (In 1978, the proportion who regularly exercise was estimated at more than 35 percent.)

N.d. By 1990, 50 percent of adults 65 years of age and over should be engaging in appropriate physical activity, for example, regular walking, swimming, or other aerobic activity. (In 1975, about 36 percent took regular walks.)

Increased Public and Professional Awareness

N.e. By 1990, the proportion of adults who can accurately identify the variety and duration of exercise thought to promote cardiovascular fitness most effectively should be greater than 70 percent. (Baseline data unavailable.)

N.f. By 1990, the proportion of primary care physicians who include a careful exercise history as part of their initial examination of new patients should be greater than 50 percent. (Baseline data unavailable.)

Improved Services and Protection

N.g. By 1990, the proportion of employees of companies and institutions with more than 500 employees and offering employer-sponsored fitness programs should be greater than 25 percent. (In 1979, about 2.5 percent of companies had formally organized fitness programs.)

In 1984, the National Children and Youth Fitness Study found that about 66 percent of children and adolescents, ages 10 to 17, report that they participate 3 or more times per week year-round for at least 20 minutes per session, in activities presumed to require 60 percent or more of maximal cardiorespiratory capacity, and that are considered to be activities that can be carried into adulthood. (Office of Disease Prevention and Health Promotion.)

In 1984, the percent of children in grades 5 through 12 participating in daily school physical education programs was estimated to be 36 percent. (National Children and Youth Fitness Study, Office of Disease Prevention and Health Promotion.)

In 1990, 41 percent of adults 18–64 years of age reported they exercised regularly. An estimated 42 percent regularly exercised in 1985. (National Center for Health Statistics, National Health Interview Survey.)

In 1990, 32 percent exercised or played sports regularly. This figure was 29 percent in 1985. (National Center for Health Statistics, National Health Interview Survey.)

In 1990, 5.2 percent of adults 18 years and over reported that exercise needs to be performed three times per week and maintained for 20 minutes each time to promote cardiovascular fitness. In 1985, 5.1 percent of the population knew the duration, frequency, and intensity of exercise needed to promote cardiovascular fitness most effectively. (National Center for Health Statistics, National Health Interview Survey.)

In 1985, 32.4 percent of worksites with 250–749 employees and 53.7 percent of worksites with 750 or more employees offered exercise or fitness activities. (Office of Disease Prevention and Health Promotion.)

Improved Surveillance and Evaluation Systems

N.h. By 1990, a methodology for systematically assessing the physical fitness of children should be established, with at least 70 percent of children and adolescents 10–17 years of age participating in such an assessment.

N.i. By 1990, data should be available with which to evaluate the short- and long-term health effects of participation in programs of appropriate physical activity.

N.j. By 1990, data should be available to evaluate the effects of participation in programs of physical fitness on job performance and health care costs.

N.k. By 1990, data should be available for regular monitoring of national trends and patterns of participation in physical activity, including participation in public recreation programs in community facilities.

This objective has two targets: 1) the development of methods to assess the fitness of children, and 2) widespread participation by children in the assessment. The first target has been achieved. At least three tests of youth physical fitness, including national norms, are available. However, reliable estimates of the number of children participating in such tests are not available. (Centers for Disease Control, National Center for Chronic Disease Prevention and Health Promotion.)

Since this objective was formulated in 1978, data have increased substantially regarding the effects of physical activity on cardiovascular disease, hypertension, osteoporosis, diabetes, colon cancer, weight management, and depression. Many remaining questions about the health effects of physical activity continue to be investigated. (Centers for Disease Control, National Center for Chronic Disease Prevention and Health Promotion.)

National Resource Center on Worksite Health Promotion files indicate that one-sixth of the major studies on worksite health promotion programs have specifically addressed effects of physical fitness programs in the workplace as of January 1992. According to the National Center for Chronic Disease Prevention and Health Promotion, although studies have been conducted to assess the effects of physical fitness on job performance and health-care costs, concerns about study design, lack of standard operational definitions for job performance and health-care costs, and lack of comparability between measures constrain firm conclusions. What evidence there is shows a positive correlation between physical fitness programs and job performance and lowered health-care costs.

Data on national trends and patterns of physical activity are regularly collected by the National Health Interview Survey.

Control of Stress and Violent Behavior

Improved Health Status

O.a. By 1990, the death rate from homicide among black males 15–24 years of age should be reduced to below 60 per 100,000. (In 1978, the homicide rate for this group was 70.7 per 100,000.)

O.b. By 1990, injuries and deaths to children inflicted by
abusing parents should be reduced by at least 25 percent.
(Baseline data unavailable.)

O.c. By 1990, the rate of suicide among people 15–24 years of age should be below 11 per 100,000. (In 1978, the suicide rate for this age group was 12.1 per 100,000.)

Year	Homicide rate
1978	70.7
1979	76.5
1980	84.3
1981	78.2
1982	72.0
1983	66.8
1984	61.5
1985	66.1
1986	79.2
1987	85.6
1988	101.8
1989	114.8
1990 objective	60.0

SOURCE: Data from National Center for Health Statistics, Division of Vital Statistics.

The incidence rate of child injury or impairment for children from birth to 18 years of age was estimated at 9.8 per 1,000 in 1980 and 16.3 in 1986. (Data from the Office of Human Development Services, Administration for Children, Youth and Families, the Study of National Incidence and Prevalence of Child Abuse and Neglect.)

Year	Suicide rate
1978	12.1
1979	12.4
1980	12.3
1981	12.3
1982	12.1
1983	11.9
1984	12.5
1985	12.9
1986	13.1
1987	12.9
1988	13.2
1989	13.3
1990 ^a	13.6
1990 objective	11.0

aProvisional data.

SOURCE: Data from National Center for Health Statistics, Division of Vital Statistics.

Reduced Risk Factors

O.d. By 1990, the number of handguns in private ownership should decline by 25 percent. (In 1978, the total number of handguns in private ownership was estimated to be 30 million to 40 million.)

There is no central source for compiling data on private ownership of handguns. Several surveys suggest that there is some type of gun in about 50 percent of households in the United States; this is a consistent figure across the surveys. The percent with handguns is estimated to be slightly less. (Centers for Disease Control, National Center for Environmental Health and Injury Control.)

Increased Public and Professional Awareness

O.e. By 1990, the proportion of the population 15 years of age and over that can identify an appropriate community agency to assist in coping with a stressful situation should be greater than 50 percent. (Baseline data unavailable.)

O.f. By 1990, the proportion of young people 15–24 years of age who can identify an accessible suicide prevention "hotline" should be greater than 60 percent. (Baseline data unavailable.)

O.g. By 1990, the proportion of the primary care physicians who take a careful history related to personal stress and psychological coping skills should be greater than 60 percent. (Baseline data unavailable.)

Improved Services and Protection

O.h. By 1990, to reduce the gap in mental health services, the number of persons reached by mutual support or self-help groups should double from 1978 baseline figures. (In 1978, estimates ranged from 2.5 million to 5 million, depending on the definition of such groups.)

O.i. By 1990, stress identification and control should become integral components of the continuum of health services offered by organized health programs (Baseline data unavailable.)

O.j. By 1990, of the 500 largest U.S. firms, the proportion offering work-based stress reduction programs should be greater than 30 percent. (Baseline data unavailable.)

Improved Surveillance and Evaluation Systems

O.k. By 1985, surveys should show what percentage of the U.S. population perceives stress as adversely affecting their health, and what proportion of these are trying to use appropriate stress-control techniques.

O.l. By 1985, a methodology should have been developed to rate the environmental stress loads of major categories of occupations.

O.m. By 1990, the existing knowledge base through scientific inquiry about stress effects and stress management should be greatly enlarged.

In 1984, 12 to 14 million persons were reached by mutual support or self-help groups. (Office of Disease Prevention and Health Promotion.)

In 1985, 60.8 percent of worksites with 750 or more employees offered stress management activities to their employees. (Office of Disease Prevention and Health Promotion.)

In 1990, 41 percent of the population 18 years of age and over indicated that stress had at least some effect on their health; 13 percent had sought help from family, friends, professionals, or self-help groups. The corresponding percents for 1985 were 44 percent and 11 percent, respectively. (National Center for Health Statistics, National Health Interview Survey.)

This objective has not been met. However, efforts are underway to develop a generic questionnaire for job stress and strain and to establish norms. (National Institute for Occupational Safety and Health, Division of Biomedical and Behavioral Science.)

This objective has been met. Significant gains have occurred in expanding the knowledge base about stress effects and stress management. (National Institute for Occupational Safety and Health, Division of Biomedical and Behavioral Science.)

O.n. By 1990, the reliability of data on the incidence and prevalence of child abuse and other forms of family violence should be greatly increased.

Pursuant to Public Law (P.L.) 93-247 (1974) as amended, P.L. 98-457 (1984), and P.L. 100-294 (1988) as amended, the National Center on Child Abuse and Neglect was created to develop a national data collection system which coordinates State reports of officially reported cases of child abuse. The Study of National Incidence and Prevalence of Child Abuse and Neglect, conducted in 1980 and again in 1986, surveyed representative samples of child protective services agencies and professionals located in schools, hospitals, juvenile courts, and other settings. The third study of the incidence of substantiated reported child abuse cases is scheduled for 1992. (National Center on Child Abuse and Neglect, Administration for Children, Youth and Families.)

Prevention Profile, 1991

Summary and Information Tables

Table A. Relative status of 1990 health promotion and disease prevention objectives

1990 objective identifier		Percent of target attained			
	Summary of progress ^a	100 percent and greater	50–99 percent	0–49 percent	Regression
High blood pressure control					
Aa	1000/	~			
Ab	100% -15%	X			X
Women	-1%				X
Ad High blood pressure	206%	X			
Cigarette smoking	(b)				
Diabetes	(^b) 116%	V			
Ae	100%	×			
Ag_Sodium	115%	X			
Calories	(^b) 100%	X			
Al	100%	x			
Family planning					
Ba	-7%				X
Bb	-68%				X X X X
Bc	67% 90%				â
Be	-209%				X
Bg	-22% 105%	V			X
Bh	238%	X X X			
Вј	100%	X			
Pregnancy and infant health					
Ca	83%		X		
Cb White	146% 49%		Х	Х	
Black	41%			â	
Hispanic (1983 Baseline)	143%	X			
Cc	110% 59%	^	X		
Ce White	57%		X	.,	
Black	33%			Χ	
American Indian	54%		X		
Cf	123%	X			
Cg	140% 83%	Х	X		
Gi	5%		^	X	
Cj White	158%	X			V
Black	-8% 141%	×			Х
Hispanic	145%	â			
Ck	178%	X	~		
CI Birth defects	63% (b)		Х		
Mental retardation	(p) (p) (p) (p)				
Miscarriage	(b)				
Low birth weight	\b\ \b\				
Premature birth	(b)				
Miscarriage	(5)				
Cm	7%			X	
Black	1%			X X X	
American Indian	5% 8%			x	
Co				,,	
Cp	-53%	V			X
Cq Phenylketonuria	100% 100%	X			
Cr					
	100%	X			

Table A. Relative status of 1990 health promotion and disease prevention objectives - Con.

			Percent of ta	rget attained	
1990 objective identifier	Summary of progress ^a	100 percent and greater	50–99 percent	0–49 percent	Regression
Immunization					······································
Da	-108%				Χ
Db	68% 99%		X X X		
Dd	98%		â		
De	611%	X			
Dt	-473% 55%		Х		Χ
Dh	113%	X	^		
Di	97%		X X		
Dj Measles	69% -27%		Х		Х
Mumps	44%			X	^
Polio	3%			X X X	
DTP	47% 250%	X		Х	
Rubella	175%	X X X X			
Mumps	125%	X			
Polio	167% 167%	X			
DI	27%	^		X	
Dm	17%			Х	
Dn	48% 100%	X		Х	
Dp Employment-based insurance	45%			X	
Medicaid	100%	X X			
Dq	100% 0%	X		Х	
Case definitions	100%	X		^	
Sexually transmitted diseases					
Ea	102%	X			
Eb Gonococcal	74%	^	X		
Ec Primary/secondary syphilis	-212%				X X
Congenital syphilis	-3255%				Х
Ee ,					
Ef Sexually active 15–44 years of age	60%		X X		
Eg	83%		Х		
El					
<u> </u>	100%	X X			
Ek	100%	Х			
Toxic agent and radiation control					
Fa					
Fb					
Fd	-50%				X
<u>Fe</u>					
Fg					
Fh					
<u> </u>					
Fj					
Fl					
<u>F</u> m			V		
Fo	92%		Х		
Fp					
Fg					
	40001	1/			
Fr. Fs.	100% 0%	Х		X	

Table A. Relative status of 1990 health promotion and disease prevention objectives—Con.

			Percent of ta	rget attained	
1990 objective identifier	Summary of progress ^a	100 percent and greater	50–99 percent	0–49 percent	Regression
Occupational safety and health					
Ga	118% 111% –170% 64%	X X	x		Х
6d	 		^		
ag					
al	175% 	X			
al					
GoGp	100% 18%	X		×	
GqGrGrGrGrGrGrG	0% 0%	.,		X X X	
Gt	100%	X			
Ha	79%		X		
1b	71% 110%	х	X	Х	
-ld	31% 91% 53%		X X	^	
−dg	104% 299% 19%	X X		Х	
Hi	166% 101%	X X	v	^	
H! Poison control center	91% (^b)		Х		
Hn	100% 74% (^b) (^b)	X	Х		
Spinal cord injury centers	(^b) 48% 48%			X	
Fluoridation and dental health					
la	332%	Χ			
c Gingivitis. Destructive periodontal disease	–372%(°) –2685%(°)				X
lef Brush and floss	83%		x		
Fluoridated water	(P) (b) 136%	х			
Dental checkups	(^b) 3% –14%			X	х
Ij Brushing 2X daily	121% (^b)	X			
k	100%	X			

Table A. Relative status of 1990 health promotion and disease prevention objectives - Con.

		Percent of target attained					
1990 objective identifier	Summary of progress ^a	100 percent and greater	50–99 percent	0-49 percent	Regressio		
Surveillance/control of infectious diseases							
Ja	-33%				X		
Jb	55%		X		Х		
lc	–500% 0%			X	^		
le	21%			X			
f							
g	100%	Х					
1.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							
j.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0%			X			
k	100%	X		^			
m							
Smoking and health							
Ka	94%		X				
(b	0% 5%			Χ	Х		
ናር	–5% 46%			X	^		
Ge	119%	X X					
(f Lung cancer	106%	X					
Cancer of larynx	100% 96%	^	X				
Bladder cancer	40%	.,		X			
(g Emphysema	106%	X					
Chronic bronchitis	(^b) 71%		X				
Birth control/stroke	86%		X X				
(i)	166%	X					
(j	0%	^		Х			
XI	100%	X	.,				
۲m	74% 0%		Х	Х			
(n	100%	X		^			
ζρ							
(q							
Alcohol and drug misuse	125%	¥					
Lb	145%	X					
<u> </u>	180%	X	V				
.d	83% 229%		Х		Х		
f					•		
g	109%	X X X X					
_h Alcohol	110% 115%	X					
Cocaine	100%	â					
<u> </u>				V			
_j	0% 359%	X		Х			
Other drugs	133%	â					
I Marijuana	750%	X X X					
Other drugs	100% 71%	Х	Х				
_m Birth defects	55%		â				
Mouth cancer	(b)			V			
Lo Cigarettes	29% (b)			Х			
Marijuana	(b) (b)						
Alcohol	(⁰)						
.p	100%	X					
		^					
	0%			X			

Table A. Relative status of 1990 health promotion and disease prevention objectives - Con.

			Percent of ta	rget attained	
1990 objective identifier	Summary of progress ^a	100 percent and greater	50–99 percent	0–49 percent	Regression
Improved nutrition					
Ma					
Mc Men	-15%				Х
Women	1%			Х	
Md Men	44%		.,	X	
Women	60%		X	٧,	
Me Men	21% 18%			X X	
Mf	1070			^	
Mg	100%	X			
Mň Hospital discharge (1 week)	25%			X X	
6 months	4%		v	X	
Mi Heart disease	90%		X		
Cholesterol	\b\ \b\				
High blood pressureSodium					
Alcohol.	\p\				
Cholesterol	(b) (b) (b) (b) (b) (b) (b) (b) (b) 70%				
Dental caries	(p)				
Snacks	(b)				
Cancer) ₀ (
л; Бат	70%		X		
Sodium	(p)				
<u>Calories</u>	(b) (b)				
Fiber	(^D)		V		
Ak Eating fewer calories	74%		X		
Physical activity	(p)				
Al Sodium labeling	62%		X		
Nutrition labeling	33%			X	
<u>/im</u>					
An,				V	
10	23% 32%			X X	
Ap Often	(b)			^	
Aq	50%		X		
Physical fitness and exercise					
Va	73%		Х		
Nb	11%		^	X	
lc	24%			â	
ld	64%		X		
le	7%			Х	
if	133%	X			
ih Methods	100%	X			
Participation	0%	••		Χ	
VI	100%	X			
₫	100%	X			
NK	100%	X			
Control of stress and violent behavior					
Da	-412%				X X
0c	-464% -109%	X			X
Dd	-10376	^			
)e					
yf					
)g ,	2000/	V			
)h	380%	X			
)	100%	X			
)k	100%	x			
DI	0%			X	
Om	100%	X			
On	100%	X			

^aIn the majority of cases where the baseline and target values were numeric, the summary measure was obtained by the following formula: (Baseline–Achieved)/(Baseline–Target). The column headed "100 percent and greater" indicates objective targets that were fully met. If progress towards the target was made but the target was not attained, the summary value range is 1 to 99 percent. If the achieved value was in the opposite direction of the target from the baseline, the summary percent is negative. Progress towards targets that could not be quantified was summarized as 100 percent if met, and 0 percent if not met.

blncluded in the objective summary measure.

^cBaseline and target measures do not reflect current state-of-the-art measures.

Table B. 1990 health promotion/disease prevention objectives similar to the year 2000

Priority area	1990 objective identifier	Year 2000 objectives similar or identical to 1990 objectives	Brief description
High blood pressure control	Aa Ab Ac Ad Ae Af Ag Ah Ai	15.4 2.9 *2.3 (a) 15.13 (a) 2.14 (a) (a)	Controlled high blood pressure Sodium intake Overweight Knowledge of CHD/stroke risks Blood pressure screening Public programs for blood pressure Nutrition labeling Surveillance Methodology to assess HBP control
Family planning	Ba Bbc Bd Be Be Bi Bi Bj	5.1 5.1 5.1 5.1 5.1 5.2 (a) 5.7 (a) (a)	Births to girls 14 & under Fertility rate (15 year olds) Fertility rate (16 year olds) Fertility rate (17 year olds) Unintended births (unmarried women) Family planning information/education Knowledge of contraceptive methods High estrogen oral contraceptive use Infertility assessments
Pregnancy and infant health	abccdefgcijkci ficopgrs	14.1 14.1 14.1 (a) 14.3 (a) (a) 14.4 14.5 14.5 9.12 14.10 14.11 14.11 14.13 14.14 14.15 14.16	Infant mortality Infant mortality Neonatal mortality Perinatal mortality Maternal mortality Anencephaly & spina bifida Rh disease of newborn Fetal alcohol syndrome Low birth weight Low birth weight Certified car carriers (infants) Knowledge of risks during pregnancy Appropriate prenatal, maternal, & perinatal care First trimester prenatal care Prenatal counseling/screening Appropriate maternal care Neonatal screening for metabolic disorders Appropriate infant care Surveillance
Immunization	Da Db Dc Db Db Db Db Db Db Db Db Db Db Db Db Db	20.1 20.1 20.1 20.1 20.1 20.1 20.1 (a) 20.11 20.11 20.11 20.11 (a) (a) (a) (a) (a) (a) (a) (a)	Measles Mumps Rubella Congenital rubella syndrome Diphtheria Pertussis Tetanus Polio Immunization information Immunizations New vaccines Mass immunization program plan Barriers to immunizations Immunization records Surveillance
Sexually transmitted diseases	5 名比巴巴巴斯坦斯河河	(*) 19.1 19.6 19.3 19.4 (a) 19.2 *19.10 19.12 *18.9 *19.11 19.13 19.15 (a) (a) (a) (a) (a)	Gonorrhea GPID Primary & secondary syphilis/congenital syphilis Neonatal infection due to STDs Nongonococcal urethritis & chlamydia Condom use STD education in schools
Toxic agent and radiation control	EAD CO FEE FEE FEE	11.4 (a) 11.5 11.9 11.7 11.7 (a) 11.7 (a) 11.7 (a) 11.7 (a)	Lead toxicity in children Birth defects & miscarriages Criteria air pollutants Safe drinking water Contaminated ground/surface water & soil Toxic pesticides, herbicides, etc. Inhalation of toxic fumes during transportation Medically unnecessary diagnostic x rays Knowledge of local environmental conditions Knowledge of exposure to toxins Knowledge of environmental health threats

Table B. 1990 health promotion/disease prevention objectives similar to the year 2000 - Con.

Priority area	1990 objective identifier	Year 2000 objectives similar or identical to 1990 objectives	Brief description
Foxic agent and radiation control – Con.	FI Fm Fn	10.15 (a) 11.14	Provider environmental health threat assessments Management of lead toxicity in children Protection against hazards of toxic chemicals
	Fo Fp Fq Fr Fs Ft	(a) (a) (a) (a) 11.16 (a)	Clear labeling of toxic products Access to facilities managing toxic exposure Early warning system for environ. health hazards Emergency response to environmental hazards Surveillance for environmental health hazards Clearinghouse & data registry
Occupational safety and health	ਫ਼ਫ਼ਖ਼ਫ਼	10.1 10.2 (a) 10.4 10.11 10.7 10.8 (a) (a) (a) (a) (a) (a) (a) (a)	Workplace accident deaths Work-related disabling injuries Workdays lost due to injuries Occupational dermatitis Preventable occupational diseases Occupational noise-induced hearing loss Occupational heavy metal poisoning Worksite hazard control plan Worksite hazard control plan Knowledge of occupational health & safety risks Worksite education for occupational risks to health Routine notification of worksite exposures Manager knowledge of safety & health principles Provider occupational health threat assessments Occupational safety/health technologies Standards for health & safety issues Health hazard evaluations Surveillance
njury prevention	зост марстантититититититити	(a)	Surveillance Tracking system for emerging health problems Motor vehicle deaths Child motor vehicle deaths Child home injury deaths Fall-related deaths Drowning deaths Tap water scald injuries Residential fire deaths unintentional firearm deaths Motor vehicle automatic restraint protection Certified car carriers (infants) Functional smoke alarm systems Parental knowledge of childhood health risks Injury prevention counseling by clinicians Ambulance response & transport Access to trauma centers Access to poison control centers Uniform injury reporting
luoridation and dental health	la lb lc ld le lf lg lh li li li	13.1 (a) 13.5 13.6 (a) *9.19 13.5 13.6 (a) 13.9 13.10 13.12 (a) (a) (a)	Dental caries (children) Gingivitis (children) Gingivitis & periodontal disease Availability of highly cariogenic food in schools Protective mouth gear during contact sports Knowledge of risks for dental disease Knowledge about oral hygiene Water fluoridation Fluoridated school water supply Dental services (children) Surveillance Surveillance
Gurveillance/control of infectious diseases	Ja Jb Jc Jd Je Jf Jg Jh Jj Jk Jj Jk J	*20.3 20.4 20.10 20.7 20.5 20.5 (a) (a) (a) (a) (a) (a) (a) (a) (a) (a)	Hepatitis b Tuberculosis Pneumococcal pneumonia Bacterial meningitis Nosocomial infections Nosocomial infection reduction plan Surveillance New vaccines Surveillance Surveillance Surveillance Surveillance Laboratory monitoring of infectious agents Legionellosis
moking and health	Ka Kb Kc Kd Ke Kf	*3.4 *3.4 3.7 14.10 3.5 (a) (a) (a) (a) (a)	Cigarette smoking Cigarette smoking (pregnant women) Cigarette smoking (students) Mg of tar and nicotine per cigarette Knowledge of risks from smoking Knowledge of risks from smoking

Table B. 1990 health promotion/disease prevention objectives similar to the year 2000-Con.

Priority area	1990 objective identifier	Year 2000 objectives similar or identical to 1990 objectives	Brief description
Smoking and health—Con	Kh Ki Ki Kk Kn Kn Ko Kp Kg	(a) 3.10 3.11 (a) (a) 3.12 (a) (a) (a) (a) (a)	Knowledge of risks from smoking (women) Knowledge of risks from smoking (children) Worksite/community smoking cessation programs Cigarette contents listed on packages Strengthened warning on cigarette packages Clean indoor air laws Differential insurance premiums Research by insurance companies Research on low yield cigarettes Research on the changing tobacco product
Alcohol and drug misuse	La Lb Lc Lde Lf Lg Lf Li Lf Lf Lf Lf Lf Lf Lf Lf Lf Lf Lf Lf Lf	4.1 (a) 4.2 14.4 4.3 12.5 12.6 4.8 4.5 4.6 4.5 4.6 4.6 4.6 14.10 (a) 4.10 12.5 12.6	Alcohol-related motor vehicle deaths Alcohol-related accident deaths Cirrhosis deaths Fetal alcohol syndrome Drug-related deaths Adverse prescription drug reactions Alcohol consumption Adolescent drug and alcohol use Adolescent drinking-related problems. Problem drinkers Frequent drug use (young adults) Adolescents reporting frequent use of drugs Knowledge of risks of alcohol during pregnancy Knowledge of risks from alcohol Knowledge of risks from alcohol Counseling for use of prescription drugs
Improved nutrition	Lp Lq Lr Mab Mc Md Me Mf Mg Mh Mi Mi	4.14 12.5 (a) 2.10 2.4 *2.3 *2.7 15.6 (a) 2.9 *14.9 (a) (a) (a)	Worksite substance abuse prevention programs Patient drug profile systems Surveillance Iron deficiency anemia Growth retardation Overweight Weight loss practices Mean serum cholesterol level Mean serum cholesterol level Mean serum cholesterol level Sodium intake Breastfeeding Knowledge of dietary risk factors Knowledge of health benefits from good nutrition
Physical fitness and exercise	MK MM no p q MD c d e t NN NO P NN N	(a) 2.14 (a) 2.17 2.19 2.21 (a) *1.3 1.8 1.4 *1.3 (a) 1.12 1.10 (a) (a) (a) (a) (a) (a) (a)	Knowledge about effective weight loss Nutrition labeling Sodium levels in processed foods Nutritious school/worksite food services Nutrition education in schools Nutrition education/counseling by clinicians Development national nutrition monitoring system Regular physical activity (children) Daily school physical education Vigorous physical activity Regular physical activity Knowledge of health benefits from activity Activity profiles by clinicians Worksite fitness programs Surveillance Data to evaluate health effects of activity Data to evaluate health effects Surveillance
Control of stress and violent behavior	Oa Ob Oc Od Oe Of Og Oh Oi Oj Oo On	7.1 7.4 *6.1 7.11 6.8 (a) 6.13 6.13 6.14 6.12 (a) (a) (a) (a) (a) (a) (a) (a)	Homicide deaths Child abuse Suicide deaths Handguns in private ownership Knowing where to seek help for stress Youth knowledge of suicide prevention programs Stress-related services by clinicians mental health services Stress identification and control Worksite stress reduction programs Surveillance Methodology for occupational stress loads Research base Surveillance

Number of 1990 objectives similar or identical to year 2000 objectives: 139

^{*}Primary objective among duplicate objectives. aNo similar year 2000 objective.

Table C. Data tables for figures 1-32

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	Goal
Figure 1															
Infant mortality															
rates	14.1	13.8	13.1	12.6	11.9	11.5	11.2	10.8	10.6	10.4	10.1	10.0	9.8	9.1	9.0
Figure 2															
White	12.2	11.9	11.3	10.9	10.3	9.9	9.6	9.3	9.2	8.8	8.5	8.4	8.1		
Black	24.4	23.9	22.6	22.2	20.8	20.5	20.0	19.2	19.0	18.9	18.8	18.5	18.6		
Figure 3															
Ages 1-14									_						
years	42.3	42.1	40.1	38.5	38.0	36.7	35.3	34.1	33.8	33.7	33.3	33.2	32.4	30.1	34.0
Figure 4															
Ages 15-24														4044	00.0
years	114.8	115.0	114.8	115.4	107.1	101.0	96.0	96.8	95.9	102.3	99.4	102.1	99.9	104.1	93.0
Figure 5															
Ages 25–64									=	404.0	400.4	440.0	400.0	400.4	400.0
years	532.9	520.3	500.2	498.0	482.1	462.3	452.8	443.5	438.7	431.0	423.4	419.3	409.8	400.4	400.0
Figure 6															
Ages 25-34	400.0	404.7	100.0	105.5	100 1	105.0	101.4	101 1	123.4	132.1	133.2	135.4	138.1	139.6	
years	132.8	131.7	133.0	135.5	132.1	125.2	121.4	121.1	123.4	132.1	133.2	133.4	130.1	139.0	
Ages 35–44 years	247.3	238.7	229.8	227.9	221.3	207.4	201.9	204.8	207.2	212.9	214.1	219.6	221.7	221.1	
Ages 45-54															
years	621.2	610.4	589.7	584.0	573.5	549.7	535.7	521.1	516.3	504.8	498.0	486.2	475.0	463.1	
Ages 55–64		4.00=4	4 000 0	4 0 4 0 0	4 000 4	4 007 0	4 000 5	1 007 0	1 000 7	1 055 1	1 041 0	1 005 6	1 204 4	1175.6	
years	1,408.5	1,387.1	1,338.0	1,346.3	1,322.1	1,297.9	1,299.5	1,287.8	1,282.7	1,255.1	1,241.3	1,235.6	1,204.4	1175.0	
Figure 7															
Restricted-	20.5	40.0	44.0	20.0	20.0	04.0	00.4	01.0	00.4	32.1	30.3	30.6	31.5	31.4	30.0
activity days	36.5	40.3	41.9	39.2	39.9	31.6	32.1	31.8	33.1	32.1	30.3	30.0	\$1.5	31.4	50.0
Figure 8															
Bed-disability	445	145	10.7	10.0	140	147	16.7	15.1	13.7	14.9	14.0	14.4	14.2	13.6	12.0
days	14.5	14.5	13.7	13.8	14.0	14.7	10.7	15.1	13.7	14.5	14.0	14.4	14.2	10.0	12.0
Figure 9															
White male				70.7	71.1	71.5	71.7	71.8	71.9	72.0	72.2	72.3	72.7		
White female				78.1	78.4	78.7	78.7	78.7	78.7	78.8	78.9	78.9	79.2		• • •
Black male				63.8	64.5	65.1	65.4	65.6	65.3	65.2	65.2	64.9	64.8		
Black female				72.5	73.2	73.7	73.6	73.7	73.5	73.5	73.6	73.4	73.5		

	Percent
Figure 10	
Age:	
Under 15 years	2.4
75 years and over	31.7
Sex:	
Male	8.4
Female	9.3
Race:	
White	8.1
Black	15.1
Income:	
Less than \$14,000	18.6
\$50,000 or more	4.0
Location:	
Metropolitan	8.5
Nonmetropolitan	10.4

Table C. Data tables for figures 1-32-Con.

Figure 14 Men 46.3 14.2 5.8 22.0 Women 61.3 22.8 4.5 29.0 Figure 15 All races 36.5 31.3 4.7	19		1984	1985	1986	1987	1988	1989	1990
White 3.3 3.4 3.4 3.4 3.5 3.6 Black Black Black Black Black Figure 12 Total 25.6 Race and sex: White male 22.7 The management of the male of the ma	Figure 11								
Black 6.2 6.3 6.3 6.6 6.2 6.6 6.7 Figure 12 Total. 25.6 34.5 34.5 34.5 34.5 34.5 34.5 34.5 34.5 34.5 34.5 34.6 34.5 34.6 34.6 34.6 34.7	Total	3.6	3.7	3.7	3.7	3.7	3.8	3.9	3.9
Figure 12	White	3.3	3.4	3.4	3.4	3.4	3.5	3.6	3.6
Figure 12	Black	6.2	6.3	6.3	6.6	6.2	6.6	6.7	6.5
Total. 25.6 Race and sex: 27.7 Black male. 34.5 White female. 23.6 Black female. 22.6 Education: 22.6 Less than 12 years. 29.3 13-15 years. 29.3 13-15 years and over. 14.1 Figure 13 Total. 81.9 Age of child: Under 2 years 2-4 years. 92.4 2-4 years. 83.1 5-7 years. 78.6 8-9 years. 78.5 2-9 years. 59.3 12 years 59.3 12 years 59.3 12 years 85.9 16 years and over. 93.0 Coloration of responsible adult: Less than 12 years 59.3 12 years 98.9 16 years and over. 99.0 Figure 14 Men. 46.3 114.2 5.8 22.0 Wom	MANUEL MA			***************************************	Percen	nt			1. TO 12 TO B. W. C. S. STATE STATE STATE OF STA
Race and sex White male	Figure 12					_			
White male. 27.7 Black male. 34.5 White female. 23.6 Black female. 22.6 Education: 22.6 Less than 12 years. 36.7 12 years. 29.3 13-15 years. 23.5 16 years and over. 14.1 Figure 13 Total. 81.9 Age of child: 92.4 Under 2 years. 92.4 2-4 years. 83.1 5-7 years. 83.1 5-7 years. 78.5 8-9 years. 73.7 Education of responsible adult: 12 years. Less than 12 years. 59.3 12 years. 59.3 12 years. 85.9 16 years and over. 93.0 Figure 14 Men. 46.3 14.2 5.8 22.0 Women. 61.3 22.8 4.5 29.0 Women. 66.3 14.2 5.8 22.0 Women. 66.3 15.2 5.8	Total				25.6				
Black male									
White female 23.6 Black female 22.6 Education: 22.6 Less than 12 years 36.7 12 years 29.3 13-15 years 23.5 16 year and over. 14.1 Figure 13 Total. 81.9 Age of child: Under 2 years 92.4 2-4 years. 83.1 5-7 years. 78.6 8-9 years. 73.7 Education of responsible adult: Less than 12 years. 59.3 12 years 78.5 13-15 years. 85.9 16 years and over. 93.0 Figure 14 Men 46.3 14.2 5.8 22.0 Women 61.3 22.8 4.5 29.0 All births First child Second child Th Figure 15 All races 36.5 31.3 4.7									
Black female 22.6 Education:									
Education: Less than 12 years									
Less than 12 years					22.6				
12 years 29.3 13-15 years 23.5 16 years and over 14.1 Figure 13 Total. 81.9 Age of child: Under 2 years 2-4 years 92.4 2-4 years 83.1 5-7 years 78.6 8-9 years 73.7 Education of responsible adult: 12 years Less than 12 years 59.3 12 years 78.5 13-15 years 85.9 16 years and over 93.0 Trying to lose Diet only Exercise only Both Under the property of the pro					26.7				
13-15 years 23.5 16 years and over 14.1 Figure 13 Total 81.9 Age of child: Under 2 years 92.4 2-4 years 83.1 5-7 years 78.6 8-9 years 73.7 Education of responsible adult: Less than 12 years 59.3 12 years 78.5 13-15 years 85.9 16 years and over 93.0 Figure 14 Men 46.3 14.2 5.8 22.0 Women 61.3 22.8 4.5 29.0 All births First child Second child The Figure 15 All races 36.5 31.3 4.7									
16 years and over									
Figure 13 Total	•								
Total 81.9 Age of child: 92.4 Under 2 years 92.4 2-4 years 83.1 5-7 years 78.6 8-9 years 73.7 Education of responsible adult: Less than 12 years 59.3 12 years 78.5 13-15 years 85.9 16 years and over 93.0 Men 46.3 14.2 5.8 22.0 Women 61.3 22.8 4.5 29.0 Momen All births First child Second child The Figure 15 All races 36.5 31.3 4.7					17.1				
Age of child: Under 2 years 92.4 2–4 years 83.1 5–7 years 78.6 8–9 years 73.7 Education of responsible adult: Less than 12 years 59.3 12 years 78.5 13–15 years 85.9 16 years and over 93.0 Trying to lose Diet only Exercise only Both Universal Reverse only Both Second Child The Figure 15 All races All races 36.5 31.3 4.7 In reversal Reverse only Both Second Child The Reverse only Both Both Second Child The Reverse only Both Bo	ŭ				81 9				
Under 2 years 92.4 2-4 years 83.1 5-7 years 78.6 8-9 years 73.7 Education of responsible adult: Less than 12 years Less than 12 years 59.3 12 years 78.5 13-15 years 85.9 16 years and over 93.0 Men 46.3 14.2 5.8 22.0 Women 61.3 22.8 4.5 29.0 Men 61.3 5.8 22.0 7.0 </td <td></td> <td></td> <td></td> <td></td> <td>01.5</td> <td></td> <td></td> <td></td> <td></td>					01.5				
2–4 years. 83.1 5–7 years. 78.6 8–9 years. 73.7 Education of responsible adult: Less than 12 years 59.3 12 years 78.5 13–15 years. 85.9 16 years and over. 93.0 Figure 14 Figure 14 Men. 46.3 14.2 5.8 22.0 Women. 61.3 22.8 4.5 29.0 All births First child Second child The Figure 15 All races 36.5 31.3 4.7	- -				92.4				
5–7 years. 78.6 8–9 years. 73.7 Education of responsible adult: 59.3 Less than 12 years. 59.3 12 years. 78.5 13–15 years. 85.9 16 years and over. 93.0 Trying to lose Diet only Exercise only Both Wen. 46.3 14.2 5.8 22.0 Women. 61.3 22.8 4.5 29.0 All births First child Second child The Figure 15 All races. 36.5 31.3 4.7	•								
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13–15 years 85.9 16 years and over. 93.0 Trying to lose Diet only Exercise only Both Or Both Figure 14 Wen 46.3 14.2 5.8 22.0 Women 61.3 22.8 4.5 29.0 All births First child Second child The Figure 15 All races 36.5 31.3 4.7	Less than 12 years				59.3				
93.0 Trying to lose Diet only Exercise only Both University B					78.5				
Trying to lose Diet only Exercise only Both Diet only Diet only Exercise only Both Diet only Diet only Diet only Exercise only Both Diet only Diet	•				85.9				
Figure 14 Men 46.3 14.2 5.8 22.0 Women 61.3 22.8 4.5 29.0 All births First child Second child The Figure 15 All races 36.5 31.3 4.7					93.0				
Figure 14 Men 46.3 14.2 5.8 22.0 Women 61.3 22.8 4.5 29.0 All births First child Second child Th Figure 15 All races 36.5 31.3 4.7						· · · · · · · · · · · · · · · · · · ·	·- //···		Other and
Men 46.3 14.2 5.8 22.0 Women 61.3 22.8 4.5 29.0 All births First child Second child The Figure 15 All races 36.5 31.3 4.7			Trying to lose	Die	t only	Exercise only	/ Both		unknown
Women. 61.3 22.8 4.5 29.0 All births First child Second child The Figure 15 All races 36.5 31.3 4.7	J								
All births First child Second child Th Figure 15 Second child Th All races 36.5 31.3 4.7									4.3
Figure 15 All races	Women		61.3	2	2.8	4.5	29.0		5.0
All races			All births	·	First child	Se	cond child		Third child
	Figure 15								
White			36.5		31.3		4.7		0.6
2.0	White		28.3		25.1		2.9		0.3
Black	Black		80.0		64.0		13.7		2.1
All persons White male Black male White female Black			All persons	White ma	le Bla	ck male	White female		Black female
Figure 16	Figure 16				·	· · · · · ·			
Heart disease	Heart disease		155.9	205.9	2	272.6	106.6		172.9
Figure 17	Figure 17								
	J		28.0	28.0		54.1	24.1		44.9
						•			
Figure 18 Cancer 133.0 157.2 230.6 110.7 1			132.0	1570	,	220 6	110.7		100.0
			133.0	157.2	2	2JV.b	110./		130.9
Figure 19	<u>•</u>								
Motor vehicle crashes	Motor vehicle crashes		18.9	26.8		29.4	11.5		9.1
Figure 20	Figure 20								
Homicide and legal intervention 9.4 8.1 61.5 2.8	Homicide and legal intervention		9.4	8.1		61.5	2.8		12.5

Table C. Data tables for figures 1-32-Con.

	All	persons	· · · · · · · · · · · · · · · · · · ·	White ma	le	Black male	e \	White female	Black	female
Figure 21										
1980		15.6		15.5		4.7		84.3		18.4
1981		14.7		14.4		4.3		78.2		16.9
1982		13.7		13.1		4.4		72.0		15.3
1983		12.4		11.5		3.7		66.8		15.7
1984		12.0		11.1		4.3		61.5		14.8
1985		12.1		11.2		3.6		66.1		14.2
1986		14.2		12.5		4.3		79.2		16.2
1987		14.0		11.2		3.9		85.6		17.7
1988		15.4		11.5	ı	3.9		101.8		17.4
1989		16.9		12.8		3.9		114.8		17.3
Figure 22										
Suicide		11.3		19.€		12.5		4.8		2.4
Figure 23										
1980		12.3		21.4		4.6		12.3		2.3
1981		12.3		21.1		4.9		11.1		2.4
1982		12.1		21.2		4.5		11.0		2.2
1983		11.9		20.6		4.6		11.5		2.7
1984		12.5		22.0		4.7		11,2		2.4
1985		12.9		22.7		4.7		13.3		2.0
1986		13.1		23.6		4.7		11.5		2.3
1987		12.9		22.7		4.6		12.9		2.5
						4.6				2.6
1988		13.2 13.3		23.4 23.2		4.4		14.5 16.7		2.8
Figure 24										
HIV infection		8.7		13.1		40.3		0.9		8.1
Figure 25										
Heart diseases				870.0	ı	1,435.9		314.6	7	99.6
Cancer				838.4		1,107.3		824.6	9	26.0
Unintentional injuries		~		1,461.1		1,951.3		530.2	6	52.5
Homicide				278.4		2,251.8		96.7	4	74.3
HIV				399.6		1,106.6		30.9	2	76.8
Other				2,677.6		6,369.6		1,606.8	4,3	02.3
Mexican American Puerto F	Rican (Cuban		tral and American	Chinese	Japanese		American India Alaskan Nativ		Black
Figure 26										
1st Trimester	7	83.2		60.8	81.5	86.2	77.6	57.9	78.9	60.0
Figure 27		00.2		00.0	01.0	00.2	11.0	07.0	10.0	00.0
3rd Trimester or no										
prenatal care 14.6 11.3	3	4.0		11.9	3.6	2.7	4.7	13.4	5.2	11.9
	Total		panic rigin	Incom than \$			n less tha school	n Black	70 years and c	-
Figure 28			9,	παιτφ	. 5,000	nigii		Diagn	und	
5										
Clinical breast examination and	47.4	4	2.0	30	0	33	17	42.0	36.	Ω
mammogram	71.4	4	٠٧.٧	30	.5	33		42.0	36.	ن.
Figure 29										
Ever had Pap test	93.2		6.6	87		87			86.	
Pap test in past 3 years	80.7	7	7.1	71	.9	70).2		68.	.6
	18 yea	ars and	over	18–29 y	ears	30-44 yea	rs 45	-64 years	65 years ar	nd over
Figure 30										
Total		75.1		71.		71.4		77.1	84.8	
								-		١
Male		69.3		61.5	5	64.9		74.3	84.0	,
Male		69.3 80.4		61.5 81.5		64.9 77.6		74.3 79.6	84.0 85.3	

Table C. Data tables for figures 1-32-Con.

	Percent
Figure 31	
Total	15.7
Race:	
White	14.5
Black	21.9
Poverty status:	
In poverty	36.0
Not in poverty	11.5
Employment:	
Currently employed	14.3
Unempolyed	39.2
Not in labor force	18.5
Education:	
Less than 12 years	30.1
12 years	16.6
More than 12 years	9.2

	Usual source	Not in poverty	In poverty
Figure 32			
White male	71.6	72.3	59.4
Black male	64.6	66.0	58.3
White female	84.6	85.4	76.8
Black female	85.0	86.3	81.9



List of Detailed Tables

Health, United States, 1991

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Table 1. Resident population, according to age, sex, race, and Hispanic origin: United States, selected years 1950–89

[Data are based on decennial census updated by 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					N	umber in	thousand	3				
1950	150,697 179,323 203,212 226,546 243,400 245,807 248,239	3,147 4,112 3,485 3,534 3,771 3,859 3,945	13,017 16,209 13,669 12,815 14,481 14,597 14,807	24,319 35,465 40,746 34,942 34,146 34,655 35,162	22,098 24,020 35,441 42,487 38,252 37,398 36,514	23,759 22,818 24,907 37,082 43,315 43,675 43,834	21,450 24,081 23,088 25,635 34,305 35,264 36,503	17,343 20,485 23,220 22,800 23,276 24,162 24,896	13,370 15,572 18,590 21,703 22,019 21,831 21,593	8,340 10,997 12,435 15,581 17,668 17,897 18,182	3,278 4,633 6,119 7,729 9,301 9,522 9,761	577 929 1,511 2,240 2,867 2,948 3,042
White male												
1950. 1960. 1970. 1980. 1987. 1988. 1989.	67,129 78,367 86,721 94,976 100,589 101,389 102,223	1,400 1,784 1,501 1,487 1,567 1,599 1,623	5,845 7,065 5,873 5,402 6,000 6,031 6,093	10,860 15,659 17,667 14,773 14,108 14,296 14,477	9,689 10,483 15,232 18,123 15,902 15,478 15,058	10,430 9,940 10,775 15,940 18,384 18,491 18,527	9,529 10,564 9,979 11,010 14,690 15,063 15,571	7,836 9,114 10,090 9,774 9,851 10,240 10,549	6,180 6,850 7,958 9,151 9,180 9,087 8,978	3,736 4,702 4,916 6,096 7,028 7,124 7,250	1,406 1,875 2,243 2,600 3,154 3,240 3,336	218 331 487 621 723 739 761
White female												
1950	67,813 80,465 91,028 99,835 105,231 105,988 106,738	1,341 1,714 1,434 1,412 1,487 1,517 1,541	5,599 6,795 5,615 5,127 5,700 5,732 5,794	10,431 15,068 16,912 14,057 13,377 13,552 13,725	9,821 10,596 15,420 17,653 15,479 15,065 14,643	10,851 10,204 11,004 15,896 18,024 18,126 18,142	9,719 11,000 10,349 11,232 14,783 15,134 15,604	7,868 9,364 10,756 10,285 10,217 10,600 10,913	6,168 7,327 8,853 10,325 10,202 10,064 9,901	4,031 5,428 6,366 7,951 8,788 8,867 8,973	1,669 2,441 3,429 4,457 5,284 5,389 5,502	314 527 890 1,440 1,887 1,940 2,000
Black male												
1950	7,300 9,114 10,748 12,585 14,103 14,325 14,545	281 245 269 289 300 314	1,082 975 967 1,104 1,123 1,155	1,442 2,185 2,784 2,614 2,697 2,739 2,785	1,162 1,305 2,041 2,807 2,740 2,712 2,673	1,105 1,120 1,226 1,967 2,549 2,598 2,631	1,003 1,086 1,084 1,235 1,663 1,736 1,817	772 891 979 1,024 1,117 1,145 1,170	460 617 739 854 961 969 975	299 382 461 567 647 660 676	137 169 228 268 272 278	29 46 53 69 70 72
Black female												
1950 1960 1970 1980 1987 1988	7,745 9,758 11,832 14,046 15,633 15,877 16,115	283 243 266 283 293 305	1,085 970 951 1,069 1,086 1,116	1,446 2,191 2,773 2,578 2,620 2,656 2,696	1,300 1,404 2,196 2,937 2,812 2,781 2,737	1,260 1,300 1,456 2,267 2,855 2,906 2,940	1,112 1,229 1,309 1,488 1,990 2,074 2,170	796 974 1,134 1,258 1,375 1,412 1,448	443 663 868 1,059 1,164 1,170 1,175	322 430 582 776 871 886 901	160 230 360 442 454 464	38 71 106 152 158 165
Hispanic male												
1980	7,280 9,637 9,973 10,317	173 220 223 236	675 830 858 895	1,530 1,877 1,928 1,976	1,646 1,872 1,889 1,901	1,255 2,008 2,104 2,185	761 1,197 1,277 1,361	570 713 740 773	364 514 528 542	201 260 275 291	86 117 120 123	19 28 30 32
Hispanic female												
1980 1987 1988 1989	7,329 9,535 9,857 10,188	166 212 215 228	648 799 827 864	1,482 1,802 1,850 1,897	1,547 1,760 1,779 1,796	1,249 1,823 1,898 1,962	805 1,218 1,287 1,360	615 771 802 837	411 583 603 620	257 339 356 373	116 178 186 194	30 50 54 59

NOTES: The race groups, white and black, include persons of both Hispanic and non-Hispanic origin. Conversely, persons of Hispanic origin may be of any race. Population figures are census counts as of April 1 for 1950, 1960, 1970, and 1980 and estimates as of July 1 for other years.

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; Population estimates and projections. Current Population Reports. Series P-25, Nos. 499, 1022, 1045, 1046, and 1057. Washington. U.S. Government Printing Office, May 1973, Mar. 1988, Sept. 1989, Jan. 1990, and Mar. 1990; U.S. Bureau of the Census, U.S. Census of Population: 1960, Number of Inhabitants, PC(1)-A1, United States Summary, 1964. U.S. Bureau of the Census, U.S. Census of Population: 1970, Number of Inhabitants, Final Report PC(1)-A1, United States Summary, 1971; Unpublished data from the U.S. Bureau of the Census.

Table 2. Persons and families below poverty level, according to selected characteristics, race, and Hispanic origin: United States, selected years 1973–90

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

Selected characteristics, race, and Hispanic origin	1973	19801	1985	1986	1987	1988	1989	1990
All persons				Percent be	low poverty			
All races	11.1	13.0	14.0	13.6	13.4	13.0	12.8	13.5
White	8.4 31.4 21.9	10.2 32.5 25.7	11.4 31.3 29.0	11.0 31.1 27.3	10.4 32.4 28.0	10.1 31.3 26.7	10.0 30.7 26.2	10.7 31.9 28.1
Related children under 18 years of age in families								
All races	14.2	17.9	20.1	19.8	19.7	19.0	19.0	19.9
White	9.7 40.6 27.8	13.4 42.1 33.0	15.6 43.1 39.6	15.3 42.7 37.1	14.7 44.4 38.9	14.0 42.8 37.3	14.1 43.2 35.5	15.6 44.7 38.2
Families with female householder, no husband present, and children under 18 years of age								
All races	43.2	42.9	45.4	46.0	45.5	44.7	42.8	44.5
White	35.2 58.8	35.9 56.0 57.3	38.7 58.9 64.0	39.8 58.0 59.5	38.3 58.6 60.9	38.2 56.2 59.2	36.1 53.9 57.9	37.9 56.1 58.2
All persons			Nun	nber below po	verty in thous	ands		
All races	22,973	29,272	33,064	32,370	32,221	31,745	31,528	33,585
White	15,142 7,388 2,366	19,699 8,579 3,491	22,860 8,926 5,236	22,183 8,983 5,117	21,195 9,520 5,422	20,715 9,356 5,357	20,785 9,302 5,430	22,326 9,837 6,006
Related children under 18 years of age in families								
All races	9,453	11,114	12,483	12,257	12,275	11,935	12,001	12,715
White	5,462 3,822 1,364	6,817 3,906 1,718	7,838 4,057 2,512	7,714 4,037 2,413	7,398 4,234 2,606	7,095 4,148 2,576	7,164 4,257 2,496	8,084 4,528 2,827
Families with female householder, no husband present, and children under 18 years of age								
All races	1,987	2,703	3,131	3,264	3,281	3,294	3,190	3,426
White	1,053 905 	1,433 1,217 288	1,730 1,336 493	1,812 1,384 489	1,742 1,437 527	1,740 1,452 510	1,671 1,415 491	1,814 1,513 536

¹Data for Hispanic families with female householder, no husband present, and children under 18 years are for 1979.

NOTES: The race groups, white and black, include persons of both Hispanic and non-Hispanic origin. Conversely, persons of Hispanic origin may be of any race. SOURCE: U.S. Bureau of the Census: Poverty in the United States 1990. Current Population Reports. Series P-60, No. 175. Washington. U.S. Government Printing Office, Aug. 1991.

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Table 3 (page 1 of 2). Live births, crude birth rates, and birth rates by age of mother, according to race: United States, selected years 1950–90

							Age				
Race and year	Live births	Crude birth rate ¹	10–14 years	15–17 years	18–19 years	2024 years	25–29 years	30-34 years	35–39 years	40–44 years	45–49 years
All races						Live birth	ns per 1,00	0 women			
1950	. 4,257,850 . 3,731,386	24.1 23.7 18.4 14.6	1.0 0.8 1.2 1.3	40.7 43.9 38.8 36.1	132.7 166.7 114.7 85.0	196.6 258.1 167.8 113.0	166.1 197.4 145.1 108.2	103.7 112.7 73.3 52.3	52.9 56.2 31.7 19.5	15.1 15.5 8.1 4.6	1.2 0.9 0.5 0.3
1980	. 3,629,238 . 3,680,537 . 3,638,933 . 3,669,141 . 3,760,561 . 3,756,547 . 3,809,394 . 3,909,510	15.9 15.8 15.9 15.5 15.5 15.8 15.6 15.7 15.9 16.3	1.1 1.1 1.1 1.2 1.2 1.3 1.3 1.3	32.5 32.1 32.4 32.0 31.1 31.1 30.6 31.8 33.8 36.5	82.1 81.7 80.7 78.1 78.3 80.8 81.0 80.2 81.7 86.4	115.1 111.8 111.3 108.3 107.3 108.9 108.2 108.9 111.5	112.9 112.0 111.0 108.7 108.3 110.5 109.2 110.8 113.4 116.6	61.9 61.4 64.2 64.6 66.5 68.5 69.3 71.3 73.7 76.2	19.8 20.0 21.1 22.1 22.8 23.9 24.3 26.2 27.9 29.7	3.9 3.8 3.9 3.8 3.9 4.0 4.1 4.4 4.8 5.2	0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2
Provisional data: 1988 ² 1989 ² 1990 ²	. 4,021,000	15.9 16.2 16.7									
Race of child ³ : White											
1950	. 3,600,744 . 3,091,264	23.0 22.7 17.4 13.6	0.4 0.4 0.5 0.6	31.3 35.5 29.2 28.0	120.5 154.6 101.5 74.0	190.4 252.8 163.4 108.2	165.1 194.9 145.9 108.1	102.6 109.6 71.9 51.3	51.4 54.0 30.0 18.2	14.5 14.7 7.5 4.2	1.0 0.8 0.4 0.2
1980	. 2,908,669 . 2,942,054 . 2,904,250 . 2,923,502 . 2,991,373 . 2,970,439 . 2,992,488 . 3,046,162	14.9 14.8 14.9 14.6 14.5 14.8 14.5 14.5 14.7	0.6 0.5 0.6 0.6 0.6 0.6 0.6 0.6 0.6	25.2 25.1 25.2 24.8 23.9 24.0 23.4 24.1 25.5 27.5	72.1 71.9 70.8 68.3 68.1 70.1 69.8 68.6 69.2 72.6	109.5 106.3 105.9 102.6 101.4 102.8 101.5 101.1 102.5 105.7	112.4 111.3 110.3 108.0 107.7 110.0 108.3 109.5 111.6 114.3	60.4 60.2 63.3 64.0 66.1 68.1 68.9 70.8 72.9 75.3	18.5 18.7 20.0 21.0 21.7 22.7 23.3 25.2 26.9 28.8	3.4 3.5 3.5 3.5 3.6 3.7 4.0 4.4 4.8	0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2
Race of mother4: White											
1989	. 3,192,355	15.3	0.7	28.3	74.7	108.0	116.1	76.6	29.3	4.9	0.2
Race of child3: Black											
1960	. 572,362	31.9 25.3 20.7	4.3 5.2 5.1	101.4 85.6	204.9 152.4	295.4 202.7 142.8	218.6 136.3 102.2	137.1 79.6 53.1	73.9 41.9 25.6	21.9 12.5 7.5	1.1 1.0 0.5
1980 1981 1982 1983 1984 1985 1986 1987 1988	587,797 592,641 586,027 592,745 608,193 621,221 641,567 671,976	22.1 21.6 21.4 20.9 20.8 21.1 21.2 21.6 22.2 23.1	4.3 4.1 4.1 4.3 4.5 4.6 4.7 4.8 5.0	73.6 70.6 71.2 70.1 69.7 69.8 70.0 72.9 76.6 82.4	138.8 135.9 133.3 130.4 132.0 137.1 141.0 142.2 150.5 160.8	146.3 141.2 139.1 137.7 137.9 140.8 143.7 149.5 157.5 165.5	109.1 108.3 106.9 103.4 103.2 105.1 105.9 109.0 112.8 119.0	62.9 60.4 60.4 59.2 59.5 60.7 62.2 63.5 66.0 69.4	24.5 24.2 24.4 24.7 24.8 25.5 25.5 26.3 27.5 28.7	5.8 5.6 5.4 5.2 5.1 4.9 5.1 5.3 5.6 6.0	0.3 0.4 0.3 0.2 0.3 0.3 0.2 0.3 0.2

See footnotes at end of table.

Table 3 (page 2 of 2). Live births, crude birth rates, and birth rates by age of mother, according to race: United States, selected years 1950–90

[Data are based on the National Vital Statistics System]

			Age								
Race and year	Live births	Crude birth rate ¹	10–14 years	15–17 years	18–19 years	20–24 years	25–29 years	30–34 years	35–39 years	40–44 years	45–49 years
Race of mother ⁴ : Black						Live birth	s per 1,00	0 women			
989	673,124	22.0	5.0	80.0	153.2	157.1	112.6	65.1	26.8	5.5	0.3

¹Live births per 1,000 population.

NOTE: Data are based on births adjusted for underregistration for 1950 and on registered births for all other years. Beginning in 1970, births to nonresidents of the United States are excluded.

SOURCES: National Center for Health Statistics: Vital Statistics of the United States, 1989, Vol. I, Natality. Public Health Service. Washington. U.S. Government Printing Office, 1991; and Births, marriages, divorces, and deaths for 1990. Monthly Vital Statistics Report. Vol. 39, No. 12. DHHS Pub. No. (PHS) 91–1120. April 8, 1991. Public Health Service. Hyattsville, Md.

²Includes births of nonresidents of the United States.

³Live births are tabulated by race of child.

⁴Live births are tabulated by race of mother.

Table 4. Fertility rates, according to live-birth order and race: United States, selected years 1950-90 [Data are based on the National Vital Statistics System]

				Live-birth order		Live-birth order								
Race and year	Total	1	2	3	4	5 or higher								
All races			Live births per	1,000 women 15-	-44 years of age									
1950	106.2	33.3	32.1	18.4	9.2	13.2								
1960	118.0	31.1	29.2	22.8	14.6	20.3								
1970	87.9	34.2	24.2	13.6	7.2	8.7								
1975	66.0	28.1	20.9	9.4	3.9	3.7								
1980	68.4	29.5	21.8	10.3	3.9	2.9								
	67.4	29.0	21.6	10.2	3.8	2.8								
1982	67.3	28.6	22.0	10.2	3.8	2.6								
1983	65.8	27.8	21.5	10.1	3.7	2.6								
1985	65.4	27.4	21.7	10.1	3.7	2.6								
1986	66.2	27.6	22.0	10.4	3.8	2.5								
	65.4 65.7	27.2	21.6	10.3	3.8	2.5								
1987	65.7	27.2	21.6	10.5	3.9	2.5								
1988	67.2	27.6	22.0	10.9	4.1	2.6								
1989	69.2	28.4	22.4	11.3	4.3	2.8								
Provisional data:														
19881	67.3													
19891,	68.8													
1990¹	71.1													
Race of child ² : White														
1950	102.3	33.3	32.3	17.9	8.4	10.4								
1960	113.2	30.8	29.2	22.7	14.1	16.4								
1970	84.1	32.9	23.7	13.3	6.8	7.4								
1975	62.5	26.7	20.3	8.8	3.5	3.1								
1980	64.7	28.4	21.0	9.5	3.4	2.4								
1981	63.9	28.1	20.9	9.4	3.3	2.3								
1982	63.9	27.7	21.3	9.5	3.3	2.2								
1983	62.4	26.8	20.9	9.4	3.3	2.1								
1984	62.2	26.4	21.1	9.4	3.2	2.0								
1985	63.0	26.5	21.4	9.7	3.3	2.0								
1986	61.9	26.0	20.9	9.6	3.3	1.9								
1987	62.0	25.9	20.9	9.8	3.4	1.9								
1988	63.0	26.2	21.1	10.1	3.6	2.1								
1989	64.7	26.9	21.4	10.5	3.7	2.2								
Race of mother ³ : White														
1989	66.0	27.5	21.8	10.7	3.8	2.2								
Race of child 2: Black														
1960	153.5	33.6	29.3	24.0	18.6	48.0								
1970	115.4	43.3	27.1	16.1	10.0	18.9								
1975	87.9	36.9	24.2	12.6	6.3	8.0								
1980	88.1	35.2	25.7	14.5	6.7	6.0								
1981	85.4	33.8	25.2	14.3	6.6	5.7								
1982	84.1	33.0	24.9	14.2	6.5	5.4								
1983	81.7	32.3	24.1	13.7	6.3	5.2								
1984	81.4	32.2	24.1	13.7	6.3	5.1								
1985	82.2	32.4	24.5	13.9	6.3	5.1								
1986	82.4	32.5	24.5	14.1	6.3	4.9								
1987	83.8	32.8	24.9	14.5	6.5	5.0								
1988	86.6	33.5	25.8	15.1	6.9	5.3								
1989	90.4	34.7	26.7	15.9	7.4	5.7								
Race of mother ³ : Black														
1989	85.8	32.7	25.3	15.2	7.1	5.5								

¹Includes births of nonresidents of the United States. ²Live births are tabulated by race of child.

NOTE: Data are based on births adjusted for underregistration for 1950 and on registered births for all other years. Beginning in 1970, births to nonresidents of the United States are excluded. Figures for live-birth order not stated are distributed.

SOURCES: National Center for Health Statistics: Vital Statistics of the United States, 1989, Vol. I, Natality. Public Health Service. Washington. U.S. Government Printing Office, 1991; and Births, marriages, divorces, and deaths for 1990. Monthly Vital Statistics Report. Vol. 39, No. 12. DHHS Pub. No. (PHS) 91–1120. April 8, 1991. Public Health Service. Hyattsville, Md.

³Live births are tabulated by race of mother.

Table 5. Completed fertility rates and parity distribution for women 50–54 years of age at the beginning of selected years 1930–90, according to race of child and birth cohort: United States, selected birth cohorts 1876–80 to 1936–40

	Ago E0 E4	Completed -			Pa	rity (numbe	er of childre	en born aliv	re)		
Race of child and birth cohort of mother	as of January 1, —	fertility	Total	0	1	2	3	4	5	6	7 or more
All races						Distrib	ution of wo	men²			
1876–80	1930	3,531.9	1,000.0	216.8	123.2	132.0	114.0	93.0	72.0	64.5	184.5
1886–90 <i></i>		3,136.8	1,000.0	210.4	148.5	153.2	129.7	99.5	68.0	55.4	135.3
1896–1900	1950	2,675.9	1,000.0	194.6	200.7	195.2	136.6	87.8	53.5	41.5	90.1
1906–10		2,285.8	1,000.0	215.6	225.1	218.7	131.4	77.5	44.6	29.2	57.9
1916–20		2,574.0	1,000.0	149.0	179.0	251.7	174.6	102.8	55.8	32.0	55.1
1921–25	1975	2,857.0	1,000.0	108.5	152.1	248.7	197.0	123.5	68.0	39.5	62.7
1926–30 <i></i>	1980	3,079.2	1,000.0	105.5	113.7	226.5	209.6	143.5	81.9	47.6	71.7
1927–31		3,118.0	1,000.0	104.1	107.3	222.4	212.0	147.6	84.6	49.2	72.8
1928–32		3,152.7	1,000.0	101.1	102.2	219.7	214.7	151.3	87.0	50.8	73.2
1929–33	1983	3,182.8	1,000.0	96.3	98.9	218.0	217.7	154.9	89.2	52.0	73.0
930–34	1984	3,199.6	1,000.0	91.5	96.8	217.8	220.9	157.9	90.7	52.6	71.8
1931–35		3,201.4	1,000.0	87.2	96.3	218.8	224.0	160.0	91.4	52.5	69.8
932-36	1986	3,182.4	1,000.0	84.8	97.0	221.0	226.9	160.8	91.3	51.7	66.5
933-37	1987	3,146.4	1,000.0	84.0	98.7	224.4	229.5	160.6	90.2	50.2	62.4
1934–38	1988	3,092.6	1,000.0	85.0	100.8	229.7	232.0	159.2	87 <i>.</i> 7	48.1	57.5
1935–39		3,026.3	1,000.0	86.9	103.8	236.6	234.2	156.6	84.2	45.6	52.1
936–40		2,949.7	1,000.0	89.6	107.1	245.7	236.1	152.6	79.9	42.4	46.6
White											
1876–80	1930	3,444.4	1,000.0	218.2	121.9	136.1	116.9	94.8	74.0	64.2	173.9
886–90	1940	3,092.9	1,000.0	209.1	144.3	160.3	132.4	100.2	70.3	54.8	128.6
896-1900	1950	2,631.5	1,000.0	193.1	192.1	205.9	141.4	89.0	55.2	41.1	82.2
1906–10	1960	2,248.9	1,000.0	207.9	218.0	233.2	138.8	79.6	44.7	28.0	49.8
1916–20	1970	2,526.7	1,000.0	134.6	175.9	268.7	185.1	106.5	55 <i>.</i> 3	30.3	43.6
1921–25	1975	2,793.7	1,000.0	94.2	150.6	264.6	208.8	127.9	67.9	36.9	49.1
1926–30		2,986.0	1,000.0	94.1	114.1	240.2	222.3	148.8	81.2	44.5	54.8
1927–31	1981	3,022.6	1,000.0	92.5	108.2	236.8	223.9	153.1	83.9	46.0	55.6
1928–32	1982	3,057.9	1,000.0	89.5	103.2	232.9	227.6	157.2	86.5	47.2	55.9
1929–33	1983	3,087.2	1,000.0	85.0	99.8	231.2	230.5	161.1	88.6	48.2	55.6
1930–34	1984	3,102.5	1,000.0	81.2	97.6	230.5	233.6	164.1	90.0	48.5	54.5
1931–35	1985	3,101.2	1,000.0	78.5	96.8	231.1	236.4	166.0	90.5	48.2	52.5
1932–36		3,080.0	1,000.0	77.9	97.0	232.9	239.2	166.3	89.9	47.3	49.5
1933–37		3,042.3	1,000.0	78.6	98.5	236.2	241.6	165.5	88.1	45.5	46.0
1934–38		2,990.0	1,000.0	80.7	100.6	241.2	243.9	163.3	85.2	43.1	42.0
1935–39		2,926.9	1,000.0	83.2	103.6	248.4	245.7	159.8	81.3	40.3	37.7
1936–40		2,854.7	1,000.0	86.3	107.1	257.6	247.1	154.9	76.5	37.2	33.3
All other											
1876–80	1930	4,254.7	1,000.0	207.7	134.0	99.5	87.4	79.9	54.7	64.8	272.0
1886–90		3,451.4	1,000.0	231.9	175.9	105.9	96.6	93.3	52.4	58.0	186.0
1896–1900		2,967.7	1,000.0	227.4	255.0	114.1	97.5	74.3	38.8	42.6	150.3
1906–10		2,529.1	1,000.0	287.5	266.6	114.5	73.2	60.1	43.5	35.6	119.0
1916–20		2,924.2	1,000.0	266.2	202.0	120.9	91.2	72.5	57.8	44.9	144.5
1921–25		3,316.0	1,000.0	217.7	163.5	131.7	108.2	89.0	68.7	56.4	164.8
1926–30		3,718.9	1,000.0	187.4	110.8	130.2	121.0	106.4	85.7	69.3	189.2
1927–31		3,756.0	1,000.0	185.7	102.5	129.1	123.0	109.1	88.1	71.5	191.0
1928–32		3,779.4	1,000.0	181.6	96.7	129.4	126.5	111.4	90.2	73.5	190.7
1929–33		3,805.1	1,000.0	172.4	93.2	132.3	130.1	114.4	93.1	75.1	189.4
1930–34		3,822.2	1,000.0	160.3	92.2	136.0	135.3	117.5	95.5	76.9	186.3
1931–35		3,836.2	1,000.0	145.1	93.4	140.8	140.4	121.8	98.2	78.4	181.9
1932–36		3,830.3	1,000.0	131.0	96.4	145.5	145.5	125.9	100.5	79.9	175.3
		3,805.9	1,000.0	119.4	99.8	150.3	150.2	129.9	102.4	80.6	167.4
1933–37		3,745.8	1,000.0	113.4	102.8	154.9	155.3	132.7	102.7	80.6	157.2
1934–38				111.5	102.6	160.6	160.4	135.3	102.7	79.2	145.2
1935–39		3,661.6	1,000.0			168.2	165.6	137.2	101.3	76.9	131.4
1936–40	. 1990	3,556.1	1,000.0	111.8	107.6	100.2	100.0	101.4	101.0	10.5	101.4

¹Number of children born alive to each 1,000 women who have completed their reproductive histories (women 50–54 years of age). ²Proportional distribution of each 1,000 women in the cohort by the number of children born alive to them.

NOTES: Example of use of table – For every 1,000 women 50–54 years of age in 1981, an average of 3,118.0 children were born alive (about 3 children per woman). About 10 percent of the women in this cohort reached 50–54 years of age having had no children, about 11 percent had 1 child, and about 12 percent had 6 children or more. There is a small discontinuity between 1980 and 1981 in the central birth rates, which are the basis for the completed fertility rates, because of a change in the population bases. The impact of this change on the completed rates is negligible.

SOURCES: National Center for Health Statistics: Fertility Tables for Birth Cohorts by Color, United States, 1917–73 by R. Heuser. DHEW Pub. No. (HRA) 76–1152. Health Resources Administration. Washington. U.S. Government Printing Office, Apr. 1976; Data computed from Vital Statistics of the United States, 1989, Vol. I, Natality. Public Health Service. Washington. U.S. Government Printing Office, 1991.

Table 6. Lifetime births expected by currently married women and percent of expected births already born, according to age and race: United States, selected years 1967–90

[Data are based on reporting of birth expectations by currently married women of the civilian noninstitutionalized population]

Race and year	All ages 18–34 years	18–19 years	20–21 years	22–24 years	25–29 years	30–34 years
All races		Expected	births per curre	ently married wor	man	
1967. 1971. 1975. 1980. 1985. 1986. 1987.	3.1 2.6 2.3 2.2 2.2 2.3 2.2	2.7 2.3 2.2 2.1 2.1 2.2	2.9 2.4 2.2 2.2 2.2 2.2 2.2	2.9 2.4 2.2 2.1 2.2 2.3 2.2	3.0 2.6 2.3 2.2 2.3 2.3 2.3	3.3 3.0 2.6 2.2 2.2 2.2
1990	2.2 2.3	2.1 2.1	2.2 2.2	2.2 2.3	2.3 2.3	2.2 2.3
White						
1967. 1971. 1975. 1980. 1985. 1986. 1987. 1988.	3.0 2.6 2.3 2.2 2.2 2.2 2.2 2.2 2.2	2.7 2.3 2.2 2.1 2.0 2.1 2.0 2.1	3.0 2.4 2.1 2.2 2.2 2.2 2.2 2.2 2.2	2.8 2.4 2.1 2.1 2.2 2.3 2.2 2.2 2.3	3.0 2.6 2.2 2.1 2.2 2.2 2.2 2.3 2.3	3.2 2.9 2.6 2.2 2.1 2.2 2.2 2.3
Black						
1967. 1971. 1975. 1980. 1985. 1986. 1987. 1988. 1990.	3.5 3.1 2.8 2.4 2.4 2.3 2.3 2.5	* * * * * * * 2.1	2.5 2.6 2.2 * * * 2.4	3.0 2.8 2.5 2.1 2.3 2.4 2.2 2.2 2.6	3.4 3.1 2.6 2.4 2.3 2.3 2.3 2.3 2.4	4.3 3.7 3.2 2.5 2.5 2.3 2.3 2.6
All races		Percen	t of expected bi	rths already borr	า	
1967. 1971. 1975. 1980. 1985. 1986. 1987. 1988. 1990.	70.2 69.4 68.8 67.0 64.2 64.7 66.5 65.3 64.5	26.9 25.3 27.5 29.5 27.0 29.0 27.8 25.0 29.9	33.2 32.5 30.7 32.9 30.9 30.4 36.4 33.4 33.1	47.8 46.7 43.9 44.9 41.8 41.8 43.0 40.9 44.2	76.1 74.4 70.9 64.7 60.2 59.5 62.0 58.9 57.5	92.7 93.7 93.0 89.7 84.4 84.8 83.8 83.6 81.1
White						
1967. 1971. 1975. 1980. 1985. 1986. 1987. 1988. 1990.	68.9 68.9 68.3 63.3 63.8 65.6 64.4 63.6	24.2 23.7 24.9 28.6 25.7 28.6 27.0 24.0 26.8	30.1 31.4 29.4 31.8 30.6 28.7 36.0 32.6 30.0	46.2 45.3 42.3 43.5 40.4 40.5 42.0 38.9 43.1	75.1 74.1 70.5 64.0 59.4 58.6 60.9 58.2 56.2	92.9 93.8 93.2 90.0 84.1 84.8 83.6 83.2 80.8
Black	92.0	*	65.7	67.0	07.0	00.0
1967 1971 1975 1980 1985 1986 1987 1988	82.8 74.8 76.4 74.7 77.1 75.7 77.8 75.5 74.1	* * * * * * 49.0	65.7 43.0 43.3 46.1 * * * 54.8	67.9 57.5 61.0 58.9 62.3 59.7 55.4 61.4 56.6	87.9 81.0 78.2 73.8 72.8 70.2 76.6 70.1 71.9	92.3 93.4 91.8 90.9 91.4 90.0 89.7 89.9 85.0

NOTE: Data for 1989 are not available.

SOURCE: U.S. Bureau of the Census: Population characteristics. Current Population Reports. Series P-20, Nos. 301, 375, 406, 421, 427, 436, and 454. Washington. U.S. Government Printing Office, Nov. 1976, Oct. 1982, June 1986, Dec. 1987, May 1988, May 1989, and Oct. 1991.

Table 7 (page 1 of 2). Low birth weight live births, according to race and Hispanic origin of mother: United States, 1970 and 1980–89

Race, and Hispanic origin of mother	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
					Total nu	mber of live	births 1				
All mothers	3,731,386	3,612,258	3,629,238	3,680,537	3,638,933	3,669,141	3,760,561	3,756,547	3,809,394	3,909,510	4,040,958
White	3,109,956		2,947,679 564,955	2,984,817 568,506	2,946,468 562,624	2,967,100 568,138		3,019,175 592,910	3,043,828 611,173		3,192,355 673,124
Alaskan Native Asian or Pacific	22,264	29,389	29,688	32,436	32,881	33,256	34,037	34,169	35,322	37,088	39,478
Islander	27,706 7,044 7,744 8,066		84,553 12,628 7,589 15,040	93,193 12,552 7,211 15,419	95,713 13,193 7,190 16,413	98,926 14,725 7,625 18,680	104,606 16,405 8,035 20,058	107,797 16,701 7,938 21,237	116,560 17,818 8,054 22,134	129,035 21,322 8,658 23,207	133,075 20,982 8,689 24,585
Other Asian or Pacific Islander ²	4,852	41,234	49,296	58,011	58,917	57,896	60,108	61,921	68,554	75,848	78,819
Hispanic origin ^{3,4} Mexican American Puerto Rican		215,439 33,671	321,954 222,143 33,376 8,369	337,390 227,558 34,108 9,603	336,833 221,788 33,856 9,709	346,986 225,767 34,219 9,477	242,976 35,147	389,048 246,174 36,588 9,924	406,153 251,189 38,139 9,987	449,604 271,170 46,232 10,189	532,249 327,233 56,229 10,842
American Other and unknown		21,268	24,380	28,958	31,043	36,401	40,985	45,026	50,350	57,610	72,443
Hispanic Non-Hispanic white ³ Non-Hispanic black ³		1,245,221			40,437 1,358,303 321,787	41,122 1,361,814 325,754	1,394,729	51,336 1,388,251 342,179	56,488 1,399,129 355,644	64,403 1,664,239 434,843	65,502 2,526,367 611,269
Low birth weight (less than 2,500 grams)					Perc	ent of live b	pirths				
All mothers	7.93	6.84	6.81	6.75	6.82	6.72	6.75	6.81	6.90	6.93	7.05
White	6.85 13.90		5.69 12.72		5.69 12.82	5.61 12.58	5.65 12.65	5.66 12.77	5.70 12.98	5.67 13.26	5.72 13.51
Alaskan Native Asian or Pacific	7.97	6.44	6.27	6.06	6.17	6.15	5.86	5.94	6.15	6.00	6.26
Islander	9.03	5.21 6.60		5.26 6.09	6.57 5.07 6.05 7.28	6.57 5.05 5.91 7.78	4.98 6.21	6.47 4.85 6.03 7.42	6.41 5.02 6.49 7.30	6.31 4.63 6.69 7.15	6.51 4.89 6.67 7.35
Pacific Islander ²	9.36	6.87	6.89	7.03	6.77	6.65	6.22	6.64	6.47	6.48	6.66
Hispanic origin ^{3,4} Mexican American Puerto Rican Cuban		5.62 8.95	5.61 9.01	5.72 9.11	6.29 5.77 8.90 5.65	6.15 5.68 8.88 5.86	5.77 8.69	6.13 5.62 9.22 5.46	6.24 5.74 9.30 5.89	6.17 5.60 9.42 5.94	6.18 5.60 9.50 5.77
American Other and unknown		5.76	5.73	5.61	6.20	5.81	5.68	5.69	5.74	5.58	5.81
Hispanic Non-Hispanic white ³ Non-Hispanic black ³			7.00 5.63 12.79	5.62	7.23 5.64 12.83	6.89 5.53 12.54	5.60	6.87 5.58 12.85	5.63	6.85 5.62 13.28	6.74 5.62 13.61
Very low birth weight (less than 1,500 grams)											
All mothers	1.17	1.15	1.16	1.18	1.19	1.19	1.21	1.21	1.24	1.24	1.28
White	.95 2.40					.93 2.60		.93 2.73			.95 2.95
Alaskan Native Asian or Pacific	.98	.92	.89	1.06	1.07	1.02	1.01	.99	1.13	1.00	1.00
Islander	1.48	.66 .94	.68 .75	.70 .94	.63	.93 .70 .81 .97	.57 .84	.86	.65 .80	.57 .92	.90 .61 .86 1.12
Other Asian or Pacific Islander ²	1.37	.97	.99	.95	.90	.98	.92	.92	.84	.89	.91

See footnotes at end of table.

Table 7 (page 2 of 2). Low birth weight live births, according to race and Hispanic origin of mother: United States, 1970 and 1980-89

[Data are based on the National Vital Statistics System]

Race, and Hispanic origin of mother	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Very low birth weight (less than 1,500 grams)—Con.					***************************************	ent of live b					7000
Hispanic origin 3.4 Mexican American		.98 .92 1.29 1.02	.98 .92 1.43 1.17	.99 .93 1.54 .90	1.03 .96 1.46 .97	1.01 .93 1.49 1.04	1.01 .97 1.30 1.18	1.02 .94 1.47 1.09	1.06 .96 1.63 .97	1.01 .89 1.61 1.17	1.05 .94 1.71 1.13
American Other and unknown		.99	.93	.83	.99	1.04	1.01	1.04	1.02	.97	1.05
Hispanic Non-Hispanic white ³ Non-Hispanic black ³		1.01 .86 2.46	.93 .87 2.50	1.03 .89 2.53	1.08 .90 2.57	1.05 .88 2.56	.96 .90 2.66	1.08 .89 2.68	1.15 .91 2.73	1.11 .89 2.82	1.04 .93 2.97

¹Includes live births with unknown birth weight.

NOTES: The race groups, white and black, include persons of both Hispanic and non-Hispanic origin. Conversely, persons of Hispanic origin may be of any race. SOURCE: National Center for Health Statistics: Data computed by the Division of Analysis from data compiled by the Division of Vital Statistics.

Includes live births with an and part Hawaiians.

Placta shown only for States with an Hispanic-origin item on their birth certificates.

⁴Includes mothers of all races.

Table 8 (page 1 of 2). Prenatal care and maternal education for live births, according to race and Hispanic origin of mother: United States, 1970 and 1980–89

Prenatal care, education, race, and Hispanic origin of mother	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Prenatal care began during 1st trimester					Perce	nt of live	births				
All mothers	68.0	76.3	76.3	76.1	76.2	76.5	76.2	75.9	76.0	75.9	75.5
White. Black. American Indian or Alaskan Native. Asian or Pacific Islander Chinese Japanese Filipino Other Asian or Pacific Islander¹.	67.3	79.2 62.4 55.8 73.7 82.6 86.1 77.3 67.6	79.3 62.1 56.6 73.2 82.6 85.2 77.5 67.4	79.2 61.1 57.7 73.3 81.9 85.6 76.8 68.9	79.3 61.2 56.6 73.9 80.4 86.6 77.4 69.9	79.6 61.9 57.4 74.7 81.5 87.0 77.8 70.2	79.3 61.5 57.5 74.1 82.0 84.7 76.5 69.7	79.1 61.2 58.2 74.9 82.2 85.7 78.2 70.3	79.3 60.8 57.6 75.0 81.5 86.6 77.9 71.0	79.3 60.7 58.1 75.5 82.3 86.3 78.4 71.5	78.9 60.0 57.9 74.8 81.5 86.2 77.6 70.8
Hispanic origin ^{2,3} Mexican American Puerto Rican Cuban Central and South American Other and unknown Hispanic Non-Hispanic white ² Non-Hispanic black ²		60.2 59.6 55.1 82.7 58.8 66.4 81.2 60.7	60.6 60.1 54.2 80.1 58.3 66.9 81.3 60.7	61.0 60.7 54.5 79.3 58.5 66.0 81.1 59.7	61.0 60.2 55.1 81.2 59.3 66.6 81.3 59.9	61.5 60.4 57.4 82.2 61.1 66.7 81.6 60.6	61.2 60.0 58.3 82.5 60.6 65.8 81.4 60.1	60.3 58.9 57.2 81.8 58.8 66.6 81.5 60.1	61.0 60.0 57.4 83.1 59.1 65.5 81.7 60.0	61.3 58.3 63.2 83.4 62.8 67.3 81.8 60.4	59.5 56.7 62.7 83.2 60.8 66.0 82.7 59.9
Prenatal care began during 3d trimester or no prenatal care											
All mothers	7.9	5.1	5.2	5.5	5.6	5.6	5.7	6.0	6.1	6.1	6.4
White. Black. American Indian or Alaskan Native. Asian or Pacific Islander Chinese Japanese Filipino Other Asian or Pacific Islander¹.	6.3 16.6 28.9 6.8 6.5 4.1 7.2 10.7	4.3 8.9 15.2 6.5 3.7 2.1 4.0 9.0	4.3 9.2 14.7 6.6 3.8 2.5 3.6 9.0	4.5 9.7 14.0 6.6 3.5 2.5 3.8 8.5	4.6 9.8 14.4 6.5 4.6 2.4 4.1 8.2	4.7 9.7 13.8 6.4 4.2 2.6 4.3 8.1	4.8 10.2 12.9 6.5 4.4 3.1 4.8 8.1	5.0 10.7 12.9 6.2 4.2 3.1 4.5 7.8	5.0 11.2 13.1 6.3 4.2 2.8 4.9 7.8	5.0 11.0 13.2 5.9 3.4 3.3 4.8 7.3	5.2 11.9 13.4 6.1 3.6 2.7 4.7 7.6
Hispanic origin ^{2,3} Mexican American Puerto Rican Cuban Central and South American Other and unknown Hispanic Non-Hispanic white ² Non-Hispanic black ²		12.0 11.8 16.2 3.9 13.1 9.2 3.5 9.7	11.6 11.6 15.8 4.2 12.4 8.3 3.6 9.9	12.1 12.0 17.2 4.9 13.4 9.3 3.8 10.6	12.5 12.7 17.4 4.0 13.3 9.0 3.9 10.7	12.6 13.0 16.3 4.0 12.6 9.1 3.9 10.6	12.4 12.9 15.5 3.7 12.5 9.4 4.0 10.9	13.0 13.4 17.4 4.2 13.8 9.0 4.1 11.4	12.7 13.0 17.1 3.9 13.5 9.3 4.1 11.8	12.1 13.9 10.2 3.6 9.9 8.8 4.1 11.0	13.0 14.6 11.3 4.0 11.9 9.3 3.7 12.0
Education of mother less than 12 years											
All mothers	30.8	23.7	22.9	22.3	21.7	20.9	20.6	20.4	20.2	20.4	23.2
White. Black. American Indian or Alaskan Native. Asian or Pacific Islander Chinese Japanese Filipino Other Asian or Pacific Islander ¹ .	60.5 22.0 23.0 11.8 26.4	20.8 36.4 44.2 21.0 15.2 5.0 16.4 26.4	19.9 35.7 43.0 23.0 16.1 4.7 16.0 29.3	19.3 35.1 41.8 23.3 17.3 4.3 15.6 29.3	18.7 34.5 41.3 21.7 18.2 4.0 15.0 26.6	18.1 33.4 40.0 20.2 18.2 3.5 13.4 24.8	17.8 32.6 39.0 19.4 15.5 4.8 13.9 23.5	17.7 31.9 39.2 17.9 12.3 4.0 12.6 22.2	17.4 31.6 38.5 17.9 13.5 3.1 12.3 21.7	17.6 31.4 37.9 17.9 14.2 3.5 11.8 21.7	21.6 30.4 37.2 19.5 14.9 3.3 10.2 26.1
Hispanic origin ^{2,3} Mexican American Puerto Rican Cuban Central and South American Other and unknown Hispanic Non-Hispanic white ² Non-Hispanic black ²		51.1 62.8 55.3 24.1 41.2 40.1 18.3 37.4	49.5 61.9 53.9 26.9 39.3 39.5 17.4 36.6	48.0 60.5 52.9 27.0 39.2 38.7 17.3 36.4	46.5 59.4 50.0 24.6 39.5 38.9 16.7 35.4	44.9 58.7 48.2 22.4 37.1 36.0 15.9 34.2	44.5 59.0 46.6 21.1 37.0 36.5 15.8 33.5	43.4 58.9 44.8 19.7 35.9 33.7 15.7 32.6	42.8 58.4 44.3 18.7 34.1 34.3 15.3 32.2	42.5 56.9 45.2 18.1 31.8 34.1 16.7 31.8	52.8 61.3 43.7 17.9 43.6 34.5 15.3 29.9

See footnotes at end of table.

Table 8 (page 2 of 2). Prenatal care and maternal education for live births, according to race and Hispanic origin of mother: United States, 1970 and 1980-89

[Data are based on the National Vital Statistics System]

Prenatal care, education, race, and Hispanic origin of mother	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Education of mother 16 years or more					Perce	nt of live	births				
All mothers	8.6	14.0	14.8	15.3	15.8	16.4	16.7	17.1	17.6	17.7	17.4
White. Black. American Indian or Alaskan Native. Asian or Pacific Islander Chinese Japanese Filipino Other Asian or Pacific Islander¹.	9.6 2.8 2.7 20.9 34.0 20.7 28.1 3.1	15.5 6.2 3.5 30.8 41.5 36.8 37.1 25.5	16.4 6.5 3.7 29.4 40.8 35.2 36.8 24.2	16.9 6.7 3.6 29.3 38.2 38.4 36.6 24.2	17.6 6.7 3.4 30.0 38.0 38.8 35.8 25.6	18.3 6.9 3.6 30.4 36.4 39.8 35.8 26.4	18.6 7.0 3.7 30.3 35.2 38.1 35.2 27.1	19.2 7.1 3.8 31.4 36.8 41.3 35.4 28.0	19.8 7.1 3.7 32.0 36.8 41.8 36.9 28.8	20.1 7.1 3.7 31.7 36.4 42.3 35.5 28.6	19.2 7.2 4.3 31.2 40.5 43.6 36.0 25.3
Hispanic origin ^{2,3} Mexican American Puerto Rican Cuban Central and South American Other and unknown Hispanic Non-Hispanic white ² Non-Hispanic black ²		4.2 2.2 3.0 11.6 6.1 5.5 16.4 5.7	4.6 2.4 3.4 10.7 6.8 6.0 17.2 6.1	5.0 2.8 3.7 11.2 7.1 6.0 17.6 6.3	5.2 2.8 3.9 12.4 6.6 6.4 18.3 6.3	5.7 2.9 4.3 13.7 7.6 7.0 18.9 6.5	6.0 3.0 4.6 15.0 8.1 7.2 19.3 6.7	6.5 3.3 4.9 15.4 8.4 8.7 19.8 6.9	6.6 3.2 5.4 17.3 8.8 7.6 20.4 6.8	7.0 3.7 5.3 18.2 10.1 8.0 20.4 6.9	5.1 3.2 6.3 19.2 8.2 7.7 22.0 7.2

NOTES: Excludes births that occurred in States not reporting education and/or prenatal care (see Appendix I). The race groups, white and black, include persons of both Hispanic and non-Hispanic origin. Conversely, persons of Hispanic origin may be of any race.

SOURCE: National Center for Health Statistics: Data computed by the Division of Analysis from data compiled by the Division of Vital Statistics.

¹Includes Hawaiians and part Hawaiians. ²Data shown only for States with an Hispanic-origin item on their birth certificates.

³Includes mothers of all races.

Table 9. Maternal age and marital status for live births, according to race and Hispanic origin of mother: United States, 1970 and 1980–89

Age, marital status, race, and Hispanic origin of mother	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Age of mother less than 18 years	·····				Perce	nt of live	births				
All mothers	6.3	5.8	5.4	5.2	5.0	4.8	4.7	4.8	4.8	4.8	4.8
White. Black. American Indian or Alaskan Native. Asian or Pacific Islander Chinese Japanese	4.8 14.8 7.5 3.1 1.1 2.0	4.5 12.5 9.4 1.5 .3 1.0	4.3 11.7 9.1 1.6 .2 1.0	4.1 11.4 8.5 1.7 .3 1.3	3.9 11.2 8.7 1.6 .3	3.7 10.8 7.9 1.6 .2	3.7 10.6 7.6 1.6 .3	3.7 10.6 8.0 1.7 .2	3.7 10.7 7.9 1.8 .2	3.7 10.6 7.8 1.8 .3	3.6 10.5 7.5 2.0 .3
Filipino	3.7 7.0	1.6 1.8	1.6 2.0	1.6 2.0	1.8 1.9	2.0 2.0	1.6 2.1	1.7 2.2	1.8 2.3	1.7 2.4	1.9 2.6
Hispanic origin ^{2,3}		7.4 7.7 10.0 3.8 2.4 6.5 4.0 12.7	7.3 7.7 9.8 3.6 2.4 6.5 3.8 11.9	7.2 7.5 9.9 3.2 2.6 6.9 3.6 11.6	7.0 7.5 9.3 2.6 2.6 7.1 3.4 11.2	6.7 7.2 8.5 2.5 2.4 7.0 3.2 10.9	6.4 6.9 8.5 2.2 2.4 7.0 3.2 10.7	6.5 6.9 8.4 2.3 2.4 7.3 3.2 10.6	6.6 7.0 8.7 2.1 2.7 7.7 3.2 10.7	6.6 7.0 9.2 2.2 2.7 7.6 3.2 10.8	6.7 6.9 9.4 2.7 3.0 8.0 3.0
Age of mother 18-19 years											
All mothers	11.3	9.8	9.4	9.0	8.7	8.3	8.0	7.8	7.6	7.7	8.1
White. Black. American Indian or Alaskan Native. Asian or Pacific Islander Chinese Japanese Filipino Other Asian or Pacific Islander¹.	10.4 16.6 12.8 6.6 3.9 4.1 7.1 13.8	9.0 14.5 14.6 3.9 1.0 2.3 4.0 4.9	8.6 14.1 13.9 4.1 1.0 2.6 3.9 5.2	8.2 13.7 13.8 4.1 .8 2.5 4.3 4.9	7.9 13.6 13.3 3.7 .6 2.3 3.8 4.5	7.4 13.3 13.1 3.4 .5 2.3 3.5 4.3	7.1 12.9 12.4 3.4 .6 1.9 3.7 4.2	7.0 12.6 12.1 3.4 .5 1.9 3.4 4.3	6.8 12.2 11.8 3.3 .6 1.6 3.4 4.1	6.9 12.3 11.4 3.4 .5 1.8 3.8 4.3	7.2 12.9 12.1 3.7 .7 1.8 4.0 4.6
Hispanic origin ^{2,3} Mexican American Puerto Rican Cuban Central and South American Other and unknown Hispanic Non-Hispanic white ² Non-Hispanic black ²		11.6 12.0 13.3 9.2 6.0 10.8 8.5 14.7	11.2 11.7 13.3 9.2 5.8 10.4 8.1 14.1	11.1 11.5 13.1 8.2 6.4 11.3 7.8 13.9	10.6 10.9 13.2 6.8 6.0 11.2 7.4 13.5	10.3 10.8 12.8 5.7 5.7 10.9 6.8 13.4	10.1 10.6 12.4 4.9 5.8 10.5 6.6 12.9	9.9 10.5 12.5 4.5 5.7 10.0 6.4 12.6	9.7 10.3 11.8 4.1 5.3 10.5 6.2 12.2	9.8 10.3 12.2 3.9 5.4 10.8 6.6 12.4	10.0 10.5 12.6 4.3 5.6 11.2 6.5 13.0
Unmarried mothers											
All mothers. White. Black. American Indian or Alaskan Native. Asian or Pacific Islander. Chinese. Japanese Filipino Other Asian or Pacific Islander 1. Hispanic origin 2-3	10.7 5.5 37.5 22.4 8.7 3.0 4.6 9.1 16.5	18.4 11.2 56.1 39.2 7.3 2.7 5.2 8.6 8.5 23.6	18.9 11.8 56.9 41.2 7.0 2.4 6.2 9.1 7.7 24.5	19.4 12.3 57.7 42.6 7.9 2.5 7.1 9.9 8.7 25.6	20.3 12.9 59.2 45.3 8.6 3.3 7.2 10.3 9.5 27.5	21.0 13.6 60.3 46.1 9.2 3.4 6.9 10.8 10.4 28.3	22.0 14.7 61.2 46.8 9.5 3.0 7.9 11.4 10.9 29.5	23.4 15.9 62.4 48.8 10.0 3.5 7.9 12.0 11.4 31.6	24.5 16.9 63.4 51.1 11.0 4.5 7.9 12.7 12.4 32.6	25.7 18.0 64.7 51.7 11.5 3.9 8.8 13.6 13.2 34.0	27.1 19.2 65.7 52.7 12.4 4.2 9.4 14.8 14.2 35.5
Hispanic origin ^{2,3} Mexican American Puerto Rican Cuban Central and South American Other and unknown Hispanic Non-Hispanic white ² Non-Hispanic black ²		20.3 46.3 10.0 27.1 22.4 9.6 57.3	24.5 20.7 48.0 14.3 29.0 25.0 10.0 58.0	25.6 21.9 49.0 15.9 30.2 26.3 10.5 59.0	27.5 23.7 49.5 16.1 33.0 28.2 11.0 60.5	26.3 24.2 50.8 16.2 34.0 30.0 11.5 61.5	29.5 25.7 51.1 16.1 34.9 31.1 12.4 62.1	27.9 52.6 15.8 38.0 31.9 13.5 63.3	28.9 53.0 16.1 37.1 34.2 14.3 64.2	30.6 53.3 16.3 36.4 35.5 15.2 64.8	31.7 55.2 17.5 38.9 37.0 16.1 66.0

¹Includes Hawaiians and part Hawaiians.

NOTES: For 1970 excludes births that occurred in States not reporting marital status (see Appendix I). The race groups, white and black, include persons of both Hispanic and non-Hispanic origin. Conversely, persons of Hispanic origin may be of any race.

SOURCE: National Center for Health Statistics: Data computed by the Division of Analysis from data compiled by the Division of Vital Statistics.

²Data shown only for States with an Hispanic-origin item on their birth certificates (see Appendix I).

³Includes mothers of all races.

Table 10. Low birth weight live births, according to race of mother, geographic division, and State: United States, average annual 1977–79, 1982–84, and 1987–89

		All races			White			Black	
Geographic division and State	1977–79	1982–84	1987–89	1977–79	1982–84	1987–89	1977–79	198284	1987–89
			Percent of	live births	weighing le	ess than 2,	500 grams		
United States	7.02	6.76	6.96	5.89	5.65	5.70	12.86	12.67	13.26
New England	6.36	5.97	5.93	5.93	5.51	5.36	12.91	12.45	12.40
Maine	5.35	5.37	5.03	5.34	5.35	5.02	*	*	*
New Hampshire	5.76	5.08	4.96	5.74	5.07	4.94	*	*	*
Vermont	6.47 6.33	5.96	5.25	6.42	5.96 5.46	5.23			
Massachusetts	6.67	5.89 6.19	5.88 6.10	5.98 6.19	5.46 5.69	5.30 5.60	11.74 *13.68	11.65 *12.38	11.53 *11.09
Connecticut	6.93	6.60	6.77	6.00	5.70	5.75	14.03	13.36	13.86
Middle Atlantic	7.35	6.96	7.35	6.09	5.72	5.78	13.30	12.67	13.92
New York	7.67	7.16	7.67	6.34	5.87	6.00	12.99	12.07	13.72
New Jersey	7.42	7.03	7.11	5.88	5.60	5.51	13.69	13.00	13.62
Pennsylvania	6.83	6.61	6.97	5.85	5.58	5.64	13.72	13.96	14.71
East North Central	6.87	6.64	6.97	5.72	5.43	5.56	13.43	13.53	13.97
Ohio	6.84	6.59	6.83	5.89	5.63	5.74	13.14	12.82	13.07
Indiana	6.46	6.35	6.55	5.77	5.67	5.85	12.35	12.15	12.50
Illinois	7.42	7.17	7.53	5.69	5.39	5.55	13.86	13.93	14.34
Michigan	7.12	6.96	7.36	5.87	5.56	5.63	13.55	14.26	14.80
Wisconsin	5.52	5.19	5.54	5.07	4.63	4.74	12.76	12.72	13.39
West North Central	5.87	5.63	5.82	5.35	5.09	5.19	13.16	12.74	13.04
Minnesota	5.20 5.21	4.98 4.89	4.97 5.32	5.03 5.06	4.76 4.73	4.58 5.14	*12.32 *12.20	*12.43 *11.89	13.66
lowa	6.84	6.66	6.91	5.69	5.55	5.73	13.41	12.99	*11.55 13.08
North Dakota	5.23	4.77	4.90	5.03	4.66	4.75	*	*	*
South Dakota	5.29	5.11	5.07	5.17	4.80	4.90	*	*	*
Nebraska	5.62	5.42	5.60	5.29	5.04	5.14	*12.77	*12.44	*13.41
Kansas	6.42	6.13	6.20	5.88	5.56	5.57	12.98	12.52	13.09
South Atlantic	8.06	7.81	7.95	6.14	5.93	5.93	12.68	12.52	12.97
Delaware	7.73	7.27	7.17	5.96	5.72	5.42	13.74	12.46	12.84
Maryland	7.72	7.52	7.99	5.77	5.47	5.74	12.52	12.42	13.07
District of Columbia	13.08	12.99	14.65	*6.72	6.02	5.59	14.43	14.70	17.27
Virginia	7.36	7.21	7.03	5.94	5.66	5.45	11.98	12.23	12.02
West Virginia	6.87	6.77	6.71	6.64	6.57	6.50	*12.76	*11.78	*12.05
North Carolina	8.03	7.89	8.01	6.17	6.04	6.05	12.39	12.42	12.69
South Carolina	8.89 8.60	8.76 8.39	8.92	6.12	6.19 6.04	6.31	13.03	12.82	13.09
Georgia	7.84	7.44	8.32 7.67	6.22 6.21	5.95	6.03 6.00	12.85 12.46	12.74 12.03	12.60 13.05
East South Central	7.92	7.85		6.29	6.22				
Kentucky	7.92 7.02	6.91	7.97 6.80	6.44	6.22	6.28 6.28	12.26 12.89	12.26 12.11	12.43 11.85
Tennessee	7.99	7.95	8.08	6.60	6.44	6.47	12.94	13.27	13.30
Alabama	8.08	7.92	8.12	5.94	5.81	6.02	12.06	11.91	12.15
Mississippi	8.74	8.78	9.04	5.88	5.99	6.30	11.85	11.94	12.15
West South Central	7.49	7.17	7.29	6.20	5.97	6.04	12.84	12.75	12.81
Arkansas	7.61	7.58	8.07	6.02	5.98	6.54	12.31	12.60	13.07
Louisiana	8.74	8.51	8.86	6.20	5.75	6.00	12.71	13.13	13.06
Oklahoma	6.89	6.60	6.59	6.30	6.07	6.03	12.79	12.38	11.74
Texas	7.20	6.86	6.92	6.20	5.99	5.99	13.09	12.54	12.70
Mountain	6.79	6.56	6.68	6.60	6.39	6.44	14.02	12.57	14.04
Montana	5.91	5.69	5.68	5.87	5.61	5.58	*	*	*
Idaho	5.43	5.33	5.43	5.38	5.29	5.38	*	*	*
Wyoming	7.79	7.09	7.34	7.70	7.05	7.32	*	*	*
Colorado	8.23	7.76	7.84	7.93	7.45	7.46	15.24	13.82	14.42
New MexicoArizona	8.48	7.66	7.10	8.44	7.75 5.06	7.14	*15.15	*12.31	*12.61
Utah	6.12 5.47	6.04 5.58	6.34 5.70	5.92 5.44	5.86 5.49	6.11 5.63	*12.62 *	11.99 *	13.52 *
Nevada	7.33	6.70	7.22	6.62	6.18	6.38	*13.54	*11.19	14.73
Pacific	5.94	5.78	5.94	5.32	5.13	5.20			
Washington	5.39	5.76 5.13	5.94 5.41	5.32 5.16	4.81	5.02	11.90 10.90	11.78 11.00	13.37 12,22
Oregon	5.39	5.13	5.41	5.16	4.86	5.02	*12.25	*11.39	*13.10
California	6.07	5.91	6.05	5.39	5.22	5.25	12.23	11.91	13.53
Alaska	5.54	4.81	4.91	5.07	4.37	4.53	*	*7.15	*9.77

^{*}Data for States with fewer than 5,000 live births for the 3-year period are considered unreliable. Data for States with fewer than 1,000 live births are considered highly unreliable and are not shown.

SOURCE: National Center for Health Statistics: Data computed by the Division of Analysis from data compiled by the Division of Vital Statistics.

Table 11. Very low birth weight live births, according to race of mother, geographic division, and State: United States, average annual 1977–79, 1982–84, and 1987–89

		All races			White			Black	
Geographic division and State	1977–79	1982–84	1987–89	1977-79	1982-84	1987–89	1977–79	1982-84	198789
			Percent of	live births	weighing le	ess than 1,	500 grams		
United States	1.15	1.18	1.26	0.90	0.93	0.94	2.43	2.59	2.87
New England	1.06	1.07	1.08	0.95	0.95	0.94	2.74	2.80	2.87
Maine	0.84	0.93	0.79	0.83	0.92	0.78	*	*	*
New Hampshire	0.92	0.94	0.90	0.92	0.93	0.89	*	*	*
Vermont	1.03	0.90	0.81	1.02	0.90	0.80			
Massachusetts	1.02 1.27	1.03 1.09	1.06 1.15	0.92 1.11	0.94 0.96	0.92 1.05	2.37 *3.67	2.41 *2.89	2.57 *2.46
Connecticut	1.20	1.26	1.32	0.98	1.00	1.04	2.96	3.21	3.36
Middle Atlantic	1.21	1.23	1,39	0.95	0.95	1,00	2.48	2.56	3.11
New York	1.27	1.27	1.45	0.98	0.97	1.02	2.44	2.41	3.02
New Jersey	1.22	1.24	1.37	0.90	0.94	0.97	2.51	2.53	3.07
Pennsylvania	1.12	1.17	1.33	0.92	0.92	0.97	2.54	2.98	3.40
East North Central	1.18	1.21	1.28	0.93	0.93	0.94	2.63	2.83	3.02
Ohio	1.15	1.17	1.20	0.95	0.95	0.94	2.50	2.66	2.68
Indiana	1.09	1.08	1.17	0.93	0.91	0.99	2.51	2.62	2.67
Illinois	1.33	1.34	1.42	0.95	0.94	0.97	2.75	2.90	3.00
Michigan	1.22	1.29	1.43	0.94	0.97	0.94	2.63	2.99	3.54
Wisconsin	0.92	0.95	0.99	0.83	0.84	0.80	2.42	2.65	2.76
West North Central	0.95	0.97	1.00	0.85	0.86	0.86	2.45	2.53	2.71
Minnesota	0.86 0.89	0.89 0.81	0.86 0.88	0.83 0.86	0.85 0.78	0.78 0.83	*2.46 *2.39	*2.50 *2.11	2.98 *2.36
Missouri	1.08	1.14	1.23	0.85	0.78	0.83	2.42	2.62	2.72
North Dakota	1.00	0.83	0.79	0.91	0.79	0.79	*	*	*
South Dakota	0.77	0.88	0.89	0.78	0.83	0.85	*	*	*
Nebraska	0.90	0.91	0.93	0.83	0.83	0.84	*2.28	*2.42	*2.45
Kansas	1.01	1.05	1.08	0.88	0.94	0.93	2.55	2.46	2.77
South Atlantic	1.41	1.49	1.56	0.98	1.02	1.02	2.47	2.68	2.91
Delaware	1.22	1.45	1.59	0.89	1.09	1.05	2.33	2.61	3.36
Maryland	1.46	1.55	1.76	0.98	1.01	1.09	2.64	2.88	3.28
District of Columbia	2.77	3.19	3.66	*1.01	1.41	1.09	3.13	3.63	4.39
Virginia	1.29 1.09	1.34 1.08	1.32 1.12	0.96 1.04	0.96 1.03	0.92 1.05	2.37 *2.35	2.61 *2.28	2.62 *2.94
North Carolina	1.42	1.47	1.61	0.94	1.00	1.07	2.54	2.64	2.92
South Carolina	1.50	1.70	1.71	0.94	1.12	1.12	2.36	2.61	2.66
Georgia	1.46	1.65	1.61	0.93	1.06	1.03	2.40	2.73	2.70
Florida	1.37	1.35	1.42	1.04	1.00	0.98	2.34	2.44	2.83
East South Central	1.23	1.34	1.44	0.91	0.98	1.03	2.08	2.31	2.52
Kentucky	1.04	1.14	1.16	0.93	0.99	1.03	2.19	2.66	2.37
Tennessee	1.23	1.36	1.49	0.95	1.02	1.08	2.24	2.56	2.84
Alabama	1.29	1.38	1.52	0.87	0.92	1.02	2.07	2.26	2.48
Mississippi	1.38	1.49	1.57	0.84	0.93	0.90	1.97	2.11	2.33
West South Central	1.16	1.18	1.25	0.87 0.83	0.92 0.92	0.94 0.97	2.38 2.18	2.42 2.27	2.61 2.59
Arkansas	1.17 1.44	1.25 1.47	1.34 1.66	0.83	0.89	0.96	2.30	2.45	2.69
Oklahoma	1.00	1.07	1.05	0.89	0.94	0.93	2.13	2.38	2.21
Texas	1.10	1.11	1,17	0.86	0.92	0.94	2.53	2.44	2.61
Mountain	0.89	0.94	0.96	0.85	0.89	0.90	2.60	2.50	2.72
Montana	0.80	0.81	0.84	0.80	0.77	0.80	*	*	*
Idaho	0.71	0.77	0.89	0.70	0.75	0.88	*	*	*
Wyoming	0.97	1.00	0.88	0.92	0.98	0.87	*	*	*
Colorado	1.01	1.00	1.00	0.95	0.94	0.92	2.71	2.40	2.42
New Mexico	1.05 0.90	1.04	0.94 1.03	1.02 0.86	1.04 0.92	0.91	*3.53 *2.18	*2.28 2.61	*2.66 3.06
Arizona	0.69	1.00 0.77	0.78	0.88	0.92	0.97 0.76	"2.18 *	2.01	3.00
Nevada	1.13	1.05	1.18	0.96	0.92	0.96	*2.57	*2.59	3.00
Pacific	0.94	0.99	1.02	0.82	0.86	0.87	2.21	2.49	2.83
Washington	0.81	0.87	0.87	0.76	0.82	0.87	1.94	2.49	2.55
Oregon	0.81	0.85	0.83	0.80	0.84	0.79	*1.36	*1.58	*2.03
California	0.98	1.02	1.05	0.84	0.87	0.89	2.25	2.55	2.87
Alaska	0.85	0.88	0.96	0.82	0.80	0.85	*	*2.08	*2.60
Hawaii	0.86	1.02	1.04	0.66	0.87	1.00	*	*1.92	*2,23

^{*}Data for States with fewer than 5,000 live births for the 3-year period are considered unreliable. Data for States with fewer than 1,000 live births are considered highly unreliable and are not shown.

SOURCE: National Center for Health Statistics: Data computed by the Division of Analysis from data compiled by the Division of Vital Statistics.

Table 12. Legal abortion ratios, according to selected patient characteristics: United States, selected years 1973–89

[Data are based on reporting by State health departments and by facilities]

Characteristic	1973	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989¹
					Abort	ions per	100 live	births			•	
Total	19.6	27.2	35.9	35.8	35.4	34.9	36.4	35.4	35.4	35.6	35.2	34.6
Age												
Under 15 years 15–19 years. 20–24 years. 25–29 years. 30–34 years. 35–39 years. 40 years and over	74.3 31.7 17.9 12.3 16.5 26.7 40.2	101.5 46.4 25.0 16.6 22.1 37.5 59.9	122.7 66.4 37.5 23.0 23.3 40.3 78.3	126.4 66.8 37.9 23.2 23.7 40.3 77.6	120.0 66.5 38.0 23.5 23.0 37.1 75.0	133.6 67.3 38.1 23.0 22.0 35.4 69.1	145.8 71.4 41.2 23.9 22.3 35.2 66.7	141.2 71.7 40.4 23.2 21.4 33.4 63.8	130.5 70.2 41.0 24.0 21.5 33.4 59.8	131.3 72.6 42.0 23.9 21.4 31.7 56.2	90.5 61.2 36.9 21.1 18.6 27.7 51.3	83.5 54.8 36.1 20.9 18.4 26.8 49.4
Race												
White	17.5 28.9	22.7 46.5	31.3 54.7	31.2 54.4	30.4 55.6	29.5 56.0	30.8 58.2	29.6 57.6	30.0 55.8	30.0 55.7	25.7 45.5	24.8 46.1
Marital status												
Married	6.2 109.8	8.3 141.1	10.2 149.9	9.8 147.5	9.7 142.2	9.3 135.2	9.6 137.1	8.7 129.5	9.3 120.6	9.8 114.9	8.1 97.1	7.8 88.4
Number of previous live births ²												
0	23.0 12.1 19.6 25.8 26.4	30.2 17.3 29.7 39.8 40.8	48.6 21.9 32.8 33.5 27.3	48.6 21.9 32.6 33.5 26.6	48.2 22.0 32.4 32.2 25.4	46.9 22.1 32.5 31.9 24.8	49.3 23.0 34.0 32.8 24.9	47.7 22.8 33.0 32.1 23.7	47.1 23.8 33.5 32.4 24.2	46.3 24.7 34.5 33.2 24.2	37.4 21.0 29.3 27.7 20.2	37.2 21.2 28.6 27.8 19.9

¹Preliminary data.

NOTE: Ratios exclude cases for which selected characteristic was unknown and are based on abortions reported to the Centers for Disease Control.

SOURCES: Centers for Disease Control: Abortion Surveillance, 1973–75. Public Health Service, DHHS, Atlanta, Ga., May 1977–Nov. 1980; Abortion Surveillance, 1980. Public Health Service, DHHS, Atlanta, Ga., May 1983; CDC Surveillance Summaries. Abortion Surveillance, United States, 1984–85. Vol. 38, No. SS-2. Public Health Service, DHHS, Atlanta, Ga., Sept. 1989; Abortion Surveillance: Preliminary Analysis, United States, 1986 and 1987. Vol. 38, No. 38. Public Health Service, DHHS, Atlanta, Ga., Sept. 1989; Abortion Surveillance: Preliminary Analysis, United States, 1989. Public Health Service, DHHS, Atlanta, Ga., July 1991; and Abortion Surveillance: Preliminary Analysis, United States, 1989. Public Health Service, DHHS, Atlanta, Ga., Dec. 1991.

²For 1973–75, data Indicate number of living children.

Table 13. Legal abortions, according to selected characteristics: United States, selected years 1973-89

[Data are based on reporting by State health departments and by facilities]

Characteristic	1973	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	19891
				Numbe	er of lega	l abortio	ns report	ted in the	usands			
Centers for Disease Control Alan Guttmacher Institute ²	616 745	855 1,034	1,298 1,554	1,301 1,577	1,304 1,574	1,269 1,575	1,334 1,577	1,329 1,589	1,328 1,574	1,354 1,559	1,371 1,591	1,397
		.,	,	,	, F	,	distributio	•	•	·	·	
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
Period of gestation												
Under 9 weeks	36.1 29.4 17.9 6.9 8.0 1.7	44.6 28.4 14.9 5.0 6.1 1.0	51.7 26.2 12.2 5.2 3.9 0.9	51.2 26.8 12.1 5.2 3.7 1.0	50.6 26.7 12.4 5.3 3.9 1.1	49.7 26.8 12.8 5.8 3.9 1.0	50.5 26.4 12.6 5.8 3.9 0.8	50.3 26.6 12.5 5.9 3.9 0.8	51.0 25.8 12.2 6.1 4.1 0.8	50.4 26.0 12.4 6.2 4.2 0.8	48.7 26.4 12.7 6.6 4.5 1.1	49.8 25.8 12.6 6.6 4.2 1.0
Type of procedure												
Curettage	88.4 10.4 0.7 0.6	90.9 6.2 0.4 2.4	95.5 3.1 0.1 1.3	96.1 2.8 0.1 1.0	96.4 2.5 0.0 1.0	96.8 2.1 0.0 1.1	96.8 1.9 0.0 1.3	97.5 1.7 0.0 0.8	97.0 1.4 0.0 1.6	97.2 1.3 0.0 1.5	98.6 1.1 0.0 0.3	98.7 0.9 0.0 0.4
Location of facility												
In State of residence Out of State of residence	74.8 25.2	89.2 10.8	92.6 7.4	92.5 7.5	92.9 7.1	93.3 6.7	92.0 8.0	92.4 7.6	92.3 7.7	91.7 8.3	91.4 8.6	91.0 9.0
Previous induced abortions												
0		81.9 14.9 2.5 0.7	67.6 23.5 6.6 2.3	65.3 24.3 7.5 2.9	63.7 24.9 8.2 3.2	62.4 25.0 9.0 3.7	60.5 25.7 9.4 4.3	60.1 25.7 9.8 4.4	59.3 26.3 9.6 4.8	58.5 26.5 10.3 4.7	57.8 26.9 10.4 4.9	58.1 26.5 9.9 5.5

¹Preliminary data.

NOTE: For a discussion of the differences in reported legal abortions between the Centers for Disease Control and the Alan Guttmacher Institute, see Appendix I. Percent distributions exclude cases for which selected characteristic was unknown and are based on abortions reported to the Centers for Disease Control.

SOURCES: Centers for Disease Control: Abortion Surveillance, 1980. Public Health Service, DHHS, Atlanta, Ga., May 1983; CDC Surveillance Summaries. Abortion Surveillance, United States, 1984–85. Vol. 38, No. SS-2. Public Health Service, DHHS, Atlanta, Ga., Sept. 1989; Abortion Surveillance: Preliminary Analysis, United States, 1986 and 1987. Vol. 38, No. 38. Public Health Service, DHHS, Atlanta, Ga., Sept. 1989; Abortion Surveillance, United States, 1988. Public Health Service, DHHS, Atlanta, Ga., July 1991; and Abortion Surveillance: Preliminary Analysis, United States, 1989. Public Health Service, DHHS, Atlanta, Ga., Dec. 1991; Sullivan, E., Tietze, C., and Dryfoos, J.: Legal abortions in the United States, 1975–1976. Fam. Plann. Perspect. 9(3):116–129, May–June 1977; Henshaw, S. K., Forrest, J. D., and Blaine, E.: Abortion services in the United States, 1981 and 1982. Fam. Plann. Perspect. 16(3), May–June 1984; Henshaw, S. K., Forrest, J. D., and Van Vort, J.: Abortion services in the United States, 1984 and 1985. Fam. Plann. Perspect. 19(2), Mar.–Apr. 1987; and Henshaw, S. K. and Van Vort, J.: Abortion services in the United States, 1987 and 1988. Fam. Plann. Perspect. 22(3), May–June 1990.

²Data for 1986 is projected.

Table 14. Legal abortions, abortion-related deaths, and abortion-related death rates, according to period of gestation: United States, 1974-76, 1977-79, 1980-82, and 1983-85

[Data are based primarily on reporting by State health departments and by facilities]

	Number of	Abortion-re	lated deaths1
Period of gestation and year	legal abortions reported	Number	Rate per 100,000 abortions
Total			
1974–76. 1977–79. 1980–82. 1983–85.	2,606,596 3,489,127 3,902,346 3,931,078	66 44 ² 27 ³ 27	2.5 1.3 0.7 0.7
Under 9 weeks			
1974–76. 1977–79. 1980–82. 1983–85.	1,171,478 1,808,655 1,996,573 1,968,827	8 10 6 2	*0.7 *0.6 *0.3 *
9-10 weeks			
1974–76. 1977–79. 1980–82. 1983–85.	738,615 942,467 1,036,542 1,046,140	10 9 5 5	*1.4 *1.0 *0.5 *0.5
11-12 weeks			
1974–76. 1977–79. 1980–82. 1983–85.	387,208 439,754 477,875 497,902	10 7 3 3	*2.6 *1.6 *
13 weeks and over			
1974–76 1977–79 1980–82 1983–85	309,295 298,251 391,356 418,209	38 18 11 15	12.3 6.0 2.8 3.6

¹1983 data are provisional.

SOURCE: Centers for Disease Control: Abortion Surveillance, 1978. Public Health Service, DHHS, Atlanta, Ga., Nov. 1980; Unpublished data.

 ²¹⁹⁸² data include 2 deaths with weeks of gestation unknown.
 31984 data include 2 deaths with weeks of gestation unknown.

^{*}Estimates with relative standard errors greater than 30 percent are considered unreliable. Estimates with relative standard errors greater than 50 percent are considered highly unreliable and are not shown.

Table 15. Methods of contraception for ever-married women 15-44 years of age, according to race and age: United States, 1973, 1982, and 1988

[Data are based on household interviews of samples of women in the childbearing ages]

		All races			White			Black	
Method of contraception and age	1973	19821	1988	1973	19821	1988	1973	19821	1988
			Numb	er of ever-n	narried won	nen in thou	sands	* ********	
15–44 years	30,247	34,935	36,842	26,795	30,419	31,465	3,109	3,440	3,614
15–24 years	6,593 12,731 10,922	5,550 15,996 13,439	3,971 16,889 15,982	5,855 11,356 9,584	4,975 31,819 11,626	3,495 14,371 13,599	692 1,226 1,191	427 1,628 1,358	343 1,666 1,606
All methods			Percent o	f ever-marr	ied women	using cont	raception		
15–44 years	66.4	66.9	70.8	67.8	68.0	71.8	55.8	60.4	63.9
15–24 years	66.9 70.4 61.5	65.4 70.0 63.9	69.6 70.6 71.4	67.1 71.6 63.6	66.8 70.7 65.3	68.8 71.3 73.1	65.2 59.2 46.8	53.3 67.7 54.0	69.0 66.1 60.5
Female sterilization			Percer	nt of ever-m	arried cont	racepting w	omen		
15–44 years	13.6	28.9	34.7	12.5	27.2	32.9	25.4	42.8	54.5
15–24 years	4.3 12.1 21.7	*6.1 24.5 44.0	8.4 27.6 48.5	4.1 11.4 19.2	*5.7 22.7 42.4	8.2 26.2 45.9	6.8 20.3 47.2	*13.0 37.7 59.5	*11.0 46.9 73.6
Male sterilization ²									
15–44 years	10.4	13.6	15.0	11.2	14.7	16.8	*1.2	*2.2	1.3
15–24 years	2.1 10.3 15,8	*4.1 11.5 20.2	*2.8 11.8 21.3	2.3 11.0 17.2	*4.4 12.6 21.8	*3.2 13.1 23.9	*0.1 *2.0 *1.1	*0.5 *1.7 *3.6	*- *1.6 *1.4
Birth control pill									
15-44 years	36.6	20.7	21.2	36.1	20.6	21.1	41.8	23.1	22.7
15–24 years	65.3 36.2 18.3	56.2 22.8 *3.2	61.4 28.6 3.8	64.4 35.8 18.2	56.0 22.1 *3.2	59.8 28.7 4.0	72.4 41.6 17.2	56.8 28.8 *4.3	74.9 29.3 *2.4
Intrauterine device									
15–44 years	10.2	7.6	2.2	9.8	7.5	2.1	13.8	10.0	3.4
15–24 years	10.8 13.2 5.6	*3.5 9.6 6.8	*0.4 2.1 2.8	10.7 12.7 5.4	*3.3 9.4 7.0	*0.5 1.8 2.7	12.6 18.8 8.4	*8.2 14.1 *4.5	*- 3.8 3.9
Diaphragm									
15–44 years	3.4	6.5	6.0	3.6	6.8	6.2	1.8	4.2	2.3
15–24 years	*1.5 3.1 5.0	*7.0 8.5 *3.8	3.1 6.7 5.9	*1.6 3.2 5.3	*7.2 9.1 *3.7	*3.5 7.1 6.0	*0.3 *2.2 *2.5	*4.5 3.1 *5.7	*1.3 *1.6 3.4
Condom									
15–44 years	12.6	12.1	12.9	13.4	12.6	13.1	4.1	5.0	7.7
15–24 years	7.7 12.4 16.1	12.7 12.4 11.4	16.3 13.9 11.0	8.3 13.1 17.2	12.9 13.0 12.0	17.7 14.0 11.0	*1.8 3.8 6.4	*6.3 5.0 *4.5	*7.6 9.6 5.7

¹Estimates have been revised and differ from those previously published. ²Refers only to currently married couples in 1973.

^{*}Relative standard error greater than 30 percent.

SOURCE: Division of Vital Statistics, National Center for Health Statistics: Data from the National Survey of Family Growth.

Table 16. Methods of contraception for women 15–44 years of age, according to race and marital status: United States, 1982 and 1988

[Data are based on household interviews of samples of women in the childbearing ages]

Marital status and	All I	races	W	hite	Ві	ack
method of contraception	19821	1988	19821	1988	1982 ¹	1988
Marital status			Number of wome	n in thousands		
All marital statuses	54,099	57,900	45,367	47,077	6,985	7,679
Currently married	28,231 6,704 19,164	29,147 7,695 21,058	25,195 5,224 14,948	25,426 6,038 15,612	2,130 1,310 3,545	2,197 1,417 4,065
All methods		Por	cent of women u	,	•	.,
All marital statuses	55.7	60.3	56.7	61.8	52,0	56.7
Currently married	69.7 55.5 35.3	74.3 57.6 41.9	70.4 56.3 33.6	75.3 57.4 41.5	63.3 55.7 43.8	67.0 59.0 50.4
Female sterilization		F	Percent of contra	cepting women		
All marital statuses	23.2	27.5	22.1	26.1	30.0	38.1
Currently married	26.9 39.2 3.7	31.4 50.7 6.4	25.8 35.2 *1.0	30.2 47.9 2.4	37.0 53.5 12.8	48.3 65.4 19.6
Male sterilization	•	0.,		2.7	12.0	19.0
All marital statuses	10.9	11.7	10.0	10.0		0.0
Currently married	15.5 3.4 1.8	17.3 3.6 1.8	12.2 16.4 4.3 2.3	13.6 19.1 4.3 2.3	1.4 3.4 * *0.4	0.9 2.0 *0.1 *0.3
Birth control pill						
All marital statuses	28.0	30.7	26.7	29.8	38.0	38.0
Currently married	19.3 28.4 53.0	20.4 25.3 59.0	19.0 30.4 51.6	20.0 27.4 60.2	24.5 20.4 58.1	26.0 16.8 55.3
Intrauterine device						
All marital statuses	7.1	2.0	6.9	1.8	9.1	3.1
Currently married	6.9 11.5 5.4	2.0 3.6 1.3	6.8 11.8 4.3	1.8 3.3 *0.9	9.3 11.4 7.9	2.3 5.4 2.7
Diaphragm						
All marital statuses	8.1	5.7	8.8	6.2	3.5	1.9
Currently married	6.5 6.7 13.4	6.2 5.3 4.9	6.7 7.8 16.8	6.4 5.6 6.1	5.1 *2.5 2.6	2.4 *2.1 1.5
Condom						1.0
All marital statuses	12.0	14.6	12.7	14.9	6.2	10.3
Currently married Widowed, separated, or divorced Never married.	14.1 *1.5 11.6	14.3 5.9 19.6	14.5 *1.5 12.8	14.3 6.3 21.4	6.8 *1.6 7.9	9.8 4.1 13.2

¹Estimates have been revised and differ from those previously published.

^{*}Relative standard error greater than 30 percent.

SOURCE: Division of Vital Statistics, National Center for Health Statistics: Data from the National Survey of Family Growth.

Table 17. Life expectancy at birth and at 65 years of age, according to race and sex: United States, selected years 1900–1990

	All races			White			Black		
	Both	.,		Both		*****	Both		
Specified age and year	sexes	Male	Female	sexes	Male	Female	sexes	Male	Female
At birth			F	Remaining	life expec	tancy in yea	rs		
1900 1,2	47.3	46.3	48.3	47.6	46.6	48.7	³ 33.0	³ 32.5	³ 33.5
1950 ²	68.2	65.6	71.1	69.1	66.5	72.2	60.7	58.9	62.7
1960²	69.7	66.6	73.1	70.6	67.4	74.1	63.2	60.7	65.9
1970	70.9	67.1	74.8	71.7	68.0	75.6	64.1	60.0	68.3
1975	72.6	68.8	76.6	73.4	69.5	77.3	66.8	62.4	71.3
1980	73.7	70.0	77.4	74.4	70.7	78.1	68.1	63.8	72.5
1981	74.2	70.4	77.8	74.8	71.1	78.4	68.9	64.5	73.2
1982	74.5	70.9	78.1	75.1	71.5	78.7	69.4	65.1	73.7
1983	74.6	71.0	78.1	75.2	71.7	78.7	69.6	65.4	73.6
1984	74.7	71.2	78.2	75.3	71.8	78.7	69.7	65.6	73,7
1985	74.7	71.2	78.2	75.3	71.9	78.7	69.5	65.3	73.5
1986	74.8	71.3	78.3	75.4	72.0	78.8	69.4	65.2	73.5
1987	75.0	71.5	78.4	75.6	72.2	78.9	69.4	65.2	73.6
1988	74.9	71.5	78.3	75.6	72.3	78.9	69.2	64.9	73.4
1989	75.3	71.8	78.6	76.0	72.7	79.2	69.2	64.8	73.5
Provisional data:									
1988 ²	74.9	71.4	78.3	75.5	72.1	78.9	69.5	65.1	73.8
19892	75.2	71.8	78.5	75.9	72.6	79.1	69.7	65.2	74.0
1990 ²	75.4	72.0	78.8	76.0	72.6	79.3	70.3	66.0	74.5
At 65 years									
1900–1902 ^{1,2}	11.9	11.5	12.2		11.5	12.2		10.4	11.4
1950 ²	13.9	12.8	15.0		12.8	15.1	13.9	12.9	14.9
1960 ²	14.3	12.8	15.8	14.4	12.9	15.9	13.9	12.7	15.1
1070	15.2	13.1	17.0	15.2	13.1	17.1	14.2	12.5	15.7
1970			18.1	16.1	13.1	18.2	15.0	13.1	16.7
1975	16.1	13.8							
1980	16.4	14.1	18.3	16.5	14.2	18.4	15.1	13.0	16.8
1981	16.7	14.3	18.6	16.7	14.4	18.7	15.5	13.4	17.3
1982	16.8	14.5	18.7	16.9	14.5	18.8	15.7	13.5	17.5
1983	16.7	14.5	18.6	16.8	14.5	18.7	15.5	13.4	17.3
1984	16.8	14.6	18.6	16.9	14.6	18.7	15.5	13.5	17.2
1985	16.7	14.6	18.6	16.8	14.6	18.7	15.3	13.3	17.0
1986	16.8	14.7	18.6	16.9	14.8	18.7	15.4	13.4	17.0
1987	16.9	14.8	18.7	17.0	14.9	18.8	15.4	13.5	17.1
1988	16.9	14,9	18.6	17.0	14.9	18.7	15.4	13.4	16.9
1989	17.2	15.2	18.8	17.3	15.2	19.0	15.5	13.6	17.0
Provisional data:	100	140	10.0	170	140	107	455	106	17.1
19882	16.9	14.8	18.6	17.0	14.9	18.7	15.5	13.6	
1989 ²	17.2	15.2	18.8	17.3	15.2	18.9	15.8	13.8	17.4
1990 ²	17.3	15.3	19.0	17.3	15.3	19.0	16.1	14.2	17.6

¹Death registration area only. The death registration area increased from 10 States and the District of Columbia in 1900 to the coterminous United States in 1933. ²Includes deaths of nonresidents of the United States.

SOURCES: U.S. Bureau of the Census: U.S. Life Tables 1890, 1901, 1910, and 1901–1910, by J. W. Glover. Washington. U.S. Government Printing Office, 1921; National Center for Health Statistics: Vital Statistics Rates in the United States, 1940–1960, by R. D. Grove and A. M. Hetzel. DHEW Pub. No. (PHS) 1677. Public Health Service. Washington. U.S. Government Printing Office, 1968; Annual summary of births, marriages, divorces, and deaths, United States, 1988. Monthly Vital Statistics Report. Vol. 37, No. 13. DHHS Pub. No. (PHS) 89–1120. July 26, 1989; Annual summary of births, marriages, divorces, and deaths, United States, 1989. Monthly Vital Statistics Report. 1991; and Annual summary of births, marriages, divorces, and deaths, United States, 1990. Monthly Vital Statistics Report. Vol. 39, No. 13. DHHS Pub. No. (PHS) 91–1120. 1991. Public Health Service. Hyatsville, Md.; Unpublished data from the Division of Vital Statistics; Data computed by the Office of Research and Methodology from data compiled by the Division of Vital Statistics.

³Figure is for the all other population.

Table 18 (page 1 of 2). Infant mortality rates, fetal death rates, and perinatal mortality rates, according to race: United States, selected years 1950–90

		Infant	mortality rate 1				
		Neoi	natal				
Race and year	Total	Under 28 days	Under 7 days	Postneonatal	Fetal death rate²	Late fetal death rate ³	Perinata mortality rate4
All races		Deaths pe	r 1,000 live bir	ths			
1950 ⁵	29.2 26.0 20.0 16.1	20.5 18.7 15.1 11.6	17.8 16.7 13.6 10.0	8.7 7.3 4.9 4.5	18.4 15.8 14.0 10.6	14.9 12.1 9.5 7.8	32.5 28.6 23.0 17.7
1980. 1981. 1982. 1983. 1984. 1985. 1986. 1987. 1988.	12.6 11.9 11.5 11.2 10.8 10.6 10.4 10.1 10.0 9.8	8.5 8.0 7.7 7.3 7.0 7.0 6.7 6.5 6.3 6.2	7.1 6.7 6.4 6.1 5.8 5.6 5.4 5.2 5.1	4.1 3.9 3.8 3.9 3.8 3.7 3.6 3.6 3.6 3.6	9.1 8.9 8.8 8.4 8.1 7.8 7.7 7.6 7.5	6.2 5.9 5.4 5.2 4.7 4.6 4.5 4.5	13.2 12.6 12.3 11.5 11.0 10.7 10.3 10.0 9.7 9.6
Provisional data: 1987 ⁵ 1988 ⁵ 1989 ⁵ 1990 ⁵	10.0 9.9 9.7 9.1	6.5 6.4 6.3 5.7		3.4 3.5 3.5 3.3			
Race of child 6: White	00.0	10.4	47.4	-7.4	400	40.0	
1950 ⁵ . 1960 ⁵ . 1970. 1975.	26.8 22.9 17.8 14.2	19.4 17.2 13.8 10.4	17.1 15.6 12.5 9.0	7.4 5.7 4.0 3.8	16.6 13.9 12.3 9.4	13.3 10.8 8.6 7.1	30.1 26.2 21.1 16.0
1980. 1981. 1982. 1983. 1984. 1985. 1986. 1987. 1988. 1989.	11.0 10.5 10.1 9.7 9.4 9.3 8.9 8.6 8.5 8.2	7.5 7.1 6.8 6.4 6.2 6.1 5.8 5.5 5.4 5.2	6.2 5.9 5.6 5.4 5.1 5.0 4.8 4.5 4.4	3.5 3.4 3.3 3.3 3.2 3.1 3.1 3.1 3.0	8.1 8.0 7.9 7.4 7.3 7.0 6.7 6.6 6.4	5.7 5.4 5.0 4.8 4.5 4.3 4.2 4.0	11.9 11.3 11.0 10.3 9.9 9.6 9.1 8.7 8.4 8.3
Race of child ⁶ : Black							
1950 ⁵	43.9 44.3 32.6 26.2	27.8 27.8 22.8 18.3	23.0 23.7 20.3 15.7	16.1 16.5 9.9 7.9	32.1 23.2 16.8	 11.4	26.9
1980 1981 1982 1983 1984 1985 1986 1987 1988 1989	21.4 20.0 19.6 19.2 18.4 18.2 18.0 17.9 17.6 17.7	14.1 13.4 13.1 12.4 11.8 12.1 11.7 11.7 11.5 11.3	11.9 11.4 11.1 10.6 10.2 10.3 10.1 10.0 9.8 9.6	7.3 6.6 6.8 6.5 6.1 6.1 6.2 6.4	14.4 13.8 13.5 12.7 12.6 12.5 12.8 12.7 12.8	8.9 8.2 8.1 7.7 7.3 7.1 7.0 6.8 6.7	20.7 19.4 19.1 18.2 17.4 17.0 16.9 16.5 16.2
Race of mother7: White							
1980. 1981. 1982. 1983. 1984. 1985. 1986. 1987. 1988. 1989.	10.9 10.3 9.9 9.6 9.3 9.2 8.5 8.4 8.1	7.4 7.0 6.7 6.3 6.1 6.0 5.7 5.4 5.3 5.1	6.1 5.8 5.6 5.3 5.1 5.0 4.7 4.5 4.3 4.2	3.5 3.4 3.2 3.3 3.2 3.1 3.1 3.1 2.9	8.0 7.9 7.8 7.3 7.2 6.9 6.6 6.5 6.3	5.6 5.4 5.3 4.9 4.7 4.5 4.2 4.1 3.9 3.9	11.7 11.2 10.9 10.2 9.8 9.4 8.9 8.5 8.2 8.1

See footnotes at end of table.

Table 18 (page 2 of 2). Infant mortality rates, fetal death rates, and perinatal mortality rates, according to race: United States, selected years 1950–90

[Data are based on the National Vital Statistics System]

	, , , , , , , , , , , , , , , , , , , ,	Infant i	mortality rate 1				
	-	Neor	natal				
	Total	Under 28 days	Under 7 days	Postneonatal	Fetal death rate ²	Late fetal death rate ³	Perinatal mortality rate⁴
Race of mother 7: Black		Deaths pe	r 1,000 live bir	ths			
1980. 1981. 1982. 1983. 1984. 1985. 1986. 1987. 1988. 1989.	22.2 20.8 20.5 20.0 19.2 19.0 18.9 18.8 18.5	14.6 14.0 13.6 12.9 12.3 12.6 12.3 12.3 12.1	12.3 11.8 11.6 11.1 10.6 10.8 10.6 10.5 10.3	7.6 6.8 6.9 7.0 6.8 6.4 6.6 6.4 6.5 6.7	15.0 14.3 14.3 14.0 13.3 13.1 13.1 13.5 13.5	9.3 8.5 8.5 8.0 7.6 7.4 7.3 7.3 7.2 7.1	21.5 20.2 19.9 19.0 18.1 18.1 17.8 17.7 17.4

¹Infant mortality rate is number of deaths of infants under 1 year per 1,000 live births. Neonatal deaths occur within 28 days of birth; postneonatal deaths occur 28,365 days after birth. Deaths within 7 days are early peopatal deaths.

SOURCES: National Center for Health Statistics: Vital Statistics of the United States, Vol. II, Mortality, Part A, for data years 1950–89. Public Health Service. Washington. U.S. Government Printing Office. Births, marriages, divorces, and deaths for 1990. Monthly Vital Statistics Report. Vol. 39, No. 12. DHHS Pub. No. (PHS) 91-1120. April 8, 1991; and Annual summary of births, marriages, divorces, and deaths, United States, 1990. Monthly Vital Statistics Report. Vol. 39, No. 13. DHHS Pub. No. (PHS) 91-1120. 1991. Public Health Service. Hyattsville, Md.; Data computed by the Division of Analysis from data compiled by the Division of Vital Statistics.

^{28–365} days after birth. Deaths within 7 days are early neonatal deaths.

Number of deaths of fetuses of 20 weeks or more gestation per 1,000 live births plus fetal deaths.

³Number of fetal deaths of 28 weeks or more gestation per 1,000 live births plus late fetal deaths.

Number of late fetal deaths plus infant deaths within 7 days of birth per 1,000 live births plus late fetal deaths.

⁵Includes births and deaths of nonresidents of the United States.

⁶Deaths are tabulated by race of decedent; live births are tabulated by race of child (see Appendix II).

⁷Deaths are tabulated by race of decedent; live births are tabulated by race of mother (see Appendix II).

Table 19. Infant, neonatal, and postneonatal mortality rates, according to race and Hispanic origin of mother: United States, 1960 and 1983–86 birth cohorts

[Data are based on the National Linked Files of Births and Infant Deaths]

			Birth	cohort		
Race and Hispanic origin of mother	1960¹	1983	1984	1985	1986	1984–86
			Infant deaths per	1,000 live births		
All mothers	25.1	10.9	10.4	10.4	10.1	10.3
White	22.2	9.3	8.9	8.9	8.5	8.8
Black	42.1	19.2	18.2	18.6	18.2	18.3
American Indian or Alaskan Native		15.2	13.4	13.1	13.9	13.5
Asian or Pacific Islander		8.3	8.9	7.8	7.8	8.1
Chinese		9.5 *	7.2 *	5.8 *6.0	5.9 *7.0	6.3
Japanese Filipino		8.4	8.5	*6.0 7.7	*7.2 7.2	6.5 7.8
Other Asian or Pacific Islander ²		8.3	9.7	7.7 8.6	8.6	7.6 8.9
Hispanic origin ^{3,4}		9.5	9.3	8.8	8.4	8.8
Mexican American		9.1 12.9	8.9 12.9	8.5	7.9	8.5
Cuban		*7.5	*8.1	11.1 8.5	11.7 *7.5	11.9 8.0
Central and South American		8.5	8.3	8.0	7.8 7.8	8.0
Other and unknown Hispanic		10.6	9.6	9.5	9.2	9.4
Non-Hispanic white 4		9.2	8.7	8.7	8.4	8.6
Non-Hispanic black ⁴		19.1	18.1	18.3	18.0	18.2
		N	eonatal deaths p	er 1,000 live birth	s	
All mothers	18.4	7.1	6.8	6.8	6.5	6.7
White	16.9	6.1	5.8	5.8	5.5	5.7
Black	27.3	12.5	11.9	12.3	11.9	12.0
American Indian or Alaskan Native		7.5	6.4	6.1	6.1	6.2
Asian or Pacific Islander		5.2	5.7	4.8	4.8	5.1
Chinese		5.5	4.4	3.3	3.1	3.6
Japanese		*	*	*3.1	*4.7	3.8
Filipino		5.6	5.3	5.1	4.9	5.1
Other Asian or Pacific Islander ²		5.2	6.5	5.4	5.3	5.7
Hispanic origin 3,4		6.2	6.2	5.7	5.5	5.8
Mexican American		5.9	5.8	5.4	5.1	5.4
Puerto Rican		8.7	8.6	7.6	7.6	7.9
Cuban		*5.0	*6.4	6.2	*5.1	5.9
Central and South American		5.8	5.9	5.6	5.2	5.5
Other and unknown Hispanic		6.4	6.5	5.6	6.0	6.0
Non-Hispanic white ⁴		6.0	5.7	5.7	5.4	5.6
Non-mispanic black		12.1	11.5	11.9	11.5	11.7
		Pos	tneonatal deaths	per 1,000 live bir	ths	
All mothers	6.7	3.8	3.6	3.6	3.6	3.6
White	5.3	3.2	3.1	3.1	3.0	3.1
Black	14.8	6.7	6.3	6.3	6.3	6.3
American Indian or Alaskan Native		7.7	7.0	7.0	7.8	7.3
Asian or Pacific Islander		3.1	3.1	2.9	3.0	3.0
Chinese		*	*	*2.5 *	*2.8 *2.5	2.7 2.7
Filipino.		*2.8	*3.2	*2.7	2.3	2.7
Other Asian or Pacific Islander ²		3.1	3.2	3.1	3.3	3.2
Hispanic origin ^{3,4}		3.3	3.1	3.2	2.9	3.1
Mexican American		3.2	3.2	3.2	2.8	3.0
Puerto Rican		4.2	4.3	3.5	4.2	4.0
Cuban		*	*1.7	*	*2.4	2.1
Central and South American		2.6	2.4	2.4	2.6	2.5
Other and unknown Hispanic		4.2	3.1	3.9	3.2	3.4
Non-Hispanic white 4		3.2	3.0	3.0	3.0	3.0
Non-Hispanic black⁴		7.0	6.6	6.4	6.5	6.5

¹Data are shown by race of child in 1960.

²Includes Hawaiians and part Hawaiians.

³Includes mothers of all races.

⁴Data shown only for States with an Hispanic-origin item on their birth certificates. In 1983–86, 23 States and the District of Columbia included this item.

^{*}Infant and neonatal mortality rates for groups with fewer than 10,000 births are considered unreliable. Postneonatal mortality rates for groups with fewer than 20,000 births are considered unreliable. Infant and neonatal mortality rates for groups with fewer than 7,500 births are considered highly unreliable and are not shown. Postneonatal mortality rates for groups with fewer than 15,000 births are considered highly unreliable and are not shown.

SOURCE: National Center for Health Statistics: Data computed by the Division of Analysis from data compiled by the Division of Vital Statistics on the national linked files of births and infant deaths,

Table 20. Infant mortality rates, according to birthweight, race, and Hispanic origin of mother: United States, 1960 and 1983–86 birth cohorts

[Data are based on the National Linked Files of Births and Infant Deaths]

			Birth	cohort		,
Birthweight, race, and Hispanic origin of mother	1960¹	1983	1984	1985	1986	1984–86
Birthweight less than 1,500 grams			Infant deaths pe	r 1,000 live births		· · · · · · · · · · · · · · · · · · ·
All mothers	752.6	393.6	383.5	381.0	364.8	376.3
White	769.4	402.4	389.5	385.1	369.8	381.4
Black	706.4	378.7	372.5	370.5	353.6	365.3
American Indian or Alaskan Native		376.1	356.7	388.9	422.6	389.7
Asian or Pacific Islander		352.9	363.4	384.4	347.2	364.8
Chinese		*	*	*369.6	*	331.1
Japanese				*238.8		290.2
Filipino		*321.0	*287.3	*350.9	*285.7	307.1
		342.4	408.7	414.9	370.4	397.7
Hispanic origin 3.4		382.2	381.7	359.8	347.1	362.1
Mexican American		387.1	395.8	360.2	352.3	368.5
Puerto Rican		389.9	364.7	351.6	347.6 *	354.5
Cuban						365.3
Central and South American		331.2 380.6	342.1 368.1	347.7 372.3	313.2 356.5	333.1 364.7
Other and unknown Hispanic Non-Hispanic white 4		398.8	387.4	372.3 384.0	369.4	380.2
Non-Hispanic black ⁴		372.0	370.6	360.3	345.7	358.5
		072,0	070.0	000.0	040.7	000.0
Birthweight 1,500–2,499 grams	01.0	00.0	22.2	07.0	07.0	00.0
All mothers	91.9	30.0	28.9	27.8	27.2	28.0
White	93.9	31.3	30.8	28.9	28.1	29.3
Black	85.1	26.6	24.4	25.1	24.2	24.6
American Indian or Alaskan Native		*44.7	*45.8	*42.7	*51.6	46.7
Asian or Pacific Islander		25.3 *	23.8	22.5	25.5	24.0 29.9
Japanese		*	*	*	*	22.2
Filipino.		*	*	*	*	17.9
Other Asian or Pacific Islander ²		25.8	25.5	22.5	27.6	25.3
Hispanic origin 3.4		26.8	29.1	27.3	25.9	27.4
Mexican American		28.0	29.9	27.8 27.8	27.9	28.5
Puerto Rican		24.5	28.0	26.5	22.9	25.7
Cuban		∠ ∓,5 *	*	∠0.5 *	*	24.0
Central and South American		*24.0	*25.4	*22.4	24.1	23.9
Other and unknown Hispanic		28.9	29.3	30.5	22.5	27.2
Non-Hispanic white ⁴		31.7	30.2	28.8	28.6	29.2
Non-Hispanic black ⁴		26.7	23.4	26.1	24.5	24.7
Birthweight 2,500 grams or more						
All mothers	11.2	4.5	4.3	4,2	4.1	4.2
White	9.7	4.1	3.9	3.9	3.7	3.8
Black	20.2	6.9	6.3	6.2	6.2	6.2
American Indian or Alaskan Native		9.1	7.6	7.3	7.5	7.4
Asian or Pacific Islander		3.8	4.1	3.2	3.4	3.6
Chinese		*	*	*2.6	*2.5	2.8
Japanese		*	*	*	*	2.9
Filipino		*	*4.5	*3.4	*3.6	3.9
Other Asian or Pacific Islander ²		3.7	4.2	3.5	3.6	3.7
Hispanic origin 3,4		4.2	3.9	3.8	3.5	3.7
Mexican American		4.1	3.9	3.7	3.3	3.6
Puerto Rican		5.5	5.2	4.5	4.8	4.8
Cuban		*	*	*	*	3.0
Central and South American		3.5	3.3	3.3	3.2	3.3
Other and unknown Hispanic	•	4.6	4.0	4.2	3.9	4.0
Non-Hispanic white ⁴		4.1 7.1	3.8	3.8	3.7 6.4	3.8
MONTHSpanic black		7.1	6.5	6.2	6.4	6.4

¹Data are shown by race of child in 1960.

²Includes Hawaiians and part Hawaiians.

³Includes mothers of all races.

Data shown only for States with an Hispanic-origin item on their birth certificates. In 1983-86, 23 States and the District of Columbia included this item.

^{*}Birthweight specific infant mortality rates are considered unreliable for groups with fewer than 200 births with birthweight less than 1,500 grams, fewer than 2,000 births with birthweight 1,500–2,499 grams, and fewer than 20,000 births with birthweight 2,500 grams or more. Birthweight specific infant mortality rates are considered highly unreliable and are not shown for groups with fewer than 150 births with birthweight less than 1,500 grams, fewer than 1,500 births with birthweight 1,500–2,499 grams, and fewer than 15,000 births with birthweight 2,500 grams or more.

SOURCE: National Center for Health Statistics: Data computed by the Division of Analysis from data compiled by the Division of Vital Statistics on the national linked files of births and infant deaths.

Table 21. Infant mortality rates, according to race, geographic division, and State: United States, average annual 1977–79, 1982–84, and 1987–89

Geographic division and State United States New England Maine New Hampshire Vermont Massachusetts Rhode Island Connecticut Middle Atlantic New York New Jersey Pennsylvania East North Central Ohio Indiana Illinois Miceographic division and State	13.6 11.5 9.9 10.4 10.7 11.3 13.3 12.4 13.8 14.0 13.4 13.7 13.8 13.3 13.4 15.6 13.7	1982-84 11.2 9.7 8.7 9.9 8.9 9.4 10.5 10.5 11.4 11.6 11.1 11.6 11.1 11.6 11.3	9.9 8.1 7.8 8.0 7.4 7.6 8.9 8.8 10.3 10.7 9.5 10.1	1977–79 Infant death 11.8 10.7 9.9 10.4 10.6 10.8 11.9 10.9 11.8 11.9 10.8 12.2 12.0	9.6 9.1 8.6 9.9 8.9 8.8 9.2 9.7 10.0 9.3	1987–89 0 live births 8.3 7.3 7.8 8.0 7.4 6.8 8.4 7.4 8.2 8.7 7.3	23.6 23.2 * * 20.3 *36.1 24.3 23.3 22.7	1982-84 19.9 20.2 * * 18.5 *20.7 21.5 19.5 18.1	18.6 17.7 * * 16.7 *15.9 19.5 19.7 18.7
New England Maine New Hampshire Vermont Massachusetts Rhode Island Connecticut Middle Atlantic New York New Jersey Pennsylvania East North Central Ohio Indiana Illinois Michigan	11.5 9.9 10.4 10.7 11.3 13.3 12.4 13.8 14.0 13.4 13.7 13.8 13.3 13.4 15.6	9.7 8.7 9.9 8.9 9.4 10.5 10.5 11.4 11.6 11.1	9.9 8.1 7.8 8.0 7.4 7.6 8.9 8.8 10.3 10.7 9.5 10.1	11.8 10.7 9.9 10.4 10.6 10.8 11.9 10.9 11.8 11.9 10.8 12.2	9.6 9.1 8.6 9.9 8.9 8.8 9.2 9.7 10.0 9.3	8.3 7.3 7.8 8.0 7.4 6.8 8.4 7.4 8.2 8.7	23.6 23.2 * * 20.3 *36.1 24.3 23.3 22.7	20.2 * * 18.5 *20.7 21.5 19.5	17.7 * 16.7 *15.9 19.5 19.7
New England Maine New Hampshire Vermont Massachusetts Rhode Island Connecticut Middle Atlantic New York New Jersey Pennsylvania East North Central Ohio Indiana Illinois Michigan	11.5 9.9 10.4 10.7 11.3 13.3 12.4 13.8 14.0 13.4 13.7 13.8 13.3 13.4 15.6	9.7 8.7 9.9 8.9 9.4 10.5 10.5 11.4 11.6 11.1	8.1 7.8 8.0 7.4 7.6 8.9 8.8 10.3 10.7 9.5 10.1	10.7 9.9 10.4 10.6 10.8 11.9 10.9 11.8 11.9 10.8 12.2	9.1 8.6 9.9 8.9 8.8 9.2 9.7 10.0 9.3	7.3 7.8 8.0 7.4 6.8 8.4 7.4 8.2 8.7	23.2 * 20.3 *36.1 24.3 23.3 22.7	20.2 * * 18.5 *20.7 21.5 19.5	17.7 * 16.7 *15.9 19.5 19.7
Maine New Hampshire Vermont Massachusetts Rhode Island Connecticut Middle Atlantic New York New Jersey Pennsylvania East North Central Ohio Indiana Illinois Michigan	9.9 10.4 10.7 11.3 13.3 12.4 13.8 14.0 13.4 13.7 13.8 13.3 13.4 15.6	8.7 9.9 8.9 9.4 10.5 10.5 11.4 11.6 11.1 11.6 11.0	7.8 8.0 7.4 7.6 8.9 8.8 10.3 10.7 9.5 10.1	9.9 10.4 10.6 10.8 11.9 10.9 11.8 11.9 10.8	8.6 9.9 8.9 8.8 9.2 9.7 10.0 9.3	7.8 8.0 7.4 6.8 8.4 7.4 8.2 8.7	* 20.3 *36.1 24.3 23.3 22.7	*	* 16.7 *15.9 19.5 19.7
New Hampshire Vermont. Massachusetts Rhode Island Connecticut Middle Atlantic New York New Jersey Pennsylvania East North Central Ohio Indiana Illinois Michigan	10.4 10.7 11.3 13.3 12.4 13.8 14.0 13.4 13.7 13.8 13.3 13.4 15.6	9.9 8.9 9.4 10.5 10.5 11.4 11.6 11.1 11.6 11.0	8.0 7.4 7.6 8.9 8.8 10.3 10.7 9.5 10.1 10.5	10.4 10.6 10.8 11.9 10.9 11.8 11.9 10.8 12.2	9.9 8.9 8.8 9.8 9.2 9.7 10.0	8.0 7.4 6.8 8.4 7.4 8.2 8.7	* 20.3 *36.1 24.3 23.3 22.7	* 18.5 *20.7 21.5 19.5	* 16.7 *15.9 19.5 19.7
Vermont. Massachusetts Rhode Island Connecticut Aiddle Atlantic New York New Jersey Pennsylvania East North Central Ohio Indiana Illinois Michigan	10.7 11.3 13.3 12.4 13.8 14.0 13.4 13.7 13.8 13.3 13.4 15.6	8.9 9.4 10.5 10.5 11.4 11.6 11.1 11.6 11.0	7.4 7.6 8.9 8.8 10.3 10.7 9.5 10.1	10.6 10.8 11.9 10.9 11.8 11.9 10.8 12.2	8.9 8.8 9.8 9.2 9.7 10.0 9.3	7.4 6.8 8.4 7.4 8.2 8.7	* 20.3 *36.1 24.3 23.3 22.7	* 18.5 *20.7 21.5 19.5	* 16.7 *15.9 19.5 19.7
Massachusetts Rhode Island Connecticut Aiddle Atlantic New York New Jersey Pennsylvania East North Central Ohio Indiana Illinois Michigan	11.3 13.3 12.4 13.8 14.0 13.4 13.7 13.8 13.3 13.4 15.6	9.4 10.5 10.5 11.4 11.6 11.4 11.1 11.6 11.0	7.6 8.9 8.8 10.3 10.7 9.5 10.1	10.8 11.9 10.9 11.8 11.9 10.8 12.2	8.8 9.8 9.2 9.7 10.0 9.3	6.8 8.4 7.4 8.2 8.7	20.3 *36.1 24.3 23.3 22.7	18.5 *20.7 21.5 19.5	16.7 *15.9 19.5 19.7
Rhode Island Connecticut Middle Atlantic New York New Jersey Pennsylvania East North Central Ohio Indiana Illinois Michigan	13.3 12.4 13.8 14.0 13.4 13.7 13.8 13.3 13.4 15.6	10.5 10.5 11.4 11.6 11.4 11.1 11.6 11.0	8.9 8.8 10.3 10.7 9.5 10.1 10.5	11.9 10.9 11.8 11.9 10.8 12.2	9.8 9.2 9.7 10.0 9.3	8.4 7.4 8.2 8.7	*36.1 24.3 23.3 22.7	*20.7 21.5 19.5	*15.9 19.5 19.7
Connecticut Middle Atlantic New York New Jersey Pennsylvania East North Central Ohio Indiana Illinois Michigan	12.4 13.8 14.0 13.4 13.7 13.8 13.3 13.4 15.6	10.5 11.4 11.6 11.4 11.1 11.6 11.0	8.8 10.3 10.7 9.5 10.1 10.5	10.9 11.8 11.9 10.8 12.2	9.2 9.7 10.0 9.3	7.4 8.2 8.7	24.3 23.3 22.7	21.5 19.5	19.5 19.7
New York New Jersey Pennsylvania East North Central Ohio Indiana Illinois Michigan	14.0 13.4 13.7 13.8 13.3 13.4 15.6	11.6 11.4 11.1 11.6 11.0	10.7 9.5 10.1 10.5	11.9 10.8 12.2	10.0 9.3	8.7	22.7		
New Jersey Pennsylvania East North Central Ohio Indiana Illinois Michigan	13.4 13.7 13.8 13.3 13.4 15.6	11.4 11.1 11.6 11.0	9.5 10.1 10.5	10.8 12.2	9.3			18.1	18.7
Pennsylvania East North Central Ohio Indiana Illinois Michigan	13.7 13.8 13.3 13.4 15.6	11.1 11.6 11.0	10.1 10.5	12.2		7.3			
East North Central. Ohio Indiana Illinois Michigan	13.8 13.3 13.4 15.6	11.6 11.0	10.5			0.0	24.1	20.3	19.2
Ohio	13.3 13.4 15.6	11.0			9.5	8.0	24.1	22.4	22.8
Indiana Illinois Michigan	13.4 15.6			12.0	9.7 9.7	8.5 8.3	25.0 22.2	22.6 19.8	20.4 17.3
Illinois	15.6		10.4	12.3	10.4	9.3	23.4	19.9	20.5
•	13.7	12.7	11.6	12.5	9.9	8.9	27.8	24.0	21.5
Misconsin		11.9	11.0	11.7	9.5	8.3	24.5	24.5	22.4
Wisconsin	11.1	9.7	8.7	10.6	8.9	7.8	19.0	19.7	17.0
Vest North Central	12.6	10.0	8.9	11.6	9.2	8.0	26.2	20.1	18.6
Minnesota	11.3 11.8	9.4 9.3	7.8 8.7	10.8 11.5	9.1 9.1	7.1 8.2	*31.1 *26.5	*22.7 *23.0	22.8 *22.6
Missouri	14.2	10.9	10.1	12.1	9.1	8.7	26.5	20.0	17.5
North Dakota	13.0	9.2	9.1	12.2	8.6	8.4	*	*	*
South Dakota	13.6	10.3	9.9	12.0	8.4	8.1	*	*	*
Nebraska	12.4	9.8	8.5	11.8	9.4	7.7	*25.0	*17.8	*20.6
Kansas	12.4	10.3	8.7	11.5	9.6	7.8	23.3	19.3	18.9
South Atlantic	15.5	12.7	11.3	12.2	9.9	8.6	23.6	20.1	18.5
Delaware	14.6 14.5	11.6 11.8	11.8 11.0	11.4 11.5	8.9 9.1	9.2 8.3	25.7 22.4	20.5 18.8	20.5 17.7
District of Columbia	25.6	20.5	21.9	*10.9	8.3	14.4	28.9	23.5	25.3
Virginia	14.7	12.3	10.2	12.3	10.0	7.8	23.0	20.4	18.2
West Virginia	14.5	11.1	9.4	14.2	10.9	9.1	*24.4	*17.4	*18.7
North Carolina	15.8	13.1	11.9	12.1	10.3	9.1	24.6	20.0	18.8
South Carolina	17.7 15.3	15.3 13.0	12.6 12.5	12.9 11.9	11.4 9.8	9.4 9.4	25.2 21.6	21.6 19.0	17.9 18.5
Florida	14.8	11.9	10.3	12.0	9.4	8.1	23.0	20.0	17.8
East South Central	15.2	12.9	11.3	12.3	10.4	8.9	23.1	19.7	17.7
Kentucky	12.9	11.7	9.9	12.1	11.1	9.2	21.3	19.0	16.7
Tennessee	14.6	12.2	11.1	12.6	10.2	8.5	21.8	19.7	19.2
Alabama	15.8	13.3	12.1	12.3	10.1	9.1	22.5	19.5	17.9
Mississippi	18.1	15.0	12.5	11.8	10.3	9.0	24.9	20.2	16.4
Vest South Central	14.5	11.2	9.6	12.5	9.9	8.2	23.2	17.6	15.9
Arkansas	15.0 16.9	10.5 12.8	10.4 11.4	12.6 12.3	8.7 9.3	8.6 8.4	22.4 24.2	16.6 18.9	16.6 16.1
Oklahoma	13.4	11.4	9.1	12.2	10.9	8.5	21.4	16.6	14.1
Texas	13.9	10.8	9.1	12.5	10.0	8.1	22.8	16.9	15.8
fountain	12.1	9.8	9.2	11.5	9.5	8.7	24.1	18.9	19.3
Montana	12.0	9.3	10.0	11.3	9.1	9.1	*	*	*
Idaho	11.0	10.2	9.6	11.0	10.1	9.3	*	*	*
Wyoming	13.4	10.2	9.2	13.3	10.2	9.1	*	*	*
Colorado	11.3 14.0	9.8 10.3	9.4 8.9	11.0 12.9	9.5	9.1 8.3	20.4 *28.7	17.7 *14.4	16.5 *22.6
Arizona	13.4	9.5	9.5	12.9	10.0 8.8	8.9	*26.0	20.0	21.4
Utah	10.7	9.7	8.3	10.6	9.6	8.0	*	*	*
Nevada	12.9	10.5	8.7	11.9	9.9	7.7	*23.2	*19.0	20.0
acific	11.8	9.8	8.8	11.0	9.2	8.1	21.7	18.7	18.9
Washington	12.0	10.1	9.3	11.6	9.6	8.7	22.4	24.4	20.6
Oregon	11.9	10.0	9.3	11.7	9.8	9.1	*22.6	*17.6	*21.4
California	11.7 15.2	9.7 11.6	8.7 10.4	10.8	9.1 9.4	8.0 8.0	21.6	18.3 *23.3	18.8 *15.7
Hawaii	10.9	9.4	8.1	13.2 7.9	9.4 6.8	8.0 5.5	*	*19.8	*15.7 *14.4

¹Deaths are tabulated by race of decedent; live births are tabulated by race of mother.

^{*}Data for States with fewer than 5,000 live births for the 3-year period are considered unreliable. Data for States with fewer than 1,000 live births are considered highly unreliable and are not shown.

SOURCE: National Center for Health Statistics: Data computed by the Division of Analysis from data compiled by the Division of Vital Statistics.

Table 22. Neonatal mortality rates, according to race, geographic division, and State: United States, average annual 1977–79, 1982–84, and 1987–89

		All races			White ¹		Black ¹		
Geographic division and State	1977–79	1982-84	1987–89	1977-79	1982-84	1987–89	1977–79	1982–84	198789
			Ne	eonatal dea	ths per 1,0	000 live birt	ths		
United States	9.4	7.3	6.3	8.2	6.4	5.3	15.8	13.0	12.1
New England	8.5	7.0	5.6	8.0	6.5	5.1	17.2	14.6	12.5
Maine	6.0	5.7	5.1	6.0	5.7	5.0	*	*	*
New Hampshire	7.9	7.2	5.2	7.9	7.1	5.2	*	*	*
Vermont	7.4	5.9	4.7	7.3	5.9	4.8	*	*	*
Massachusetts	8.5	6.7	5.3	8.1	6.3	4.8	15.1	12.9	11.7
Rhode Island	9.7	8.0	6.7	8.9	7.6	6.2	*22.5	*14.2	*11.7
Connecticut	9.7	7.9	6.3	8.5	6.9	5.3	18.5	16.2	13.9
Middle Atlantic	10.1	7.9	7.0	8.8	6.9	5.7	16.2	12.6	13.0
New York	10.1	7.9	7.3	8.8	7.1	6.0	15.7	11.6	12.5
New Jersey	9.7	7.8	6.4	8.2	6.7	5.1	16.2	12.5	12.3
Pennsylvania	10.3	7.8	7.0	9.3	6.7	5.7	17.4	15.3	15.1
East North Central	9.5	7.8	6.7	8.4	6.6	5.5	16.6	14.9	13.1
Ohio	9.4 9.2	7.4 7.4	6.1 6.4	8.5 8.4	6.6 6.8	5.3 5.7	15.4 15.8	13.1 13.0	10.5 13.1
Illinois	10.9	7.4 8.5	7.5	9.0	6.9	5.7 5.9	18.1	15.0	13.1
Michigan	9.4	8.3	7.4	8.0	6.5	5.4	16.6	17.7	16.1
Wisconsin	7.4	6.3	5.2	7.2	5.8	4.7	11.1	12.1	9.6
West North Central	9.0	6.4	5.3	8.3	5.9	4.8	18.1	12.6	11.1
Minnesota	7.8	5.9	4.7	7.6	5.8	4.3	*19.0	*13.9	14.3
lowa	8.6	5.9	5.5	8.4	5.8	5.3	*18.2	*14.6	*13.1
Missouri	10.1	7.0	6.2	8.7	6.0	5.5	18.6	12.9	10.4
North Dakota	9.7	5.8	5.1	9.3	5.6	4.9	*	*	*
South Dakota	9.1	6.1	5.0	8.7	5.5	4.7	*	*	*
Nebraska	8.8	6.5	4.8	8.4	6.3	4.4	*16.4	*10.7	*11.6
Kansas	9.0	6.5	5.1	8.4	6.1	4,5	16.4	11.3	11.2
South Atlantic	10.7	8.6	7.5	8.7	6.7	5.6	15.7	13.5	12.5
Delaware	10.9	8.2	8.6	8.3	6.5	6.8	19.7	14.0	14.7
Maryland	10.7	8.2	7.4	8.5	6.2	5.4	16.4	13.3	12.3
District of Columbia	19.4	15.3	16.0	*8.7	6.2	8.8	21.8	17.6	18.9
Virginia	10.6	8.8	6.9	8.8	7.0	5.1	16.6	14.8	12.7
West Virginia	9.9	7.1	6.3	9.6	7.0	6.2	*17.6	*12.1	*9.9
North Carolina	11.0	8.8	7.9	8.7	6.9	5.9	16.4	13.5	12.8
South Carolina	12.0 10.0	10.1 8.7	8.3 8.3	9.2 8.2	7.6 6.6	6.1 6.1	16.2 13.2	14.1 12.7	11.8 12.3
Georgia	10.0	7.8	6.7	8.4	6.4	5.3	14.6	12.6	11.6
East South Central	10.3	8.5	7.2	8.5	7.0	5.6	15.1	12.5	11.4
Kentucky	8.7	7.7	5.8	8.2	7.3	5.4	14.4	12.4	10.5
Tennessee	10,1	8.1	7.0	8.7	6.6	5.2	15.4	13.4	12.6
Alabama	10.5	8.8	8.1	8.5	7.0	6.2	14.2	12.1	11.6
Mississippi	12.1	9.5	7.8	8.6	7.0	5.8	15.9	12.4	10.2
West South Central	9.8	7.1	5.9	8.6	6.3	5.1	15.3	11.1	9.9
Arkansas	9.4	6.3	6.1	8.2	5.3	5.1	13.1	9.3	9.6
Louisiana	11.8	8.5	7.3	9.0	6.3	5.4	16.2	12.2	10.4
Oklahoma	8.6	7.1	5.3	8.1	6.8	5.1	12.6	10.5	7.8
Texas	9.5	6.8	5.6	8.6	6.3	5.0	15.5	10.6	9.9
Mountain	7.8	5.8	5.2	7.6	5.7	5.0	15.8	11.1	12.1
Montana	7.8	5.1	4.9	7.7	5.0	4.8	*	*	*
ldaho	6.9	5.7	5.4	6.9	5.7	5.3	*	*	*
Wyoming	8.3	6.0	5.2	8.3	5.9	5.2	*	*	*
Colorado	6.9	5.8	5.6	6.7	5.6	5.4	13.8	11.6	11.4
New Mexico	9.2	6.0	5.5	8.9	6.1 5.7	5.2	*17.9	*7.5	*14.2
Arizona	8.9 7.1	5.7 5.0	5.8	8.6	5.7 5.0	5.5 4.1	*17.9 *	11.5	14.2 *
Utah	7.1 8.0	5.9 6.0	4.1 4.2	7.1 7.2	5.9 5.9	4.1 3.7	*14.7	*9.5	9.8
Pacific ,	7.6 7.4	6.0 5.6	5.2	7.1	5.7 5.4	4.8	14.1 12.8	11.8 14.2	11.1 11.1
Washington	7.4 7.4	5.6 5.5	4.9 5.0	7.3 7.3	5.4 5.4	4.7 5.0	*13.6	*9,2	*9.6
California	7.4 7.7	6.2	5.3	7.3 7.1	5.8	4.9	14.1	11.7	11.2
Alaska	9.2	6.2	4.9	8.6	5.2	4.0	*	*15.0	*8.9
		6.2	4.9	5.3	4.4	3.0	*	*10.2	*9.4

¹Deaths are tabulated by race of decedent; live births are tabulated by race of mother.

^{*}Data for States with fewer than 5,000 live births for the 3-year period are considered unreliable. Data for States with fewer than 1,000 live births are considered highly unreliable and are not shown.

SOURCE: National Center for Health Statistics: Data computed by the Division of Analysis from data compiled by the Division of Vital Statistics.

Table 23. Postneonatal mortality rates, according to race, geographic division, and State: United States, average annual 1977–79, 1982–84, and 1987–89

		All races			White ¹			Black1	
Geographic division and State	1977–79	1982–84	1987–89	1977–79	198284	1987–89	1977–79	1982–84	1987-89
			Post	neonatal d	eaths per 1	1.000 live b	oirths		
United States	4.2	3.8	3.6	3.5	3.3	3.0	7.8	6.9	6.5
New England	3.0	2.7	2.5	2.8	2.5	2.2	6.0	5.6	5.2
Maine	3.8	3.0	2.8	3.8	3.0	2.7	*	J.U *	J.Z *
New Hampshire	2.5	2.8	2.8	2.5	2.8	2.8	*	*	*
Vermont	3.3	3.0	2.7	3.3	3.0	2.6	*	*	*
Massachusetts	2.8	2.7	2.3	2.7	2.5	2.1	5.3	5.6	5.0
Rhode Island	3.6	2.5	2.3	3.0	2.3	2.2	*	*6.5	*4.2
Connecticut	2.7	2.6	2.5	2.4	2.3	2.1	5.7	5.3	5.6
Middle Atlantic	3.7	3.5	3.3	3.0	2.8	2.5	7.2	6.9	6.7
New York	3.9	3.6	3.4	3.1	2.9	2.6	7.1	6.6	6.2
New Jersey	3.7	3.6	3.1	2.6	2.6	2.2	7.9	7.8	7.0
Pennsylvania	3.4	3.3	3.1	3.0	2.8	2.4	6.7	7.1	7.7
East North Central	4.3	3.8	3.8	3.6	3.1	3.1	8.4	7.7	7.3
Ohio	4.0	3.6	3.6	3.6	3.1	3.0	6.9	6.7	6.9
Indiana	4.3	3.9	4.0	3.9	3.5	3.6	7.6	6.9	7.4
Illinois	4.7	4.2	4.0	3.5	2.9	2.9	9.7	9.0	8.1
Michigan	4.4	3.6	3.6	3.7	3.0	3.0	7.9	6.8	6.3
Wisconsin	3.7	3.4	3.5	3.4	3.1	3.0	7.9	7.5	7.5
West North Central	3.7	3.6	3.6	3.3	3.3	3.1	8.0	7.4	7.6
Minnesota	3.5	3.5	3.2	3.2	3.3	2.8	*12.1	*8.8	*8.6
lowa	3.3	3.4	3.2	3.2	3.3	3.0	*8.3	*8.4	*9.4
Missouri	4.1	3.9	3.9	3.4	3.4	3.3	7.9	7.1	7.1
North Dakota	3.3	3.4	4.0	3.0	2.9	3.5	*	*	*
South Dakota	4.5	4.2	4.9	3.2	2.9	3.4	*	*	*
Nebraska	3.7	3.3	3.7	3.4	3.1	3.3	*8.5	*7.1	*9.0
Kansas	3.4	3.8	3.7	3.1	3.5	3.3	*6.8	*8.0	*7.7
South Atlantic	4.8	4.1	3.8	3.6	3.2	3.0	7.8	6.5	6.0
Delaware	3.8	3.4	3.2	3.2	2.4	2.5	*6.0	*6.5	*5.8
Maryland	3.8	3.6	3.6	2.9	2.8	2.9	6.0	5.5	5.4
District of Columbia	6.2	5.2	5.9	*2.1	*2.2	*5.6	7.1	5.9	6.5
Virginia	4.2	3.5	3.3	3.5	3.0	2.7	6.4	5.6	5.5
West Virginia	4.6	4.0	3.1	4.6	4.0	2.9	*6.8	*5.3	*8.7
North Carolina	4.9	4.3	4.0	3.4	3.4	3.2	8.2	6.5	6.0
South Carolina	5.8	5.2	4.3	3.6	3.7	3.2	9.1	7.5	6.1
Georgia	5.3	4.3	4.3	3.7	3.2	3.3	8.3	6.4	6.2
Florida	4.9	4.1	3.6	3.7	3.0	2.8	8.5	7.4	6.3
East South Central	4.9	4.5	4.2	3.8	3.5	3.3	8.0	7.2	6.3
Kentucky	4.2	4.0	4.0	3.9	3.8	3.8	6.8	6.6	6.2
Tennessee	4.5	4.1	4.1	3.9	3.5	3.3	6.4	6.2	6.6
Alabama	5.3	4.5	4.1	3.7	3.0	2.9	8.3	7.4	6.3
Mississippi	6.0	5.5	4.7	3.2	3.4	3.2	9.0	7.8	6.2
West South Central	4.7	4.1	3.7	3.9	3.6	3.2	7.9	6.5	6.0
Arkansas	5.6	4.3	4.3	4.4	3.4	3.5	9.3	7.3	7.1
Louisiana	5.1	4.4	4.1	3.4	3.1	3.1	8.0	6.7	5.7
Oklahoma	4.8	4.3	3.8	4.1	4.1	3.5	8.8	6.1	6.3
Texas	4.4	4.0	3.5	3.9	3.7	3.1	7.4	6.3	5.9
Mountain	4.3	4.0	3.9	3.9	3.8	3.7	8.2	7.8	7.2
Montana	4.2	4.2	5.1	3.6	4.0	4.3	*	7.0 *	/ · <u>~</u>
Idaho	4.1	4.5	4.2	4.1	4.4	4.1	*	*	*
Wyoming	5.1	4.2	3.9	5.0	4.3	3.9	*	*	*
Colorado	4.4	4.0	3.8	4.3	4.0	3.8	*6.6	*6.1	*5.1
New Mexico	4.8	4.3	3.4	4.0	3.9	3.1	*	*	*
Arizona	4.5	3.7	3.7	3.6	3.1	3.4	*8.1	*8.5	*7.2
Utah	3.6	3.7	4.1	3.5	3.7	4.0	*	*	*
Nevada	5.0	4.5	4.5	4.7	4.1	4.0	*8.5	*9.5	*10.2
Pacific	4.1	3.7	3.6	3.9	3.5	3.3	7.6	6.9	7.7
Washington	4.6	4.5	4.3	4.4	4.2	4.0	*9.6	*10.2	*9.5
Oregon	4.6	4.5	4.2	4.4	4.4	4.0	*9.0	*8.3	*9.5 *11.9
California	4.0	3.5	3.4	3.7	3.3	3.1	7.5	6.6	7.6
				٠.,	J.J	J.,		0.0	7.0
Alaska	6.0	5.3	5.4	4.6	4.1	4.0	*	*	*

¹Deaths are tabulated by race of decedent; live births are tabulated by race of mother.

^{*}Data for States with fewer than 10,000 live births for the 3-year period are considered unreliable. Data for States with fewer than 2,000 live births are considered highly unreliable and are not shown.

SOURCE: National Center for Health Statistics: Data computed by the Division of Analysis from data compiled by the Division of Vital Statistics.

Table 24. Fetal death rates, according to race, geographic division, and State: United States, average annual 1977–79, 1982–84, and 1987–89

		All races			White ¹			Black1	
Geographic division and State	1977–79	1982-84	1987–89	1977–79	1982-84	1987-89	1977–79	1982-84	1987–89
			Fetal dea	ths² per 1,	000 live bir	ths plus fe	tal deaths		· · · · · · · · · · · · · · · · · · ·
United States	9.6	8.4	7.5	8.4	7.4	6.4	15.9	13.9	13.5
New England	7.6	7.1	6.3	7.3	6.6	5.8	11.6	13.9	13.0
Maine	7.3	6.9	6.0	7.1	6.9	5.7	*	*	*
New Hampshire	6.7 7.2	6.3 7.0	6.4 5.7	6.7 7.2	6.4	6.2 5.7	*	*	*
Massachusetts	7.2 7.1	7.0	5.7 5.9	7.0	6.9 6.6	5.7 5.4	8.7	15.1	12.3
Rhode Island	10.4	8.0	7.2	10.1	7.8	6.7	*16.7	*12.3	*13.8
Connecticut	8.1	7.0	6.9	7.4	6.3	6.1	13.7	12.9	12.8
Middle Atlantic	10.8	9.8	9.0	9.4	8.7	7.4	17.3	15.0	15.8
New York	10.9	10.4	9.6	9.8	9.3	7.9	15.8	14.7	16.2
New Jersey	9.5	8.2	8.0	8.1	6.9	6.4	15.5	13.9	14.4
Pennsylvania	11.3	9.8	8.7	9.7	8.8	7.5	22.9	17.1	16.0
East North Central	8.8	7.6	6.8	7.9	6.8	5.9	14.1	11.9	11.5
Ohio	9.2	7.9	7.0	8.4	7.1	6.3	14.2	12.5	11.0
Indiana	9.0 9.7	7.7 8.4	7.6 7.5	8.3 8.2	7.2 7.1	6.8 6.1	14.8 15.0	12.2 13.3	13.7 12.5
Michigan	8.3	6.3	5.5	7.3	5.9	4.7	13.3	8.5	9.3
Wisconsin	6.8	7.0	6.2	6.7	6.4	5.5	8.7	14.3	12.9
West North Central	8.3	7.3	6.4	7.8	6.8	5.9	14.6	13.5	12.2
Minnesota	7.5	6.7	6.2	7.3	6.4	5.8	*14.7	*14.6	15.5
lowa	7.4	6.8	6.5	7.1	6.7	6.2	*16.4	*14.0	*14.3
Missouri	9.2	7.9	6.7	8.4	7.1	5.9	14.1	12.6	10.8
North Dakota	9.0	6.8	6.2	8.7	6.3	6.0	*	*	*
South Dakota	9.0	7.6	6.4	7.9	6.8	5.7	*	*	*
Nebraska	8.6 8.4	7.8 7.5	6.8	8.2 7.8	7.3	6.3	*18.9	*15.9	*13.9
Kansas			6.1		6.8	5.5	14.8	15.3	13.6
South Atlantic	11.7 8.7	10.5 8.3	9.1 7.1	9.5 7.6	8.5 7.4	7.0 5.7	17.1 12.3	15.7 11.1	14.6 11.7
Maryland	9.7	8.9	7.6	7.6	6.9	5.6	15.3	13.7	12.2
District of Columbia	14.9	13.5	12.7	*7.6	9.0	8.4	16.4	14.6	14.7
Virginia	13.8	11.3	9.4	11.3	9.3	7.7	22.0	18.1	15.3
West Virginia	10.5	9.4	7.9	. 10.2	9.3	7.7	*18.5	*12.3	*14.1
North Carolina	11.3	9.5	8.5	8.9	7.9	6.7	16.5	13.1	12.8
South Carolina	12.7	12.1	10.4	9.6	8.9	7.3	17.5	17.3	15.2
Georgia Florida	13.9 9.9	12.7 9.7	11.3 8.3	11.5 8.2	10.1 7.9	8.2 6.5	18.2 14.6	17.6 15.0	17.0 14.3
East South Central	11.3 9.5	9.7 8.4	8.4 8.1	9.1 8.8	8.0 7.9	6.8 7.6	17.2 16.5	14.3 14.4	12.8 13.4
Tennessee	10.4	7.8	6.2	9.3	7.9 7.2	7.8 5.3	14.4	10.0	9.0
Alabama	11.4	10.5	10.1	9.0	8.5	7.8	15.9	14.4	14.6
Mississippi	14.9	13.1	10.2	9.5	9.5	6.7	20.5	17.2	14.0
West South Central	9.4	8.2	7.1	8.3	7.3	6.2	14.2	12.1	11.0
Arkansas	10.3	7.2	7.8	8.4	6.3	6.4	15.8	9.8	11.8
Louisiana	10.8	9.3	8.1	7.8	7.1	6.3	15.7	13.1	10.8
Oklahoma	9.3	8.2	7.8	8.4	7.1	6.7	15.4	11.8	14.3
Texas	8.9	8.0	6.7	8.3	7.5	6.1	12.3	11.7	10.6
Mountain	8.5	7.6	6.6	8.2	7.3	6.2	15.9	15.4	14.8
Montana	8.5	7.0	7.5	7.9	6.6	6.9	*	*	*
ldaho	7.5 7.8	7.3 7.4	6.5 7.3	7.5 7.9	7.1 7.3	6.3 7.0	*	*	*
Colorado	11.0	9.5	7.3 7.7	10.5	9.1	7.0	21.5	17.7	14.6
New Mexico	8.4	7.3	4.8	8.0	7.1	4.5	*11.8	*13.0	*12.7
Arizona	7.6	7.0	6.1	7.1	6.5	5.7	*13.7	12.2	13.6
Utah	7.8	6.7	6.0	7.7	6.5	5.9	*	*	*
Nevada	7.7	7.5	7.9	6.9	6.5	6.8	*11.2	*17.9	16.8
Pacific	8.3	7.1	6.6	7.6	6.6	5.9	14.9	12.0	13.9
Washington	7.4	6.8	5.4	7.1	6.6	5.0	13.3	12.4	12.8
Oregon	7.7	6.5	5.7	7.5	6.4	5.6	*12.0	*10.0	*8.4
California	8.3	7.1	6.8	7.6	6.7	6.0	14.9	11.9	14.1
Alaska Hawaii	8.5 11.1	6.3 9.9	5.6 7.6	7.2 10.8	5.8 8.4	4.1 7.0	*	*14.7 *17.8	*14.8 *12.7
			(5)	IV.O	0.4	7.11	••		

¹Fetal deaths are tabulated by race of fetus; live births are tabulated by race of mother.

²Deaths of fetuses of 20 weeks or more gestation.

^{*}Data for States with fewer than 5,000 live births for the 3-year period are considered unreliable. Data for States with fewer than 1,000 live births are considered highly unreliable and are not shown.

SOURCE: National Center for Health Statistics: Data computed by the Division of Analysis from data compiled by the Division of Vital Statistics.

Table 25. Infant mortality rates, feto-infant mortality rates, and postneonatal mortality rates, and average annual percent change: Selected countries, 1983 and 1988

[Data are based on reporting by countries]

		Infant mo	ortality rate1	Fe	to-infant i	mortality rate ²	Po	stneonata	al mortality rate ³
Country	1983	19884	Average annual percent change	1983	1988 ⁵	Average annual percent change	1983	1988 ⁶	Average annual percent change
Japan	6.2	4.8	-5.0	12.4	9.1	-6.0	2.3	2.0	-2.8
Sweden	7.1	5.8	-4.0	10.7	9.5	-2.4	2.5	2.1	-3.4
Finland	6.2	6.1	-0.3	10.2	11.3	2.1	2.1	2.1	0.0
Netherlands	8.4	6.8	-4.1	14.2	12.3	 2.8	3.1	2.3	-5.8
Switzerland	7.6	6.8	-2.2	12.4	10.7	-2.9	2.7	2.6	-0.8
Singapore	9.4	6.9	-6.0	14.8	10.7	-6.3	2.8	2.3	-3.9
Canada	8.5	7.2	-3.3	13.3	11.0	-3.7	3.1	2.6	-3.5
Hong Kong	9.8	7.4	-5.5	14.4	11.5	-4.4	2.9	2.8	-0.7
Federal Republic of Germany	10.3	7.5	-6.1	14.9	11.0	-5.9	4.4	3.5	-4.5
Denmark	7.7	7.5	-0.5	12.9	12.9	0.0	3.1	3.0	-0.7
France	9.1	7.8	-3.0	16.6	14.0	-3.3	4.1	3.8	-1.5
German Democratic Republic	10.7	8.1	-5.4	16.3	13.0	-4.4	3.5	3.1	-2.4
Spain	10.9	8.1	-5.8	16.9	13.3	-4 .7	3.3	3.0	-3.1
Austria.	11.9	8.1	- 7.4	17.1	11.8	<i>−</i> 7.2	4.7	3.4	-6.3
Scotland	9.9	8.2	-3.7	15.7	13.5	-3.0	4.1	3.7	-2.0
Norway	7.9	8.3	1.0	13.9	12.9	-1.5	3.1	3.8	4.2
Australia	9.6	8.7	-1.9	14.6	13.1	-2.1	3.6	3.4	-1.1
Ireland	10.1	8.9	-2.5	18.6	15.8	-3.2	4.0	3.5	-2.6
Northern Ireland	12.1	8.9	-6.0	19.4	13.9	-6.5	4.8	3.6	-5.6
England and Wales	10.1	9.0	-2.3	15.8	13.8	-2.7	4.3	4.1	-0.9
Belgium	10.4	9.2	-2.4	17.3	15.6	-2.6	4.0	4.1	0.6
Italy	12.3	9.3	-5.4	19.4	15.4	-4.5	2.7	2.1	-4.9
United States	11.2	10.0	-2.2	16.5	14.4	-2.7	3.9	3.6	-1.6
Israel	14.4	10.2	-6.7	20.6	15.5	- 5.5	5.2	3.5	-7.6
New Zealand	12.9	10.8	-3.5	18.3	15.5	-3.3	7.0	6.1	-2.7
Greece	14.6	11.0	 5.5	21.7	17.8	-3.9	3.7	2.9	-4.8
Czechoslovakia	15.7	11.9	-5.4	20.8	16.3	-4.8	5.1	3.9	-5.2
Cuba	16.8	11.9	-6.7	28.1	24.9	-3.0	6.1	3.8	-9.0
Puerto Rico	17.4	12.6	-6.3	27.9	22.5	-4.2	3.5	3.0	-3.0
Portugal	19.3	13.1	-7.5	29.5	20.8	-6.8	6.3	4.4	-6.9
Bulgaria	16.5	13.6	-3.8	23.3	19.4	-3.6	7.4	6.2	-3.5
Costa Rica	18.6	14.7	- 4.6				7.3	5.3	-6.2
Hungary	19.0	15.8	-3.6	26.0	21.8	- 3.5	4.8	4.0	-3.6
Poland	19.2	16.2	-3.3	25.2	21.6	-3.0	6.0	4.6	-5.2
Kuwait	19.0	17.3	-2.3	30.7	25.1	-6.5	7.3	5.2	-8.1
Chile	21.9	18.9	-2.9	27.6	25.4	-1.6	11.2	9.4	-3.4
Yugoslavia	30.7	24.5	-4.4	37.1	30.1	-4.1	14.9	11.0	-5.9
U.S.S.R	25.1	24.9	-0.2		34.4			14.8	
Romania	23.9	25.4	1.2	31.7	32.8	0.7	14.4	18.0	4.6

¹Number of deaths of infants under 1 year per 1,000 live births.

NOTES: Rankings are from lowest to highest infant mortality rates based on the latest data available for countries or geographic areas with at least 1 million population and with "complete" counts of live births and infant deaths as indicated in the United Nations Demographic Yearbook, 1988. Some of the international variation in infant mortality rates (IMR) is due to variation among countries in distinctions between fetal and infant deaths. The feto-infant mortality rate (FIMR) attempts to reduce international variation due to clinical distinctions between fetal and infant deaths. The United States ranks 23rd on the IMR and 20th on the FIMR and 20th on the postneonatal mortality rate.

SOURCES: World Health Organization: World Health Statistics Annuals. Vols. 1985–1990. Geneva. United Nations: Demographic Yearbook 1983–1988. New York. National Center for Health Statistics: Vital Statistics of the United States, 1983, Vol. II, Mortality, Part A. DHHS Pub. No. (PHS) 87–1101. Public Health Service. Washington. U.S. Government Printing Office, 1988; Vital Statistics of the United States, 1988, Vol. II, Mortality, Part A. DHHS Pub. No. (PHS) 91–1101. Public Health Service. Washington. U.S. Government Printing Office, 1991.

²Number of late fetal deaths plus infant deaths under 1 year per 1,000 live births plus late fetal deaths.

³Number of postneonatal deaths per 1,000 live births.

⁴Data for Kuwait are for 1987.

⁵Data for Belgium and Cuba are for 1987; and data for Kuwait are for 1986.

⁶Data for Belgium and Kuwait are for 1987; and data for Spain are for 1986.

Table 26 (page 1 of 2). Life expectancy at birth and at 65 years of age, according to sex: Selected countries, 1983 and 1988

[Data are based on reporting by countries]

	At	birth	At 65	years
Country	19831	1988²	19831	19882
Male		Life expecta	ncy in years	
Japan Hong Kong. Greece. Sweden Switzerland Israel Netherlands Canada Italy Australia	74.5 72.3 73.6 73.6 72.7 73.0 73.0 72.0 71.3 72.2	75.8 74.4 74.3 74.2 74.0 73.9 73.7 73.4 73.3 73.2	15.5 14.0 15.4 14.7 14.6 14.9 14.0 14.5 13.7 14.3	16.2 15.3 15.6 15.0 15.4 15.1 14.4 15.0 14.7
Spain. Norway France England and Wales. Kuwait Federal Republic of Germany. Austria Costa Rica Cuba Denmark	72.6 72.8 70.7 71.6 69.0 70.7 69.5 74.5 72.2 71.5	73.1 73.1 72.9 72.7 72.5 72.3 72.1 72.1 72.0 72.0	14.8 14.5 14.2 13.3 12.5 13.3 13.1 17.3 15.3 13.9	15.0 14.6 15.7 14.5 14.1 14.5 14.0 15.3
Ireland United States Singapore Belgium Puerto Rico New Zealand Northern Ireland Finland Fortugal Scotland	70.3 71.0 69.4 70.6 71.6 70.8 69.3 70.2 69.3 69.6	71.6 71.5 71.5 71.4 71.1 71.0 70.9 70.7 70.5 70.5	12.6 14.5 12.5 13.1 16.3 13.6 12.4 13.0 13.6 12.5	13.0 14.9 13.5 13.5 16.8 13.7 12.9 13.6 14.2
Chile German Democratic Republic. Yugoslavia Bulgaria Czechoslovakia. Romania. Poland Hungary. U.S.S.R	67.8 69.5 67.1 68.4 66.9 66.9 67.1 65.1	70.0 69.7 68.7 68.3 67.7 67.1 67.1 66.1 64.7	13.3 12.5 12.5 12.6 11.5 12.6 12.6 11.6	13.7 12.6 13.3 12.6 11.9 12.8 12.5 12.3
Female Japan France Switzerland Netherlands Canada Sweden Italy Hong Kong. Australia Norway	80.3 78.8 79.8 79.8 79.0 79.6 77.9 78.4 79.0 79.8	81.9 81.3 81.1 80.5 80.3 80.0 79.9 79.9 79.8 79.7	18.9 18.4 18.7 19.0 18.7 18.5 17.2 17.9 18.6 18.7	20.2 20.4 19.8 19.3 19.6 18.7 18.6 19.1 18.7
Spain Greece Puerto Rico Federal Republic of Germany Finland Austria England and Wales United States Belgium Denmark	78.8 78.3 78.3 77.5 78.5 76.6 77.6 78.1 77.2 77.5	79.7 79.4 79.4 79.1 78.8 78.7 78.4 78.3 78.1 77.7	18.1 17.6 18.8 17.1 17.5 16.6 17.4 18.6 17.0	18.4 18.0 19.6 18.1 17.7 17.8 17.9 18.6 17.5 17.9

See footnotes at end of table.

Table 26 (page 2 of 2). Life expectancy at birth and at 65 years of age, according to sex: Selected countries, 1983 and 1988

[Data are based on reporting by countries]

	At I	oirth	At 65	years				
Country	19831	1988 ²	1983 ¹	1988²				
Female - Con	Life expectancy in years							
Portugal Israel New Zealand Ireland Ireland Northern Ireland Costa Rica Scotland. Singapore German Democratic Republic. Kuwait	76.2 76.4 77.0 76.0 75.7 78.4 75.8 75.0 75.4 73.8	77.7 77.4 77.3 77.1 76.9 76.9 76.8 76.2 76.0 75.8	16.7 16.2 17.5 15.9 16.1 19.0 16.2 15.5 15.4 15.2	17.5 16.7 17.6 16.6 17.0 16.8 16.8 16.0 15.6				
Poland Chile Czechoslovakia. Cuba Yugoslavia Bulgaria Hungary U.S.S.R Romania.	75.2 74.7 74.3 75.3 73.0 74.4 73.0 72.7 72.5	75.7 75.7 75.3 75.3 74.7 74.6 74.2 73.4 72.7	16.1 16.8 14.7 16.7 14.9 14.8 15.6 14.4	16.3 16.7 15.5 16.6 15.9 15.6 15.8 14.7				

¹Data for Spain are for 1981; data for Canada, Chile, Greece, and Kuwait are for 1982; data for Denmark are for 1982–1983; data for England and Wales are for 1982–1984; data for Portugal are for 1982–1985; and data for U.S.S.R. are for 1984–1985.

NOTES: Rankings are from highest to lowest life expectancy based on the latest available data for countries or geographic areas with at least 1 million population. This table is based on official mortality data from the country concerned, as submitted to the United Nations Demographic Yearbook or the World Health Statistics Applied

SOURCES: World Health Organization: World Health Statistics Annuals. Vols. 1984–1990. Geneva. United Nations: Demographic Yearbook 1984 and 1986. New York. National Center for Health Statistics: Vital Statistics of the United States, 1983, Vol. II, Mortality, Part A. DHHS Pub. No. (PHS) 87–1101. Public Health Service. Washington. U.S. Government Printing Office, 1988; Vital Statistics of the United States, 1988, Vol. II, Mortality, Part A. DHHS Pub. No. (PHS) 91–1101. Public Health Service. Washington. U.S. Government Printing Office, 1991.

for 1982–1984; data for Portugal are for 1982–1985; and data for U.S.S.R. are for 1984–1985.

Data for Romania are for 1984; data for Belgium are for 1986; data for New Zealand are for 1986–1988; data for Bulgaria, Chile, Kuwait, and Spain are for 1987; and data for Portugal are for 1987–1988.

Table 27 (page 1 of 2). Death rates for all causes, according to sex, race, and age: United States, selected years 1950–89

Sex, race, and age	1950¹	1960¹	1970	1980	1985	1986	1987	1988	1989
All races	·		Dea	aths per 10	0,000 resid	lent popula	ation		
All ages, age adjusted	840.5 963.8	760.9 954.7	714.3 945.3	585.8 878.3	546.1 873.9	541.7 873.2	535.5 872.4	535.5 882.0	523.0 866.3
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	3,299.2 139.4 60.1 128.1 178.7 358.7 853.9 1,911.7 4,067.7 9,331.1 20,196.9	2,696.4 109.1 46.6 106.3 146.4 299.4 756.0 1,735.1 3,822.1 8,745.2	2,142.4 84.5 41.3 127.7 157.4 314.5 730.0 1,658.8 3,582.7 8,004.4 16,344.9	1,288.3 63.9 30.6 115.4 135.5 227.9 584.0 1,346.3 2,994.9 6,692.6 15,980.3	1,067.8 51.4 26.3 95.9 123.4 207.2 516.3 1,282.7 2,838.6 6,445.1 15,480.3	1,032.1 52.0 26.0 102.3 132.1 212.9 504.8 1,255.1 2,801.4 6,348.2 15,398.9	1,018.5 51.6 25.6 99.4 133.2 214.1 498.0 1,241.3 2,751.3 6,282.5 15,320.8	1,008.3 50.9 25.8 102.1 135.4 219.6 486.2 1,235.6 2,729.8 6,321.3 15,594.0	1,005.2 49.2 25.4 99.9 138.1 221.7 475.0 1,204.4 2,646.7 6,138.8 15,034.8
White male									
All ages, age adjusted	963.1 1,089.5	917.7 1,098.5	893.4 1,086.7	745.3 983.3	688.7 960.0	679.8 954.4	668.2 947.8	664.3 952.2	644.2 930.2
Under 1 year. 14 years 514 years 1524 years 2534 years 3544 years 4554 years 5564 years 6574 years 7584 years 85 years and over	3,400.5 135.5 67.2 152.4 185.3 380.9 984.5 2,304.4 4,864.9 10,526.3 22,116.3	2,694.1 104.9 52.7 143.7 163.2 332.6 932.2 2,225.2 4,848.4 10,299.6 21,750.0	2,113.2 83.6 48.0 170.8 176.6 343.5 882.9 2,202.6 4,810.1 10,098.8 18,551.7	1,230.3 66.1 35.0 167.0 171.3 257.4 698.9 1,728.5 4,035.7 8,829.8 19,097.3	1,033.9 52.4 29.9 136.3 157.1 241.4 608.8 1,614.3 3,716.8 8,500.4 18,788.9	976.6 52.2 29.9 145.9 168.8 248.4 592.2 1,573.1 3,634.8 8,341.7 18,576.1	942.1 52.0 30.0 137.3 167.8 249.6 582.8 1,552.8 3,548.4 8,212.2 18,434.9	930.5 51.0 28.9 139.7 169.6 257.2 564.6 1,530.2 3,504.5 8,201.8 18,814.9	909.4 47.8 28.1 132.9 173.5 260.8 551.1 1,486.1 3,362.7 7,911.0 17,978.1
Black male									
All ages, age adjusted	1,373 <i>.</i> 1 1,260.3	1,246.1 1,181.7	1,318.6 1,186.6	1,112.8 1,034.1	1,024.0 976.8	1,026.9 987.7	1,023.2 989.5	1,037.8 1,006.8	1,032.1 1,006.5
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	95.1 289.7 503.5 878.1 1,905.0 3,773.2 5,310.3	5,306.8 208.5 75.1 212.0 402.5 762.0 1,624.8 3,316.4 5,798.7 8,605.1 14,844.8	4,298.9 150.5 67.1 320.6 559.5 956.6 1,777.5 3,256.9 5,803.2 9,454.9 12,222.3	2,586.7 110.5 47.4 209.1 407.3 689.8 1,479.9 2,873.0 5,131.1 9,231.6 16,098.8	2,134.8 89.0 41.3 174.1 374.4 641.8 1,283.3 2,623.1 4,888.7 9,298.4 15,046.2	2,181.7 90.9 42.0 190.5 385.6 675.9 1,266.5 2,545.5 4,789.9 9,290.8 15,488.1	2,211.4 90.5 42.5 203.9 389.8 701.5 1,263.6 2,464.7 4,737.6 9,240.7 15,226.1	2,167.7 90.5 42.1 223.3 409.7 728.3 1,282.2 2,477.5 4,695.3 9,419.9 15,454.3	2,179.0 88.4 41.7 235.8 417.1 744.1 1,296.9 2,439.6 4,621.3 9,064.4 15,355.6
White female	645.0	EEE 0	E01 7	411 1	200.6	2077	004.4	004.4	0740
All ages, age adjusted	645.0 803.3	555.0 800.9	501.7 812.6	411.1 806.1	390.6 837.1	387.7 840.7	384.1 845.5	384.4 860.0	374.9 846.0
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	2,566.8 112.2 45.1 71.5 112.8 235.8 546.4 1,293.8 3,242.8 8,481.5 19,679.5	2,007.7 85.2 34.7 54.9 85.0 191.1 458.8 1,078.9 2,779.3 7,696.6 19,477.7	1,614.6 66.1 29.9 61.6 84.1 193.3 462.9 1,014.9 2,470.7 6,698.7 15,980.2	962.5 49.3 22.9 55.5 65.4 138.2 372.7 876.2 2,066.6 5,401.7 14,979.6	786.9 39.7 19.4 48.4 58.9 121.2 339.5 864.1 2,028.3 5,171.4 14,579.4	759.1 40.7 18.6 50.4 60.4 121.3 330.3 853.3 2,031.8 5,108.7 14,502.9	742.9 40.5 17.9 49.1 62.6 119.3 325.7 848.5 2,001.8 5,075.2 14,486.9	728.2 40.2 18.6 49.2 61.7 119.1 317.2 850.5 1,995.9 5,129.3 14,755.9	716.0 38.4 18.8 48.9 62.0 117.4 307.0 828.4 1,947.5 5,001.7 14,242.8

See footnotes at end of table.

Table 27 (page 2 of 2). Death rates for all causes, according to sex, race, and age: United States, selected years 1950–89

[Data are based on the National Vital Statistics System]

Sex, race, and age	1950¹	19601	1970	1980	1985	1986	1987	1988	1989
Black female			De	aths per 10	0,000 resid	dent popula	ation		
All ages, age adjusted	1,106.7 1,002.0	916.9 905.0	814.4 829.2	631.1 733.3	589.1 727.7	588.2 733.9	586.2 737.3	593.1 754.5	585.6 752.4
Under 1 years 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	72.8 213.1 393.3 758.1 1,576.4 3,089.4 4,000.2	4,162.2 173.3 53.8 107.5 273.2 568.5 1,177.0 2,510.9 4,064.2 6,730.0	3,368.8 129.4 43.8 111.9 231.0 533.0 1,043.9 1,986.2 3,860.9 6,691.5	2,123.7 84.4 30.5 70.5 150.0 323.9 768.2 1,561.0 3,057.4 6,212.1	1,756.6 70.3 28.1 59.5 136.3 278.4 654.0 1,501.7 2,925.7 6.252.0	1,731.1 76.5 26.9 64.3 146.5 290.2 654.6 1,469.8 2,892.3 6,148.8	1,791.5 73.5 25.0 67.9 150.0 295.9 646.3 1,445.0 2,874.5 6,145.7	1,821.5 70.7 29.8 69.0 155.5 307.7 633.9 1,465.5 2,874.9 6,255.3	1,863.9 72.5 28.1 67.8 158.4 302.0 617.1 1,424.2 2,854.5 6,211.4

¹Includes deaths of nonresidents of the United States.

SOURCES: National Center for Health Statistics: Vital Statistics of the United States, Vol. II, Mortality, Part A, for data years 1950–89. Public Health Service. Washington. U.S. Government Printing Office; Data computed by the Division of Analysis from data compiled by the Division of Vital Statistics and from table 1.

Table 28. Death rates for all causes, according to age, race, and Hispanic origin: United States, 1987-89

Race, Hispanic origin, and age	1987	1988	1989
White	Death	s per 100,000 resident pop	ulation
Under 1 year. 1–14 years 15–24 years 25–44 years 45–64 years 65 years and over	845.1 30.8 93.8 146.3 810.5 5,059.9	832.0 30.4 95.1 148.6 790.4 5,106.4	815.5 29.4 91.5 150.8 761.2 4,957.6
Black			
Under 1 year. 1–14 years 15–24 years 25–44 years 45–64 years 65 years and over	2,003.7 47.9 135.0 350.8 1,375.5 5,592.2	1,996.6 49.0 145.2 367.0 1,379.9 5,649.8	2,023.7 48.4 150.8 373.6 1,355.2 5,585.3
Hispanic ¹			
Under 1 year. 1–14 years 15–24 years 25–44 years 45–64 years 65 years and over	919.7 28.8 113.2 176.1 592.6 3,523.3	963.9 30.3 113.3 184.8 609.2 3,481.9	1,013.5 32.9 121.4 201.4 611.1 3,516.9
Asian or Pacific Islander			
Under 1 year. 1–14 years 15–24 years 25–44 years 45–64 years 65 years and over	610.6 23.7 57.1 76.2 398.8 2,458.3	609.2 23.9 57.1 76.8 402.3 2,430.3	659.5 25.9 55.6 80.6 386.8 2,379.2
American Indian or Alaskan Native			
Under 1 year. 1–14 years 15–24 years 25–44 years 45–64 years 65 years and over	1,249.3 44.7 152.0 273.1 847.8 3,273.8	1,224.9 43.7 161.6 271.1 855.9 3,291.8	1,316.4 46.8 157.4 286.3 891.5 3,471.0

¹Data shown only for States with an Hispanic-origin item on their death certificates. See Appendix I.

SOURCES: National Center for Health Statistics: Vital Statistics of the United States, Vol. II, Mortality, Part A. Public Health Service. Washington. U.S. Government Printing Office; Death rates for Hispanics, Asian or Pacific Islanders, and American Indian or Alaskan Natives were computed by the Office of Analysis and Epidemiology, National Center for Health Statistics. See Appendix I.

NOTES: The race groups include persons of both Hispanic and non-Hispanic origin. Conversely, persons of Hispanic origin may be of any race.

Table 29. Death rates for selected causes, according to age, race, and Hispanic origin: United States,1987–89

	Accide	nts and adverse	effects	Homicide and suicide			
Age, race, and Hispanic origin	1987	1988	1989	1987	1988	1989	
1–14 years		Dea	aths per 100,000	resident populat	ion		
All races	14.6	14.4	13.7	2.0	2.2	2.3	
White	13.7	13.3	12.8	1.6	1.7	1.7	
Black	19.8	20.4	18.9	4.3	5.0	5.4	
Hispanic ¹	11.5	12.2	13.0	1.7	1.8	2.3	
Asian or Pacific Islander	9.4	9.5	9.8	1.5	1.6	2.4	
American Indian or Alaskan Native	22.2	23.8	23.3	2.4	2.5	3.8	
15-24 years							
All races	48.9	49.5	45.8	26.9	28.6	30.3	
White	51.5	52.0	48.1	21.4	21.9	22.3	
Black	35.6	36.6	34.9	58.9	67.6	75.2	
Hispanic ¹	46.7	49.3	51.3	38.7	38.6	43.4	
Asian or Pacific Islander	26.2	29.1	25.0	15.5	13.2	17.5	
American Indian or Alaskan Native	86.1	88.8	84.0	41.3	48.4	48.0	
25–44 years							
All races	35.4	35.8	35.4	28.4	28.8	28.7	
White	34.0	34.3	33.9	24.0	23.8	23.5	
Black	47.3	48.9	47.7	63.6	67.5	68.0	
Hispanic ¹	37.1	40.0	42.5	33.9	34.1	37.8	
Asian or Pacific Islander	16.4	15.5	15.8	11.8	14.5	14.6	
American Indian or Alaskan Native	100.1	97.2	94.2	46.8	46.5	47.3	

		Diseases of hear	1	Malignant neoplasms			
Age, race, and Hispanic origin	1987	1988	1989	1987	1988	1989	
45–64 years		De	aths per 100,000	resident popula	tion		
All races	270.9	259.3	241.5	301.7	296.6	290.9	
White. Black	257.3 425.1 161.8 103.6 234.1	244.2 425.9 166.2 99.1 224.1	225.8 409.2 158.0 94.6 241.7	293.7 410.7 148.5 147.5 153.5	288.7 400.6 151.9 159.5 182.6	282.8 399.0 160.6 147.9 182.7	
65 years and over							
All races	2,074.6	2,066.4	1,949.2	1,059.8	1,067.6	1,085.1	
White. Black. Hispanic ¹ . Asian or Pacific Islander American Indian or Alaskan Native.	2,087.6 2,179.9 1,352.9 880.9 1,144.4	2,079.5 2,180.9 1,335.6 870.0 1,128.3	1,959.9 2,080.6 1,336.0 831.7 1,211.4	1,054.0 1,231.8 693.4 559.5 583.8	1,062.0 1,241.4 665.4 548.8 606.5	1,079.0 1,269.8 727.3 561.0 684.2	

¹Data shown only for States with an Hispanic-origin item on their death certificates. See Appendix I.

NOTES: The race groups include persons of both Hispanic and non-Hispanic origin. Conversely, persons of Hispanic origin may be of any race.

SOURCES: National Center for Health Statistics: Vital Statistics of the United States, Vol. II, Mortality, Part A. Public Health Service. Washington. U.S. Government Printing Office; Death rates for Hispanics, Asian or Pacific Islanders, and American Indian or Alaskan Natives were computed by the Office of Analysis and Epidemiology, National Center for Health Statistics. See Appendix I.

Table 30 (page 1 of 2). Age-adjusted death rates for selected causes of death, according to sex and race: United States, selected years 1950–89

Sex, race, and cause of death	19501	1960¹	1970	1980	1985	1986	1987	1988	1989
All races			Dea	aths per 10	0,000 resic	lent popula	ation		
All causes	840.5	760.9	714.3	585.8	546.1	541.7	535.5	535.5	523.0
Natural causes	766.6	695.2	636.9	519.7	490.5	484.4	479.4	478.9	467.5
Diseases of heart	307.2	286.2	253.6	202.0	180.5	175.0	169.6	166.3	155.9
Ischemic heart disease				149.8	125.5	118.8	113.9	110.2	105.1
Cerebrovascular diseases	88.6	79.7	66.3	40.8	32.3	31.0	30.3	29.7	28.0
Malignant neoplasms	125.3	125.8	129.8	132.8	133.6	133.2	132.9	132.7	133.0
Respiratory system	12.8	19.2	28.4	36.4	38.8	39.0	39.7	39.9	40.3
Colorectal	19.0	17.7	16.8	15.5	14.8	14.4	14.3	13.9	13.6
Prostate ²	13.4 22.2	13.1	13.3 23.1	14.4 22.7	14.6 23.2	15.0 23.1	14.9 22.9	15.2 23.1	15.7 23.0
Breast ³	4.4	22.3 8.2	13.2	15.9	23.2 18.7	18.8	18.7	19.4	19.4
Pneumonia and influenza	26.2	28.0	22.1	12.9	13.4	13.5	13.1	14.2	13.7
Chronic liver disease and cirrhosis	8.5	10.5	14.7	12.2	9.6	9.2	9.1	9.0	8.9
Diabetes mellitus	14.3	13.6	14.1	10.1	9.6	9.6	9.8	10.1	11.5
Nephritis, nephrotic syndrome, and nephrosis				4.5	4.9	4.9	4.8	4.8	4.4
Septicemia				2.6	4.1	4.3	4.5	4.6	4.1
Atherosclerosis				5.7	4.0	3.7	3.6	3.4	2.9
Human immunodeficiency virus infection							5.5	6.6	8.7
External causes	73.9	65.7	77.4	66.1	55.6	57.3	56.1	56.6	55.5
Accidents and adverse effects	57.5	49.9	53.7	42.3	34.7	35.2	34.6	35.0	33.8
Motor vehicle accidents	23.3	22.5	27.4	22.9	18.8	19.4	19.5	19.7	18.9
Suicide	11.0	10.6	11.8	11.4	11.5	11.9	11.7	11.4	11.3
Homicide and legal intervention	5.4	5.2	9.1	10.8 3.0	8.3 3.5	9.0 3.9	8.6 3.8	9.0 4.2	9.4 4.1
Drug-induced causes				8.4	5.5 6.9	6.7	6.8	7.0	7.2
				0.4	0.5	0.7	0.0	7.0	1.4
White male									
All causes	963.1	917.7	893.4	745.3	688.7	679.8	668.2	664.3	644.2
Natural causes	860.1	825.8	788.6	651.2	608.8	598.2	589.3	585.4	567.4
Diseases of heart	381.1	375.4	347.6	277.5	244.5	234.8	225.9	220.5	205.9
Ischemic heart disease			-	218.0	180.8	169.9	161.7	155.8	148.2
Cerebrovascular diseases	87.0	80.3	68.8	41.9	32.8	31.1	30.3	30.0	28.0
Malignant neoplasms	130.9	141.6	154.3	160.5	159.2	158.8	158.4	157.6	157.2
Respiratory system	21.6	34.6	49.9	58.0	58.2	58.0	58.6	58.0	57.4
Colorectal	19.8 13.1	18.9 12.4	18.9 12.3	18.3 13.2	17.6 13.3	17.2 13.8	17.1	16.6 14.1	16.3 14.5
Prostate	6.0	13.8	24.0	26.7	28.5	28.1	13.7 27.4	27.8	26.8
Pneumonia and influenza	27.1	31.0	26.0	16.2	17.4	17.5	16.8	18.0	16.9
Chronic liver disease and cirrhosis	11.6	14.4	18.8	15.7	12.6	12.2	12.1	12.1	11.9
Diabetes mellitus	11.3	11.6	12.7	9.5	9.2	9.1	9.5	9.6	11.0
Nephritis, nephrotic syndrome, and nephrosis				4.9	5.4	5.4	5.3	5.2	4.7
Septicemia				2.8	4.3	4.5	4.5	4.5	4.1
Atherosclerosis				6.5	4.6	4.3	4.2	4.0	3.4
Human immunodeficiency virus infection							_8.3	9.9	13.1
External causes	103.0	91.9	104.8	94.1	79.9	81.6	78.9	78.9	76.8
Accidents and adverse effects	80.9	70.5	76.2	62.3	50.4	51.1	49.7	49.9	47.8
Motor vehicle accidents	35.9	34.0	40.1	34.8	27.6	28.7	28.4	28.5	26.8
Suicide	18.1	17.5	18.2	18.9	19.9	20.5	20.1	19.8	19.6
Homicide and legal intervention	3.9	3.9	7.3	10.9	8.1	8.4	7.7	7.7	8.1
Drug-induced causes				3.2 10.8	4.0 9.1	4.6 8.9	4.3 9.1	4.8 9.4	4.8 9.8
				10.8	9.1	0.9	9.1	9.4	9.0
Black male									
All causes	1,373.1	1,246.1	1,318.6	1,112.8	1,024.0	1,026.9	1,023.2	1,037.8	1,032.1
Natural causes	1,209.2	1,093.4	1,095.4	942.6	892.7	888.7	886.4	894.9	887.4
Diseases of heart	415.5	381.2	375.9	327.3	301.0	294.3	287.1	286.2	272.6
Ischemic heart disease				196.0	164.9	153.9	150.8	146.9	142.9
Cerebrovascular diseases	146.2	141.2	122.5	77.5	60.8	58.9	57.1	57.8	54.1
Malignant neoplasms	126.1	158.5	198.0	229.9	231.6	229.0	227.9	227.0	230.6
Respiratory system	16.9	36.6	60.8	82.0	84.4	83.9	84.2	83.4	84.6
Colorectal	13.8	15.0	17.3	19.2	19.5	19.3	19.7	19.0	19.4
Prostate	16.9	22.2	25.4	29.1	30.2	30.1	30.1	30.3	30.9
Chronic obstructive pulmonary diseases	60.0	70.0	E2 0	20.9	23.9	24.6	24.0	26.0	24.9
Pneumonia and influenza	63.8 8.8	70.2 14.8	53.8 33.1	28.0 30.6	26.8 23.4	27.2 20.8	26.4 22.0	28.0 20.7	27.9 20.5
Diabetes mellitus	11.5	16.2	21.2	17.7	23.4 17.7	20.6 17.9	18.3	19.8	20.5 22.6
Nephritis, nephrotic syndrome, and nephrosis	11.0	10.2		14.2	14.1	14.2	13.4	13.3	13.9
Septicemia				8.0	11.9	12.4	12.5	12.2	11.2
Atheroscierosis				7.5	5.1	5.0	4.4	4.6	3.3
Human immunodeficiency virus infection				7.5			25.4	31.6	40.3
External causes	163.9	152.7	223.2	170.2	131.3	138.2	136.8	142.9	144.7
Accidents and adverse effects	105.7	100.0	119.5	82.0	66.7	66.9	66.8	69.0	67.3
Motor vehicle accidents	39.8	38.2	50.1	32.9	27.7	29.2	28.5	29.6	29.4
Suicide	7.0	7.8	9.9	11.1	11.3	11.5	12.0	11.8	12.5
Homicide and legal intervention	51.1	44.9	82.1	71.9	49.9	55.9	53.8	58.2	61.5
Drug-induced causes				5.8	8.9	10.5	11.3	12.9	11.4
Alcohol-induced causes				32.4	27.2	25.0	26.0	26.6	26.8

See footnotes at end of table.

Table 30 (page 2 of 2). Age-adjusted death rates for selected causes of death, according to sex and race: United States, selected years 1950–89

[Data are based on the National Vital Statistics System]

Sex, race, and cause of death	1950¹	1960¹	1970	1980	1985	1986	1987	1988	1989
White female			Deat	hs per 100	,000 resid	ent popula	tion		
All causes	645.0	555.0	501.7	411.1	390.6	387.7	384.1	384.4	374.9
Natural causes	607.7 223.6	522.7 197.1	463.8 167.8	380.0 134.6 97.4	363.4 121.7 82.9	360.4 119.0 79.5	356.7 116.3 76.9	357.1 114.2	348.3 106.6
Cerebrovascular diseases	79.7	68.7	56.2	35.2	27.9	27.1	26.3	74.7 25.5	71.0 24.1
Malignant neoplasms Respiratory system Colorectal.	119.4 4.6 19.0	109.5 5.1 17.0	107.6 10.1 15.3	107.7 18.2 13.3	110.3 22.6 12.3	110.1 23.1 12.0	109.7 23.8 11.8	110.1 24.8 11.5	110.7 25.8 11.1
Breast Chronic obstructive pulmonary diseases	22.5 2.8	22.4 3.3	23.4 5.3	22.8 9.2	23.3 12.9	23.0	22.8	23.0	22.9
Pneumonia and influenza	18.9	19.0	15.0	9.4	9.8	13.3 9.9	13.7 9.7	14.5 10.7	15.2 10.3
Chronic liver disease and cirrhosis	5.8 16.4	6.6 13.7	8.7 12.8	7.0 8.7	5.6 8.1	5.4 8.1	5.1 8.1	5.0 8.4	5.0 9.6
Nephritis, nephrotic syndrome, and nephrosis . Septicemia				2.9 1.8	3.4 3.0	3.3 3.2	3.3 3.4	3.3 3.5	3.0 3.1
Atherosclerosis				5.0	3.5	3.2	3.2 0.6	3.0 0.7	2.6 0.9
External causes	37.3 30.6	32.3 25.5	37.9 27.2	31.1 21.4	27.2 18.4	27.3 18.4	27.4 18.6	27.3 18.8	26.6 18.5
Motor vehicle accidentsSuicide	10.6 5.3	11.1 5.3	14.4 7.2	12.3 5.7	10.8 5.3	11.0 5.4	11.4 5.3	11.6 5.1	11.5 4.8
Homicide and legal intervention	1.4	1.5 	2.2	3.2 2.6	2.9 2.5	2.9 2.7	2.9 2.5	2.8 2.7	2.8 2.6
Alcohol-induced causes				3.5	2.8	2.7	2.6	2.7	2.8
Black female									
All causes	1,106.7	916.9	814.4	631.1	589.1	588.2	586.2	593.1	585.6
Natural causes	1,054.8 349.5	867.3 292.6	757.9 251.7	588.4 201.1	554.4 186.8	551.9 185.1	549.6 180.8	554.8 181.1	548.0 172.9
Ischemic heart disease	155.6	139.5	107.9	116.1 61.7	100.8 50.3	97.0 47.6	93.6 46.7	93.0 46.6	90.9 44.9
Malignant neoplasms	131.9 4.1	127.8 5.5	123.5 10.9	129.7 19.5	130.4 22.5	132.1 23.3	132.0 24.3	131.2 24.6	130.9 25.4
ColorectalBreast	15.0 19.3	15.4 21.3	16.1 21.5	15.3 23.3	16.1 25.3	15.2 25.8	15.5 26.5	14.9 27.0	14.8 26.0
Chronic obstructive pulmonary diseases Pneumonia and influenza	50.4	43.9	29.2	6.3 12.7	8.7 12.4	8.9 13.1	9.5 12.2	10.0 13.4	10.9 13.8
Chronic liver disease and cirrhosis	5.7 22.7	8.9 27.3	17.8 30.9	14.4 22.1	10.1 21.1	9.3 21.4	9.1 21.3	9.3 22.1	8.5 24.2
Nephritis, nephrotic syndrome, and nephrosis . Septicemia				10.3 5.4	10.5 8.1	9.9 8.1	9.8 9.1	10.3	9.6 8.4
Atherosclerosis Human immunodeficiency virus infection				5.6	3.8	3.5	3.3	3.3	2.9
External causes. Accidents and adverse effects.	51.9	49.6	56.5	42.7	34.7	36.3	4.7 36.6	6.2 38.3	8.1 37.6
Motor vehicle accidents	38.5 10.3	35.9 10.0	35.3 13.8	25.1 8.4	20.7 8.2	21.0 8.5	21.0 8.7	22.2 9.2	21.6 9.1
Suicide	1.7 11.7	1.9 11.8	2.9 15.0	2.4 13.7	2.1 10.8	2.4 11.8	2.1 12.3	2.4 12.7	2.4 12.5
Drug-induced causes				2.7 10.6	3.3 7.9	3.7 7.0	4.1 7.2	4.3 7.7	4.1 7.6

¹Includes deaths of nonresidents of the United States.

NOTES: For data years shown, the code numbers for cause of death are based on the then current International Classification of Diseases, which are described in Appendix II, tables IV and V. Categories for the coding and classification of human immunodeficiency virus infection were introduced in the United States beginning with mortality data for 1987.

SOURCES: National Center for Health Statistics: Vital Statistics Rates in the United States, 1940–1960, by R. D. Grove and A. M. Hetzel. DHEW Pub. No. (PHS) 1677. Public Health Service. Washington. U.S. Government Printing Office, 1968; Unpublished data from the Division of Vital Statistics; Vital Statistics of the United States, Vol. II, Mortality, Part A, for data years 1950–89. Public Health Service. Washington. U.S. Government Printing Office; Data computed by the Division of Vital Statistics and from table 1.

²Male only.

³Female only.

Table 31 (page 1 of 3). Numbers of deaths and rank for selected causes of death, according to sex and race: United States, 1985–89

Sex, race, and cause of death	1985	1986	1987	1988	1989	1985	1986	1987	1988	1989
All races			Number					Rank		
All causes	2,086,440	2,105,361	2,123,323	2,167,999	2,150,466					
Diseases of heart	771,169	765,490	760,353	765,156	733,867	1	1	1	1	1
Cerebrovascular diseases	153,050 461,563	149,643 469,376	149,835 476,927	150,517 485,048	145,551 496,152	3 2	3 2	3 2	3 2	3 2
Chronic obstructive pulmonary diseases	74,662	76,559	78,380	82,853	84,344	5	5	5	5	5
Pneumonia and influenza	67,615	69,812	69,225	77,662	76,550	6	6 9	6 9	6	6
Chronic liver disease and cirrhosis	26,767 36,969	26,159 37,184	26,201 38,532	26,409 40,368	26,694 46,833	9 7	9 7	7	9 7	9 7
Nephritis, nephrotic syndrome, and nephrosis	21,349	21,767	22,052	22,392	21,118	11	11	11	10	12
Septicemia	17,182	18,795	19,916	20,925	19,333	14 10	13 10	13 10	13	14
Atherosclerosis	23,926	22,706	22,474 13,468	22,086 16,602	19,357 22,082			15	11 15	13 11
Accidents and adverse effects	93,457	95,277	95,020	97,100	95,028	4	4	4	4	4
Suicide	29,453	30,904	30,796	30,407	30,232	8 12	8 12	8 12	8 12	8 10
-	19,893	21,731	21,103	22,032	22,909	12	12	12	12	10
White male	050 455	050 554	050.000	065 440	050.050					
All causes	950,455	952,554	953,382	965,419	950,852					• • •
Diseases of heart	355,374 51,965	347,967 50,365	342,063 50,237	341,519 50.692	325,397 48,563	1 4	1 4	1 4	1 4	1 4
Malignant neoplasms	215,079	218,381	221,757	224,514	228,301	2	2	2	2	2
Chronic obstructive pulmonary diseases	43,074	43,341	43,290	44,827	44,046	5	5	5	5	5
Pneumonia and influenza	29,028 14,321	29,891 14,099	29,284 14,175	32,262 14,381	30,892 14,414	6 8	6 8	6 8	6 8	6 9
Diabetes mellitus	12,758	12,788	13,553	14,008	16,282	9	9	9	9	8
lephritis, nephrotic syndrome, and nephrosis	8,482	8,754	8,800	8,786	8,093	10	10	10	11	12
Septicemia	6,321 8,251	6,962 7,767	7,096 7.686	7,270 7,529	6,728 6,652	14 11	13 12	14 13	14 13	13 14
luman immunodeficiency virus infection			8,700	10,479	14,114			11	10	10
Accidents and adverse effects	53,856	54,864	53,936	54,435	52,691	3	3	3	3	3
Suicide	21,256 8,122	22,270 8,567	22,188 7,979	21,980 7,994	21,858 8,337	7 12	7 11	7 12	7 12	7 11
Black male										
All causes	133,610	137,214	139,551	144,228	146,393					
Diseases of heart	38,982	39,076	38,934	39,584	38,321	1	1	1	1	1
Cerebrovascular diseases	8,000 29.028	7,938 29,363	7,852 29,928	8,098 30,321	7,739 31,452	4 2	4 2	4 2	5 2	5 2
Chronic obstructive pulmonary diseases	3,154	3,302	3,319	3,644	3,593	8	8	8	9	9
Pneumonia and influenza	3,664	3,836	3,795	4,047	4,168	6	6	6	7	7
Chronic liver disease and cirrhosis	2,616 2,230	2,404 2,295	2,574 2,388	2,476 2,640	2,517 3,072	9 10	9 10	10 11	11 10	11 10
Nephritis, nephrotic syndrome, and nephrosis	1,935	1,963	1,905	1,908	2,047	11	11	12	12	12
Septicemia	1,595	1,697	1,760	1,729	1,643	12	12	13	13	14
Atherosclerosis	758 	756	680 3,301	739 4,202	547 5,475	16	15	17 9	17 6	17 6
Accidents and adverse effects	8,752	9.035	9,159	9,608	9,503	3	3	3	3	3
Suicide	1,481	1,537	1,635	1,648	1,771	13	13	14	14	13
Iomicide and legal intervention	6,616	7,634	7,518	8,314	8,888	5	5	5	4	4
American Indian male	4 404	4.005	4.400	4.047	F 000					
All causes	4,181	4,365	4,432	4,617	5,066		• • •		• • •	• • •
Diseases of heart	1,001 157	999 140	1,062 180	1,048 171	1,184 193	1 7	1 7	1 5	1 7	1 6
Malignant neoplasms	533	522	496	594	706	á	á	3	á	3
Chronic obstructive pulmonary diseases	89	107	102	112	143	10	9	10	10	10
Pneumonia and influenza	151 173	138 176	153 168	147 193	165 214	8 4	8 6	8 6	8 4	8 4
Diabetes mellitus	102	97	111	193	155	9	10	9	9	9
Nephritis, nephrotic syndrome, and nephrosis	36	43	53	50	43	13	14	12	13	13
Septicemia	30	44	33	35	36 17	14 16	13 15	14 15	14 16	14
Atherosclerosis	12	22	17 17	19 26	17 28	16	15	15 15	16 15	17 15
Accidents and adverse effects	804	871	884	900	885	2	2	2	2	2
SuicideHomicide and legal intervention	172	181	186	192	197	5	5	4	5	5
normore and regal intervention	161	194	158	178	177	6	4	7	6	7

See notes at end of table.

Table 31 (page 2 of 3). Numbers of deaths and rank for selected causes of death, according to sex and race: United States, 1985–89

Sex, race, and cause of death	1985	1986	1987	1988	1989	1985	1986	1987	1988	1989
Asian or Pacific Islander male			Number					Rank		
All causes	9,441	9,795	10,496	11,155	11,688					
Diseases of heart	2,837	2,853	3,137	3,225	3,240	1	1	1	1	1
Cerebrovascular diseases	658 2,262	718 2,281	788 2,454	791 2,639	821 2,821	4 2	4 2	4 2	4 2	3 2
Chronic obstructive pulmonary diseases	276	308	327	353	391	6	6	6	6	6
Pneumonia and influenza	315	334	329	376	473	.5	5	5	5	5
Chronic liver disease and cirrhosis Diabetes mellitus	133 172	115 186	133 183	145 200	161 217	11 8	12 9	11 9	11 9	12 9
Nephritis, nephrotic syndrome, and nephrosis	98	101	113	134	134	13	13	12	13	13
Septicemia	71 40	82 42	79 44	97 40	81 38	14 16	14 16	14	15	15
Human immunodeficiency virus infection			69	99	132			17 15	19 14	20 14
Accidents and adverse effects	734	791	827	864	809	3	3	3	3	4
Suicide Homicide and legal intervention	230 164	237 195	257 190	255 221	270 279	7 9	7 8	7 8	7 8	8 7
White female		,00			2.0	Ū	Ū	Ū	Ū	•
All causes	868,599	878,529	889,685	911,487	902,989					
Diseases of heart	332,778	333,396	333,669	337,007	323,469	1	1	1	1	1
Cerebrovascular diseases	81,067	79,641	79,810	79,383	76,953	3	3	3	3	3
Malignant neoplasms	190,648 26,364	193,971 27,781	196,716 29,378	200,626 31.846	205,855 33,835	2 5	2 5	2 5	2 5	2 5
Pneumonia and influenza	31,480	32,432	32,527	37,308	36,961	4	4	4	4	4
Chronic liver disease and cirrhosis	7,871 17,547	7,817 17,496	7,591	7,543	7,797	10 7	11	11	11	11
Nephritis, nephrotic syndrome, and nephrosis	8,564	8,692	17,842 8,964	18,684 9,129	21,771 8,514	9	7 9	7 9	7 10	7 10
Septicemia	7,419	8,194	8,840	9,673	8,829	11	10	10	9	9
Atherosclerosis	13,770	13,091	13,040 628	12,732 788	11,139 981	8	8	8 24	8 24	8 23
Accidents and adverse effects	25,155	25,451	25,874	26,656	26,448	6	6	6	<u>-</u> 6	6
Suicide Homicide and legal intervention	5,831 3,041	6,167	6,029	5,810	5,566	12 17	12	12	12	12
Black female	5,041	3,123	3,149	3,072	2,971	17	17	16	18	18
All causes	110,597	113,112	115,263	119,791	121,249					
Diseases of heart	37,702	38.650	38,813	39,882	39,110	1	1	1	1	1
Cerebrovascular diseases	10,341	10,014	10,055	10,381	10,240	3	3	3	3	3
Malignant neoplasms	21,878	22,616	23,099	23,647	24,112	.2	2	2	2	2
Pneumonia and influenza	1,505 2,674	1,554 2,864	1,733 2,770	1,832 3,144	2,078 3,417	11 7	11 6	11 6	11 6	9 6
Chronic liver disease and cirrhosis	1,439	1,341	1,342	1,427	1,334	12	12	12	12	12
Diabetes mellitus	3,874 2,109	4,004 2,057	4,109 2,070	4,332 2,249	4,883 2,119	4 8	4 8	4 8	4 8	4 8
Septicemia	1,662	1,720	1,988	2,011	1,912	10	10	9	10	11
Atherosclerosis	1,022	964	942	955	889	13	15	15	15	16
Human immunodeficiency virus infection Accidents and adverse effects	3,455	3,550	739 3,618	995 3,879	1,320 3,901	<i>-</i>	 5	16 5	14 5	13 5
Suicide	314	355	328	374	382	19	19	19	20	19
Homicide and legal intervention	1,666	1,861	1,969	2,089	2,074	9	9	10	9	10
American Indian female All causes	2,973	2,936	3,170	2 200	2 540					
Diseases of heart	732	•		3,300	3,548					• • • •
Cerebrovascular diseases	189	683 175	755 185	777 200	860 181	1 4	1 4	1 4	1 4	1 5
Malignant neoplasms	456	466	549	557	612	2	2	2	2	2 8
Chronic obstructive pulmonary diseases Pneumonia and influenza	51 99	46 85	71 110	66 131	85 142	10 7	12 7	8 7	8 7	8 7
Chronic liver disease and cirrhosis	147	124	134	162	172	6	6	6	6	6
Diabetes mellitus	150	137	158	187	211	5	5	5	5	4
Nephritis, nephrotic syndrome, and nephrosis Septicemia	56 39	74 33	63 37	53 50	59 35	8 12	8 14	9 14	10 12	11 13
Atherosclerosis	26	26	20	26	29	15	15	15	15	15
Human immunodeficiency virus infection	306	339	3 305	306	210	3	3	26	٠	23
Suicide	38	37	305	36	318 35	14	13	3 13	3 14	3 13
Homicide and legal intervention	39	55	51	50	72	12	11	11	12	10

See notes at end of table.

Table 31 (page 3 of 3). Numbers of deaths and rank for selected causes of death, according to sex and race: United States, 1985–89

Sex, race, and cause of death	1985	1986	1987	1988	1989	1985	1986	1987	1988	1989
Asian or Pacific Islander female	-		Number					Rank		
All causes	6,446	6,719	7,193	7,808	8,354					
Diseases of heart	1.729	1,834	1.875	2.065	2,186	1	1	2	2	2
Cerebrovascular diseases	669	641	719	789	846	3	3	3	3	3
Malignant neoplasms	1,649	1,752	1,902	2,115	2,236	2	2	1	1	1
Chronic obstructive pulmonary diseases	146	120	159	168	167	6	8	7	7	7
Pneumonia and influenza	201	226	253	242	328	5	5	5	5	5
Chronic liver disease and cirrhosis	66	78	82	78	79	13	13	12	13	13
Diabetes mellitus	132	175	184	188	231	7	6	6	6	6
Nephritis, nephrotic syndrome, and nephrosis	68	81	83	80	105	12	12	11	12	11
Septicemia	44	62	80	59	68	15	14	13	14	14
Atherosclerosis	46	37	43	46	46	14	15	15	15	15
Human immunodeficiency virus infection			10	8	14			24	27	24
Accidents and adverse effects	380	366	407	433	442	4	4	4	4	4
Suicide	123	118	126	109	143	9	9	9	10	8
Homicide and legal intervention	79	97	79	109	102	11	11	14	10	12

NOTES: For data years shown, the code numbers for cause of death are based on the International Classification of Diseases, Ninth Revision, described in Appendix II, table V. Categories for the coding and classification of human immunodeficiency virus infection were introduced in the United States beginning with mortality data for 1987.

SOURCES: National Center for Health Statistics: Vital Statistics of the United States, Vol. II, Mortality, Part A, for data years 1985–89. Public Health Service. Washington. U.S. Government Printing Office; Data computed by the Division of Analysis from data compiled by the Division of Vital Statistics.

Table 32 (page 1 of 2). Years of potential life lost before age 65 for selected causes of death, according to sex and race: United States, selected years 1970–89

Sex, race, and cause of death	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
All races			Yea	ars lost pe	r 100,000	populatio	n under 6	5 years o	f age		
All causes	8,595.9	6,416.0	6,155.9	5,897.7	5,702.9	5,631.6	5,641.6	5,706.2	5,653.5	5,698.2	5,679.5
Diseases of heart	1,108.9	841.3	819.3	792.4	784.4	763.5	750.2	734.7	711.7	689.1	649.7
Ischemic heart disease			526.8	507.8	485.1	463.1	447.2			379.0	362.5
Cerebrovascular diseases	241.1	140.8	136.5				119.4	116.1	116.1	115.5	109.5
Malignant neoplasms			885.3				872.5	864.4	850.8	847.6	843.3
Respiratory system	190.7		210.4				206.9				201.1
Colorectal			66.8				64.7				59.1
Prostate ¹			8.5				8.6			8.4	8.6
Chronic obstructive pulmonary	115.6	105.5	104.6	105.2	103.7	107.7	106.6	107.6	107.2	108.5	108.4
diseases	73.2	57.2	58.2	57.7	60.0	58.6	60.0	60.0	04.0	04.0	00.4
Pneumonia and influenza	392.1	97.5	87.0				60.9 80.9	60.9 82.6		61.9	62.4
Chronic liver disease and cirrhosis	187.8		132.6			115.7	113.2			84.3 109.9	84.9 107.5
Diabetes mellitus		56.2	55.3				54.7	57.1	57.6	62.0	67.0
Human immunodeficiency virus							• • • • • • • • • • • • • • • • • • • •	0,	01.0	02.0	07.0
infection									170.0	206.3	269.7
Accidents and adverse effects	1,599.1	1,373.1	1,280.7	1,171.5	1,114.6	1,098.5	1,084.2	1,112.6	1,079.8	1,077.6	1,028.9
Motor vehicle accidents	889.4	840.8	789.3	694.1	659.5	672.2	658.9	687.0	675.2	673.4	632.9
Suicide	250.2	309.0	315.8		306.0		312.6	320.9	314.2	311.3	307.1
Homicide and legal intervention	271.8	373.6	359.0	336.4	299.0	292.4	290.7	320.9	307.2	324.9	338.5
White male											
All causes	9,757.4	7,611.5	7,307.1	6,990.6	6,732.1	6,653.1	6,676.5	6,747.0	6,605.6	6,614.5	6,525.1
Diseases of heart	1,607.4	1,179.1	1,149.5	1,118.9	1,091.6	1,058.3	1,031.5	1,000.4	963.4	924.5	870.0
Ischemic heart disease		869.7	838.1	809.6	770.4	732.7	705.3	662.8	626.7	587.9	561.6
Cerebrovascular diseases	215.0	122.6	117.0	111.6	110.0	108.0	103.8	99.8	100.4	100.4	93.2
Malignant neoplasms	1,036.9	935.1	901.7		889.2	882.4	884.8	878.1	857.5	850.3	838.4
Respiratory system	287.8	286.0	283.2		271.8	270.1	266.3	261.3	262.0	257.8	250.4
Colorectal	81.2	73.5	72.4		72.2	71.8	71.1	68.4	70.2	68.5	65.2
Prostate	14.4	15.2	15.4	15.4	16.0	15.4	14.7	15.7	15.6	15.4	16.0
diseases	88.8	64.2	66.5	60.6	64.4	co c	cc c	00.0	00.0	00 =	
Pneumonia and influenza	353.2	88.7	82.3	63.6 74.2	64.4 74.0	63.6 75.3	63.2 77.9	63.9 80.7	63.6 76.9	62.7	61.4
Chronic liver disease and cirrhosis	209.8	166.9	156.3	150.5	143.0	141.3	136.6	133.5	136.0	81.0 139.9	79.6 139.1
Diabetes mellitus	75.3	52.5	53.7	52.6	53.0	52.6	54.2	56.1	59.1	61.7	67.3
Human immunodeficiency virus						0	0 1.12	00.1	00.1	01.7	07.0
infection									253.1	300.7	399.6
Accidents and adverse effects	2,261.3	2,071.0	1,945.2	1,771.9	1,667.5	1,635.2	1,602.5	1,641.9	1,570.0	1,556.4	1,461.1
Motor vehicle accidents	1,296.5	1,301.7	1,228.8	1,071.6	1,006.0	1,016.7	981.8	1,029.6	995.7	984.4	902.6
Suicide	369.6	509.0	515.0	518.8	510.6	525.1	528.2	546.2	530.8	527.3	518.0
Homicide and legal intervention	201.9	365.4	346.6	320.5	286.2	277.9	274.2	291.6	264.3	266.6	278.4
Black male											
All causes	20,283.5	14,381.9	13,522.0	12,888.6	12,351.9	12,190.3	12,534.3	13,124.5	13,384.1	13,845.2	14,186.5
Diseases of heart		1,661.4	1,591.4	1,500.9	1,541.6	1,523.9	1,546.2	1,539.1	1,493.9	1,491.2	1,435.9
Ischemic heart disease		800.9	778.5	735.2	699.2	690.6	675.0	634.2	609.8	593.5	588.8
Cerebrovascular diseases	595.6	349.3	331,4	307.3	291.5	299.7	290.4	293.9	282.0	296.1	278.8
Malignant neoplasms	1,216.0	1,175.8	1,162.6	1,153.3	1,132.9	1,156.6	1,130.2	1,106.0	1,082.3	1,092.3	1,107.3
Respiratory system	376.7	400.4	392.6	385.7	381.4	387.1	384.6	371.2	358.2	355.1	362.9
Prostate	80.8 35.2	76.7 34.1	77.4 32.9	79.3	75.4	81.1	78.5	77.3	83.8	81.3	79.4
Chronic obstructive pulmonary	33.2	34.1	32.8	29.8	31.0	30.2	31.4	30.9	30.5	30.6	. 29.7
diseases	146.8	110.8	107.0	110.7	113.9	106.8	109.9	116.0	122.0	120.6	118.4
Pneumonia and influenza	1,308.9	315.2	267.3	252.6	255.7	241.8	251.2	247.5	259.1	269.9	270.8
Chronic liver disease and cirrhosis	463.5	391.9	339.9	296.6	286.6	286.7	306.1	278.4	289.6	271.8	265.2
Diabetes mellitus	144.0	102.2	101.3	93.7	105.2	105.4	102.0	108.3	106.7	124.5	137.4
Human immunodeficiency virus											
infection									708.8	879.1	1,106.6
Accidents and adverse effects	3,500.6	2,308.9	2,096.2	1,936.1	1,851.7	1,856.8	1,868.0	1,956.7	1,958.8	1,973.3	1,915.3
Motor vehicle accidents	1,466.1	1,022.4	927.3	852.1	826.5	864.3	886.9	959.0	929.9	949.6	924.0
Sulcide	237.5	323.8	316.0	316.2	303.2	321.0	329.6	332.6	350.6	363.6	387.8
	۵,204.0	2,274.9	2,198.0	2,016.8	1,747.4	1,648.0	1,671.8	1,933.5	1,897.9	2,115.4	2,251.8

See footnotes at end of table.

Table 32 (page 2 of 2). Years of potential life lost before age 65 for selected causes of death, according to sex and race: United States, selected years 1970–89

Diseases of heart	Sex, race, and cause of death	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Diseases of heart	White female			Year	s lost per	100,000	opulation	under 65	years of	age		
Ischemic heart diseases 180.1 111.4 110.4 100.6 97.4 98.1 92.7 90.0 89.6 88.5	All causes	5,527.4	3,983.2	3,872.3	3,728.2	3,625.5	3,580.7	3,525.6	3,499.0	3,461.4	3,447.7	3,403.8
Ischemic heart diseases 180.1 111.4 110.4 100.6 97.4 98.1 92.7 90.0 89.6 88.5	Diseases of heart	497.4	401.2	401.4	383.9	385.3	375.8	367.6	361.3	355.1	341.4	314.6
Malignant neoplasms 974.6 858.3 845.1 852.0 841.7 844.6 842.7 829.4 822.2 22.3 8 Respiratory system 89.8 132.6 132.0 139.0 142.0 141.3 144.8 141.8 1	Ischemic heart disease		227.9	226.2	216.5	210.7	201.7	194.5	184.6	180.4	170.6	159.4
Respiratory system	Cerebrovascular diseases	180.1	111.6	110.4	100.6	97.4	98.1	92.7	90.0	89.6	86.5	82.0
Colorectal	Malignant neoplasms	974.6	858.3	845.1	852.0	841.7	844.6	842.7	829.4	822.2	822.3	824.6
Breast.	Respiratory system	89.8	132.6	132.0	139.0	142.0	141.3	144.8	141.8	144.5	148.3	147.4
Breast. 233.4 211.7 210.4 211.4 207.4 214.0 213.8 212.7 211.7 213.7 215.7 21	Colorectal	77.0	64.0	60.6	60.1	59.6	59.1	57.7	56.3	56.0	53.6	51.3
diseases		233.4	211.7	210.4	211.4	207.4	214.0	213.8	212.7	211.7	213.7	215.3
diseases												
Pneumonia and influenza. 247.2 64.0 57.6 49.2 52.5 50.1 52.0 51.8 49.3 51.2		46.5	43.0	45.0	44.7	48.1	47.1	52.0	50.6	52.6	51.2	54.7
Chronic liver disease and cirrhosis 114,7 79,1 72,2 64,5 63,6 60,6 58,8 56,3 53,8 53,7 Diabetes mellitus 65,1 45,4 44,2 44,1 47,1 42,3 43,0 46,1 44,8 47,4 Human immunodeficiency virus infection	Pneumonia and influenza	247.2	64.0	57.6	49.2	52.5	50.1	52.0	51.8	49.3	51.2	51.6
Diabetes mellitus.		114.7	79.1	72.2	64.5	63.6	60.6	58.8	56.3	53.8	53.7	50.8
Human immunodeficiency virus Infection												51.6
infection		•										.,,
Accidents and adverse effects 755.6 647.8 604.5 552.1 538.0 540.9 530.5 539.1 539.9 537.1 53 Motor vehicle accidents 466.5 437.3 413.7 364.7 354.6 369.9 362.0 370.3 380.9 380.9 380.1 530.1 141.4 136.9 139.6 136.7 131.4 141.4 136.9 139.6 136.7 131.4 141.4 136.9 139.6 136.7 131.4 141.4 136.9 139.6 136.7 131.4 141.4 136.9 139.6 136.7 131.4 141.4 136.9 139.6 136.7 131.4 141.4 136.9 139.6 136.7 131.4 141.4 136.9 139.6 136.7 131.4 141.4 136.9 139.6 136.7 131.4 141.4 136.9 139.6 136.7 131.4 141.4 136.9 139.6 136.7 131.4 141.4 136.9 139.6 136.7 131.4 141.4 136.9 139.6 136.7 131.4 141.4 136.9 139.6 136.7 131.4 141.4 136.9 139.6 136.7 131.4 141.4 136.9 139.6 136.7 131.4 141.4 136.9 139.6 136.7 131.4 141.4 136.9 139.6 136.7 131.4 141.4 136.9 139.6 136.7 131.4 141.4 137.7 150.2 141.2 129.3 141.4 136.9 136.7 131.4 136.9 141.2 129.3 141.4 136.9 136.7 131.4 136.9 141.2 129.3 141.4 136.9 136.7 136.4 141.4 137.7 150.2 141.2 129.3 151.4 141.4 141.4 137.7 150.2 141.2 129.3 151.4 141.4 141.4 137.7 150.2 141.2 129.3 151.4 141.4 141.4 141.4 137.7 150.2 141.2 129.3 151.4 141.4 141.4 141.4 137.7 150.2 141.2 129.3 151.4 141.4 141.4 141.4 137.7 150.2 141.2 151.9 151.4 141.4 141.4 141.4 141.4 141.4 150.4 141.4 141.4 141.4 141.4 150.4 141.4 141.4 141.4 141.4 150.4 141										19.0	23.7	30.9
Motor vehicle accidents												530.2
Suicide Suic												374.1
Black female Black female Black female Black female 12,188.8 7,927.2 7,455.8 7,161.6 7,011.9 6,901.5 6,894.3 7,032.0 7,128.7 7,352.4 7,4												126.2
Black female All causes 12,188.8 7,927.2 7,455.8 7,161.6 7,011.9 6,901.5 6,894.3 7,032.0 7,128.7 7,352.4 7,4 Diseases of heart 1,292.7 937.2 871.7 854.2 865.7 846.2 848.2 858.4 818.7 834.1 7 Ischemic heart diseases 564.7 289.0 275.9 270.5 260.7 248.9 246.5 236.1 240.0 238.1 2 Malignant neoplasms 1,044.8 968.4 940.3 941.9 938.1 946.3 927.9 965.7 959.9 947.4 9 Respiratory system 89.3 132.8 137.5 132.3 137.9 132.2 137.7 135.9 141.2 136.0 1 Colorectal 81.4 70.3 71.5 75.2 67.4 66.5 72.5 71.5 70.6 71.4 Breast. 209.3 210.9 215.8 220.5 220.8 245.0 232.0 257.5 261.2 267.8 2 Chronic obstructive pulmonary diseases 93.3 62.5 59.2 71.5 71.6 70.5 72.5 71.5 77.6 84.8 Pneumonia and influenza. 888.7 187.4 150.4 148.3 133.0 141.4 137.7 150.2 141.2 151.9 1 Chronic liver disease and cirrhosis 295.6 210.9 180.5 161.4 158.8 147.8 145.0 135.9 141.2 129.3 1 Bruman immunodeficiency virus infection 179.7 109.3 105.4 99.3 106.9 98.8 101.5 107.3 98.8 112.0 1 Human immunodeficiency virus infection 478.4 296.8 269.6 274.9 260.7 267.2 282.7 293.3 303.5 323.7 3 Suicide 81.9 70.3 72.4 65.4 67.6 65.4 58.0 64.4 63.5 73.2												96.7
All causes	_	*										
Diseases of heart 1,292.7 937.2 871.7 854.2 865.7 846.2 848.2 858.4 818.7 834.1 7 Ischemic heart disease	Black female											
Ischemic heart disease	All causes	12,188.8	7,927.2	7,455.8	7,161.6	7,011.9	6,901.5	6,894.3	7,032.0	7,128.7	7,352.4	7,431.5
Cerebrovascular diseases 564.7 289.0 275.9 270.5 260.7 248.9 246.5 236.1 240.0 238.1 2 Malignant neoplasms 1,044.8 968.4 940.3 941.9 938.1 946.3 927.9 965.7 959.9 947.4 9 Respiratory system 89.3 132.8 137.5 132.3 137.9 132.2 137.7 135.9 141.2 136.0 1 Colorectal 81.4 70.3 71.5 75.2 67.4 66.5 72.5 71.5 70.6 71.4 Breast 209.3 210.9 215.8 220.5 220.8 245.0 232.0 257.5 261.2 267.8 2 Chronic obstructive pulmonary diseases 93.3 62.5 59.2 71.5 71.6 70.5 72.5 71.5 77.6 84.8 Pneumonia and influenza 888.7 187.4 150.4 148.3 133.0 141.4 137.7 150.2 141.2 151.9 1 Chronic liver disease and cirrhosis 295.6 210.9 <td>Diseases of heart</td> <td>1,292.7</td> <td>937.2</td> <td>871.7</td> <td>854.2</td> <td>865.7</td> <td>846.2</td> <td>848.2</td> <td>858.4</td> <td>818.7</td> <td>834.1</td> <td>799.6</td>	Diseases of heart	1,292.7	937.2	871.7	854.2	865.7	846.2	848.2	858.4	818.7	834.1	799.6
Malignant neoplasms 1,044.8 968.4 940.3 941.9 938.1 946.3 927.9 965.7 959.9 947.4 9 Respiratory system 89.3 132.8 137.5 132.3 137.9 132.2 137.7 135.9 141.2 136.0 1 Colorectal 81.4 70.3 71.5 75.2 67.4 66.5 72.5 71.5 70.6 71.4 71.4 71.5 72.5 71.5 70.6 71.4 71.4 71.5 72.5 71.5 70.6 71.4 71.4 71.5 72.5 71.5 70.6 71.4 71.4 71.5 72.5 71.5 70.6 71.4 71.4 71.5 72.5 71.5 70.6 71.4 71.5 72.5 71.5 70.6 71.4 71.6 70.5 72.5 71.5 77.6 84.8 84.8 71.5 71.6 70.5 72.5 71.5 77.6 84.8 84.8 84.8 84.8 84.8 84.8 84.8 84.8 84.8 84.8 84.8 84.8 84.8 84.8 84.8 84.8 84.8	Ischemic heart disease		382.7	357.8	363.2	347.6	330.5	319.0	307.6	289.4	292.8	283.4
Respiratory system 89.3 132.8 137.5 132.3 137.9 132.2 137.7 135.9 141.2 136.0 1 Colorectal 81.4 70.3 71.5 75.2 67.4 66.5 72.5 71.5 70.6 71.4 Breast 209.3 210.9 215.8 220.5 220.8 245.0 232.0 257.5 261.2 267.8 2 Chronic obstructive pulmonary diseases 93.3 62.5 59.2 71.5 71.6 70.5 72.5 71.5 77.6 84.8 Pneumonia and influenza 888.7 187.4 150.4 148.3 133.0 141.4 137.7 150.2 141.2 151.9 1 Chronic liver disease and cirrhosis 295.6 210.9 180.5 161.4 158.8 147.8 145.0 135.9 141.2 129.3 1 Diabetes mellitus 179.7 109.3 105.4 99.3 106.9 98.8 101.5 107.3 98.8 112.0 1 Human immunodeficiency virus infection 1.169.9	Cerebrovascular diseases	564.7	289.0	275.9	270.5	260.7	248.9	246.5	236.1	240.0	238.1	231.4
Respiratory system 89.3 132.8 137.5 132.3 137.9 132.2 137.7 135.9 141.2 136.0 1 Colorectal 81.4 70.3 71.5 75.2 67.4 66.5 72.5 71.5 70.6 71.4 Breast 209.3 210.9 215.8 220.5 220.8 245.0 232.0 257.5 261.2 267.8 2 Chronic obstructive pulmonary diseases 93.3 62.5 59.2 71.5 71.6 70.5 72.5 71.5 77.6 84.8 Pneumonia and influenza 888.7 187.4 150.4 148.3 133.0 141.4 137.7 150.2 141.2 151.9 1 Chronic liver disease and cirrhosis 295.6 210.9 180.5 161.4 158.8 147.8 145.0 135.9 141.2 129.3 1 Diabetes mellitus 179.7 109.3 105.4 99.3 106.9 98.8 101.5 107.3 98.8 112.0 1 Human immunodeficiency virus infection 1.169.9	Malignant neoplasms	1,044.8	968.4	940.3	941.9	938.1	946.3	927,9	965.7	959.9	947.4	926.0
Breast		89.3	132.8	137.5	132.3	137.9	132.2	137.7	135.9	141.2	136.0	142.7
Chronic obstructive pulmonary diseases	Colorectal	81.4	70.3	71.5	75.2	67.4	66.5	72.5	71.5	70.6	71.4	64.7
diseases. 93.3 62.5 59.2 71.5 71.6 70.5 72.5 71.5 77.6 84.8 Pneumonia and influenza. 888.7 187.4 150.4 148.3 133.0 141.4 137.7 150.2 141.2 151.9 1 Chronic liver disease and cirrhosis 295.6 210.9 180.5 161.4 158.8 147.8 145.0 135.9 141.2 129.3 1 Diabetes mellitus. 179.7 109.3 105.4 99.3 106.9 98.8 101.5 107.3 98.8 112.0 1 Human immunodeficiency virus infection 1.169.9 718.5 659.6 648.4 646.7 595.5 609.0 643.8 628.2 682.8 6 6 646.7 595.5 609.0 643.8 628.2 682.8 6 6 664.4 646.7 595.5 609.0 643.8 628.2 682.8 6 6 664.4 646.7 595.5 609.0 643.8 628.2 682.8 6 6 664.8 67.2 282.7 293.3 303.5<	Breast	209.3	210.9	215.8	220.5	220.8	245.0	232.0	257.5	261.2	267.8	253.5
Pneumonia and influenza. 888.7 187.4 150.4 148.3 133.0 141.4 137.7 150.2 141.2 151.9 1 Chronic liver disease and cirrhosis 295.6 210.9 180.5 161.4 158.8 147.8 145.0 135.9 141.2 129.3 1 Diabetes mellitus 179.7 109.3 105.4 99.3 106.9 98.8 101.5 107.3 98.8 112.0 1 Human immunodeficiency virus infection 169.4 215.0 2 Accidents and adverse effects 1,169.9 718.5 659.6 648.4 646.7 595.5 609.0 643.8 628.2 682.8 6 Motor vehicle accidents 478.4 296.8 269.6 274.9 260.7 267.2 282.7 293.3 303.5 323.7 3 Suicide 81.9 70.3 72.4 65.4 67.6 65.4 58.0 64.4 63.5 73.2	Chronic obstructive pulmonary											
Pneumonia and influenza. 888.7 187.4 150.4 148.3 133.0 141.4 137.7 150.2 141.2 151.9 1 Chronic liver disease and cirrhosis 295.6 210.9 180.5 161.4 158.8 147.8 145.0 135.9 141.2 129.3 1 Diabetes mellitus 179.7 109.3 105.4 99.3 106.9 98.8 101.5 107.3 98.8 112.0 1 Human immunodeficiency virus infection 169.4 215.0 2 Accidents and adverse effects 1,169.9 718.5 659.6 648.4 646.7 595.5 609.0 643.8 628.2 682.8 6 Motor vehicle accidents 478.4 296.8 269.6 274.9 260.7 267.2 282.7 293.3 303.5 323.7 3 Suicide 81.9 70.3 72.4 65.4 67.6 65.4 58.0 64.4 63.5 73.2	diseases	93.3	62.5	59.2	71.5	71.6	70.5	72.5	71.5	77.6	84.8	79.2
Diabetes mellitus 179.7 109.3 105.4 99.3 106.9 98.8 101.5 107.3 98.8 112.0 1 Human immunodeficiency virus infection 169.4 215.0 2 Accidents and adverse effects 1,169.9 718.5 659.6 648.4 646.7 595.5 609.0 643.8 628.2 682.8 6 Motor vehicle accidents 478.4 296.8 269.6 274.9 260.7 267.2 282.7 293.3 303.5 323.7 3 Suicide 81.9 70.3 72.4 65.4 67.6 65.4 58.0 64.4 63.5 73.2	Pneumonia and influenza	888.7	187.4	150.4	148.3	133.0	141.4	137.7	150.2	141.2	151.9	160.9
Diabetes mellitus 179.7 109.3 105.4 99.3 106.9 98.8 101.5 107.3 98.8 112.0 1 Human immunodeficiency virus infection 169.4 215.0 2 Accidents and adverse effects 1,169.9 718.5 659.6 648.4 646.7 595.5 609.0 643.8 628.2 682.8 6 Motor vehicle accidents 478.4 296.8 269.6 274.9 260.7 267.2 282.7 293.3 303.5 323.7 3 Suicide 81.9 70.3 72.4 65.4 67.6 65.4 58.0 64.4 63.5 73.2	Chronic liver disease and cirrhosis	295.6	210.9	180.5	161.4	158.8	147.8	145.0	135.9	141.2	129.3	117.1
Human immunodeficiency virus infection						106.9	98.8	101.5				112.1
infection		••								/ -	-· -	
Accidents and adverse effects 1,169.9 718.5 659.6 648.4 646.7 595.5 609.0 643.8 628.2 682.8 6 Motor vehicle accidents 478.4 296.8 269.6 274.9 260.7 267.2 282.7 293.3 303.5 323.7 3 Suicide 81.9 70.3 72.4 65.4 67.6 65.4 58.0 64.4 63.5 73.2	•									169.4	215.0	276.8
Motor vehicle accidents		1.169.9		659.6	648.4	646.7	595.5					652,5
Suicide		•										310.6
												73.9
Homicide and legal intervention												474.3

¹Male only.

NOTES: For data years shown, the code numbers for cause of death are based on the International Classification of Diseases, Ninth Revision, described in Appendix II, table V. International Classification of Diseases codes for human immunodeficiency virus infection not available for use with the National Vital Statistics System until 1987. Years of potential life lost before age 65 provides a measure of the impact of mortality on the population under 65 years of age. See Appendix II for method of calculation.

SOURCES: National Center for Health Statistics: Vital Statistics of the United States, Vol. II, Mortality, Part A, for data years 1970–89. Public Health Service, Washington. U.S. Government Printing Office; Data computed by the Division of Analysis from data compiled by the Division of Vital Statistics and from table 1.

²Female only.

Table 33 (page 1 of 2). Death rates for diseases of heart, according to sex, race, and age: United States, selected years 1950–89

Sex, race, and age	1950 ¹	1960¹	1970	1980	1985	1986	1987	1988	1989
All races			Dea	aths per 10	0,000 resid	lent popula	tion		
All ages, age adjusted	307.2	286.2	253.6	202.0	180.5	175.0	169.6	166.3	155.9
	355.5	369.0	362.0	336.0	323.0	317.5	312.4	311.3	295.6
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.	3.5	6.6	13.1	22.8	24.5	26.1	25.2	22.6	19.7
	1.3	1.3	1.7	2.6	2.1	2.5	2.2	2.4	1.9
	2.1	1.3	0.8	0.9	0.9	0.9	0.9	0.9	0.8
	6.8	4.0	3.0	2.9	2.8	2.8	2.8	2.9	2.6
	19.4	15.6	11.4	8.3	8.2	8.6	8.4	8.2	7.9
	86.4	74.6	66.7	44.6	38.0	37.5	35.6	34.2	32.3
	308.6	271.8	238.4	180.2	152.9	144.6	140.5	131.4	124.2
	808.1	737.9	652.3	494.1	439.1	424.2	408.8	400.9	376.7
	1,839.8	1,740.5	1,558.2	1,218.6	1,080.6	1,043.0	1,007.9	984.1	911.8
	4,310.1	4,089.4	3,683.8	2,993.1	2,712.6	2,637.5	2,560.0	2,542.7	2,400.6
	9,150.6	9,317.8	7,891.3	7,777.1	7,275.0	7,178.7	7,074.2	7,098.1	6,701.6
White male									
All ages, age adjusted	381.1	375.4	347.6	277.5	244.5	234.8	225.9	220.5	205.9
	433.0	454.6	438.3	384.0	358.9	348.6	340.1	336.8	318.3
Under 1 year 1-4 years 5-14 years 15-24 years 25-34 years 35-44 years 45-54 years 45-64 years 65-74 years 75-84 years 75-84 years 85 years and over	4.1	6.9	12.0	22.5	23.8	26.0	24.8	21.2	18.4
	1.1	1.0	1.5	2.1	1.7	2.1	1.8	1.9	1.7
	1.7	1.1	0.8	0.9	0.8	0.9	0.9	1.0	0.7
	5.8	3.6	3.0	2.9	3.0	3.0	3.0	3.1	2.7
	20.1	17.6	12.3	9.1	9.2	9.5	9.3	9.2	8.9
	110.6	107.5	94.6	61.8	52.4	51.7	48.7	46.2	43.1
	423.6	413.2	365.7	269.8	224.4	208.8	201.6	186.3	174.8
	1,081.7	1,056.0	979.3	730.6	635.6	610.3	582.7	565.1	531.5
	2,308.3	2,297.9	2,177.2	1,729.7	1,501.0	1,440.9	1,378.0	1,348.9	1,243.8
	4,907.3	4,839.9	4,617.6	3,883.2	3,532.9	3,405.2	3,291.0	3,257.6	3,066.1
	9,950.5	10,135.8	8,818.0	8,958.0	8,396.3	8,138.4	8,030.6	8,072.5	7,549.9
Black male									
All ages, age adjusted	415.5	381.2	375.9	327.3	301.0	294.3	287.1	286.2	272.6
	348.4	330.6	330.3	301.0	285.0	281.3	276.1	276.3	263.5
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.	6.4 18.0 51.9 198.1 624.1 1,434.0 2,140.1	13.9 3.8 3.0 8.7 43.1 168.1 514.0 1,236.8 2,281.4 3,533.6 6,037.9	33.5 3.9 1.4 8.3 41.6 189.2 512.8 1,135.4 2,237.8 3,783.4 5,367.6	42.8 6.3 1.3 8.3 30.3 136.6 433.4 987.2 1,847.2 3,578.8 6,819.5	46.7 4.4 1.5 7.2 29.1 122.0 382.4 882.6 1,738.4 3,450.0 6,098.5	49.8 5.3 1.4 6.7 29.3 123.6 365.1 864.9 1,673.1 3,407.3 6,268.7	45.7 5.1 1.6 6.9 26.9 118.8 362.8 814.7 1,659.7 3,371.6 6,050.7	43.0 4.5 1.8 7.9 27.6 113.0 352.9 833.0 1,616.7 3,435.7 6,165.7	34.4 4.6 1.4 6.3 25.3 108.3 359.4 795.8 1,531.5 3,157.2 5,837.5
White female									
All ages, age adjusted	223.6	197.1	167.8	134.6	121.7	119.0	116.3	114.2	106.6
	289.4	306.5	313.8	319.2	320.7	319.0	317.1	318.0	303.0
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.	2.7	4.3	7.0	15.7	18.3	19.1	19.4	16.8	14.2
	1.1	0.9	1.2	2.1	1.6	2.1	1.7	2.2	1.3
	1.9	0.9	0.7	0.8	0.9	0.7	0.7	0.7	0.6
	5.3	2.8	1.7	1.7	1.7	1.6	1.7	1.7	1.5
	12.2	8.2	5.5	3.9	3.8	4.1	4.1	3.9	3.8
	40.5	28.6	23.9	16.4	14.3	13.8	13.1	12.5	11.9
	141.9	103.4	91.4	71.2	62.1	59.8	58.8	54.5	50.4
	460.2	383.0	317.7	248.1	225.8	221.4	217.1	213.3	196.1
	1,400.9	1,229.8	1,044.0	796.7	713.7	693.9	675.1	656.2	604.4
	3,925.2	3,629.7	3,143.5	2,493.6	2,233.3	2,180.2	2,120.7	2,101.5	1,990.7
	9,084.7	9,280.8	7,839.9	7,501.6	7,089.3	7,021.3	6,924.6	6,957.3	6,580.4

See footnote at end of table.

Table 33 (page 2 of 2). Death rates for diseases of heart, according to sex, race, and age: United States, selected years 1950–89

Sex, race, and age	1950 ¹	1960¹	1970	1980	1985	1986	1987	1988	1989
Black female			Dea	aths per 10	0,000 resid	lent popula	tion		
All ages, age adjusted	349.5 289.9	292.6 268.5	251.7 261.0	201.1 249.7	186.8 248.1	185.1 250.8	180.8 248.3	181.1 251.2	172.9 242.7
Under 1 year		12.0 2.8	31.3 4.2	43.6 4.4	39.5 5.2	42.8 4.8	36.4 4.4	39.9 4.1	39 <i>.</i> 7 3.2
5–14 years	8.8 19.8	3.0 10.0	1.8 6.0	1.7 4.6	1.7 4.6	1.5 4.6	1.4 4.4	1.0 4.4	1.6 4.2
25–34 years	52.0 185.0	35.9 125.3	24.7 99.8	15.7 61.7	13.1 50.4	15.3 50.1	14.8 46.5	13.2 50.8	13.1 47.1
45–54 years	526.8 1.210.7	360.7 952.3	290.9 710.5	202.4 530.1	172.6 500.4	172.5 479.0	165.7 469.9	167.8 471.4	153.7 453.1
65–74 years	1,659.4	1,680.5 2,926.9	1,553.2 2,964.1	1,210.3 2,707.2	1,133.6 2,606.0	1,108.3 2,623.5	1,090.2 2,566.3	1,060.0 2,625.6	1,024.9 2,492.9
85 years and over		5,650.0	5,003.8	5,796.5	5,441.0	5,698.6	5,627.6	5,648.1	5,469.7

¹Includes deaths of nonresidents of the United States.

NOTE: For data years shown, the code numbers for cause of death are based on the then current international Classification of Diseases, which are described in Appendix II, tables IV and V.

SOURCES: National Center for Health Statistics: Vital Statistics of the United States, Vol. II, Mortality, Part A, for data years 1950–89. Public Health Service. Washington. U.S. Government Printing Office; Data computed by the Division of Analysis from data compiled by the Division of Vital Statistics and from table 1.

Table 34 (page 1 of 2). Death rates for cerebrovascular diseases, according to sex, race, and age: United States, selected years 1950–89

Sex, race, and age	1950¹	1960¹	1970	1980	1985	1986	1987	1988	1989
All races			De	aths per 10	00,000 resid	lent popula	tion		····
All ages, age adjusted	88.6	79.7	66.3	40.8	32.3	31.0	30.3	29.7	28.0
	104.0	108.0	101.9	75.1	64.1	62.1	61.6	61.2	58.6
Under 1 year 1–4 years. 5–14 years 15–24 years 235–34 years 35–44 years 45–54 years 55–64 years 65–74 years 75–84 years 85 years and over.	5.1	4.1	5.0	4.4	3.6	2.9	3.4	3.9	3.2
	0.9	0.8	1.0	0.5	0.3	0.3	0.4	0.4	0.3
	0.5	0.7	0.7	0.3	0.2	0.2	0.2	0.2	0.2
	1.6	1.8	1.6	1.0	0.8	0.7	0.6	0.7	0.6
	4.2	4.7	4.5	2.6	2.1	2.2	2.2	2.2	2.1
	18.7	14.7	15.6	8.5	7.2	7.1	7.0	6.9	6.4
	70.4	49.2	41.6	25.2	21.1	20.4	20.1	19.2	18.4
	195.3	147.3	115.8	65.2	54.3	53.0	52.2	51.3	48.8
	549.7	469.2	384.1	219.5	171.3	164.1	157.2	154.7	144.7
	1,499.6	1,491.3	1,254.2	788.6	605.8	573.8	562.6	553.6	519.8
	2,990.1	3,680.5	3,014.3	2,288.9	1,837.5	1,762.6	1,733.1	1,707.4	1,631.0
White male									
All ages, age adjusted	87.0	80.3	68.8	41.9	32.8	31.1	30.3	30.0	28.0
	100.5	102.7	93.5	63.3	52.5	50.5	49.9	50.0	47.5
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.	5.9	4.3	4.5	3.8	3.7	2.5	3.6	3.1	2.8
	1.1	0.8	1.2	0.4	*0.3	*0.2	0.5	0.3	*0.2
	0.5	0.7	0.8	0.2	0.2	0.2	0.2	0.2	0.3
	1.6	1.7	1.6	1.0	0.7	0.7	0.6	0.7	0.6
	3.4	3.5	3.2	2.0	1.8	1.8	1.8	1.8	1.7
	13.1	11.3	11.8	6.5	5.4	5.7	5.4	5.5	5.0
	53.7	40.9	35.6	21.7	18.0	16.5	16.7	16.0	14.8
	182.2	139.0	119.9	64.2	54.2	51.4	50.7	50.4	47.4
	569.7	501.0	420.0	240.4	183.7	171.4	165.4	163.5	152.2
	1,556.3	1,564.8	1,361.6	854.8	651.1	617.3	601.2	590.8	554.6
	3,127.1	3,734.8	3,018.1	2,236.9	1,747.8	1,697.0	1,663.1	1,667.1	1,568.3
Black male									
All ages, age adjusted	146.2	141.2	122.5	77.5	60.8	58.9	57.1	57.8	54.1
	122.0	122.9	108.8	73.1	58.5	57.1	55.7	56.5	53.2
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.	*0.7 3.3 12.0 59.3 211.9 522.8 783.6	8.5 1.9 *0.9 3.7 12.8 47.4 166.1 439.9 899.2 1,475.2 2,700.0	12.3 *1.4 0.8 3.0 14.6 52.7 136.1 343.4 780.1 1,445.7 1,963.1	11.2 *0.6 *0.5 2.1 7.7 29.2 82.1 189.8 472.8 1,067.6 1,873.2	9.8 *0.8 *0.1 1.3 5.7 25.9 70.6 151.6 358.9 817.6 1,363.1	8.0 *0.5 *0.2 1.1 6.1 27.2 68.2 144.3 337.8 809.9 1,350.7	*5.9 *0.5 *0.3 0.9 5.4 27.1 67.5 143.9 318.5 777.6 1,339.1	9.3 *0.5 *0.2 0.9 6.7 25.9 66.6 146.4 325.8 796.3 1,302.9	7.6 *0.3 *0.4 1.0 4.8 24.9 66.8 135.6 301.8 715.5 1,333.3
White female									
All ages, age adjusted	79.7	68.7	56.2	35.2	27.9	27.1	26.3	25.5	24.1
	103.3	110.1	109.8	88.8	78.1	76.2	75.8	74.9	72.1
Under 1 year 1–4 years. 5–14 years 15–24 years 25–34 years 35–44 years 45–54 years 55–64 years 55–64 years 55–74 years 75–84 years 85 years and over.	2.9	2.6	3.2	3.3	2.2	1.8	2.0	2.8	2.5
	0.6	0.5	0.6	0.4	*0.3	*0.2	*0.3	*0.3	*0.3
	0.4	0.6	0.6	0.3	0.3	0.2	0.2	0.2	0.2
	1.2	1.4	1.1	0.7	0.7	0.6	0.6	0.6	0.5
	2.9	3.4	3.4	2.0	1.6	1.6	1.7	1.6	1.5
	13.6	10.1	11.5	6.7	5.3	5.0	5.1	4.6	4.3
	55.0	33.8	30.5	18.7	15.4	15.5	14.5	13.9	13.2
	156.9	103.0	78.1	48.7	39.7	40.1	38.7	37.0	35.6
	498.1	383.3	303.2	172.8	138.0	136.3	129.3	125.3	117.8
	1,471.3	1,444.7	1,176.8	730.3	559.4	530.7	524.0	512.7	479.7
	3,017.9	3,795.7	3,167.6	2,367.8	1,923.0	1,837.3	1,807.8	1,767.0	1,695.9

See footnote at end of table.

Table 34 (page 2 of 2). Death rates for cerebrovascular diseases, according to sex, race, and age: United States, selected years 1950–89

[Data are based on the National Vital Statistics System]

Sex, race, and age	1950¹	1960¹	1970	1980	1985	1986	1987	1988	1989
Black female			De	eaths per 1	00,000 resid	dent popula	ition		
All ages, age adjusted	155.6 128.3	139.5 127.7	107.9 112.2	61.7 77.9	50.3 68.0	47.6 65.0	46.7 64.3	46.6 65.4	44.9 63.5
Under 1 year 1–4 years. 5–14 years. 15–24 years. 25–34 years. 35–44 years. 45–54 years. 55–64 years.	*0.6 4.2 15.9 75.0 248.9 567.7	*6.7 *1.3 1.0 3.4 17.4 57.4 166.2 452.0	9.1 *1.4 0.8 3.0 14.3 49.1 119.4 272.4	*6.4 *0.5 *0.3 1.7 7.0 21.6 61.9 138.7	*5.3 *0.5 *0.3 1.5 5.6 19.3 49.8 111.3	*5.3 *0.4 *0.3 1.0 6.0 18.5 46.4 109.4	7.8 *0.6 *0.2 1.1 5.8 17.5 47.2 108.7	8.2 *0.7 *0.4 1.1 5.3 18.5 43.0 105.7	*4.6 *0.4 *0.3 1.3 5.7 16.9 44.1 99.5
65–74 years 75–84 years 85 years and over	754.4 	830.5 1,413.1 2,578.9	673.5 1,338.3 2,210.5	362.2 918.6 1,896.3	281.5 775.4 1,585.6	268.5 710.7 1,504.1	261.2 685.7 1,480.9	264.7 700.7 1,517.7	248.1 701.1 1,419.4

¹Includes deaths of nonresidents of the United States.

NOTES: For data years shown, the code numbers for cause of death are based on the then current International Classification of Diseases, which are described in Appendix II, tables IV and V.

SOURCES: National Center for Health Statistics: Vital Statistics of the United States, Vol. II, Mortality, Part A, for data years 1950–89. Public Health Service. Washington. U.S. Government Printing Office; Data computed by the Division of Analysis from data compiled by the Division of Vital Statistics and from table 1.

^{*}Based on fewer than 20 deaths.

Table 35 (page 1 of 2). Death rates for malignant neoplasms, according to sex, race, and age: United States, selected years 1950–89

Sex, race, and age	1950¹	1960¹	1970	1980	1985	1986	1987	1988	1989
All races			De	aths per 10	0,000 resid	ient popula	tion		
All ages, age adjusted	125.3 139.8	125.8 149.2	129.8 162.8	132.8 183.9	133.6 193.3	133.2 194.7	132.9 195.9	132.7 197.3	133.0 199.9
Under 1 years 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.	8.7 11.7 6.7 8.6 20.0 62.7 175.1 392.9 692.5 1,153.3 1,451.0	7.2 10.9 6.8 8.3 19.5 59.7 177.0 396.8 713.9 1,127.4 1,450.0	4.7 7.5 6.0 8.3 16.5 59.5 182.5 423.0 751.2 1,169.2 1,320.7	3.2 4.5 4.3 6.3 13.7 48.6 180.0 436.1 817.9 1,232.3 1,594.6	3.0 3.8 3.5 5.4 13.1 45.7 169.1 450.5 838.3 1,281.0 1,591.5	2.6 4.0 3.4 5.4 13.1 45.3 165.7 444.4 847.0 1,287.3 1,612.0	2.7 3.8 3.3 5.1 12.4 43.5 164.3 447.0 843.6 1,298.4 1,618.0	2.3 3.7 3.2 5.1 11.9 44.2 160.4 447.3 842.7 1,313.3 1,638.9	2.7 3.4 3.3 5.1 12.1 43.1 157.2 445.1 852.6 1,338.1 1,662.3
White male									
All ages, age adjusted	130.9 147.2	141.6 166.1	154.3 185.1	160.5 208.7	159.2 217.2	158.8 218.8	158.4 220.5	157.6 221.4	157.2 223.3
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	9.6 13.1 7.6 9.9 17.7 44.5 150.8 409.4 798.7 1,367.6 1,732.7	7.9 13.1 8.0 10.3 18.8 46.3 164.1 450.9 887.3 1,413.7 1,791.4	4.3 8.5 7.0 10.6 16.2 50.1 172.0 498.1 997.0 1,592.7 1,772.2	3.5 5.4 5.2 7.8 13.6 41.1 175.4 497.4 1,070.7 1,779.7 2,375.6	3.1 4.4 4.0 6.5 13.0 39.5 161.2 508.4 1,061.2 1,820.1 2,424.5	3.0 4.7 3.9 6.8 13.5 37.7 158.5 504.3 1,063.3 1,827.0 2,462.3	2.7 4.1 4.1 6.0 11.9 36.7 157.1 509.8 1,061.1 1,826.6 2,475.5	2.3 3.9 3.7 5.9 11.5 36.9 153.5 508.6 1,050.4 1,839.7 2,533.0	2.8 3.9 3.7 5.7 11.4 35.6 149.6 505.7 1,054.3 1,853.0 2,566.1
Black male									
All ages, age adjusted	126.1 106.6	158.5 136.7	198.0 171.6	229.9 205.5	231.6 212.2	229.0 211.4	227.9 212.2	227.0 211.7	230.6 216.2
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	5.8 7.9 18.0 55.7 211.7 490.8 636.4	*6.8 7.9 4.4 9.7 18.4 72.9 244.7 579.7 938.5 1,053.3 1,155.2	*5.3 7.6 4.8 9.4 18.8 81.3 311.2 689.2 1,168.9 1,624.8 1,387.0	*4.5 5.1 3.7 8.1 14.1 73.8 333.0 812.5 1,417.2 2,029.6 2,393.9	*2.4 3.3 3.6 6.4 14.7 71.2 313.6 803.3 1,448.7 2,238.3 2,507.7	*1.7 3.1 3.8 6.3 14.2 71.4 303.6 776.0 1,455.1 2,249.2 2,620.9	*2.1 4.3 2.7 6.5 14.3 64.9 296.7 767.3 1,453.6 2,329.5 2,659.4	*2.7 3.4 3.1 6.2 14.0 68.0 302.2 749.8 1,434.5 2,344.5 2,720.0	*1.6 2.9 3.3 6.9 14.9 65.3 304.6 759.5 1,460.7 2,410.4 2,787.5
White female									
All ages, age adjusted	119.4 139.9	109.5 139.8	107.6 149.4	107.7 170.3	110.3 183.7	110.1 185.6	109.7 186.9	110.1 189.3	110.7 192.9
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	7.8 11.3 6.3 7.5 20.9 74.5 185.8 362.5 616.5 1,026.6 1,348.3	6.8 9.7 6.2 6.5 18.8 66.6 175.7 329.0 562.1 939.3 1,304.9	5.4 6.9 5.4 6.2 16.3 62.4 177.3 338.6 554.7 903.5 1,126.6	2.7 3.6 3.7 4.7 13.5 50.9 166.4 355.5 605.2 905.4 1,266.8	3.0 3.5 3.1 4.3 12.6 47.0 160.6 374.1 645.3 949.2 1,270.9	2.4 3.4 3.1 4.2 12.1 47.4 155.6 369.4 658.7 956.4 1,283.6	3.0 3.6 2.8 3.9 12.3 45.1 154.9 370.1 654.0 968.6 1,291.0	2.2 3.7 2.6 4.2 11.5 46.2 151.3 372.5 660.0 984.4 1,300.1	3.0 3.0 4.3 12.0 45.5 148.1 370.9 670.8 1,013.9 1,322.0

See footnote at end of table.

Table 35 (page 2 of 2). Death rates for malignant neoplasms, according to sex, race, and age: United States, selected years 1950–89

Sex, race, and age	1950¹	1960¹	1970	1980	1985	1986	1987	1988	1989
Black female				Deaths per	100,000 res	ident popu	lation		
All ages, age adjusted	131.9	127.8	123.5	129.7	130.4	132.1	132.0	131.2	130.9
	111.8	113.8	117.3	136.5	143.9	146.7	147.8	148.9	149.6
Under 1 year		*6.7 6.9	*3.3 5.7	*3.0 3.9	*4.3 2.5	*2.8 4.3	*1.8 2.6	*3.4 3.8	*3.3 3.7
5–14 years	3.9	4.8	4.0	3.4	3.0	2.9	3.0	2.8	2.8
	8.8	6.9	6.4	5.7	4.3	4.7	5.3	4.9	4.9
25–34 years	34.3	31.0	20.9	18.3	17.0	17.8	15.8	17.5	15.8
	119.8	102.4	94.6	73.5	69.5	72.2	72.9	71.2	67.4
	277.0	254.8	228.6	230.2	208.1	215.3	214.5	196.2	197.8
55–64 years	484.6	442.7	404.8	450.4	465.4	451.6	457.3	454.1	442.3
	477.3	541.6	615.8	662.4	694.2	717.5	703.4	728.3	748.1
75–84 years		696.3 728.9	763.3 791.5	923.9 1,159.9	1,014.6 1,228.8	1,017.9 1,254.5	1,045.5 1,256.6	1,062.6 1,288.0	1,078.7 1,282.4

¹Includes deaths of nonresidents of the United States.

NOTE: For data years shown, the code numbers for cause of death are based on the then current International Classification of Diseases, which are described in Appendix II, tables IV and V.

SOURCES: National Center for Health Statistics: Vital Statistics of the United States, Vol. II, Mortality, Part A, for data years 1950–89. Public Health Service. Washington. U.S. Government Printing Office; Data computed by the Division of Analysis from data compiled by the Division of Vital Statistics and from table 1.

^{*}Based on fewer than 20 deaths.

Table 36 (page 1 of 2). Death rates for malignant neoplasms of respiratory system, according to sex, race, and age: United States, selected years 1950–89

Sex, race, and age	1950¹	1960¹	1970	1980	1985	1986	1987	1988	1989
All races			Dea	ths per 10	0,000 resid	ent populat	ion		
All ages, age adjusted	12.8 14.1	19.2 22.2	28.4 34.2	36.4 47.9	38.8 53.3	39.0 54.1	39.7 55.5	39.9 56.2	40.3 57.3
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.	*0.1 *0.1 *0.1 0.2 0.9 55.1 22.9 55.2 69.3 69.3 64.0	*0.2 *0.1 *0.0 0.1 1.1 7.3 32.0 81.5 117.2 102.9 79.1	*0.1 *0.1 *0.0 0.2 1.0 11.6 46.2 116.2 174.6 175.1	*0.2 *0.1 *0.0 0.1 0.8 9.6 56.5 144.3 243.1 251.4 184.5	*0.1 *0.0 *0.0 0.1 0.8 8.1 52.8 158.4 268.0 294.5 202.0	*0.1 *0.0 *0.0 0.1 0.7 7.9 51.7 157.8 271.7 303.9 214.9	*0.1 *0.0 *0.0 0.1 0.8 7.7 51.6 160.4 278.1 313.3 221.8	*0.1 *0.0 *0.0 0.1 0.7 7.6 50.0 162.2 280.0 324.2 228.5	*0.2 *0.0 *0.0 0.1 0.7 7.2 48.7 162.3 287.0 336.5 232.2
White male									
All ages, age adjusted	21.6 24.1	34.6 39.6	49.9 58.3	58.0 73.4	58.2 77.3	58.0 77.8	58.6 79.1	58.0 79.1	57.4 79.1
Under 1 years 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	*0.2 *0.1 *0.1 0.3 1.2 7.9 39.1 95.9 119.4 109.1	*0.1 *0.0 *0.0 0.2 1.6 10.4 53.0 149.8 225.1 191.9 133.9	*0.2 *0.1 *0.0 0.2 1.4 15.4 67.6 199.3 344.8 360.7 221.8	*0.2 *0.0 *0.0 0.2 0.9 11.2 74.3 215.0 418.4 516.1	*- *0.0 *0.0 0.2 0.7 9.4 65.2 221.7 419.1 562.6 459.1	*0.1 *0.0 *0.0 0.2 0.9 8.5 63.7 221.3 417.0 570.7 477.5	*0.1 *- *0.1 0.9 8.5 63.5 223.7 422.9 572.9 495.4	*0.1 *0.0 *0.0 0.1 0.8 8.4 60.6 222.9 418.8 579.0 493.9	*0.1 *0.0 *0.0 0.1 0.7 7.8 58.5 219.2 418.6 580.4 510.2
Black male									
All ages, age adjustedAll ages, crude	16.9 14.3 *	36.6 31.1 *0.4	60.8 51.2 *0.4	82.0 70.8 *0.4	84.4 74.5 *0.3	83.9 74.6 *	84.2 75.5 *0.7	83.4 75.3 *_	84.6 76.4 *0.6
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.	*- *0.1 *0.4 2.1 9.4 41.1 78.8 65.2	*0.1 *0.0 *0.2 2.6 20.7 75.0 161.8 184.6 126.3 110.3	*0.1 *0.3 2.9 32.6 123.5 250.3 322.2 290.6 154.4	*0.2 *0.0 *0.3 1.9 26.9 142.8 340.3 499.4 499.6 337.7	*0.0 *0.3 1.9 22.8 132.1 352.1 534.8 581.3 390.8	* *0.2 1.4 22.3 131.3 337.3 542.3 606.5 456.7	*- *0.2 1.8 19.6 126.8 333.3 562.8 629.9 459.4	*- *0.3 1.3 21.0 122.8 322.3 556.5 664.3 528.6	*- *0.3 1.2 20.1 126.6 329.7 561.1 677.3 465.3
White female	4.6	E 1	10.1	10.0	22.6	22.1	23.8	24.8	25.8
All ages, age adjustedAll ages, crude	4.6 5.4	5.1 6.4	10.1 13.1	18.2 26.5	22.6 34.6	23.1 35.9	23.8 37.5	24.8 39.4	41.6
Under 1 year 1–4 years 5–14 years 15–24 years 25–34 years 35–44 years 45–64 years 65–64 years 65–74 years 75–84 years 75–84 years	*0.1 *0.1 *0.2 0.5 2.2 6.5 15.5 27.2 40.0 44.0	*0.2 *0.1 *0.0 *0.1 0.6 3.4 9.8 16.7 26.5 36.5 45.2	*0.1 *0.1 *0.1 *0.1 0.6 6.0 22.1 39.3 45.4 56.8 57.4	*0.1 *0.1 *0.1 *0.0 0.5 6.8 33.9 74.2 108.1 99.3 96.8	*0.2 *0.1 *0.0 *0.1 0.6 5.6 36.0 94.2 149.1 140.3 102.1	*0.2 *0.0 *0.1 0.5 5.8 34.9 94.9 156.0 149.0 113.8	*0.1 *0.0 *0.1 0.6 5.7 35.0 98.1 161.1 161.7 117.6	*- *0.0 *0.1 0.5 5.6 35.0 103.2 168.1 173.4 127.1	*0.1 *- *0.0 *0.1 0.5 5.3 34.0 106.2 180.2 191.6 128.9

See footnote at end of table.

Table 36 (page 2 of 2). Death rates for malignant neoplasms of respiratory system, according to sex, race, and age: United States, selected years 1950–89

Sex, race, and age	1950¹	1960¹	1970	1980	1985	1986	1987	1988	1989
Black female			D	eaths per	100,000 res	sident popu	lation		
All ages, age adjusted	4.1	5.5	10.9	19.5	22.5	23.3	24.3	24.6	25.4
	3.4	4.9	10.1	19.3	23.3	24.3	25.4	26.2	27.4
Under 1 year	*_	*_	*_	*0.4	*0.4	*_	*_	*0.3	*0.3
	*_	*0.1	*0.1	*	*_	*_	*0.1	*_	*_
514 years	*_	*0.1	*_	*0.0	*0.0	*_	*0.0	*0.1	*0.0
	*0.3	*-	*0.1	*0.1	*0.1	*0.1	*0.1	*0.1	*0.1
25–34 years	*1.2	0.8	*0.5	*0.8	1.0	*0.6	*0.4	*0.6	1.0
	2.7	3.4	10.5	7.9	7.7	8.6	8.9	6.6	7.9
45–54 years	8.8	12.8	25.3	46.4	40.7	42.8	43.9	41.0	41.2
	15.3	20.7	36.4	83.8	105.6	102.4	107.0	110.3	107.1
65–74 years	16.4 	20.7 33.1 44.7	49.3 52.6 47.6	91.7 81.1 90.5	118.9 108.6 112.2	130.9 123.5 102.1	136.5 129.9 110.5	145.8 146.0 105.7	156.8 158.4 122.4

¹Includes deaths of nonresidents of the United States.

NOTE: For data years shown, the code numbers for cause of death are based on the then current International Classification of Diseases, which are described in Appendix II, tables IV and V.

SOURCES: National Center for Health Statistics: Vital Statistics of the United States, Vol. II, Mortality, Part A, for data years 1950–89. Public Health Service. Washington. U.S. Government Printing Office; Data computed by the Division of Analysis from data compiled by the Division of Vital Statistics and from table 1.

^{*}Based on fewer than 20 deaths.

Table 37. Death rates for malignant neoplasm of breast for females, according to race and age: United States, selected years 1950–89

Race and age	1950¹	1960¹	1970	1980	1985	1986	1987	1988	1989
All races			Dea	ths per 100	0,000 resid	ent populat	ion		
All ages, age adjusted	22.2 24.7	22.3 26.1	23.1 28.4	22.7 30.6	23.2 32.7	23.1 32.8	22.9 32.8	23.1 33.5	23.0 33.7
Under 25 years. 25–34 years 35–44 years 45–54 years 55–64 years 65–74 years 75–84 years 85 years and over.	*0.1 3.8 20.8 46.9 70.4 94.0 139.8 195.5	*0.1 3.8 20.2 51.4 70.8 90.0 129.9 191.9	*0.0 3.9 20.4 52.6 77.6 93.8 127.4 157.1	*0.0 3.3 17.9 48.1 80.5 101.1 126.4 169.3	*0.0 3.0 17.5 46.7 83.6 107.7 137.7	*0.0 3.1 18.3 45.4 80.9 109.9 136.2 180.0	*0.0 3.1 17.5 45.4 80.7 108.3 137.8 176.5	*0.0 3.0 17.6 45.3 81.8 109.4 143.1 183.9	*0.0 3.0 17.7 44.7 78.6 111.1 147.5 185.8
White									
All ages, age adjusted	22.5 25.7	22.4 27.2	23.4 29.9	22.8 32.3	23.3 34.6	23.0 34.6	22.8 34.5	23.0 35.2	22.9 35.6
Under 25 years. 25–34 years. 35–44 years. 45–54 years. 55–64 years. 65–74 years. 75–84 years. 85 years and over.	*0.1 3.7 20.8 47.1 70.9 96.3 143.6 204.2	*0.0 3.6 19.7 51.2 71.8 91.6 132.8 199.7	*0.0 3.7 20.2 53.0 79.3 95.9 129.6 161.9	*0.0 3.0 17.3 48.1 81.3 103.7 128.4 171.7	*0.0 2.8 16.7 46.5 84.2 110.0 140.4 178.9	*0.0 2.7 17.3 44.4 81.8 112.4 139.7 182.7	*0.0 2.9 16.4 44.3 81.3 110.6 140.5 179.2	*0.0 2.7 16.5 44.4 82.2 111.8 145.2 186.6	*0.0 2.7 17.0 43.6 79.5 113.2 150.5 188.9
Black									
All ages, age adjusted	19.3 16.4	21.3 18.7	21.5 19.7	23.3 22.9	25.3 25.6	25.8 26.2	26.5 27.2	27.0 28.1	26.0 27.3
Under 25 years. 25–34 years. 35–44 years. 45–54 years. 55–64 years. 65–74 years. 75–84 years. 85 years and over.	*0.1 4.9 21.0 46.5 64.3 67.0	*0.2 6.1 24.8 54.4 63.2 72.3 87.5 92.1	*0.1 5.9 24.4 52.0 64.7 77.3 101.8 112.1	*0.0 5.3 24.1 52.7 79.9 84.3 114.1 149.9	*0.1 4.4 26.3 54.4 88.5 99.3 121.0 152.5	*0.1 5.6 28,3 59.1 83.6 100.5 112.1 162.1	*0.1 4.7 28.9 60.1 88.2 101.0 125.3 162.5	*0.1 5.4 29.1 58.5 90.4 102.5 139.0 176.6	*0.1 5.1 25.4 59.2 82.2 106.9 135.3 170.9

¹Includes deaths of nonresidents of the United States.

NOTE: For data years shown, the code numbers for cause of death are based on the then current International Classification of Diseases, which are described in Appendix II, tables IV and V.

SOURCES: National Center for Health Statistics: Vital Statistics of the United States, Vol. II, Mortality, Part A, for data years 1950–89. Public Health Service. Washington. U.S. Government Printing Office; Data computed by the Division of Analysis from data compiled by the Division of Vital Statistics and from table 1.

^{*}Based on fewer than 20 deaths.

Table 38. Maternal mortality rates for complications of pregnancy, childbirth, and the puerperium, according to race and age: United States, selected years 1950–89

Race and age	1950¹	1960¹	1970	1980	1985	1986	1987	1988	1989
All races				Deaths pe	r 100,000 l	ive births			
All ages, age adjusted	73.7	32.1	21.5	9.4	7.6	7.0	6.1	8.0	7.3
	83.3	37.1	21.5	9.2	7.8	7.2	6.6	8.4	7.9
Under 20 years	70.7	22.7	18.9	7.6	6.9	5.9	5.1	7.0	5.8
	47.6	20.7	13.0	5.8	5.4	5.7	4.8	7.2	6.4
	63.5	29.8	17.0	7.7	6.4	5.8	5.3	6.1	6.7
	107.7	50.3	31.6	13.6	8.9	7.8	8.9	9.3	10.0
	222.0	104.3	81.9	36.3	25.0	21.4	15.1	21.9	15.3
White									
All ages, age adjusted	53.1	22.4	14.5	6.8	5.0	4.7	4.9	5.6	5.4
	61.1	26.0	14.4	6.7	5.2	4.9	5.1	5.9	5.6
Under 20 years. 20–24 years. 25–29 years. 30–34 years. 35 years and over ² .	44.9	14.8	13.9	5.9	*4.3	*4.1	*5.4	*3.8	*5.2
	35.7	15.3	8.4	4.3	3.4	3.7	3.9	5.5	4.9
	45.0	20.3	11.2	5.5	4.7	3.6	3.9	4.6	4.8
	75.9	34.3	18.8	9.4	5.2	5.2	6.0	7.1	6.4
	174.1	73.9	59.6	25.8	17.8	16.1	11.8	12.4	9.7
Black									
All ages, age adjustedAll ages, crude		92.0 103.6	64.3 59.8	23.9 21.5	21.0 20.4	19.3 18.8	14.3 14.2	19.8 19.5	18.6 18.4
Under 20 years.		54.8	31.8	12.8	*12.1	*10.6	*4.1	*11.8	*7.0
20–24 years.		56.9	41.0	13.4	14.0	13.9	9.4	14.5	13.5
25–29 years.		92.8	63.8	21.4	18.4	19.3	14.3	14.3	17.9
30–34 years .		150.6	115.6	41.9	35.8	29.0	30.9	26.7	33.8
35 years and over ² .		299.5	204.7	96.5	72.6	*58.6	*43.1	84.8	57.5

¹Includes deaths of nonresidents of the United States.

NOTE: For data years shown, the code numbers for cause of death are based on the then current International Classification of Diseases, which are described in Appendix II, tables IV and V.

SOURCES: National Center for Health Statistics: Vital Statistics of the United States, Vol. II, Mortality, Part A, for data years 1950–89. Public Health Service. Washington. U.S. Government Printing Office; Vital Statistics of the United States, Vol. I, Natality, for data years 1950–89. Public Health Service. Washington. U.S. Government Printing Office; Data computed by the Division of Analysis from data compiled by the Division of Vital Statistics; U.S. Bureau of the Census: Population estimates and projections. Current Population Reports. Series P–25, No. 499. Washington. U.S. Government Printing Office, May 1973.

²Rates computed by relating deaths of women 35 years and over to live births to women 35–49 years.

^{*}Based on fewer than 20 deaths.

Table 39 (page 1 of 2). Death rates for motor vehicle accidents, according to sex, race, and age: United States, selected years 1950–89

Sex, race, and age	19501	1960¹	1970	1980	1985	1986	1987	1988	1989
All races			Deat	hs per 100	,000 reside	nt populati	on		
All ages, age adjusted	23.3 23.1	22.5 21.3	27.4 26.9	22.9 23.5	18.8 19.2	19.4 19.9	19.5 19.8	19.7 20.0	18.9 19.2
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.	8.4 11.5 8.8 34.4 24.6 20.3 22.2 29.2 38.8 52.7 45.1	8.1 10.0 7.9 38.0 24.3 19.3 21.4 25.1 31.4 41.8 37.9	9.8 11.5 10.2 47.2 30.9 24.9 25.5 27.9 32.8 43.5 34.2	7.0 9.2 7.9 44.8 29.1 20.9 18.6 17.4 19.2 28.1 27.6	4.8 7.1 6.8 36.1 22.8 17.1 15.2 15.5 17.7 27.6 26.1	4.9 7.0 6.9 39.0 24.2 16.6 15.1 17.9 28.8 25.3	5.3 6.8 7.0 37.8 24.2 17.3 15.4 15.6 18.5 29.3 27.1	5.6 6.9 7.0 38.5 23.9 17.4 15.8 15.7 19.2 29.1	5.5 6.8 6.4 35.4 23.4 17.3 15.6 15.8 19.1 29.8 28.8
White male									
All ages, age adjusted All ages, crude	35.9 35.1	34.0 31.5	40.1 39.1	34.8 35.9	27.6 28.2	28.7 29.2	28.4 28.8	28.5 28.7	26.8 27.0
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	9.1 13.2 12.0 58.3 39.1 30.9 31.6 41.9 59.1 86.4 79.3	8.8 11.3 10.3 62.7 38.6 28.4 29.7 34.4 45.5 66.8 61.9	9.1 12.2 12.6 75.2 47.0 35.2 34.6 39.0 46.2 69.2 65.5	7.0 9.5 9.8 73.8 46.6 30.7 26.3 23.9 25.8 43.6 57.3	4.5 7.6 8.5 57.4 35.5 24.1 20.9 20.6 21.7 41.2 56.4	4.1 7.0 8.7 62.6 37.3 23.7 20.8 19.9 22.4 42.9 51.6	4.3 7.2 9.1 59.2 36.8 24.4 20.6 20.8 24.0 43.4 58.6	5.8 6.9 8.7 60.3 36.1 24.6 21.5 20.5 24.2 43.4 59.3	4.9 6.8 7.8 54.2 34.7 23.6 20.7 21.0 23.5 43.1 62.0
Black male									
All ages, age adjusted	39.8 37.2	38.2 33.1	50.1 44.3	32.9 31.1	27.7 26.7	29.2 28.6	28.5 27.7	29.6 28.9	29.4 28.3
Under 1 years 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.	9.7 41.6 57.4 45.9 49.9 58.8 48.5	*6.8 12.7 10.4 46.4 51.0 43.6 48.1 47.3 46.1 51.8 *58.6	10.6 16.9 16.1 58.1 70.4 59.5 61.4 62.1 54.9 51.6 45.7	7.8 13.7 10.5 34.9 41.2 39.1 40.3 41.8 46.5 *34.0	*5.9 10.7 8.9 32.1 37.2 35.4 29.9 34.3 30.0 42.2 36.9	8.0 10.7 9.6 35.3 41.7 35.1 31.4 31.9 27.2 53.1 62.7	8.3 9.9 9.2 36.2 35.2 35.2 32.4 30.1 31.2 36.2 40.6	7.7 9.2 9.5 38.0 38.3 37.3 32.2 30.2 37.0 45.2 65.7	7.6 8.8 8.7 36.6 37.9 37.8 35.8 32.0 43.9 48.6
White female									
All ages, age adjusted	10.6 10.9	11.1 11.2	14.4 14.8	12.3 12.8	10.8 11.4	11.0 11.5	11.4 11.9	11.6 12.1	11.5 12.1
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 75–84 years	7.8 10.1 5.6 12.6 9.0 8.1 10.8 15.0 20.9 25.4 22.3	7.5 8.3 5.3 15.6 9.0 8.9 11.4 15.3 19.3 23.8 22.2	10.2 9.6 6.9 22.7 12.3 14.3 16.1 22.1 28.1 18.1	7.1 7.7 5.7 23.0 12.2 10.6 10.2 10.5 13.4 19.0 15.3	3.9 5.7 5.2 20.1 10.0 9.4 8.9 9.9 14.3 19.9 15.1	4.6 6.0 4.9 21.5 10.8 8.4 8.5 9.6 14.4 20.5	5.8 5.9 4.9 21.7 11.6 9.3 9.2 10.4 13.7 22.0 15.9	5.3 6.2 5.2 21.8 11.7 9.1 9.5 10.5 14.5 22.8 17.7	4.7 6.0 5.0 21.4 11.9 9.5 9.4 10.1 15.3 22.4 17.3

See footnote at end of table.

Table 39 (page 2 of 2). Death rates for motor vehicle accidents, according to sex, race, and age: United States, selected years 1950–89

[Data are based on the National Vital Statistics System]

Sex, race, and age	1950¹	1960¹	1970	1980	1985	1986	1987	1988	1989
Black female			Deat	ths per 100	,000 reside	ent populati	on		
All ages, age adjusted	10.3 10.2	10.0 9.7	13.8 13.4	8.4 8.3	8.2 8.3	8.5 8.5	8.7 8.8	9.2 9.3	9.1 9.3
Under 1 year 1–4 years. 5–14 years. 15–24 years. 25–34 years. 35–44 years. 45–54 years. 55–64 years.	6.2 11.5 10.7 11.1 10.6 14.0	8.1 8.8 5.9 9.9 9.8 11.0 11.8	11.9 12.6 9.3 13.4 13.3 16.1 16.4	*5.3 9.5 5.2 8.0 10.6 8.3 9.1 9.3	7.8 6.8 4.3 9.1 9.2 9.1 8.2 9.5	*5.3 6.9 4.8 9.1 10.3 8.7 8.7	*5.3 7.5 4.7 9.5 11.1 9.0 8.8	*5.5 7.5 5.6 10.7 11.1 10.1 8.9 9.7	7.9 6.3 4.6 10.1 11.9 10.4 8.4 9.6
65–74 years	12.7 	14.2 *8.8 *21.1	16.3 14.4 *15.4	8.5 11.1 *12.3	9.6 15.0 *9.4	9.7 10.0 *11.0	11.8 10.9 *7.2	9.6 14.1 *10.8	12.5 13.6 *6.1

¹Includes deaths of nonresidents of the United States.

NOTE: For data years shown, the code numbers for cause of death are based on the then current International Classification of Diseases, which are described in Appendix II, tables IV and V.

SOURCES: National Center for Health Statistics: Vital Statistics of the United States, Vol. II, Mortality, Part A, for data years 1950–89. Public Health Service. Washington. U.S. Government Printing Office; Data computed by the Division of Analysis from data compiled by the Division of Vital Statistics and from table 1.

^{*}Based on fewer than 20 deaths.

Table 40 (page 1 of 2). Death rates for homicide and legal intervention, according to sex, race, and age: United States, selected years 1950–89

Sex, race, and age	1950¹	1960¹	1970	1980	1985	1986	1987	1988	1989
All races			Dea	ths per 100	0,000 reside	ent populat	ion		
All ages, age adjustedAll ages, crude	5.4 5.3	5.2 4.7	9.1 8.3	10.8 10.7	8.3 8.3	9.0 9.0	8.6 8.7	9.0 9.0	9.4 9.2
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	4.4 0.6 0.5 6.3 9.9 8.8 6.1 4.0 3.2 2.3	4.8 0.7 0.5 5.9 9.7 8.1 6.2 4.2 2.8 2.4	4.3 1.9 0.9 11.7 16.6 13.7 10.1 7.1 5.0 4.0	5.9 2.5 1.2 15.6 19.6 15.1 11.1 7.0 5.7 5.2 5.3	5.3 2.4 1.2 12.1 14.7 11.3 8.1 5.7 4.3 4.3	7.4 2.7 1.1 14.2 16.1 11.4 8.3 5.4 4.4 4.6 4.7	7.2 2.3 1.2 14.0 15.1 10.8 7.7 5.5 4.3 4.8 5.1	8.2 2.6 1.3 15.4 16.0 7.1 5.2 4.2 4.5	8.5 2.7 1.5 16.9 16.3 11.0 7.6 5.0 4.1 4.2 4.3
White male									
All ages, age adjusted All ages, crude	3.9 3.9	3.9 3.6	7.3 6.8	10.9 10.9	8.1 8.2	8.4 8.6	7.7 7.9	7.7 7.9	8.1 8.2
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	4.3 0.4 0.4 3.7 5.4 6.4 5.5 4.1 3.5	3.8 0.6 0.4 4.4 6.2 5.5 5.0 4.3 3.4 2.7 2.7	2.9 1.4 0.5 7.9 13.0 11.0 9.0 7.7 5.6 5.1	4.3 2.0 0.9 15.5 18.9 15.5 11.9 7.8 6.9 6.3	3.7 1.9 1.1 11.2 13.9 11.5 8.6 6.3 4.5 4.5 3.9	5.4 1.9 0.9 12.5 14.6 11.6 8.6 6.0 4.3 4.6 4.4	6.0 1.8 0.8 11.2 13.2 10.2 8.3 6.3 4.2 4.9 5.4	5.6 2.2 1.0 11.5 13.2 10.4 7.6 6.0 4.1 4.3 5.1	5.6 1.9 1.0 12.8 13.7 10.5 8.5 5.6 3.9 5.1
Black male									
All ages, age adjusted	51.1 47.3	44.9 36.6	82.1 67.6	71.9 66.6	49.9 48.4	55.9 55.0	53.8 53.3	58.2 58.0	61.5 61.1
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	1.8 58.9 110.5 83.7 54.6 35.7 18.7	10.3 1.7 1.4 46.4 92.0 77.5 54.8 31.8 19.1 16.1 *10.3	14.3 5.1 4.2 102.5 158.5 126.2 100.5 59.8 40.6 19.0 *19.6	18.6 7.2 2.9 84.3 145.1 110.3 83.8 55.6 33.9 27.6 *17.0	16.0 6.5 3.2 66.1 94.3 76.3 51.1 37.8 27.6 21.5 *16.9	22.5 9.3 3.2 79.2 108.0 79.4 56.3 35.4 30.0 27.9 *25.4	19.4 4.8 4.3 85.6 98.9 78.4 46.0 32.8 28.0 29.5 29.0	19.3 7.5 4.2 101.8 108.8 79.2 45.2 29.1 26.2 30.5 31.4	22.0 7.9 4.9 114.8 112.6 78.6 46.2 30.2 26.3 28.4 34.7
White female		4 6		0.0					
All ages, age adjusted	1.4 1.4	1.5 1.4	2.2 2.1	3.2 3.2	2.9 2.9	2.9 3.0	2.9 3.0	2.8 2.9	2.8 2.8
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.	3.9 0.6 0.4 1.9 2.2 1.6 1.3 1.1 1.2	3.5 0.5 0.3 1.5 2.2 1.9 1.5 1.1 1.2	2.9 1.2 0.5 2.7 3.4 3.2 2.0 1.7 2.5 1.9	4.3 1.5 1.0 4.7 4.3 4.1 3.0 2.1 2.5 3.3 4.0	4.3 1.6 0.8 3.6 4.4 3.6 2.9 2.3 2.2 3.1 3.2	5.1 1.4 0.8 4.3 4.4 3.5 2.8 1.9 2.2 3.1 3.3	4.2 1.5 0.8 3.9 4.6 3.5 2.7 1.9 2.4 3.1 3.8	6.0 1.6 0.8 3.9 4.4 3.2 2.5 2.0 2.3 3.0 2.9	5.6 1.5 0.9 3.9 4.2 3.3 2.5 1.7 2.1 2.7 2.0

See footnote at end of table.

Table 40 (page 2 of 2). Death rates for homicide and legal intervention, according to sex, race, and age: United States, selected years 1950–89

[Data are based on the National Vital Statistics System]

Sex, race, and age	1950¹	1960¹	1970	1980	1985	1986	1987	1988	1989
Black female	Deaths per 100,000 resident population								
All ages, age adjusted	11.7 11.5	11.8 10.4	15.0 13.3	13.7 13.5	10.8 11.0	11.8 12.1	12.3 12.6	12.7 13.2	12.5 12.9
Under 1 year 1–4 years 5–14 years 15–24 years 25–34 years 35–44 years 45–54 years	1.2 16.5 26.6 17.8 8.5	13.8 *1.7 1.0 11.9 24.9 20.5 12.7	10.7 6.3 2.0 17.7 25.6 25.1 17.5	12.8 6.4 2.2 18.4 25.8 17.7 12.5	10.3 6.3 2.0 14.2 19.8 14.8 9.0	17.0 6.8 2.3 16.2 21.9 14.8 8.5	18.7 7.2 2.0 17.7 22.4 14.4 10.5	23.5 6.3 3.1 17.4 25.5 14.6 7.7	23.9 7.3 2.9 17.3 23.2 14.7 8.4
45–64 years 65–64 years 65–74 years 75–84 years 85 years and over	3.6 3.4 	6.8 3.3 *2.5 *2.6	8.1 7.7 *5.7 *9.8	8.9 8.6 6.7 *8.5	6.4 7.2 7.6 *11.5	6.8 8.7 8.6 *13.1	7.6 6.9 10.4 *10.5	6.8 9.0 9.9 12.7	8.1 8.2 9.9 15.2

¹Includes deaths of nonresidents of the United States.

NOTE: For data years shown, the code numbers for cause of death are based on the then current International Classification of Diseases, which are described in Appendix II, tables IV and V.

SOURCES: National Center for Health Statistics: Vital Statistics of the United States, Vol. II, Mortality, Part A, for data years 1950–89. Public Health Service. Washington. U.S. Government Printing Office; Data computed by the Division of Analysis from data compiled by the Division of Vital Statistics and from table 1.

^{*}Based on fewer than 20 deaths.

Table 41 (page 1 of 2). Death rates for suicide, according to sex, race, and age: United States, selected years 1950–89

Sex, race, and age	1950¹	1960¹	1970	1980	1985	1986	1987	1988	1989
All races			Dea	ths per 100	0,000 resid	ent populat	tion		
All ages, age adjusted	11.0 11.4	10.6 10.6	11.8 11.6	11.4 11.9	11.5 12.3	11.9 12.8	11.7 12.7	11.4 12.4	11.3 12.2
Under 1 year	 0.2	 0.3	 0.3	 0.4	 8.0	 0.8	 0.7		 0.7
15–24 years	4.5 9.1	5.2 10.0	8.8 14.1	12.3 16.0	12.9 15.2	13.1 15.7	12.9 15.4	0.7 13.2 15.4	13.3 15.0
35–44 years	14.3 20.9 27.0	14.2 20.7 23.7	16.9 20.0 21.4	15.4 15.9 15.9	14.6 15.6 16.7	15.2 16.4 17.0	15.0 15.9 16.6	14.8 14.6 15.6	14.6 14.6 15.5
65–74 years	29.3 31.1 28.8	23.0 27.9 26.0	20.8 21.2 19.0	16.9 19.1 19.2	18.5 24.1 19.1	19.7 25.2 20.8	19.4 25.8 22.1	18.4 25.9 20.5	18.0 23.1 22.8
White male									
All ages, age adjusted	18.1 19.0	17.5 17.6	18.2 18.0	18.9 19.9	19.9 21.5	20.5 22.3	20.1 22.1	19.8 21.7	19.6 21.4
Under 1 year									
1–4 years. 5–14 years. 15–24 years.	0.3 6.6	0.5 8.6	0.5 13.9	0.7 21.4	1.3 22.7	1.2 23.6	1.2 22.7	1.1 23.4	1.0 23.2
25–34 years	13.8 22.4	14.9 21.9 33.7	19.9 23.3	25.6 23.5	25.4 23.5	26.4 23.9	25.6 23.9	25.7 24.1	24.9 23.8
45–54 years	34.1 45.9 53.2	40.2 42.0	29.5 35.0 38.7	24.2 25.8 32.5	25.1 28.6 35.3	26.3 28.7 37.6	25.4 28.7 36.8	23.2 27.0 35.4	24.2 26.6 35.1
75–84 years	61.9 61.9	55.7 61.3	45.5 45.8	45.5 52.8	57.1 60.3	58.9 66.3	60.9 71.9	61.5 65.8	55.3 71.9
Black male									
All ages, age adjusted	7.0 6.3	7.8 6.4	9.9 8.0	11.1 10.3	11.3 10.8	11.5 11.1	12,0 11.6	11.8 11.5	12.5 12.2
Under 1 year					• • •				
1–4 years	*_	*0.1	*0.1	*0.3	*0.6	0.8	0.8	*0.6	0.9
15–24 years	4.9 9.3	4.1 12.4	10.5 19.2	12.3 21.8	13.3 19.6	11.5 21.3	12.9 21.1	14.5 22.1	16.7 22.0
35–44 years	10.4	12.8	12.6	15.6	14.9	17.5	17.9	16.4	18.1
45–54 years	10.4 16.5	10.8 16.2	13.8 10.6	12.0 11.7	13.5 11.5	12.8 9.9	13.0 10.3	11.7 10.6	10.9 10.4
65–74 years	10.0	11.3	8.7	11.1	15.8	16.1	17.6	12.9	15.4
75-84 years		6.6 6.9	8.9 *8.7	10.5 *18.9	15.6 *7.7	16.0 *17.9	20.9 *13.0	17.6 *10.0	14.7 *22.2
White female									
All ages, age adjusted	5.3 5.5	5.3 5.3	7.2 7.1	5.7 5.9	5.3 5.6	5.4 5.9	5.3 5.7	5.1 5.5	4.8 5.2
Under 1 year			• • •	• • •					
5-14 years	*0.1	*0.1	0.1	0.2	0.5	0.3	0.3	0.4	0.3
15–24 years	2.7 5.2	2.3 5.8	4.2 9.0	4.6 7.5	4.7 6.4	4.7 6.2	4.6 6.3	4.6 6.1	4.4 5.9
35–44 years	8.2 10.5	8.1 10.9	13.0 13.5	9.1	7.7	8.3	7.9	7.4	7.1
45–54 years55–64 years	10.5	10.9	12.3	10.2 9.1	9.0 8.4	9.6 9.0	9.4 8.4	8.6 7.9	8.0 7.9
65-74 years	10.6	8.8	9.6	7.0 5.7	7.3	7.7	7.6	7.3	6.4
75–84 years	8.4 8.9	9.2 6.1	7.2 5.8	5.7 5.8	7.0 4.7	8.0 5.0	7.5 4.8	7.4 5.3	6.3 6.2

See footnote at end of table.

Table 41 (page 2 of 2). Death rates for suicide, according to sex, race, and age: United States, selected years 1950–89

Sex, race, and age	1950¹	1960¹	1970	1980	1985	1986	1987	1988	1989
Black female			Dea	ths per 100	0,000 reside	ent populat	ion		
All ages, age adjusted	1.7 1.5	1.9 1.6	2.9 2.6	2.4 2.2	2.1 2.1	2.4 2.3	2.1 2.1	2.4 2.4	2.4 2.4
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	* - * 1.8 2.6 2.0 3.5 *1.1	*0.0 *1.3 3.0 3.1 3.0 *2.3 *1.3	0.2 3.8 5.7 3.7 3.7 *2.0 *1.7 *2.8	*0.1 2.3 4.1 4.6 2.8 2.3 *1.7	*0.2 2.0 3.0 3.6 3.2 2.2 *2.0 *4.5	*0.2 2.3 3.8 2.8 3.2 4.2 2.8 *2.6	*0.2 2.5 4.0 2.9 2.2 1.8 2.5 *2.3	*0.5 2.6 3.8 3.5 3.8 2.0 *1.3	*0.3 2.8 3.7 3.9 3.0 2.5 *2.1 *1.7 *0.6

¹Includes deaths of nonresidents of the United States.

NOTE: For data years shown, the code numbers for cause of death are based on the then current International Classification of Diseases, which are described in Appendix II, tables IV and V.

SOURCES: National Center for Health Statistics: Vital Statistics of the United States, Vol. II, Mortality, Part A, for data years 1950–89. Public Health Service. Washington. U.S. Government Printing Office; Data computed by the Division of Analysis from data compiled by the Division of Vital Statistics and from table 1.

^{*}Based on fewer than 20 deaths.

Table 42. Death rates for human immunodeficiency virus (HIV) infection, according to sex, race, and age: United States, 1987, 1988, and 1989

		Both sexes	3		Male			Female	
Race and age	1987	1988	1989	1987	1988	1989	1987	1988	1989
All races			De	aths per 10	00,000 resi	dent popul	ation		•-
All ages, age adjusted	5.5	6.6	8.7	10.0	12.0	15.7	1.1	1.4	1.8
All ages, crude	5.5	6.8	8.9	10.2	12.4	16.3	1.1	1.4	1.8
Under 1 year	2.3	2.1	3.0	2.1	2.5	2.7	2.5	1.7	3.4
1–4 years	0.7	0.8	0.8	0.7	0.8	0.7	0.7	0.7	0.8
5–14 years	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
15–24 years	1.3	1.4	1.7	2.2	2.4	2.7	0.3	0.5	0.6
25–34 years	11.6	13.8	17.7	20.5	24.2	31.0	2.7	3.5	4.4
35–44 years	14.0	17.5	23.5	26.2	32.5	43.5	2.1	3.0	3.9
45–54 years	7.9	9.7	13 <i>.</i> 2	15.4	18.8	25.5	8.0	1.1	1.6
55-64 years	3.5	4.0	5.3	6.7	7.6	10.3	0.5	0.7	0.8
65–74 years	1.3	1.6	1.8	2.3	2.8	3.2	0.5	0.6	0.7
75–84 years	0.8	0.8	0.7	1.2	1.5	1.2	0.6	0.4	0.4
85 years and over	*0.5	*0.4	*0.4	*0.7	*1.0	*0.9	*0.3	*0.1	*0.2
White									
All ages, age adjusted	4.4	5.3	7.0	8.3	9.9	13.1	0.6	0.7	0.9
All ages, crude	4.5	5.4	7.2	8.6	10.3	13.8	0.6	0.7	0.9
Under 1 year	1.1	1.1	1.6	1.3	1.4	1.7	*0.9	*0.7	1.6
1–4 years	0.4	0,4	0.4	0.4	0.4	*0.2	0.4	0.4	0.5
5-14 years	0.1	0.1	0.1	0.2	0.2	0.2	*0.1	*0.1	*0.1
15–24 years	1.0	1.1	1.2	1.8	1.8	2.1	0.1	0.3	0.4
25–34 years	9.1	10.7	14.0	16.8	19.5	25.6	1.3	1.7	2.1
35–44 years	11.3	14.0	18.7	21.7	26.7	35.8	1.0	1.4	1.6
45–54 years	6.9	8.4	11.4	13.5	16.4	22.3	0.5	0.6	0.8
55–64 years	3.0	3.4	4.6	5.9	6.5	9.0	0.4	0.5	0.5
65–74 years	1.3	1.5	1.5	2.3	2.5	2.7	0.5	0.6	0.6
75–84 years	0.8	0.8	0.7	1.2	1.4	1.2	0.6	0.4	0.4
85 years and over	*0.4	*0.4	*0.4	*0.6	*0.9	*0.8	*0.3	*0.2	*0.2
	0	0	0.,	0.0	0.0	0.0	0.0	Ų. <u>L</u>	0.2
Black									
All ages, age adjusted	14.2	17.9	22.9	25.4	31.6	40.3	4.7	6.2	8.1
All ages, crude	13.6	17.2	22.2	23.4	29.3	37.6	4.7	6.3	8.2
Under 1 year	9.4	8.1	11.0	7.3	8.7	8.6	11.7	7.5	13.4
1–4 years	2.4	3.0	3.0	2.4	3.2	3.5	2.4	2.8	2.5
5–14 years	*0.3	0.4	0.4	*0.3	*0.4	*0.4	*0.3	*0.5	*0.4
15–24 years	3.3	3.8	4.5	5.3	5.9	6.9	1.4	1.7	2.1
25–34 years	30.9	37.8	45.9	52.0	62.8	75.9	12.0	15.4	19.1
35–44 years	39.1	50.2	66.8	72.9	91.7	121.1	10.8	15.4	21.2
45-54 years	17.7	23.0	30.9	35.4	45.2	59.9	3.3	5.0	7.5
55–64 years	7.9	9.7	12.6	15.6	18.4	24.5	*1.5	2.6	2.8
65–74 years	1.6	3.4	4.8	*2.3	6.4	9.2	*1.0	*1.1	*1.6
75–84 years	*0.4	*1.4	*1.3	*0.4	*2.6	*1.4	*0.5	*0.7	*1.3
85 years and over	*1.4	*0.4	*0.4	*2.9	*1.4	*1.4	*0.7	*	*

^{*}Based on fewer than 20 deaths.

NOTE: Categories for the coding and classification of human immunodeficiency virus infection were introduced in the United States beginning with mortality data for 1987.

SOURCE: National Center for Health Statistics: Vital Statistics of the United States, Vol. II, Mortality, Part A, for data years 1987-89. Public Health Service. Washington. U.S. Government Printing Office.

Table 43. Deaths for selected occupational diseases for males, according to age: United States, selected years 1970–89

Age and cause of death	1970	1975	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
25 years and over						Numbe	er of de	aths 1						
Malignant neoplasm of peritoneum and pleura (mesothelioma)	602 1,155 25 351	591 973 43 243	557 840 64 162	559 918 86 220	552 977 96 202	556 1,053 98 165	576 954 99 176	584 926 128 149	584 923 131 160	571 947 130 138	564 882 180 135	575 823 195 153	556 757 206 128	565 725 261 130
25-64 years														
Malignant neoplasm of peritoneum and pleura (mesothelioma)	308 294 17 90	280 188 22 64	254 116 31 50	246 130 29 51	241 136 30 49	229 116 21 44	234 116 26 42	211 88 30 37	211 97 25 34	210 89 29 30	200 71 37 22	196 71 32 32	187 56 38 26	179 50 31 21
65 years and over														
Malignant neoplasm of peritoneum and pleura (mesothelioma)	294 861 8 261	311 785 21 179	303 724 33 112	313 788 57 169	311 841 66 153	327 937 77 121	342 838 73 134	373 838 98 112	373 826 106 126	361 858 101 108	364 811 143 113	379 752 163 121	369 701 168 102	386 675 230 109

¹This table classifies deaths according to underlying cause. Multiple cause of death data from the Vital Statistics System can be used to identify additional deaths for which occupational disease is a nonunderlying cause of death rather than the underlying cause. Additional deaths for which occupational disease is a nonunderlying cause among men 25 years and over are shown below.

Nonunderlying cause of death	1980	1983	1984	1985	1986	1987	1988
Malignant neoplasm of peritoneum					400	444	404
and pleura (mesothelioma)	135	115	124	102	106	111	104
and pleura (mesothelioma) Coalworkers' pneumoconiosis	1,587	1,758	1,742	1,652	1,536	1,419	1,445
Asbestosis		321	298	382	494	488	536
Silicosis	232	205	210	187	175	173	162

NOTES: Selection of occupational diseases based on definitions in D. Rutstein et al.: Sentinel health events (occupational): A basis for physician recognition and public health surveillance, Am. J. Public Health 73(9): 1054–1062, Sept. 1983. For data years shown, the code numbers for cause of death are based on the then current International Classification of Diseases, which are described in Appendix II, tables IV and V. Changes in number of deaths from 1978 to 1979 may be affected by changes in coding from the Eighth Revision to the Ninth Revision.

SOURCES: Data computed by the National Institute for Occupational Safety and Health from data compiled by the Division of Vital Statistics, National Center for Health Statistics; Data computed by the Division of Epidemiology and Health Promotion from data compiled by the Division of Vital Statistics.

Table 44. Occupational injury deaths, according to industry: United States, 1980-86

Industry	1980	1981	1982	1983	1984	1985	1986
			Deaths	per 100,000 w	orkers 1		
Total civilian work force	9.1	8.7	7.9	7.3	7.2	6.9	6.0
Agriculture, forestry, and fishing	26.3	24.6	21.8	18.7	19.0	18.8	15.4
Mining	33.9	37.2	23.5	22.6	31.5	24.5	22.1
Construction	26.8	26.6	26.4	26.1	24.3	24.3	21.9
Manufacturing	4.1	3.7	3.5	3.3	3.7	3.5	3.3
Transportation, communication, and							
public utilities	27.5	26.5	23.2	21.4	23.4	22.8	19.5
Wholesale trade	2.4	2.2	2.0	2.0	1.7	1.9	1.6
Retail trade	3.7	3.4	3.0	2.8	2.3	2.5	1.9
Finance, insurance, and real estate	1.3	1.3	1.2	1.2	1.4	0.9	1.0
Services	3.4	2.9	2.8	2.6	2.3	2.3	1.9
Public administration	6.9	6.8	6.5	6.8	6.4	5.8	5.6
Not classified							
			N	umber of death	ns		
Total civilian work force	7,513	7,204	6,503	5,887	6,189	6,216	5,577
Agriculture, forestry, and fishing	830	817	759	670	737	769	682
Mining	338	412	279	220	307	231	187
Construction	1,198	1,141	1,039	982	1,015	1,089	1,018
Manufacturing	857	746	686	610	719	671	628
Transportation, communication, and							
public utilities	1,274	1,223	1,073	975	1,093	1,098	950
Wholesale trade	126	117	103	103	92	107	90
Retail trade	551	515	466	424	377	427	330
Finance, insurance, and real estate	71	73	65	69	83	52	61
Services	578	511	528	488	463	506	444
Public administration	359	351	340	322	307	290	286
Not classified	1,331	1,298	1,165	1,024	996	976	901

¹Denominators for death rates are average annual employment (U.S. Bureau of Labor Statistics. Employment and Earnings, annual average supplements; Vol. 28–34:1, 1981–87).

NOTES: Includes deaths to United States residents, 16 years of age and over, that resulted from an "external" cause and the item "injury at work" was checked on the death certificate. Industry is coded based on Standard Industrial Classification Manual, 1987 Edition (see Appendix II, table VI).

SOURCE: National Institute for Occupational Safety and Health: National Traumatic Occupational Fatalities: 1980-86. September 1989.

Table 45. Provisional death rates for all causes, according to race, sex, and age: United States, 1988-90

[Data are based on a 10-percent sample of death certificates from the National Vital Statistics System]

		All races			White			Black	
Sex and age	1988	1989	1990	1988	1989	1990	1988	1989	1990
Both sexes			De	aths per 10	0,000 resid	lent popula	tion		
All ages, age adjusted	536.3	524.1	515.1	513.4	500.0	494.3	769.9	761.2	729.6
	883.0	868.1	861.9	910.0	893.3	891.6	853.9	848.1	820.4
Under 1 year	1,001.9	986.0	936.6	818.4	819.2	814.4	2,030.4	1,899.8	1,652.5
	50.7	43.8	44.2	47.6	39.0	40.0	66.1	69.6	66.9
5–14 years	26.2	26.6	24.1	23.9	24.5	23.1	38.7	38.5	30.8
	104.8	103.5	104.1	98.8	95.8	95.1	143.3	150.1	161.8
25–34 years	133.6	139.7	139.6	115.6	119.1	120.6	266.5	286.5	276.1
	217.6	221.0	221.1	188.7	191.1	192.4	476.9	485.4	471.4
45–54 years	486.4	479.1	463.1	441.4	434.1	425.3	908.9	904.1	832.3
	1,246.3	1,210.0	1,175.6	1,193.9	1,153.3	1,125.2	1,859.7	1,825.2	1,767.5
	2,731.2	2,628.2	2,607.4	2,679.4	2,573.2	2,565.7	3,587.3	3,504.1	3,319.7
75–84 years	6,324.4	6,167.5	6,084.5	6,305.2	6,155.4	6,081.0	7,257.6	6,970.4	6,873.2
	15,577.7	15,083.2	14,784.4	15,888.0	15,362.5	15,087.7	13,206.1	13,110.2	12,707.3
Male									
All ages, age adjusted	699.8	679.6	668.9	670.5	647.9	642.7	1,018.4	1,010.0	956.9
	944.2	922.0	917.2	960.3	934.6	937.2	988.4	984.5	941.5
Under 1 year	1,121.5	1,076.7	1,037.5	937.5	910.0	908.8	2,196.7	1,993.6	1,796.4
	56.2	46.6	48.7	51.7	42.0	43.9	82.8	73.6	71.7
5–14 years	30.5	32.3	29.1	29.0	30.3	27.7	39.1	44.5	38.4
	154.0	152.0	156.1	144.4	139.0	140.7	214.2	235.7	258.6
	196.0	203.3	205.6	169.6	173.4	178.9	404.9	432.9	414.8
3544 years	296.2	301.7	306.1	254.7	260.4	265.6	703.9	701.2	688.0
	636.5	628.2	600.9	573.0	563.8	547.1	1,294.3	1,288.9	1,181.1
55–64 years	1,624.2	1,569.8	1,507.5	1,557.4	1,497.5	1,454.8	2,415.9	2,371.3	2,180.2
	3,583.2	3,414.6	3,358.5	3,533.8	3,348.0	3,316.2	4,527.3	4,516.3	4,172.9
	8,243.2	7,950.4	7,950.2	8,234.6	7,943.6	7,976.4	9,360.3	8,902.9	8,731.4
85 years and over.	18,475.2	17,695.3	17,521.6	18,933.7	18,110.4	17,973.3	15,342.9	14,958.3	14,743.2
Female									
All ages, age adjusted	403.5	396.4	389.0	385.8	378.8	372.8	574.9	564.6	549.4
	825.0	816.9	809.3	861.8	853.8	847.9	732.6	725.0	711.0
Under 1 year	876.3	890.9	831.2	692.8	722.9	715.0	1,860.1	1,803.3	1,504.6
	44.9	40.8	39.4	43.3	35.9	35.9	48.8	65.4	62.0
5–14 years	21.7	20.6	18.9	18.5	18.3	18.2	38.4	32.3	23.0
	54.5	53.9	50.8	52.0	51.4	48.2	74.1	66.5	67.0
25–34 years	71.2 141.0 344.3	75.9 142.2 337.9	73.4 138.1 332.6	60.5 123.0 314.2	63.8 122.0 308.7	61.1 119.2	142.8 286.9	155.4 304.6	152.0 289.5
45–54 years	909.4 2,051.4	887.8 1,997.1	877.5 2,002.1	865.7 1,993.0	841.2 1,946.8	307.5 825.1 1,956.9	596.3 1,399.1 2,887.1	593.2 1,373.6 2,744,7	550.8 1,424.2 2,673.9
75–84 years	5,166.6	5,083.4	4,941.7	5,145.3	5,072.3	4,921.1	5,997.8	5,812.5	5,763.7
	14,451.7	14,070.3	13,727.5	14,727.8	14,317.0	13,993.7	12,259.5	12,224.2	11,831.4

NOTE: Includes deaths of nonresidents of the United States.

SOURCE: National Center for Health Statistics: Annual summary of births, marriages, divorces, and deaths, United States, 1990. Monthly Vital Statistics Report. Vol. 39, No. 13. DHHS Pub. No. (PHS) 91–1120. 1991. Public Health Service. Hyattsville, Md.

Table 46. Provisional death rates for selected causes of death: United States, 1988-90

[Data are based on a 10-percent sample of death certificates from the National Vital Statistics System]

	Age-a	djusted dea	th rate	Cru	ide death	rate		Rank	
Cause of death	1988	1989	1990	1988	1989	1990	1988	1989	1990
All causes	536.3	524.1	515.1	883.0	868.1	861.9			
Diseases of heart	166.7	155.9	150.3	312.2	296.3	289.0	1	1	1
Ischemic heart disease	110.4	104.9	101.0	207.9	200.6	195.1			
Cerebrovascular diseases	29.8	28.5	27.6	61.1	59.4	57.9	3	3	3
Malignant neoplasms	133.3	133.7	133.0	198.6	200.3	201.7	2	2	2
Respiratory system	40.6	40.1	39.9	57.3	57.0	57.3			
Breast ¹	23.3	23.4	23.6	33.9	34.1	34.9			
Chronic obstructive pulmonary diseases	19.2	19.4	19.7	33.3	34.0	35.5	5	5	5
Pneumonia and influenza	14.2	13.3	13.5	31.5	30.3	31.3	6	6	6
Chronic liver disease and cirrhosis	9.0	8.7	8.3	10.6	10.6	10.2	9	9	10
Diabetes mellitus	9.9	11.3	11.7	16.1	18.8	19.5	7	7	7
Nephritis, nephrotic syndrome, and nephrosis	4.6	4.4	4.2	8.9	8.6	8.3	12	12	12
Septicemia	4.5	4.1	4.2	8.5	7.7	7.9	13	14	13
Atherosclerosis	3.7	3.0	2.4	9.6	7.7	6.6	10	13	15
Human immunodeficiency virus infection	6.5	8.3	9.1	6.6	8.6	9.6	15	11	11
Accidents and adverse effects	35.1	33.5	32.7	39.7	38.2	37.3	4	4	4
Motor vehicle accidents	20.1	19.4	18.9	20.4	19.7	19.1			
Suicide	11.3	11.7	11.3	12.3	12.6	12.3	8	8	8
Homicide and legal intervention	9.0	9.4	10.6	9.0	9.3	10.2	11	10	9

¹Female only.

NOTES: Includes deaths of nonresidents of the United States. Code numbers for cause of death are based on the International Classification of Diseases, Ninth Revision, described in Appendix II, table V. Categories for the coding and classification of human immunodeficiency virus infection were introduced in the United States beginning with mortality data for 1987.

SOURCES: National Center for Health Statistics: Annual summary of births, marriages, divorces, and deaths, United States, 1988. Monthly Vital Statistics Report. Vol. 37, No. 13. DHHS Pub. No. (PHS) 89–1120. July 26, 1989; and Annual summary of births, marriages, divorces, and deaths, United States, 1990. Monthly Vital Statistics Report. Vol. 39, No. 13. DHHS Pub. No. (PHS) 91–1120. 1991. Public Health Service. Hyattsville, Md.

Table 47. Provisional death rates for the 3 leading causes of death, according to age: United States, 1988-90

[Data are based on a 10-percent sample of death certificates from the National Vital Statistics System]

Cause of death and age	1988	1989	1990
Diseases of heart	Dea	ths per 100,000 resident popu	lation
All ages, age adjusted	166.7	155.9	150.3
	312.2	296.3	289.0
Under 1 year 1–14 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	23.6	18.8	17.9
	1.4	1.1	1.1
	2.8	2.1	2.4
	7.3	7.5	7.6
	33.0	30.8	30.2
	131.4	124.6	117.9
	405.6	377.8	357.2
	985.6	910.1	885.8
	2,554.4	2,412.5	2,344.3
	7,119.1	6,742.6	6,451.4
Malignant neoplasms			
All ages, age adjusted	133.3	133.7	133.0
	198.6	200.3	201.7
Under 1 year 1–14 years 15–24 years 25–34 years 35–44 years 45–54 years 45–54 years 65–74 years 75–84 years 85 years and over	1.3	1.5	2.2
	3.5	3.2	3.0
	5.0	5.3	4.8
	10.8	13.3	12.7
	44.3	45.0	43.2
	157.2	158.5	155.7
	456.5	451.4	440.7
	845.4	843.5	857.3
	1,324.8	1,338.4	1,348.7
	1,664.5	1,655.2	1,702.1
Cerebrovascular diseases			
All ages, age adjusted	29.8	28.5	27.6
	61.1	59.4	57.9
Under 1 year 1–14 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	1.0 0.1 0.9 2.1 7.1 20.4 51.9 155.7 544.4 1,710.3	2.8 0.3 0.4 1.9 6.7 18.1 50.6 147.6 530.2 1,632.8	2.5 0.3 0.8 1.9 6.6 19.7 46.5 144.5 501.5

NOTES: Includes deaths of nonresidents of the United States. Code numbers for cause of death are based on the International Classification of Diseases, Ninth Revision, described in Appendix II, table V.

SOURCES: National Center for Health Statistics: Annual summary of births, marriages, divorces, and deaths, United States, 1988. Monthly Vital Statistics Report. Vol. 37, No. 13. DHHS Pub. No. (PHS) 89–1120. July 26, 1989; and Annual summary of births, marriages, divorces, and deaths, United States, 1990. Monthly Vital Statistics Report. Vol. 39, No. 13. DHHS Pub. No. (PHS) 91–1120. 1991. Public Health Service. Hyattsville, Md.

Table 48. Progress toward 1990 health promotion goals: United States, selected years 1977-90

1990 goals	1977	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990¹	1990 goal
Infants (under 1 year)			-		Dea	aths per	1,000 liv	ve births					
To continue to improve infant health, and by 1990, to reduce infant mortality by at least 35 percent to fewer than 9 deaths per 1,000 live births.	14.1	12.6	11.9	11.5	11.2	10.8	10.6	10.4	10.1	10.0	9.8	9.1	9
Children (1-14 years)					Deat	hs per 1	00,000 g	opulatio	n				
To improve child health, foster optimal childhood development, and by 1990, reduce deaths among children ages 1 to 14 years by at least 20 percent to fewer than 34 per 100,000	42.3	38.5	38.0	36.7	35.3	34.1	33.8	33.7	33.3	33.2	32.4	30.1	34
To improve the health and health habits of adolescents and young adults, and by 1990, to reduce deaths among people ages 15 to 24 by at least 20 percent to fewer than 93 per 100,000	114.8	115.4	107.1	101.0	96.0	96.8	95.9	102.3	99.4	102.1	99.9	104.1	93
To improve the health of adults, and by 1990, to reduce deaths among people ages 25 to 64 by at least 25 percent to fewer than 400 per 100,000	532.9	498.0	482.1	462.3	452.8	443.5	438.7	431.0	423.4	419.3	409.8	400.4	400
25–34 years of age	132.8 247.3 621.2 1,408.5	135.5 227.9 584.0 1,346.3	132.1 221.3 573.5 1,322.1	125.2 207.4 549.7 1,297.9	121.4 201.9 535.7 1,299.5	121.1 204.8 521.1 1,287.8	123.4 207.2 516.3 1,282.7	132.1 212.9 504.8 1,255.1	133.2 214.1 498.0 1,241.3	135.4 219.6 486.2 1,235.6	138.1 221.7 475.0 1,204.4	139.6 221.1 463.1 1,175.6	
Older adults (65 years and over)					Restric	ted-activ	vity days	per pers	son				
To improve the health and quality of life for older adults, and by 1990, to reduce the average annual number of days of restricted activity due to acute and chronic conditions by 20 percent, to fewer than 30 days per year for people aged 65 and older ²	36.5	39.2	39.9	31.6	32.1	31.8	33.1	32.1	30.3	30.6	31.5	31.4	30
					Bed-	disabilit	y days p	er perso	n				
To reduce the average annual number of days of bed disability due to acute and chronic conditions by 20 percent, to fewer than 12 days per year for people aged 65 and													
over ²	14.5	13.8	14.0	14.7	16.7	15.1	13.7	14.9	14.0	14.4	14.2	13.6	12

¹1990 mortality data are provisional. For comparative purposes, the 1989 provisional data are:

1989

	Deaths per 1,000 live births
Infant mortality	9.7
	Deaths per 100,000 population
1-14 years of age. 15-24 years of age. 25-64 years of age. 25-34 years of age. 35-44 years of age. 45-54 years of age. 55-64 years of age.	31.7 103.5 412.0 139.7 221.0 479.1 1,210.0

²Levels of estimates for 1982–90 may not be comparable to estimates for previous years because the 1982–90 data are based on a revised questionnaire and field procedures.

SOURCES: Office of the Assistant Secretary for Health and Surgeon General: Healthy People—The Surgeon General's Report on Health Promotion and Disease Prevention, 1979. DHEW Pub. No. (PHS) 79–55071. Public Health Service. Washington. U.S. Government Printing Office, 1979; National Center for Health Statistics: Vital Statistics of the United States, Vol. II, Mortality, Part A, for data years 1977–89. Public Health Service. Washington. U.S. Government Printing Office; Annual summary of births, marriages, divorces, and deaths: United States, 1990. Monthly Vital Statistics Report. Vol. 39, No. 13. DHHS Pub. No. (PHS) 91–1120. Aug. 28, 1991; Public Health Service. Hyattsville, Md.; Data computed by Division of Analysis from data compiled by Division of Vital Statistics and from table 1; Division of Health Interview Statistics: Current estimates from the National Health Interview Survey: United States, 1989. Vital and Health Statistics. Series 10, No. 176. DHHS Pub. No. (PHS) 90–1504. Public Health Service. Washington. U.S. Government Printing Office, Oct. 1990; Current estimates from the National Health Interview Survey: United States, 1990. Vital and Health Statistics. Series 10, No. 179. DHHS Pub. No. (PHS) 91–1507. Public Health Service. Washington. U.S. Government Printing Office, Oct. 1991.

Table 49. Vaccinations of children 1–4 years of age for selected diseases, according to race and residence in metropolitan statistical area (MSA): United States, 1970, 1976, and 1983–85

		Ra	се	Insid	le MSA	
Vaccination and year	Total	White	All other	Central city	Remaining areas	Outside MSA
All respondents			Percent o	f population		
Measles:						
1970	57.2	60.4	41.9	55.2	61.7	54.3
1976	65.9	68.3	54.8	62.5	67.2	67.3
1983	64.9	66.8	57.2	60.4	66.3	66.7
1984	62.8	65.4	52.0	56.6	63.3	66.4
1985	60.8	63.6	48.8	55.5	63.3	61.9
Rubella;						
1970	37.2	38.3	31.8	38.3	39.2	34.3
1976	61.7	63.8	51.5	59.5	63.5	61.5
1983	64.0	66.3	54.7	59.5	65.2	66.0
1984	60.9	63.9	48.3	56.1	60.4	64.6
1985	58.9	61.6	47,7	53.9	61.0	60.3
OTP: 1,2						
1970	76.1	79.7	58.8	68.9	80.7	77.1
1976	71.4	75.3	53.2	64.1	75.7	72.9
1983	65.7	70.1	47.7	55.4	69.4	69.4
1984	65.7	69.1	51.3	57.9	66.6	69.8
1985	64.9	68.7	48.7	55.5	68.4	67.9
Polio: 2						
1970	65.9	69.2	50.1	61.0	70.8	64.7
1976	61.6	66.2	39.9	53.8	65.3	63.9
1983	57.0	61.9	36.7	47.7	60.3	60.3
1984	54.8	58.4	39.9	48.7	55.2	58.5
1985 . ,	55.3	58.9	40.1	47.1	58.4	58.0
Mumps:						
1970	*					
1976	48.3	50.3	38.7	45.6	50.7	47.9
1983	59.5	61.8	50.0	52.6	60.2	63.6
1984	58.7	61.3	47.7	51.8	58.3	63.6
1985	58.9	61.8	47.0	52.4	61.0	61.4
Respondents consulting vaccination records, 1985 ³						
Measles	76.9	78.1	67.2	73.5	76.7	79.0
Rubella	73.8	75.0	64.1	70.4	75.0	74.6
OTP 1,2	87.0	88.5	75.2	79.6	89.7	88.6
Polio ²	75.7	77.5	61.5	68.9	79.6	75.9
Mumps	75.5	77.1	62.7	70.5	76.8	77.0

¹Diphtheria-tetanus-pertussis.

SOURCE: Division of Immunization, Center for Prevention Services, Centers for Disease Control: Unpublished data from the United States Immunization Survey.

²Three doses or more.

³The data in this panel are based only on 35 percent of white respondents and 19 percent of all other respondents who consulted records for some or all vaccination questions. One month prior to interview all sampled households were asked to check vaccination records such as those from a private physician, the health department, or military.

NOTE: Beginning in 1976, the category "don't know" was added to response categories. Prior to 1976, the lack of this option resulted in some forced positive answers, particularly for vaccinations requiring multiple dose schedules, that is, polio and DTP. Data on immunization status of children will be collected in the 1991 National Health Interview Survey.

Table 50. Selected notifiable disease rates, according to disease: United States, selected years 1950-90

Disease	1950	1960	1970	1980	1985	1988	1989	1990
			Cas	ses per 100,00	00 populatio	n		
Diphtheria	3.83	0.51	0.21	0.00	0.00	0.00	0.00	0.00
Hepatitis A ¹			27.87	12.84	10.03	11.60	14.43	12.64
Hepatitis B ¹			4.08	8.39	11.50	9.43	9.43	8.48
Mumps			55.55	3.86	1.30	2.05	2.34	2.17
Pertussis (whooping cough)	79.82	8.23	2.08	0.76	1.50	1.40	1.67	1.84
Poliomyelitis, total	22.02	1.77	0.02	0.00	0.00	0.00	0.00	0.00
Paralytic ²		1.40	0.02	0.00	0.00	0.00	0.00	0.00
Rubeola (measles)	211.01	245.42	27.75	1.72	0.26	0.09	0.16	0.45
Salmonellosis, excluding typhoid fever	211.01	3.85	23.23 10.84	5.96 14.88	1.18	1.38	7.33	11.17
Shigellosis	15.45	6.94	6.79	8.41	27.37 7.14	19.91 12.46	19.26	19.54
Tuberculosis ³	80.45	30.83	18.28	12.25	9.30	9.13	10.07 9.46	10.89 10.33
Varicella (chicken pox)	00.40		10.20	96.69	123.23	122.43	121.77	120.06
Sexually transmitted diseases: 4				00.00	120.20	122.70	121.11	120.00
Syphilis ⁵	146.02	68.78	45.26	30.51	28.50	42.53	46.37	53.80
Primary and secondary	16.73	9.06	10.89	12.06	11.45	16.47	18.47	20.10
Early latent	39.71	10.11	8.08	9.00	9.15	14.63	18.29	22.10
Late and late latent	70.22	45.91	24.94	9.30	7.77	11.13	8.88	10.30
Congenital 6	8.97	2.48	0.97	0.12	0.14	0.30	0.73	1.30
Gonorrhea	192.45	145.33	297.22	444.99	384.28	300.30	295.70	276.60
Chancroid	3.34	0.94	0.70	0.35	0.87	2.04	1.90	1.70
Granuloma inguinale	1.19	0.17	0.06	0.02	0.02	0.00	0.00	0.00
Lymphograndioma veneredin	0.95	0.47	0.30	0.09	0.10	0.08	0.07	0.10
				Number of	cases			
Diphtheria	5,796	918	435	3	3	2	3	4
Hepatitis A ¹			56,797	29,087	23,210	28,507	35,821	31,441
Hepatitis B ¹			8,310	19,015	26,611	23,177	23,419	21,102
Mumps			104,953	8,576	2,982	4,866	5,712	5,292
Pertussis (whooping cough)	120,718	14,809	4,249	1,730	3,589	3,450	4,157	4,570
Poliomyelitis, total	33,300	3,190	33 31	9	7	9	5	7
Rubella (German measles)		2,525		8	7	9	5	4 40"
Rubeola (measles)	319.124	441,703	56,552 47,351	3,904 13,506	630 2,822	225 3,396	396	1,125
Salmonellosis, excluding typhoid fever	010,124	6.929	22,096	33,715	65,347	48.948	18,193 47,812	27,786 48,603
Shigellosis	23.367	12,487	13,845	19,041	17,057	30,617	25,010	27.077
Tuberculosis ³	121,742	55,494	37,137	27,749	22,201	22,436	23,495	25,701
Varicella (chicken pox)				190,894	178,162	192,857	185,441	173,099
Sexually transmitted diseases:4				,	,	102,007	100,111	170,000
Syphilis ⁵	217,558	122,538	91,382	68,832	67,563	104.546	115.113	134,255
Primary and secondary	23,939	16,145	21,982	27,204	27,131	40,474	45,854	50,233
Early latent	59,256	18,017	16,311	20,297	21,689	35,968	45,409	55 132
Late and late latent	113,569	81,798	50,348	20,979	18,414	27,363	22,035	25,612
Congenital ⁶	13,377	4,416	1,953	277	329	741	1,809	3,288
Gonorrhea	286,746	258,933	600,072	1,004,029	911,419	738,160	734,127	690,169
Chancroid	4,977	1,680	1,416	788	2,067	4,891	4,69 <u>7</u>	4,212
Granuloma inguinale	1,783	296 835	124	51	44	11	7	97
Lymphograndionia venereum,,	1,427	033	612	199	226	194	182	277

¹Reports from New York City are not available for 1985.

NOTES: Rates greater than 0 but less than 0.005 are shown as 0.00. The total resident population was used to calculate all rates except sexually transmitted diseases, for which the civilian resident population was used. Population data from those States where diseases were not notifiable or not available were excluded from rate calculation. See Appendix I for information on underreporting of notifiable diseases.

SOURCES: Centers for Disease Control: Final 1990 reports of notifiable diseases, Morbidity and Mortality Weekly Report 39(53). Public Health Service, Atlanta, Ga., Oct. 1991, in press; Division of Sexually Transmitted Diseases, Center for Prevention Services, Centers for Disease Control: Selected data.

Data beginning in 1986 may be updated due to late reports.

Data after 1974 are not comparable to prior years because of changes in reporting criteria effective in 1975.

Newly reported civilian cases.

⁵Includes stage of syphilis not stated.

⁶Data reported for 1990 reflects change in case definition introduced in 1989.

Table 51. Acquired immunodeficiency syndrome (AIDS) cases, according to age at diagnosis, sex, race, and Hispanic origin: United States, 1984-91

Age at diagnosis, sex, race, and Hispanic origin	All years ^{1,2}	1984	1985	1986	1987	1988	1989²	1990²	1991²	All years ^{1,2}
				Number	, by year o	of report				Percent distribution
Total ³	189,323	4,441	8,219	13,150	21,120	30,769	33,649	41,577	33,477	
Male										
All males, 13 years and over ³	167,552	4,112	7,566	12,004	19,113	27,154	29,670	36,312	28,941	100.0
White, not Hispanic Black, not Hispanic Hispanic American Indian 4 Asian or Pacific Islander 5	99,509 44,283 22,049 255 1,079	2,600 950 541 3 16	4,805 1,717 986 7 48	7,528 2,760 1,608 19 79	12,353 4,326 2,245 25 127	16,096 7,156 3,660 32 163	17,549 8,062 3,723 54 212	20,916 10,259 4,742 63 238	16,066 8,360 4,161 51 191	59.4 26.4 13.2 0.2 0.6
13–19 years. 20–29 years. 30–39 years. 40–49 years. 50–59 years. 60 years and over	519 32,292 78,149 39,204 12,641 4,747	17 840 1,984 891 314 66	29 1,476 3,624 1,667 605 165	45 2,491 5,656 2,574 918 320	70 3,808 8,890 4,282 1,474 589	85 5,478 12,631 6,121 1,998 841	90 5,735 13,917 6,823 2,252 853	101 6,835 16,811 8,905 2,644 1,016	75 5,061 13,368 7,341 2,229 867	0.3 19.3 46.6 23.4 7.5 2.8
Female										
All females, 13 years and over ³	18,646	279	523	963	1,686	3,044	3,383	4,544	4,029	100.0
White, not Hispanic Black, not Hispanic. Hispanic American Indian ⁴ Asian or Pacific Islander ⁵	5,152 10,362 2,948 42 96	78 145 56 –	143 284 92 3 1	269 521 161 2 8	547 896 229 3 11	854 1,657 502 5 21	949 1,900 496 9 18	1,231 2,535 738 10 18	1,038 2,322 627 9 17	27.6 55.6 15.8 0.2 0.5
13–19 years. 20–29 years. 30–39 years. 40–49 years. 50–59 years. 60 years and over	190 4,777 8,756 2,910 1,045 968	4 96 130 27 5 17	4 175 232 47 26 39	12 275 445 129 47 55	11 483 748 231 91 122	23 777 1,507 411 149 177	28 888 1,626 509 173 159	62 1,109 2,098 785 274 216	43 895 1,899 748 266 178	1.0 25.6 47.0 15.6 5.6 5.2
Children										
All children, under 13 years ³	3,125	50	130	183	321	571	596	721	507	100.0
White, not Hispanic Black, not Hispanic. Hispanic American Indian ⁴ Asian or Pacific Islander ⁵	711 1,743 642 7 17	10 28 12 - -	25 85 20 - -	42 105 35 - 1	85 161 72 2 1	150 304 112 - 4	111 341 137 1 3	163 385 166 3 4	114 306 81 1 4	22.8 55.8 20.5 0.2 0.5
Under 1 year	808 2,317	6 44	35 95	36 147	87 234	162 409	139 457	196 525	142 365	25.9 74.1

NOTES: The AIDS case definition was changed in September 1987 to allow for the presumptive diagnosis of AIDS-associated diseases and conditions and to expand the spectrum of human immunodeficiency virus-associated diseases reportable as AIDS. Excludes residents of U.S. territories.

SOURCE: Centers for Disease Control, National Center for Infectious Diseases, Division of HIV/AIDS.

¹Includes cases prior to 1984. ²Data are as of September 30, 1991, and reflect reporting delays.

³Includes all other races not shown separately.

⁴Includes Aleut and Eskimo.

⁵Includes Chinese, Japanese, Filipino, Hawaiian (includes part Hawaiian), and other Asian or Pacific Islander.

Table 52. Deaths among acquired immunodeficiency syndrome (AIDS) cases, according to age at diagnosis, sex, race, and Hispanic origin: United States, 1984–91

Age at diagnosis, sex, race, and Hispanic origin	All years ^{1,2}	1984	1985	1986	1987	1988	1989²	1990²	1991²	All years ^{1,2}
				Numbe	er, by year	of death				Percent distribution
Total ³	122,203	3,322	6,584	11,329	15,125	19,120	24,847	25,747	13,882	
Male										
All males, 13 years and over ³	108,984	3,025	6,030	10,282	13,472	16,946	22,057	22,800	12,371	100.0
White, not Hispanic Black, not Hispanic. Hispanic American Indian ⁴ Asian or Pacific Islander ⁵	65,114 28,616 14,243 163 688	1,859 740 404 3 17	3,754 1,473 768 4 29	6,446 2,427 1,335 12 53	8,026 3,550 1,788 22 74	9,864 4,650 2,274 23 104	12,822 6,016 2,997 28 149	13,588 6,050 2,931 38 155	7,636 3,125 1,457 32 102	59.7 26.3 13.1 0.1 0.6
13–19 years. 20–29 years. 30–39 years. 40–49 years. 50–59 years. 60 years and over	306 19,795 49,709 26,126 9,286 3,762	13 578 1,386 697 273 78	23 1,158 2,759 1,328 564 198	38 1,948 4,734 2,327 867 368	43 2,549 6,146 3,042 1,142 550	41 3,185 7,611 3,944 1,500 665	59 3,917 10,100 5,345 1,892 744	56 3,929 10,426 5,768 1,885 736	28 2,128 5,614 3,218 985 398	0.3 18.2 45.6 24.0 8.5 3.5
Female										
All females, 13 years and over ³	11,518	247	448	898	1,384	1,893	2,464	2,624	1,371	100.0
White, not Hispanic Black, not Hispanic Hispanic American Indian ⁴ Aşian or Pacific Islander ⁵	3,187 6,451 1,766 22 72	59 140 47 - 1	144 218 83 3 	256 483 148 1 7	432 762 182 2 6	533 1,043 299 1 16	635 1,398 403 5 17	699 1,508 393 5	388 795 170 4 12	27.7 56.0 15.3 0.2 0.6
13–19 years	92 2,898 5,285 1,760 705 778	1 90 108 23 9 16	5 132 203 48 18 42	11 245 408 105 44 85	11 359 611 181 91 131	11 459 885 279 106 153	13 572 1,206 402 141 130	24 635 1,195 448 174 148	12 343 594 253 108 61	0.8 25.2 45.9 15.3 6.1 6.8
Children										
All children, under 13 years ³	1,701	50	106	149	269	281	326	323	140	100.0
White, not Hispanic Black, not Hispanic Hispanic American Indian ⁴ Asian or Pacific Islander ⁵	402 929 352 5 11	9 29 12 - -	29 59 16 - 2	35 82 30 - 2	69 130 67 2 1	67 151 60 - 3	88 164 71 1 1	61 197 62 1 1	32 84 23 – 1	23.6 54.6 20.7 0.3 0.6
Under 1 year	398 1,303	6 44	24 82	39 110	63 206	65 216	77 249	75 248	41 99	23.4 76.6

¹Includes cases prior to 1984.

NOTES: The AIDS case definition was changed in September 1987 to allow for the presumptive diagnosis of AIDS-associated diseases and conditions and to expand the spectrum of human immunodeficiency virus-associated diseases reportable as AIDS. Excludes residents of U.S. territories.

SOURCE: Centers for Disease Control, National Center for Infectious Diseases, Division of HIV/AIDS.

²Data are as of September 30, 1991, and reflect reporting delays.

³Includes all other races not shown separately.

⁴Includes Aleut and Eskimo.

⁵Includes Chinese, Japanese, Filipino, Hawaiian (includes part Hawaiian), and other Asian or Pacific Islander.

Table 53 (page 1 of 2). Acquired immunodeficiency syndrome (AIDS) cases, according to race, Hispanic origin, sex, and transmission category for persons 13 years of age and over: United States, 1984–91

	years ^{1,2}	years1,2	1984	1985	1986	1987	1988	1989 ²	1990²	19912
	Percent					- 10111				
	distribution				Number	r, by year c	f report			
Total ³	100.0	186,198	4,391	8,089	12,967	20,799	30,198	33,053	40,856	32,970
Male homosexual/bisexual	60.0	111,694	2,855	5,449	8,551	13,556	17,872	19,673	23,731	18,203
Intravenous drug use	21.2	39,514	777	1,398	2,244	3,542	6,903	7,216	9,174	7,747
intravenous drug use	6.5 0.9	12,047 1,598	411 38	584 73	982 123	1,553 206	2,027 297	2,146 284	2,293 329	1,782 230
Born in Caribbean/African		•								
countries	1.3 4.3	2,399 7,922	112 56	140 143	216 338	261 647	365 1,173	369 1,501	411 2,171	391 1,863
Sex with intravenous drug user	2.9	5,347	42	107	236	443	852	1,061	1,442	1,140
Transfusion	2.2	4,062	49	169	298	625	815	739	801	536
Undetermined ⁵	3.7	6,962	93	133	215	409	746	1,125	1,946	2,218
Race and Hispanic origin										
White, not Hispanic	100.0	104,661	2,678	4,948	7,797	12,900	16,950	18,498	22,147	17,104
Male homosexual/bisexual	76.0	79,531	2,150	4,054	6,226	10,029	12,804	13,869	16,634	12,456
Intravenous drug use Male homosexual/bisexual and	8.4	8,754	145	252	407	817	1,488	1,697	2,049	1,794
intravenous drug use	6.9	7,253	265	371	644	1,004	1,170	1,282	1,310	1,053
Hemophilia/coagulation disorder Born in Caribbean/African	1.3	1,337	28	62	113	180	243	235	272	187
countries	0.0	10	1	_	1	1	1		2	4
Heterosexual contact ⁴	2.2	2,313	16	34	96	213	362	452	636	500
Sex with intravenous drug user	1.2	1,241	10	19	48	105	206	265	338	249
Transfusion	2.8 2.4	2,921 2,542	38 35	131 44	229 81	477 179	604 278	543 420	525 719	350 760
	100.0	54,645						9,962		10,682
Black, not Hispanic			1,095	2,001	3,281	5,222	8,813	•	12,794	-
Male homosexual/bisexual Intravenous drug use Male homosexual/bisexual and	35.5 39.5	19,384 21,589	401 407	796 753	1,328 1,207	2,121 1,887	3,078 3,745	3,583 4,013	4,408 5,096	3,377 4,229
intravenous drug use	6.3	3,424	97	143	237	391	608	643	730	509
Hemophilia/coagulation disorder Born in Caribbean/African	0.2	120	5	4	4	11	27	18	26	25
countries	4.3	2,366	111	140	214	258	360	363	404	383
Heterosexual contact ⁴	7.6	4,172	23	81	162	322	571	793	1,157	1,050
Sex with intravenous drug user	5.5	3,009	17	64	120	250	452	596	818	681
Transfusion	1.4 5.2	738 2,852	8 43	26 58	43 86	94 138	138 286	130 419	172 801	124 985
Hispanic	100.0	24,997	597	1,078	1,769	2,474	4,162	4,219	5,480	4,788
Male homosexual/bisexual Intravenous drug use Male homosexual/bisexual and	46.0 35.9	11,495 8,982	288 224	554 385	911 618	1,254 829	1,797 1,646	1,981 1,464	2,398 1,984	2,114 1,678
intravenous drug use	5.2	1,292	48	68	97	146	241	205	234	205
Hemophilia/coagulation disorder Born in Caribbean/African	0.4	109	4	7	5	10	22	22	26	12
countries	0.1	13	_	~		2	2	2	5	1
Heterosexual contact 4	5.5	1,366	17	28	77	109	226	235	368	293
Sex with intravenous drug user	4.2	1,055	15	24	68	87	186	186	279	198
Transfusion	1.2	312	2	7	20	40	56	54	82	49
Undetermined ⁵ , , , , , , , , , , ,	5.7	1,428	14	29	41	84	172	256	383	436

See footnotes at end of table.

Table 53 (page 2 of 2). Acquired immunodeficiency syndrome (AIDS) cases, according to race, Hispanic origin, sex, and transmission category for persons 13 years of age and over: United States, 1984–91

Race, Hispanic origin, sex, and transmission category	All years ^{1,2}	All years ^{1,2}	1984	1985	1986	1987	1988	1989²	1990²	19912
Sex	Percent distribution				Numbe	er, by year	of report			
Male	100.0	167,552	4,112	7,566	12,004	19,113	27,154	29,670	36,312	28,941
Homosexual/bisexual	66.7 17.9	111,694 30,027	2,855 607	5,449 1,114	8,551 1,767	13,556 2,703	17,872 5,275	19,673 5,454	23,731 6,947	18,203 5,756
intravenous drug use	7.2 0.9	12,047 1,560	411 34	584 72	982 119	1,553 202	2,027 293	2,146 278	2,293 322	1,782 222
countries	1.0 1.4 1.0 1.5	1,725 2,398 1,592 2,524	95 10 9 29	110 28 25 109	161 64 44 193	187 162 115 408	259 324 229 490	238 494 367 453	302 712 454 474	260 601 347 352
Undetermined ⁵	3.3 100.0	5,577 18,646	71 279	100 523	167 963	342 1,686	614 3,044	934 3,383	1,531	1,765
Intravenous drug use	50.9 0.2	9,487 38	170 4	284 1	477 4	839 4	1,628 4	1,762 6	4,544 2,227 7	4,029 1,991 8
countries	3.6 29.6 20.1 8.2 7.4	674 5,524 3,755 1,538 1,385	17 46 33 20 22	30 115 82 60 33	55 274 192 105 48	74 485 328 217 67	106 849 623 325 132	131 1,007 694 286 191	109 1,459 988 327 415	131 1,262 793 184 453

¹Includes cases prior to 1984.

NOTES: The AIDS case definition was changed in September 1987 to allow for the presumptive diagnosis of AIDS-associated diseases and conditions and to expand the spectrum of HIV-associated diseases reportable as AIDS. Excludes residents of U.S. territories.

SOURCE: Centers for Disease Control, National Center for Infectious Diseases, Division of HIV/AIDS.

²Data are as of September 30, 1991, and reflect reporting delays.

³Includes all other races not shown separately.

Includes persons who have had heterosexual contact with a person with human immunodeficiency virus (HIV) infection or at risk of HIV infection.

Includes persons for whom risk information is incomplete (because of death, refusal to be interviewed, or loss to followup), persons still under investigation, men reported only to have had heterosexual contact with prostitutes, and interviewed persons for whom no specific risk is identified.

Table 54 (page 1 of 2). Deaths among acquired immunodeficiency syndrome (AIDS) cases, according to race, Hispanic origin, sex, and transmission category for persons 13 years of age and over: United States, 1984–91 [Data are based on reporting by State health departments]

Race, Hispanic origin, sex, and transmission category	All years ^{1,2}	All years ^{1.2}	1984	1985	1986	1987	1988	19892	1990²	1991²
	Percent distribution				Numb	per, by yea	r of death			
Total ³	100.0	120,502	3,272	6,478	11,180	14,856	18,839	24,521	25,424	13,742
Male homosexual/bisexual	60.9	73,387	2,028	4,171	7,184	8,921	11,207	14,614	15,312	8,660
Intravenous drug use Male homosexual/bisexual and	20.6	24,847	637	1,193	2,020	3,089	4,172	5,489	5,314	2,509
intravenous drug use	6.6 0.9	8,012 1,129	314 26	485 75	837 107	1,113 158	1,235 191	1,494 209	1,531 231	807 113
Born in Caribbean/African										
countries	1.1 3.8	1,356 4,624	80 44	109 126	146 269	190 457	183 705	233 1,007	181 1,272	106 713
Sex with intravenous drug user	2.6	3,146	38	89	184	320	501	720	833	439
Transfusion	2.6 3.3	3,156 3,991	64 79	193 126	359 258	533 395	597 549	590 885	528 1.055	263 571
	3.3	3,331	79	120	200	383	548	000	1,055	5/1
Race and Hispanic origin										
White, not Hispanic	100.0	68,301	1,918	3,898	6,702	8,458	10,397	13,457	14,287	8,024
Male homosexual/bisexual	76.6 7.6	52,320 5,203	1,499 107	3,087 219	5,255 361	6,331 632	7,821 844	10,275 1,167	10,919 1,177	6,240 603
intravenous drug use	6.9 1.4	4,720 951	193 23	304 61	536 96	666 136	703 168	838 168	884 195	495 87
countries	0.0	1	_	_	_		_	-	1	-
Heterosexual contact ⁴ Sex with intravenous drug user	1.9 1.0	1,313 681	6 5	32 12	82 39	125 68	204 103	286 165	355 173	216 113
Transfusion	3.4	2,336	52	149	278	412	454	404	376	187
Undetermined ⁵	2.1	1,457	38	46	94	156	203	319	380	196
Black, not Hispanic	100.0	35,067	880	1,691	2,910	4,312	5,693	7,414	7,558	3,920
Male homosexual/bisexual	36.4 39.6	12,776 13,870	298 358	647 658	1,149 1,130	1,592 1,692	2,120 2,324	2,643 3,049	2,668 2,986	1,411 1,461
intravenous drug use	6.7 0.2	2,344 87	79 1	126 7	212 3	320 13	378 11	465 20	490 15	219 16
countries	3.8	1,344	80	108	146	189	183	227	179	104
Heterosexual contact ⁴ Sex with intravenous drug user	7.1 5.2	2,486 1,815	23 19	66 54	120 88	264 201	367 284	540	701 494	392 258
Transfusion	1.5	525	9	27	45	80	93	408 122	101	256 47
Undetermined ⁵	4.7	1,635	32	52	105	162	217	348	418	270
Hispanic	100.0	16,009	451	851	1,483	1,970	2,573	3,400	3,324	1,627
Male homosexual/bisexual Intravenous drug use Male homosexual/bisexual and	47.0 35.4	7,520 5,669	212 171	414 312	725 520	909 760	1,141 987	1,533 1,248	1,552 1,127	889 428
intravenous drug use	5.6 0.5	900 75	41 2	54 5	85 8	123 7	147 10	181 17	144 17	86 8
Born in Caribbean/African countries	0.0	7	-	1	_	1		3	_	2
Heterosexual contact ⁴	4.9	783	15	28	64	67	129	168	207	.94
Sex with intravenous drug user	3.9	629	14	23	56	51	111	140	159	65
Transfusion	1.4 5.2	227 828	2 8	11 26	28 53	30 73	40 119	49 201	41 236	24 96
			-							

See footnotes at end of table.

Table 54 (page 2 of 2). Deaths among acquired immunodeficiency syndrome (AIDS) cases, according to race, Hispanic origin, sex, and transmission category for persons 13 years of age and over: United States, 1984-91 [Data are based on reporting by State health departments]

Race, Hispanic origin, sex, and transmission category	All years ^{1,2}	All years ^{1,2}	1984	1985	1986	1987	1988	1989²	1990²	19912
Sex	Percent distribution				Numbe	er, by year	of death			
Male	100.0	108,984	3,025	6,030	10,282	13,472	16,946	22,057	22,800	12,371
Homosexual/bisexual	67.3	73,387	2,028	4,171	7,184	8,921	11,207	14,614	15,312	8,660
	17.5	19,066	489	958	1,566	2,386	3,194	4,227	4,043	1,874
intravenous drug use	7.4	8,012	314	485	837	1,113	1,235	1,494	1,531	807
	1.0	1,103	25	71	104	156	186	207	225	110
countries	0.9	963	61	88	99	138	123	153	125	71
	1.2	1,313	6	30	51	118	181	287	398	239
	0.8	878	6	26	36	81	136	189	254	148
	1.8	1,965	41	124	246	320	365	368	329	161
	2.9	3,175	61	103	195	320	455	707	837	449
Female	100.0	11,518	247	448	898	1,384	1,893	2,464	2,624	1,371
Intravenous drug use	50.2	5,781	148	235	454	703	978	1,262	1,271	635
	0.2	26	1	4	3	2	5	2	6	3
countries	3.4	393	19	21	47	52	60	80	56	35
	28.7	3,311	38	96	218	339	524	720	874	474
	19.7	2,268	32	63	148	239	365	531	579	291
	10.3	1,191	23	69	113	213	232	222	199	102
	7.1	816	18	23	63	75	94	178	218	122

NOTES: The AIDS case definition was changed in September 1987 to allow for the presumptive diagnosis of AIDS-associated diseases and conditions and to expand the spectrum of HIV-associated diseases reportable as AIDS. Excludes residents of U.S. territories.

SOURCE: Centers for Disease Control, National Center for Infectious Diseases, Division of HIV/AIDS.

¹Includes cases prior to 1984. ²Data are as of September 30, 1991, and reflect reporting delays.

³Includes all other races not shown separately.

⁴Includes persons who have had heterosexual contact with a person with human immunodeficiency virus (HIV) infection or at risk of HIV infection.

⁵ Includes persons for whom risk information is incomplete (because of death, refusal to be interviewed, or loss to followup), persons still under investigation, men reported only to have had heterosexual contact with prostitutes, and interviewed persons for whom no specific risk is identified.

Table 55 (page 1 of 2). Acquired immunodeficiency syndrome (AIDS) cases, according to geographic division and State: United States, 1983–91

Geographic division and State	All years ^{1,2}	1983	1984	1985	1986	1987	1988	1989²	1990²	19912	12 months ending September 30, 1991
	·			Nur	mber, by	year of re	port				Cases per 100,000 population ³
United States	189,323	2,080	4,441	8,219	13,150	21,120	30,769	33,649	41,577	33,477	16.72
New England	7,390	58	154	279	528	847	1,283	1,395	1,508	1,314	12.68
	255	-	-	11	22	28	27	66	66	35	4.36
	226	1	3	4	13	32	38	37	65	32	4.17
	92	1	1	2	6	15	11	20	22	14	4.23
	4,085	34	86	164	282	452	711	753	843	747	15.83
	446	4	7	12	30	68	84	88	88	65	8.72
	2,286	18	57	86	175	252	412	431	424	421	15.61
Middle Atlantic	58,355	1,036	1,954	3,152	4,845	6,110	10,272	9,300	12,044	9,105	30.66
	40,892	863	1,582	2,482	3,769	3,947	6,969	6,001	8,390	6,434	44.82
	12,120	136	282	469	767	1,509	2,450	2,227	2,462	1,755	29.67
	5,343	37	90	201	309	654	853	1,072	1,192	916	9.83
East North Central Ohio Indiana. Illinois Michigan Wisconsin.	13,077	60	198	353	821	1,405	2,144	2,662	3,015	2,391	7.18
	2,779	7	31	54	212	335	506	488	663	476	5.65
	1,261	3	25	26	71	133	79	401	292	231	4.90
	5,816	39	100	188	346	629	990	1,137	1,274	1,095	12.30
	2,422	9	32	61	150	211	456	506	577	417	5.78
	799	2	10	24	42	97	113	130	209	172	3.89
West North Central Minnesota lowa Missouri North Dakota South Dakota Nebraska Kansas	4,412 981 301 2,335 24 28 228 515	15 4 - 7 - 1 3	44 11 2 27 - 2 2	128 41 12 50 1 1 7	241 96 21 74 4 2 10 34	476 130 30 238 2 2 2 24 50	769 166 42 411 3 7 51 89	833 176 56 442 8 4 33	1,058 203 68 581 2 9 58 137	844 151 70 504 4 3 42 70	6.02 4.72 3.51 11.68 0.63 1.29 3.61 3.66
South Atlantic Delaware Maryland District of Columbia Virginia. West Virginia North Carolina South Carolina Georgia Florida	37,391	266	584	1,300	2,075	3,691	5,445	7,060	8,782	8,092	21.85
	370	1	3	12	22	39	62	80	93	58	11.73
	3,899	27	54	149	188	457	542	715	994	768	19.24
	3,242	19	90	178	226	465	495	495	741	530	116.11
	2,588	21	40	109	160	242	348	389	737	536	11.07
	224	-	5	6	8	23	20	55	63	44	2.70
	2,088	9	15	66	81	209	276	445	566	421	7.59
	1,300	11	7	38	58	84	174	327	351	250	8.37
	5,408	25	56	191	304	517	838	1,091	1,216	1,157	21.10
	18,272	153	314	551	1,028	1,655	2,690	3,463	4,021	4,328	37.84
East South Central	3,950	10	24	72	165	324	759	762	1,043	789	6.53
	636	4	10	17	32	48	90	114	189	132	4.75
	1,352	2	5	18	72	72	330	266	341	246	6.42
	1,148	3	6	29	33	153	213	216	238	255	7.64
	814	1	3	8	28	51	126	166	275	156	7.56
West South Central Arkansas Louisiana Oklahoma. Texas.	18,107	112	315	617	1,181	2,158	2,848	3,143	4,463	3,250	15.48
	602	-	1	10	29	48	80	79	208	147	7.93
	2,850	18	55	104	165	336	401	508	702	561	16.16
	868	5	9	20	50	107	149	168	203	157	6.40
	13,787	89	250	483	937	1,667	2,218	2,388	3,350	2,385	18.00
Mountain. Montana. Idaho. Wyoming. Colorado New Mexico Arizona Utah. Nevada	5,330 80 98 51 1,929 438 1,487 423 824	33 - - 21 1 7 2	74 - 1 38 3 21 7 4	161 1 4 1 62 14 50 17	332 3 4 166 21 78 21 36	635 6 10 3 226 47 216 39 88	896 16 11 6 325 60 278 81 119	1,118 13 23 16 386 94 331 74 181	1,122 17 28 5 361 109 313 98 191	953 24 19 15 339 89 192 84	8.71 3.87 2.67 3.76 12.68 8.01 6.44 5.72 19.81

See footnotes at end of table.

Table 55 (page 2 of 2). Acquired immunodeficiency syndrome (AIDS) cases, according to geographic division and State: United States, 1983–91

[Data are based on reporting by State health departments]

Geographic division and State	All years ^{1,2}	1983	1984	1985	1986	1987	1988	1989²	1990²	1991²	12 months ending September 30, 1991
				Nun	nber, by	year of re	port				Cases per 100,000 population ³
Pacific . Washington	41,311 2,622 1,230 36,582 114 763	490 6 5 470 1 8	1,094 59 13 1,008 1	2,157 110 35 1,979 5 28	2,962 168 64 2,658 16 56	5,474 324 160 4,891 16 83	6,353 342 177 5,710 19 105	7,376 509 228 6,442 17 180	8,542 687 336 7,339 24 156	6,739 416 210 5,964 15 134	21.52 11.30 10.58 24.81 3.01 14.70

Includes cases prior to 1983.

NOTES: The AIDS case definition was changed in September 1987 to allow for the presumptive diagnosis of AIDS-associated diseases and conditions and to expand the spectrum of human immunodeficiency virus-associated diseases reportable as AIDS. Excludes residents of U.S. territories.

SOURCE: Centers for Disease Control, National Center for Infectious Diseases, Division of HIV/AIDS.

²Data are as of September 30, 1991, and reflect reporting delays.

³Resident population as of mid-1990, based on extrapolation from 1980–85 data from the U.S. Bureau of the Census.

Table 56 (page 1 of 2). Deaths among acquired immunodeficiency syndrome (AIDS) cases, according to geographic division and State: United States, 1983–91

Geographic division and State	All vears ^{1,2}	1983	1984	1985	1986	1987	1988	1989²	1990²	19912
Geographic division and State	years 11-	1983	1964			year of dea			/990°	1991-
					Turnber, by	year or dea	1111			
United States	122,203	1,453	3,322	6,584	11,329	15,125	19,120	24,847	25,747	13,882
New England Maine New Hampshire Vermont Massachusetts Rhode Island Connecticut	4,460 136 128 52 2,522 282 1,340	46 - 2 1 30 2	108 - 1 60 5 42	223 7 7 1 113 9 86	393 16 14 6 192 24 141	572 10 16 6 311 43 186	733 19 25 5 412 44 228	860 28 22 10 514 54 232	983 41 26 13 567 67 269	492 14 15 9 301 31
Middle Atlantic	38,638 27,412 7,662 3,564	760 625 104 31	1,483 1,164 232 87	2,586 2,001 428 157	4,062 2,925 824 313	5,238 3,626 1,170 442	6,244 4,366 1,310 568	8,092 5,830 1,541 721	6,961 4,902 1,244 815	2,805 1,656 737 412
East North Central Ohio Indiana Illinois Michigan Wisconsin	8,247 1,718 735 3,812 1,523 459	45 9 7 21 5 3	135 32 14 65 16 8	322 62 22 160 60 18	601 126 60 283 97 35	892 187 79 398 168 60	1,276 261 114 602 239 60	1,786 372 147 830 348 89	1,949 418 185 873 363 110	1,206 245 104 560 221 76
West North Central Minnesota lowa Missouri North Dakota South Dakota Nebraska Kansas	2,617 634 178 1,285 18 14 145 343	7 2 1 3 - - 1	36 9 2 19 - - 2 4	100 26 7 48 2 1 4	218 61 16 91 4 3 13	309 77 19 140 2 1 16 54	396 85 22 203 3 3 30 50	521 101 34 285 6 1 26 68	609 161 34 301 1 2 32 78	415 110 42 192 - 3 21 47
South Atlantic Delaware Maryland District of Columbia Virginia West Virginia North Carolina South Carolina Georgia Florida	23,500 239 2,461 2,070 1,665 147 1,302 778 3,217 11,621	197 - 13 14 20 - 5 2 18 125	459 2 52 42 25 5 25 12 56 240	1,025 7 119 133 80 6 44 30 127 479	1,790 21 176 203 140 8 91 46 227 878	2,651 30 276 239 205 12 133 79 347 1,330	3,561 30 347 315 276 12 192 116 515 1,758	4,788 45 503 395 331 36 320 158 654 2,346	5,459 68 600 464 384 46 295 231 806 2,565	3,464 34 364 256 202 22 196 100 444 1,846
East South Central Kentucky Tennessee Alabama Mississippi	2,439 450 804 698 487	11 5 3 3	26 11 6 6 3	84 20 27 27 10	152 26 64 34 28	260 41 84 79 56	382 61 119 112 90	523 104 151 151 117	610 116 202 167 125	377 63 141 118 55
West South Central	11,622 344 1,817 554 8,907	78 2 13 1 62	223 - 32 11 180	515 10 95 12 398	992 24 140 40 788	1,514 38 221 69 1,186	1,866 64 269 92 1,441	2,375 84 376 131 1,784	2,661 69 388 112 2,092	1,363 53 272 81 957
Mountain Montana Idaho. Wyoming Colorado New Mexico Arizona Utah Nevada	3,151 44 61 27 1,205 257 820 249 488	19 - - 11 - 4 1 3	63 - 1 40 2 12 3 5	135 1 1 2 58 8 40 12 13	280 3 3 1 112 23 87 25 26	389 5 7 4 145 25 113 32 58	514 6 12 2 179 32 173 41 69	622 10 8 6 206 57 189 39 107	699 8 20 4 263 56 171 62	414 11 10 6 188 49 25 34 91

See footnotes at end of table.

Table 56 (page 2 of 2). Deaths among acquired immunodeficiency syndrome (AIDS) cases, according to geographic division and State: United States, 1983–91

[Data are based on reporting by State health departments]

Geographic division and State	All years ^{1,2}	1983	1984	1985	1986	1987	1988	1989²	1990²	1991²
				N	umber, by	year of dea	ath			
Pacific	27,529 1,580	290 7	789 31	1,594 81	2,841 128	3,300 186	4,148 240	5,280 304	5,816 353	3,346 250
Oregon	778 24,644	2 279	9 741	24 1,450	67 2,604	74 2,983	112 3,707	139 4,745	201 5,149	149 2,865
Alaska	49 478	1	8	6 33	7 35	5 52	9 80	9 83	7 106	4 78

¹Includes cases prior to 1983.

NOTES: The AIDS case definition was changed in September 1987 to allow for the presumptive diagnosis of AIDS-associated diseases and conditions and to expand the spectrum of human immunodeficiency virus-associated diseases reportable as AIDS. Excludes residents of U.S. territories.

SOURCE: Centers for Disease Control, National Center for Infectious Diseases, Division of HIV/AIDS.

²Data are as of September 30, 1991, and reflect reporting delays.

Table 57. Age-adjusted cancer incidence rates for selected cancer sites, according to sex and race: Selected years 1973–89

[Data are based on the Surveillance, Epidemiology, and End Results Program's population-based registries in Atlanta, Detroit, Seattle-Puget Sound, San Francisco-Oakland, Connecticut, Iowa, New Mexico, Utah, and Hawaii]

Race, sex, and site	1973	1975	1980	1984	1985	1986	1987	1988	1989	Estimated annual percent change ¹
White male			Numbe	r of new ca	ses per 10	00,000 pop	oulation ²			
All sites	363.7	378.9	407.8	424.9	430.2	436.0	453.9	447.7	444.4	1.3
Oral cavity and pharynx Esophagus Stomach Colon and rectum Colon Rectum Pancreas Lung and bronchus Prostate gland Urinary bladder Non-Hodgkin's lymphoma Leukemia	17.5 4.8 13.9 54.2 34.7 19.4 12.7 72.4 62.4 27.2 10.3 14.4	18.4 4.8 12.5 55.1 36.1 19.0 12.4 75.8 68.7 28.6 11.4 14.2	16.9 4.9 12.4 58.9 39.4 11.0 82.4 78.9 31.5 12.7 14.5	17.1 4.8 10.9 63.0 43.4 19.6 11.1 84.6 82.8 32.3 15.5 14.1	16.8 5.3 10.6 63.8 43.5 20.2 10.7 82.5 86.9 31.1 15.9 14.1	16.3 5.2 10.8 62.4 43.0 19.4 10.8 82.2 90.5 32.2 16.7 14.1	17.2 5.5 10.5 61.4 42.1 19.3 10.5 84.3 102.3 33.7 18.3 13.7	15.3 5.4 10.7 59.6 41.1 18.5 10.5 81.7 104.8 32.8 17.9 13.3	14.8 5.1 10.6 58.1 39.6 18.6 9.7 78.9 108.5 31.6 17.8 12.9	-0.8 0.7 -1.6 0.6 1.0 -0.2 -1.0 0.6 3.1 1.1 3.8 -0.5
Black male										
All sites	437.9	435.0	512.1	542.5	535.2	532.4	546.7	536.0	524.4	1.6 2.5
Oral cavity and pharynx Esophagus Stomach Colon and rectum Colon. Rectum Pancreas Lung and bronchus Prostate gland Urinary bladder Non-Hodgkin's lymphoma. Leukemia	16.3 12.9 25.9 42.4 31.3 11.0 15.7 104.4 105.2 10.7 9.0 12.0	17.2 17.3 19.8 46.9 34.0 12.9 15.3 100.7 110.7 13.5 7.1 12.4	23.3 16.5 21.5 63.7 46.0 17.7 17.7 131.8 126.7 14.6 9.3 13.1	27.4 18.0 17.7 55.9 42.7 13.1 15.5 141.7 140.5 15.7 11.1	22.1 19.7 18.6 61.0 47.0 14.0 19.9 133.0 134.2 16.2 10.0	24.6 21.8 18.7 59.6 44.1 15.5 165.0 131.5 17.6 10.9	26.3 18.2 20.9 61.1 47.1 14.0 15.9 124.6 145.6 17.7 9.4 13.7	22.4 16.8 20.1 58.0 42.9 15.1 17.1 126.0 144.4 14.3 12.5	23.9 15.5 18.3 62.8 48.0 14.7 12.5 118.3 142.0 13.9 11.0 12.1	2.5 0.7 -0.8 2.0 2.3 1.2 -0.4 1.6 2.2 1.5 3.0 0.0
White female										
All sites	294.0	310.0	311.2	332.5	342.5	340.2	350.9	346.5	340.2	0.9
Colon and rectum Colon. Rectum Pancreas. Lung and bronchus Melanoma of skin. Breast Cervix uteri Corpus uteri. Ovary Non-Hodgkin's lymphoma.	41.6 30.2 11.4 7.4 17.8 5.8 84.0 12.7 29.4 14.6 7.5	42.9 30.9 12.0 7.1 21.9 6.9 89.5 11.1 33.7 14.4 8.5	44.9 33.1 11.8 7.3 28.4 9.1 87.4 9.1 25.3 14.0 9.3	44.7 32.4 12.4 8.4 35.0 9.3 100.0 8.3 24.0 14.8 11.1	46.0 34.0 12.0 8.2 36.1 10.1 106.4 7.6 23.3 15.1 11.3	43.1 32.2 10.9 7.9 37.9 10.4 109.0 8.0 22.4 13.5	41.3 30.2 11.0 7.5 39.7 10.9 117.0 7.4 22.7 14.6 11.3	40.0 29.4 10.7 7.6 41.4 10.2 113.5 7.9 21.3 15.5 12.1	40.3 29.6 10.6 7.2 40.1 10.2 108.2 8.2 21.9 15.8 11.4	-0.2 -0.1 -0.5 0.3 5.1 3.6 1.8 -2.9 -2.7 0.3 2.8
Black female	070.5	000.1	000.4	000.0	205 1	2027	200 0	224 5	319.3	1.1
All sites Colon and rectum Colon. Rectum Pancreas Lung and bronchus Breast Cervix uteri Corpus uteri Ovary Non-Hodgkin's lymphoma.	279.5 40.6 29.2 11.5 11.5 20.7 68.0 29.6 14.8 10.3 5.4	293.1 42.9 32.4 10.5 11.7 20.4 77.5 27.8 16.8 10.1 4.0	306.4 49.9 41.3 8.6 13.1 34.2 74.4 19.2 14.2 10.1 6.1	323.0 47.9 38.0 9.9 13.3 40.1 84.0 17.4 15.2 9.4 5.9	325.1 46.4 36.3 10.1 11.5 41.1 92.9 16.0 15.1 10.1 6.8	328.7 47.3 36.7 10.6 13.1 43.3 94.1 15.2 14.2 9.0 6.9	328.3 48.1 37.4 10.8 15.0 39.4 90.8 15.0 13.7 10.1 8.0	334.5 46.5 36.7 9.8 14.0 42.4 97.4 15.4 13.9 10.6 7.1	44.1 33.8 10.3 11.1 45.2 87.6 12.8 16.7 10.6 7.9	1.1 1.4 0.1 1.0 5.2 2.0 -4.5 -0.0 0.3 3.9

¹The estimated annual percent change has been calculated by fitting a linear regression model to the natural logarithm of the yearly rates from 1973–89. ²Age adjusted by the direct method to the 1970 U.S. population.

SOURCE: National Cancer Institute, National Institutes of Health, Cancer Statistics Review, 1973–1989. NIH Pub. No. 92-2789. U.S. Department of Health and Human Services. Public Health Service. Bethesda, Md., 1992.

Table 58. Five-year relative cancer survival rates for selected sites, according to race and sex: 1974–76, 1977–79, 1980–82, and 1983–88

[Data are based on the Surveillance, Epidemiology, and End Results Program's population-based registries in Atlanta, Detroit, Seattle-Puget Sound, San Francisco-Oakland, Connecticut, Iowa, New Mexico, Utah, and Hawaii]

		All ra	aces			W	hite			Bla	ack	
Sex and site	1974–76	1977–79	198082	198388	197476	1977–79	198082	1983–88	1974–76	1977–79	1980–82	1983–88
Male				,		Percent o	of patients					
All sites	40.8	42.9	44.7	46.7	41.9	44.2	46.1	48.4	31.1	32.0	33.8	33.4
Oral cavity and pharynx	3.5 13.8 49.5 47.4 2.9 11.1 66.6 73.5 46.8	51.0 4.7 15.3 51.3 48.5 2.2 11.8 70.7 76.2 45.4	50.5 5.8 16.1 55.1 50.0 2.7 11.9 72.9 78.9 49.7	49.0 7.2 15.4 58.9 55.5 2.7 11.5 75.9 80.1 49.7	54.4 4.1 13.1 49.9 47.8 3.1 11.0 67.6 74.3 47.5	53.3 5.6 14.4 51.7 49.6 2.2 12.0 71.7 76.7 45.9	53.7 6.4 15.1 55.5 51.1 2.6 12.0 74.0 79.7 50.4	52.1 8.1 14.4 60.1 56.5 2.4 11.8 77.6 80.5 50.3	30.8 2.1 15.6 43.8 34.1 1.2 10.9 57.7 54.0 42.9	30.8 2.4 14.6 45.0 37.6 2.8 8.9 61.9 62.2 42.1	25.5 4.6 18.3 46.4 36.0 3.7 10.9 63.9 61.8 46.5	26.2 5.3 15.0 47.2 42.3 4.8 9.6 62.9 65.2 41.3
Leukemia	32.8	35.7	36.4	36.3	33.3	36.5	37.5	37.6	31.7	29.4	28.8	29.1
All sites	50.4 49.3 2.2	55.9 53.5 50.6 2.5 17.0	55.7 54.8 53.7 3.3 15.9	57.0 57.4 56.6 3.6 15.7	57.3 50.6 49.7 2.1 15.7	56.6 53.6 51.3 2.2 17.1	56.5 55.1 54.5 2.9 16.0	58.2 58.3 57.2 3.2 16.0	46.7 46.9 48.9 3.1 12.6	46.2 49.6 37.9 4.8 17.0	45.3 50.5 39.9 5.9 15.4	43.6 48.3 49.8 4.5 12.6
Melanoma of skin Breast Cervix uteri Corpus uteri Ovary Non-Hodgkin's lymphoma	84.5 74.2 68.4 87.7 36.5	85.6 74.4 67.7 84.8 38.0 50.3	87.3 75.9 66.5 81.3 38.8 52.3	87.1 78.0 65.6 82.5 39.5 53.1	84.6 74.8 69.2 88.6 36.2 47.4	85.9 75.1 68.8 86.1 37.5 50.2	87.3 76.7 67.3 82.5 38.6 52.5	87.3 79.3 68.0 84.2 39.3 53.8	62.9 63.2 60.4 40.7 54.1	62.5 61.8 57.8 39.5 58.9	65.6 60.1 53.6 37.3 54.0	*66.5 62.1 55.3 54.3 37.1 44.4

^{*}Standard error is greater than 10 percentage points.

NOTES: Rates are based on followup of patients through 1989. 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.

SOURCES: National Cancer Institute, National Institutes of Health, Cancer Statistics Review, 1973–1989. NIH Pub. No. 92-2789. U.S. Department of Health and Human Services. Public Health Service. Bethesda, Md., 1992; National Cancer Institute, Division of Cancer Prevention and Control: Unpublished data.

Table 59. Limitation of activity caused by chronic conditions, according to selected characteristics: United States, 1985 and 1990

	limit	l with ation ctivity	but r	rited not in activity	Limiti amount of major		Unable to carry on major activity	
Characteristic	1985	1990	1985	1990	1985	1990	1985	1990
				Percent of	population			
Total 1,2	13.4	12.9	4.2	4.1	5.5	5.0	3.7	3.9
Age								
Under 15 years Under 5 years 5–14 years 15–44 years 45–64 years 65 years and over	4.8 2.2 6.2 8.3 23.4 39.6	4.7 2.2 6.1 8.5 21.8 37.5	1.2 0.6 1.6 2.7 5.9 15.5	1.2 0.6 1.6 2.6 5.7 15.4	3.1 1.1 4.2 3.6 8.8 13.8	3.1 1.0 4.1 3.5 7.5 11.9	0.4 0.5 0.4 1.9 8.7 10.4	0.4 0.6 0.4 2.4 8.6 10.2
65–74 years. 75 years and over	36.7 44.3	33.7 43.3	14.0 17.9	13.2 18.8	11.5 17.3	9.9 14.9	11.2 9.1	10.6 9.6
Sex ¹								
Male Female	13.6 13.2	12.9 13.0	3.8 4.5	3.8 4.3	5.1 5.8	4.7 5.3	4.7 2.9	4.4 3.4
Race ¹								
White	13.1 16.3	12.8 15.5	4.3 3.9	4.2 3.8	5.5 6.1	5.0 5.3	3.4 6.4	3.6 6.5
Family income 1,3								
Less than \$14,000	22.4 15.0 12.0 10.7 8.8	22.9 14.8 11.6 10.4 8.4	5.6 4.3 3.7 3.8 3.2	5.2 4.3 3.8 3.7 3.4	8.5 6.3 5.2 4.6 3.7	8.1 5.7 4.7 4.4 3.3	8.3 4.5 3.1 2.4 1.8	9.6 4.8 3.0 2.3 1.7
Geographic region ¹								
Northeast	11.8 12.7 14.8 13.8	11.9 12.9 14.0 12.5	3.7 3.7 4.8 4.3	3.9 3.9 4.1 4.4	4.8 5.3 6.1 5.7	4.5 5.5 5.3 4.5	3.3 3.7 4.0 3.8	3.6 3.4 4.6 3.7
Location of residence ¹								
Within MSAOutside MSA	13.0 14.6	12.4 14.9	4.0 4.7	4.0 4.3	5.4 5.9	4.7 6.1	3.6 4.0	3.7 4.5

¹Age adjusted.
2Includes all other races not shown separately and unknown family income.
3Family income categories for 1990. Income categories for 1985 are: less than \$11,000; \$11,000–\$19,999; \$20,000–\$29,999; \$30,000–\$39,999; and \$40,000 or more.

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Data from the National Health Interview Survey.

Table 60. Disability days associated with acute conditions and incidence of acute conditions, according to age: United States, 1983-90

Age	1983	1984	1985	1986	1987	1988	1989	1990
Restricted-activity days	•			Number p	er person			
All ages ¹	7.2	7.4	6.8	7.7	6.8	7.1	7.5	7.0
Under 15 years . Under 5 years . 5–14 years . 15–44 years . 45–64 years . 65 years and over . 65–74 years . 75 years and over .	8.2 9.5 7.5 6.6 9.2 8.7 10.1	7.9 8.8 7.4 7.1 6.6 9.1 8.3 10.2	6.9 7.5 6.7 6.5 6.0 9.6 8.9 10.9	8.2 9.0 7.8 7.0 7.0 10.2 10.2	7.5 9.4 6.6 6.5 6.1 8.0 8.2 7.7	8.1 9.7 7.2 6.7 5.8 8.2 7.3 9.6	8.4 9.6 7.8 7.3 5.9 9.1 8.2 10.4	7.6 9.5 6.5 6.9 5.8 8.7 7.6 10.3
Bed-disability days ²								
All ages ¹	3.4	3.3	3.1	3.4	3.0	3.1	3.5	3.1
Under 15 years Under 5 years 5-14 years 15-44 years 45-64 years 65 years and over 65-74 years 75 years and over	4.0 4.7 3.6 3.0 2.8 4.5 4.4	3.6 3.8 3.5 3.2 2.6 3.9 3.7 4.3	3.4 3.5 3.3 2.8 2.7 3.9 2.8 5.7	3.8 3.9 3.1 3.1 4.6 3.9 5.5	3.4 4.4 2.8 2.8 2.6 3.4 3.7 3.0	3.9 3.4 2.8 2.4 3.4 3.1 4.0	4.2 4.5 4.0 3.2 2.8 4.2 3.6 5.0	3.5 4.5 3.0 3.0 2.7 3.2 2.6 4.0
Incidence of acute conditions ³			1	Number per	100 persons	3		
All ages ¹	182.9	184.9	183.1	189.5	180.8	184.8	190.5	181.2
Under 15 years Under 5 years 5–14 years 15–44 years 45–64 years 65 years and over 65–74 years 75 years and over	288.1 354.5 252.8 165.1 109.3 100.9 103.1 97.3	289.3 345.1 259.2 172.2 104.4 98.8 97.4 101.0	280.0 334.6 250.9 170.1 112.9 98.4 98.9 97.7	302.7 360.4 271.7 180.5 125.1 119.5 118.2 121.5	281.7 358.9 240.4 168.7 101.4 100.4 94.8 109.4	296.5 362.8 261.3 162.6 107.9 108.9 107.8 110.6	299.7 369.5 262.3 173.5 113.6 100.2 97.4 104.6	288.1 365.0 246.9 157.0 114.4 105.8 108.2 102.1

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Data from the National Health Interview Survey.

¹Age adjusted.
²A subset of restricted-activity days.
³Excludes conditions involving neither medical attention nor activity restriction.

Table 61. Self-assessment of health, according to selected characteristics: United States, 1985 and 1990

		Exce	ellent	Very	good	Go	ood	Fair o	r poor
Characteristic	Total	1985	1990	1985	1990	1985	1990	1985	1990
			·····	Perc	ent distribu	ution 1			
Total ^{2,3}	100.0	40.4	40.5	27.1	28.5	22.8	22.0	9.8	8.9
Age									
Under 15 years Under 5 years 5–14 years 15–44 years 45–64 years 65 years and over 65–74 years.	100.0 100.0 100.0 100.0 100.0 100.0 100.0	53.1 54.7 52.2 43.9 27.0 15.9 17.1	52.8 53.2 52.6 43.1 29.2 17.1 18.9	26.3 25.8 26.5 30.1 25.3 20.2 20.7	28.1 28.1 28.1 30.9 27.1 22.9 23.5	18.2 17.2 18.7 20.6 29.2 32.5 32.9	16.6 15.8 17.1 20.6 27.7 32.3 32.6	2.5 2.3 2.5 5.4 18.6 31.4 29.3	2.4 2.9 2.2 5.4 16.0 27.7 25.1
75 years and over	100.0	13.9	14.5	19.5	21.9	31.9	31.9	34.7	31.7
Sex ²									
Male	100.0 100.0	42.8 38.0	42.5 38.7	26.2 27.9	28.3 28.8	21.5 24.1	20.8 23.2	9.5 10.0	8.4 9.3
Race ²									
White	100.0 100.0	42.1 29.1	42.1 31.1	27.5 23.9	29.0 25.3	21.5 30.0	20.8 28.5	8.9 17.0	8.1 15.1
Family income 2,4									
Less than \$14,000	100.0 100.0 100.0 100.0 100.0	28.3 35.0 41.0 44.5 53.3	28.1 34.6 40.6 45.9 52.1	24.0 27.9 28.3 28.8 27.1	24.3 29.6 30.2 29.7 28.0	28.4 25.6 22.7 20.2 15.3	28.9 25.0 21.7 19.1 16.0	19.3 11.6 8.0 6.4 4.2	18.6 10.8 7.5 5.3 4.0
Geographic region ²									
Northeast	100.0 100.0 100.0 100.0	40.5 41.2 37.3 44.5	43.1 41.7 37.3 42.2	27.9 27.9 26.5 25.8	28.1 29.3 27.8 29.1	23.1 21.9 24.3 21.3	21.6 21.1 23.8 20.6	8.5 9.0 11.9 8.5	7.2 7.9 11.2 8.1
Location of residence ²									
Within MSAOutside MSA	100.0 100.0	41.3 37.1	41.6 36.7	27.3 26.3	28.5 28.7	22.3 24.5	21.5 24.1	9.0 12.1	8.5 10.4

¹Denominator excludes unknown health status.

²Age adjusted.

³Includes all other races not shown separately and unknown family income.

⁴Family income categories for 1990. Income categories for 1985 are less than \$11,000; \$11,000-\$19,999; \$20,000-\$29,999; \$30,000-\$39,999; and \$40,000 or more.

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Data from the National Health Interview Survey.

Table 62. Current cigarette smoking by persons 18 years of age and over, according to sex, race, and age: United States, selected years 1965–90

Sex, race, and age	1965	1974	1979	1983	1985	1987	1988	19901
All persons			Percent o	of persons 18	years of ag	e and over		
18 years and over, age adjusted	42.3	37.2	33.5	32.2	30.0	28.7	27.9	25.4
	42.4	37.1	33.5	32.1	30.1	28.8	28.1	25.5
All males								
18 years and over, age adjusted	51.6	42.9	37.2	34.7	32.1	31.0	30.1	28,0
	51.9	43.1	37.5	35.1	32.6	31.2	30.8	28.4
18–24 years	54.1	42.1	35.0	32.9	28.0	28.2	25.5	26.6
	60.7	50.5	43.9	38.8	38.2	34.8	36.2	31.6
	58.2	51.0	41.8	41.0	37.6	36.6	36.5	34.5
	51.9	42.6	39.3	35.9	33.4	33.5	31.3	29.3
	28.5	24.8	20.9	22.0	19.6	17.2	18.0	14.6
White: 18 years and over, age adjusted	50.8	41.7	36.5	34.1	31.3	30.4	29.5	27.6
18-24 years	53.0	40.8	34.3	32.5	28.4	29.2	26.7	27.4
	60.1	49.5	43.6	38.6	37.3	33.8	35.4	31.6
	57.3	50.1	41.3	40.8	36.6	36.2	35.8	33.5
	51.3	41.2	38.3	35.0	32.1	32.4	30.0	28.7
	27.7	24.3	20.5	20.6	18.9	16.0	16.9	13.7
Black: 18 years and over, age adjusted	59.2	54.0	44.1	41.3	39.9	39.0	36.5	32.2
18–24 years	62.8	54.9	40.2	34.2	27.2	24.9	18.6	21.3
	68.4	58.5	47.5	39.9	45.6	44.9	41.6	33.8
	67.3	61.5	48.6	45.5	45.0	44.0	42.5	42.0
	57.9	57.8	50.0	44.8	46.1	44.3	43.2	36.7
	36.4	29.7	26.2	38.9	27.7	30.3	29.8	21.5
All females								
18 years and over, age adjusted	34.0	32.5	30.3	29.9	28.2	26.7	26.0	23.1
	33.9	32.1	29.9	29.5	27.9	26.5	25.7	22.8
18–24 years	38.1	34.1	33.8	35.5	30.4	26.1	26.3	22.5
	43.7	38.8	33.7	32.6	32.0	31.8	31.3	28.2
	43.7	39.8	37.0	33.8	31.5	29.6	27.8	24.8
	32.0	33.4	30.7	31.0	29.9	28.6	27.7	24.8
	9.6	12.0	13.2	13.1	13.5	13.7	12.8	11.5
White: 18 years and over, age adjusted	34.3	32.3	30.6	30.1	28.3	27.2	26.2	23.9
18–24 years	38.4	34.0	34.5	36.5	31.8	27.8	27.5	25.4
	43.4	38.6	34.1	32.2	32.0	31.9	31.0	28.5
	43.9	39.3	37.2	34.8	31.0	29.2	28.3	25.0
	32.7	33.0	30.6	30.6	29.7	29.0	27.7	25.4
	9.8	12.3	13.8	13.2	13.3	13.9	12.6	11.5
Black: 18 years and over, age adjusted	32,1	35.9	30.8	31.8	30.7	27.2	27.1	20.4
18–24 years	37.1	35.6	31.8	32.0	23.7	20.4	21.8	10.0
	47.8	42.2	35.2	38.0	36.2	35.8	37.2	29.1
	42.8	46.4	37.7	32.7	40.2	35.3	27.6	25.5
	25.7	38.9	34.2	36.3	33.4	28.4	29.5	22.6
	7.1	8.9	8.5	13.1	14.5	11.7	14.8	11.1

¹The reader should use caution in interpreting the changes in prevalence from 1988 to 1990 as an accelerated decline in prevalence until confirmed by data from the 1991 survey now in progress. Some inconsistencies in smoking patterns in the National Health Interview Survey data have been noted, and there is a lack of agreement among national tobacco use surveys on smoking trends in recent years.

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Data from the National Health Interview Survey; Data computed by the Division of Epidemiology and Health Promotion from data compiled by the Division of Health Interview Statistics.

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NOTES: A current smoker is a person who has smoked at least 100 cigarettes and who now smokes; includes occasional smokers. Excludes unknown smoking status.

Table 63. Age-adjusted prevalence of current cigarette smoking by persons 25 years of age and over, according to sex, race, and education: United States, selected years 1974–90

Sex, race, and education	1974	1979	1983	1985	1987	1988	19901
		Percen	t of persons 25	years of age a	ınd over, age a	adjusted	
All persons ²	37.1	33.3	31.7	30.2	29.1	28.4	25.6
Less than 12 years	43.8	41.1	40.8	41.0	40.6	39.4	36.7
12 years	36.4	33.7	33.6	32.1	31.8	31.8	29.3
13–15 years	35.8	33.2	30.3	29.7	27.2	26.4	23.5
16 or more years	27.5	22.8	20.7	18.6	16.7	16.3	14.1
All males ²	43.0	37.6	35.1	32.9	31.5	31.1	28.3
Less than 12 years	52.4	48.1	47.2	46.0	45.7	44.9	41.8
12 years	42.6	39.1	37.4	35.6	35.2	35.2	33.2
13–15 years	41.6	36.5	33.0	33.0	28.4	29.0	25.9
16 or more years	28.6	23.1	21.8	19.7	17.3	17.2	14.6
White males ²	41.9	36.9	34.5	31.9	30.6	30.1	27.7
Less than 12 years	51.6	48.0	47.9	45.2	45.3	44.8	41.7
12 years	42.2	38.6	37.1	34.8	34.6	34.2	33.0
13–15 years	41.4	36.4	32.6	32.3	28.0	28.2	25.4
16 or more years	28.1	22.8	21.1	19.2	17.4	17.1	14.5
Black males ²	53.8	44.9	42.8	42.5	41.9	40.3	34.5
Less than 12 years	58.3	50.1	46.0	51.1	49.4	45.3	41.4
12 years	*51.2	48.4	47.2	41.9	43.6	48.3	37.4
13–15 years	*45.7	39.3	44.7	42.3	32.4	34.8	28.3
16 or more years	*41.8	*37.9	*31.3	*32.0	20.9	21.5	20.6
All females ²	32.2	29.6	28.8	27.8	26.9	25.9	23.2
Less than 12 years	36.8	35.0	35.3	36.7	36.1	34.5	32.1
12 years	32.5	29.9	30.9	29.6	29.2	29.1	26.3
13–15 years	30.2	30.0	27.5	26.7	26.0	24.1	21.1
16 or more years	26.1	22.5	19.2	17.4	16.1	15.3	13.6
White females ²	31.9	29.8	28.8	27.6	27.0	25.9	23.6
Less than 12 years	37.0	36.1	35.5	37.1	37.0	35.2	33.6
12 years	32.1	29.9	30.9	29.4	29.4	29.3	26.8
13–15 years	30.5	30.6	28.0	27.1	26.2	23.8	21.4
16 or more years	25.8	21.9	18.9	16.8	16.4	15.1	13.7
Black females ²	35.9	30.6	31.8	32.1	28.6	28.2	22.6
Less than 12 years	36.4	31.9	36.9	39.2	35.0	33.9	26.8
12 years	41.9	33.0	35.2	32.3	28.1	30.1	24.0
13–15 years	33.2	*28.8	26.5	23.7	27.2	26.8	23.1
16 or more years	*35.2	*43.4	*38.7	27.5	19.5	22.2	16.9

¹The reader should use caution in interpreting the changes in prevalence from 1988 to 1990 as an accelerated decline in prevalence until confirmed by data from the 1991 survey now in progress. Some inconsistencies in smoking patterns in the National Health Interview Survey data have been noted, and there is a lack of agreement among national tobacco use surveys on smoking trends in recent years.

²Includes unknown education.

SOURCE: Data computed by the Division of Epidemiology and Health Promotion, National Center for Health Statistics from data compiled by the Division of Health Interview Statistics.

^{*}For age groups where percent smoking was 0 or 100 the age-adjustment procedure was modified to substitute the percent from the next lower education group. These age-adjusted percents should be considered unreliable because of small sample size.

NOTES: A current smoker is a person who has smoked at least 100 cigarettes and who now smokes; includes occasional smokers. Excludes unknown smoking status.

Table 64 (page 1 of 2). Use of selected substances in the past month by youths 12–17 years of age and young adults 18–25 years of age, according to age, sex, race, and Hispanic origin: United States, selected years 1974–91

[Data are based on household interviews of a sample of the population 12 years of age and over in the coterminous United States]

Substance, age, sex, race, and Hispanic origin	1974	1976	1977	1979	1982	1985	1988	1990	1991
Cigarettes				Perc	ent of popul	ation			
12–17 years	25	23	22	(1)	15	15	12	12	11
12-13 years	13	11	10	(1)	*3	6	3	2	3
14–15 years	25	20	22	(1)	10	14	11	14	9
16-17 years	38	39	35	(1)	30	25	20	18	21
Male	27	21	23	(¹)	16	16	12	12	12
Female	24	26	22	(1)	13	15	11	11	10
White						17	14	14	13
Black						9	5	4	4
Hispanic						11	8	11	9
18–25 years	49	49	47	(1)	40	37	35	32	32
Male	50	48	50	(1)	37	38	36	36	32
Female	47	51	44	(1)	42	35	35	27	32
White						38	37	35	36
Black						34	30	21	22
Hispanic						30	28	25	25
Alcohol ²									
12-17 years	34	32	31	37	27	31	25	25	20
12–13 years	19	19	13	20	10	11	6	8	7
14-15 years	32	31	28	36	23	35	23	26	19
1617 years	51	47	52	55	45	46	42	38	35
Male	39	36	37	39	27	34	27	25	22
Female	29	29	25	36	27	28	23	24	18
White						34	27	28	20
Black						21	16	15	20
Hispanic						22	25	19	23
18–25 years	69	69	70	76	68	71	65	63	64
Male		79	82	84	75	78	75	74	70
Female		58	59	68	61	64	57	53	58
White						76.	69	66	67
Black						57	50	59	56
Hispanic						58	61	57	53
Marijuana									
12–17 years	12	12	17	17	12	12	6	5	4
12–13 years	*2	*3	*4	4	*2	*4	1	*	*
14–15 years	12	13	16	17	8	11	5	5	4
16–17 years	20	21	30	28	23	21	12	10	9
Male	12	14	20	19	13	13	6	6	5
Female	11	11	13	14	10	11	7	4	4
White						13	7	6	4
Black						8	4	3	5
Hispanic						9	5	4	5
18–25 years	25	25	27	35	27	22	15	13	13
Male		31	35	45	36	27	20	17	16
Female		19	20	26	19	17	11	9	11
White						22	16	14	14
Black						24	15	13	15
Hispanic						15	14	8	9
Cocaine									
12–17 years	*1.0	*1.0	*0.8	1.4	1.6	1.5	1.1	0.6	0.4
Male					1.8	2.0	0.9	0.7	0.5
Female					*1.5	*1.0	1.4	*	0.3
						1.5	1.3	0.4	*0.3
White							1)	υ.⊶	
White						1.0	*	0.4 *	*0.5

See footnotes at end of table.

Table 64 (page 2 of 2). Use of selected substances in the past month by youths 12–17 years of age and young adults 18–25 years of age, according to age, sex, race, and Hispanic origin: United States, selected years 1974–91

[Data are based on household interviews of a sample of the population 12 years of age and over in the coterminous United States]

Substance, age, sex, race, and Hispanic origin	1974	1976	1977	1979	1982	1985	1988	1990	1991
Cocaine - Con.				Percent of	population				
18–25 years	3.1	2.0	3.7	9.3	6.8	7.6	4.5	2.2	2.0
Malé					9.1	9.0	6.0	2.8	2.8
Female					4.7	6.3	3.0	1.6	1.3
White						8.1	4.1	1.9	1.7
Black						6.4	4.3	3.6	3.1
Hispanic						6.6	6.7	3.1	2.7

¹Data not comparable because definitions differ.

SOURCES: National Institute on Drug Abuse: National Household Survey on Drug Abuse: Main Findings, 1979, by P. M. Fishburne, H. I. Abelson, and I. Cisin. DHHS Pub. No. (ADM) 80-976. Alcohol, Drug Abuse, and Mental Health Administration. Washington. U.S. Government Printing Office, 1980; National Household Survey on Drug Abuse: Main Findings, 1982, by J. D. Miller et al. DHHS Pub. No. (ADM) 83-1263. Alcohol, Drug Abuse, and Mental Health Administration. Washington. U.S. Government Printing Office, 1983; National Household Survey on Drug Abuse: Main Findings, 1985. DHHS Pub. No. (ADM) 88-1586. National Household Survey on Drug Abuse: Main Findings, 1990; and National Household Survey on Drug Abuse: Main Findings, 1990; and National Household Survey on Drug Abuse: Main Findings, 1991.

² In 1979, 1982, 1985, 1988, 1990, and 1991 private answer sheets were used for alcohol questions; in earlier years, respondents answered questions aloud.

^{*}Relative standard error greater than 30 percent. Estimates with relative standard error greater than 50 percent are not shown.

Table 65. Use of selected substances in the past month by high school seniors, according to sex, race, Hispanic origin, and average parental education: United States, 1980–90

[Data are based on a survey of high school seniors in the coterminous United States]

Substance, sex, race, Hispanic origin, and											···
average parental education	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Cigarettes				Percent	using su	ibstance	in the pas	st month			
All seniors	30.5	29.4	30.0	30.3	29.3	30.1	29.6	29.4	28.7	28.6	29.4
Male	26.8	26.5	26.8	28.0	25.9	28.2	27.9	27.0	28.0	27.7	29.1
	33.4	31.6	32.6	31.6	31.9	31.4	30.6	31.4	28.9	29.0	29.2
White. Black. Hispanic	31.0	30.1	31.3	31.3	31.0	31.7	32.0	32.2	32.3	32.1	32.5
	25.2	22.3	21.2	21.2	17.6	18.7	14.6	13.9	12.8	12.4	12.0
	20.6	24.8	24.6	24.8	25.9	25.1	22.6	22.8	21.0	20.4	23.2
Average parental education: 1 Less than high school	32.7	32.5	32.6	32.7	33.6	32.3	28.6	28.8	28.1	25.4	26.3
	34.2	31.7	32.0	32.2	31.8	32.3	32.3	31.4	29.9	30.8	30.8
	28.0	28.2	29.0	28.0	28.1	29.7	29.7	28.8	27.8	29.4	29.3
	25.7	26.0	25.5	27.8	25.2	27.7	26.4	27.6	28.6	27.0	29.1
	24.0	22.5	25.1	25.5	23.7	22.6	26.7	29.3	27.8	26.3	28.6
Alcohol											
All seniors	72.0	70.7	69.7	69.4	67.2	65.9	65.3	66.4	63.9	60.0	57.1
Male	77.4	75.7	74.1	74.4	71.4	69.8	69.0	69.9	68.0	65.1	61.3
	66.8	65.7	65.4	64.3	62.8	62.1	61.9	63.1	59.9	54.9	52.3
White. Black. Hispanic	75.8	75.0	74.2	73.5	72.1	70.2	70.2	71.8	69.5	65.3	62.2
	47.7	45.8	46.2	49.3	42.1	43.6	40.4	38.5	40.9	38.1	32.9
	61.5	62.2	58.8	59.5	60.0	56.5	56.2	58.0	57.6	48.9	49.2
Average parental education: 1 Less than high school High school graduate Some college College graduate. Some postgraduate.	65.9	62.1	61.3	61.2	58.1	58.7	56.1	56.3	54.5	47.8	47.2
	72.0	70.7	69.4	69.2	67.4	65.9	65.3	67.0	64.6	59.7	57.2
	73.3	71.5	72.7	70.4	69.6	66.9	66.7	67.2	64.3	62.9	57.7
	74.4	73.1	74.5	73.1	69.3	68.9	68.0	68.8	66.0	62.1	60.8
	77.2	77.4	74.1	75.0	70.3	67.9	69.9	70.5	67.3	62.2	60.8
Marijuana											
All seniors	33.7	31.6	28.5	27.0	25.2	25.7	23.4	21.0	18.0	16.7	14.0
Male	37.8	35.3	31.4	31.0	28.2	28.7	26.8	23.1	20.7	19.5	16.1
	29.1	27.3	24.9	22.2	21.1	22.4	20.0	18.6	15.2	13.8	11.5
White. Black. Hispanic	34.2	32.4	29.1	26.6	25.3	26.4	24.6	22.3	19.9	18.6	15.6
	26.5	24.9	24.8	26.9	22.8	21.7	16.6	12.4	9.8	9.4	5.2
	29.2	26.8	25.6	25.0	22.4	21.5	21.1	19.5	12.7	12.1	11.3
Average parental education: 1 Less than high school High school graduate Some college College graduate. Some postgraduate	29.9	29.7	24.9	26.2	23.8	23.4	21.0	19.9	15.6	13.9	11.4
	34.6	31.5	28.4	27.3	25.4	25.9	24.1	20.9	16.8	16.3	14.3
	33.6	31.4	29.3	26.1	25.8	26.5	24.1	21.1	17.7	17.9	13.5
	33.7	31.9	30.1	26.9	23.3	27.1	23.1	21.1	19.3	17.1	15.0
	36.2	31.9	27.7	25.5	23.4	20.6	21.7	21.2	20.6	16.2	15.0
Cocaine											
All seniors	5.2	5.8	5.0	4.9	5.8	6.7	6.2	4.3	3.4	2.8	1.9
Male	6.0	6.3	5.9	5.7	7.0	7.7	7.2	4.9	4.2	3.6	2.3
	4.3	5.0	3.8	4.1	4.4	5.6	5.1	3.7	2.6	2.0	1.3
WhiteBlack	5.4	6.1	4.9	4.9	6.0	7.0	6.4	4.4	3.7	2.9	1.8
	2.0	2.1	3.2	3.0	2.4	2.7	2.7	1.8	1.4	1.2	0.5
	5.4	6.5	6.0	7.2	7.2	8.2	8.8	5.6	3.3	4.0	3.3
Average parental education: 1 Less than high school High school graduate Some college College graduate Some postgraduate	3.8	3.9	3.6	4.6	4.5	6.5	5.8	3.4	3.2	3.5	2.0
	4.5	4.9	4.6	4.2	5.9	6.7	6.1	4.1	3.3	2.7	1.8
	5.8	6.0	5.2	4.7	5.6	6.7	6.7	4.9	3.0	2.6	2.0
	5.9	7.6	5.9	6.0	6.2	6.8	6.1	4.2	4.0	3.1	1.2
	7.0	7.4	5.4	6.0	6.6	6.4	5.3	4.0	3.6	2.4	2.0

¹Average parental education is calculated by averaging the following respondent-reported parental educational categories: (1) completed grade school or less, (2) some high school, (3) completed high school, (4) some college, (5) completed college, and (6) graduate or professional school after college.

NOTES: The Nation's High School Seniors survey excludes high school dropouts (about 15 percent of the age group during the 1980's) and absentees (about 16–19 percent of high school students). High school dropouts and absentees have higher drug usage than those included in the survey.

SOURCE: National Institute on Drug Abuse: Monitoring the Future Study: Annual surveys.

Table 66. Cocaine-related emergency room episodes, according to age, sex, race, and Hispanic origin: Selected metropolitan areas, 1985–90

[Data are based on a sample of emergency rooms]

	Da	ta from 21 me	etropolitan are	eas	Data	from national s	ample
Age, sex, race, and Hispanic origin	1985–86	1986–87	1987–88	1988–89	1989–90	1989	1990
All races, both sexes ¹		Annu	al percent ch	ange		Number of	episodes
ıll ages²	81.3	72.7	32.7	-2.1	-27.0	110,013	80,355
2-17 years	94.9	34.4	33.8	-10.4	-26.9	2,544	1,859
824 years	81.1	67.1	32.5	-10.8	-39 <i>.</i> 7	25,996	15,665
5–34 years	82.8	73.0	29.5	-1.5	-28.6	55,422	39,589
5–44 years	74.8 71.8	87.1 73.2	40.8 43.6	6.2 9.4	–10.9 –5.4	21,529 3,965	19,186 3,749
5–64 years	71.0	13.2	43.0	3.4	-5.4	3,303	0,743
White male	7.4.0	55.0	00.5	0.0	07.4	04.700	45.540
ll ages ²	74.2	55.0	28.5	<i>–</i> 9.2	-37.4	24,789	15,512
2–17 years	46.8	37.2	20.6	4.3	-40.8	880	521
3–24 years	65.0	48.0	25.6	-13.7	-48.8	6,138	3,143
5–34 years	74.3 102.1	60.9 52.1	24.0 49.0	-12.7 2.3	-41.9 -14.1	12,714 4,369	7,392 3,755
5–64 years	76.4	47.4	48.3	13.7	2.7	594	610
Black male							
lages ²	82.4	85.3	40.5	-0.1	-16.1	33,070	27,745
2–17 years	127.0	67.9	41.1	-4.0	-35.3	363	235
3–24 years	104.9	85.3	41.2	7.6	-37.5	6,098	3,811
5–34 years	86.0	80.2	37.6	-0.1	-16.9	16,193	13,453
5–44 years	56.6	107.0	45.0	4.5	-0.2	8,271	8,253
5–64 years	69.3	66.4	51.5	8.0	- 3.6	1,989	1,917
Hispanic male							
lages ²	76.8	41.1	27.8	-2.2	- 31.8	7,067	4,821
2–17 years	*	24.0	41.9	-20.5	-52.2	297	142
3–24 years	75.8	32.0	44.9	-11.2	-31.7	2,088	1,426
5–34 years	78.9 52.5	40.3 67.6	18.6 17.4	-1.8 10.8	-30.0 -32.8	3,009 1,367	2,106 918
5–44 years	52.5 *	35.7	59.2	15.7	-32.8 -30.9	291	201
White female							
Il ages ²	62.7	52.4	27.1	-5.0	-37.0	13,226	8,331
2-17 years	98.5	-9.9	36.4	-16.1	-4.0	505	485
3–24 years	48.0	-9.5 49.2	29.6	-17.7	-44.2	3,908	2,179
5–34 years	67.6	58.6	21.2	-0.8	-38.9	6,740	4,120
5–44 years	84.5	72.1	45.1	11.9	-21.9	1,782	1,391
5–64 years	*	*	34.3	55.3	-33.2	220	*147
Black female							
lages ²	103.9	85.0	29.5	0.8	-16.0	17,657	14,833
2-17 years	*	112.2	17.3	-18.9	-29.8	248	*174
3–24 years	125.9	88.4	26.1	-9.7	-24.4	3,944	2,981
5–34 years	97.0	80.6	29.2	4.4	-15.0	9,714	8,257
5-44 years	105.8	84.5	38.1	7.6	-8.4	3,181	2,914
5–64 years	45.7	139.2	33.6	2.5	-4.3	465	445
Hispanic female							
lages ²	79.6	39.1	26.7	-6.1	-32.7	2,556	1,719
2–17 years	* 7c c	*	*	-30.8	-31.2	93	64
3–24 years	75.5	34.2	30.5	-16.3	-29.0	730	518 770
5–34 years	82.3 48.8	53.4 32.8	7.1 76.5	-5.5 16.7	-30.1 -42.7	1,115 557	779 319
	40.0	0Z.Q	10.0	10.7	-44.1	الان	313

¹Includes unknown race/ethnicity and/or sex.

NOTES: Prior to 1989, data from the Drug Abuse Warning Network (DAWN) were derived from a nonrandom sample of emergency rooms primarily located in 21 metropolitan areas. In 1989, DAWN data were derived from a national probability sample.

SOURCE: National Institute on Drug Abuse, Drug Abuse Warning Network.

²Includes ages under 12, over 64, and unknown.

^{*}Annual percent change based on fewer than 30 episodes in a year from the 21 metropolitan areas is considered unreliable and is not shown. National estimates with relative standard error greater than 30 percent are considered unreliable.

Table 67. Alcohol consumption status of persons 18 years of age and over, according to sex: United States, selected years 1971–88

[Data are based on interviews of samples of the noninstitutionalized population]

Sex and alcohol consumption	1971	1973	1974	1975	1976	1979	1983	1988
Both sexes				Percent o	f persons			
Abstain	36 34 20 10	34 29 23 14	36 28 28 11	36 31 21 12	33 38 19 10	33 34 24 9	39 30 21 10	43 30 19 8
Male								
Abstain Light Moderate Heavier Heavier	30 29 26 15	25 24 29 22	24 24 34 18	27 27 26 20	26 33 24 18	25 29 31 14	28 28 28 16	32 30 25 13
Female								
Abstain Light Moderate Heavier	42 40 13 5	42 35 17 6	42 32 21 5	45 35 15 4	39 44 15 3	40 38 18 4	50 30 15 4	53 30 14 3

NOTES: Data for 1971–79 are from the National Institute of Alcohol Abuse and Alcoholism's National Survey on Drinking. Data for 1983 and 1988 are from the National Health Interview Survey. Alcohol consumption status is defined in ounces of absolute alcohol (ethanol) consumed per day as follows: abstain, less than .01; light, .01–.21; moderate, .22–.99; and heavier, 1.00 or more.

SOURCES: Clark, W. B., Midanik, L., and Knupfer, G.: Report on the 1979 National Survey. University of California. Contract No. ADM 281–77–0021. Prepared for the National Institute of Alcohol Abuse and Alcoholism. Rockville, Md., Dec. 1981. Williams, G., and DeBakey, S. Changes in levels of alcohol consumption: United States, 1983 to 1988. British Journal of Addiction, (April 1992, forthcoming).

Table 68 (page 1 of 2). Elevated blood pressure among persons 20–74 years of age, according to race, sex, and age: United States, 1960–62, 1971–74, and 1976–80

[Data are based on physical examinations of a sample of the civilian noninstitutionalized population]

		All races			White			Black	
Sex and age	1960–62	1971–74	1976–80	1960–62	1971–74	1976–80	196062	1971–74	1976–80
		Pe		oulation with					
Both sexes ¹			01	diastolic pr	essure at le	ast 90 mmH	g		
20-74 years, age adjusted	37.4 38.1	38.4 38.1	38.0 37.2	36.2 37.1	37.3 37.3	37.0 36.5	48.8 48.7	49.6 47.3	46.6 43.2
20–24 years	12.9 16.2	13.5 20.0	16.1 21.3	13.1 15.3	13.7 19.2	16.0 21.2	13.1 23.4	13.7 28.2	16.9 22.8
35-44 years	30.0 44.4	32.3 46.9	33.1 47.0	28.3 42.4	29.7 45.8	31.0 45.8	44.0 60.6	54.5 57.4	47.6 58.2
45–54 years	62.3	59.4	56.7	60.9	58.4	55.2	78.9	71.8	70.5
65–74 years	73.8	70.3	63.1	73.1	69.3	61.9	85.2	80.0	71.9
Male									
20-74 years, age adjusted 20-74 years, crude	40.8 41.0	42.7 42.0	43.6 42.5	40.0 40.4	42.1 41.6	43.1 42.3	48.9 49.6	51.0 48.9	48.5 45.7
20–24 years	21.7	20.2	24.7	22.1	20.7	25.6	*18.4	18.6	22.2
25–34 years	23.3 37.4	27.5 38.1	31.1 39.5	22.3 37.0	27.2 36.0	31.3 37.7	31.9 44.2	33.6 60.5	31.7 52.8
45–54 years	47.2	52.8	51.8	46.0	53.0	51.8	56.3	53.3	49.8
55–64 years	59.3 65.9	59.3 65.4	58.7 62.0	58.2 65.0	58.9 64.0	57.6 60.6	75.1 *76.8	67.5 79.3	71.8 69.2
65–74 years	03.9	03.4	02.0	05.0	0-7.0	00.0	70.0	70.0	00.2
Female 1	34.0	34.3	32.6	32.3	32.6	31.0	49.0	48.5	45.2
20-74 years, age adjusted	35.3	34.6	32.3	34.0	33.3	31.0	47.9	46.1	41.2
20–24 years	4.2	7.1	7.8	3.8	6.9	6.5	8.7	9.3	12.2
25–34 years	9.2 22.9	12.7 26.9	11.7 27.1	8.2 19.9	11.2 23.8	11.0 24.6	17.3 43.8	24.0 49.9	15.6 43.7
35–44 years	41.8	41.5	42.4	39.0	39.1	40.1	64.8	61.0	65.6
55–64 years	65.0	59.5	54.9	63.3	57.9	53.0	82.8	75.3	69.4
65–74 years	80.3	74.1	63.9	79.8	73.4	62.9	*92.1	80.6	74.0
Dath agus 1		Pe		oulation with r diastolic pr				Нg	
Both sexes 1	10.0	10.0	18.1	17.2	18.0	17.4	32.9	32.4	24.6
20-74 years, age adjusted	18.8 19.2	19.3 19.2	17.6	17.8	18.0	17.0	32.6	30.5	22.3
20-24 years	4.3	3.7	4.9	4.3	3.7	5.0	5.1	4.5	4.3
25–34 years	5.6 13.4	6.8 15.5	8.0 13.9	4.3 11.5	6.1 13.5	7.8 12.4	14.8 29.0	13.3 31.9	9.3 24.7
35–44 years	21.4	24.3	25.1	19.1	22.2	24.1	39.5	43.7	36.1
55-64 years	31.8	33.2	28.1	30.1	31.6	26.9	50.4	52.1	39.3
65–74 years	48.7	40.9	34.5	46.9	39.5	33.9	71.9	55.7	36.7
Male							22.2	04.0	00.4
20-74 years, age adjusted	18.8 19.0	20.7 20.2	20.9 20.1	17.4 17.6	19.6 19.3	20.4 19.8	32.9 32.9	31.8 30.1	26.1 23.9
20–24 years	6.7	5.7	7.4	6.5	5.8	8.0	*9.7	5.6	4.3
25–34 years	7.8	8.9	12.2	6.1	8.3	12.2	21.8	16.1 36.8	13.4 33.9
35–44 years	16.2 21.4	19.1 26.8	17.0 28.2	14.9 19.6	17.2 25.8	15.2 28.4	28.1 34.6	36.8 37.0	27.8
55–64 years	29.3	32.5	31.2	27.4	31.2	29.8	50.3	49.5	45.5
65–74 years	40.5	36.4	33.3	38.6	35.1	32.6	*63.3	50.3	32.3

See footnote at end of table.

Table 68 (page 2 of 2). Elevated blood pressure among persons 20–74 years of age, according to race, sex, and age: United States, 1960–62, 1971–74, and 1976–80

[Data are based on physical examinations of a sample of the civilian noninstitutionalized population]

Sex and age	All races			White			Black				
	1960–62	1971–74	1976–80	1960–62	1971–74	1976–80	1960–62	1971–74	197680		
Female ¹	Percent of population with systolic pressure at least 160 mmHg or diastolic pressure at least 95 mmHg										
remale '			Ų.	ulasione pi	essure at le	asi 55 111111	ig.				
20-74 years, age adjusted	18.6	18.0	15.4	16.9	16.3	14.4	33.2	33.0	23.5		
20-74 years, crude	19.3	18.3	15.2	18.0	16.8	14.5	32.3	30.9	21.0		
20-24 years	1.9	1.9	2.5	2.1	1.7	2.0	1.3	3.5	4.4		
25–34 years	3.4	4.8	3.8	2.5	4.0	3.4	9.7	11.2	6.0		
35–44 years	10.8	12.2	11.0	8.3	10.0	9.7	29.8	28.2	17.5		
45–54 years	21.5	21.9	22.3	18.7	18.8	20.0	44.3	49.4	43.4		
55–64 years	34.1	33.9	25.2	32.5	32.0	24.3	50.5	54.2	34.2		
65–74 years	55.4	44.4	35.4	53.8	42.9	34.9	*79.0	59.8	40.0		

¹Excludes pregnant women.

^{*}Percents based on fewer than 45 persons are considered unreliable. Percents based on fewer than 25 persons are considered highly unreliable and are not shown.

NOTE: Percents are based on a single measurement of blood pressure to provide comparable data across the 3 time periods.

SOURCE: Division of Health Examination Statistics, National Center for Health Statistics: Unpublished data.

Table 69. Hypertension among persons 20–74 years of age, according to race, sex, and age: United States, 1960–62, 1971–74, and 1976–80

[Data are based on physical examinations of a sample of the civilian noninstitutionalized population]

Sex and age	All races			White			Black			
	1960–62	1971–74	1976–80	1960–62	1971–74	1976–80	1960-62	1971–74	197680	
Both sexes ¹	Percent of population									
20–74 years, age adjusted	38.5	40.0	40.6	37.1	38.7	39.4	51.4	53.5	50.5	
	39.0	39.7	39.7	37.9	38.7	38.9	51.3	51.0	46.7	
20–24 years	13.4	13.6	16.4	13.3	13.8	16.2	15.6	13.7	18.2	
	17.3	20.6	22.0	16.1	19.5	21.9	26.5	31.3	24.2	
	30.7	33.4	34.5	28.6	30.6	32.3	47.0	58.0	49.6	
	45.5	49.1	50.2	43.4	47.5	48.9	62.2	63.5	64.3	
	63.5	62.5	61.4	61.9	61.2	59.8	82.0	77.7	76.0	
65–74 years	75.7	73.5	69.7	74.9	72.5	68.5	88.1	83.8	80.7	
20–74 years, age adjusted	41.4	44.0	45.3	40.6	43.3	44.8	49.7	54.2	50.5	
	41.7	43.3	44.0	41.0	42.8	43.8	50.5	52.1	47.4	
20–24 years	21.6	20.4	24.7	22.0	20.9	25.6	*18.4	18.4	22.2	
	23.5	27.6	31.4	22.5	27.3	31.7	32.4	33.6	32.1	
	37.7	39.1	40.5	37.1	36.6	38.6	46.6	64.7	54.3	
	47.6	55.0	53.6	46.5	54.6	53.5	56.3	61.1	53.3	
	60.3	62.5	61.8	59.1	62.1	60.8	76.2	72.0	73.8	
	68.8	67.2	67.1	68.1	65.8	65.8	*76.8	81.5	75.1	
Female ¹										
20–74 years, age adjusted	35.5	36.1	36.0	33.4	34.1	34.2	53.4	52.9	50.6	
	36.6	36.5	35.6	34.9	34.9	34.2	52.0	50.2	46.1	
20–24 years	5.3	7.2	8.3	4.4	6.9	6.8	13.3	9.5	14.6	
25–34 years	11.2	13.7	12.8	9.7	11.7	12.0	22.2	29.6	17.7	
35–44 years	24.0	28.2	28.8	20.6	24.9	26.2	47.3	52.8	46.0	
45–54 years	43.4	43.6	47.1	40.6	40.9	44.5	68.1	65.6	73.9	
55–64 years	66.4	62.5	61.1	64.4	60.5	59.0	87.8	82.5	77.9	
65–74 years	81.5	78.3	71.8	80.7	77.5	70.6	*97.5	85.6	85.0	

¹Excludes pregnant women.

NOTE: A person with hypertension is defined by either having elevated blood pressure (systolic pressure of at least 140 mmHg or diastolic pressure of at least 90 mmHg) or taking antihypertensive medication. Percents are based on a single measurement of blood pressure to provide comparable data across the 3 time periods. In 1976–80, 31.3 percent of persons 20–74 years of age had hypertension, based on the average of 3 blood pressure measurements, in contrast to 39.7 percent when a single measurement is used.

SOURCE: Division of Health Examination Statistics, National Center for Health Statistics: Unpublished data.

^{*}Percents based on fewer than 45 persons are considered unreliable. Percents based on fewer than 25 persons are considered highly unreliable and are not shown.

Table 70. Borderline high and high serum cholesterol levels among persons 20–74 years of age, according to race, sex, and age: United States, 1960–62, 1971–74, and 1976–80

[Data are based on physical examinations of a sample of the civilian noninstitutionalized population]

		All races				White			Black	
Sex a	and age	1960–62	1971–74	1976–80	1960–62	1971–74	1976–80	1960–62	1971–74	1976–80
Both	sexes		F	Percent of p	opulation wi	th borderline	e high serun	n cholesterc	ı!	
	djusted	32.2 32.7	32.3 32.2	30.7 30.3	32.5 33.0	32.4 32.3	30.8 30.4	29.5 30.7	31.5 31.0	29.3 28.4
		21.5 32.1	22.5 29.4	22.1 25.9	22.7 32.6	22.3 29.7	22.1 25.9	14.7 25.1	24.9 28.5	21.5 23.9
35-44 years		39.6	35.1	32.3	39.6	35.7	32.9	42.0	29.1	29.1
		36.6 29.1	37.0 35.2	34.7 35.6	37.1 28.6	37.1 34.7	34.5 35.5	33.6 34.7	36.0 36.7	33.5 34.2
•		28.4	32.5	33.5	29.4	32.4	33.3	17.8	33.8	35.3
	lale									
20-74 years, age a	djusted	35.2 35.7	33.7 33.5	31.6 31.1	35.6 36.0	34.1 34.0	31.9 31.5	31.1 33.3	29.2 28.7	27.5 26.7
		23.3	19.6	20.4	24.1	19.6	20.7	*15.8	19.8	18.9
		33.7	30.8	28.0	34.1	31.6	28.3	24.5	25.2	22.6
		40.7	36.0	33.0	39.7	37.0	33.7	49.4	25.4	28.1
		38.2	38.0	35.2	38.9	38.0	35.5	35.4	38.6	31.8
		36.3 35.5	39.9 35.8	37.3 34.8	36.7 37.2	40.0 36.3	37.6 34.6	36.3 *14.1	33.6 32.0	29.7 35.7
Fe	male									
	ıdjusted	29.5	31.2	30.0	29.8	30.9	29.7	27.8	33.2	30.8
	·	30.0	31.0	29.6	30.2	30.7	29.4	28.4	32.9	29.9
		20.0	25.1	23.7 23.9	21.4	24.7	23.6 23.6	13.8 25.5	29.0	23.5 25.0
		30.7 38.5	28.2 34.3	23.9 31.7	31.1 39.4	27.8 34.5	23.0 32.1	25.5 35.7	31.0 31.9	29.9
		35.0	36.1	34.2	35.3	36.3	33.5	31.7	33.9	34.9
		22.3	31.0	34.0	21.0	29.9	33.7	*32.9	39.2	38.0
65–74 years		22.7	30.0	32.5	23.0	29.5	32.2	*20.7	35.2	35.0
	sexes	33.4	00 7		t of population 34.1	on with high 28.7	serum chol 28.0	lesterol 29.1	28.9	26.2
20-74 years, crude	djusted	33.6	28.7 28.2	28.0 26.8	34.6	28.4	27.2	28.4	27.2	23.8
20–24 years	• • • • • • • • • • • • • • • • • • • •	9.4	8.5	6.4	10.0	8.5	6.3	2.7	6.6	5.2
25-34 years		15.9 28.3	13.7 25.3	13.5 24.1	16.2 29.2	13.5 25.2	13.6 24.4	15.8 21.1	15.6 24.6	13.4 20.3
		43.1	38.1	38.7	43.5	38.1	38.6	42.0	39.2	40.5
		56.2	45.1	45.3	58.3	45.3	45.9	41.8	44.9	41.4
		54.8	47.7	43.0	54.5	47.7	43.6	60.2	47.8	39.3
	lale	20.0	07.0	00.0	00.0	07.4	00.0	05.0	00.0	05.7
	djusted	30.0 30.7	27.3 26.8	26.0 24.9	30.6 31.4	27.4 26.9	26.0 25.0	25.9 26.7	26.6 25.1	25.7 23.9
"		8.1	7.0	6.2	9.1	7.6	6.1	*_	1.7	2.9
25-34 years		18.6	15.8	15.3	19.5	15.5	15.0	13.9	19.4	19.3
		33.9	31.8	27.9	35.5	31.8	27.9	19.9	28.0	24.5
	• • • • • • • • • • • • • • • • • • • •	39.2	37.5	36.9	39.2	38.1 36.1	36.5 37.3	40.8 39.5	32.8 39.2	40.3 35.3
		41.6 38.0	36.2 34.7	36.8 31.7	42.3 37.5	34.4	32.4	*44.9	38.6	27.2
-	male									
20-74 years, age a	djusted	36.4	29.7	29.2	37.0	29.6	29.6	31.8	30.8	26.6
		36.3	29.6	28.5	37.5	29.8	29.2	29.9	28.8	23.7
		10.5	9.8	6.6	10.8	9.4	6.5	4.7	10.6	7.0
		13.5 23.1	11.7 19.3	11.8 20.7	13.2 23.3	11.5 18.9	12.4 21.1	17.1 22.1	12,7 22.0	8.7 16.9
		46.9	38.7	40.5	47.6	38.2	40.6	43.3	44.6	40.7
		70.1	53.1	52.9	73.0	53.7	53.7	*44.4	49.4	46.5
		68.5	57.7	51.6	68.7	57.9	52.1	*72.6	54.8	48.4

^{*}Percents based on fewer than 45 persons are considered unreliable. Percents based on fewer than 25 persons are considered highly unreliable and are not shown.

NOTES: Borderline high serum cholesterol is defined as greater than or equal to 200 mg/dl (5.17 mmol/L) but less than or equal to 239 mg/dl (6.19 mmol/L). 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 National Cholesterol Education Program Expert Panel on Detection, Evaluation and Treatment of High Blood Cholesterol in Adults, Nov. 1987. (Archives of Internal Medicine: January 1988, 148: 36–69).

SOURCE: Division of Health Examination Statistics, National Center for Health Statistics: Unpublished data.

Table 71. Overweight persons 20–74 years of age, according to race, sex, and age: United States, 1960–62, 1971–74, and 1976–80

[Data are based on physical examinations of a sample of the civilian noninstitutionalized population]

	,	All races			White			Black	
Sex and age	1960–62	1971–74	1976–80	1960–62	1971–74	1976–80	1960–62	1971–74	1976–80
Both sexes				Perc	ent of popul	ation			
20–74 years, age adjusted	25.0	25.7	26.2	24.1	24.8	25.1	32.6	35.7	37.7
	25.5	25.5	25.7	24.6	24.7	24.8	33.4	34.9	35.7
20–24 years	11.6	11.3	11.7	11.5	10.9	11.2	11.6	15.8	15.3
	18.7	20.5	20.2	17.5	19.7	19.4	31.1	29.1	26.3
	23.5	28.4	27.9	21.4	26.6	26.4	38.0	45.3	40.8
	29.4	30.0	31.7	28.6	29.1	30.2	34.3	39.4	52.1
	35.4	32.0	32.8	34.6	31.0	31.9	44.0	43.9	44.2
	33.5	31.5	32.7	33.8	31.0	31.9	31.5	37.3	46.0
Male									
20–74 years, age adjusted	23.2	24.1	24.8	23.5	24.3	24.9	21.7	25.0	27.5
	23.4	24.0	24.2	23.7	24.1	24.4	22.5	24.5	25.7
20–24 years	15.5	12.1	12.1	16.1	12.8	12.7	*8.5	8.2	5.5
	21.6	23.6	20.4	21.2	23.6	20.9	33.0	26.1	17.5
	22.8	29.4	28.9	22.0	28.9	28.2	28.6	39.3	40.9
	28.1	27.6	31.0	29.0	28.2	30.5	20.6	22.4	41.4
	26.9	24.8	28.1	28.5	24.9	28.6	17.1	25.6	26.0
	21.8	23.0	25.2	22.6	23.1	25.8	*11.7	21.6	26.4
Female									
20–74 years, age adjusted	26.5	26.9	27.4	24.4	25.0	25.2	42.9	44.5	46.1
	27.4	27.0	27.1	25.4	25.2	25.1	43.0	43.2	43.8
20–24 years	7.9	10.5	11.4	6.7	9.1	9.6	14.2	22.5	23.7
	15.9	17.6	20.0	13.9	15.9	17.9	29.6	31.5	33.5
	24.1	27.3	27.0	20.9	24.5	24.8	46.1	49.9	40.8
	30.7	32.3	32.5	28.2	29.9	29.9	47.8	53.5	61.2
	43.2	38.5	37.0	40.1	36.6	34.8	71.4	58.7	59.4
	42.9	38.0	38.5	42.8	37.0	36.5	*47.8	49.2	60.8

^{*}Based on fewer than 45 persons.

NOTES: Overweight is defined for men as body mass index greater than or equal to 27.8 kilograms/meter², and for women as body mass index greater than or equal to 27.3 kilograms/meter². These cut points were used because they represent the sex-specific 85th percentiles for persons 20–29 years of age in the 1976–80 National Health and Nutrition Examination Survey. Excludes pregnant women. Height was measured without shoes; 2 pounds are deducted from data for 1960–62 to allow for weight of clothing.

SOURCE: Division of Health Examination Statistics, National Center for Health Statistics: Unpublished data.

Table 72. Air pollution, according to source and type of pollutant: United States, selected years 1970-89

[Data are calculated emissions estimates]

Type of pollutant and year	All sources	Transportation	Stationary fuel combustion	Industrial processes	Solid waste	Other
Particulate matter		Emissi	ions in 106 metric tons	per year		
1970	18.5 10.6	1.2 1.3	4.6 2.8	10.5 5.2	1.1 0.6	1.1 0.7
1980	8.5	1.3	2.4	3.3	0.4	1.1
1984	7.4	1.3	2.1	2.8	0.3	0.9
1985	7.3	1.4	1.8	2.8	0.3	1.1
1986	6.8	1.4	1.8	2.6	0.3	0.9
1987	7.0	1.4	1.8	2.5	0.3	1.0
1988	7.5	1.5	1.7	2.7	0.3	1.3
1989	7.2	1.5	1.8	2.7	0.3	1.0
Sulfur oxides						
1970	28.4	0.6	21.3	6.4	0.0	0.1
1975	25.8	0.7	20.2	5.0	0.0	0.0
1980	23.4	0.9	18.7	3.8	0.0	0.0
1984	21.5	0.8	17.4	3.3	0.0	0.0
1985	21.1	0.9	17.0	3.2	0.0	0.0
1986	20.9	0.9	16.9	3.2	0.0	0.0
1987	20.7	0.9	16.6	3.2	0.0	0.0
1988	20.9 21.1	0.9 1.0	16.6 16.8	3.4 3.3	0.0 0.0	0.0 0.0
Nitrogen oxides						
1970	18.5	8.0	9.1	0.7	0.4	0.3
1975	19.5	9.3	9.3	0.7	0.1	0.1
1980	20.9	9.8	10.1	0.7	0.1	0.2
1984	19.8	8.8	10.2	0.6	0.1	0.2
1985	20.0	8.9	10.2	0.6	0.1	0.2
1986	19.1	8.3	10.0	0.6	0.1	0.2
1987	19.5	8.1	10.5	0.6	0.1	0.2
1988	20.0	8.1	10.9	0.6	0.1	0.3
1989	19.9	7.9	11.1	0.6	0.1	0.2
Volatile organic compounds						
1970	25.0	10.3	0.6	8.9	1.8	3.3
1975	21.1	8.8	0.6	8.3	0.9	2.5
1980	22.6	9.0	0.9	9.2	0.6	2.9
1984	21.2	8.1	1.0	8.8	0.6	2.7
1985	20.2	7.6	0.9	8.5	0.6	2.6
1986	19.1	7.2	0.9	8.1	0.6	2.3
1987	19.4	7.1	0.9	8.3	0.6	2.5
1988	19.5	6.9	0.9	8.1	0.6	2.9
1989	18.5	6.4	0.9	8.1	0.6	2.5
Carbon monoxide						
1970	101.4	74.4	4.5	8.9	6.4	7.2
1975	84.1	65.0	4.3	6.9	3.1	4.8
1980	79.6	56.1	7.4	6.3	2.2	7.6
1984	71.8	50.6	8.3	4.7	1.9	6.3
1985	69.6	47.9	7.5	4.4	2.0	7.9
1986	64.0	44.6	7.5	4.2	1.8	5.9
1987	64.2	43.3	7.6	4.3	1 . 8	7.2
1988	65.0	41.2	7.6	4.6	1.7	9.9
1989	60.9	40.0	7.8	4.6	1.7	6.8
Lead		Emissi	ons in 103 metric tons	per year		
1970	203.8	163.6	9.6	23.9	6.7	
1975	147.0 70.6	122.6 59.4	9.3 3.9	10.3 3.6	4.8 3.7	
1984	40.1	34.7	0.5	2.3	2.6	
1985	20.9	15.5	0.5	2.3	2.6	
1986	8.4	3.5	0.5	1.9	2.6	
1987	8.0	3.0	0.5	1.9	2.6	
1988	7.6	2.6	0.5	2.0	2.5	
1989	7.2	2.2	0.4	2.3	2.3	
						

NOTE: Because of modifications in methodology and use of more refined emission factors, data from this table should not be compared with data in previous editions of Health, United States.

SOURCE: Office of Air Quality Planning and Standards, Technical Support Division, National Air Data Branch: National Air Pollutant Emission Estimates, 1940–1989. EPA-450/4-91-004. U.S. Environmental Protection Agency. Research Triangle Park, N.C., Mar. 1991.

Table 73. Occupational injuries with lost workdays in the private sector, according to industry: United States, 1978–89

[Data are based on employer records from a sample of business establishments]

Industry	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
				Numbe	r of injuri	es with Ic	st workd	ays in the	ousands			
Total private sector 1	2,438.5	2,701.4	2,491.0	2,408.9	2,141.3	2,140.3	2,449.7	2,484.7	2,533.2	2,721.3	2,880.4	2,955.5
Agriculture, fishing, and forestry ¹ Mining Construction Manufacturing Transportation, communication, and	30.2	31.4	39.3	42.2	42.0	44.1	46.3	45.2	43.7	49.3	51.3	52.2
	54.5	63.9	66.2	70.8	57.1	41.7	51.4	43.9	31.6	34.6	37.1	33.9
	228.5	258.9	242.6	222.1	195.8	207.9	256.5	272.8	290.4	292.3	304.4	301.2
	1,053.2	1,152.7	1,009.5	951.0	760.1	738.6	841.8	825.1	825.4	923.2	1,007.3	1,007.4
public utilities	260.9	282.3	263.0	252.3	230.0	215.7	249.3	243.5	235.7	247.5	261.3	273.9
	180.5	200.3	191.1	177.1	166.7	159.0	179.3	188.4	195.8	203.3	214.7	230.3
	312.0	355.6	330.2	328.3	322.1	343.5	395.0	399.9	421.0	445.0	461.6	480.6
real estate	34.3	40.5	38.1	37.5	41.1	41.2	44.3	45.5	49.1	49.9	54.0	52.6
	284.4	315.7	311.1	327.5	326.3	348.5	385.8	420.6	440.4	476.0	488.6	523.4
				Injuries w	ith lost w	orkdays	per 100 fi	ull-time ei	mployees	1		
Total private sector 1	4.0	4.2	3.9	3.7	3.4	3.4	3.6	3.6	3.6	3.7	3.8	3.9
Agriculture, fishing, and forestry ¹ Mining Construction Manufacturing Transportation, communication, and	5.2	5.5	5.6	5.8	5.7	6.0	5.9	5.6	5.4	5.5	5.5	5.6
	6.4	6.7	6.4	6.2	5.4	4.4	5.3	4.7	4.1	4.8	5.1	4.8
	6.3	6.8	6.5	6.3	6.0	6.2	6.9	6.8	6.8	6.7	6.8	6.7
	5.4	5.7	5.2	4.9	4.3	4.2	4.5	4.4	4.5	5.0	5.3	5.3
public utilities	5.7	5.8	5.4	5.2	4.8	4.7	5.1	4.9	4.8	4.9	5.0	5.2
	3.9	4.0	3.8	3.5	3.4	3.2	3.4	3.5	3.6	3.7	3.8	3.9
	2.8	3.1	2.9	2.9	2.9	3.0	3.2	3.1	3.2	3.3	3.3	3.4
real estate	0.8	0.9	0.8	0.8	0.9	0.8	0.9	0.9	0.9	0.9	0.9	0.9
	2.3	2.4	2.3	2.3	2.3	2.3	2.4	2.5	2.5	2.6	2.6	2.6
				Total	lost work	days per	100 full-ti	me empl	oyees			
Total private sector 1	62.1	66.2	63.7	60.4	57.5	57.2	61.8	63.3	63.9	67.3	72.6	74.2
Agriculture, fishing, and forestry ¹ Mining Construction Manufacturing Transportation, communication, and	78.3	81.7	81.3	81.4	84.2	89.5	89.4	90.1	92.4	92.5	99.8	99.4
	142.3	149.8	162.8	145.7	136.7	124.1	159.3	144.3	124.4	142.5	150.3	134.7
	108.1	119.2	116.1	112.1	114.6	117.3	126.7	128.1	133.3	134.9	141.1	141.6
	82.3	87.3	84.0	79.4	72.4	70.4	74.2	76.2	80.2	87.9	96.4	98.7
public utilities Wholesale trade Retail trade Finance, insurance, and	101.3	106.1	103.3	100.0	95.8	94.4	104.2	106.3	101.0	107.1	117.5	120.0
	56.8	58.2	57.1	53.5	51.6	50.1	54.8	59.1	62.0	63.2	68.4	70.7
	39.1	44.1	44.1	40.8	42.1	46.3	47.9	46.2	50.0	52.2	56.2	59.0
real estate	12.1	12.9	11.6	11.3	12.8	12.4	13.2	14.6	16.0	13.8	16.3	16.5
	35.4	37.1	34.5	34.7	35.1	36.2	40.3	44.7	42.2	44.8	47.1	49.9

¹Excludes farms with fewer than 11 employees.

NOTES: Industry is coded based on various editions of the Standard Industrial Classification Manual as follows: data for 1978 are based on the 1972 Edition; data for 1979–87 are based on the 1972 Edition, 1977 Supplement; and data for 1988–89 are based on the 1987 Edition (see Appendix II).

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor: Occupational Injuries and Illnesses in the United States by Industry, 1978-89 Editions, 1980-1991.

Table 74. Production employees with potential exposure to elemental lead or to continuous noise, according to industry and size of facility: United States, 1972–74 and 1981–83

[Data are based on interviews of a sample of nonagricultural businesses]

	All fac	cilities	8–99 en	nployees	100–499 e	employees	500 or more	e employees
Industry	1972–74	1981–83	1972–74	1981–83	1972–74	1981–83	1972-74	1981–83
			Nı	umber of em	ployees in th	ousands		
All production employees ¹	28,379	19,546	9,957	7,303	8,331	6,091	10,091	6,151
Textile mill products	246	546	94	82	109	261	*43	203
Apparel and other textile mill products	920	991	515	345	367	482	*38	*164
Lumber and wood products	217	442	105	230	85	143	*27	*70
Printing and publishing	1,248	636	365	283	306	218	578	135
Chemicals and allied products	964	462	193	106	192	132	579	224
Rubber and miscellaneous plastics	508	473	132	165	171	204	205	104
Stone, clay, and glass products Primary metals industries	687 1,322	382 556	173 112	175 96	300	124 212	*214	*83
Fabricated metal products	1,441	967	515	393	215 522	379	995 404	248 194
Machinery, except electrical	1,529	1,270	271	418	359	338	900	513
Electrical and electronic machinery,	1,020	1,210	2,1	410	000	000	300	515
equipment, and supplies	1,493	964	97	143	326	327	1,070	494
Transportation equipment	1,160	837	95	95	131	155	935	587
Measuring, analyzing, and controlling instruments; photographic, medical,	.,							007
and optical goods; watches and clocks	392	328	91	66	74	92	227	170
Miscellaneous manufacturing industries	393	360	140	109	159	104	*93	*147
		Percer	nt of employ	ees with any	potential ex	posure to ele	mental lead	
All production employees 1	0.6	3.6	0.4	3.4	0.4	4.0	0.9	3.6
Textile mill products	-	0.1	_	0.1	_	0.2	*_	0.3
Apparel and other textile mill products	0.1	0.6	0.0	0.1	_	0.7	*_	*1.1
Lumber and wood products	_	0.6	_	0.7	_	0.4	*_	*0.5
Printing and publishing	1.7	2.0	3.1	2.9	1.0	1.0	1.2	1.6
Chemicals and allied products	1.1	4.4	0.4	1.9	2.6	5.2	8.0	5.1
Rubber and miscellaneous plastics	0.2	2.0	0.1	3.7	0.2	0.6	0.5	2.1
Stone, clay, and glass products	1.7	4.0	0.3	2.7	1.2	0.5	*3.5	*12.3
Primary metals industries	0.5	3.0	0.3	3.6	0.2	4.9	0.7	1.1
Fabricated metal products	0.2	4.8	0.1	0.8	0.4	9.8	0.1	3.2
Machinery, except electrical Electrical and electronic machinery,	0.7	6.1	0.3	3.8	1.2	8.8	0.6	6.1
equipment, and supplies	1.2	18.5	0.4	23.4	2.1	15.8	1.0	18.9
Transportation equipment	1.1	1.1	0.9	_	0.5	0.3	1.2	1.5
Measuring, analyzing, and controlling								
instruments; photographic, medical,								
and optical goods; watches and clocks	1.0	_	2.9	_	0.7	_	0.4	_
Miscellaneous manufacturing industries	0.5	4.8	1.1	6.2	0.1	3.0	*0.2	*5.0
	Perc	ent of emplo	oyees with p	otential exp	osure to conf	inuous noise	at 85 dBA or	greater
All production employees 1	22.4	21.2	14.7	17.3	24.4	24.9	28.3	22.0
Textile mill products	36.2	48.0	29.1	36.4	43.0	51.6	*34.2	48.2
Apparel and other textile mill products	21.4	15.2	20.5	5.8	23.2	16.5	*14.9	*31.4
Lumber and wood products	42.8	44.4	48.9	45.0	28.9	53.3	*63.1	*24.4
Printing and publishing	24.0	24.4	20.4	19.5	12.0	26.0	32.7	32.0
Chemicals and allied products	13.1	22.2	15.3	14.8	22.8	19.7	9.1	27.2
Rubber and miscellaneous plastics	52.9	28.7	48.9	20.0	55.4	33.7	53.4	32.4
Stone, clay, and glass products	32.6	24.7	28.1	22.2	38.9	29.6	*27.3	*27.3
Primary metals industries	53.5	48.4	45.2	33.4	68.0	53.2	51.3	50.2
Fabricated metal products	49.5	34.9	40.6	33.0	55.6	34.8	53.0	38.5
Machinery, except electrical	31.1	18.1	28.2	17.3	29.0	19.7	32.8	17.6
Electrical and electronic machinery, equipment, and supplies	13.1	10.8	6.7	9.0	17 4	7.0	10.0	10.6
Transportation equipment	48.3	28.5	6.7 24.2	9.9 32.4	17.4 48.9	7.2 32.5	12.3 50.6	13.6
Measuring, analyzing, and controlling	+0.3	20.3	44.6	JZ.4	₩0.8	32.5	50.6	26.8
instruments; photographic, medical,								
and optical goods; watches and clocks	14.5	14.5	2.2	7.6	16.9	6.1	18.6	22.0
		10.9	22.7	16.3	34.6	٠, ١	. 5.0	*1.0

 $^{^{1}\}mbox{Production}$ employees work in locations where production or service work is conducted.

^{*}Based on fewer than 10 facilities.

NOTES: Data are displayed for elemental lead (Chemical Abstract Number 7439921) only. These data do not include potential exposures to lead in approximately 150 compounds also measured in the surveys. Industry categories are based on the Standard Industrial Classification (SIC) Manual. For a listing of the code numbers, see Appendix II, table VI.

SOURCE: National Institute for Occupational Safety and Health: Unpublished data from the 1972-74 National Occupational Hazard Survey and 1981-83 National Occupational Exposure Survey.

Table 75. Health and safety services available in nonagricultural industries, according to size of facility: United States, 1972-74 and 1981-83

[Data are based on interviews of a sample of nonagricultural businesses]

	All fac	cilities	8–99 em	ployees	100–499 e	employees	500 or more employees	
Health and safety services available in facility	1972–74	1981–83	1972-74 ¹	1981–83	1972–74	1981–83	1972–74	1981–83
			Nu	mber of em	ployees in th	ousands		
All employees	38,263	33,413	15,394	11,083	10,883	9,870	11,985	12,460
Occupational health and safety practices				Percent	of employee	es		
Regularly monitor environmental conditions ²	21.7	48.5	2.5	11.2	12.1	43.6	55.2	85.7
areas ³	39.2 52.5	53.4 80.2	32.5 41.9	45.9 70.4	46.1 60.1	59.1 82.9	41.4 59.4	55.5 86.8
Medical facilities and practices								
Health unit at facility	31.5 70.7 18.8 17.0 38.5 14.4 5.1 3.0	43.0 77.2 26.6 52.7 49.9 30.5 16.7 14.5	3.3 49.0 1.2 17.5 12.8 6.0 1.4 1.3	3.8 53.2 1.3 50.5 20.0 8.4 5.0 4.0	18.4 76.2 4.3 25.2 35.2 13.5 3.7 3.7	31.7 79.1 8.2 67.1 47.1 26.7 16.8 9.9	79.6 93.5 52.7 8.8 74.5 25.9 11.1 4.7	86.9 96.9 63.7 43.2 78.4 53.1 26.6 27.4
showing type of illness	14.2	17.6	4.7	9.5	9.5	18.3	30.8	24.1

SOURCE: National Institute for Occupational Safety and Health, National Occupational Exposure Survey: Analysis of Management Interview Responses. DHHS Pub. No. (NIOSH) 89-103. Public Health Service. Washington. U.S. Government Printing Office, 1989.

¹Includes facilities with fewer than eight employees.
²Monitoring environmental conditions such as presence of tumes, gases, dust, noise, vibration, and radiation.

³Includes respirators, protective clothing, etc.

Table 76. Physician contacts, according to place of contact and selected patient characteristics: United States, 1985 and 1990

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

	Place of contact												
	-	sician tacts			tor's ice	outp	spital atient tment ¹	Telep	ohone	Но	me	Oti	her²
Characteristic	1985	1990	Total	1985	1990	1985	1990	1985	1990	1985	1990	1985	1990
	Number p	er person					Percen	t distrib	ution				
Total ^{3,4}	5.2	5.5	100.0	57.5	59.9	14.7	13.7	13.9	12.7	1.9	2.1	12.0	11.6
Age													
Under 15 years Under 5 years 5–14 years 15–44 years 45–64 years 65 years and over 65–74 years 75 years and over	4.5 6.7 3.3 4.6 6.1 8.3 7.7 9.3	4.5 6.9 3.2 4.8 6.4 9.2 8.5 10.1	100.0 100.0 100.0 100.0 100.0 100.0 100.0	58.3 57.1 59.5 56.0 58.5 59.4 60.8 57.6	60.7 59.1 62.6 59.4 60.4 58.7 60.2 56.8	13.9 13.1 14.7 15.1 16.1 12.1 13.8 9.8	13.6 14.0 13.1 14.3 14.1 11.1 13.7 7.8	17.0 19.6 14.1 13.2 12.4 10.6 10.6 10.7	14.9 15.9 13.7 12.0 12.2 9.9 9.7 10.2	1.0 *0.8 *1.2 1.0 2.1 8.2 4.4 13.4	0.9 *1.1 *0.6 0.6 2.0 11.8 7.0 18.1	9.9 9.5 10.4 14.7 10.9 9.6 10.4 8.5	9.9 9.8 10.0 13.7 11.4 8.4 9.4 7.0
Sex ³													
Male	4.5 5.9	4.7 6.1	100.0 100.0	56.8 57.9	57.6 61.6	17.6 12.8	16.1 12.2	11.4 15.5	11.3 13.4	1.9 1.9	2.1 2.0	12.3 11.9	12.9 10.9
Race ³													
White	5.3 4.9	5.6 5.1	100.0 100.0	58.8 48.2	61.7 48.2	13.2 24.9	12.3 24.3	14.7 8.0	13.1 9.1	1.8 2.7	1.9 2.8	11.5 16.2	11.0 15.6
Family income 3,5													
Less than \$14,000	5.8 5.1 5.4 5.1 5.5	6.3 5.6 5.2 5.7 5.6	100.0 100.0 100.0 100.0 100.0	49.2 54.8 59.1 60.6 62.8	48.9 56.9 60.9 62.0 66.1	19.8 16.5 13.7 13.0 10.8	19.9 16.0 13.8 11.5 8.9	10.3 14.6 14.2 15.6 15.6	11.5 11.8 13.2 14.6 14.1	3.3 1.8 1.2 0.4 1.4	3.2 1.7 1.6 1.1 1.5	17.4 12.4 11.7 10.5 9.4	16.4 13.5 10.4 10.9 9.5
Geographic region ³													
Northeast	5.1 5.3 5.0 5.6	5.2 5.3 5.6 5.6	100.0 100.0 100.0 100.0	57.9 55.2 60.0 56.0	62.6 55.8 61.1 60.4	16.4 14.7 14.0 13.9	13.0 14.7 13.6 13.6	12.6 16.2 12.8 14.0	11.7 15.4 11.3 12.8	2.3 1.7 2.0 1.6	1.9 1.9 2.6 1.4	10.8 12.1 11.3 14.4	10.8 12.3 11.3 12.0
Location of residence ³													
Within MSA	5.3 4.8	5.6 4.9	100.0 100.0	56.5 61.2	59.6 61.4	14.8 14.3	13.7 14.1	14.3 12.1	13.1 10.7	1.7 2.3	1.9 2.6	12.6 10.2	11.7 11.2

¹Includes hospital outpatient clinic, emergency room, and other hospital contacts.

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Data from the National Health Interview Survey.

²Includes clinics or other places outside a hospital.

³Age adjusted.

⁴Includes all other races not shown separately and unknown family income.

Family income categories for 1990. Income categories for 1985 are less than \$11,000; \$11,000–\$19,999; \$20,000–\$29,999; \$30,000–\$39,999; and \$40,000 or more.

^{*}Relative standard error greater than 30 percent.

Table 77. Interval since last physician contact, according to selected patient characteristics: United States, 1964, 1985, and 1990

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

		Le	ss than 1 y	ear		1 year–less than 2 years		<i>2</i> y	ears or mo	re¹
Characteristic	Total	1964	1985	1990	1964	1985	1990	1964	1985	1990
					Percent di	stribution ²				
Total ^{3,4}	100.0	66.9	75.8	78.2	14.0	10.8	10.1	19.1	13.4	11.7
Age										
Under 15 years Under 5 years 5–14 years 15–44 years 45–64 years 65 years and over 65–74 years 75 years and over	100.0 100.0 100.0 100.0 100.0 100.0 100.0	68.4 80.7 61.7 66.3 64.5 69.7 68.8 71.3	80.4 92.3 74.0 71.2 74.4 84.5 83.0 86.9	82.9 93.6 77.2 73.3 77.3 87.1 85.7 89.3	14.8 11.1 16.9 15.0 13.0 9.3 9.4 9.3	11.7 5.8 14.7 12.2 9.2 5.6 5.8 5.3	10.7 5.0 13.7 11.6 8.6 4.7 5.1 4.1	16.7 8.2 21.4 18.7 22.5 21.0 21.8 19.5	8.0 1.8 11.2 16.6 16.5 9.9 11.2 7.7	6.4 1.4 9.1 15.0 14.1 8.2 9.1 6.6
Sex ³										
Male Female	100.0 100.0	63.5 69.9	71.0 80.3	73.3 82.9	15.0 13.1	11.8 9.8	11.3 9.0	21.5 17.0	17.2 9.9	15.4 8.1
Race ³										
White	100.0 100.0	68.1 58.3	76.2 74.4	78.7 77.5	13.8 15.1	10.6 12.2	9.9 11.0	18.1 26.6	13.2 13.5	11.5 11.6
Family income 3,6										
Less than \$14,000. \$14,000-\$24,999. \$25,000-\$34,999. \$35,000-\$49,999. \$50,000 or more	100.0 100.0 100.0 100.0 100.0	58.6 62.5 66.8 70.2 73.6	74.4 73.8 75.7 77.9 80.0	77.3 76.7 78.7 80.1 81.7	13.2 14.2 14.5 14.0 12.9	10.4 11.6 10.8 9.6 9.9	9.8 10.2 10.0 9.4 8.9	28.2 23.3 18.7 15.7 13.5	15.2 14.7 13.5 12.5 10.0	12.9 13.2 11.4 10.4 9.4
Geographic region ³										
Northeast	100.0 100.0 100.0 100.0	68.0 66.6 65.2 69.0	78.3 76.1 74.0 76.1	81.6 79.5 76.0 77.5	14.1 14.2 13.9 13.7	9.4 10.5 12.0 10.5	9.1 9.6 11.3 9.4	17.9 19.2 20.9 17.3	12.3 13.4 14.0 13.4	9.3 10.9 12.7 13.1
Location of residence ³										
Within MSA	100.0 100.0	68.2 64.0	76.6 73.1	79.0 75.7	14.0 14.1	10.4 11.9	9.7 11.4	17.8 21.9	13.0 15.0	11.3 12.9

¹Includes persons who never visited a physician.

²Denominator excludes persons with unknown interval.

³Age adjusted.

findludes all other races not shown separately and unknown family income. 51964 data include all other races.

⁶Family income categories for 1990. Income categories in 1964 are less than \$2,000; \$2,000-\$3,999; \$4,000-\$6,999; \$7,000-\$9,999; and \$10,000 or more; and, in 1985 are less than \$11,000; \$11,000-\$19,999; \$20,000-\$29,999; \$30,000-\$39,999; and \$40,000 or more.

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Data from the National Health Interview Survey.

Table 78. Office visits to physicians, according to physician specialty and selected patient characteristics: United States, 1985 and 1989

[Data are based on reporting by a sample of office-based physicians]

		All s	specialties ¹			neral and ly practice		nternal edicine	Ped	liatrics
Characteristic	1985	1989	1985	1989	1985	1989	1985	1989	1985	1989
		s per son²		r of visits usands	·		Percen	t of visits		
Total	2.71	2.81	636,386	692,702	100.0	100.0	100.0	100.0	100.0	100.0
Age										
Under 15 years	2.31 2.28	2.55 2.27	118,768 249,688	137,502 259,460	15.3 42.5	15.8 39.7	3.5 28.1	1.6 30.9	90.1 8.8	93.6 5.8
45–64 years	3.10	3.15	137,391	145,160	22.7	23.2	29.3	29.0		
65 years and over	4.85	5.15	130,538	150,580	19.6	21.2	39.2	38.5		
65–74 years	4.54	4.69	75,427	83,692	11.2	11.8	22.7	20.0		
75 years and over	5.35	5.87	55,111	66,888	8.4	9.5	16.5	18.6		
Sex										
Male	2.28	2.39	248,905	275,206	39.3	39.3	38.9	42.1	48.0	52.4
Female	3.11	3.20	387,481	417,496	60.7	60.7	61.1	58.0	52.0	47.6
Race										
White	2.84	2.81	572,507	587,976	88.4	88.1	91.7	83.3	89.4	84.2
Black	1.93	2.16	52,143	62,146	9.5	8.8	7.4	12.9	8.1	11.5
	Gei	neral			Ortho	pedic				
	sur	gery	Ophtha	lmology		gery	Dermate	ology	Otolaryn	gology
Characteristic	1985	1989	1985	1989	1985	1989	1985	1989	1985	1989
					Percent	of visits				
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Age										
Under 15 years	5.6	4.1	7.6	5.7	10.8	9.8	7.0	9.0	25.8	20.4
15-44 years	36.8	33.2	24.4	18.9	48.7	48.8	53.0	46.9	35.1	36.4
45–64 years	30.4	32.3	24.2	22.9	26.6	23.9	21.7	23.3	22.1	22.3
65 years and over	27.2	30.4	43.8	52.6	13.9	17.5	18.3	20.9	17.0	20.9
65–74 years	16.0 11.1	18.5 11.9	21.1 22.8	24.7 27.9	8.5 5.4	10.1 7.4	10.9 7.4	11.9 9.0	11.2 5.8	11.9 9.0
•	11.1	11.5	22.0	21.0	0.4	7.4	7.4	3.0	5.0	3.0
Sex										
Male	39.9	39.5	39.3	39.6	51.6	52.1	45.5	40.8	47.3	43.8
Female	60.1	60.5	60.7	60.4	48.4	47.9	54.5	59.3	52.8	56.2
Race										
White	88.2	82.6	91.6	91.9	90.2	88.0	92.0	92.2	93.9	90.3
Black	10.9	15.1	6.1	5.2	8.0	9.8	6.9	4.7	4.8	6.3

¹Includes other specialties not shown separately.

NOTES: Rates are based on the civilian noninstitutionalized population. In 1985 the survey excluded Alaska and Hawaii. In 1989 the survey was redesigned and included all 50 States.

SOURCE: Division of Health Care Statistics, National Center for Health Statistics: Data from the National Ambulatory Medical Care Survey.

²Total, sex-specific, and race-specific data are age-adjusted.

Table 79. Office visits to physicians, according to selected patient and visit characteristics and physician specialty: United States, 1985 and 1989

[Data are based on reporting by a sample of office-based physicians]

			atient's rst visit		10	sit lasted) minutes or less¹			Return vi	
Characteristic		1985	198		1985	1	989	1985		1989
					Perc	ent of visits				
Total ²		17.7	17.	.5	42.6	2	11.3	58.8		58.1
Age										
Under 15 years		17.8 20.8 14.8 10.5 11.2 9.6	15 21 15 9 11 8	.8 .1 .7 .0	50.8 41.6 36.3 35.6 34.6 36.9	3 3 3	52.2 39.9 32.9 32.3 32.2 32.4	49.2 58.9 65.6 72.8 72.6 73.1		45.0 59.2 66.7 74.6 74.1 75.3
Sex ²										
Male Female		19.5 16.9	20 16		43.3 42.2		11.6 11.1	56.7 59.8		56.1 59.0
Race ²										
White		17.4 20.1	16 22		42.3 45.0		11.0 11.1	58.4 62.2		57.8 61.5
		ull ialties	Gener family p	al and oractice		rnal licine	Pedia	ıtrics³		neral gery
Characteristic	1985	1989	1985	1989	1985	1989	1985	1989	1985	1989
			Pero	ent of visits	with drug ac	dministered	or prescrib	ed		
Total ²	60.4	59.8	71.2	69.3	72.7	67.9		,	37.2	32.8
Age										
Under 15 years	62.0 55.9 63.4 68.2 67.1 69.7	63.0 55.3 61.9 64.2 62.6 66.3	68.1 68.6 76.1 81.2 80.2 82.5	64.9 68.5 73.7 76.1 75.3 77.1	68.1 70.6 79.3 81.7 81.0 82.7	56.6 69.0 75.4 81.2 78.7 83.9	67.0 63.1 	67.3 61.7 	37.9 35.6 35.3 46.1 43.5 49.9	36.2 30.6 29.2 39.7 39.3 40.2
Sex ²										
Male	59.0 61.3	58.2 60.9	69.2 72.5	67.5 70.3	67.9 76.1	66.9 69.1	67.0 67.0	65.5 69.2	39.2 35.2	32.0 33.8
Race ²										
WhiteBlack	59.7 67.0	59.4 63.9	70.1 78.7	69.8 73.1	72.6 75.0	68.1 83.9	66.6 70.5	66.0 73.5	36.7 42.0	31.0 45.7

¹Time spent in face-to-face contact between physician and patient.

²Age adjusted.

³Data shown by sex and race are for children under 15 years of age.

NOTES: Rates are based on the civilian noninstitutionalized population. In 1985 the survey excluded Alaska and Hawaii. In 1989, the survey was redesigned and included all 50 States.

SOURCE: Division of Health Care Statistics, National Center for Health Statistics: Data from the National Ambulatory Medical Care Survey.

Table 80. Dental visits and interval since last visit, according to selected patient characteristics: United States, 1964, 1983, and 1989

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

					Interva	l since la	ast dent	al visit¹				
	D	ental visi	ts	Less	than 1	year	2 ye	ears or n	nore	Neve	r visited c	lentist
Characteristic	1964	1983	1989	1964	1983	1989	1964	1983	1989	1964	1983	1989
	Numl	per per pe	erson				Perc	ent of po	pulation)		
Total ^{2,3,4}	1.6	1.9	2.1	42.7	55.3	57.7	28.7	24.1	21.4	15.5	7.7	6.4
Age												
2–14 years ⁴ 2–4 years ⁴ 5–14 years 15–44 years 45–64 years 65 years and over 75 years and over	1.3 0.3 1.9 1.9 1.7 0.8 0.9 0.6	2.0 0.7 2.5 1.9 2.0 1.5 1.8	2.1 0.9 2.5 2.0 2.4 2.0 2.2 1.8	39.6 11.1 55.1 51.8 39.1 21.5 24.9 14.9	57.9 28.4 67.3 58.5 53.1 38.6 43.2 31.1	60.5 32.1 69.5 59.7 56.8 43.2 47.6 36.3	5.4 0.3 8.2 26.9 46.3 69.0 65.2 76.3	7.6 1.0 9.7 24.3 34.3 51.3 46.9 58.4	6.6 1.0 8.4 22.8 28.9 43.7 39.7 50.0	46.6 87.0 24.6 4.0 1.3 1.5 1.1	23.5 64.2 10.5 1.7 0.6 0.9 0.8 1.0	19.7 55.0 8.6 1.4 0.4 0.5 0.4
Sex ²												
Male	1.4 1.7	1.7 2.1	2.0 2.3	40.9 44.4	53.3 57.2	55.4 60.0	29.6 28.0	25.7 22.7	23.2 19.6	16.1 15.0	7.9 7.6	6.7 6.1
Race ²												
White	1.7 0.8	2.0 1.2	2.3 1.2	45.3 22.3	57.5 41.1	60.0 44.0	27.8 37.6	23.0 32.2	20.2 29.5	13.8 28.0	7.2 10.3	6.1 7.7
Family income ^{2,6}												
Less than \$14,000	0.9 0.9 1.4 1.9 2.7	1.2 1.5 2.2 2.5 2.9	1.3 1.6 2.2 2.7 3.1	26.4 30.0 39.7 50.1 63.9	40.4 46.7 58.4 68.2 75.3	41.9 49.5 60.3 69.7 76.1	35.4 35.2 30.6 25.3 16.8	35.2 29.7 22.2 16.2 12.2	33.7 27.5 20.3 15.1 10.6	27.4 22.0 15.8 10.9 7.2	11.2 9.8 7.2 4.5 3.6	9.6 7.8 6.3 4.5 3.4
Geographic region ²												
Northeast Midwest South West	2.1 1.6 1.2 1.7	2.4 1.9 1.6 2.0	2.2 2.1 1.8 2.4	48.5 44.6 35.8 43.8	61.5 58.0 49.2 55.9	61.4 62.2 52.5 58.0	26.1 29.3 30.9 27.9	20.9 23.4 27.3 23.3	17.9 20.1 25.4 19.7	12.5 12.9 20.9 14.3	5.7 6.1 10.0 8.0	4.8 5.0 8.0 6.7
Location of residence ²												
Within MSAOutside MSA	1.8 1.2	2.1 1.6	2.2 1.7	44.9 37.8	57.4 51.0	58.8 54.2	27.5 31.8	22.4 27.6	20.2 25.5	14.4 17.9	7.2 8.6	6.2 6.8

Percent not shown for an interval of 1 year-less than 2 years. Denominators exclude persons with unknown interval (5.2 percent in 1989).

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Data from the National Health Interview Survey,

²Age adjusted.

Again and a special stress of the special spec

age are included.

51964 data are for all other races.

6Family income categories for 1989. Income categories in 1964 are: less than \$2,000; \$2,000–\$3,999; \$4,000–\$6,999; \$7,000–\$9,999; and \$10,000 or more; and, in 1983 are: less than \$10,000; \$10,000–\$18,999; \$19,000–\$29,999; \$30,000–\$39,999; and \$40,000 or more.

Table 81. Discharges, days of care, and average length of stay in short-stay hospitals, according to selected characteristics: United States, 1964, 1985, and 1990

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

		Discharges	;		Days of care)	Aver	age length o	f stay
Characteristic	1964	1985	1990	1964	1985	1990	1964	1985	1990
			Number pe	r 1,000 popul	ation		N	lumber of day	/S
Total 1,2	109.1	105.2	91.0	970.9	749.1	607.1	8.9	7.1	6.7
Age									
Under 15 years Under 5 years 5–14 years 15–44 years 45–64 years 65 years and over 65–74 years 75 years and over	67.6 94.3 53.1 100.6 146.2 190.0 181.2 206.7	51.2 81.4 35.1 73.1 162.1 281.5 247.4 336.5	46.7 79.9 29.0 62.6 135.7 248.8 215.4 300.6	405.7 731.1 229.1 760.7 1,559.3 2,292.7 2,150.4 2,560.4	269.9 413.9 193.1 411.0 1,291.2 2,454.7 2,072.3 3,071.5	271.3 496.4 150.8 340.5 911.5 2,092.4 1,719.3 2,669.9	6.0 7.8 4.3 7.6 10.7 12.1 11.9	5.3 5.1 5.5 5.6 8.0 8.7 8.4 9.1	5.8 6.2 5.2 5.4 6.7 8.4 8.0 8.9
Sex ¹									
Male	103.8 113.7	107.4 103.8	91.0 91.7	1,010.2 933.4	795.8 708.3	622.7 592.9	9.7 8.2	7.4 6.8	6.8 6.5
Race ¹									
White	112.4 84.0	105.1 115.2	89.5 112.0	961.4 1,062.9	729.5 983.1	580.9 875.9	8.6 12.7	6.9 8.5	6.5 7.8
Family income 1,4									
Less than \$14,000 . \$14,000—\$24,999 . \$25,000—\$34,999 . \$35,000—\$49,999 . \$50,000 or more	102.4 116.4 110.7 109.2 110.7	139.1 115.6 106.7 98.5 81.0	142.2 98.4 85.1 73.2 72.5	1,051.2 1,213.9 939.8 882.6 918.9	1,191.9 838.3 699.4 605.7 489.1	1,141.2 594.5 560.6 380.3 446.2	10.3 10.4 8.5 8.1 8.3	8.6 7.3 6.6 6.1 6.0	8.0 6.0 6.6 5.2 6.2
Geographic region 1									
Northeast	98.5 109.2 117.8 110.5	97.5 108.8 116.7 89.0	84.9 91.5 106.4 70.5	993.8 944.9 968.0 985.9	790.3 787.2 832.8 499.0	623.4 570.8 713.6 444.6	10.1 8.7 8.2 8.9	8.1 7.2 7.1 5.6	7.3 6.2 6.7 6.3
Location of residence 1									
Within MSAOutside MSA	107.5 113.3	101.7 117.1	85.9 109.5	1,015.4 871.9	736.7 795.9	599.6 636.0	9.4 7.7	7.2 6.8	7.0 5.8

¹Age adjusted.

NOTE: Excludes deliveries

SOURCE: Division of Health Interview Statistics, National Center for Health Statistics: Data from the National Health Interview Survey.

²Includes all other races not shown separately and unknown family income.

³¹⁹⁶⁴ data include all other races.

⁴Family income categories for 1990. Income categories in 1964 are less than \$2,000; \$2,000–\$3,999; \$4,000–\$6,999; \$7,000–\$9,999; and \$10,000 or more; and, in 1985 are less than \$11,000; \$11,000–\$19,999; \$20,000–\$29,999; \$30,000–\$39,999; and \$40,000 or more.

Table 82. Discharges, days of care, and average length of stay in non-Federal short-stay hospitals, according to selected characteristics: United States, 1980–90

Characteristic	1980¹	1981	1982	1983	1984	1985	1986	1987	1988²	1989²	1990²
				Discha	rges per	1,000 pop	ulation				
Total ³	159.1	160.2	158.5	157.1	148.2	138.0	132.8	127.9	117.8	115.5	113.1
Sex ³											
Male Female	140.1 178.1	141.0 179.5	140.5 176.5	139.9 174.4	131.8 164.7	123.5 152.7	119.8 146.2	115.0 141.2	105.8 130.2	103.9 127.4	99.6 126.9
Age											
Under 15 years	71.6 150.2 194.8 383.7 315.9 489.1	72.9 148.7 195.3 396.5 330.0 498.4	71.2 145.0 195.5 398.8 324.2 511.4	70.8 140.3 192.2 412.7 334.2 529.3	62.0 132.2 183.3 400.4 319.6 520.1	57.2 125.1 169.5 368.3 294.9 476.5	53.5 118.9 162.2 367.3 296.8 470.5	51.3 115.1 156.9 350.5 280.9 451.6	49.2 104.0 140.5 334.1 262.8 436.5	48.2 102.8 135.0 330.2 257.3 433.6	43.9 101.7 133.1 327.1 253.9 430.0
Geographic region ³											
Northeast	148.4 176.4 166.2 138.0	146.5 179.9 165.2 141.1	145.9 176.0 165.2 138.2	144.2 167.9 167.7 139.6	135.1 156.7 159.5 132.3	129.7 143.5 143.4 131.0	124.1 139.8 136.3 127.8	118.9 135.3 127.9 128.6	126.5 120.2 118.9 103.6	125.1 116.8 119.0 98.3	121.5 114.7 119.1 92.6
				Da	ys of care	e per 1,00	0 populat	ion			
Total ³	1,136.5	1,134.0	1,101.7	1,068.8	960.1	877.1	833.1	808.7	754.8	732.2	709.5
Sex ³											
Male Female			1,047.6 1,157.7	1,025.7 1,115.7	917.6 1,005.8	841.2 914.7	803.4 865.0	789.2 831.1	739.6 772.6	720.8 746.6	681.0 738.7
Age											
Under 15 years		337.1 769.6 1,564.0 4,155.3 3,259.2 5,529.3	326.4 742.0 1,536.7 4,026.2 3,101.1 5,423.5	323.4 707.5 1,460.6 4,004.3 3,069.5 5,392.7	277.7 647.3 1,316.8 3,574.8 2,711.0 4,855.5	260.8 603.6 1,192.8 3,215.1 2,417.8 4,389.4	244.7 575.7 1,101.4 3,120.7 2,363.8 4,227.9	240.6 556.9 1,068.6 3,029.9 2,294.4 4,097.8	245.3 493.1 955.3 2,970.0 2,214.8 4,054.3	234.3 481.1 903.7 2,930.4 2,115.5 4,087.4	212.4 466.2 898.2 2,834.6 2,026.3 3,972.2
Geographic region ³											
Northeast	1,217.3 1,309.4 1,114.5 844.6	1,190.2 1,306.7 1,112.9 859.3	1,149.8 1,283.0 1,083.3 825.7	1,115.6 1,184.4 1,087.1 821.9	1,012.3 1,059.9 962.9 756.5	963.1 955.7 851.4 717.9	877.6 914.2 817.6 703.0	847.1 885.3 781.5 712.5	928.7 749.3 729.0 606.7	918.1 727.7 731.5 537.0	887.2 715.7 707.2 513.3
				A	Average le	ength of st	tay in day	s			
Total ³	7.1	7.1	7.0	6.8	6.5	6.4	6.3	6.3	6.4	6.3	6.3
Sex ³											
Male Female	7.7 6.7	7.6 6.7	7.5 6.6	7.3 6.4	7.0 6.1	6.8 6.0	6.7 5.9	6.9 5.9	7.0 5.9	6.9 5.9	6.8 5.8
Age											
Under 15 years	4.4 5.2 8.2 10.7 10.0 11.4	4.6 5.2 8.0 10.5 9.9 11.1	4.6 5.1 7.9 10.1 9.6 10.6	4.6 5.0 7.6 9.7 9.2 10.2	4.5 4.9 7.2 8.9 8.5 9.3	4.6 4.8 7.0 8.7 8.2 9.2	4.6 4.8 6.8 8.5 8.0 9.0	4.7 4.8 6.8 8.6 8.2 9.1	5.0 4.7 6.8 8.9 8.4 9.3	4.9 4.7 6.7 8.9 8.2 9.4	4.8 4.6 6.7 8.7 8.0 9.2
Geographic region ³											
Northeast	8.2 7.4 6.7 6.1	8.1 7.3 6.7 6.1	7.9 7.3 6.6 6.0	7.7 7.1 6.5 5.9	7.5 6.8 6.0 5.7	7.4 6.7 5.9 5.5	7.1 6.5 6.0 5.5	7.1 6.5 6.1 5.5	7.3 6.2 6.1 5.9	7.3 6.2 6.1 5.5	7.3 6.2 5.9 5.5

¹Geographic data for 1980 are based on the civilian population as of April 1, 1980.

NOTES: Excludes newborn infants. Rates are based on the civilian population as of July 1.

SOURCE: Division of Health Care Statistics, National Center for Health Statistics: Data from the National Hospital Discharge Survey.

²Comparisons of 1988, 1989, and 1990 data with data for earlier years should be made with caution as estimates of change may reflect improvements in the design (see Appendix I) rather than true changes in hospital use.

³Age adjusted.

Table 83. Discharges, days of care, and average length of stay in non-Federal short-stay hospitals for patients discharged with the diagnosis of human immunodeficiency virus (HIV) and for all patients: United States, 1984–90

	Disch	narges	Days	of care	
Type of discharge, sex, age, and year	Number in thousands	Number per 1,000 population	Number in thousands	Number per 1,000 population	Average length of stay in days
Diagnosis of HIV					
Total: 1984 ¹ 1985 ¹ 1986 1987 1988 ² 1989 ² 1990 ² Male, 20–49 years: 1984 ¹ 1985 ¹ 1986 1987 1988 ² 1989 ²	10 23 44 67 95 140 146 *9 21 35 51 73 102	0.04 0.10 0.18 0.28 0.39 0.57 0.59 *0.17 0.41 0.67 0.97 1.36 1.87	123 387 714 936 1,277 1,731 2,188 *114 355 573 724 914 1,235	0.52 1.63 2.98 3.87 5.23 7.02 8.77 *2.26 6.90 10.96 13.64 16.97 22.64	12.1 17.1 16.4 14.1 13.4 12.4 14.9 *13.2 16.8 16.4 14.1 12.5 12.1
1990 ²	102	1.84	1,645	29.71	16.2
Total: 1984. 1985. 1986. 1987. 1988 ² . 1989 ² . 1990 ² .	37,162 35,056 34,256 33,387 31,146 30,947 30,788	158.5 147.9 143.1 138.2 127.6 125.5 123.5	244,652 226,217 218,496 214,942 203,678 200,827 197,422	1,043.6 954.4 912.8 889.4 834.3 814.5 791.7	6.6 6.5 6.4 6.5 6.5
Male, 20–49 years: 1984. 1985. 1986. 1987. 1988 ² . 1989 ² . 1990 ² .	4,497 4,393 4,300 4,075 3,670 3,676 3,649	89.5 85.4 82.2 76.8 68.2 67.4 65.9	27,725 27,117 26,488 26,295 22,697 22,967 22,539	551.5 527.4 506.4 495.3 421.6 421.0 407.0	6.2 6.2 6.2 6.5 6.2 6.2 6.2

¹During these years, only data for AIDS (ICD-9-CM Code 279.19) were reported.

NOTES: Excludes newborn infants. Rates are based on the civilian population as of July 1. This table shows data for patients diagnosed with human immunodeficiency virus (HIV) (International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) 042–044, 279.19, and 795.8) beginning with the 1991 edition of Health, United States. Previous editions of Health, United States showed data for patients diagnosed with acquired immunodeficiency syndrome (AIDS) (ICD-9-CM code 279.19 for 1984–85 with additional codes 042.0–042.2 and 042.9 for 1986–89).

SOURCES: Division of Health Care Statistics, National Center for Health Statistics: Data from the National Hospital Discharge Survey; Utilization of short-stay hospitals by patients with AIDS: United States, 1984–1986, by E. J. Graves. Advance Data From Vital and Health Statistics. No. 156. DHHS Pub. No. (PHS) 88–1250. Public Health Service. Hyattsville, Md., 1988; Unpublished data.

²Comparisons of 1988, 1989, and 1990 data with data for earlier years should be made with caution as estimates of change may reflect improvements in the design (see Appendix I) rather than true changes in hospital use.

^{*}Based on a sample size of 30-59 discharges and should be used with caution.

Table 84 (page 1 of 2). Rates of discharges and days of care in non-Federal short-stay hospitals, according to sex, age, and selected first-listed diagnosis: United States, 1980, 1988, 1989, and 1990

		Disch	arges			Days	of care	
Sex, age, and first-listed diagnosis	1980¹	1988	1989	1990	1980¹	1988	1989	1990
Both sexes			N	umber pe	r 1,000 por	oulation		
Total ^{2,3}	159.1	117.8	115.5	113.1	1,136.5	754.8	732.2	709.5
Females with delivery	14.7	13.4	13.9	14.2	55.5	39.2	40.5	39.5
Diseases of heart	13.1	13.2	12.6	12.5	123.5	92.2	86.4	84.5
Malignant neoplasms	7.6 3.5	6.2 3.6	5.8 4.0	5.7 4.0	90.5 27.7	57.6 28.5	53.2 30.2	52.6 30.8
Pneumonia, all forms	4.9	3.8	3.8	3.7	51.2	30.8	30.9	28.9
Male								
All ages ^{2,3}	140.1	105.8	103.9	99.6	1,072.6	739.6	720.8	681.0
Diseases of heart	15.9 8.2	16.4 6.4	15.6 6.3	15.4 5.9	145.0 98.7	111.8 59.9	104.6 57.7	102.6 55.8
Pneumonia, all forms	4.1	4.1	4.6	4.4	32.5	32.3	34.6	34.7
Fracture, all sites	5.2	4.1	3.9	3.7	46.9	29.3	29.3	24.2
Cerebrovascular diseases	3.5	2.8	2.8	2.8	41.9	26.8	28.2	26.2
Inguinal hernia	4.3	2.0	1.6	1.2	20.0	4.8	4.1 268.3	2.7 230.7
Under 15 years ³	78.7 5.9	54.6 3.8	55.1 5.0	48.5 3.9	341.5 22.0	275.5 11.7	200.3 17.1	230.7 12.7
Acute respiratory infection	5.9 5.2	3.9	4.6	4.3	25.2	16.9	18.7	18.9
Bronchitis, emphysema, and asthma	4.0	4.1	4.2	4.1	16.3	11.0	12.2	11.6
Congenital anomalies	4.0	3.5	3.0	2.6	22.2	18.7	14.5	14.8
Fracture, all sites	3.7	2.6	2.8	1.9	22.7	13.5	15.0	7.8
Chronic disease of tonsils and adenoids Otitis media and eustachian tube disorders	5.4 4.5	2.3 2.0	1.7 1.7	1.0 1.5	9.2 11.3	3.3 4.2	2.0 3.4	1.3 3.6
15–44 years ³	91.5	61.5	59.8	58.0	581.0	388.2	371.5	355.4
Fracture, all sites	6.3	4.5	4.2	4.2	50.1	27.1	25.8	23.0
Psychoses	3.0	3.9	3.8	3.8	39.2	51.9	51.3	52.4
Diseases of heart	2.9	2.8	2.6	2.9	21.7	16.1	13.9	15.5
Lacerations and open wounds	3.4	2.2 2.5	2.2 2.1	2.3 2.4	17.9 20.7	9.4 12.6	8.1 9.4	9.6 10.0
Intervertebral disc disorders	2.3 3.5	2.5 2.1	1.9	2.4	33.4	24.8	21.2	20.1
45–64 years ³	195.4	146.4	142.8	138.3	1,590.3	993.2	962.1	930.3
Diseases of heart	33.7	34.1 9.8	32.8 10.8	31.2 10.5	288.1 167.2	210.1 95.1	195.4 96.8	182.3 97.9
Malignant neoplasms	14.4 4.7	4.2	4.0	4.0	49.6	35,7	34.2	40.1
Fracture, all sites	4.0	3.6	3.6	3.3	36.5	26.6	32.2	23.9
Pneumonia, all forms	3.2	2.9	3.5	3.3	29.8	24.7	29.3	26.7
Inguinal hernia	6.9	3.3	2.4	1.9	36.5	7.7	5.9	4.3
Alcohol dependence syndrome	6.4	2.2	2.0	2.3 346.2	67.8 4,244.0	18.8 3,083.5	16.9 3,047.0	21.5 2,882.8
65 years and over ³	411.8 78.5	360.3 84.0	354.4 79.7	80.2	786.3	635.7	603.6	602.4
Malignant neoplasms	46.2	37.0	35.4	31.8	587.9	351.8	335.6	316.0
Pneumonia, all forms	15.0	20.1	21.4	20.4	166.1	200.4	200.8	204.7
Cerebrovascular diseases	24.4	18.3	18.9	19.1	301.2	191.9	207.7	176.4
Hyperplasia of prostate	18. 1	15.4	15.3	15.1	176.7	93.0	84.2	78.6
Female	170 1	100.0	107.4	126.0	1 201 7	770 6	746.6	738.7
All ages ^{2,3}	178.1	130.2	127.4	126.9	1,201.7	772.6	746.6	
Delivery	29.0 10.7	26.5 10.5	27.5 10.1	28.0 10.0	109.4 105.1	77.4 75.7	80.2 70.8	78.1 69.4
Malignant neoplasms	7.3	6.2	5.6	5.7	85.8	56.6	50.2	51.0
Fracture, all sites	4.4	3.3	3.5	3.4	52.1	30.4	30.5	31.4
Pneumonia, all forms	3.0	3.2	3.4	3.6	24.0	25.7	27.0	27.9
Pregnancy with abortive outcome	4.1	1.9	1.6	1.5	8.7	4.3	3.7	3.1
Under 15 years ³	64.2 3.6	43.4 3.1	40.9 3.6	39.2 3.4	288.9 17.7	213.6 14.9	198.6 16.7	193.1 15.8
Pneumonia, all forms	3.6 4.6	3.1 2.5	3.0	2.8	16.0	8.9	10.7	9.4
Bronchitis, emphysema, and asthma	2.5	2.5	2.4	2.5	9.6	7.3	6.8	7.8
Congenital anomalies	3.2	2.1	2.0	1.7	19.4	14.5	12.6	9.9
Chronic disease of tonsils and adenoids	6.4	2.4	1.8	1.4	11.2	2.5	2.1	1.8
Noninfectious enteritis and colitis	3.7	2.0	1.5	1.6	16.8	5.4	5.7	4.7

See footnotes at end of table.

Table 84 (page 2 of 2). Rates of discharges and days of care in non-Federal short-stay hospitals, according to sex, age, and selected first-listed diagnosis: United States, 1980, 1988, 1989, and 1990

		Disch	arges			Days	of care	
Sex, age, and first-listed diagnosis	19801	1988	1989	1990	19801	1988	1989	1990
Female - Con.			N	umber pe	r 1,000 pop	oulation		
15–44 years ³	206.9	145.6	144.9	144.5	986.4	595.6	588.2	574.7
Delivery	70.7 9.9 2.4 4.8 5.1 6.6	64.9 4.6 3.6 3.0 2.5 1.5	67.4 3.9 3.4 2.8 2.4 1.1	68.4 3.5 3.9 2.8 2.2 1.2	264.5 21.2 36.7 25.7 25.7 21.6	189.4 10.5 57.7 13.2 11.6 5.5	196.2 9.0 48.4 11.5 10.3 4.0	190.8 7.4 56.9 11.2 9.0 3.9
45–64 years ³	194.3	135.1	127.9	128.2	1,604.1	920.5	850.0	868.5
Diseases of heart Malignant neoplasms Benign neoplasms Cholelithiasis Psychoses Diabetes	17.8 16.6 6.7 4.7 3.1 6.3	17.2 14.7 4.9 4.1 4.2 2.8	16.0 11.3 4.4 4.4 4.3 3.2	16.3 12.7 4.4 4.7 4.2 2.9	152.9 190.8 44.8 42.9 50.6 63.5	106.5 122.2 24.8 24.2 62.0 21.8	95.4 92.2 21.2 23.7 64.0 22.3	98.9 106.3 21.6 26.5 62.0 25.3
65 years and over ³	364.7	316.2	313.5	313.8	3,999.8	2,892.3	2,850.1	2,801.4
Diseases of heart Malignant neoplasms Cerebrovascular diseases Fracture, all sites Pneumonia, all forms Eye diseases and conditions	64.8 28.5 21.6 19.2 9.7 16.4	65.8 23.4 19.6 16.6 13.4 5.8	63.8 23.5 20.1 17.9 14.2 4.0	62.3 21.5 19.4 18.7 15.1 3.1	701.1 383.8 287.9 309.5 109.2 67.3	520.6 258.5 193.0 192.7 138.7 12.5	497.8 247.7 205.1 206.0 139.6 10.6	472.9 219.1 187.4 211.0 157.8 6.3

¹Comparisons of 1980 with later years should be made with caution as estimates of change may reflect improvements in the design (see Appendix I) rather than true changes in hospital use.

NOTES: Excludes newborn infants. Rates are based on the civilian population. In each sex and age group, data are shown for diagnoses with the five highest discharge rates in 1980 and 1989. Diagnostic categories are based on the International Classification of Diseases, 9th Revision, Clinical Modification. For a listing of the code numbers, see Appendix II, table VII.

SOURCE: Division of Health Care Statistics, National Center for Health Statistics: Data from the National Hospital Discharge Survey.

²Age adjusted.

³Includes discharges with first-listed diagnoses not shown in table.

Table 85 (page 1 of 2). Discharges and average length of stay in non-Federal short-stay hospitals, according to sex, age, and selected first-listed diagnosis: United States, 1980, 1988, 1989, and 1990

		Disch	arges		A	verage ler	gth of sta	 1y
Sex, age, and first-listed diagnosis	1980¹	1988	1989	1990	1980¹	1988	1989	1990
Both sexes		Number in	thousands			Number	of days	
Total ²	37,832	31,146	30,947	30,788	7.3	6.5	6.5	6.4
Females with delivery Diseases of heart Malignant neoplasms Pneumonia, all forms Fracture, all sites	3,762 3,201 1,829 782 1,163	3,781 3,641 1,670 924 1,014	3,937 3,534 1,608 1,033 1,021	4,025 3,556 1,571 1,052 1,017	3.8 9.5 12.0 8.3 10.8	2.9 7.1 9.4 8.4 8.4	2.9 7.0 9.2 8.1 8.5	2.8 6.9 9.4 8.3 8.3
Male								
All ages ²	15,145	12,642	12,583	12,280	7.7	7.1	7.0	6.9
Diseases of heart Malignant neoplasms Pneumonia, all forms Fracture, all sites Cerebrovascular diseases Inguinal hernia	1,688 875 414 582 371 458	1,955 772 472 506 336 232	1,892 770 544 480 344 193	1,913 730 530 466 359 149	9.1 12.0 8.2 9.0 12.1 4.7	6.9 9.4 8.3 7.2 9.8 2.5	6.8 9.2 7.8 7.5 10.3 2.6	6.7 9.5 8.2 6.7 9.2 2.2
Under 15 years ²	2,063	1,486	1,521	1,362	4.3	5.0	4.9	4.8
Acute respiratory infection	154 136 105 106 97 141 118	103 105 111 95 71 64 55	137 126 115 83 77 46 47	111 119 115 74 54 29 41	3.8 4.9 4.0 5.5 6.2 1.7 2.5	3.1 4.4 2.7 5.4 5.2 1.4 2.1	3.4 4.1 2.9 4.8 5.4 1.2 2.0	3.2 4.4 2.8 5.6 4.0 1.3 2.5
15–44 years ²	4,687	3,485	3,405	3,330	6.3	6.3	6.2	6.1
Fracture, all sites Psychoses Diseases of heart Lacerations and open wounds Intervertebral disc disorders. Alcohol dependence syndrome	320 155 149 176 120 180	257 219 159 124 139 118	241 217 146 124 122 109	238 220 166 134 138 118	8.0 12.9 7.5 5.2 8.8 9.5	6.0 13.4 5.7 4.3 5.1 11.9	6.1 13.5 5.4 3.7 4.4 11.1	5.5 13.6 5.3 4.1 4.2 9.8
45–64 years ²	4,127	3,221	3,179	3,115	8.1	6.8	6.7	6.7
Diseases of heart Malignant neoplasms Cerebrovascular diseases Fracture, all sites Pneumonia, all forms Inguinal hernia Alcohol dependence syndrome	712 304 99 85 68 146 134	751 215 93 79 65 72 49	730 240 88 80 77 53 44	704 236 91 74 75 42 51	8.5 11.6 10.6 9.0 9.3 5.3	6.2 9.7 8.5 7.4 8.4 2.3 8.4	6.0 9.0 8.7 9.0 8.4 2.5 8.5	5.8 9.3 10.0 7.2 8.0 2.3 9.5
65 years and over ²	4,268	4,450	4,478	4,472	10.3	8.6	8.6	8.3
Diseases of heart	814 479 156 253 188	1,038 457 248 226 191	1,007 447 271 238 193	1,036 411 264 247 195	10.0 12.7 11.1 12.3 9.8	7.6 9.5 10.0 10.5 6.0	7.6 9.5 9.4 11.0 5.5	7.5 9.9 10.0 9.2 5.2
Female								
All ages² Delivery Diseases of heart Malignant neoplasms Fracture, all sites Pneumonia, all forms Pregnancy with abortive outcome See footnotes at end of table.	22,686 3,762 1,513 954 580 368 531	18,504 3,781 1,686 898 508 452 266	18,364 3,937 1,642 838 541 489 229	18,508 4,025 1,643 841 551 522 208	7.0 3.8 10.0 12.0 12.6 8.4 2.1	6.2 2.9 7.4 9.4 9.7 8.6 2.3	6.1 2.9 7.2 9.3 9.4 8.4 2.3	6.1 2.8 7.1 9.2 9.7 8.4 2.1

Table 85 (page 2 of 2). Discharges and average length of stay in non-Federal short-stay hospitals, according to sex, age, and selected first-listed diagnosis: United States, 1980, 1988, 1989, and 1990

		Disch	arges		A	verage ler	gth of sta	у
Sex, age, and first-listed diagnosis	1980¹	1988	1989	1990	1980¹	1988	1989	1990
Female – Con.	1	Number in	thousands	i		Number	of days	
Under 15 years ²	1,609	1,125	1,077	1,049	4.5	4.9	4.9	4.9
Pneumonia, ali forms Acute respiratory infection Bronchitis, emphysema, and asthma Congenital anomalies Chronic disease of tonsils and adenoids. Noninfectious enteritis and colitis	91 115 63 80 160 92	79 65 66 55 61 52	95 78 64 53 48 39	92 75 68 46 38 43	4.9 3.5 3.8 6.1 1.8 4.6	4.9 3.5 2.9 6.8 1.1 2.7	4.6 3.5 2.8 6.2 1.2 3.8	4.6 3.4 3.1 5.8 1.2 3.0
15–44 years ²	10,949	8,448	8,443	8,469	4.8	4.1	4.1	4.0
Delivery Pregnancy with abortive outcome Psychoses Benign neoplasms Inflammatory disease of female pelvic organs Disorders of menstruation	3,741 525 129 253 268 347	3,768 264 210 176 145 88	3,926 227 197 161 137 66	4,008 205 228 163 130 70	3.7 2.1 15.1 5.4 5.1 3.3	2.9 2.3 15.9 4.4 4.6 3.6	2.9 2.3 14.3 4.2 4.4 3.5	2.8 2.1 14.6 4.0 4.1 3.3
45–64 years ²	4,533	3,235	3,092	3,129	8.3	6.8	6.6	6.8
Diseases of heart Malignant neoplasms Benign neoplasms Cholelithiasis Psychoses Diabetes	415 387 156 109 72 148	411 351 116 97 99 67	386 273 108 107 104 78	397 309 107 114 103 70	8.6 11.5 6.7 9.2 16.3 10.0	6.2 8.3 5.1 6.0 14.9 7.8	6.0 8.2 4.8 5.4 14.9 6.9	6.1 8.4 4.9 5.7 14.6 8.9
65 years and over ²	5,596	5,696	5,752	5,861	11.0	9.1	9.1	8.9
Diseases of heart Malignant neoplasms Cerebrovascular diseases Fracture, all sites Pneumonia, all forms Eye diseases and conditions	995 437 331 295 150 251	1,185 422 352 300 242 105	1,170 431 368 329 261 73	1,164 401 362 350 283 58	10.8 13.5 13.3 16.1 11.2 4.1	7.9 11.0 9.9 11.6 10.3 2.1	7.8 10.6 10.2 11.5 9.8 2.7	7.6 10.2 9.7 11.3 10.4 2.0

¹Comparisons of 1980 with later years should be made with caution as estimates of change may reflect improvements in the design (see Appendix I) rather than true changes in hospital use

NOTES: Excludes newborn infants. In each sex and age group, data are shown for diagnoses with the five highest discharge rates in 1980 and 1989. Diagnostic categories are based on the International Classification of Diseases, 9th Revision, Clinical Modification. For a listing of the code numbers, see Appendix II, table VII.

SOURCE: Division of Health Care Statistics, National Center for Health Statistics: Data from the National Hospital Discharge Survey.

changes in hospital use. ²Includes discharges with first-listed diagnoses not shown in table.

Table 86 (page 1 of 2). Operations for inpatients discharged from non-Federal short-stay hospitals, according to sex, age, and surgical category: United States, 1980, 1988, 1989, and 1990

	C	Operations	in thousai	nds	Operations per 1,000 population				
Sex, age, and surgical category	1980¹	1988	1989²	1990	19801	1988	1989 ²	1990	
Male			-						
Ali ages ^{2,3,4}	8,505	9,069	8,886	8,538	78.1	75.4	72.8	68.8	
Cardiac catheterization	228	598	601	620	2.2	5.2	5.1	5.2	
Prostatectomy	335	358	376	364	3.1	2.9	3.0	2.8	
Reduction of fracture (excluding skull, nose, and jaw)	325	337	342 271	300 286	2.9 1.0	2.7 2.3	2.8 2.3	2.4 2.4	
Direct heart revascularization (coronary bypass)	108 483	270 261	220	181	4.6	2.3	2.3 1.8	1.5	
Operations on muscles, tendons, fascia, and bursa	210	181	191	175	1.9	1.5	1.6	1.4	
Jnder 15 years ^{2,4}	1,068	751	703	598	40.7	27.6	25.5	21.3	
Reduction of fracture (excluding skull, nose, and jaw)	55	52	54	42	2.1	1.9	2.0	1.5	
onsillectomy, with or without adenoidectomy	138	69	49	33	5.3	2.6	1.8	1.2	
lyringotomy	115	45	41	30	4.4	1.6	1.5	1.1	
ppendectomy, excluding incidental ⁵	43	33	37	40	1.6	1.2	1.3	1.4	
lepair of inguinal hernia	86	31	28	19	3.3	1.1	1.0	0.7	
Dircumcision	43	20	19	24	1.6	0.7	0.7	0.8	
5–44 years ^{2,4}	2,900	2,489	2,408	2,257	56.6	43.9	42.3	39.3	
eduction of fracture (excluding skull, nose, and jaw)	188	178	176	159	3.7	3.1	3.1	2.8	
spinal fusion	67	111	115	147	1.3	2.0	2.0	2.6	
ebridement of wound, infection, or burn	75	84	93	82	1.5	1.5	1.6	1.4	
perations on muscles, tendons, fascia, and bursa	110	93	86	93	2.2	1.6	1.5	1.6	
ppendectomy, excluding incidental ⁵	85	88	83	80	1.7	1.5	1.5	1.4	
epair of inguinal hernia	127 94	62 30	46 37	37 25	2.5 1.8	1.1 0.5	0.8 0.6	0.7 0.4	
5–64 years ^{2,4}	2,313	2,568	2,498	2,499	109.5	116.7	112.2	110.9	
ardiac catheterization	129	296	291	306	6.1	13.5	13.0	13.6	
irect heart revascularization (coronary bypass)	72	134	129	132	3.4	6.1	5.8	5.9	
rostatectomy	83	67	71	80	3.9	3.1	3.2	3.5	
xcision or destruction of intervertebral disc and									
spinal fusion	43	69	70	80	2.1	3.1	3.2	3.6	
deduction of fracture (excluding skull, nose, and jaw)	43 152	52 80	65 58	47 50	2.1 7.2	2.4 3.6	2.9 2.6	2.1 2.2	
Repair of inguinal hernia	58	44	56 57	44	2.8	2.0	2.6	2.0	
55 years and over ^{2,4}	2,224	3,261	3,277	3,184	214.6	264.0	259.4	246.5	
rostatectomy	251	290	304	284	24.2	23.4	24.1	22.0	
Cardiac catheterization	52	222	230	236	5.0	17.9	18.2	18.3	
Pirect heart revascularization (coronary bypass)	27	122	131	137	2.6	9.8	10.4	10.6	
acemaker insertion or replacement	75	120	106	100	7.3	9.7	8.4	7.7	
Repair of inguinal hemia	119	88	87	74	11.4 5.9	7.1	6.9	5.8 5.9	
iopsies on the digestive system	61 124	121 24	83 16	76 18	12.0	9.8 1.9	6.6 1.3	1.4	
	12.				1	.,,		•••	
Female Ni ages ^{2,3,4}	15,989	16,555	14,484	14,513	126,1	116.9	101.0	100.3	
-		•	•	-					
rocedures to assist delivery ²	2,391 619	3,131 933	2,446 938	2,491 945	18.4 4.8	22.0 6.5	17.1 6.6	17.3 6.6	
esarean sectionesarean sec	355	690	762	795	2.8	4.9	5.3	5.5	
lysterectomy	649	578	541	591	5.2	4.3	3.9	4.3	
Ophorectomy and salpingo-ophorectomy	483	451	421	476	3.9	3.4	3.1	3.4	
ilateral destruction or occlusion of fallopian tubes	641	406	389	419	4.9	2.9	2.7	2.9	
Plagnostic dilation and curettage of uterus	923	143	137	109	7.3	1.1	1.0	8.0	
Jnder 15 years ^{2,4}	771	519	462	413	30.8	20.0	17.6	15.4	
onsillectomy, with or without adenoidectomy	156	66	53	41	6.2	2.5	2.0	1.5	
eduction of fracture (excluding skull, nose, and jaw)	32	24	29	18	1.3	0.9	1.1	0.7	
fyringotomy	87	32	27	22	3.5.	1.2	1.0	0.8	
appendectomy, excluding incidental ⁵	34	25 16	24 15	26 11	1.4 0.9	1.0 0.6	0.9 0.6	1.0 0.4	
Operations on muscles, tendons, fascia, and bursa	23 31		15	*			0.0 *	U.4 *	
Adenoidectomy without tonsillectomy	31	*6			1.2	*0.2	*	,	

See footnotes at end of table.

Table 86 (page 2 of 2). Operations for inpatients discharged from non-Federal short-stay hospitals, according to sex, age, and surgical category: United States, 1980, 1988, 1989, and 1990

	Oį	oerations ii	n thousan	ds	Oper	ations per	1,000 popu	lation
Sex, age, and surgical category	19801	1988	1989²	1990	1980¹	1988	1989²	1990
Female — Con.								
15–44 years ^{2,4}	9,625	10,007	8,071	8,129	181.9	172.5	138.6	138.7
Procedures to assist delivery ²	2,381	3,121	2,439	2,480	45.0	53.8	41.9	42.3
Cesarean section ⁶	614	931	936	940	11.6	16.0	16.1	16.0
Repair of current obstetrical laceration	352	688	760	793	6.7	11.9	13.0	13.5
Bilateral destruction or occlusion of fallopian tubes	632	404	386	418	11.9	7.0	6.6	7.1
Hysterectomy	402	340	317	349	7.6	5.9	5.4	6.0
Diagnostic dilation and curettage of uterus	625	86	82	67	11.8	1.5	1.4	1.1
45–64 years ^{2,4}	3,113	2,622	2,492	2,586	133.4	109.5	103.1	106.0
Hysterectomy	203	188	165	184	8.7	7.9	6.8	7.5
Oophorectomy and salpingo-oophorectomy	162	165	144	160	7.0	6.9	5.9	6.5
Cardiac catheterization	58	136	135	151	2.5	5.7	5.6	6.2
Cholecystectomy	107	101	114	118	4.6	4.2	4.7	4.8
Reduction of fracture (excluding skull, nose, and jaw)	61	54	59	55	2.6	2.2	2.5	2.3
Diagnostic dilation and curettage of uterus	241	40	41	31	10.3	1.7	1.7	1.3
subcutaneous tissue)	69	38	30	25	2.9	1.6	1.2	1.0
65 years and over ^{2,4}	2,480	3,407	3,459	3,385	161.6	189.2	188.5	181.3
Cardiac catheterization	32	163	185	185	2.1	9.1	10.1	9.9
Reduction of fracture (excluding skull, nose, and jaw)	127	156	180	171	8.3	8.6	9.8	9.1
Pacemaker insertion or replacement	70	103	115	99	4.6	5.7	6.2	5.3
Biopsies on the digestive system	72	144	101	99	4.7	8.0	5.5	5.3
Cholecystectomy	83	100	99	83	5.4	5.5	5.4	4.5
Extraction of lens	211	61	44	33	13.8	3.4	2.4	1.8
Insertion of prosthetic lens (pseudophakos)	93	63	40	31	6.1	3.5	2.2	1.7

¹Comparisons of 1980 with later years should be made with caution as estimates of change may reflect improvements in the design (see Appendix I) rather than true

NOTES: Excludes newborn infants. Data do not reflect total use of operations because operations for outpatients are not included in the National Hospital Discharge Survey. In recent years, for example, lens extractions and myringotomies are frequently performed on outpatients. Rates are based on the civilian population. In each sex and age group, data are shown for the five most common operations in 1980 and 1989. Surgical categories are based on the International Classification of Diseases, 9th Revision, Clinical Modification. For a listing of the code numbers, see Appendix II, table VIII.

SOURCE: Division of Health Care Statistics, National Center for Health Statistics: Data from the National Hospital Discharge Survey.

changes in hospital use.

²Beginning in 1989, the definition of some surgical and diagnostic and other nonsurgical procedures was revised, thus causing a discontinuity in the trends for the totals and selected surgical procedures. See Appendix II. ³Rates are age adjusted.

⁴Includes operations not listed in table.

⁵Limited to estimated number of appendectomies, excluding those performed incidental to other abdominal surgery.

⁶Cesarean sections accounted for 16.5 percent of all deliveries in 1980, 22.7 percent in 1985, 24.4 percent in 1987, 24.7 percent in 1988, 23.8 percent in 1989, and

^{*}Estimates based on fewer than 30 discharges are not shown; estimates based on 30-59 discharges should be used with caution.

Table 87 (page 1 of 2). Diagnostic and other nonsurgical procedures for inpatients discharged from non-Federal short-stay hospitals, according to sex, age, and procedure category: United States, 1980, 1988, 1989, and 1990

	F	Procedures	s in thousa	ands	Proce	edures per	1,000 pop	ulation
Sex, age, and procedure category	1980¹	1988	1989²	1990	1980¹	1988	1989 ²	1990
Male								
All ages ^{2,3,4}	3,386	6,665	7,202	7,378	31.3	55.6	59.3	59.6
Angiocardiography using contrast material	174	749	767	833	1.6	6.4	6.5	6.9
computerized axial tomography (CAT scan)	152	775	721	736	1.4	6.3	5.8	5.8
agnostic ultrasound	114	599	628	667	1.0	5.1	5.2	5.4
ystoscopy	543	399	356	350	5.1	3.2	2.8	2.7
adioisotope scan	236	315	287	268	2.1	2.6	2.3	2.1
rteriography using contrast material	180	246	233	217	1.7	2.0	1.9	1.7
ndoscopy of large intestine without biopsy	228	170	158	148	2.1	1.4	1.2	1.2
nder 15 years ^{2,4}	217	424	566	546	8.3	15.6	20.5	19.4
pinal tap	39	84	97	94	1.5	3.1	3.5	3.4
iagnostic ultrasound	*6	51	49	47	*0.2	1.9	1.8	1.7
omputerized axial tomography (CAT scan)	17	42	46	41	0.7	1.5	1.7	1.5
lectroencephalogram	*5	15	17	17	*0.2	0.5	0.6	0.6
adioisotope scan	*8	11	14	11	*0.3	0.4	0.5	0.4
oplication of cast or splint	21	14 *	12 *	10 *	0.8	0.5 *	0.4 *	0.4 *
ystoscopy	23				0.9			
5–44 years ^{2,4}	884	1,382	1,477	1,584	17.3	24.4	25.9	27.6
omputerized axial tomography (CAT scan)	37	218	196	215	0.7	3.8	3.4	3.8
iagnostic ultrasound	25	111	117	118	0.5	2.0	2.0	2.1
ngiocardiography using contrast material	30	89	98 es	102	0.6	1.6	1.7	1.8
ontrast myelogram	88	79 60	65 50	58 47	1.7	1.4	1.1	1.0 0.8
adioisotope scan	48 94	62 55	58 55	47 43	0.9 1.8	1.1 1.0	1.0 1.0	0.8
rthroscopy of knee	80	36	37	35	1.6	0.6	0.6	0.6
systoscopy	52	25	25	21	1.0	0.4	0.4	0.4
pplication of cast or splint	54	27	25	22	1.1	0.5	0.4	0.4
	1,128	2,038	2,103	2,106	53.4	92.6	94.4	93.5
ngiocardiography using contrast material	106	388	386	428	5.0	17.6	17.3	19.0
iagnostic ultrasound	41	173	188	184	1.9	7.9	8.5	8.1
omputerized axial tomography (CAT scan)	43	200	179	170	2.0	9.1	8.1	7.5
adioisotope scan	75	102	88	81	3.5	4.7	3.9	3.6
ystoscopy	153	93	84	80	7.3	4.2	3.8	3.6
rteriography using contrast material	76	95	77	65	3.6	4.3	3.4	2.9
indoscopy of large intestine without biopsy	86	48	36	42	4.0	2.2	1.6	1.9
5 years and over ^{2,4}	1,158	2,821	3,056	3,143	111.8	228.4	241.8	243.3
Computerized axial tomography (CAT scan)	54	316	299	309	5.2	25.6	23.7	23.9
ngiocardiography using contrast material	35	264	274	297	3.4	21.3	21.7	23.0
iagnostic ultrasound	42	264	274	319	4.0	21.4	21.7	24.7
ystoscopy	287	266	232	232	27.7	21.6	18.3	18.0
ndoscopy of small intestine without biopsyadioisotope scan	35 105	113 139	131 127	123 129	3.3 10.1	9.1 11.3	10.4 10.1	9.5 10.0
adioisotope scan	72	110	117	109	7.0	8.9	9.3	8.4
ndoscopy of large intestine without biopsy	72 86	94	95	84	8.3	7.6	7.5	6.5
Female	0 500	6 000	0.471	10.077	27.5	47.9	647	60 V
ll ages ^{2,3,4}	3,532	6,902	9,471	10,077	27.5	47.3	64.7	68.0
Diagnostic ultrasound	204	963	930	941	1.6	6.6 5.6	6.3 5.3	6.2 4.9
computerized axial tomography (CAT scan)	154	838	798 432	770 510	1.2 0.7	5.6 3.1	5.3 3.0	4.9 3.5
ngiocardiography using contrast material	84 289	439 390	432 347	510 335	2.1	2.6	2.3	3.5 2.1
adioisotope scan	164	279	291	294	1.3	1.8	1.9	1.9
ndoscopy of large intestine without biopsyndoscopy of large intestine without biopsy	307	238	255	250	2.3	1.5	1.6	1.5
ystoscopy	324	143	131	135	2.6	1.0	0.9	0.9
aparoscopy (excluding that for ligation and division of	J							2.0
fallopian tubes)	235	133	125	147	1.8	0.9	0.9	1.0
•								

See footnotes at end of table.

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Table 87 (page 2 of 2). Diagnostic and other nonsurgical procedures for inpatients discharged from non-Federal short-stay hospitals, according to sex, age, and procedure category: United States, 1980, 1988, 1989, and 1990

Temale - Con. Temale - Computerized axial tomography (CAT scan) Temale - Computerized axial tomography using contrast material Temale - Computerized axial tomography (CAT scan) Temale - Computerized axial tomography (CAT	ion
Under 15 years 2.4 191 356 418 403 7.6 13.8 15.9 Spinal tap 26 70 75 71 1.0 2.7 2.9 Computerized axial tomography (CAT scan) 10 39 37 27 0.4 1.5 1.4 Diagnostic ultrasound *5 45 33 43 *0.2 1.7 1.3 Electroencephalogram * 19 14 14 * 0.7 0.5 Angiocardiography using contrast material * * 11 *6 * * 0.4 Application of cast or splint 13 *9 *7 *6 0.5 *0.3 *0.3 Radioisotope scan *6 *6 *6 *6 *9 *0.2 *0.2 *0.2 Cystoscopy 38 *5 * * 1.5 *0.2 * 15-44 years 2.4 1,203 1,643 3,850 4,217 22.7 28.3 66.1 Diagnostic ultrasound 94 365 348 309 1.8	1990
Spinal tap 26 70 75 71 1.0 2.7 2.9 Computerized axial tomography (CAT scan) 10 39 37 27 0.4 1.5 1.4 Diagnostic ultrasound *5 45 33 43 *0.2 1.7 1.3 Electroencephalogram * 19 14 14 * 0.7 0.5 Angiocardiography using contrast material * * 11 *6 * * 0.4 Application of cast or splint 13 *9 *7 *6 0.5 *0.3 *0.3 Radioisotope scan *6 *6 *6 *6 *9 *0.2 *0.2 *0.2 Cystoscopy 38 *5 * * 1.5 *0.2 * 15–44 years ^{2.4} 1,203 1,643 3,850 4,217 22.7 28.3 66.1 Diagnostic ultrasound 94 365 348 309 1.8 6.3 6.0 </td <td></td>	
Computerized axial tomography (CAT scan) 10 39 37 27 0.4 1.5 1.4 Diagnostic ultrasound *5 45 33 43 *0.2 1.7 1.3 Electroencephalogram * 19 14 14 * 0.7 0.5 Angiocardiography using contrast material * * 11 *6 * * 0.4 Application of cast or splint 13 *9 *7 *6 0.5 *0.3 *0.3 Radioisotope scan *6 *6 *6 *6 *9 *0.2 *0.2 *0.2 Cystoscopy 38 *5 * * 1.5 *0.2 * 15–44 years *2.4 1,203 1,643 3,850 4,217 22.7 28.3 66.1 Diagnostic ultrasound 94 365 348 309 1.8 6.3 6.0 Computerized axial tomography (CAT scan) 36 156 157 144 0.7 2.7 2.7 Laparoscopy (excluding that for ligation and division of fallopian tubes) <t< td=""><td>15.0</td></t<>	15.0
Diagnostic ultrasound *5 45 33 43 *0.2 1.7 1.3 Electroencephalogram * 19 14 14 * 0.7 0.5 Angiocardiography using contrast material * * 11 *6 * * 0.4 Application of cast or splint 13 *9 *7 *6 0.5 *0.3 *0.3 Radioisotope scan *6 *6 *6 *6 *9 *0.2 *0.2 *0.2 Cystoscopy 38 *5 * * 1.5 *0.2 * 15–44 years ^{2.4} 1,203 1,643 3,850 4,217 22.7 28.3 66.1 Diagnostic ultrasound 94 365 348 309 1.8 6.3 6.0 Computerized axial tomography (CAT scan) 36 156 157 144 0.7 2.7 2.7 Laparoscopy (excluding that for ligation and division of fallopian tubes) 214 124 118 120 4.1 2.1 2.0 Biliary tract X—ray 60	2.7
Electroencephalogram	1.0
Angiocardiography using contrast material	1.6
Application of cast or splint	0.5
Radioisotope scan *6 *6 *6 *9 *0.2 *0.2 *0.2 Cystoscopy 38 *5 * * 1.5 *0.2 * 15–44 years ^{2.4} 1,203 1,643 3,850 4,217 22.7 28.3 66.1 Diagnostic ultrasound 94 365 348 309 1.8 6.3 6.0 Computerized axial tomography (CAT scan) 36 156 157 144 0.7 2.7 2.7 Laparoscopy (excluding that for ligation and division of fallopian tubes) 214 124 118 120 4.1 2.1 2.0 Biliary tract X-ray 60 109 94 102 1.1 1.9 1.6	*0.2
Cystoscopy	*0.2
15–44 years ^{2.4}	*0.3
Diagnostic ultrasound 94 365 348 309 1.8 6.3 6.0 Computerized axial tomography (CAT scan) 36 156 157 144 0.7 2.7 2.7 Laparoscopy (excluding that for ligation and division of fallopian tubes) 214 124 118 120 4.1 2.1 2.0 Biliary tract X-ray 60 109 94 102 1.1 1.9 1.6	70.0
Computerized axial tomography (CAT scan) 36 156 157 144 0.7 2.7 2.7 Laparoscopy (excluding that for ligation and division of fallopian tubes) 214 124 118 120 4.1 2.1 2.0 Biliary tract X-ray 60 109 94 102 1.1 1.9 1.6	72.0
Laparoscopy (excluding that for ligation and division of fallopian tubes) 214 124 118 120 4.1 2.1 2.0 Biliary tract X–ray 60 109 94 102 1.1 1.9 1.6	5.3
fallopian tubes) 214 124 118 120 4.1 2.1 2.0 Biliary tract X-ray 60 109 94 102 1.1 1.9 1.6	2.5
Biliary tract X-ray	2.0
	1.7
	1.0
Contrast myelogram	0.6
Endoscopy of large intestine without biopsy	0.6
Cystoscopy	0.7
45–64 years ^{2,4}	76.3
Diagnostic ultrasound	7.1
Computerized axial tomography (CAT scan)	6.7
Angiocardiography using contrast material	8.8
Radioisotope scan	3.2
Biliary tract X-ray	2.6
Endoscopy of small intestine without biopsy	2.9 2.4
Endoscopy of large intestine without biopsy	2. 4 1.5
	92.6
Computerized axial tomography (CAT scan) 66 455 428 436 4.3 25.3 23.3 Diagnostic ultrasound 62 377 359 415 4.0 20.9 19.6	23.3 22.2
Diagnostic ultrasound	13.1
Radioisotope scan	10.1
Endoscopy of small intestine without biopsy	9.0
Endoscopy of large intestine without biopsy	8.4
Cystoscopy	3.0

¹Comparisons of 1980 with later years should be made with caution as estimates of change may reflect improvements in the design (see Appendix I) rather than true changes in hospital use.

NOTES: Excludes newborn infants. Data do not reflect total use of procedures because procedures for outpatients are not included in the National Hospital Discharge Survey. For example, CAT scans are frequently performed on outpatients. Rates are based on the civilian population. In each sex and age group, data are shown for the five most common procedures in 1980 and 1989. Procedure categories are based on the International Classification of Diseases, 9th Revision, Clinical Modification. For a listing of the code numbers, see Appendix II, table IX.

SOURCE: Division of Health Care Statistics, National Center for Health Statistics: Data from the National Hospital Discharge Survey.

²Beginning in 1989, the definition of some surgical and diagnostic and other nonsurgical procedures was revised, thus causing a discontinuity in the trends for the totals. See Appendix II.

³Rates are age adjusted.

⁴Includes nonsurgical procedures not shown.

^{*}Estimates based on fewer than 30 discharges are not shown; estimates based on 30-59 discharges should be used with caution.

Table 88. Admissions, average length of stay, outpatient visits, and percent outpatient surgery in short-stay hospitals, according to type of ownership and size of hospital: United States, selected years 1960–89

[Data are based on reporting by a census of registered hospitals]

Type of ownership and size of hospital	1960	1970	1975	1980	1985	1986	1987	1988	1989
Admissions				Num	ber in thou	sands			
All ownerships	24,324	30,706	35,270	38,140	35,478	34,399	33,592	33,233	32,842
Federal Non-Federal Nonprofit Proprietary State-local government	1,354 22,970	1,454 29,252 20,948 2,031 6,273	1,751 33,519 23,735 2,646 7,138	1,942 36,198 25,576 3,165 7,458	1,977 33,501 24,188 3,242 6,071	1,988 32,410 23,492 3,231 5,687	1,959 31,633 22,946 3,157 5,530	1,753 31,480 22,946 3,090 5,444	1,701 31,141 22,798 3,071 5,271
Size of hospital: 6–99 beds 100–199 beds 200–299 beds 300–499 beds 500 beds or more			5,639 7,276 6,287 8,795 7,274	5,436 7,452 6,789 10,137 8,327	4,311 6,713 6,484 9,620 8,348	4,066 6,503 6,514 9,220 8,094	3,968 6,244 6,403 9,016 7,961	3,871 6,196 6,480 8,885 7,802	3,784 6,232 6,472 8,845 7,509
Average length of stay				N	umber of da	ays			
All ownerships	8.4	8.7	8.0	7.8	7.3	7.3	7.4	7.5	7.5
Federal	21.4 7.6 7.4 5.7 8.8	17.0 8.2 8.2 6.8 8.7	14.4 7.7 7.8 6.6 7.6	12.9 7.6 7.7 6.5 7.4	11.6 7.1 7.2 6.1 7.2	11.3 7.1 7.2 6.1 7.4	11.3 7.2 7.2 6.3 7.6	12.5 7.2 7.2 6.2 7.6	12.1 7.3 7.3 6.3 7.7
Size of hospital: 6–99 beds 100–199 beds 200–299 beds 300–499 beds 500 beds or more			6.5 7.2 7.6 8.2 10.2	6.3 7.1 7.5 8.0 9.6	6.0 6.7 6.9 7.3 8.8	6.2 6.7 6.9 7.3 8.8	6.4 6.9 7.0 7.3 8.8	6.5 6.9 7.1 7.4 9.0	6.6 7.0 7.0 7.4 8.9
Outpatient visits ¹				Num	ber in thou	sands			
All ownerships		173,058	245,938	255,320	272,833	285,216	300,960	326,575	342,618
Federal		39,514 133,545 90,992 4,698 37,854	49,627 196,311 132,368 7,713 56,230	48,568 206,752 142,864 9,696 54,192	50,059 222,773 160,002 12,378 50,394	50,946 234,270 168,284 14,896 51,091	53,256 247,704 178,089 16,566 53,049	55,139 271,436 195,864 17,926 57,646	54,709 287,909 209,641 19,341 58,926
Size of hospital: 6–99 beds			41,346 40,433 38,122 63,019 63,019	41,875 45,686 41,119 65,550 61,089	41,813 50,542 45,805 68,664 66,008	43,111 56,005 46,783 69,883 69,434	48,273 57,267 50,626 73,369 71,426	52,294 63,663 56,570 78,569 75,480	53,875 67,736 62,975 82,532 75,499
Outpatient surgery				Percer	nt of total su	rgeries 2			
All ownerships				16.4	34.5	40.3	44.2	46.9	48.7
Federal				18.9 16.3 17.1 14.3 13.6	34.0 34.5 35.5 34.1 29.7	40.6 40.3 40.8 41.9 37.0	49.3 43.9 44.3 47.3 39.3	49.0 46.8 47.0 50.5 43.1	51.3 48.5 48.6 52.5 45.0
Size of hospital: 6–99 beds 100–199 beds 200–299 beds 300–499 beds 500 beds or more.				17.8 15.4 16.7 17.1 15.3	36.5 36.4 36.5 34.5 30.5	44.6 43.0 41.8 40.0 35.3	49.4 47.1 45.7 43.1 39.1	52.8 50.2 49.3 46.6 39.5	54.1 52.4 50.6 48.0 41.5

¹Because of modifications in 1977 and 1982 in the collection of outpatient data, there are discontinuities in the trends for this item.

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²The American Hospital Association defines surgery as a surgical episode in the operating or procedure room. During a single episode, multiple surgical procedures may be performed.

NOTE: Excludes psychiatric and tuberculosis and other respiratory disease hospitals.

SOURCES: American Hospital Association: Hospitals. JAHA 35(15):396–401 and 45(15):463–467, Aug. 1961 and Aug. 1971; Hospital Statistics, 1976, 1981, 1985–91 Editions. Chicago, 1976, 1981, 1985–91. (Copyrights 1961, 1971, 1976, 1981, 1985–90: Used with the permission of the American Hospital Association.)

Table 89. Nursing home and personal care home residents 65 years of age and over and rate per 1,000 population, according to age, sex, and race: United States, 1963, 1973–74, 1977, and 1985

[Data are based on a sample of nursing homes]

		Res	idents		Re	sidents per 1,0	00 populati	on¹
Age, sex, and race	1963	1973–742	1977 ³	1985	1963	1973-742	1977 ³	1985
Age								
All ages	445,600	961,500	1,126,000	1,318,300	25.4	44.7	47.1	46.2
65–74 years	89,600 207,200 148,700	163,100 384,900 413,600	211,400 464,700 449,900	212,100 509,000 597,300	7.9 39.6 148.4	12.3 57.7 257.3	14.4 64.0 225.9	12.5 57.7 220.3
Sex								
Male	141,000	265,700	294,000	334,400	18.1	30.0	30.3	29.0
65–74 years	35,100 65,200 40,700	65,100 102,300 98,300	80,200 122,100 91,700	80,600 141,300 112,600	6.8 29.1 105.6	11.3 39.9 182.7	12.6 44.9 146.3	10.8 43.0 145.7
Female	304,500	695,800	832,000	983,900	31.1	54.9	58.6	57.9
65–74 years	54,500 142,000 108,000	98,000 282,600 315,300	131,200 342,600 358,200	131,500 367,700 484,700	8.8 47.5 175.1	13.1 68.9 294.9	15.8 75.4 262.4	13.8 66.4 250.1
Race⁴								
White	431,700	920,600	1,059,900	1,227,400	26.6	46.9	48.9	47.7
65–74 years	84,400 202,000 145,400	150,100 369,700 400,800	187,500 443,200 429,100	187,800 473,600 566,000	8.1 41.7 157.7	12.5 60.3 270.8	14.2 67.0 234.2	12.3 59.1 228.7
Black	13,800	37,700	60,800	82,000	10.3	22.0	30.7	35.0
65–74 years	5,200 5,300 3,300	12,200 13,400 12,100	22,000 19,700 19,100	22,500 30,600 29,000	5.9 13.8 41.8	11.1 26.7 105.7	17.6 33.4 133.6	15.4 45.3 141.5

¹Residents per 1,000 population for 1973–74 and 1977 will differ from those presented in the sources because the rates have been recomputed using revised census estimates for these years (see source note).

SOURCES: National Center for Health Statistics: Characteristics of residents in institutions for the aged and chronically ill, United States, April–June 1963, by G. S. Wunderlich. Vital and Health Statistics. Series 12, No. 2. DHEW Pub. No. (PHS) 1000. Public Health Service. Washington. U.S. Government Printing Office, Sept. 1965; Characteristics, social contacts, and activities of nursing home residents, United States: 1973–74 National Nursing Home Survey, by A. Zappolo. Vital and Health Statistics. Series 13, No. 27. DHEW Pub. No. (HRA) 77–1778. Health Resources Administration. Washington. U.S. Government Printing Office, May 1977; Characteristics of nursing home residents, health status, and care received: National Nursing Home Survey, United States, May–December 1977, by E. Hing. Vital and Health Statistics. Series 13, No. 51. DHHS Pub. No. (PHS) 81–1712. Public Health Service. Washington. U.S. Government Printing Office, April 1981; The National Nursing Home Survey: 1985 summary for the United States, by E. Hing, E. Sekscenski, and G. Strahan. Vital and Health Statistics. Series 13, No. 97. DHHS Pub. No. (PHS) 89-1758. Public Health Service. Washington. U.S. Government Printing Office, January 1989. U.S. Bureau of the Census: Preliminary estimates of the population of the United States by age, sex, and race: 1970–1981. Current Population Reports. Series P–25, No. 917. Washington. U.S. Government Printing Office, July 1982.

²Excludes residents in personal care or domiciliary care homes.

³Includes residents in domiciliary care homes.

⁴For data years 1973–74 and 1977, all Hispanics were included in the white category. For 1963, black includes all other races.

Table 90. Nursing home residents, according to selected functional status and age: United States, 1977 and 1985

[Data are based on a sample of nursing homes]

			1977					1985		
Functional status	All ages	Under 65 years	65–74 years	75–84 years	85 years and over	All ages	Under 65 years	6574 years	75–84 years	85 years and over
			-		Number o	f residents				
All residents	1,303,100	177,100	211,400	464,700	449,900	1,491,400	173,100	212,100	509,000	597,300
					Percent d	istribution				
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Dressing										
Independent	30.6 69.4	44.8 55.2	38.8 61.2	27.5 72.5	24.2 75.8	24.6 75.4	41.1 58.9	29.8 70.2	24.1 75.9	18.3 81.7
Using toilet room										
Independent	47.5	61.8	53.1	45.7	41.0	39.1	57.1	43.4	39.7	32.0
Requires assistance Does not use	42.5 10.1	28.1 10.1	37.8 9.1	44.7 9.6	48.0 11.0	48.9 12.0	31.5 11.4	45.8 10.8	47.8 12.6	55.9 12.1
Mobility										
Walks independently	33.9	53.6	43.2	33.2	22.5	29.3	51.0	39.6	30.4	18.4
Walks with assistance	28.8 32.0	15.7 25.5	21.4 30.5	30.5 31.5	35.6 35.9	24.8 39.5	13.5 29.3	20.4 33.7	24.7 38.7	29.6 45.1
Bedfast	5.3	5.2	5.0	4.9	6.1	6.5	6.2	6.3	6.1	6.9
Continence										
No difficulty controlling bowel or										
bladder	54.7	68.0	62.4	52.9	47.8	48.1	67.7	57.1	45.0	41.9
Bowel	3.7 9.0	3.0 5.8	3.7 6.5	4.0 9.4	3.8 11.1	1.9 10.3	*1.5 6.4	*2.0 6.8	1.7 11.0	2.2 12.0
Bowel and bladder Ostomy in either bowel or	25.9	16.8	20.6	26.9	30.8	31.7	16.8	27.5	33.6	35.8
bladder	6.7	6.4	6.8	6.9	6.5	8.1	7.5	6.6	8.7	8.1
Eating										
Independent	67.4	73.8	72.9	66.2	63.5	60.7	68.5	66.6	60.9	56.1
Requires assistance 2	32.6	26.2	27.1	33.8	36.5	39.3	31.5	33.4	39.1	43.9
Vision										
Not impaired	67.2 19.0	81.0 10.9	75.4 13.4	67.9 19.6	57,2 24.1	75.9 14.6	88.5 5.9	83.3 10.0	77.8 14.2	68.1 19.1
Severely impaired	6.6	2.2	3.3	6.1	10.4	5.6	*1.9	4.3	4.1	8.4
Completely lost	2.9 4.3	2.2 3.8	2.6 5.3	2.6 3.9	3.8 4.5	2.5 1.4	*2.5 *1.2	*1.3 *1.0	2.1 1.8	3.2 1.2
Hearing										
Not impaired	69.5	87.6	81.0	71.6	54.9	78.5	96.1	90.4	82.6	65.7
Partially impaired	21.7 4.3	6.6 *0.4	11.4 1.9	21.2 3.0	33.1 8.4	16.7 3.4	*3.1 *0.1	7.4 *1.1	14.8 1.5	25.5 6.8
Completely lost	0.7	*1.1	*0.7	*0.6	*0.7	0.6	*0.1	*0.4	*0.6	*0.8
Unknown	3.7	4.4	5.0	3.6	3.0	0.8	*0.5	*0.7	*0.5	1.1

¹Includes those who do not dress.

SOURCES: Division of Health Care Statistics, National Center for Health Statistics: Characteristics of nursing home residents, health status, and care received:
National Nursing Home Survey, United States, May-December 1977, by E. Hing. Vital and Health Statistics. Series 13, No. 51. DHHS Pub. No. (PHS) 81–1712. Public Health Service. Washington. U.S. Government Printing Office, April 1981; The National Nursing Home Survey: 1985 summary for the United States, by E. Hing, E. Sekscenski, and G. Strahan. Vital and Health Statistics. Series 13, No. 97. DHHS Pub. No. (PHS) 89-1758. Public Health Service. Washington. U.S. Government Printing Office, January 1989.

 $^{^2\}mbox{lncludes}$ those who are tube or intravenously fed.

^{*}Relative standard error greater than 30 percent.

Table 91. Admissions to mental health organizations and rate per 100,000 civilian population, according to type of service and organization: United States, selected years 1969-88

[Data are based on inventories of mental health organizations]

		Admis	sions in 1	thousand	s	Rá	ate per 10	0,000 civil	lian popul	ation
Service and organization	1969	1975	1983	1986	1988¹	1969	1975	1983	1986	1988¹
Inpatient and residential treatment										
All organizations	1,283	1,558	1,633	1,817	2,002	644.2	736.5	701.4	759.9	820.4
State and county mental hospitals	487 92 478 135 60	434 126 544 181 236	339 165 786 149	330 235 849 180	304 382 879 246	244.4 46.2 240.1 67.9 30.0	205.1 59.4 257.2 85.5 111.7	146.0 70.9 336.8 64.3	139.1 98.0 354.8 75.1	124.7 156.4 360.2 100.7
disturbed children	8 23	12 25	17 177	25 198	23 168	3.8 11.8	5.7 11.9	7.1 76.3	10.2 82.7	9.6 68.8
Outpatient treatment									02.7	00.0
All organizations	1,147	2,291	2,665	2,765	3,014	575.9	1,083.2	1,147.5	1,155.7	1,234.5
State and county mental hospitals	164 26 171 17 177	146 33 255 94 785	84 78 469 103	62 123 494 125	91 127 460 214	82.5 12.8 85.7 8.4 88.7	69.1 15.6 120.5 44.4 371.2	36.3 33.4 202.1 44.5	26.0 51.5 206.3 52.3	37.4 52.1 188.3 87.7
disturbed children	8 538 46	20 871 87	33 538 1,360	62 391 1,508	56 558 1,508	4.0 270.4 23.4	9.4 411.8 41.2	14.1 231.7 585.4	25.8 163.2 630.6	22.8 228.4 617.8
Partial care treatment										
All organizations	55	163	177	189	304	27.8	77.2	76.3	78.9	125.7
State and county mental hospitals	11 3 18 4 13	14 3 14 8 94	4 6 46 10	6 9 39 7	5 39 39 16	5.3 1.4 9.1 1.8 6.5	6.7 1.5 6.7 3.7 44.5	1.6 2.4 19.8 4.4	2.4 3.7 16.4 3.1	2.3 16.0 16.1 6.5
disturbed children	1 4 2	3 22 5	3 5 103	5 123	9 196	0.3 2.2 1.2	1.6 10.4 2.1	1.5 2.3 44.3	2.3 51.0	3.5 81.3

¹Data for 1988 are provisional.

NOTES: Changes in reporting procedures in 1981 affect the comparability of data with those from previous years. Some numbers in this table have been revised and differ from previous editions of Health, United States.

SOURCES: Survey and Reports Branch, Division of Biometry and Applied Sciences, National Institute of Mental Health: R. W. Manderscheid and S. A. Barrett: Mental Health, United States, 1987. DHHS Pub. No. (ADM) 87–1518. U.S. Government Printing Office, 1987; Unpublished data.

² Includes Veterans Administration neuropsychiatric hospitals and Veterans Administration general hospitals with separate psychiatric services.

³Includes other multiservice mental health organizations with inpatient and residential treatment services that are not elsewhere classified.

⁴Beginning in 1983 a definitional change sharply increased the number of multiservice mental health organizations while decreasing the number of freestanding psychiatric outpatient clinics. See Appendix I.

5Beginning in 1986 outpatient psychiatric clinics providing partial care are counted as multiservice mental health organizations in the "all other" category.

⁶Includes freestanding psychiatric partial care organizations.

Table 92. Inpatient and residential treatment episodes in mental health organizations, rate per 100,000 civilian population, and inpatient days, according to type of organization: United States, selected years 1969–88

[Data are based on inventories of mental health organizations]

Organization	1969	1975	19811	1983	1986	1988²
			Episodes in	thousands		
All organizations	1,710	1,817	1,720	1,861	2,055	2,234
State and county mental hospitals Private psychiatric hospitals Non-Federal general hospital psychiatric	767 103	599 137	499 177	459 181	445 258	408 411
services	535	566	677	820	883	914
services ³ Federally funded community mental	187	214	206	171	204	266
health centers	65	247	• • •	•••	• • •	
emotionally disturbed children	21 32	28 26	34 127	33 197	47 218	47 188
		Epis	odes per 100,000) civilian populati	on	
All organizations	859.1	859.6	755.6	799.1	858.9	914.4
State and county mental hospitals Private psychiatric hospitals Non-Federal general hospital psychiatric	385.3 51.5	283.3 64.8	219.3 77.5	197.7 77.8	186.0 107.9	167.0 168.3
services	269.0	267.6	297.3	351.3	369.0	374.4
services ³	93.9	101.4	90.3	73.4	85.2	108.8
health centers	32.6	116.8		• • •	• • •	
emotionally disturbed children	10.7 16.1	13.4 12.3	15.1 56.1	14.0 84.9	19.7 91.1	19.1 76.8
			Days in the	ousands		
All organizations	168,934	104,970	77,053	81,821	83,413	83,167
State and county mental hospitals Private psychiatric hospitals Non-Federal general hospital psychiatric	134,185 4,237	70,584 4,401	44,558 5,578	42,427 6,010	39,075 8,568	36,310 10,857
services	6,500	8,349	10,727	12,529	12,570	13,126
services ³	17,206	11,725	7,591	7,425	7,753	7,155
health centers	1,924	3,718	•••	•••	•••	
emotionally disturbed children	4,528 354	5,900 293	6,127 2,472	5,776 7,654	8,267 7,180	8,464 7,255

¹In 1981, some organizations were reclassified and data for some organization types were not available, resulting in a particularly large increase for the "all other" category in 1981.

NOTES: Changes in reporting procedures in 1981 affect the comparability of data with those from previous years. Some numbers in this table have been revised and differ from previous editions of Health, United States.

SOURCES: Survey and Reports Branch, Division of Biometry and Applied Sciences, National Institute of Mental Health: R. W. Manderscheid and S. A. Barrett: Mental Health, United States, 1987. DHHS Pub. No. (ADM) 87–1518. U.S. Government Printing Office, 1987; Unpublished data.

²Data for 1988 are provisional.

³Includes Veterans Administration neuropsychiatric hospitals and Veterans Administration general hospitals with separate psychiatric services.

fincludes other multiservice mental health organizations with inpatient and residential treatment services that are not elsewhere classified.

⁵Beginning in 1983 a definitional change sharply increased the number of multiservice mental health organizations. See Appendix I.

Table 93. Admissions to selected inpatient psychiatric organizations and rate per 100,000 civilian population, according to sex, age, and race: United States, 1975, 1980, and 1986

[Data are based on a sample survey of patients]

	State and	county menta	al hospitals	Private	osychiatric l	hospitals	Non-Fed	eral general .	hospitals1
Sex, age, and race	1975	1980	1986	1975	1980	1986	1975	1980	1986
Both sexes				Numb	er in thousa	ınds			
Total	385	369	326	130	141	207	516	564	794
Under 18 years	25	17	16	15	17	42	43	44	46
18–24 years	72	.77	58	19	23	22	93	98	120
25–44 years	166	177	189	47	56	91	220	249	405
45–64 years	102 21	78 20	48 15	35 13	32 14	34 18	121 38	123 50	142 82
	296	265				177			
White	296 89	104	217 109	119 10	123 18	30	451 65	469 95	607 187
Male									
Total	249	239	205	56	67	107	212	255	379
Under 18 years	16	11	10	8	9	23	20	20	21
18–24 years	52	56	39	10	13	14	45	52	57
25–44 years	107	119	125	20	27	50	85	115	215
45–64 years	61 13	43 11	25 7	14 5	13 5	14 6	48 14	46 21	60 26
White									
All other	191 58	171 68	135 69	51 5	58 9	89 18	184 27	213 42	274 105
Female									
Total	136	130	121	74	74	101	304	309	415
Under 18 years	9	5	6	8	7	20	23	23	25
18–24 years	20	22	19	9	10	. 8	48	45	63
25–44 years	59	58	64	28	29	41	135	135	190
45–64 years	41 8	35 9	24 8	21 8	18 9	20 12	74 24	77 29	81 56
White	105	94	82	69	65	88	267	256	333
All other	31	36	40	5	9	13	37	53	82
Both sexes			R	ate per 100,	000 civilian	population			
Total	182.2	163.6	136.1	61.4	62.6	86.7	243.8	250.0	331.7
Under 18 years	38.1	26.1	25.2	23.3	26.3	67.1	64.4	68.5	72.0
18–24 years	271.8	264.6	215.5	73.7	79.6	81.3	352.8	334.2	443.7
25–44 years	314.1 233.5	282.9 175.7	251.9 107.0	89.3 80.1	89.1 71.0	121.6 75.2	416.8 278.5	399.0 276.4	540.4 314.9
65 years and over	91.8	78.0	50.9	57.7	54.1	61.9	170.3	195.4	281.5
White	161.1	136.8	106.7	64.9	63.4	87.3	245.4	241.8	299.0
All other	321.9	328.0	299.8	37.9	57.5	83.1	233.3	300.0	514.3
Male									
Total	243.7	219.8	176.6	54.5	61.9	92.1	207.1	233.8	327.6
Under 18 years	48.3	35.4	30.1	22.5	28.9	69.8	59.1	62.6	63.7
18–24 years	409.0	387.9	292.6	78.0	92.2	103.2	350.8	365.3	428.5
25–44 years	418.4 291.5	388.1 202.3	338.4 114.4	76.6 66.8	86.8 63.2	136.1 65.5	332.8 228.6	374.7 219.1	584.2
65 years and over	136.4	105.3	57.1	50.3	47.3	52.1	152.0	203.4	281.1 223.1
White	214.2	182.2	137.1	57.0	61.7	90.3	206.9	226.3	278.3
All other	444.5	457.8	403.0	38.1	62.7	102.8	209.1	281.1	610.3
Female									
Total	124.7	111.1	98.1	67.8	63.3	81.5	278.1	265.1	335.5
Under 18 years	27.5	16.4	20.0	24.1	23.6	64.3	70.0	74.6	80.7
18–24 years	143.1	145.8	141.0	69.6	67.4	60.2	354.6	304.4	458.3
25–44 years	215.9 180.5	182.3 151.7	168.1 100.2	101.2 92.3	91.2 78.1	107.6 84.0	495.8 324.3	422.2 328.2	498.1 345.8
65 years and over	60.8	59.6	46.7	62.8	58.8	68.6	182.9	190.0	345.8
White	111.2	94.1	78.1	72.5	65.0	84.5	281.7	256.4	318.6
All other	212.0	212.6	207.2	37.7	52.8	65.5	254.9	316.7	428.0

¹Non-Federal general hospitals include public and nonpublic facilities.

SOURCES: National Institute of Mental Health: C. A. Taube and S. A. Barrett: Mental Health, United States, 1985. DHHS Pub. No. (ADM) 85–1378. U.S. Government Printing Office, 1985; R. W. Manderscheid and M. A. Sonnenschein: Mental Health, United States, 1990. DHHS Pub. No. (ADM) 90-1708. U.S. Government Printing Office, 1990: Unpublished data.

Table 94. Admissions to selected inpatient psychiatric organizations, according to selected primary diagnoses and age: United States, 1975, 1980, and 1986

[Data are based on a sample survey of patients]

		ate and cou ental hospi	•	psy	Private chiatric hos	oitals	Nor	n-Federal ge hospitals¹	neral
Primary diagnosis and age	1975	1980	1986	1975	1980	1986	1975	1980	1986
All diagnoses ²				Rate per 1	00,000 civili	an population	on		
All ages	182.2	163.6	136.1	61.4	62.6	86.7	243.8	250.0	331.7
Under 25 years	104.8 314.1 233.5 91.8	101.2 282.9 175.7 78.0	82.1 251.9 107.0 50.9	37.7 89.3 80.1 57.7	43.1 89.1 71.0 54.1	71.4 121.6 75.2 61.9	146.7 416.8 278.5 170.3	152.2 399.0 276.4 195.4	183.1 540.4 314.9 281.5
Alcohol related	•		44.0	· · · ·	· · · ·	51.5	0,0		201.0
All ages	50.4	35.5	22.5	5.1	5.8	6.6	17.0	18.8	41.4
Under 25 years	10.7 86.2 110.0 14.8	12.4 64.0 57.7 11.5	15.5 42.6 15.3 *3.2	0.4 7.6 12.5 4.3	1.4 9.3 10.9 4.4	2.2 10.0 11.0 4.5	2.4 31.0 34.5 10.2	4.4 34.3 30.6 12.8	13.4 92.6 31.8 11.3
Drug related									
All ages	6.8	7.8	8.7	1.5	1.8	6.1	8.4	7.4	20.2
Under 25 years	7.2 12.6 *0.6 *3.5	9.4 12.9 1.4 *0.7	5.8 14.2 10.5 *0.8	1.5 2.3 0.1 0.4	1.8 3.0 1.0 0.6	7.5 9.3 *1.8	7.7 13.8 6.5 *2.6	7.8 9.3 7.1 *2.0	18.4 41.2 *2.1 *0.1
Organic disorders ³									
All ages	9.6	6.8	4.3	2.5	2.2	2.0	9.0	7.4	9.8
Under 25 years	2.2 6.4 12.2 43.3	1.2 4.7 8.1 30.0	*0.2 2.6 7.3 17.2	0.7 1.1 1.7 14.5	0.5 0.9 2.7 10.8	*0.5 *0.3 *1.5 11.7	1.1 5.4 9.3 49.3	*0.8 5.6 6.9 36.4	1.7 6.1 5.7 50.7
Affective disorders									
All ages	21.3	22.0	22.8	26.0	26.8	41.9	91.9	79.2	121.9
Under 25 years	7.5 40.6 29.4 16.8	9.1 36.9 32.4 14.3	9.6 43.2 25.0 7.9	9.5 39.4 43.3 29.6	13.5 38.9 36.3 29.2	28.5 63.4 38.5 33.4	35.3 160.9 135.6 78.5	32.2 123.7 113.8 81.0	49.2 176.8 147.3 166.3
Schizophrenia									
All ages	61.2	62.1	49.7	13.4	13.3	9.9	58.9	59.9	63.3
Under 25 years	35.9 125.8 63.5 9.3	36.6 125.0 54.8 13.9	18.6 107.5 35.9 18.3	11.1 23.8 11.3 2.7	10.6 22.5 11.6 3.6	5.7 18.9 8.5 *1.8	42.0 118.0 50.3 5.6	38.3 114.5 53.6 16.3	30.4 118.6 68.9 14.0

¹Non-Federal general hospitals include public and nonpublic facilities.

NOTES: Primary diagnosis categories are based on the then current International Classification of Diseases and Diagnostic and Statistical Manual of Mental Disorders. For a listing of the code numbers, see Appendix II, table X.

SOURCES: National Institute of Mental Health: C. A. Taube and S. A. Barrett: Mental Health, United States, 1985. DHHS Pub. No. (ADM) 85-1378. U.S. Government Printing Office, 1985; R.W. Manderscheid and M. A. Sonnenschein: Mental Health, United States, 1990. DHHS Pub. No. (ADM) 90-1708. U.S. Government Printing Office, 1990: Unpublished data.

²Includes all other diagnoses not listed separately.

³Excludes alcohol- and drug-related diagnoses.

^{*}Based on 5 or fewer sample admissions.

Table 95. Persons employed in health service sites: United States, selected years 1970-90

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

Site	1970¹	1975	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990
					Number	of persons	in thous	ands				
All employed civilians	76,805	85,846	99,303	99,526	100,834	105,005	107,150	109,597	112,440	114,968	117,342	117,914
All health service sites	4,246	5,945	7,339	7,810	7,874	7,934	7,910	8,129	8,478	8,781	9,110	9,447
Offices of physicians	477 222 19 2,690	618 331 30 3,441	777 415 40 4,036	898 415 53 4,341	888 441 54 4,348	896 468 61 4,288	894 480 59 4,269	896 497 66 4,368	950 552 72 4,444	985 521 77 4,520	1,039 560 97 4,568	1,098 580 90 4,690
facilities	509 330	891 634	1,199 872	1,217 886	1,342 801	1,362 859	1,309 899	1,339 963	1,337 1,123	1,467 1,211	1,521 1,325	1,543 1,446
					Pe	rcent of e	mployed	civilians				
All health service sites	5.5	6.9	7.4	7.8	7.8	7.6	7.4	7.4	7.5	7.6	7.8	8.0
						Percent	t distributi	on				
All health service sites	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Offices of physicians	11.2 5.2 0.4 63.4	10.4 5.6 0.5 57.9	10.6 5.7 0.5 55.0	11.5 5.3 0.7 55.6	11.3 5.6 0.7 55.2	11.3 5.9 0.8 54.0	11.3 6.1 0.7 54.0	11.0 6.1 0.8 53.7	11.2 6.5 0.8 52.4	11.2 5.9 0.9 51.5	11.4 6.1 1.1 50.1	11.6 6.1 1.0 49.6
facilities	12.0 7.8	15.0 10.7	16.3 11.9	15.6 11.3	17.0 10.2	17.2 10.8	16.5 11.4	16.5 11.8	15.8 13.2	16.7 13.8	16.7 14.5	16.3 15.3

¹April 1, derived from decennial census; all other data years are annual averages from the Current Population Survey.

NOTES: Totals exclude persons in health-related occupations who are working in nonhealth industries, as classified by the U.S. Bureau of the Census, such as pharmacists employed in drugstores, school nurses, and nurses working in private households. Totals include Federal, State, and county health workers. In 1970–82, employed persons were classified according to the industry groups used in the 1970 Census of Population. Beginning in 1983, persons were classified according to the system used in the 1980 Census of Population.

SOURCES: U.S. Bureau of the Census: 1970 Census of Population, occupation by industry. Subject Reports. Final Report PC(2)-7C. Washington. U.S. Government Printing Office, Oct. 1972; U.S. Bureau of Labor Statistics: Labor Force Statistics Derived from the Current Population Survey: A Databook, Vol. I. Washington. U.S. Government Printing Office, Sept. 1982; Employment and Earnings, January 1983–91. Vol. 30, No. 1, Vol. 31, No. 1, Vol. 32, No. 1, Vol. 33, No. 1, Vol. 34, No. 1, Vol. 35, No. 1, Vol. 37, No. 1, Vol. 37, No. 1, and Vol. 38, No. 1. Washington. U.S. Government Printing Office, Jan. 1983–91; American Chiropractic Association: Unpublished data.

²Data for 1980 and 1982 are from the American Chiropractic Association; data for all other years are from the U.S. Bureau of Labor Statistics.

Table 96. (page 1 of 2). Active non-Federal physicians per 10,000 civilian population, according to geographic division, State, and primary specialty: United States, 1975, 1985, 1987, and 1989

							E	Doctors of	medicine	,1		
		Total ph	ysicians²			Patien	t care ³			Primar	y care⁴	_
Geographic division and State	1975	1985	1987	1989	1975	1985	1987	1989	1975	1985	1987	1989
					Number	per 10,00	00 civilian	populatio	n			
United States	15.3	20.7	21.4	21.9	13.5	18.0	18.9	19.3	4.1	5.4	5.5	5.6
New England	19.1	26.7	27.7	28.6	16.9	22.9	24.2	25.1	4.6	6.2	6.2	6.4
Maine	12.8	18.7	19.3	20.0	10.7	15.6	16.0	16.7	3.8	5.4	5.4	5.6
New Hampshire	14.3	18.1	18.5	19.4	13.1	16.7	17.2	18.1	4.6	5.6	5.7	6.0
Vermont	18.2 20.8	23.8 30.2	24.5 31.2	25.2 32.3	15.5 18.3	20.3 25.4	21.5 27.0	22.0 28.2	5.2 4.7	6.5 6.4	6.6 6.4	6.8 6.6
Rhode Island	17.8	23.3	24.9	25.6	16.1	20.2	21.8	22.2	4.4	5.5	5.6	5.7
Connecticut	19.8	27.6	29.0	29.6	17.7	24.3	25.7	26.3	4.7	6.4	6.5	6.7
Middle Atlantic	19.5	26.1	27.3	27.9	17.0	22.2	23.6	24.2	4.5	5.9	6.0	6.2
New York	22.7 16.2	29.0 23.4	30.1 24.5	30.7 25.2	20.2 14.0	25.2 19.8	26.9 21.1	27.3 21.8	5.1 4.1	6.3 5.5	6.3 5.8	6.6 5.9
New Jersey	16.6	23.4	24.8	25.5	13.9	19.2	20.4	20.9	4.1	5.3 5.4	5.6 5.5	5.6
East North Central	13.9	19.3	19.9	20.3	12.0	16.4	17.1	17.4	3.7	5.0	5.1	5.1
Ohio	14.1	19.9	20.6	21.0	12.2	16.8	17.5	17.8	3.7	4.8	4.8	4.9
Indiana	10.6	14.7	15.4	15.8	9.6	13.2	14.0	14.3	3.8	4.6	4.7	4.8
Illinois	14.5 15.4	20.5 20.8	21.1 21.3	21.5 21.6	13.1 12.0	18.2 16.0	18.9 16.4	19.2	4.1 3.2	5.5	5.7	5.7
Michigan	12.5	17.7	18.4	18.8	11.4	15.9	16.7	16.6 17.1	3.2 4.0	4.5 5.4	4.4 5.6	4.5 5.8
West North Central	13.3	18.3	19.1	19.6	11.4	15.6	16.4	16.9	3.8	5.2	5.3	5.4
Minnesota	14.9	20.5	21.1	21.6	13.7	18.5	19.3	19.9	4.6	6.5	6.5	6.8
lowa	11.4	15.6	16.5	16.9	9.4	12.4	13.1	13.5	3.5	4.3	4.4	4.4
Missouri	15.0 9.7	20.5 15.8	21.3 16.7	21.7 16.9	11.6 9.2	16.3 14.9	17.1 15.8	17.5 15.9	3.3 4.1	4.7 5.8	4.6	4.6
South Dakota	8.2	13.4	14.0	14.2	5.2 7.7	12.3	13.0	13.9	3.4	5.0	6.0 5.6	6.1 5.6
Nebraska	12.1	15.7	16.7	17.0	10.9	14.4	15.5	15.8	4.2	5.3	5.4	5.6
Kansas	12.8	17.3	17.8	18.4	11.2	15.1	15.7	16.2	3.9	5.2	5.1	5.4
South Atlantic	14.0	19.7	20.8	21.3	12.6	17.6	18.6	19.1	3.7	5.2	5.4	5.5
Delaware	14.3	19.7	20.2	20.3	12.7	17.1	17.7	17.8	3.8	4.7	4.7	4.8
Maryland	18.6 39.6	30.4 55.3	31.5 57.2	32.3 58.0	16.5 34.6	24.9 45.6	26.7 47.5	27.5 48.2	4.2 7.2	6.5 10.3	6.8 10.6	7.0 10.9
Virginia	12.9	19.5	20.1	20.6	11.9	17.8	18.6	19.0	3.8	5.4	5.6	5.6
West Virginia	11.0	16.3	17.2	17.4	10.0	14.6	15.2	15.4	3.3	4.4	4.6	4.8
North Carolina	11.7	16.9	17.7	18.5	10.6	15.0	16.1	16.8	3.5	4.7	4.9	5.1
South Carolina	10.0 11.5	14.7 16.2	15.5 16.8	15.9 17.3	9.3 10.6	13.6 14.7	14.5 15.4	14.8 15.9	3.3 3.3	4.5 4.3	4.7 4.4	4.6 4.5
Florida	15.2	20.2	21.1	21.5	13.4	17.8	18.7	19.2	3.9	5.3	5.6	5.7
East South Central	10.5	15.0	15.9	16.4	9.7	14.0	14.9	15.4	3.2	4.5	4.7	4.8
Kentucky	10.9	15.1	16.0	16.4	10.1	13.9	15.1	15.5	3.6	4.8	5.0	5.1
Tennessee	12.4	17.7	18.6	19.1	11.3	16.2	17.3	17.7	3.2	4.7	4.9	5.0
Alabama	9.2 8.4	14.2 11.8	15.0 12.5	15.5 12.9	8.6 8.0	13.1 11.1	14.0 11.9	14.4 12.2	3.0 3.1	4.2 4.2	4.4 4.3	4.6 4.3
West South Central	11.9	16.4	17.1	17.5	10.5	14.5	15.2	15.6	3.5	4.5	4.5	4.6
Arkansas	9.1	13.8	14.4	14.6	8.5	12.8	13.5	13.8	3.4	4.8	4.9	5.0
Louisiana	11.4	17.3	17.9	18.4	10.5	16.1	16.8	17.3	3.3	4.5	4.5	4.7
Oklahoma	11.6 12.5	16.1 16.8	16.7 17.3	16.9 17.8	9.4 11.0	12.9 14.7	13.4 15.3	13.6 15.8	3.2 3.6	4.0 4.5	4.4 4.5	4.4 4.6
Mountain	14.3	17.8	18.5	19.0	12.6	15.7	16.3	16.8	4.1	5.0	5.2	5.2
Montana	10.6	14.0	15.2	15.8	10.1	13.2	14.4	14.9	4.5	5.4	5.7	5.9
Idaho	9.5	12.1	12.2	12.4	8.9	11.4	11.5	11.8	4.0	4.8	4.8	4.9
Wyoming	9.5	12.9	13.3	14.0	8.9	12.0	12.6	13.3	4.1	4.6	5.1	5.1
Colorado	17.3 12.2	20.7 17.0	21.0 17.7	21.7 18.5	15.0 10.1	17.7 14.7	18.3 15.5	18.9	4.6 3.4	5.6 4.8	5.6 5.2	5.7 5.2
Arizona	16.7	20.2	20.9	21.3	14.1	14.7 17.1	17.8	16.3 18.1	3.4 4.2	4.8 5.1	5.2 5.2	5.2
Utah	14.1	17.2	17.7	18.1	13.0	15.5	16.1	16.5	3.8	4.4	4.5	4.5
Nevada	11.9	16.0	16.1	16.3	10.9	14.5	14.7	14.9	3.6	4.6	4.7	4.7

See footnotes at end of table.

Table 96. (page 2 of 2). Active non-Federal physicians per 10,000 civilian population, according to geographic division, State, and primary specialty: United States, 1975, 1985, 1987, and 1989

							Ĺ	Doctors of	medicine	,1		
	Total physicians ²			Patient care ³				Primary care4				
Geographic division and State	1975	1985	1987	1989	1975	1985	1987	1989	1975	1985	1987	1989
					Number	per 10,00	00 civilian	populatio	n			
Pacific	17.9	22.5	22.9	23.3	16.3	20.5	20.9	21.2	5.2	6.6	6.5	6.5
Washington	15.3	20.2	20.8	21.3	13.6	17.9	18.5	19.0	4.7	6.3	6.4	6.5
Oregon	15.6	19.7	20.0	20.7	13.8	17.6	18.1	18.6	4.6	6.1	6.0	6.1
California	18.8	23.7	23.8	24.1	17.3	21,5	21.7	22.0	5.5	6.7	6.6	6.6
Alaska	8.4	13.0	13.8	14.2	7.8	12.1	12.7	13.2	3.5	5.6	5.7	5.9
Hawaii	16.2	21.5	22.5	23.1	14.7	19.8	20.7	21.3	4.9	7.0	7.1	7.3

¹Excludes doctors of osteopathy; States with large numbers are Florida, Michigan, Missouri, New Jersey, Ohio, Pennsylvania, and Texas.

SOURCES: Compiled by Health Resources and Services Administration, Bureau of Health Professions based on data from the American Medical Association Physician Distribution and Licensure in the U.S., 1975, Physician Characteristics and Distribution in the U.S., 1986 Edition, 1989 and 1990 Editions; American Osteopathic Association: 1975–76 Yearbook and Directory of Osteopathic Physicians, 1985–86 Yearbook and Directory of Osteopathic Physicians; American Association of Colleges of Osteopathic Medicine: Annual Statistical Report, 1988.

²Includes active non-Federal doctors of medicine and doctors of osteopathy in all other specialties not shown separately.

³Excludes doctors of medicine in medical teaching, administration, research, and other nonpatient care activities.

⁴Includes doctors of medicine in patient care office-based general practice and family practice, internal medicine, and pediatrics.

NOTES: Starting in 1989 data for doctors of medicine are as of January 1; in earlier years these data are as of December 31. See Appendix II for physician definitions.

Table 97. Active physicians, according to type of physician, and number per 10,000 population: United States and outlying U.S. areas, selected 1950–89 estimates and 2000 projections

[Data are based on reporting by physicians and medical schools]

Year	All active physicians	Doctors of medicine	Doctors of osteopathy	Active physicians per 10,000 population
		Number of physicians	3	
1950 1960	219,900 259,400	209,000 247,300	10,900 12,200	14.1 14.0
1970. 1971. 1972. 1973.	326,500 337,400 348,300 355,700 370,000	314,200 325,000 335,500 342,500 356,400	12,300 12,400 12,800 13,200 13,600	15.6 16.1 16.4 16.4 16.9
1975	384,500 399,500 405,900 424,000 440,400	370,400 385,000 390,800 408,300 424,000	14,100 14,500 15,100 15,700 16,400	17.4 17.9 18.0 18.6 19.1
1980	457,500 467,000 482,000 501,100	440,400 448,700 465,000 481,500	17,100 18,000 18,700 19,700 20,800	19.7 19.9 20.5 21.1
1985. 1986. 1987. 1988.	534,400 544,800 560,300 577,200	512,900 520,900 536,200 550,700	21,900 23,200 24,100 25,300 26,500	22.0 22.2 22.6 23.3
Projections				
2000	721,600	682,100	39,500	26.9

NOTES: Starting in 1989 data for doctors of medicine are as of January 1; in earlier years these data are as of December 31. Population estimates include residents in the United States, Puerto Rico, and other U.S. outlying areas; U.S. citizens in foreign countries; and the Armed Forces in the United States and abroad. For 2000, the Series II projections of the total population from the U.S. Bureau of the Census are used. Estimation and projection methods are from the Bureau of Health Professions. See Appendix II for physician definitions. The numbers for doctors of medicine differ from American Medical Association figures because physicians not classified by activity status and whose addresses are unknown are included in this table.

SOURCES: Bureau of Health Professions: Sixth Report to the President and Congress on the Status of Health Personnel in the United States. Health Resources and Services Administration. DHHS Pub. No. HRS-P-OD-88-1, Rockville, Md., 1988. Seventh Report to the President and Congress on the Status of Health Personnel in the United States. Health Resources and Services Administration. DHHS Pub. No. HRS-P-OD-90-1, Rockville, Md., 1990; Unpublished data; American Medical Association: data from annual surveys; Unpublished data.

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Table 98. Physicians, according to activity and place of medical education: United States and outlying U.S. areas, selected years 1970–89

[Data are based on reporting by physicians]

Activity and place of medical education	1970	1975	1980	1985	1986	1987	1989
			Nun	nber of physic	cians		
Doctors of medicine	334,028	393,742	467,679	552,716	569,160	585,597	600,789
Professionally active	310,845	340,280	414,916	497,140	505,750	521,328	536,755
Place of medical education: U.S. medical graduates	256,427 54,418		333,325 81,591	392,007 105,133	398,314 107,436	410,300 111,028	423,172 113,583
Activity: Non-Federal	281,344 255,027 188,924	312,089 287,837 213,334	397,129 361,915 271,268	475,573 431,527 329,041	483,812 436,877 325,757	499,582 453,230 337,507	516,396 468,902 350,066
General and family practice	50,816	46,347	47,772	53,862	53,622	55,117	56,318
Cardiovascular diseases Dermatology Gastroenterology Internal medicine Pediatrics Pulmonary diseases	3,882 2,932 1,112 22,950 10,310 785	5,046 3,442 1,696 28,188 12,687 1,166	6,725 4,372 2,735 40,514 17,436 2,040	9,054 5,325 4,135 52,712 22,392 3,035	9,413 5,354 4,409 52,287 22,530 3,188	9,925 5,532 4,764 55,452 23,370 3,474	10,235 5,721 4,942 56,946 24,692 3,578
General surgery Obstetrics and gynecology. Ophthalmology Orthopedic surgery Otolaryngology Plastic surgery Urological surgery	18,068 13,847 7,627 6,533 3,914 1,166 4,273	19,710 15,613 8,795 8,148 4,297 1,706 5,025	22,409 19,503 10,598 10,719 5,262 2,437 6,222	24,708 23,525 12,212 13,033 5,751 3,299 7,081	23,542 23,580 12,134 13,061 5,768 3,355 7,030	23,689 24,271 12,538 13,520 6,022 3,520 7,182	24,737 25,161 12,847 14,071 6,223 3,648 7,338
Anesthesiology Diagnostic radiology Emergency medicine Neurology Pathology, anatomical/clinical Psychiatry Radiology Other specialty	7,369 896 1,192 2,993 10,078 5,781 12,400	8,970 1,978 1,862 4,195 12,173 6,970 15,320	11,336 4,190 3,245 5,952 15,946 7,791 24,064	15,285 7,735 4,691 6,877 18,521 7,355 28,453	15,310 8,065 7,277 4,797 6,529 18,162 6,144 20,200	15,986 8,557 7,564 5,087 6,747 18,695 6,149 20,346	16,720 9,012 8,041 5,374 7,022 19,625 6,164 21,651
Hospital-based practice. Residents and interns Full-time hospital staff Other professional activity ² .	66,103 45,840 20,263 26,317	74,503 53,527 20,976 24,252	90,647 59,615 31,032 35,214	102,486 72,159 30,327 44,046	111,120 77,618 33,502 46,935	115,723 79,483 36,240 46,352	118,836 80,019 38,817 47,494
Federal . Patient care . Office-based practice . Hospital-based practice . Residents and interns . Full-time hospital staff . Other professional activity ² .	29,501 23,508 3,515 19,993 5,388 14,605 5,993	28,191 24,100 2,095 22,005 4,275 17,730 4,091	17,787 14,597 732 13,865 2,427 11,438 3,190	21,567 17,293 1,156 16,137 3,252 12,885 4,274	21,938 16,985 1,221 15,764 2,858 12,906 4,953	21,746 16,902 1,149 15,753 2,717 13,036 4,844	20,359 15,570 1,135 14,435 2,084 12,351 4,789
Inactive	19,621 358 3,204	21,449 26,145 5,868	25,744 20,629 6,390	38,646 13,950 2,980	46,835 13,661 2,914	48,042 13,364 2,863	48,804 12,405 2,825

¹Foreign medical graduates received their medical education in schools outside the United States and Canada.

NOTES: Starting in 1989 data for doctors of medicine are as of January 1; in earlier years these data are as of December 31. See Appendix II for physician definitions.

SOURCES: Haug, J. N., Roback, G. A., and Martin, B. C.: Distribution of Physicians in the United States, 1970. Chicago. American Medical Association, 1971; Goodman, L. J., and Mason, H. R.: Physician Distribution and Medical Licensure in the U.S., 1975. Chicago. American Medical Association, 1976; Bidese, C. M., and Danais, D. G.: Physician Characteristics and Distribution in the U.S., 1981. Chicago. American Medical Association, 1982; Roback, G. A., Mead, D., and Randolph, L. L.: Physician Characteristics and Distribution in the U.S., 1986. Chicago. American Medical Association, 1986; Department of Data Release Services: Physician Characteristics and Distribution in the U.S., 1987. Chicago. American Medical Association, 1987; Roback, G. A., Randolph, L. L., and Seidman, B.: Physician Characteristics and Distribution in the U.S., 1989. Chicago. American Medical Association, 1989; Roback, G. A., Randolph, L. L., and Seidman, B.: Physician Characteristics and Distribution in the U.S., 1980. Chicago. American Medical Association, 1990. (Copyrights 1971, 1976, 1982, 1986–87, 1989, and 1990: Used with the permission of the American Medical Association.)

²Includes medical teaching, administration, research, clinical fellows, and other.

³Not classified established in 1970; however, complete data not available until 1972.

Table 99. Active health personnel and number per 100,000 population, according to occupation and geographic region: United States, 1970, 1980, and 1989

	Number of active			Geographic	region	
Year and occupation	health personnel	United States	Northeast	Midwest	South	West
1970			Number	per 100,000 popula	tion ¹	
Physicians						
Federal ²	290.862	142.7	185.0	127.5	114.8	158.2
Doctors of medicine 2,3,	279,212	137.0	178.7	118.2	111.5	154.8
Doctors of osteopathy	11,650	5.7	6.3	9.3	3.3	3.4
Dentists ⁴	95,700	47.0	58.9	46.3	35.3	54.9
Optometrists	18,400	9.0	9.7	<u>10.3</u>	_6.6	10.5
Pharmacists	112,570	55.4 3.5	60.1 6.0	57.5 3.6	50.6 1.6	52.9 3.0
Podiatrists	7,110 750.000	3.5 368.9	6.0 491.2	3.5 367.5	281.8	355.9
Veterinarians	25,900	12.7	8.3	16.1	11.8	15.0
1980						
Physicians	427.028	189.8				
Federal ²	17,548	7.8				
Non-Federal	409,480	182.0	224.5	165.2	157.0	200.0
Doctors of medicine 2,3	393,407	174.9	216.1	153.3	152.8	195.8
Doctors of osteopathy	16,073	7.1	8.4	11.9	4.2	4.2 59.2
Dentists ⁴	121,240 22,330	53.5 9.8	66.2 9.9	52.7 10.9	42.6 7.7	11.6
Pharmacists	142,780	62.5	66.5	67.8	62.1	51.8
Podiatrists	8,880	4.0	6.3	3.9	2.5	4.1
Registered nurses	1,272,900	560.0	736.0	583.6	443.4	533.7
Associate and diploma	908,300	399.9	536.0	429.2	316.5	351.1
Baccalaureate	297,300 67,300	130.9 29.6	161.0 39.0	127.8 26.7	103.8 23.0	148.1 34.6
Masters and doctorate Veterinarians	36,000	29.6 16.3	39.0 10.8	26.7 19.9	23.0 16.0	18.5
	00,000	10.0	10.0	10.0	70.0	10.0
1989	500.000	202.2				
Physicians	562,839	230.6 8.3				
Éederal²	20,359 542,480	222.2	313.2	222.0	215.7	254.2
Doctors of medicine ^{2,3}	516,396	236.6	298.4	203.5	208.2	247.3
Doctors of osteopathy	26,084	10.7	14.8	18.5	7.5	6.9
Dentists⁴	144,000	58.1				
Optometrists	25,500	10.2				
Pharmacists	160,000 11,950	64.1 5.0				
Registered nurses	1,666,200	671.0	843.7	729.5	562.2	613.8
Associate and diploma	1,052,000	423.8	531.7	467.9	365.1	363.8
Baccalaureate	497,300	200.3	247.9	214.7	160.3	203.0
Masters and doctorate	116,900	47.1	69.0	47.1	37.1	46.9
Veterinarians	49,300	19.8	*			

¹Ratios for physicians and dentists are based on civilian population; ratios for all other health occupations are based on resident population.

NOTE: See Appendix II for physician definitions.

SOURCES: Division of Health Professions Analysis, Bureau of Health Professions: Supply and Characteristics of Selected Health Personnel. DHHS Pub. No. (HRA) 81–20. Health Resources Administration. Hyattsville, Md., June 1981; American Medical Association: Physician Characteristics and Distribution in the U.S., 1981 Edition. Chicago, 1981; Unpublished data; American Osteopathic Association: 1980–81 Yearbook and Directory of Osteopathic Physicians. Chicago, 1980. American Association of Colleges of Osteopathic Medicine: Annual Statistical Report 1989. Rockville, Md., 1989; American Medical Association: Physician Characteristics and Distribution in the U.S., 1990 Edition. Chicago, 1990; Unpublished data.

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²Starting in 1989 data for doctors of medicine are as of January 1; in earlier years these data are as of December 31.

³Excludes physicians not classified according to activity status from the number of active health personnel.

⁴Excludes dentists in military service.

Table 100. Full-time equivalent employment in selected occupations for community hospitals: United States, 1981 and 1986-89

[Data are based on reporting by a census of registered hospitals]

							e annual change
Occupation	1981	1986	1987	1988	1989	1981–86	1986–89
All hospital personnel ¹	3,069,955	3,055,071	3,143,077	3,231,745	3,328,509	-0.1	2.9
Administrators and assistant administrators Registered nurses Licensed practical nurses Ancillary nursing personnel Medical record administrators and technicians Licensed pharmacists and pharmacy technicians Medical technologists and other laboratory personnel Dietitians and dietetic technicians	26,734 629,354 234,226 280,614 38,186 47,053 147,451 40,192	32,990 736,253 174,154 226,821 44,057 54,679 145,622 34,241	32,978 758,976 170,433 234,162 45,064 57,297 146,183 34,539	35,715 770,613 170,637 244,297 46,937 58,759 148,635 35,126	37,269 791,521 172,143 252,500 47,834 60,984 152,122 34,416	5.4 4.0 -7.1 -5.2 3.6 3.8 -0.3 -3.9	4.1 2.4 -0.4 3.6 2.8 3.7
Radiologic service personnel. Occupational therapists and recreational therapists. Physical therapists and physical therapy assistants and aides.	90,738 8,481 27,675	94,683 11,210 30,216	97,944 12,331 31,692	101,098 13,133 32,680	104,494 13,604 33.104	1.1 7.2 2.2	3.3 6.7 3.1
Speech pathologists and audiologists	2,463 47,312	3,776 52,751	4,035 54,103	4,346 55.690	4,608 57,355	11.3	6.9 2.8
Medical social workers	13,915 66,906	16,042 67,366	17,747 65,284	18,685 67,587	19,698 68,641	3.6 0.2	7.1 0.6

SOURCE: Compiled by the Office of Data Analysis and Management, Bureau of Health Professions, from the American Hospital Association's 1981, 1986, 1987, 1988, and 1989 Annual Survey of Hospitals.

¹Includes occupational categories not shown. ²This category is primarily composed of medical residents.

Table 101 (page 1 of 2). Full-time equivalent patient care staff in mental health organizations, according to type of organization and staff discipline: United States, selected years 1978–88

[Data are based on inventories of mental health organizations]

Organization and discipline	1978	19841	1986	1988 ²	1978	1984 ¹	1986	1988²
All organizations		Nur	nber			Percent d	istribution	
All patient care staff Professional patient care staff Psychiatrists Psychologists ³ Social workers Registered nurses Other professional staff ⁴ Other mental health workers	292,699 153,598 14,492 16,501 28,125 42,399 52,081 139,101	313,243 202,474 18,482 21,052 36,397 54,406 72,137 110,769	346,630 232,481 17,874 20,210 40,951 66,180 87,266 114,149	382,065 257,382 18,114 22,812 46,051 73,429 96,976 124,683	100.0 52.5 5.0 5.6 9.6 14.5 17.8 47.5	100.0 64.6 5.9 6.7 11.6 17.4 23.0 35.4	100.0 67.1 5.2 5.8 11.8 19.1 25.2 32.9	100.0 67.4 4.7 6.0 12.1 19.2 25.4 32.6
State and county mental hospitals								
All patient care staff Professional patient care staff Psychiatrists Psychologists ³ Social workers Registered nurses Other professional staff ⁴ Other mental health workers	131,187 45,131 3,712 3,149 5,924 14,859 17,487 86,056	117,630 51,290 4,108 3,239 6,175 16,051 21,717 66,340	119,073 54,853 3,762 3,412 6,238 19,425 22,016 64,220	116,903 57,935 3,950 3,512 7,203 20,266 23,004 58,968	100.0 34.4 2.8 2.4 4.5 11.3 13.3 65.6	100.0 43.6 3.5 2.8 5.2 13.6 18.5 56.4	100.0 46.1 3.2 2.9 5.2 16.3 18.5 53.9	100.0 49.6 3.4 3.0 6.2 17.3 19.7 50.4
Private psychiatric hospitals								
All patient care staff Professional patient care staff Psychiatrists Psychologists ³ Social workers Registered nurses Other professional staff ⁴ Other mental health workers	18,728 11,419 1,285 590 920 3,967 4,657 7,309	26,359 19,524 1,447 1,461 2,179 6,818 7,619 6,835	35,480 27,246 1,554 1,557 2,893 10,147 11,095 8,234	57,207 44,148 1,904 1,810 4,162 15,128 21,144 13,059	100.0 61.0 6.9 3.2 4.9 21.2 24.9 39.0	100.0 74.1 5.5 5.5 8.3 25.9 28.9 25.9	100.0 76.8 4.4 4.4 8.2 28.6 31.3 23.2	100.0 77.2 3.3 3.2 7.3 26.4 37.0 22.8
Non-Federal general hospitals' psychiatric services								
All patient care staff Professional patient care staff Psychiatrists Psychologists ³ Social workers Registered nurses Other professional staff ⁴ Other mental health workers	34,966 22,401 3,583 1,512 2,552 10,611 4,143 12,565	59,848 46,335 6,679 3,283 4,898 20,454 11,021 13,513	61,148 50,233 6,009 2,983 5,634 23,454 12,153 10,915	61,817 48,201 5,229 3,593 5,490 24,463 9,426 13,616	100.0 64.1 10.2 4.3 7.3 30.3 11.8 35.9	100.0 77.4 11.2 5.5 8.2 34.2 18.4 22.6	100.0 82.1 9.8 4.9 9.2 38.4 19.9	100.0 78.0 8.5 5.8 8.9 39.6 15.2 22.0
Veterans Administration psychiatric services								
All patient care staff Professional patient care staff Psychiatrists Psychologists ³ Social workers Registered nurses Other professional staff ⁴ Other mental health workers	26,282 13,954 1,471 1,255 1,620 5,326 4,282 12,328	22,948 16,265 2,463 1,247 1,545 5,699 5,311 6,683	23,559 17,782 2,245 1,439 1,680 6,761 5,657 5,777	21,581 14,714 2,108 1,318 1,360 6,285 3,643 6,867	100.0 53.1 5.6 4.8 6.2 20.3 16.3 46.9	100.0 70.9 10.7 5.4 6.7 24.8 23.1 29.1	100.0 75.5 9.5 6.1 7.1 28.7 24.0 24.5	100.0 68.2 9.8 6.1 6.3 29.1 16.9 31.8
Residential treatment centers for emotionally disturbed children								
All patient care staff. Professional patient care staff Psychiatrists. Psychologists ³ Social workers Registered nurses. Other professional staff ⁴ Other mental health workers	16,464 10,824 140 497 2,196 324 7,667 5,640	15,297 10,551 240 820 2,283 485 6,723 4,746	25,146 17,599 335 911 4,585 746 11,022 7,547	29,842 19,382 425 1,224 4,175 807 12,751 10,460	100.0 65.7 0.9 3.0 13.3 2.0 46.6 34.3	100.0 69.0 1.6 5.4 14.9 3.2 43.9 31.0	100.0 70.0 1.3 3.6 18.2 3.0 43.8 30.0	100.0 64.9 1.4 4.1 14.0 2.7 42.7 35.1

See footnotes at end of table.

Table 101 (page 2 of 2). Full-time equivalent patient care staff in mental health organizations, according to type of organization and staff discipline: United States, selected years 1978–88

[Data are based on inventories of mental health organizations]

Organization and discipline	1978	19841	1986	1988²	1978	1984¹	1986	1988²
All other organizations⁵		Nur	nber			Percent c	listribution	
All patient care staff	65,072 49,869 4,301 9,498 14,913 7,312 13,845 15,203	71,161 58,509 3,545 11,002 19,317 4,899 19,746 12,652	82,224 64,768 3,969 9,908 19,921 5,647 25,323 17,456	94,715 73,002 4,498 11,355 23,661 6,480 27,008 21,713	100.0 76.6 6.6 14.6 22.9 11.2 21.3 23.4	100.0 82.2 5.0 15.5 27.1 6.9 27.7 17.8	100.0 78.8 4.8 12.1 24.2 6.9 30.8 21.2	100.0 77.1 4.7 12.0 25.0 6.8 28.5 22.9

¹In 1984 some organizations were reclassified.

SOURCES: Survey and Reports Branch, Division of Biometry and Applied Sciences, National Institute of Mental Health: R. W. Manderscheid and S. A. Barrett: Mental Health, United States, 1987. DHHS Pub. No. (ADM) 87–1518. U.S. Government Printing Office, 1987; Unpublished data.

²Data for 1988 are provisional.

³During 1978 this category included all psychologists with a B.A. degree and above. Beginning in 1984, only psychologists with an M.A. degree and above are included.

⁴Includes occupational therapists, recreation therapists, vocational rehabilitation counselors, and teachers.

⁵Includes freestanding outpatient, partial care, and multiservice organizations. 1978 also includes community mental health centers.

Table 102. First-year enrollment and graduates of health professions schools and number of schools, according to profession: United States, selected 1950–90 estimates and 2000 projections

[Data are based on reporting by health professions schools]

				Registered	nursing						
Year	Medicine	Osteopathy	Total	Baccalaureate	Associate degree		Licensed practical nursing	Dentistry	Optometry	Pharmacy	Chiropractic
First-year enrollment				•							
1980. 1981. 1982. 1983. 1984. 1985. 1986.	17,320 17,230 17,175 16,992 16,929	1,426 1,496 1,582 1,682 1,746 1,750 1,737	105,952 110,201 115,279 120,579 123,824 118,224 100,791	35,414 35,808 35,928 37,264 39,400 39,573 34,310	53,633 56,899 60,423 63,947 66,576 63,776 56,635	16,905 17,494 18,928 19,368 17,848 14,875 9,846	56,316 58,479 60,426 61,453 57,865 47,034 44,477	6,132 6,030 5,855 5,498 5,274 5,047 4,843	1,202 1,258 1,249 1,147 1,219 1,187 1,251	8,035 7,551 6,899 6,574 6,715 6,849 7,084	
1987. 1988. 1989. 1990.	16,779 16,686 16,781 16,749	1,724 1,692 1,780 1,844	90,693 94,269 103,025 108,580	28,026 28,505 29,042 29,858	54,330 57,375 63,973 68,634	8,337 8,389 10,010 10,088	42,452 43,774 	4,554 4,370 4,196 3,979	1,234 1,268 1,271 1,258	7,632 7,864 8,067 8,088	
Graduates											
1950 ¹	5,553 7,081 8,367 12,714	373 427 432 702	25,790 30,113 43,103 73,915	4,136 9,069 20,170	789 11,483 32,183	25,188 22,551 21,562	2,828 16,491 36,456 45,375	2,565 3,253 3,749 4,969	961 364 445 806	3,497 4,758 6,712	660 642 1,093
1980	15,667 15,985	1,059 1,151 1,017 1,317 1,287	75,523 73,985 74,052 77,408 80,312	24,994 24,370 24,081 23,855 23,718	36,034 36,712 38,289 41,849 44,394	14,495 12,903 11,682 11,704 12,200	41,892 41,002 43,299 45,174 44,654	5,256 5,550 5,371 5,756 5,337	1,073 1,092 1,106 1,166 1,188	7,432 7,323 6,859 6,374 5,963	2,049 2,526 2,631 2,948
1985. 1986. 1987. 1988. 1989 ² .	16,125 15,836 15,887 15,620	1,474 1,560 1,587 1,572 1,617 1,520	82,075 77,027 70,561 64,839 61,660	24,975 25,170 23,761 21,504 18,997	45,208 41,333 38,528 37,397 37,837	11,892 10,524 8,272 5,938 4,826	36,955 29,599 27,285 26,912	5,353 4,957 4,717 4,581 4,312	1,114 1,085 1,081 1,106 1,143 1,115	5,724 5,800 5,854 6,171 6,557	2,797 2,400
20004	15,774	1,557						3,242	1,200	7,120	2,950
Schools ⁵ 1950 ¹	79 86 103 114	6 6 7 9	1,170 1,137 1,340 1,362	172 267 326	57 437 608	908 636 428	85 661 1,233 1,315	42 47 53 59	10 10 11 12	76 74 73	20 12 11 12
1980. 1981. 1982. 1983.	126 126 127 127 127	14 15 15 15 15	1,385 1,401 1,432 1,466 1,477	377 383 402 421 427	697 715 742 764 777	311 303 288 281 273	1,299 1,309 1,295 1,297 1,254	60 60 60 60	15 16 16 16 16	72 72 72 72 72	14 16 16 17
1985. 1986. 1987. 1988. 1989.	127 127 127 127 127 126	15 15 15 15 15	1,473 1,469 1,465 1,442 1,457	441 455 467 479 488	776 776 789 792 812	256 238 209 171 157	1,165 1,087 1,068 1,095	60 59 58 58 58 58	16 16 16 16 16	72 73 74 74 74 74	17 17 17 17 17

¹Data for total registered nursing are for 1951.

SOURCES: Bureau of Health Professions: Seventh Report to the President and Congress on the Status of Health Personnel in the United States. Health Resources and Services Administration: Unpublished data; National League for Nursing: Nursing Student Census, 1989. New York, 1990; National League for Nursing: Nursing Datasource, 1990, Vol. 1; National League for Nursing: Nursing Data Review, 1989; American Nurses Association: Facts About Nursing, 1951 and 1961; American Dental Association Council on Dental Education: Annual Report on Dental Education 1989–90. Chicago, 1990; American Medical Association: Medical education in the United States. JAMA. Vol. 264, No. 7. August 15, 1990; American Association of Colleges of Osteopathic Medicine: Annual Statistical Report 1990. Rockville, Md., 1990; American Chiropractic Association: Unpublished data.

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²Data for chiropractic medicine are estimated.

³Data for medicine are estimated.

⁴Projected.

⁵Some nursing schools offer more than one type of program. Numbers shown for nursing are number of nursing programs.

NOTE: Some numbers in this table have been revised and differ from previous editions of Health, United States.

Table 103 (page 1 of 2). First-year and total enrollment of minorities in schools for selected health occupations, according to race and Hispanic origin: United States, academic years 1979–80 and 1989–90

Occupation, race, and		rırst-year	enrollment	····		l'otal en	rollment	
Hispanic origin	1979–80 ¹	1989–90	1979–80¹	198990	1979-80 ¹	1989–90	1979–80¹	1989–90
Aliopathic medicine	Number o	f students	Percent of	students	Number of	students	Percent o	f students
All races ²	16,930	16,756	100.0	100.0	63,800	65,016	100.0	100.0
Non-Hispanic white	14,259	12,039	84.2	71.8	54,854	48,961	86.0	75.3
Non-Hispanic black	1,108	1,221	6.5	7.3	3,627	4,145	5.7	6.4
Hispanic	790	964	4.7	5.8	2,514	3,537	3.9	5.4
Mexican American	290 86	307	1.7	1.8	964	1,087	1.5	1.7
Other Hispanic ³	414	139 518	0.5 2.4	0.8 3.1	283 1,267	452 1,998	0.4 2.0	0.7 3.1
American Indian	63	82	0.4	0.5	212	258	0.3	0.4
Asian	502	2,257	3.0	13.5	1,777	7,489	2.8	11.5
Osteopathic medicine								
All races	1,426	1,844	100.0	100.0	4,571	6,615	100.0	100.0
Non-Hispanic white ²	1,333	1,524	93.5	82.6	4,330	5,694	94.7	86.1
Non-Hispanic black	40	68	2.8	3.7	100	173	2.2	2.6
Hispanic	18	79	1.3	4.3	45	246	1.0	3.7
American Indian	6	15	0.4	0.8	26	39	0.6	0.6
Asian	29	158	2.0	8.6	70	463	1.5	7.0
Podiatry								
All races	718	579	100.0	100.0	2,531	2,397	100.0	100.0
Non-Hispanic white ²	641	427	89.3	73.7	2,342	1,869	92.5	78.0
Non-Hispanic black	41 8	62 46	5.7	10.7	93	240	3.7	10.0
American Indian	2	3	1.1 0.3	7.9 0.5	28 5	123 6	1.1 0.2	5.1 0.3
Asian	26	41	3.6	7.1	63	156	2.5	6.5
Dentistry ⁴								
All races	6,066	3,938	100.0	100.0	22,482	16,198	100.0	100.0
Non-Hispanic white ²	5,321	2,769	87.7	70.3	20,029	11,701	89.1	72.2
Non-Hispanic black	274	263	4.5	6.7	1,009	983	4.5	6.1
Hispanic	163	243	2.7	6.2	489	1,064	2.2	6.6
American Indian	19	15	0.3	0.4	60	57	0.3	0.4
Asian	289	648	4.8	16.5	895	2,393	4.0	14.8
Optometry								
All races	1,209	1,258	100.0	100.0	4,500	4,723	100.0	100.0
Non-Hispanic white ²		961		76.4	4,156	3,748	92.4	79.4
Non-Hispanic black		43 87		3.4	56	132	1.2	2.8
Hispanic		3		6.9 0.2	67 13	293 16	1.5 0.3	6.2 0.3
Asian		164		13.1	208	534	4.6	11.3
Pharmacy ⁵								
All races	7,905	8,009	100.0	100.0	22,560	22,764	100.0	100.0
Non-Hispanic white ²	6,971		88.2		20,185	18,325	89.5	80.5
Non-Hispanic black	387		4.9		958	1,301	4.2	5.7
Hispanic	162		2.0		410	945	1.8	4.2
American Indian	18		0.2		36	63	0.2	0.3
Asian	367		4.6		971	2,130	4.3	9.4
Veterinary medicine								
All races ²	2,255	2,194	100.0	100.0	7,803	8,456	100.0	100.0
Non-Hispanic white		2,019		92.0		7,847		92.8
Non-Hispanic black		62	~	2.8		219		2.6
Hispanic		65		3.0		220		2.6
		11		0.5		37		0.4
Asian		37		1.7		133		1.6

See footnotes at end of table.

Table 103 (page 2 of 2). First-year and total enrollment of minorities in schools for selected health occupations, according to race and Hispanic origin: United States, academic years 1979-80 and 1989-90

Occupation, race, and		First-year	enrollment		Total enrollment						
Hispanic origin	1979-80 ¹	198990	1979-80 ¹	1989–90	1979-80¹	1989–90	1979–80 ¹	198990			
Registered nurses ⁶	Number of students		Percent of	students	Number of	f students	Percent of students				
All races ²	107,476	108,580	100.0	100.0	239,486	201,458	100.0	100.0			
Non-Hispanic white	96,406	88,975	89.7	81.9	219,369	168,358	91.6	83.6			
Non-Hispanic black	7,295	12,146	6.8	11.2	12,630	20,789	5.3	10.3			
Hispanic	1,664	3,532	1.5	3.3	3,079	6,046	1.3	3.0			
American Indian		704		0.6		1,064		0.5			
Asian		3,223		3.0		5,201		2.6			

¹First-year and total enrollments for registered nurse students are for 1978–79.

SOURCES: Bureau of Health Professions: Minorities and Women in the Health Fields. 1990. Association of American Medical Colleges, Section for Student Services: Unpublished data; American Association of Colleges of Osteopathic Medicine: Annual Statistical Report, 1990. Rockville, Md., 1990; National League for Nursing: Nursing Datasource. New York, 1990. Nursing Data Book, 1980. New York, 1981. State-Approved Schools of Nursing-RN, 1973. New York, 1973; U.S. Department of Health, Education, and Welfare: Division of Nursing: Source Book-Nursing Personnel. Health Resources Administration. DHEW Pub. No. (HRA) 75–43. Washington. 1975; American Dental Association: Annual Report on Dental Education 1989/90. Chicago, 1990; Association of Schools and Colleges of Optometry: Unpublished data, Washington, D.C., 1991; American Association of Colleges of Pharmacy: Unpublished data. Alexandria, Va., 1991; Association of American Veterinary Medical Colleges: Unpublished data. Washington, D.C., 1991; Colleges of Podiatric Medicine: Annual Report to the American Association of Colleges of Podiatric Medicine 1980-1989; Unpublished data.

²Includes race/ethnicity unspecified.

³Includes Puerto Rican Commonwealth students.

⁴Excludes Puerto Rican schools.

⁵Pharmacy first-year enrollment data are for students in the first year of the final three years of pharmacy education. Pharmacy total enrollment data are for students in the final 3 years of pharmacy education.

⁶Minority distribution based only on programs reporting minority data.

Table 104. First-year and total enrollment of women in schools for selected health occupations, according to race and Hispanic origin: United States, academic years 1971–72, 1979–80, and 1989–90

Enrollment, occupation.		Both sexes			Women	
race, and Hispanic origin	1971-72 ¹	1979–80²	1989–90	1971-721	1979–80²	1989–90
First-year enrollment	1	Number of students		F	Percent of students	
Allopathic medicine ³	12,361	16,930	16,756	13.7	27.8	38.3
Non-Hispanic white Non-Hispanic black Hispanic. Mexican American Mainland Puerto Rican Other Hispanic ⁴ American Indian Asian Osteopathic medicine Dentistry ⁵ Optometry Pharmacy ⁶	881 118 40 23 217 670 4,705 906 6,532	14,259 1,108 790 290 86 414 63 502 1,426 6,066 1,209 7,905	12,039 1,221 964 307 139 518 82 2,257 1,844 3,938 1,258 8,009	22.7 8.5 15.0 34.8 19.4 4.3 3.1 5.3 25.8	26.3 44.7 30.4 25.5 34.9 32.9 25.0 30.7 18.6 17.5 22.9 45.3	36.5 55.6 40.4 36.2 44.6 41.7 40.2 38.1 32.1 34.2 49.9
Veterinary medicine	1,453 93,344	2,255 107,476	2,194 108,580	15.3 94.5	40.4 95.3	62.6
Allopathic medicine ³	43,650	63,800	65,016	10.9	25.3	36.2
Non-Hispanic white Non-Hispanic black Hispanic Mexican American Mainland Puerto Rican Other Hispanic American Indian Asian	2,055 252 76 42 647	54,854 3,627 2,514 964 283 1,267 212 1,777	48,961 4,145 3,537 1,087 452 1,998 258 7,489	20.4 9.5 17.1 23.8 17.9	23.8 42.7 29.4 23.8 36.7 32.0 25.9 29.2	34.4 54.5 37.7 36.4 41.8 37.5 40.2 37.1
Osteopathic medicine	2,304 1,268 3,094 5,149 211,239	4,571 2,531 4,500 7,803 239,486	6,615 2,397 4,723 8,456 201,458	3.4 1.2 11.5 95.5	17.3 12.1 36.6 95.3	31.1 26.4 45.0 59.1

¹Total enrollments for registered nurse students are for 1972-73.

NOTE: Data not available on first-year enrollment of women in schools of podiatry and total enrollment of women in schools of dentistry and pharmacy.

SOURCES: Bureau of Health Professions: Minorities and Women in the Health Fields. 1990. Association of American Medical Colleges, Section for Student Services: Unpublished data; American Association of Colleges of Osteopathic Medicine: Annual Statistical Report, 1990. Rockville, Md., 1990; National League for Nursing: Nursing Datasource, 1990. New York, 1990. Nursing Data Review, 1985. New York, 1986. State-Approved Schools of Nursing-RN, 1973. New York, 1973; U.S. Department of Health, Education, and Welfare: Division of Nursing: Source Book-Nursing Personnel. Health Resources Administration. DHEW Pub. No. (HRA) 75–43. Washington. 1975; American Dental Association: Annual Report on Dental Education 1989/90. Chicago, 1990; Association of Schools and Colleges of Optometry: Unpublished data. Washington, D.C., 1991; American Association of Colleges of Pharmacy: Unpublished data. Alexandria, Va., 1991; Association of American Veterinary Medical Colleges: Unpublished data. Washington, D.C., 1991; Colleges of Podiatric Medicine: Annual Report to the American Association of Colleges of Podiatric Medicine 1980–1989.

²First-year and total enrollments for nursing students are for 1978–79.

³Includes race/ethnicity unspecified.

⁴Includes Puerto Rican Commonwealth students.

⁵Excludes Puerto Rican schools.

⁶Pharmacy first-year enrollment data are for students in the first year of the final three years of pharmacy education.

Table 105. Short-stay hospitals, beds, and occupancy rates, according to type of ownership and size of hospital: United States, selected years 1960-89

[Data are based on reporting by a census of registered hospitals]

Type of ownership and size of hospital	1960	1970	1975	1980	1984	1985	1986	1987	1988	1989
Hospitals		·			N	umber				
All ownerships	5,768	6,193	6,310	6,229	6,118	6,091	6,035	5,967	5,892	5,808
Federal	361 5,407 3,291 856 1,260	334 5,859 3,386 769 1,704	331 5,979 3,364 775 1,840	325 5,904 3,339 730 1,835	304 5,814 3,366 786 1,662	307 5,784 3,364 805 1,615	307 5,728 3,338 834 1,556	308 5,659 3,289 828 1,542	313 5,579 3,256 790 1,533	311 5,497 3,233 769 1,495
Size of hospital: 6–99 beds			3,196 1,413 701 651 349	2,953 1,436 742 724 374	2,769 1,436 764 761 388	2,751 1,458 765 736 381	2,732 1,445 781 706 371	2,736 1,408 776 686 361	2,694 1,391 779 671 357	2,646 1,388 766 664 344
Beds										
All ownerships	735,451	935,724	1,036,025	1,080,164	1,102,166	1,087,750	1,066,611	1,046,013	1,033,881	1,014,965
Federal	445,753 37,029	87,492 848,232 591,937 52,739 203,556	89,049 946,976 658,948 73,495 214,533	88,144 992,020 692,929 87,033 212,058	82,415 1,019,751 716,869 99,980 202,902	84,612 1,003,138 707,806 103,921 191,411	85,071 981,540 689,685 106,716 185,139	84,523 961,490 673,308 105,746 182,436	84,419 949,462 668,101 103,623 177,738	79,202 935,763 660,947 102,416 172,400
Size of hospital: 6–99 beds 100–199 beds. 200–299 beds. 300–499 beds. 500 beds or more.			165,148 201,587 171,057 247,410 250,823	155,259 203,023 180,047 276,201 265,634	148,882 202,855 184,450 289,737 276,242	147,703 206,029 185,033 279,700 269,285	146,202 204,139 189,017 266,477 260,776	145,541 198,777 188,294 258,841 254,560	143,006 196,555 189,236 253,110 251,974	139,478 196,322 186,675 251,987 240,503
Occupancy rate					Percent of	beds occup	ied			
All ownerships	75.7	77.9	75.0	75.6	69.5	65.5	64.9	65.5	65.9	66.5
Federal	82.5 74.7 76.6 65.4 71.6	77.5 78.0 80.1 72.2 73.2	77.6 74.8 77.4 65.9 69.7	77.8 75.4 78.2 65.2 70.7	76.6 68.9 71.4 57.0 65.9	74.3 64.8 67.2 52.1 62.8	72.6 64.2 66.8 50.7 62.6	71.8 64.9 67.6 51.1 63.1	71.2 65.5 68.2 50.9 63.8	71.0 66.2 68.8 51.7 64.8
Size of hospital: 6–99 beds 100–199 beds 200–299 beds 300–499 beds 500 beds or more			61.1 71.3 77.1 80.0 80.9	60.6 71.6 77.3 80.0 81.9	53.0 64.1 70.2 73.5 77.6	48.4 60.0 65.9 69.4 74.9	47.3 58.8 65.5 69.0 74.9	47.8 59.2 65.6 70.1 75.6	48.3 59.7 66.0 70.9 75.8	49.0 60.8 66.9 70.9 76.5

NOTE: Excludes psychiatric and tuberculosis and other respiratory disease hospitals.

SOURCES: American Hospital Association: Hospitals. JAHA 35(15):396-401 and 45(15):463-467, Aug. 1961 and Aug. 1971; Hospital Statistics, 1976, 1981, 1985-91 Editions. Chicago, 1976, 1981, 1985-91. (Copyrights 1961, 1971, 1976, 1981,1985-90: Used with the permission of the American Hospital Association.)

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Table 106. Long-term hospitals, beds, and occupancy rates, according to type of hospital and ownership: United States, selected years 1970–89

[Data are based on reporting by a census of registered hospitals]

Type of hospital and ownership	1970	1975	1980	1984	1985	1986	1987	1988	1989
Hospitals									
General	75 38 37	44 23 21	17 9 8	25 15 10	23 14 9	21 13 8	21 13 8	20 10 10	25 10 15
Psychiatric	459 33 56 39 331	419 26 45 51 297	381 23 47 57 254	382 19 54 77 232	383 19 57 81 226	390 18 55 91 226	391 18 51 96 226	393 17 53 103 220	382 17 50 96 219
Tuberculosis and other respiratory diseases	103	34	10	5	5	2	3	3	3
All other Federal Nonprofit Proprietary State-local government	200 1 110 2 87	196 2 94 9	150 1 66 11 72	124 3 61 10 50	122 3 59 13 47	129 4 61 15 49	126 3 58 17 48	121 2 55 15 49	125 2 58 19 46
Beds									
General	42,569 31,403 11,166	17,329 14,406 2,923	8,253 7,205 1,048	13,846 11,994 1,852	12,985 10,073 2,912	11,112 9,079 2,033	11,508 9,232 2,276	9,807 7,449 2,358	11,275 8,373 2,902
Psychiatric Federal Nonprofit Proprietary State-local government	551,847 41,500 8,892 3,399 498,056	344,257 27,523 5,366 4,821 306,547	218,400 20,871 6,645 5,877 185,007	171,367 16,205 6,941 8,458 139,763	162,968 15,739 6,708 8,832 131,689	157,378 15,167 6,668 9,270 126,273	150,727 14,585 5,994 9,786 120,362	143,853 12,285 5,950 10,014 115,604	135,968 12,046 5,486 9,200 109,236
Tuberculosis and other respiratory diseases	19,937	5,699	1,500	664	574	183	339	312	348
All other	49,152 357 12,638 101 36,056	49,268 968 12,733 879 34,688	37,911 357 10,038 1,356 26,160	30,124 1,694 9,049 1,067 18,314	29,519 1,599 9,391 1,364 17,165	29,614 1,812 9,829 1,844 16,129	27,541 1,451 8,785 1,681 15,624	26,013 1,043 8,107 1,472 15,391	25,612 1,010 8,878 1,606 14,118
Occupancy rate				Perce	ent of beds o	ccupied			
General	79.2 80.4 75.8	84.4 85.2 80.4	83.9 84.6 79.0	83.9 84.1 83.0	80.2 80.7 78.6	79.1 77.8 85.0	76.5 74.7 83.8	78.3 76.9 82.6	81.3 81.1 81.7
Psychiatric Federal Nonprofit Proprietary State-local government	84.9 83.4 85.2 78.4 85.0	81.3 88.3 84.8 74.1 80.8	85.9 87.9 87.2 76.3 86.0	87.6 86.9 86.8 77.2 88.4	87.2 83.5 86.5 77.6 88.3	87.0 79.6 85.5 75.8 88.8	87.9 83.1 81.7 75.8 89.8	87.5 84.5 78.9 77.8 89.1	87.7 83.0 77.1 77.3 89.7
Tuberculosis and other respiratory diseases	61.9	57.6	66.4	62.3	64.3	E0 6	70 E		70.0
All other Federal Nonprofit Proprietary State-local government	83.3 73.4 82.8 87.1 83.6	82.3 86.3 83.3 86.0 81.7	85.9 65.3 87.3 86.5 85.6	88.8 84.4 90.0 92.1 88.4	88.7 81.9 89.9 85.6 88.9	59.6 87.5 80.1 88.4 82.6 88.4	70.5 87.2 82.2 87.9 76.3 88.5	76.6 87.6 83.9 89.2 80.6 87.6	73.0 86.0 87.1 86.2 79.5 86.5

SOURCES: American Hospital Association: Hospitals. JAHA 45(15):463–467, Aug. 1971; Hospital Statistics, 1976, 1981,1985–91 Editions. Chicago, 1976, 1981, 1985–91. (Copyrights 1971, 1976, 1981, 1985–90: Used with the permission of the American Hospital Association.)

Table 107. Inpatient and residential treatment beds in mental health organizations and rate per 100,000 civilian population, according to type of organization: United States, selected years 1970-88

[Data are based on inventories of mental health organizations]

Organization	1970	1976	1980¹	1982 ²	1984	1986	1988³
				Number			
All organizations	524,878	338,963	274,713	247,312	262,673	267,613	271,997
State and county mental hospitals	413,066 14,295 22,394 50,688	222,202 16,091 28,706 35,913	156,482 17,157 29,384 33,796	140,140 19,011 36,525 24,646	130,411 21,474 46,045 23,546	119,033 30,201 45,808 26,874	106,705 42,340 48,499 25,742
centers	8,108	17,029	16,264			• • •	• • •
disturbed children	15,129 1,198	18,029 993	20,197 1,433	18,475 8,515	16,745 24,452	24,547 21,150	25,271 23,440
			Number per	100,000 civilia	an population		
All organizations	263.6	160.3	124.3	108.1	112.9	111.7	111.5
State and county mental hospitals	207.4 7.2 11.2 25.5	105.1 7.6 13.6 17.0	70.2 7.7 13.7 15.7	61.2 8.3 16.0 10.8	56.1 9.2 19.8 10.1	49.7 12.6 19.1 11.2	43.8 17.3 19.9 10.5
centers	4.1	8.0	7.3			• • •	
disturbed children	7.6 0.6	8.5 0.5	9.1 0.6	8.1 3.7	7.2 10.5	10.3 8.8	10.4 9.6

During 1979-80, comparable data were not available for certain organization types, and data for either an earlier or later period were substituted.

NOTE: Changes in reporting procedures in 1979-80 and 1981-82 affect the comparability of data with those from previous years.

SOURCES: Survey and Reports Branch, Division of Biometry and Applied Sciences, National Institute of Mental Health: R. W. Manderscheid and S. A. Barrett: Mental Health, United States, 1987. DHHS Pub. No. (ADM) 87-1518. U.S. Government Printing Office, 1987; Unpublished data.

²During 1981–82, some organizations were reclassified and data for some organization types were not available, resulting in a particularly large increase for the "all other" category in 1982.

³Data for 1988 are provisional.

Includes Veterans Administration neuropsychiatric hospitals and Veterans Administration general hospitals with separate psychiatric services.

⁵Includes other multiservice mental health organizations with inpatient and residential treatment services that are not elsewhere classified.

⁶Beginning in 1983 a definitional change sharply increased the number of multiservice mental health organizations. See Appendix I.

Table 108 (page 1 of 2). Community hospital beds per 1,000 population and average annual percent change, according to geographic division and State: United States, selected years 1940–89

			Beds pe	er 1,000) civiliai	п рори	lation			Avera	ge annual p	ercent cha	nge
Geographic division and State	1940¹	1950¹	1960²	1970	1980	1985	1987	1988	1989	1940-601,2	1960-70²	1970–80	1980–89
United States	3.2	3.3	3.6	4.3	4.5	4.2	4.0	3.9	3.8	0.6	1.8	0.5	-1.9
New England Maine New Hampshire Vermont. Massachusetts Rhode Island Connecticut	4.4 3.0 4.2 3.3 5.1 3.9 3.7	4.2 3.2 4.2 4.0 4.8 3.8 3.6	3.9 3.4 4.4 4.5 4.2 3.7 3.4	4.1 4.7 4.0 4.5 4.4 4.0 3.4	4.1 4.7 3.9 4.4 4.4 3.8 3.5	4.0 4.2 3.4 3.8 4.4 3.6 3.3	3.6 4.0 3.2 3.3 4.0 3.4 3.0	3.6 3.9 3.2 3.1 4.0 3.3 3.0	3.5 3.8 3.1 3.1 3.8 3.2 3.0	-0.6 0.6 0.2 1.6 -1.0 -0.3 -0.4	0.5 3.3 -0.9 0.0 0.5 0.8 0.0	0.0 0.0 -0.3 -0.2 0.0 -0.5 0.3	-1.7 -2.3 -2.5 -3.8 -1.6 -1.9 -1.7
Middle Atlantic	3.9 4.3 3.5 3.5	3.8 4.1 3.2 3.8	4.0 4.3 3.1 4.1	4.4 4.6 3.6 4.7	4.6 4.5 4.2 4.8	4.4 4.4 3.9 4.7	4.2 4.2 3.8 4.4	4.1 4.2 3.7 4.4	4.1 4.2 3.7 4.3	0.1 0.0 -0.6 0.8	1.0 0.7 1.5 1.4	0.4 -0.2 1.6 0.2	-1.3 -0.8 -1.4 -1.2
East North Central	3.2 2.7 2.3 3.4 4.0 3.4	3.2 2.9 2.6 3.6 3.3 3.7	3.6 3.4 3.1 4.0 3.3 4.3	4.4 4.2 4.0 4.7 4.3 5.2	4.7 4.7 4.5 5.1 4.4 4.9	4.5 4.6 4.2 4.7 4.1 4.6	4.2 4.3 4.1 4.4 3.9 4.2	4.1 4.2 4.1 4.3 3.8 4.0	4.0 4.0 3.9 4.1 3.7 3.9	0.6 1.2 1.5 0.8 –1.0 1.2	2.0 2.1 2.6 1.6 2.7 1.9	0.7 1.1 1.2 0.8 0.2 -0.6	-1.8 -1.8 -1.6 -2.4 -1.9 -2.5
West North Central Minnesota lowa Missouri North Dakota South Dakota Nebraska Kansas	3.1 3.9 2.7 2.9 3.5 2.8 3.4 2.8	3.7 4.4 3.2 3.3 4.3 4.4 4.2 3.4	4.3 4.8 3.9 3.9 5.2 4.5 4.4	5.7 6.1 5.6 5.1 6.8 5.6 6.2 5.4	5.8 5.7 5.7 5.7 7.4 5.5 6.0 5.8	5.4 5.2 5.2 5.2 7.4 6.6 6.0 5.2	5.2 4.8 5.2 4.9 7.3 6.3 5.9 4.9	5.1 4.8 5.2 4.9 7.0 5.6 5.8 4.7	4.9 4.5 5.0 4.8 7.0 5.8 5.5 4.8	1.6 1.0 1.9 1.5 2.0 2.4 1.3 2.0	2.9 2.4 3.7 2.7 2.7 2.2 3.5 2.5	0.2 -0.7 0.2 1.1 0.8 -0.2 -0.3 0.7	-1.9 -2.6 -1.4 -1.9 -0.6 0.6 -1.0 -2.1
South Atlantic Delaware Maryland District of Columbia Virginia West Virginia North Carolina South Carolina Georgia Florida	2.5 4.4 3.9 5.5 2.2 2.7 2.2 1.8 1.7 2.8	2.8 3.9 3.6 5.5 2.5 3.1 2.6 2.4 2.0 2.9	3.3 3.7 3.3 5.9 3.0 4.1 3.4 2.9 2.8 3.1	4.0 3.7 3.1 7.4 3.7 5.4 3.8 3.7 3.8 4.4	4.5 3.6 3.6 7.3 4.1 5.5 4.2 3.9 4.6 5.1	4.1 3.5 3.4 7.8 3.8 5.1 3.7 3.6 4.3 4.6	3.9 3.1 3.0 7.6 3.6 4.8 3.4 4.3 4.2	3.8 3.1 2.9 7.8 3.5 4.7 3.4 3.3 4.1	3.7 3.0 2.9 7.9 3.4 4.7 3.4 3.2 4.1 4.0	1.4 -0.9 -0.8 0.4 1.6 2.1 2.2 2.4 2.5 0.5	1.9 0.0 -0.6 2.3 2.1 2.8 1.1 2.5 3.1	1.2 -0.3 1.5 -0.1 1.0 0.2 1.0 0.5 1.9	-2.2 -2.0 -2.4 0.9 -2.1 -1.7 -2.3 -2.2 -1.3 -2.7
East South Central Kentucky Tennessee Alabama Mississippi	1.7 1.8 1.9 1.5 1.4	2.1 2.2 2.3 2.0 1.7	3.0 3.0 3.4 2.8 2.9	4.4 4.0 4.7 4.3 4.4	5.1 4.5 5.5 5.1 5.3	5.0 4.4 5.3 5.0 5.2	4.9 4.5 5.0 4.8 5.3	4.7 4.3 4.8 4.6 5.4	4.7 4.3 4.8 4.6 5.2	2.9 2.6 3.0 3.2 3.7	3.9 2.9 3.3 4.4 4.3	1.5 1.2 1.6 1.7 1.9	-0.9 -0.5 -1.5 -1.1 -0.2
West South Central	2.1 1.4 3.1 1.9 2.0	2.7 1.6 3.8 2.5 2.7	3.3 2.9 3.9 3.2 3.3	4.3 4.2 4.2 4.5 4.3	4.7 5.0 4.8 4.6 4.7	4.2 4.8 4.6 4.1 4.1	4.0 4.5 4.5 4.0 3.7	3.9 4.5 4.4 4.0 3.7	3.8 4.5 4.4 3.9 3.6	2.3 3.7 1.2 2.6 2.5	2.7 3.8 0.7 3.5 2.7	0.9 1.8 1.3 0.2 0.9	-2.3 -1.2 -1.0 -1.8 -2.9
Mountain Montana Idaho. Wyoming Colorado New Mexico Arizona Utah Nevada	3.6 4.9 2.6 3.5 3.9 2.7 3.4 3.2 5.0	3.8 5.3 3.4 3.9 4.2 2.2 4.0 2.9 4.4	3.5 5.1 3.2 4.6 3.8 2.9 3.0 2.8 3.9	4.3 5.8 4.0 5.5 4.6 3.5 4.1 3.6 4.2	3.8 5.9 3.7 3.6 4.2 3.1 3.6 3.1 4.2	3.5 5.5 3.5 4.3 3.6 2.9 3.2 2.7 3.7	3.3 5.6 3.2 4.6 3.3 2.8 3.0 2.7 3.5	3.3 5.6 3.2 4.8 3.3 2.8 2.9 2.7 3.2	3.1 5.7 3.2 4.7 3.0 2.9 2.8 2.6 3.0	-0.1 0.2 1.0 1.4 -0.1 0.4 -0.6 -0.7	2.1 1.3 2.3 1.8 1.9 1.9 3.2 2.5	-1.2 0.2 -0.8 -4.1 -0.9 -1.2 -1.3 -1.5	-2.2 -0.4 -1.6 3.0 -3.7 -0.7 -2.8 -1.9 -3.7

See footnotes at end of table.

Table 108 (page 2 of 2). Community hospital beds per 1,000 population and average annual percent change, according to geographic division and State: United States, selected years 1940–89

[Data are based on reporting by facilities]

			Beds pe	er 1,000) civiliar	п рори	lation			Average annual percent change					
Geographic division and State	1940¹	1950¹	1960²	1970	1980	1985	1987	1988	1989	1940-60 ^{1,2}	1960-70²	197080	1980–89		
Pacific	4.1	3.2	3.1	3.7	3.5	3.2	3.0	2.9	2.8	-1.4	1.8	-0.6	-2.4		
Washington	3.4	3.6	3.3	3.5	3.1	3.0	2.9	2.7	2.6	-0.1	0.6	-1.2	-1.9		
Oregon	3.5	3.1	3.5	4.0	3.5	3.2	3.0	2.9	2.9	0.0	1.3	-1.3	-2.1		
California	4.4	3.3	3.0	3.8	3.6	3.2	3.0	2.9	2.9	-1.9	2.4	-0.5	-2.4		
Alaska			2.4	2.3	2.7	2.2	2.4	2.4	2.5		-0.4	1.6	-0.9		
Hawaii			3.7	3.4	3.1	2.8	2.5	2.7	2.7		-0.8	-0.9	1.5		

¹¹⁹⁴⁰ and 1950 data are estimated based on published figures.

SOURCES: American Medical Association: Hospital service in the United States. JAMA 116(11):1055–1144, 1941, and 146(2):109–184, 1951. (Copyright 1941 and 1951: Used with the permission of the American Medical Association.); American Hospital Association: Hospitals. JAHA 35(15):383–430, Aug. 1, 1961. (Copyright 1961: Used with the permission of the American Hospital Association.); Data computed by the Division of Analysis, National Center for Health Statistics from data compiled by the Division of Health Care Statistics, National Master Facility Inventory and the American Hospital Association 1989 annual survey; U.S. Bureau of the Census: Current Population Reports. Series P-25, Nos. 72, 304, 460, 640, 970, 1010, 1044, and 1058. Washington. U.S. Government Printing Office, 1953, 1965, 1971, 1976, 1980, 1985, 1989, and 1990.

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²1960 includes hospital units of institutions.

Table 109 (page 1 of 2). Occupancy rates in community hospitals and average annual percent change, according to geographic division and State: United States, selected years 1940–89

			Percer	nt of bed	ds occu _l	pied			Avera	ige annual p	ercent char	nge
Geographic division and State	1940¹	1960²	1970	1980	1985	1987	1988	1989	1940-601,2	1960-70 ²	197080	1980–89
United States	69.9	74.7	77.3	75.2	65.1	65.0	65.7	66.1	0.3	0.3	-0.3	-1.4
New England	72.5	75.2	79.7	80.1	72.8	71.9	73.6	74.9	0.2	0.6	0.1	-0.7
Maine	72.4	73.2	73.0	74.5	66.8	68.0	70.8	71.4	0.1	-0.0	0.2	-0.5
New Hampshire	65.3	66.5	73.4	73.2	63.4	64.9	65.7	66.8	0.1	1.0	0.0	1.0
Vermont	68.8	68.5	76.3	73.7	68.0	67.1	66.8	65.9	-0.0	1.1	-0.3	-1.2
Massachusetts	71.8	75.8	80.3	81.7	74.1	71.0	73.4	75.7	0.3	0.6	0.2	-0.8
Rhode Island	77.7 75.9	75.7 78.2	82.9 82.6	85.9 80.4	76.2 75.4	80.5 76.4	83.2 76.4	79.9 77.7	0.1 0.1	0.9 0.5	0.4 -0.3	0.8 0.4
Middle Atlantic	75.5	78.1	82.4	83.2	77.1	77.9	79.4	79.8	0.2	0.5	0.1	-0.5
New York	78.9	79.4	82.9	85.9	83.9	83.4	85.4	85.6	0.0	0.4	0.4	0.0
New Jersey	72.4	78.4	82.5	82.8	74.8	76.8	78.2	79.3	0.4	0.5	0.0	-0.5
Pennsylvania	71.3	76.0	81.5	79.5	68.7	70.7	71.3	71.8	0.3	0.7	-0.2	-1.1
East North Central	71.0	78.4	79.5	76.9	64.2	62.9	63.8	63.9	0.5	0.1	-0.3	-2.0
Ohio	72.1	81.3	81.8	79.2	63.9	64.4	65.5	65.0	0.6	0.1	-0.3	-2.2
Indiana	68.5	79.6	80.3	77.6	61.6	58.0	58.3	59.8	0.8	0.1	-0.3	-2.9
Illinois	73.1	76.0	79.3	74.9	64.4	63.2	63.1	63.8	0.2	0.4	-0.6	-1.8
Michigan	71.5	80.5	80.6	78.2	67.4	64.7	66.2	65.7	0.6	0.0	-0.3	-1.9
Wisconsin	65.2	73.9	73.2	73.6	61.8	61.1	63.5	63.2	0.6	-0.1	0.1	-1.7
West North Central	65.7 71.0	71.8 72.3	73.6 73.9	71.2 73.7	60.3 63.8	60.4 63.4	60.9 64.1	61.5 65.9	0.4 0.1	0.2 0.2	-0.3 0.0	−1.6 −1.2
lowa	63.6	72.6	71.9	68.7	57.3	59.4	60.8	61.9	0.7	-0.1	-0.5 -0.5	-1.2
Missouri	68.6	75.8	79.3	75.1	63.0	63.0	61.9	62.5	0.5	0.5	-0.5	-2.0
North Dakota	61.9	71.3	67.1	68.6	61.1	61.1	64.1	63.1	0.7	-0.6	0.2	-0.9
South Dakota	59.1	66.0	66.3	60.6	57.5	57.7	59.4	60.8	0.6	0.0	0.9	0.0
Nebraska	59.0	65.6	69.9	67.4	58.4	55.7	56.1	55.9	0.5	0.6	0.4	-2.1
Kansas	60.4	69.1	71.4	68.8	54.3	55.3	56.5	55.5	0.7	0.3	-0.4	-2.4
South Atlantic	66.7	74.8	77.9	75.5	65.5	66.4	66.6	66.6	0.6	0.4	-0.3	-1.4
Delaware	59.2	70.2	78.8	81.8	68.0	74.8	77.2	75.7	0.9	1.2	0.4	-0.9
Maryland	74.6	73.9	79.3	84.0	73.5	77.6	77.8	78.3	-0.0	0.7	0.6	-0.8
District of Columbia	76.2	80.8 78.0	77.7	83.0	75.9 67.2	78.2 67.6	75.9 67.3	79.7 66.4	0.3	-0.4 0.4	0.7 -0.4	-0.4 -1.7
Virginia	70.0 62.1	74.5	81.1 79.3	77.8 75.6	60.7	60.2	60.8	60.3	0.5 0.9	0.6	-0.4 -0.5	-2.5
North Carolina	64.6	73.9	78.5	77.8	64.9	69.0	71.3	72.2	0.7	0.6	-0.1	-0.8
South Carolina	69.1	76.9	76.4	77.0	67.7	67.5	67.0	69.1	0.5	-0.1	0.1	-1.2
Georgia	62.7	71.7	76.5	70.4	64.4	65.7	65.7	65.0	0.7	0.7	-0.8	-0.9
Florida	57.5	73.9	76.2	71.7	62.5	61.5	61.5	61.0	1.3	0.3	-0.6	-1.8
East South Central	62.6	71.8	78.2	74.6	62.7	60.8	61.2	61.4	0.7	0.9	-0.5	-2.1
Kentucky	61.6	73.4	79.6	77.4	64.0	60.2	60.8	61.1	0.9	0.8	-0.3	-2.6
Tennessee	65.5	75.9	78.2	75.9	64.6	64.3	64.8	64.4	0.7	0.3	-0.3	1.8
Alabama	59.0 63.8	70.8 62.8	80.0 73.6	73.3 70.5	62.3 58.1	59.3 57.2	60.1 57.1	60.7 57.5	0.9 -0.1	1.2 1.6	-0.9 -0.4	2.1 2.2
West South Central	62.5	68.7	73.2	69.7	56.9	55.9	55.9	56.9	0.5	0.6	0.5	-2.2
Arkansas	55.6	70.0	74.4	69.6	56.0	58.1	56.8	59.2	1.2	0.6	-0.7	-1.8
Louisiana	75.0	67.9	73.6	69.7	58.6	55.9	55.8	56.4	-0.5	0.8	-0.5	-2.3
Oklahoma	54.5	71.0	72.5	68.1	56.2	56.9	57.2	58.0	1.3	0.2	-0.6	-1.8
Texas	59.6	68.2	73.0	70.1	56.6	55.3	55.5	56.4	0.7	0.7	-0.4	-2.4
Mountain	60.9	69.9	71.2	69.6	58.6	58.7	59.7	60.6	0.7	0.2	-0.2	-1.5
Montana	62.8	60.3	65.9	66.1	59.1	60.1	62.6	61.5	-0.2	0.9	0.0	-0.8
Idaho	65.4	55.9	66.1	65.2	56.6	55.0	56.7	55.2	-0.8	1.7	-0.1	-1.8
Wyoming	47.5	61.1	63.1	57.2	52.0	50.7	50.5	53.0	1.3	0.3	-1.0	-0.8
Colorado	62.1	80.6	74.0	71.6	59.0	59.9	60.7	63.8	1.3	-0.9	-0.3	-1.3
New Mexico	47.8 61.2	65.1	69.8	66.2	60.0	60.1	57.9	59.0	1.6	0.7	-0.5	-1.3
Arizona	61.2 65.8	74.2 70.0	73.3 73.7	74.2 70.0	61.5 58.7	61.8 57.4	63.6 56.6	62.8 58.1	1.0 0.3	0.1 0.5	0.1 -0.5	−1.8 −2.0
Vidil	05.0	70.7	73.7 72.7	68.8	50.7 52.6	52.4	55.9	58.3	0.3	0.0	-0.5 -0.5	-2.0 -1.8

See footnotes at end of table.

Table 109 (page 2 of 2). Occupancy rates in community hospitals and average annual percent change, according to geographic division and State: United States, selected years 1940–89

[Data are based on reporting by facilities]

			Percei	nt of be	ds occu	Average annual percent change						
Geographic division and State	1940¹	1960²	1970	1980	1985	1987	1988	1989	1940-60 ^{1,2}	1960-70²	1970–80	1980–89
Pacific Washington Oregon California Alaska Hawaii	69.7 67.5 71.2 69.9	71.4 63.4 65.8 74.3 53.8 61.5	71.0 69.7 69.3 71.3 59.1 75.7	69.0 71.7 69.3 68.5 58.3 74.7	61.6 58.5 55.6 62.3 62.6 76.4	63.3 59.0 55.5 64.3 52.6 79.9	63.6 59.9 56.4 64.4 49.7 83.5	63.4 61.2 58.2 63.8 48.8 83.2	0.1 -0.3 -0.4 0.3	-0.1 1.0 0.5 -0.4 0.9 2.1	-0.3 0.3 0.0 -0.4 -0.1 -0.1	-0.9 -1.7 -1.9 -0.8 -2.0 1.2

¹¹⁹⁴⁰ data are estimated based on published figures.

SOURCES: American Medical Association: Hospital service in the United States. JAMA 116(11):1055–1144, 1941. (Copyright 1941: Used with the permission of the American Medical Association.); American Hospital Association: Hospitals. JAHA 35(15):383–430, Aug. 1, 1961. (Copyright 1961: Used with the permission of the American Hospital Association.); Data computed by the Division of Analysis, National Center for Health Statistics from data compiled by the Division of Health Care Statistics, National Master Facility Inventory and the American Hospital Association 1989 annual survey.

²1960 includes hospital units of institutions.

Table 110 (page 1 of 2). Full-time equivalent employees per 100 average daily patients in community hospitals and average annual percent change, according to geographic division and State: United States, selected years 1960–89

		Employ	vees per 1	00 averag		Average	annual percen	change		
Geographic division and State	1960¹	1970	1980	1985	1987	1988	1989	1960-701	1970–80	1980–89
United States	226	302	394	472	511	526	546	2.9	2.7	3.7
New England	249	351	456	532	587	599	617	3.5	2.7	3.4
Maine	227	289	409	494	525	534	550	2.4	3.5	3.3
New Hampshire	240	310	400	517	539	558	581	2.6	2.6	4.2
Vermont , , ,	227	318	348	434	522	528	553	3.4	0.9	5.3
Massachusetts	252	365	488	547	625	632	651	3.8	2.9	3.3
Rhode Island	270	383	454	547	547	549	579	3.6	1.7	2.7
Connecticut	247	347	440	529	568	594	605	3.5	2.4	3.6
Middle Atlantic	225	311	383	450	488	494	507	3.3	2.1	3.2
New York	233	336	396	436	481	480	492	3.7	1.7	2.4
New Jersey	225	278	332	423	438	453	465	2.1	1.8	3.8
Pennsylvania	214	287	390	491	529	544	559	3.0	3.1	4.1
East North Central	226	299	396	494	546	559	582	2.8	2.8	4.4
Ohio	232	302	392	526	567	579	605	2.7	2.6	4.9
Indiana	216	280	374	482	556	575	590	2.6	2.9	5.2
Illinois	226	301	407	492	538	553	569	2.9	3.1	3.8
Michigan	239	313	417	513	569	579	612	2.7	2.9	4.4
Wisconsin	199	277	367	405	464	471	497	3.4	2.9	3.4
West North Central	212	273	357	422	457	477	493	2.6	2.7	3.7
Minnesota	220	273	347	384	407	428	433	2.2	2.4	2.5
lowa	208	258	349	427	452	468	478	2.2	3.1	3.6
Missouri	217	289	385	471	535	557	579	2.9	2.9	4.6
North Dakota	177	254	295	326	342	354	376	3.7	1.5	2.7
South Dakota	188	247	352	323	364	399	404	2.8	3.6	1.5
Nebraska	220	276	326	397	424	445	476	2.3	1.7	4.3
Kansas	210	270	368	478	487	508	525	2.5	3.1	4.0
South Atlantic	217	295	379	458	491	516	536	3.1	2.5	3.9
Delaware	243	328	405	526	573	601	608	3.0	2.1	4.6
Maryland	237	354	403	473	514	535	553	4.1	1.3	3.6
District of Columbia	240	363	483	599	601	619	614	4.2	2.9	2.7
Virginia	193	289	369	435	475	504	525	4.1	2.5	4.0
West Virginia	198	255	351	452	481	504	511	2.6	3.2	4.3
North Carolina	196	277	363	464	502	521	531	3.5	2.7	
South Carolina	185	257	356	426	466	483	501	3.3		4.3
	233	294	396		466 476	463 499	501 524		3.3	3.9
Georgia		294 295		458				2.4	3.0	3.2
Florida	245		375	450	486	514	546	1.9	2.4	4.3
East South Central	227	275	348	409	448	468	490	1.9	2.4	3.9
Kentucky	229	276	332	403	451	464	480	1.9	1.9	4.2
Tennessee	231	284	359	420	456	488	522	2.1	2.4	4.2
Alabama	233 207	266 270	357 334	410 392	458 411	477 422	494 435	1.3 2.7	3.0 2.1	3.7 3.0
West South Central	225	297	384	471	519	537	560	2.8	2.6	4.3
Arkansas	209	274	355	429	451	476	494	2.7	2.6	3.7
Louisiana	218	292	392	483	529	547	567	3.0	3.0	4.2
Oklahoma	218 232	296 304	404 383	480 473	503 532	529 547	548 574	3.1 2.7	3.2 2.3	3.4 4.6
Montain	226	299	413	486	536	535	551	2.8	3.3	3.3
Montana	216	247	302	351	366	370	386	1.4	2.0	2.8
Idaho	255	281	374	427	511	491	524	1.0	2.9	3.8
Wyoming	217	251	445	417	442	437	447	1.5	5.9	0.0
Colorado	221	306	398	481	565	555	586	3.3	2.7	4.4
New Mexico	228	314	430	536	557	546	543	3.3	3.2	2.6
Arizona	222	327	455	523	574	564	571	3.9	3.4	2.6
Utah	243	304	460	579	615	661	669	2.3	4.2	4.2
Nevada	224	284	427	490	502	534	558	2.4	4.2	3.0

See footnote at end of table.

Table 110 (page 2 of 2). Full-time equivalent employees per 100 average daily patients in community hospitals and average annual percent change, according to geographic division and State: United States, selected years 1960–89

		Employ	rees per 1	Average annual percent change						
Geographic division and State	1960¹	1970	1980	1985	1987	1988	1989	1960-70 ¹	1970–80	1980–89
Pacific Washington Oregon California Alaska Hawaii	243 263 232 241 220 226	327 313 303 334 301 278	467 428 417 481 454 401	545 544 548 550 515 435	561 585 638 555 546 475	578 613 669 570 584 457	602 617 674 594 599 580	3.0 1.8 2.7 3.3 3.2 2.1	3.6 3.2 3.2 3.7 4.2 3.7	2.9 4.1 5.5 2.4 3.1 4.2

¹¹⁹⁶⁰ includes hospital units of institutions, but excludes students, interns, and residents.

SOURCES: American Hospital Association: Hospitals. JAHA 35(15):383-430, Aug. 1, 1961. (Copyright 1961: Used with the permission of the American Hospital Association.); Data computed by the Division of Analysis, National Center for Health Statistics from data compiled by the Division of Health Care Statistics, National Master Facility Inventory and the American Hospital Association 1989 annual survey.

Table 111 (page 1 of 2). Nursing homes with 25 or more beds, beds, and bed rates, according to geographic division and State: United States, 1976, 1982, and 1986

	٨	lursing hom	es	•	Beds			Bed rate1	
Geographic division and State	1976	1982	1986	1976	1982	1986	1976	1982	1986
United States	14,133	14,565	16,033	1,291,632	1,469,357	1,615,771	681.4	603.0	582.2
New England Maine New Hampshire Vermont Massachusetts Rhode Island	1,211	1,246	1,235	91,885	105,293	108,474	719.7	643.4	597.2
	121	155	144	7,027	9,717	9,685	602.9	630.1	561.3
	68	70	75	5,633	6,729	6,987	702.1	636.4	557.4
	53	51	47	3,477	3,196	3,083	678.0	501.5	434.1
	645	620	612	47,169	50,366	51,126	744.0	634.2	585.4
	85	95	101	6,766	8,885	9,927	682.6	679.6	681.2
Connecticut	239	255	256	21,813	26,400	27,666	738.0	680.7	645.8
	1,567	1,587	1,921	187,435	210,010	243,962	554.3	491.9	517.0
	708	732	777	97,489	108,898	114,192	587.7	524.7	501.7
	313	332	356	31,147	36,638	39,071	511.7	465.5	439.6
	546	523	788	58,799	64,474	90,699	527.9	458.2	583.6
East North Central	2,904	2,966	2,999	281,144	326,171	330,342	786.4	730.3	666.5
	750	830	886	60,680	74,276	82,522	646.4	636.2	641.8
	420	449	449	35,799	47,196	47,257	747.5	807.3	724.0
	805	809	775	84,085	99,777	96,684	844.8	813.8	713.3
	508	471	480	53,966	55,349	53,651	782.5	628.4	542.7
	421	407	409	46,614	49,573	50,228	986.5	816.6	745.3
West North Central Minnesota Iowa Missouri North Dakota South Dakota Nebraska Kansas	1,965	2,171	2,142	157,057	185,774	187,781	772.8	734.6	683.6
	385	390	399	38,177	42,500	44,357	862.1	735.5	697.3
	440	475	440	31,785	38,150	34,942	812.5	790.9	686.1
	408	530	552	32,539	46,403	50,204	602.4	705.7	692.0
	82	80	81	6,413	6,402	6,789	901.8	730.2	718.9
	117	116	114	8,047	7,938	7,918	897.6	706.0	652.9
	210	225	214	18,408	18,516	18,132	898.7	726.7	665.4
	323	355	342	21,688	25,865	25,439	741.6	725.7	655.9
South Atlantic Delaware Maryland District of Columbia Virginia West Virginia North Carolina South Carolina Georgia Florida	1,475	1,745	2,152	142,245	177,495	212,382	539.2	485.5	484.1
	22	27	36	2,123	2,194	3,345	490.5	376.3	485.5
	165	179	200	18,559	21,164	24,402	685.9	584.4	575.2
	17	16	19	2,604	2,556	3,029	440.2	377.0	383.7
	208	267	288	23,816	29,251	29,653	696.8	652.7	561.8
	73	95	103	4,858	7,505	8,692	281.0	356.2	374.6
	276	346	402	20,903	28,156	34,049	569.1	560.5	562.5
	102	130	157	8,311	11,560	14,071	507.1	515.9	518.1
	304	306	298	28,732	32,194	31,738	862.4	742.0	607.5
	308	379	649	32,339	42,915	63,403	365.0	318.2	382.9
East South Central Kentucky Tennessee Alabama Mississippi	856	865	887	66,994	85,565	90,180	579.0	589.1	541.4
	267	276	277	19,929	25,837	26,426	646.5	681.5	621.3
	258	251	267	19,448	26,111	28,599	556.9	576.2	544.7
	209	190	203	19,207	20,490	21,736	646.7	555.6	506.5
	122	148	140	8,410	13,127	13,419	415.2	522.2	469.0
West South Central Arkansas Louisiana Oklahoma Texas	1,740	1,789	1,922	157,173	177,237	189,920	912.1	802.5	736.3
	208	200	237	19,322	19,327	21,910	861.1	689.7	703.2
	200	224	276	18,969	24,836	32,747	713.9	748.7	836.4
	341	359	382	25,990	28,902	30,359	877.6	788.6	751.0
	991	1,006	1,027	92,892	104,172	104,904	991.4	846.9	712.7
Mountain Montana Idaho Wyoming Colorado New Mexico Arizona Utah Nevada	495	529	631	41,881	47,857	57,414	597.9	503.5	506.1
	69	59	57	4,725	5,120	4,804	584.3	553.3	491.5
	54	47	60	4,263	4,102	5,240	598.1	448.6	517.0
	22	25	27	1,753	2,060	2,301	595.2	556.8	550.0
	174	157	183	17,792	16,848	18,402	873.1	644.3	610.2
	30	31	56	2,489	2,351	4,915	360.0	241.5	416.5
	67	109	134	5,832	9,888	12,740	402.6	428.9	424.3
	63	76	84	3,707	5,025	5,995	503.3	518.8	511.2
	16	25	30	1,320	2,463	3,017	481.6	570.5	534.5

See footnote at end of table.

Table 111 (page 2 of 2). Nursing homes with 25 or more beds, beds, and bed rates, according to geographic division and State: United States, 1976, 1982, and 1986

[Data are based on reporting by facilities]

Geographic division and State	N	ursing hom	es		Beds		Bed rate ¹		
	1976	1982	1986	1976	1982	1986	1976	1982	1986
Pacific	1.920	1,667	2,144	165,818	153,955	195,316	670.9	481.0	520.8
Washington	318	309	328	29,415	30,017	32,021	835.1	670.0	623.9
Oregon	202	177	214	15,758	15,711	17,404	660.1	503.9	495.1
California	1.369	1,148	1,569	118,144	105,325	143,179	646.1	445.5	512.7
Alaska	8	10	10	738	1,031	1,082	1,232.1	1,458.3	950.0
Hawaii	23	23	23	1,763	1,871	1,630	384.0	269.4	200.5

¹Number of beds per 1,000 resident population 85 years of age and over.

NOTE: The 1982 inventory excluded certain types of nursing homes that the 1976 and 1986 inventories included (nursing home units of hospitals, nursing homes for the blind, etc.). To make the data comparable, these types of homes and their beds were subtracted from the 1976 and 1986 figures.

SOURCES: Division of Health Care Statistics, National Center for Health Statistics: Trends in nursing and related care homes and hospitals, United States, selected years 1969–80, by G. W. Strahan. Vital and Health Statistics. Series 14, No. 30. DHHS Pub. No. (PHS) 84-1825. Public Health Service. Washington. U.S. Government Printing Office, Mar. 1984; Nursing and related care homes as reported from the 1982 National Master Facility Inventory Survey, by D. A. Roper. Vital and Health Statistics. Series 14, No. 32. DHHS Pub. No. (PHS) 86-1827. Public Health Service. Washington. U.S. Government Printing Office, Sept. 1986; data from the National Master Facility Inventory; Final data from the 1986 Inventory of Long-term Care Places; Resident population computed by the Division of Analysis, National Center for Health Statistics from the Compressed Mortality File, a county-level national mortality and population data base.

Table 112. Gross national product, national health expenditures, and Federal government expenditures: United States, selected years 1929–90

	Gross	Natio	nal health expendit	ures	Federal :	government exp	penditures
Year	national product in billions	Amount in billions	Percent of gross national product	Amount per capita	Total in billions	Health in billions	Health as a percent of total
1929. 1935. 1940. 1950. 1955.	\$ 103.1 72.2 99.7 284.8 398.0 515.3	\$ 3.6 2.9 4.0 12.7 17.7 27.1	3.5 4.0 4.0 4.5 4.4 5.3	\$ 29 23 29 80 101 143	\$ 2.7 6.6 10.0 41.2 68.6 93.9	\$ 1.6 2.0 2.9	3.9 2.9 3.1
1965. 1966. 1967. 1968.	705.1 772.0 816.4 892.6 963.9	41.6 45.9 51.7 58.5 65.7	5.9 5.9 6.3 6.6 6.8	204 222 248 278 309	125.3 145.3 165.8 182.9 191.3	4.8 7.5 12.2 14.1 16.1	3.8 5.2 7.4 7.7 8.4
1970. 1971. 1972. 1973.	1,015.5 1,102.7 1,212.8 1,359.3 1,472.8	74.4 82.3 92.3 102.5 116.1	7.3 7.5 7.6 7.5 7.9	346 379 421 464 521	207.8 224.8 249.0 269.3 305.5	17.7 20.4 22.9 25.2 30.5	8.5 9.1 9.2 9.4 10.0
1975. 1976. 1977. 1978. 1979.	1,598.4 1,782.8 1,990.5 2,249.7 2,508.2	132.9 152.2 172.0 193.7 217.2	8.3 8.5 8.6 8.6 8.7	592 672 753 839 932	364.2 393.7 430.1 470.7 521.1	36.4 42.9 47.6 54.3 61.4	10.0 10.9 11.1 11.5 11.8
1980. 1981. 1982. 1983.	2,731.9 3,052.6 3,166.0 3,405.7 3,772.2	250.1 290.2 326.1 358.6 389.6	9.2 9.5 10.3 10.5 10.3	1,063 1,221 1,358 1,479 1,592	615.1 703.3 781.2 835.9 895.6	72.0 84.0 93.3 103.2 112.6	11.7 11.9 11.9 12.3 12.6
1985. 1986. 1987. 1988. 1989.	4,014.9 4,231.6 4,515.6 4,873.7 5,200.8 5,465.1	422.6 454.8 494.1 546.0 602.8 666.2	10.5 10.7 10.9 11.2 11.6 12.2	1,710 1,822 1,961 2,146 2,346 2,566	985.6 1,034.8 1,071.9 1,114.2 1,187.2 1,275.7	123.6 133.1 144.0 156.7 175.0 195.4	12.5 12.9 13.4 14.1 14.7 15.3

NOTES: These data include revisions back to 1978 and differ from previous editions of Health, United States. These data reflect Bureau of Economic Analysis, Department of Commerce revisions to the gross national product and Federal government expenditures as of May 1991 and Social Security Administration population revisions as of May 1991.

SOURCE: Office of National Health Statistics, Office of the Actuary: National health expenditures, 1990. Health Care Financing Review. Vol. 13, No. 1. HCFA Pub. No. 03321. Health Care Financing Administration. Washington. U.S. Government Printing Office, October 1991.

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Table 113. Total health expenditures as a percentage of gross domestic product and per capita expenditures in dollars: Selected countries and years 1960–90

Country	1960	1965	1970	1975	1980	1985	1988	1989	1990
			Health ex	penditures	as a percer	nt of gross o	lomestic prod	duct	
Australia Austria Belgium Canada Denmark Finland France	4.9 4.4 3.4 5.5 3.6 4.2 4.2	5.1 4.7 3.9 6.0 2.7 4.9 5.2	5.7 5.4 4.1 7.1 6.1 5.7 5.8	7.5 7.3 5.9 7.2 6.5 6.3 7.0	7.4 7.9 6.7 7.4 6.8 6.5 7.6	7.8 8.1 7.4 8.5 6.3 7.2 8.5	7.7 8.4 7.5 8.7 6.5 7.2 8.6	7.6 8.4 7.4 8.7 6.4 7.2 8.8	7.5 8.4 7.4 9.0 6.2 7.4 8.9
Germany Greece lceland Ireland Italy Japan Luxembourg Netherlands	4.8 2.9 3.5 4.0 3.3 2.9	5.1 3.1 4.2 4.4 4.0 4.3 	5.9 4.0 5.2 5.6 5.2 4.4 4.1 6.0	8.1 4.1 6.2 7.6 6.1 5.5 5.6 7.6	8.4 4.3 6.5 9.0 6.9 6.4 6.8 8.0	8.7 4.9 7.4 8.3 7.0 6.4 6.8 8.0	8.9 5.0 8.5 7.9 7.6 6.6 7.3 8.2	8.2 5.3 8.6 7.3 7.6 6.6 7.4 8.1	8.1 5.3 8.5 7.1 7.7 6.5 7.2 8.0
New Zealand. Norway. Portugal Spain Sweden Switzerland Turkey United Kingdom United States	4.3 3.3 4.7 3.3 3.9 5.2	3.9 2.6 5.6 3.8 4.1 6.0	5.2 5.0 3.1 3.7 7.2 5.2 4.5 7.4	6.7 6.4 4.8 7.9 7.0 3.5 5.5 8.4	7.2 6.6 5.9 5.6 9.2 7.3 4.0 5.8 9.3	6.6 6.4 7.0 5.7 8.8 7.6 2.8 6.0 10.7	7.4 7.5 7.1 6.0 8.5 7.8 3.7 6.0 11.4	7.3 7.6 7.2 6.3 8.7 7.6 3.9 6.0	7.2 7.2 6.7 6.6 8.7 7.4 4.0 6.2 12.4
				Per ca	pita health	expenditure	s ¹		
Australia	\$95 60 50 117 64 58 66	\$121 81 76 165 64 91 109	\$205 149 123 274 209 163 192	\$433 336 286 478 335 305 365	\$595 618 541 806 571 513 656	\$952 871 802 1,315 770 826 991	\$1,102 1,046 949 1,585 892 998 1,174	\$1,123 1,112 1,007 1,683 922 1,090 1,277	\$1,151 1,192 1,087 1,795 963 1,156 1,379
Germany Greece lceland Ireland Italy Japan Luxembourg Netherlands	86 17 60 37 46 26	119 29 96 52 75 63	199 62 152 99 147 126 150 207	420 110 321 225 270 252 319 411	739 196 638 448 548 515 616 693	1,046 292 964 577 766 785 879 908	1,243 343 1,350 639 990 978 1,140 1,048	1,224 382 1,353 658 1,061 1,060 1,190 1,109	1,287 406 1,372 693 1,138 1,145 1,300 1,182
New Zealand. Norway. Portugal Spain Sweden Switzerland Turkey United Kingdom United States	89 55 92 87 76 142	86 37 145 127 98 206	174 154 46 82 274 250 146 346	354 350 158 186 475 482 57 272 592	523 624 252 322 842 742 100 454 1,063	667 900 385 437 1,125 1,115 100 662 1,711	811 1,223 479 571 1,258 1,308 165 817 2,145	341 1,219 528 648 1,344 1,363 175 864 2,346	853 1,281 529 730 1,421 1,406 197 932 2,566

¹Per capita health expenditures for each country have been adjusted to U.S. dollars using the annual average daily exchange rate for each year.

NOTES: Gross domestic product differs slightly from gross national product shown in the previous table. For definitions, see Appendix II. Some numbers in this table have been revised and differ from previous editions of Health, United States.

SOURCE: Organization for Economic Cooperation and Development: Measuring Health Care 1960–1983, OECD Pub. No. 43239. Paris, France, 1985; OECD Health Data 1991, and OECD Health Systems: Facts and Trends. Forthcoming.

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Table 114. National health expenditures, percent distribution, and average annual percent change, according to type of expenditure: United States, selected years 1960–90

Type of expenditure	1960	1965	1970	1975	1980	1985	1987	1988	1989	1990
					Amount	in billior	ns			
Total	\$27.1	\$41.6	§74.4 \$	132.9	\$250.1	\$422.6	\$494.	\$546.0	\$602.8	\$666.2
					Percent of	distributi	on			
All expenditures	100	100	100	100	100	100	100	100	100	100
Health services and supplies	94	92	93	94	95	96	97	7 96	97	97
Personal health care	88 34 19 7 4 2	86 34 20 7 4 2	87 38 18 6 7 2	88 39 18 6 7 3	88 41 17 6 8	87 40 17 6 8 4	89 39 19 8	39 9 19 5 5 8 8	39 19 5 8	88 38 19 5 8
Home health care	0 16	0 14	0 12	0 10	1 9	1 9	9	1	1	1 8
durables Other personal health careProgram administration and net cost of	3 3	3 2	3 2	2 2	2 2	2 2	2			2 2
health insurance	4 1	5 2	4 2	4 2	5 3	6 3	5			6 3
Research and construction	6	8	7	6	5	4	3	3 4	3	3
Noncommercial research	3 4	4 5	3 5	3 4	2 2	2 2	2			2 2
Type of expenditure	1960–65	1965–70	1970–7	5 1975–	80 1980	085 1	985–87	1987–88	1988–89	1989-90
				Averag	e annual	percent	change			
All expenditures	8.9	12.3	12.3	13.5	11	.1	8.1	10.5	10.4	10.5
Health services and supplies	8.5	12.6	12.5	13.9	11	.3	8.2	10.3	10.6	10.5
Personal health care. Hospital care Physician services. Dentist services Nursing home care Other professional services Home health care Drugs and other medical nondurables	8.3 8.6 9.2 7.3 11.6 7.4 9.6 6.8	12.8 14.7 10.6 10.8 23.4 11.8 19.7 8.4	12.4 13.4 11.4 12.1 15.4 18.3 23.2 8.1	13.5 14.3 12.5 11.7 15.0 19.9 27.2 10.7	10 12 10 11 13 23).1 .3 .8	9.0 7.4 12.1 8.0 7.8 12.8 3.6 9.3	9.9 9.2 13.1 8.5 7.8 12.4 9.6 7.2	9.8 9.7 8.0 7.3 11.5 14.0 24.9 9.3	10.5 10.1 10.7 7.6 11.4 16.6 22.5 7.9
Vision products and other medical	0.0	101	0.0	0.0	_	1 4	10.7	44.0	100	<i>C</i> 1

NOTE: These data include revisions back to 1978 and differ from previous editions of Health, United States.

9.0

3.5

10.5

10.8

15.2

17.1

13.9

10.1

10.7

7.5

9.0

5.1

11.8

17.1

SOURCE: Office of National Health Statistics, Office of the Actuary: National health expenditures, 1990. Health Care Financing Review. Vol. 13, No. 1. HCFA Pub. No. 03321. Health Care Financing Administration. Washington. U.S. Government Printing Office, October 1991.

8.8

14.6

12.8

17.0

9.2

11.2

8.0

9.4

6.9

15.5

11.3

6.4

7.4

5.4

8.2

11.0

19.3

18.9

6.4

10.4

3.3

12.7

10.6

-4.6

8.9

5.9

7.6

4.2

11.8

12.1

16.9

13.5

14.9

14.5

15.3

12.9

11.2

26.6

10.4

4.3

6.8

1.5

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16.4

14.1

5.6

10.2

11.9

8.3

durables...

health insurance.

Government public health activities

Research and construction

Noncommercial research

Program administration and net cost of

Table 115. Personal health care expenditures average annual percent change and percent distribution of factors affecting growth: United States, 1960–90

	Average		Factors	affecting growth	
Period	annual percent change	All factors	Prices	Population	Intensity ¹
			Perce	nt distribution	
1960–90	· · 11.3	100	57	10	33
1960–61 1961–62 1962–63 1963–64	6.1 7.6 9.3 9.9	100 100 100 100	29 29 22 22	27 20 16 14	44 51 62 64
1964–65 1965–66 1966–67 1967–68 1968–69	8.6 10.5 13.6 13.1 13.0	100 100 100 100 100	36 45 45 45 44	15 11 8 8 8	49 44 47 47 48
1969–70 1970–71 1971–72 1972–73 1973–74	13.7 9.9 11.3 11.7 14.6	100 100 100 100 100	47 62 39 40 62	8 11 9 7 6	45 27 52 53 32
1974–75 1975–76 1976–77 1977–78 1978–79	14.7 14.0 12.3 12.2 13.0	100 100 100 100 100	72 64 68 66 69	6 7 8 8	22 30 25 26 23
1979–80	15.9 16.2 12.4 10.0 8.4	100 100 100 100 100	72 70 78 72 75	6 6 8 10 12	22 24 14 18 13
1984–85	8.3 8.4 9.6 9.9 9.8 10.5	100 100 100 100 100 100	66 60 69 71 63	12 12 10 10 10 10	22 28 30 21 19 27

¹Represents changes in use or kinds of services and supplies.

SOURCE: Office of National Health Statistics, Office of the Actuary: National health expenditures, 1990. Health Care Financing Review. Vol. 13, No. 1. HCFA Pub. No. 03321. Health Care Financing Administration. Washington. U.S. Government Printing Office, October 1991.

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NOTE: These data include revisions back to 1960 and differ from previous editions of Health, United States.

Table 116. Consumer Price Index and average annual percent change for all items and selected items: United States, selected years 1950-90

[Data are based on reporting by samples of providers and other retail outlets]

Year	All items	Medical care	Food	Apparel and upkeep	Housing	Energy	Personal care
				Consumer Price	Index		
1950. 1955. 1960. 1965. 1970.	24.1 26.8 29.6 31.5 38.8	15.1 18.2 22.3 25.2 34.0	25.4 27.8 30.0 32.2 39.2	40.3 42.9 45.7 47.8 59.2	36.4	22.4 22.9 25.5	26.2 29.9 34.6 36.6 43.5
1975	53.8 56.9 60.6 65.2 72.6	47.5 52.0 57.0 61.8 67.5	59.8 61.6 65.5 72.0 79.9	72.5 75.2 78.6 81.4 84.9	50.7 53.8 57.4 62.4 70.1	42.1 45.1 49.4 52.5 65.7	57.9 61.7 65.7 69.9 75.2
1980. 1981. 1982. 1983.	82.4 90.9 96.5 99.6 103.9	74.9 82.9 92.5 100.6 106.8	86.8 93.6 97.4 99.4 103.2	90.9 95.3 97.8 100.2 102.1	81.1 90.4 96.9 99.5 103.6	86.0 97.7 99.2 99.9 100.9	81.9 89.1 95.4 100.3 104.3
1985. 1986. 1987. 1988. 1989.	107.6 109.6 113.6 118.3 124.0 130.7	113.5 122.0 130.1 138.6 149.3 162.8	105.6 109.0 113.5 118.2 125.1 132.4	105.0 105.9 110.6 115.4 118.6 124.1	107.7 110.9 114.2 118.5 123.0 128.5	101.6 88.2 88.6 89.3 94.3 102.1	108.3 111.9 115.1 119.4 125.0 130.4
			Aver	age annual perce	ent change		
1950–90	4.3 2.1 2.0 1.3 4.3 6.8	6.1 3.8 4.1 2.5 6.2 6.9	4.2 1.8 1.5 1.4 4.0 8.8	2.9 1.3 1.3 0.9 4.4 4.1	¹ 6.5 6.9	² 5.2 0.4 2.2 10.5	4.1 2.7 3.0 1.1 3.5 5.9
1975–80	8.9 5.8 6.5 7.6 11.3 13.5	9.5 9.5 9.6 8.4 9.2 11.0	7.7 3.0 6.3 9.9 11.0 8.6	4.6 3.7 4.5 3.6 4.3 7.1	9.9 6.1 6.7 8.7 12.3 15.7	15.4 7.1 9.5 6.3 25.1 30.9	7.2 6.6 6.5 6.4 7.6 8.9
1980–85	5.5 10.3 6.2 3.2 4.3 3.6	8.7 10.7 11.6 8.8 6.2 6.3	4.0 7.8 4.1 2.1 3.8 2.3	2.9 4.8 2.6 2.5 1.9 2.8	5.8 11.5 7.2 2.7 4.1 4.0	3.4 13.6 1.5 0.7 1.0 0.7	5.7 8.8 7.1 5.1 4.0 3.8
1985–90	4.0 1.9 3.6 4.1 4.8 5.4	7.5 7.5 6.6 6.5 7.7 9.0	4.6 3.2 4.1 4.1 5.8 5.8	3.4 0.9 4.4 4.3 2.8 4.6	3.6 3.0 3.8 3.8 4.5	0.1 -13.2 0.5 0.8 5.6 8.3	3.8 3.3 2.9 3.7 4.7 4.3

NOTE: 1982-84 = 100.

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor: Consumer Price Index. Various releases.

¹Data are for 1970–90. ²Data are for 1960–90.

Table 117. Consumer Price Index and average annual percent change for all items and medical care components: United States, selected years 1950–90

[Data are based on reporting by samples of providers and other retail outlets]

Item and medical care component	1950	1960	1965	1970	1975	1980	1985	1988	1989	1990
					Consur	ner Price In	dex			
CPI, all items	24.1	29.6	31.5	38.8	53.8	82.4	107.6	118.3	124.0	130.7
Less medical care		30.2	32.0	39.2	54.3	82.8	107.2	117.0	122,4	128.8
CPI, all services	16.9	24.1	26.6	35.0	48.0	77.9	109.9	125.7	131.9	139.2
	15.1	22.3	25.2	34.0	47.5	74.9	113.5	138.6	149.3	162.8
Medical care services	12.8 15.7 21.0	19.5 21.9 27.0	22.7 25.1 30.3	37.0 34.5	46.6 50.8 48.1 53.2	74.8 77.9 76.5 78.9	113.2 113.5 113.3 114.2	138.3 137.5 139.8 137.5 108.7	148.9 146.4 150.1 146.1 112.4	162.7 156.1 160.8 155.8 117.3
medical professionals 1 Hospital and related services Hospital rooms	4.9	9.3	12.3	23.6	38.3	69.2 68.0	116.1 115.4	108.3 143.9 143.3 114.0 112.5	114.2 160.5 158.1 128.9 124.7	120.2 178.0 175.4 142.7 138.7
Prescription drugs Nonprescription drugs and	39.7 43.4	46.9 54.0	45.0 47.8	46.5 47.4	53.3 51.2	75.4 72.5	115.2 120.1	139.9 152.0	150.8 165.2	163.4 181.7
medical supplies 1			39.0	42.3	51.8	74.9	112.2	108.1 130.8	114.6 138.8	120.6 145.9
equipment and supplies						79.2	109.6	123.9	131.1	138.0
Item and medical care component	1950~	60 1	960–65	1965–70	1970–75	1975–80	1980–85	1985–88	198889	1989–90
					Average ar	nual perce	nt change			
CPI, all items	. 2.1		1.3	4.3	6.8	8.9	5.5	3.2	4.8	5.4
Less medical care			1.2	4.1	6.7	8.8	5.3	3.0	4.6	5.2
CPI, all services			2.0	5.6	6.5	10.2	7.1	4.6	4.9	5.5
All medical care			2.5	6.2	6.9	9.5	8.7	6.9	7.7	9.0
Medical care services. Professional medical services. Physicians' services. Dental services. Eye care 1. Services by other	4.3 3.4 2.5		3.1 2.8 2.3	7.3 6.6 5.3	7.6 6.5 6.9 6.3	9.9 8.9 9.7 8.2	8.6 7.8 8.2 7.7	6.9 6.6 7.3 6.4	7.7 6.5 7.4 6.3 3.4	9.3 6.6 7.1 6.6 4.4
medical professionals¹ Hospital and related services Hospital rooms Other inpatient services¹ Outpatient services¹	6.6		5.8	13.9	10.2	12.2	10.9 11.2	7.4 7.5	5.4 11.5 10.3 13.1 10.8	5.3 10.9 10.9 10.7 11.2
Medical care commodities	1.7 2.2		-0.8 -2.4	0.7 -0.2	2.8 1.6	7.2 7.2	8.8 10.6	6.7 8.2	7.8 8.7	8.4 10.0
medical supplies 1				1.6	4.1	7.7	8.4		6.0 6.1	5.2
over-the-counter drugs							U /	5.2	<i>⊾</i> 1	5.1

 1 Dec. 1986 = 100.

NOTE: 1982-84 = 100, except where noted.

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor: Consumer Price Index, Various releases.

Table 118. Hospital expenses and personnel and average annual percent change in non-Federal short-stay hospitals: United States, 1971-89

[Data are based on reporting by a census of registered hospitals]

	Exp	enses for inpatien	t care		Personnel ²	
Year and period	Total in billions	Per inpatient day	Per inpatient stay	Employee costs as percent of total ¹	Number in thousands	Number per 100 patients
1971	\$ 22.4 25.5 28.5 32.8 39.1	\$ 83 95 102 113 133	\$ 667 747 794 883 1,025	63.9 62.6 61.8 60.7 59.4	1,999 2,056 2,149 2,289 2,399	272 278 280 289 298
1976. 1977. 1978. 1979.	45.4 51.8 58.3 66.2 77.0	152 173 194 216 244	1,172 1,317 1,470 1,631 1,844	57.9 57.5 57.2 57.0 56.4	2,483 2,581 2,662 2,762 2,879	304 315 323 328 334
1981. 1982. 1983. 1984. 1985.	90.7 105.1 116.6 123.6 130.7	284 327 368 410 460	2,168 2,493 2,776 2,984 3,239	56.7 56.7 56.5 56.1 55.2	3,039 3,110 3,102 3,023 3,003	347 353 357 367 385
1986. 1987. 1988. 1989.	140.9 152.9 168.9 185.2	499 537 581 631	3,530 3,849 4,194 4,572	53.9 53.1 52.9 53.0	3,032 3,120 3,209 3,307	392 400 404 411
1071 00	40.5	44.0		nual percent change		
1971–89	12.5 14.1 11.5 14.9 19.4	11.9 14.5 7.4 10.8 17.7	11.3 12.0 6.3 11.2 16.1		2.8 2.9 4.5 6.5 4.8	2.3 2.2 0.7 3.2 3.1
1975–76. 1976–77. 1977–78. 1978–79. 1979–80.	16.1 14.2 12.6 13.4 16.3	14.3 13.8 12.1 11.3 13.0	14.3 12.4 11.6 11.0 13.1		3.5 3.9 3.1 3.8 4.2	2.0 3.6 2.5 1.5 1.8
1980–81 1981–82 1982–83 1983–84 1984–85	17.9 15.8 11.0 5.9 5.8	16.4 15.1 12.5 11.4 12.2	17.6 15.0 11.4 7.5 8.5		5.6 2.3 0.3 2.5 0.7	3.9 1.7 1.1 2.8 4.9
1985–86 1986–87 1987–88 1988–89	7.8 8.5 10.5 9.7	8.5 7.6 8.2 8.6	9.0 9.0 9.0 9.0	 	1.0 2.9 2.9 3.1	1.8 2.0 1.0 1.7

¹Includes employee payroll and benefit costs. Does not include contracted labor services. ²Full-time equivalent personnel.

SOURCE: American Hospital Association: Hospital Statistics, 1990 Edition. Chicago, 1990. (Copyright 1990: Used with the permission of the American Hospital Association.)

NOTE: Data refer to non-Federal short-term general and other specialty hospitals.

Table 119. Hospital expenses and average annual percent change in short-stay hospitals, according to type of ownership and size of hospital: United States, selected years 1970–89

[Data are based on reporting by a census of registered hospitals]

Type of ownership and size of hospital	1970	1975	1980	1985	1986	1987	1988	1989	1980–85	198589
Total expenses				Amount	in billions				_	e annual change
All ownership	\$ 19.7	\$ 42.7	\$ 83.8	\$ 141.3	\$ 152.4	\$ 164.9	\$ 182.0	\$ 198.6	11.0	8.9
Federal 1	1.1	3.6	6.8	10.6	11.5	12.0	13.1	13.4	9.2	6.0
	0.2	1.1	1.9	3.5	3.8	4.0	4.5	4.3	13.0	5.3
	0.9	2.3	4.5	6.6	7.2	7.5	8.0	8.5	8.0	6.5
	0.0	0.1	0.2	0.3	0.3	0.3	0.4	0.4	8.4	7.5
Non-Federal short-stay ²	18.6	39.1	77.0	130.7	140.9	152.9	168.9	185.2	11.2	9.1
	13.6	28.0	55.8	96.2	103.6	112.4	124.8	136.9	11.5	9.2
	0.7	2.6	5.8	11.5	13.0	14.1	15.5	17.2	14.5	10.6
	4.1	8.6	15.3	23.0	24.3	26.4	28.6	31.0	8.5	7.8
Size of hospital: 6–99 beds	2.2	4.4	8.0	12.5	13.3	14.6	16.1	17.5	9.2	8.9
	3.4	7.1	13.4	22.5	24.7	26.5	29.4	32.7	10.9	9.8
	3.4	7.0	13.8	23.9	27.0	29.4	33.0	36.5	11.5	11.2
	5.6	11.3	23.7	40.3	42.4	45.5	50.0	55.0	11.2	8.1
	5.1	12.9	24.9	42.2	45.1	48.9	53.5	56.9	11.2	7.7
Expenses per inpatient day				An	nount					
Non-Federal short-stay ²	68	133	244	460	499	537	581	631	13.5	8.2
	72	133	246	463	504	544	591	642	13.5	8.5
	50	133	257	500	552	585	649	708	14.2	9.1
	67	132	236	429	458	490	514	554	12.7	6.6
Size of hospital: 6–99 beds	45	102	198	381	400	426	456	483	14.0	6.1
	58	119	218	409	447	481	520	561	13.4	8.2
	68	128	235	447	488	523	572	614	13.7	8.3
	74	138	257	482	528	569	615	679	13.4	8.9
	72	155	275	503	548	600	654	717	12.8	9.3
Expenses per inpatient stay				An	nount					
Non-Federal short-stay ²	579	1,025	1,844	3,239	3,530	3,849	4,194	4,572	11.9	9.0
	597	1,045	1,900	3,308	3,588	3,912	4,267	4,638	11.7	8.8
	348	886	1,676	3,033	3,342	3,617	4,023	4,406	12.6	9.8
	585	1,016	1,724	3,073	3,396	3,720	3,990	4,389	12.3	9.3
Size of hospital: 6-99 beds 100-199 beds 200-299 beds 300-499 beds 500 beds or more	339	665	1,234	2,276	2,444	2,700	2,971	3,173	13.0	8.7
	470	865	1,554	2,739	2,999	3,301	3,603	3,913	12.0	9.3
	585	990	1,773	3,070	3,390	3,684	4,023	4,376	11.6	9.3
	665	1,147	2,047	3,535	3,832	4,161	4,569	5,007	11.6	9.1
	870	1,637	2,627	4,387	4,770	5,216	5,756	6,310	10.8	9.5

¹Includes other Federal hospitals not listed separately.

SOURCES: American Hospital Association: Hospitals. JAHA 45(15):463–467, Aug. 1971; Hospital Statistics, 1976, 1981, 1985–89 Editions. Chicago, 1976, 1981, 1985–89. (Copyrights 1971, 1976, 1981, 1985–89: Used with the permission of the American Hospital Association.)

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²Includes non-Federal short-stay general and other specialty hospitals.

Table 120. National health expenditures and average annual percent change, according to source of funds: United States, selected years 1929–90

	All health		Private funds		Public funds				
Year	expenditures in billions	Amount in billions	Amount per capita	Percent of total	Amount in billions	Amount per capita	Percent of total		
1929. 1935. 1940. 1950. 1955.	\$ 3.6 2.9 4.0 12.7 17.7 27.1	\$ 3.2 2.4 3.2 9.2 13.2 20.5	\$ 25 18 23 58 75 108	86.4 80.8 79.7 72.8 74.3 75.5	\$ 0.5 0.6 0.8 3.4 4.6 6.7	\$ 4 6 21 26 35	13.6 19.2 20.3 27.2 25.7 24.5		
1965. 1966. 1967. 1968.	41.6 45.9 51.7 58.5 65.7	31.3 32.3 32.5 36.7 41.1	154 157 156 174 193	75.3 70.4 62.9 62.8 62.5	10.3 13.6 19.2 21.8 24.6	50 66 92 103 116	24.7 29.6 37.1 37.2 37.5		
1970. 1971. 1972. 1973. 1974.	74.4 82.3 92.3 102.5 116.1	46.7 51.1 57.2 63.2 69.4	217 235 261 286 312	62.8 62.1 62.0 61.6 59.8	27.7 31.2 35.1 39.3 46.6	129 144 160 178 209	37.2 37.9 38.0 38.4 40.2		
1975. 1976. 1977. 1978.	132.9 152.2 172.0 193.7 217.2	77.8 89.8 102.0 113.9 126.9	346 396 446 494 545	58.5 59.0 59.3 58.8 58.4	55.1 62.4 70.1 79.8 90.4	245 275 307 346 388	41.5 41.0 40.7 41.2 41.6		
1980. 1981. 1982. 1983.	250.1 290.2 326.1 358.6 389.6	145.0 168.5 191.3 211.0 230.0	616 709 797 870 940	58.0 58.0 58.7 58.8 59.0	105.2 121.8 134.8 147.6 159.6	447 512 561 609 652	42.0 42.0 41.3 41.2 41.0		
1985. 1986. 1987. 1988. 1989.	422.6 454.8 494.1 546.0 602.8 666.2	247.9 264.6 285.7 318.9 350.2 383.6	1,003 1,060 1,134 1,253 1,363 1,478	58.6 58.2 57.8 58.4 58.1 57.6	174.8 190.2 208.4 227.1 252.6 282.6	707 762 827 893 983 1,089	41.4 41.8 42.2 41.6 41.9 42.4		
			Average an	nual percent	change				
1929–65	7.0 11.7	6.6 10.5	5.2 9.5		8.8 14.2	7.3 13.1			
1929–35 1935–40 1940–50 1950–55 1955–60	-3.6 6.3 12.2 7.0 8.9	-4.6 6.0 11.2 7.4 9.2	-5.1 4.7 9.7 5.3 7.5		2.2 7.6 15.5 5.8 7.9	1.4 6.8 13.3 4.4 6.1			
1960–65 1965–70 1970–75 1975–80	8.9 12.3 12.3 13.5	8.9 8.3 10.7 13.3	7.3 7.2 9.8 12.2	• • • • • • • • • • • • • • • • • • • •	9.1 21.9 14.8 13.8	7.6 20.6 13.8 12.7			
1980–85 1980–81 1981–82 1982–83 1983–84 1984–85	11.1 16.0 12.4 10.0 8.7 8.5	11.3 16.2 13.6 10.3 9.0 7.7	10.2 15.1 12.4 9.2 8.0 6.7	• • • • • • • • • • • • • • • • • • • •	10.7 15.8 10.7 9.6 8.1 9.5	9.6 14.6 9.6 8.5 7.1 8.4			
1985–90 1985–86 1986–87 1987–88 1988–89 1989–90	9.5 7.6 8.6 10.5 10.4 10.5	9.1 6.8 8.0 11.6 9.8 9.5	8.1 5.7 6.9 10.5 8.8 8.4		10.1 8.8 9.5 9.0 11.2 11.9	9.0 7.8 8.5 8.0 10.1 10.8			

NOTES: These data include revisions back to 1978 and differ from previous editions of Health, United States. They reflect Social Security Administration population revisions as of May 1991.

SOURCE: Office of National Health Statistics, Office of the Actuary: National health expenditures, 1990. Health Care Financing Review. Vol. 13, No. 1. HCFA Pub. No. 03321. Health Care Financing Administration. Washington. U.S. Government Printing Office, October 1991.

Table 121. Personal health care expenditures and percent distribution, according to source of funds: United States, selected years 1929–90

								Governmen	t
Year 	Total in billions ¹	Per capita	All sources	Out-of-pocket payments	Private health insurance	Other private funds	Total	Federal	State and local
					Percent dis	tribution			
1929	\$ 3.2	\$ 26	100.0	² 88.4	(²)	2.6	9.0	2.7	6.3
	2.7	21	100.0	² 82.4	(²)	2.8	14.7	3.4	11.3
1940	3.5	26	100.0	² 81.3	(²)	2.6	16.1	4.1	12.0
	10.9	70	100.0	65.5	9.1	2.9	22.4	10.4	12.0
1955	15.7	93	100.0	58.1	16.1	2.8	23.0	10.5	12.5
	23.9	126	100.0	55.9	21.0	1.7	21.4	8.9	12.5
1965	35.6	175	100.0	53.4	24.3	1.9	20.4	8.3	12.0
	64.9	302	100.0	39.5	23.4	2.6	34.6	22.6	12.0
1971	71.3	328	100.0	38.0	23.8	2.6	35.6	23.7	11.9
	79.4	362	100.0	37.5	23.6	2.7	36.1	24.0	12.2
1973	88.6	401	100.0	37.1	23.9	2.6	36.4	23.8	12.6
	101.6	456	100.0	35.0	24.6	2.5	37.8	25.6	12.2
1975	116.6	519	100.0	33.1	25.6	2.5	38.9	26.6	12.3
	132.8	586	100.0	32.0	26.4	3.0	38.6	27.6	11.0
	149.2	653	100.0	31.0	27.3	2.9	38.8	27.6	11.2
	167.5	726	100.0	30.0	27.9	3.0	39.1	28.0	11.1
1979	189.3	812	100.0	28.6	28.9	3.0	39.5	28.4	11.1
	219.4	933	100.0	27.1	29.7	3.5	39.7	28.9	10.8
1980	254.8	1,073	100.0	26.4	30.3	3.5	39.9	29.4	10.5
	286.4	1,193	100.0	25.9	30.9	3.6	39.6	29.3	10.3
	314.9	1,299	100.0	25.8	30.9	3.5	39.8	29.7	10.1
	341.2	1,394	100.0	25.7	31.2	3.4	39.8	29.8	9.9
1985 1986 1987 1988 1989	369.7 400.8 439.3 482.8 529.9 585.3	1,496 1,606 1,743 1,897 2,062 2,255	100.0 100.0 100.0 100.0 100.0 100.0	25.5 25.2 24.8 24.7 23.8 23.3	30.8 30.9 31.3 31.9 32.0 31.8	3.5 3.5 3.4 3.5 3.6 3.6	40.1 40.5 40.5 39.9 40.6 41.3	30.2 30.1 29.8 29.4 30.0 30.3	9.9 10.3 10.7 10.5 10.6 11.0

¹Includes all expenditures for health services and supplies other than expenses for program administration, net cost of private health insurance, and government public health activities

SOURCE: Office of National Health Statistics, Office of the Actuary: National health expenditures, 1990. Health Care Financing Review. Vol. 13, No. 1. HCFA Pub. No. 03321. Health Care Financing Administration. Washington. U.S. Government Printing Office, October 1991.

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public health activities.

2Out-of-pocket payments and private health insurance are combined for these years.

NOTE: These data include revisions back to 1978 and differ from previous editions of Health, United States.

Table 122 (page 1 of 2). Expenditures for health services and supplies and percent distribution, by type of payer: United States, selected calendar years 1965–90

Type of payer	1965	1967	1970	1975	1980	1985	1986	1987	1988	1989	1990
					An	nount in b	illions ¹				
Total	\$38.2	\$47.9	\$69.1	\$124.7	\$238.9	\$407.2	\$438.9	\$476.8	\$526.2	\$582.1	\$643.4
Private	30.3 6.5	35.0 8.9	50.1 15.1	86.2 28.8	162.1 64.8	278.9 115.0	302.9 127.3	327.2 133.6	362.8 153.1	397.5 169.7	430.4 186.2
insurance premiums	5.4	6.2	11.2	20.9	48.4	85.4	93.6	96.7	112.9	125.7	139.1
hospital insurance trust fund ² Workers' compensation and temporary disability insurance medical benefits and	0.0	1.4	2.1	5.0	10.5	20.3	23.3	24.7	26.3	28.4	29.7
administration	0.8 0.2	1.0 0.2	1.4 0.3	2.4 0.5	5.1 0.9	7.8 1.4	8.8 1.6	10.5 1.7	12.0 1.9	13.6 2.1	15.2 2.2
Household (individuals)	23.1	25.3	33.6	54.9	90.3	152.0	162.7	179.8	194.3	210.3	224.7
policy premiums. Employee and self-employment contributions and voluntary premiums paid to Medicare hospital insurance	4.1	4.2	4.6	8.9	16.2	28.4	28.9	35.3	34.9	39.2	42.6
trust fund 2. Premiums paid by individuals to Medicare supplementary medical insurance	0.0	1.6	2.4	5.7	12.0	24.0	27.6	29.5	31.4	33.8	35.7
trust fundOut-of-pocket health spending by	0.0	0.6	1.0	1.7	2.7	5.2	5.2	6.1	8.7	11.2	10.2
individuals	19.0 0.6	18.9 0.8	25.6 1.5	38.5 2.5	59.5 7.0	94.4 12.0	100.9 12.9	108.8 13.8	119.3 15.4	126.1 17.5	136.1 19.6
Public	7.9 3.4	12.8 7.0	18.9 10.4	38.5 21.3	76.7 42.5	128.3 69.0	135.9 70.4	149.6 77.3	163.4 84.2	184.6 96.2	212.9 113.9
insuranceOther ³ State and local government	0.2 3.3 4.5	0.2 6.8 5.8	0.3 10.1 8.5	1.2 20.1 17.2	2.2 40.3 34.2	4.3 64.7 59.3	3.9 66.5 65.5	4.9 72.4 72.3	6.4 77.8 79.1	8.1 88.1 88.4	9.2 104.7 99.1
Employer contributions to private health insuranceOther ⁴	0.3 4.2	0.4 5.5	0.6 7.9	1.9 15.2	6.7 27.5	16.0 43.4	16.7 48.8	17.9 54.5	20.2 58.9	23.4 64.9	25.9 73.2
					Pei	rcent distr	ibution				
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Private	79.3 17.0	73.2 18.6	72.6 21.8	69.2 23.1	67.9 27.1	68.5 28.2	69.0 29.0	68.6 28.0	69.0 29.1	68.3 29.2	66.9 28.9
insurance premiums	14.3	13.0	16.2	16.7	20.3	21.0	21.3	20.3	21.5	21.6	21.6
hospital insurance trust fund ² Workers' compensation and temporary disability insurance medical benefits and	0.0	2.9	3.0	4.0	4.4	5.0	5.3	5.2	5.0	4.9	4.6
administration	2.2 0.6	2.2 0.5	2.1 0.5	2.0 0.4	2.1 0.4	1.9 0.4	2.0 0.4	2.2 0.4	2.3 0.4	2.3 0.4	2.4 0.3
Household (individuals) Employee share of private health	60.6	52.8	48.7	44.1	37.8	37.3	37.1	37.7	36.9	36.1	34.9
insurance premiums and individual policy premiums Employee and self-employment contributions and voluntary premiums	10.8	8.8	6.7	7.2	6.8	7.0	6.6	7.4	6.6	6.7	6.6
paid to Medicare hospital insurance trust fund ²	0.0	3.3	3.4	4.6	5.0	5.9	6.3	6.2	6.0	5.8	5.5
supplementary medical insurance trust fund	0.0	1.3	1.4	1.4	1.1	1.3	1.2	1.3	1.7	1.9	1.6
individuals	49.8 1.7	39.5 1.7	37.1 2.2	30.9 2.0	24.9 2.9	23.2 2.9	23.0 2.9	22.8 2.9	22.7 2.9	21.7 3.0	21.2 3.0

See footnotes at end of table.

Table 122 (page 2 of 2). Expenditures for health services and supplies and percent distribution, by type of payer: United States, selected calendar years 1965–90

[Data are compiled by the Health Care Financing Administration]

Type of payer	1965	1967	1970	1975	1980	1985	1986	1987	1988	1989	1990
					Per	cent dist	ribution				
Public	20.7	26.8	27.4	30.8	32.1	31.5	31.0	31.4	31.0	31.7	33.1
	9.0	14.6	15.0	17.1	17.8	16.9	16.1	16.2	16.0	16.5	17.7
health insuranceOther ³ State and local government Employer contributions to private health	0.4	0.5	0.4	0.9	0.9	1.1	0.9	1.0	1.2	1.4	1.4
	8.6	14.1	14.7	16.1	16.9	15.9	15.2	15.2	14.8	15.1	16.3
	11.7	12.2	12.3	13.8	14.3	14.6	14.9	15.2	15.0	15.2	15.4
insurance	0.7	0.8	0.9	1.5	2.8	3.9	3.8	3.7	3.8	4.0	4.0
Other ⁴	11.0	11.4	11.4	12.2	11.5	10.6	11.1	11.4	11.2	11.2	11.4

¹Excludes research and construction.

NOTES: This table disaggregates health expenditures according to four classes of payers: businesses, households (individuals), Federal Government, and State and local governments. Where businesses or households pay dedicated funds into government health programs (e.g., 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.

SOURCE: Office of National Health Statistics, Office of the Actuary: The burden of health care costs: Business, households, and governments. Health Care Financing Review. Vol. 13, No. 2. Health Care Financing Administration. Washington. U.S. Government Printing Office, Winter 1991.

²Includes one-half of self-employment contribution to Medicare hospital insurance trust fund.

³Includes expenditures for Federal programs such as Medicaid and Medicare with adjustments for contributions by employers and individuals and premiums paid to the Medicare insurance trust fund.

⁴Includes expenditures for State and local programs such as Medicaid and maternal and child health, and employer contributions to Medicare hospital insurance trust fund.

Table 123. Expenditures on hospital care, nursing home care, physician services, and all other personal health care expenditures and percent distribution, according to source of funds: United States, selected years, 1960–90

	Total in	Out of pookst	Private	Other		Governmen	t
Service and year	Total in billions	Out-of-pocket payments	health insurance	private funds	Total ¹	Medicaid	Medicare
Hospital care				Percent dist	ribution		
1960 1965 1970 1975 1980 1983 1984 1985 1986 1987 1987 1988 1989	\$ 9.3 14.0 27.9 52.4 102.4 147.2 157.5 168.3 179.8 194.2 212.0 232.6 256.0	20.7 19.6 9.0 8.4 5.2 5.1 5.2 4.8 4.5 5.3 5.2 5.0	35.6 40.9 34.4 34.4 36.6 36.1 35.3 35.2 35.6 35.6 35.8 34.9	1.2 1.9 3.2 2.8 4.9 4.6 4.9 5.0 5.3 5.4	42.5 37.6 53.4 54.5 53.3 53.3 54.1 54.5 55.0 54.9 53.9 53.6 54.7	8.1 8.8 9.4 9.0 9.1 9.2 9.2 9.5 9.4 9.9	18.8 21.9 25.8 28.0 28.8 28.9 28.5 27.8 27.1 26.7 26.7
Nursing home care							
1960	1.0 1.7 4.9 9.9 20.0 28.9 31.2 34.1 36.7 39.7 42.8 47.7 53.1	80.0 64.5 48.2 42.1 43.3 47.1 47.8 48.6 49.1 47.9 48.1 43.7 44.9	0.0 0.1 0.3 0.7 0.9 1.0 1.1 1.0 1.0 1.1 1.1	6.4 5.8 4.9 4.8 3.1 2.3 2.1 1.9 1.9 1.9	13.6 29.5 46.6 52.3 52.7 49.5 48.9 48.0 49.2 48.9 53.3 52.1	28.0 47.5 48.6 45.7 44.9 44.6 44.1 45.2 44.4 43.2 45.4	5.0 2.9 2.1 1.8 1.8 1.7 1.6 2.2 8.0 4.7
Physician services							
1960 1965 1970 1975 1980 1983 1984 1985 1986 1987 1988 1989	5,3 8,2 13,6 23,3 41,9 60,6 67,1 74,0 82,1 93,0 105,1 113,6 125,7	62.7 60.6 42.8 32.8 26.9 24.1 23.4 21.8 20.8 20.4 19.9 18.8 18.7	30.2 32.5 35.2 39.3 42.9 43.9 45.2 45.6 45.6 45.7 46.7 46.5	0.1 0.1 0.1 0.1 0.0 0.0 0.0 0.0 0.0 0.0	7.1 6.8 21.9 27.9 30.2 32.0 31.4 32.6 33.5 33.8 33.4 34.7 35.0	4.6 7.1 5.1 4.0 3.8 3.9 3.8 3.6 3.7 4.2	11.8 14.6 19.0 22.0 21.6 22.5 23.2 23.4 23.0 24.1 23.9
All other personal health care ²							
1960 1965 1970 1975 1980 1983 1984 1985 1986 1987 1988 1989	8.4 11.7 18.5 31.0 55.1 78.3 85.5 93.4 102.2 112.4 122.9 136.1 150.5	87.8 87.4 80.6 72.2 62.1 58.2 57.4 56.6 56.1 55.3 54.3 52.8 50.4	1.4 2.2 4.3 8.5 17.5 21.1 21.9 21.9 22.2 22.9 23.7 24.3 25.2	2.7 2.6 2.7 3.0 3.5 3.8 4.0 4.3 4.1 3.9 4.0 4.2	8.0 7.8 12.4 16.4 16.9 16.8 16.7 17.2 17.7 17.9 18.1 18.9 20.1	4.4 6.2 6.0 6.1 6.5 6.9 7.3 7.6 8.4 9.0	0.7 1.7 3.1 4.4 4.7 4.8 4.8 4.7 5.1

¹Includes 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.

SOURCE: Office of National Health Statistics, Office of the Actuary: National health expenditures, 1990. Health Care Financing Review. Vol. 13, No. 1. HCFA Pub. No. 03321. Health Care Financing Administration. Washington. U.S. Government Printing Office, October 1991.

²Includes expenditures for dental services, other professional services, home health care, drugs and other medical nondurables, vision products and other medical durables, and other personal health care.

NOTE: These data include revisions back to 1978 and differ from previous editions of Health, United States.

Table 124. Nursing home average monthly charges per resident and percent of residents, according to primary source of payments and selected facility characteristics: United States, 1977 and 1985

[Data are based on a sample of nursing homes]

		ncome or support	Med	licare	Me	dicaid	assi	ublic stance elfare		other urces
Facility characteristic	1977	1985	1977	1985	1977	1985	1977	1985	1977	1985
				Aver	age mont	hly charge	1			
All facilities	\$690	\$1,450	\$1,167	\$2,141	\$720	\$1,504	\$508	\$ 863	\$440	\$1,099
Proprietary	686 698	1,444 1,462	1,048 1,325	2,058 *2,456	677 825	1,363 1,851	501 534	763 1,237	562 324	1,174 1,029
Certification										
Skilled nursing facility	866 800 567 447	1,797 1,643 1,222 999	1,136 1,195 	2,315 2,156 	955 739 563	2,000 1,509 1,150	575 623 479 401	*1,338 1,215 900 664	606 630 *456 *155	1,589 1,702 1,460 464
Bed size										
Less than 50 beds	516 686 721 823	886 1,388 1,567 1,701	*869 *1,141 1,242 *1,179	*1,348 1,760 2,192 2,767	663 634 691 925	1,335 1,323 1,413 1,919	394 493 573 602	*835 774 855 1,071	*295 468 551 370	*749 1,116 1,504 *866
Geographic region										
Northeast	909 652 585 663	1,645 1,398 1,359 1,498	1,369 *1,160 *1,096 *868	2,109 2,745 2,033 1,838	975 639 619 663	2,035 1,382 1,200 1,501	*511 537 452 564	738 1,241 727 837	395 524 342 *499	1,244 1,416 1,057 *843
				Pe	ercent of r	residents				
All facilities	38.4	41.6	2.0	1.4	47.8	50.4	6.4	3.4	5.3	3.2
Ownership										
Proprietary	37.5 40.4	40.1 44.9	1.7 2.7	1.6 *0.9	49.6 43.8	52.1 46.6	7.3 4.4	3.9 2.3	3.8 8.6	2.3 5.3
Certification										
Skilled nursing facility	41.5 31.6 36.3 64.2	39.1 36.8 41.4 65.5	4.6 2.6 	2.6 1.9 	41.4 58.3 55.3	53.7 57.8 55.9	7.7 3.2 5.3 19.0	2.1 1.3 *1.5 18.0	4.8 4.1 3.1 16.7	2.4 2.2 *1.1 12.9
Bed size										
Less than 50 beds	49.6 39.5 38.4 28.6	53.1 49.5 39.6 30.1	*1.8 *1.2 2.6 2.3	*1.2 *1.3 1.5 *1.5	32.7 46.5 50.4 55.5	33.8 42.9 55.2 57.7	10.5 8.1 4.6 4.6	11.2 3.9 1.6 3.0	5.4 4.7 4.0 9.1	*0.6 2.5 2.1 7.7
Geographic region										
Northeast	34.6 44.5 32.2 41.3	34.8 49.1 39.4 40.4	3.3 1.5 *1.4 2.5	1.7 *0.8 *1.2 *2.7	53.3 42.1 52.5 44.7	52.9 45.9 53.8 49.2	3.8 6.5 8.2 6.7	7.1 2.5 2.5 *1.2	5.1 5.4 5.7 4.8	3.5 1.6 3.1 6.6

¹Includes life-care residents and no-charge residents.

SOURCES: National Center for Health Statistics: The National Nursing Home Survey, 1977 summary for the United States, by J. F. Van Nostrand, A. Zappolo, E. Hing, et al. Vital and Health Statistics. Series 13, No. 43. DHEW Pub. No. (PHS) 79-1794. Public Health Service. Washington. U.S. Government Printing Office, July 1979; and The National Nursing Home Survey: 1985 summary for the United States, by E. Hing, E. Sekscenski, and G. Strahan. Vital and Health Statistics. Series 13, No. 97. DHHS Pub. No. (PHS) 89-1758. Public Health Service. Washington. U.S. Government Printing Office, January 1989.

^{*}Relative standard error greater than 30 percent.

Table 125. Nursing home average monthly charges per resident and percent of residents, according to selected facility and resident characteristics: United States, 1964, 1973–74, 1977, and 1985

[Data are based on reporting by a sample of nursing homes]

Faulity and registers		Average mont	hly charge1			Percent of r	residents	
Facility and resident characteristic	1964	1973–74 ²	1977	1985	1964	1973–74 ²	1977	1985
Facility								
All facilities	\$186	\$479	\$689	\$1,456	100.0	100.0	100.0	100.0
Ownership:								
Proprietary	205	489	670	1,379	60.2	69.8	68.2	68.7
Nonprofit and government	145	456	732	1,624	39.8	30.2	31.8	31.3
Certification: ³								
Skilled nursing facility Skilled nursing and intermediate		566	880	1,905		39.8	20.7	18.5
facility		514	762	1,571		24.5	40.5	45.2
Intermediate facility		376	556	1,179		22.4	28.3	24,9
Not certified		329	390	875		13.3	10.6	11.4
Bed size:								
Less than 50 beds		397	546	1,036		15.2	12.9	8.9
50-90 beds		448	643	1,335		34.1	30.5	27.6
100-199 beds		502	706	1,478		35.6	38.8	43.2
200 beds or more		576	837	1,759		15.1	17.9	20.2
Geographic region:								
Northeast	213	651	918	1,781	28.6	22.0	22.4	23.6
Midwest	171	433	640	1,399	36.6	34.6	34.5	32.5
South	161	410	585	1,256	18.1	26.0	27.2	29.4
West	204	454	653	1,458	16.7	17.4	15.9	14.5
Resident								
All residents	186	479	689	1,456	100.0	100.0	100.0	100.0
Age:								
Under 65 years	155	434	585	1,379	12.0	10.6	13.6	11.6
65–74 years	184	473	669	1,372	18.9	15.0	16.2	14.2
75–84 years	191	488	710	1,468	41.7	35.5	35.7	34.1
85 years and over	194	485	719	1,497	27.5	38.8	34.5	40.0
Sex:								
Male	171	466	652	1,438	35.0	29.1	28.8	28.4
Female	194	484	705	1,463	65.0	70.9	71.2	71.6

¹Includes life-care residents and no-charge residents.

SOURCES: National Center for Health Statistics: Charges for care and sources of payment for residents in nursing homes, United States, June–August 1969, by J. F. Van Nostrand and J. F. Sutton. Vital and Health Statistics. Series 12, No. 21. DHEW Pub. No. (HRA) 74–1706. Public Health Service. Washington. U.S. Government Printing Office, July 1973; Charges for care and sources of payment for residents in nursing homes, United States, National Nursing Home Survey, Aug. 1973–Apr. 1974, by E. Hing, Vital and Health Statistics. Series 13, No. 32. DHEW Pub. No. (PHS) 78–1783. Public Health Service. Washington. U.S. Government Printing Office. Nov. 1977; The National Nursing Home Survey: 1977 summary for the United States, by J. F. Van Nostrand, A. Zappolo, E. Hing, et al. Vital and Health Statistics. Series 13, No. 43. DHEW Pub. No. (PHS) 79–1794. Public Health Service. Washington. U.S. Government Printing Office, July 1979; and The National Nursing Home Survey: 1985 summary for the United States, by E. Hing, E. Sekscenski, and G. Strahan. Vital and Health Statistics. Series 13, No. 97. DHHS Pub. No. (PHS) 89-1758. Public Health Service. Washington. U.S. Government Printing Office, January 1989.

²Data exclude residents of personal care homes.

³Medicare extended care facilities and Medicaid skilled nursing homes from the 1973–74 survey were considered to be equivalent to Medicare or Medicaid skilled nursing facilities in 1977 and 1985 for the purposes of this comparison.

Table 126. National funding for health research and development and average annual percent change, according to source of funds: United States, selected years 1960-90

[Data are based on multiple sources]

		Source of funds						
Year and period	All funding	Federal	State and local	Industry ¹	Private nonprofit organizations			
			Amount in m	illions				
1960	\$886	\$448	\$46	\$253	\$139			
	1,890	1,174	90	450	176			
1970	2,847	1,667	170	795	215			
	3,168	1,877	198	860	233			
	3,536	2,147	228	934	227			
	3,750	2,225	245	1,048	232			
	4,443	2,754	254	1,183	252			
1975	4,701	2,832	286	1,319	264			
	5,107	3,059	312	1,469	267			
	5,568	3,396	338	1,614	220			
	6,262	3,811	416	1,800	236			
	7,150	4,321	465	2,093	271			
1980	7,953	4,723	480	2,459	292			
	8,723	4,848	564	2,998	312			
	9,548	4,970	642	3,593	343			
	10,753	5,399	718	4,205	431			
	12,143	6,087	799	4,765	491			
1985 ² 1986 ² 1987 ² 1988 ² 1989 ²	13,512 14,832 16,868 18,905 20,900 22,584	6,791 6,895 7,847 8,425 9,230 9,856	884 1,034 1,191 1,295 1,465 1,517	5,352 6,188 7,103 8,432 9,404 10,368	486 715 728 753 801 843			
		Aver	age annual per	cent change				
1960–90	11.4	10.9	12.4	13.2	6.2			
1960–65	16.4	21.2	14.4	12.2	4.8			
	8.5	7.3	13.6	12.1	4.1			
1970–75.	10.6	11.2	11.0	10.7	4.2			
1970–71.	11.3	12.6	16.5	8.2	8.4			
1971–72.	11.6	14.4	15.2	8.6	-2.6			
1972–73.	6.1	3.6	7.5	12.2	2.2			
1973–74.	18.5	23.8	3.7	12.9	8.6			
1974–75.	5.8	2.8	12.6	11.5	4.8			
1975–80.	11.1	10.8	10.9	13.3	2.0			
1975–76.	8.6	8.0	9.1	11.4	1.1			
1976–77.	9.0	11.0	8.3	9.9	-17.6			
1977–78.	12.5	12.2	23.1	11.5	7.3			
1978–79.	14.2	13.4	11.8	16.3	14.8			
1979–80.	11.2	9.3	3.2	17.5	7.7			
1980–85.	11.2	7.5	13.0	16.8	10.7			
1980–81.	9.7	2.6	17.5	21.9	6.8			
1981–82.	9.5	2.5	13.8	19.8	9.9			
1982–83.	12.6	8.6	11.8	17.0	25.7			
1983–84.	12.9	12.7	11.3	13.3	13.9			
1984–85.	11.3	11.6	10.6	12.3	-1.0			
1985–90.	10.8	7.7	11.4	14.1	11.6			
1985–86.	9.8	1.5	17.0	15.6	47.1			
1986–87.	13.7	13.8	15.2	14.8	1.8			
1987–88.	12.1	7.4	8.7	18.7	3.4			
1988–89.	10.6	9.6	13.1	11.5	6.4			
1989–90.	8.1	6.8	3.5	10.3	5.2			

¹Includes expenditures for drug research. These expenditures are included in the "drugs and sundries" component of the Health Care Financing Administration's National Health Expenditure Series, not under "research."

²Revised figures.

SOURCES: National Institutes of Health: NIH Data Book, 1991. Public Health Service, U.S. Department of Health and Human Services, NIH Pub. No. 91–1261, Sept. 1991; National Institutes of Health, Office of Science Policy and Legislation: Selected data.

³Preliminary figures.

Table 127. Federal funding for health research and development and percent distribution, according to agency: United States, selected fiscal years 1970-90

[Data are compiled from Federal Government sources]

Agency	1970¹	1975¹	1980	1984	1985	1986	1987	1988	1989	1990 ²
					Amount	in millions				, , , , , , , , , , , , , , , , , , , ,
Total	\$1,667	\$2,832	\$4,723	\$6,087	\$6,791	\$6,895	\$7,847	\$8,425	\$9,230	\$9,856
					Percent of	distribution	ı			
All Federal agencies	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Department of Health and Human Services	70.6	77.6	78.2	78.9	79.7	81.1	83.3	84.1	84.7	85.2
National Institutes of Health	52.4 16.2	66.4 1 <i>.</i> 5 8.3		0.7	0.7		74.6 0.8 7.7	74.7 1.1 8.0	73.4 1.3 9.4	1.0
Services	2.0	1.3	1.1	0.7	0.6	0.5	0.4	0.4	0.6	0.6
Other agencies	29.4	22.4	21.8	21.1	20.3	18.9	16.7	15.9	15.3	14.8
Department of Agriculture Department of Defense Department of Education 3 Department of Energy 4 Department of the Interior Environmental Protection Agency	3.0 7.5 6.3 0.7		3.1 4.5 0.7 4.5 0.5 1.7	0.7 3.0	6.5 0.6 2.6 0.4	7.2 0.6 2.4 0.4	2.3 0.4	1.3 5.1 0.7 2.4 0.4 0.3	1.2 4.8 0.6 2.4 0.4 0.3	0.6 2.8 0.4
International Development Cooperation Agency ⁵	0.6	0.2	0.3	0.3	0.6	0.4	0.4	0.3	0.3	0.2
National Aeronautics and Space Administration	5.2 1.7 3.5 0.9	1.6 3.3	1.6	1.4 3.1	1.3 3.3	1.2 2.7	1.7 1.1 2.7 0.4	1.6 1.0 2.6 0.3	2.5	0.9 2.4

¹Data for fiscal year ending June 30; all other data for fiscal year ending September 30. ²Estimates.

SOURCES: National Institutes of Health: NIH Data Book, 1991. Public Health Service, U.S. Department of Health and Human Services, NIH Pub. No. 91-1261, Sept. 1991; Office of Science Policy and Legislation, National Institutes of Health, Public Health Service: Unpublished data.

Office of Handicapped Research, formerly included in other Department of Health and Human Services.

Includes Atomic Energy Commission and Energy Research and Development Administration.

Includes Department of State and Agency for International Development.

Table 128. Federal spending for human immunodeficiency virus (HIV)-related activities, according to agency and type of activity: United States, fiscal years 1982–90

Agency and type of activity	1982	1983	1984	1985	1986	1987	1988	1989	1990
Agency				Amour	nt in millio	าร			
All Federal spending	\$8	\$44	\$104	\$208	\$507	\$926	\$1,591	\$2,275	\$2,973
Department of Health and Human Services,									
total	6	39	97	197	402	777	1,420	2,002	2,592
Public Health Service, total	6	29	61	109	234	502	962	1,301	1,590
National Institutes of Health	4	22	44	64	135	261	474	602	744
Alcohol, Drug Abuse, and Mental Health Administration Centers for Disease Control Food and Drug Administration Health Resources and Services	_ 2 _	1 6 -	3 14 1	3 33 9	12 62 10	48 136 16	112 305 30	173 378 74	215 443 57
Administration	_	_	_		15	12	37	60	113
Agency for Health Care Policy and Research	_	-	_	-	-	_	1	7	8
Office of the Assistant Secretary for Health Indian Health Service	_	_	_	_	_	30	3	6 1	8 3
Health Care Financing Administration Social Security Administration Other Department of Health and Human	_	10 -	30 6	75 13	135 33	215 60	360 98	545 153	780 219
Service's Agencies	_			-	_	-	_	3	3
Department of Veterans Affairs	2	5	7	11	23	55	84	142	208
Department of Defense	_	_	_		79 2	74 17	53 30	86 40	125 41
Other departments	_	_	_	_	1	3	4	5	7
Activity									
Research	4	24	47	85	193	344	659	981	1,164
Public Health Service	4 -	23 1 	47 	84 1	166 2 25	316 4 24	635 7 17	943 11 27	1,116 14 34
Department of Defense	_								_
Education and prevention	3	7	15	27	84	197	367	403	470
Public Health Service	2 1	6 1	14 1	25 2	52 5	145 11	300 17	303 28	366 29
Department of Veteraris Arians	<u>.</u>	<u>-</u>		_	24	22	16	26	28
Agency for International Development		-	_	-	2	17	30	40	41
Other	-	_	_	_	1	2	4	6	6
Medical care	1	13	36	83	197	325	467	738	1,120
Health Care Financing Administration: Medicaid (Federal share)		10	30	70 5	130 5	200 15	330 30	490 55	670 110
Public Health Service	-	_	_	_	16	41	27	55	108
Department of Veterans Affairs	1	3 -	6 -	8 -	16 30	40 28	60 20	103 33	165 63
Other	-	-		_	-	1	_	2	4
Cash assistance	_	_	6	13	33	60	98	153	219
Social Security Administration: Disability Insurance Supplemental Security Income	_		5 1	10 3	25 8	45 15	80 18	125 28	180 39

NOTES: These data include revisions and differ from previous editions of Health, United States. Federal expenditures on HIV-related activities are estimated at about 35 to 40 percent of total HIV-related expenditures which include, for example, expenditures covered by private health insurance, out-of-pocket costs to patients, and the States' share of Medicaid, public hospital, and other local expenditures.

SOURCE: Budget Office, Public Health Service: Unpublished data.

Table 129. Public health expenditures by State and territorial health agencies, according to source of funds and program area: United States, selected fiscal years 1976-89

Funds and program area	1976	1978	1980	1982	1984	1985	1986	1987	1988	1989
					Amount i	n millions				
Total	\$2,540	\$3,256	\$4,451	\$5,145	\$6,242	\$6,950	\$7,491	\$8,128	\$8,540	\$9,669
Source of funds										
Federal grants and contracts. Department of Agriculture Other State. Local. Fees, reimbursements, and other	797 154 643 1,486 96 161	1,133 351 782 1,802 87 234	1,573 678 895 2,513 114 250	1,778 916 861 2,923 123 321	2,344 1,307 1,037 3,352 151 395	2,556 1,455 1,101 3,810 149 435	2,700 1,551 1,148 4,124 148 520	2,822 1,652 1,170 4,562 140 604	3,072 1,690 1,381 4,696 144 628	3,503 1,988 1,515 5,184 154 829
Program area										
WIC1	138	337	661	890	1,269	1,431	1,534	1,622	1,660	1,938
Noninstitutional personal health other than WIC ²	1,079	1,356	1,698	1,905	2,380	2,521	2,777	3,130	3,483	3,972
institutions Environmental health Health resources Laboratory Other ³	531 199 208 104 281	641 237 297 131 256	819 298 357 161 457	950 355 360 182 504	979 415 563 214 423	1,153 467 627 229 521	1,236 480 651 238 576	1,227 528 709 265 647	1,342 464 720 279 592	1,459 520 824 308 649
					Percent d	istribution				
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Source of funds										
Federal grants and contracts. Department of Agriculture Other. State. Local. Fees, reimbursements, and other	31.4 6.1 25.3 58.5 3.8 6.3	34.8 10.8 24.0 55.3 2.7 7.2	35.3 15.2 20.1 56.5 2.6 5.6	34.6 17.8 16.7 56.8 2.4 6.2	37.6 20.9 16.6 53.7 2.4 6.3	36.8 20.9 15.8 54.8 2.1 6.3	36.0 20.7 15.3 55.0 2.0 6.9	34.7 20.3 14.4 56.1 1.7 7.4	36.0 19.8 16.2 55.0 1.7 7.3	36.2 20.6 15.7 53.6 1.6 8.6
Program area										
WIC ¹	5.4	10.4	14.8	17.3	20.3	20.6	20.5	20.0	19.4	20.0
other than WIC ²	42.5	41.6	38.2	37.0	38.1	36.3	37.1	38.5	40.8	41.1
State health agency-operated institutions	20.9 7.8 8.2 4.1 11.0	19.7 7.3 9.1 4.0 7.9	18.4 6.7 8.0 3.6 10.3	18.5 6.9 7.0 3.5 9.8	15.7 6.6 9.0 3.4 6.8	16.6 6.7 9.0 3.3 7.5	16.5 6.4 8.7 3.2 7.7	15.1 6.5 8.7 3.3 8.0	15.7 5.4 8.4 3.3 6.9	15.1 5.4 8.5 3.2 6.7

¹Supplemental Food Program for Women, Infants, and Children.

NOTE: Data are reported for 55 health agencies in 50 States, the District of Columbia, and 4 territories (Puerto Rico, American Samoa, Guam, and the Virgin Islands). SOURCES: Public Health Foundation: Public Health Agencies 1987: Expenditures and Sources of Funds. Washington. 1987; Unpublished data.

Supplemental Your Hospital House Worlder, matter, matter, matter and offinders.

2Includes funds for maternal and child health services other than WIC, handicapped children's services, communicable disease control, dental health, chronic disease control, mental health, alcohol and drug abuse, and supporting personal health programs.

3Funds for general administration and funds to local health departments not allocated to program areas.

Table 130 (page 1 of 2). Personal health care per capita expenditures and average annual percent change, according to geographic division and State: United States, selected years 1966–82

							_	e annual change
Geographic division and State	1966	1969	1972	1976	1980	1982	1966–80	1980–82
			Amou	nt per capita				
United States	\$201	\$280	\$381	\$ 605	\$ 958	\$1,220	11.8	12.8
New England	234 173 188 197	328 242 245 274	441 328 330 352	686 542 507 531	1,058 870 759 778	1,356 1,091 986 978	11.4 12.2 10.5 10.3	13.2 12.0 14.0 12.1
MassachusettsRhode IslandConnecticut	253 231 236	360 315 330	489 413 438	760 672 675	1,175 1,062 1,046	1,508 1,351 1,348	11.6 11.5 11.2 11.3	13.3 12.8 13.5 13.5
Middle Atlantic New York New Jersey Pennsylvania	227 258 192 201	319 366 264 279	425 488 355 372	662 745 578 590	1,017 1,107 877 972	1,310 1,417 1,115 1,273	11.0 11.5 11.9	13.5 13.1 12.8 14.4
East North Central. Ohio	203 195 182 220 211 192	278 264 252 300 286 269	378 361 337 407 388 373	610 597 542 634 635 610	978 958 861 1,033 1,014 952	1,249 1,247 1,101 1,308 1,281 1,219	11.9 12.0 11.7 11.7 11.9 12.1	13.0 14.1 13.1 12.5 12.4 13.2
West North Central Minnesota Iowa North Dakota South Dakota Nebraska Kansas	200 216 197 198 197 181 195	273 287 265 273 273 241 268 270	369 389 351 365 367 327 371 379	597 602 563 627 676 522 598 568	973 976 935 997 1,034 887 948 988	1,241 1,229 1,176 1,285 1,325 1,154 1,216 1,271	12.0 11.4 11.8 12.2 12.6 12.0 12.0	12.9 12.2 12.1 13.5 13.2 14.1 13.3 13.4
South Atlantic Delaware Maryland District of Columbia Virginia West Virginia North Carolina South Carolina Georgia Florida	169 209 190 430 151 161 143 125 150 184	242 286 273 667 213 227 204 182 217 264	342 381 390 958 301 313 282 251 319 377	551 599 609 1,349 493 508 461 423 515 623	879 912 957 2,198 811 808 737 686 843 975	1,115 1,153 1,232 2,838 1,054 1,057 931 857 1,048 1,228	12.5 11.1 12.2 12.4 12.8 12.2 12.4 12.9 13.1 12.6	12.6 12.4 13.5 13.6 14.0 14.4 12.4 11.8 11.5
East South Central Kentucky Tennessee Alabama Mississispi	148 155 166 145 115	211 218 232 210 163	294 286 324 300 242	483 444 531 501 425	798 739 874 809 730	1,025 957 1,144 1,033 897	12.8 11.8 12.6 13.1 14.1	13.3 13.8 14.4 13.0 10.8
West South Central	170 142 156 183 177	242 198 226 263 249	331 284 322 351 338	533 470 511 539 549	859 766 857 852 876	1,096 994 1,106 1,086 1,110	12.3 12.8 12.9 11.6 12.1	13.0 13.9 13.6 12.9 12.6
Mountain Montana Idaho Wyoming Colorado New Mexico Arizona Utah Nevada	189 175 153 200 233 157 190 158 196	259 236 210 268 311 214 271 211 282	346 325 292 327 396 282 376 286 389	541 510 455 451 605 458 582 458 658	849 801 695 710 942 722 882 714	1,070 1,036 868 873 1,209 904 1,112 896 1,380	11.3 11.5 11.4 9.5 10.5 11.5 11.6 11.4 13.6	12.3 13.7 11.8 10.9 13.3 11.9 12.3 12.0 8.9

See notes at end of table.

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Table 130 (page 2 of 2). Personal health care per capita expenditures and average annual percent change, according to geographic division and State: United States, selected years 1966–82

[Data are compiled by the Health Care Financing Administration]

							•	e annual change
Geographic division and State	1966	1969	1972	1976	1980	1982	1966–80	1980–82
			Amoun	t per capita				
Pacific	\$234	\$328	\$440	\$691	\$1,093	\$1,380	11.6	12.4
Washington	219	297	390	584	915	1,165	10.8	12.8
Oregon	197	274	364	587	912	1,165	11.6	13.0
California	242	340	460	727	1,152	1,451	11.8	12.2
Alaska	227	289	340	560	961	1.187	10.9	11.1
Hawaii	208	300	401	598	932	1,228	11.3	14.8

NOTE: Per capita spending estimates are the expenditure level of services rendered in a geographic area per resident population. Per capita figures cannot be interpreted directly as spending per resident unless substantially all of the services provided in a State are consumed by residents of that State. U.S. estimates do not include services provided in U.S. territories or possessions, services rendered by U.S. taxpayers while living abroad, and services furnished to U.S. personnel living abroad or on military vessels.

SOURCE: Office of the Actuary: Personal health care expenditures by State, selected years 1966–1982, by K. R. Levit. Health Care Financing Review. HCFA Pub. No. 03199. Health Care Financing Administration. Washington. U.S. Government Printing Office, Summer 1985.

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Table 131 (page 1 of 2). Hospital care per capita expenditures and average annual percent change, according to geographic division and State: United States, selected years 1966–82

								e annual change
Geographic division and State	1966	1969	1972	1976	1980	1982	1966–80	1980–82
			Amoun	t per capita				
United States	\$ 80	\$119	\$166	\$276	\$ 441	\$ 577	13.0	14.4
New England	101	151	207	335	515	669	12.3	14.0
Maine	74 73	107 98	138 134	246 213	411 334	517 458	13.0 11.5	12.2 17.1
New Hampshire	73 86	126	162	242	338	443	10.3	14.5
Massachusetts	116	178	247	400	624	810	12.8	13.9
Rhode Island	101	148	196	328	492	623	12.0	12.5
Connecticut	91	133	185	296	444	578	12.0	14.1
Middle Atlantic	94	144	200	328	495	641	12.6	13.8
New York	110	171	236	377	540	679	12.0	12.1
New Jersey	71	103	145	254	371 505	498	12.5	15.9
Pennsylvania	82	127	178	300	505	675	13.9	15.6
East North Central	81	117	167	286	465	615	13.3	15.0
Ohio	74	107	154	273 235	446 383	599 512	13.7 13.8	15.9 15.6
Indiana	63 90	95 132	134 195	323	539	700	13.6	14.0
Michigan	90	123	170	295	477	628	12.7	14.7
Wisconsin	76	117	163	268	401	539	12.6	15.9
West North Central	79	117	158	270	451	592	13.3	14.6
Minnesota	89	122	168	272	425	540	11.8	12.7
lowa	69	103	139	238	404	536	13.5	15.2
Missouri	81	123	164	295	510	679	14.0	15.4
North Dakota	83	121	156	283	479	624	13.3	14.1
South Dakota	75	101	133	234	398	530	12.7	15.4
Nebraska	75 76	115	157 160	259 269	429 451	568 593	13.3 13.6	15.1 14.7
Kansas	76	116						
South Atlantic	68	103	151	252 291	411 437	539 552	13.7 11.9	14.5 12.4
Delaware	91 84	131 122	174 185	287	437 464	606	13.0	14.3
District of Columbia	192	334	564	903	1,516	2,021	15.9	15.5
Virginia	63	92	132	218	372	506	13.5	16.6
West Virginia	70	107	152	264	424	564	13.7	15.3
North Carolina	57	85	121	201	324	428	13.2	14.9
South Carolina	51	79	107	188	303	397	13.6	14.5
Georgia	56	86	135	228	386	492	14.8	12.9
Florida	66	103	151	268	434	569	14.4	14.5
East South Central	60	91	131	226	383	507	14.2	15.1
Kentucky	60	91	121	202	326	433	12.9	15.2 15.9
Tennessee	67 61	102 92	149	252 238	430 408	578 541	14.2 14.5	15.9
Alabama	61 48	92 73	134 111	236 198	343	431	15.1	12.1
West South Central	_						13.3	14.7
Arkansas	66 56	97 77	135 114	229 197	380 324	500 443	13.3	16.9
Louisiana	63	94	145	239	412	549	14.4	15.4
Oklahoma	63	102	132	224	378	498	13.7	14.8
Texas	69	101	137	233	379	495	12.9	14.3
Mountain	76	109	145	234	377	483	12.1	13.2
Montana	67	95	122	193	336	445	12.2	15.1
Idaho	50	75	104	162	254	335	12.3	14.8
Wyoming	85	116	123	188	313	398	9.8	12.8
Colorado	100	136	171	274	422	557	10.8	14.9
New Mexico	69	96	122	222	348	449	12.3	13.6
Arizona	78	119	169	256	396	498	12.3	12.1
Utah	58	81	114	188	307	399	12.6	14.0
Nevada	68	108	151	273	540	630	16.0	8.0

See notes at end of table.

Table 131 (page 2 of 2). Hospital care per capita expenditures and average annual percent change, according to geographic division and State: United States, selected years 1966–82

							_	e annual change
Geographic division and State	1966 1969		1972	1976	1980	1982	1966–80	1980–82
			Amount	oer capita				
Pacific	\$ 85	\$123	\$169	\$280	\$445	\$583	12.6	14.5
Washington	72	102	133	223	337	434	11.7	13.5
Oregon	66	96	127	219	347	468	12.6	16.1
California	88	129	180	298	479	626	12.9	14.3
Alaska	149	173	164	255	446	552	8.1	11.3
Hawaii	79	115	146	222	352	479	11.3	16.7

NOTES: Per capita spending estimates are the expenditure level of services rendered in a geographic area per resident population. Per capita figures cannot be interpreted directly as spending per resident unless substantially all of the services provided in a State are consumed by residents of that State.

SOURCE: Office of the Actuary: Personal health care expenditures by State, selected years 1966–1982, by K. R. Levit. Health Care Financing Review. HCFA Pub. No. 03199. Health Care Financing Administration. Washington. U.S. Government Printing Office, Summer 1985.

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Table 132 (page 1 of 2). Nursing home care per capita expenditures and average annual percent change, according to geographic division and State: United States, selected years 1966–82

							Average percent	e annual change
Geographic division and State	1966	1969	1972	1976	1980	1982	1966–80	1980–82
			Amount p	er capita				
United States	\$12	\$19	\$31	\$52	\$ 90	\$114	15.5	12.5
New England	20	28	47	85	145	186	15.2	13.3
Maine	15	23	40	70	134	176	16.9	14.6
New Hampshire	16	20	35	43	71	90	11.2	12.6
Vermont	19	27	39	75	121	149	14.1	11.0
Massachusetts	22 15	32 21	52 34	94 78	152 169	192 214	14.8 18.9	12.4 12.5
Connecticut	19	29	49	90	156	206	16.2	14.9
Middle Atlantic	14	21	36		108			
New York	16	26	46	66 85	135	145 184	15.7 16.5	15.9 16.7
New Jersey	10	15	24	45	77	97	15.7	12.2
Pennsylvania	12	18	28	48	88	116	15.3	14.8
East North Central	12	19	31	54	97	125	16.1	13.5
Ohio	12	18	27	53	99	143	16.3	20.2
Indiana	12	20	33	57	102	129	16.5	12.5
Illinois	13	20	33	52	90	109	14.8	10.1
Michigan	10	17	27	48	86	106	16.6	11.0
Wisconsin	14	22	39	71	120	150	16.6	11.8
West North Central	18	28	44	69	131	172	15.2	14.6
Minnesota	22	33	57 51	91	175	235	16.0	15.9
lowa	22 12	36 19	51 20	81 47	143 95	168	14.3	8.4
Missouri	19	33	29 47	47 60	112	139 154	15.9 13.5	21.0 17.3
South Dakota	18	30	49	69	132	165	15.3	11.8
Nebraska	17	27	42	68	112	140	14.4	11.8
Kansas	18	26	42	65	130	163	15.2	12.0
South Atlantic	8	12	20	33	59	77	15.3	14.2
Delaware	8	12	20	42	67	86	16.4	13.3
Maryland	9	17	24	46	75	102	16.4	16.6
District of Columbia	6	10	18	22	43	55	15.1	13.1
Virginia	6 3	9 5	16 10	30	63	85 60	18.3	16.2
West Virginia	ა 6	11	12 16	20 30	41 58	62 75	20.5 17.6	23.0 13.7
South Carolina	6	9	16	28	62	75 76	18.2	10.7
Georgia	8	13	23	37	67	79	16.4	8.6
Florida	11	15	25	31	48	65	11.1	16.4
East South Central	7	11	20	35	67	86	17.5	13.3
Kentucky	9	14	23	40	81	104	17.0	13.3
Tennessee	6	10	17	28	56	76	17.3	16.5
Alabama	8	14	22	40	62	79	15.8	12.9
Mississippi	4	7	15	30	71	90	22.8	12.6
West South Central	12	19	31	48	79	94	14.4	9.1
Arkansas	13	21	34	50	95	112	15.3	8.6
LouisianaOklahoma	8 19	13 31	22 47	38 58	68 91	89	16.5	14.4
Texas	11	18	30	36 48	78	111 88	11.8 15.0	10.4 6.2
Mountain	10 12	15 17	23 33	35 43	59 66	74 92	13.5 12.9	12.0 18.1
Idaho	12	17	26	45 45	69	84	13.3	10.1
Wyoming	6	12	23	24	38	49	14.1	13.6
Colorado	15	21	33	54	86	104	13.3	10.0
New Mexico	5	9	15	16	34	49	14.7	20.0
Arizona	8	13	17	22	41	53	12.4	13.7
Utah	9	12	17	30	55	63	13.8	7.0
Nevada	7	10	20	29	60	82	16.6	16.9

See notes at end of table.

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Table 132 (page 2 of 2). Nursing home care per capita expenditures and average annual percent change, according to geographic division and State: United States, selected years 1966–82

							Average percent	e annual change
Geographic division and State	1966 1969		1972	1976	1980	1982	1966–80	1980–82
			Amount p	er capita				
Pacific	\$12	\$18	\$31	\$48	\$ 82	\$ 97	14.7	8.8
Washington	16	21	43	61	109	137	14.7	12.1
Oregon	17	24	37	57	94	113	13.0	9.6
California	11	18	30	47	78	91	15.0	8.0
Alaska	1	2	9	17	14	26	20.7	36.3
Hawaii	6	10	18	28	36	63	13.7	32.3

NOTE: Per capita spending estimates are the expenditure level of services rendered in a geographic area per resident population. Per capita figures cannot be interpreted directly as spending per resident unless substantially all of the services provided in a State are consumed by residents of that State.

SOURCE: Office of the Actuary: Personal health care expenditures by State, selected years 1966–1982, by K. R. Levit. Health Care Financing Review. HCFA Pub. No. 03199. Health Care Financing Administration. Washington. U.S. Government Printing Office, Summer 1985.

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Table 133. Health care coverage for persons under 65 years of age, according to type of coverage and selected characteristics: United States, 1980, 1984, and 1989

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

	Pi	ivate insuran	ce		Medicaid1			Not covered	2
Characteristic	1980	1984	1989	1980	1984	1989	1980	1984	1989
				Perc	ent of popula	ation			
Total ^{3,4}	78.8	76.9	76.6	5.9	6.0	6.4	12.5	15.4	15.7
Age									
Under 15 years	74.7	71.9	71.7	10.2	10.8	11.4	12.8	16.1	15.9
Under 5 years	70.3	67.6	68.1	12.0	13.4	13.3	15.2	18.0	17.0
5–14 years	76.7	74.2	73.6	9.4	9.4	10.4	11.7	15.0	15.3
15–44 years	79.3	77.0	76.6	4.2	4.4	4.4	14.2	17.6	18.1
45–64 years	83.6	83.6	83.3	3.1	2.7	3.4	8.6	10.2	10.6
Sex ³									
Male	79.5	77.5	76.9	4.7	5.0	5.2	12.7	15.8	16.4
Female	78.2	76.3	76.2	7.1	7.1	7.6	12.2	15.1	14.9
Race ³									
White	81.9	80.0	79.7	3.9	4.1	4.5	11.4	14.2	14.5
Black	60.1	58.9	59.2	17.9	17.5	17.1	19.0	22.3	22.0
Family income ^{3,5}									
Less than \$14,000	38.6	34.1	34.6	27.6	26.5	26.6	31.0	37.8	37.3
\$14,000-\$24,999	61.1	71.3	71,4	9.2	4.2	4.8	25.9	22.1	21.4
\$25,000-\$34,999	79.0	88.3	87.9	3.0	1.2	1.2	15.0	8.7	9.3
\$35,000–\$49,999	90.2	93.1	92.4	1.1	0.4	0.8	6.2	4.8	5.6
\$50,000 or more	93.7	95.2	95.7	0.6	0.4	0.4	3.9	3.1	3.2
Geographic region ³									
Northeast	81.7	80.4	83.4	7.0	7.4	5.8	10.3	11.8	10.3
Midwest	83.8	80.6	81.9	5.8	7.0	7.1	9.0	11.8	10.7
South	75.6	74.4	71.8	4.8	4.4	5.7	15.0	18.4	20.0
West	74.3	72.3	72.1	6.5	6.2	7.2	15.3	19.0	19.1
Location of residence ³									
Within MSA	79.7	77.6	77.2	6.2	6.5	6.4	11.3	14.4	15.1
Outside MSA	77.0	75.4	74.3	5.2	5.2	6.5	14.8	17.5	17.8

¹Includes persons receiving Aid to Families with Dependent Children or Supplemental Security Income or those with current Medicaid cards.

NOTES: Percents do not add to 100 because the percent with other types of health insurance (e.g., Medicare, military) are not shown, and because persons with both private insurance and Medicaid appear in both columns. 1980 denominators include persons with unknown health insurance (1.0 percent).

SOURCE: Division of Health Interview Statistics and Division of Analysis, National Center for Health Statistics: Data from the National Health Interview Survey.

Includes persons not covered by private insurance, Medicaid, Medicare, and military plans.

³Age adjusted.

Includes all other races not shown separately and unknown family income.

⁵Family income categories for 1989. Income categories for 1980 are: less than \$7,000; \$7,000-\$9,999; \$10,000-\$14,999; \$15,000-\$24,999; \$25,000 or more; and, in 1984 are: less than \$10,000; \$10,000-\$18,999; \$19,000-\$29,999; \$30,000-\$39,999; and \$40,000 or more.

Table 134. Health care coverage for persons 65 years of age and over, according to type of coverage and selected characteristics: United States, 1980, 1984, and 1989

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

	Med	licare and pr insurance	ivate	Medi	care and Med	icaid¹	Medicare only ²			
Characteristic	1980	1984	1989	1980	1984	1989	1980	1984	1989	
				Perce	nt of population	on .				
Totai ^{3,4}	64.4	70.9	73.5	8.1	5.4	5.7	22.7	20.0	16.8	
Age										
65-74 years	67.0	73.3	74.2	6.8	4.5	5.0	20.6	17.7	15.5	
75 years and over	59.9	66.8	72.3	10.3	7.0	6.8	26.4	24.1	19.0	
75-84 years	61.9	69.2	74.1	9.7	6.5	6.4	24.8	22.0	17.4	
85 years and over	51.2	56.2	64.8	12.7	9.3	8.5	33.0	33.4	26.1	
Sex ³										
Male	65.6	71.6	73.9	5.7	3.3	4.0	23.1	20.8	17.2	
Female	63.6	70.5	73.4	9.6	6.9	6.8	22.4	19.4	16.4	
Race ³										
White	68.3	74.4	77.3	6.6	4.0	4.5	21.0	18.5	14.7	
Black	26.5	38.1	39.3	23.3	19.9	16.5	40.6	35.4	37.9	
Family income 3,5										
Less than \$14,000	53.4	57.5	64.8	15.7	12.3	11,4	28.2	27.3	21.5	
\$14,000-\$24,999	72.9	79.8	81.2	4.8	1.8	2.6	19.1	15.1	13.4	
\$25,000-\$34,999	74.1	80.3	80.0	3.9	2.2	2.4	18.3	13.7	12.5	
\$35,000-\$49,999	74.4	81.0	80.3	2.5	*2.3	*1.9	16.8	11.9	10.2	
\$50,000 or more	71.9	78.5	76.5	2.2	*1.8	*1.1	18.3	14.4	12.6	
Geographic region ³										
Northeast	67.4	74.3	73.1	5.6	3.5	4.0	22.3	18,4	18.0	
Midwest	71.2	77.6	79.6	4.9	3.2	2.9	19.9	16.8	14.1	
South	58.9	65.1	70.6	10.8	7.9	7.7	25.6	23.0	18.3	
West	60.7	68.2	71.4	10.9	6.5	7.6	21.7	21.0	16.0	
Location of residence ³										
Within MSA	64.2	71.6	73.6	7.5	4.7	5.1	23.0	19.6	16.8	
Outside MSA	64.9	69.8	73.4	9.2	6.6	7.2	22.2	20.7	16.8	

¹Includes persons receiving Aid to Families with Dependent Children or Supplemental Security Income or those with current Medicaid cards.

NOTES: Persons with Medicare, private insurance, and Medicaid appear in both columns. 1980 denominators include persons with unknown health insurance (less than 1 percent). In 1989, 5.2 percent of all persons 65 years of age and over had no Medicare but only 0.9 percent were without health insurance.

SOURCE: Division of Health Interview Statistics and Division of Analysis, National Center for Health Statistics: Data from the National Health Interview Survey.

²Includes persons not covered by private insurance or Medicaid and a small proportion of persons with other types of coverage, such as CHAMPUS or public assistance.

³Age adjusted.

⁴Includes all other races not shown separately and unknown family income.

⁵Family income categories for 1989. Income categories for 1980 are: less than \$7,000; \$7,000–\$9,999; \$10,000–\$14,999; \$15,000–\$24,999; \$25,000 or more; and, in 1984 are: less than \$10,000; \$10,000–\$18,999; \$19,000–\$29,999; \$30,000–\$39,999; and \$40,000 or more.

^{*}Relative standard error greater than 30 percent.

Table 135. Health maintenance organizations and enrollment, according to model type, geographic region, and Federal program: United States, selected years 1976-91

Plans and enrollment	1976	1980	1982	1984	1985¹	1986	1987	1989	1990	1991
Plans					Num	ber				
All plans	174	235	264	304	478	623	647	604	572	553
Model type: ² Individual practice association ³	41 122	97 138	97 167	125 179	244 234	384 239	409 238	385 219	360 212	346 168 39
Geographic region: Northeast	29 52 23 70	55 72 45 63	59 87 52 66	67 105 67 65	81 157 141 99	105 202 188 128	114 203 194 136	118 183 172 131	115 160 176 121	116 157 163 117
Enrollment ⁴				Numb	er of perso	ons in thou	ısands			
Total	5,987	9,078	10,807	15,101	21,005	25,725	29,232	31,883	33.028	34,004
Model type: ² Individual practice association ³	390 5,562	1,694 7,384	1,471 9,336	2,929 12,172	6,379 14,625	9,932 15,793	12,014 17,217	13,542 18,342	13,741 19,287	13,619 17,063 3,322
Federal program: ⁵ Medicaid ⁶		265 391	197 431	349 671	561 1,064	802 1,490	811 1,674	1,043 1,761	1,187 1,842	2,029
				Nun	nber per 1,	000 popul	ation			
Geographic region: Northeast	19.9 15.2 4.3 96.9	31.4 28.1 8.3 121.8	39.0 37.2 11.1 128.7	57.8 61.6 20.4 148.0	79.4 96.8 37.5 172.5	100.5 116.4 54.4 190.4	117.0 130.5 64.2 205.6	137.7 129.2 70.5 225.5	145.6 126.2 70.5 232.1	153.7 126.5 71.4 237.7

¹Increases partly due to changes in reporting methods (see Appendix I).

NOTES: Data as of June 30 in 1976-84, December 31 in 1985-87, and January 1 in 1989-91. Medicaid enrollment in 1989-90 as of June 30. HMO's in Guam are not included.

SOURCES: Office of Health Maintenance Organizations: Summary of the National HMO census of prepaid plans, June 1976 and National HMO Census 1980. Public SOURCES: Office of Health Maintenance Organizations: Summary of the National Find Census of prepare plants, June 1976 and National Find Census 1900. Public Health Service. Washington. U.S. Government Printing Office. DHHS Pub. No. (PHS) 80–50159; InterStudy: National HMO Census: Annual Report on the Growth of HMO's in the U.S., 1982–1985 Editions; The InterStudy Edge, Spring 1987, 1988, 1989, 1990, vol. 2; Competitive Edge, vol. 1, issue 1, 1991; 1986 December Update of Medicare Enrollment in HMO's. Excelsior, Minnesota (Copyrights 1983, 1984, 1985, 1986, 1987, 1988, 1989: Used with the permission of InterStudy); U.S. Bureau of the Census: Current Population Reports, Series P–25, Nos. 998 and 1058. Washington. U.S. Government Printing Office, Dec. 1986 and Mar. 1990. U.S. Dept. of Commerce: Press release CB 91–100. Mar. 11, 1991. Health Care Financing Administration: Unpublished data; Data computed by the National Center for Health Statistics, Division of Analysis.

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²Eleven HMO's with 35,000 enrollment did not report model type in 1976.

³An individual practice association is a health maintenance organization that contracts with an association of physicians from various settings (a mixture of solo and group practices) to provide health services.

4Open-ended enrollment in HMO plans, amounting to 1.2 million on Jan. 1, 1991, is not included in this table.

⁵Federal program enrollment in HMO's refers to enrollment by Medicaid or Medicare beneficiaries, where the Medicaid or Medicare program contracts directly with the HMO to pay the appropriate annual premium.

⁶Data for 1989 and 1990 includes enrollment in managed care health insuring organizations.

Table 136. Medicare enrollees and expenditures and percent distribution, according to type of service: United States, selected years 1967–90

Type of service	1967	1970	1975	1980	1985	1988	1989	1990¹
Enrollees ²				Numbe	er in millions			
Total ³ Hospital insurance Supplementary medical insurance	19.5 19.5 17.9	20.5 20.4 19.6	25.0 24.6 23.9	28.5 28.1 27.4	31.1 30.6 30.0	33.0 32.4 31.6	33.6 33.0 32.1	34.2 33.7 32.6
Expenditures				Amour	nt in millions			
Total	\$4,737	\$7,493	\$16,316	\$36,822	\$72,294	\$88,561	\$100,586	\$110,984
Total hospital insurance ⁴	3,430	5,281	11,581	25,577	48,414	53,331	60,803	66,997
Inpatient hospital Skilled nursing facility Home health agency Hospice.	3,034 282 29	4,827 246 51	10,877 278 160	24,082 401 568	44,680 577 2,144 43	49,062 816 2,313 156	53,822 2,978 2,765 238	59,301 2,876 3,517 356
Administrative expenses ⁵	77	157	266	512	834	815	792	758
Total supplementary medical insurance	1,307	2,212	4,735	11,245	23,880	35,230	39,783	43,987
Physician. Outpatient hospital Home health agency Group practice prepayment. Independent laboratory. Administrative expenses	1,128 33 10 19 7 110	1,790 114 34 26 11 237	3,415 652 87 80 39 462	8,188 1,935 195 203 114 610	17,311 4,304 54 720 558 933	24,372 6,534 62 2,019 983 1,260	27,057 7,662 73 2,308 1,194 1,489	29,628 8,475 81 2,827 1,457 1,519
			Per	cent distribu	ution of expe	nditures		
Total hospital insurance ⁴	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Inpatient hospital Skilled nursing facility Home health agency Hospice. Administrative expenses ⁵	88.5 8.2 0.8 2.2	91.4 4.7 1.0 3.0	93.9 0.5 1.4 2.3	94.2 1.6 2.2 2.0	92.3 1.2 4.4 0.0 1.7	92.0 1.6 4.4 0.2 1.5	89.3 4.6 4.3 0.2 1.3	88.5 4.3 5.2 0.5 1.1
Total supplementary medical insurance	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Physician. Outpatient hospital Home health agency Group practice prepayment. Independent laboratory Administrative expenses	86.3 2.5 0.8 1.5 0.5 8.4	80.9 5.2 1.5 1.2 0.5 10.7	72.1 13.8 1.8 1.7 0.8 9.8	72.8 17.2 1.7 1.8 1.0 5.4	72.5 18.0 0.2 3.0 2.3 3.9	69.2 18.5 0.2 5.7 2.8 3.6	68.0 19.3 0.2 5.8 3.0 3.7	67.4 19.3 0.2 6.4 3.3 3.5

¹Preliminary figures.

SOURCE: Office of Medicare Cost Estimates, Office of the Actuary and Bureau of Data Management and Strategy. Health Care Financing Administration. Washington. April 1991.

²Includes the U.S. population residing in the United States, Puerto Rico, Virgin Islands, Guam, other outlying areas, and foreign countries, and residence unknown.

³Number enrolled in the hospital insurance and/or supplementary medical insurance programs on July 1.

⁴Includes coverage for outpatient hospital diagnostic service under hospital insurance terminated after Mar. 31, 1968, and Medicaid and Maternal and Child Health Professional Standard Review Organization activity through 1981, Peer Review Organization activity after 1983; is counted as an inpatient hospital benefit in other actuarial tables presenting benefit payments by type of benefit.

5Includes costs of experiments and demonstration projects.

Table 137. Medicare enrollment, persons served, and payments for Medicare enrollees 65 years of age and over, according to selected characteristics: United States and other areas, selected years 1967–89

		Enrol in mil	lment lions ¹				erved i			•	ents per n served ^a			-	ents per ollee	
Characteristic	1967	1977	1987	1989	1967	1977	1987	1989	1967	1977	1987	1989	1967	1977	1987	1989
Total	19.5	23.8	29.4	30.4	367	570	754	785	\$592	\$1,332	\$3,025	\$3,445	\$217	\$ 759	\$2,281	\$2,704
Age																
65–66 years	2.8 2.6 2.4 2.3 2.1 3.9 2.2 1.3	3.3 3.2 2.9 2.6 2.3 4.5 3.0 2.1	4.0 3.7 3.4 3.1 2.9 5.7 3.7 3.0	3.9 3.5 3.2 2.9 5.9 3.2	300 326 339 351 369 398 430 465	533 511 531 555 576 597 623 652	700 667 705 740 762 787 828 841	730 703 732 764 795 820 857 869	496 521 530 560 574 624 693 740	1,075 1,173 1,211 1,228 1,319 1,430 1,549 1,636	2,214 2,536 2,700 2,904 3,048 3,312 3,496 3,708	2,381 2,864 3,029 3,204 3,486 3,755 4,074 4,384	149 170 180 197 212 248 298 345	573 599 643 681 759 853 965 1,068	1,550 1,691 1,902 2,150 2,322 2,608 2,894 3,119	1,737 2,015 2,217 2,449 2,772 3,079 3,493 3,809
Sex																
Male	8.3 11.3	9.6 14.2	11.8 17.6	12.2 18.2	357 373	546 586	712 782	742 814	647 554	1,505 1,223	3,432 2,778	3,869 3,186	231 207	821 717	2,443 2,173	2,870 2,593
Race⁴																
White Other	17.4 1.5	21.1 2.1	25.7 2.8	26.5 3.0	375 260	576 514	760 699	792 724	593 557	1,328 1,404	2,993 3,403	3,391 3,990	222 145	765 722	2,275 2,379	2,686 2,889
Geographic region ⁵																
Northeast Midwest South West	5.1 5.6 5.6 2.9	5.7 6.3 7.5 3.8	6.6 7.4 9.6 5.2	6.7 7.5 10.1 5.4	385 352 351 455	613 541 556 632	793 756 768 726	817 799 811 727	604 599 528 620	1,426 1,401 1,198 1,341	3,171 2,969 2,893 3,222	3,703 3,217 3,350 3,704	233 211 186 282	874 757 666 848	2,513 2,246 2,221 2,339	3,026 2,571 2,717 2,693

¹Includes fee-for-service and Health Maintenance Organization (HMO) enrollees and is as of July 1 each year.

NOTES: Data include the United States, residence unknown, Puerto Rico, Virgin Islands, Guam, other outlying areas, and foreign countries.

SOURCE: Bureau of Data Management and Strategy, Health Care Financing Administration: Unpublished data.

Health, United States, 1991

²Excludes HMO enrollees.

³Excludes amounts for HMO services.

⁴Excludes persons of unknown race.

⁵Includes the resident population of the United States but not residence unknown.

Table 138. Hospital utilization and benefit payments for aged and disabled Medicare enrollees in non-Federal short-stay hospitals, according to geographic division: United States, 1980, 1985, and 1989

		Discharges		Avera	age length o	f stay	Average days of care			
Geographic division	1980	1985	1989	1980	1985	1989	1980	1985	1989	
		er per 1,000 h urance enroll	•		nber of days spital discha	•	Number per 1,000 hospital insurance enrollees			
United States ¹	372	347	313	10.6	8.2	8.9	4,016	2,835	2,792	
New England	333 329 373 426 372 436 433 360 338	312 421 325 355 314 415 374 312 293	290 309 319 307 309 394 347 281 275	12.1 13.4 11.2 9.9 10.3 9.6 9.1 8.7	10.0 8.5 8.6 7.7 8.5 8.0 7.5 7.0	10.5 11.6 8.7 7.9 9.0 8.2 8.1 7.1	4,130 4,528 4,243 4,371 3,880 4,260 4,025 3,243 2,988	3,125 3,569 2,791 2,745 2,655 3,311 2,792 2,195 2,111	3,062 3,573 2,770 2,424 2,779 3,242 2,811 1,998 2,027	

				Benefit payments						
	Ave	rage total cha	arges²	Но	spital insuran	ce ³	Supplement medical insur			
Geographic division	1980	1985	1989	1980	1985	1989	1980	1985	1989	
	Amount per day			Amount per enrollee						
United States ¹	\$296	\$623	\$ 980	\$ 909	\$1,585	\$1,848	\$390	\$ 770	\$1,197	
New England	295	559	838	978	1,661	1,932	402	769	1,141	
Middle Atlantic	304	559	825	965	1,792	2,094	428	893	1,372	
East North Central	298	623	971	1,008	1,603	1,849	370	706	1,142	
West North Central	246	580	915	888	1,476	1,581	304	643	889	
South Atlantic	277	613	963	818	1,486	1,736	384	771	1,254	
East South Central	249	561	902	754	1,413	1,905	281	544	1,026	
West South Central	259	599	1,003	798	1,488	1,871	352	653	1,224	
Mountain	310	706	1,173	782	1,309	1,616	368	667	1,095	
Pacific	424	907	1,480	1,003	1,713	1,865	509	1,008	1,286	

¹Includes residence unknown.

SOURCE: Bureau of Data Management and Strategy, Health Care Financing Administration: Unpublished data.

²Includes charges for Medicare covered and noncovered services and days.

³Benefit payments represent cash-flow disbursements from the Medicare Hospital Insurance and Supplementary Medical Insurance Trust Funds for all types of covered services and include retroactive adjustments for nonbilling reimbursement such as (capital, direct medical education, kidney acquisitions, and bad debts by Medicare patients), indirect medical education, lump sum interim payments, and audited fiscal year cost adjustments. Approximately 90 percent of total benefit payments are for short-stay hospital services.

Table 139. Medicaid recipients and medical vendor payments, according to basis of eligibility: United States, selected fiscal years 1972–90

Basis of eligibility	1972	1975	1980	1985	1986	1987	1988	1989	1990
Recipients				Nu	umber in mi	llions			
All recipients	17.6	22.0	21.6	21.8	22.5	23.1	22.9	23.5	25.3
				Per	cent of recip	oients 1			
Aged (65 years and over)	18.8 9.8 17.8 44.5 9.0	16.4 11.2 20.6 43.6 8.2	15.9 13.5 22.6 43.2 6.9	14.0 13.8 25.3 44.7 5.6	13.9 14.2 25.1 44.4 6.0	14.1 14.6 24.2 44.0 6.1	13.8 15.2 24.0 43.8 5.9	13.3 15.3 24.3 43.9 5.0	12.7 14.7 23.8 44.4 3.9
Vendor payments				Aı	mount in bil	lions			
All payments	\$ 6.3	\$ 12.2	\$ 23.3	\$ 37.5	\$ 41.0	\$ 45.0	\$ 48.7	\$ 54.5	\$ 64.9
				Pe	rcent distrib	oution			
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Aged (65 years and over). Blind and disabled. Adults in AFDC ² families Children in AFDC ² families. Other Title XIX ³ .	30.6 22.2 15.3 18.1 13.9	35.6 25.7 16.8 17.9 4.0	37.5 32.7 13.9 13.4 2.6	37.6 35.9 12.7 11.8 2.1	36.8 36.4 11.9 12.5 2.4	35.6 37.3 12.4 12.2 2.4	35.2 38.2 12.1 12.0 2.5	34.1 38.3 12.7 12.6 2.1	33.2 37.6 13.2 14.0 1.6
Vendor payments per recipient					Amount				
All recipients	\$358	\$ 556	\$1,079	\$1,719	\$1,821	\$1,949	\$2,126	\$2,318	\$2,568
Aged (65 years and over). Blind and disabled Adults in AFDC ² families Children in AFDC ² families. Other Title XIX ³ .	580 807 307 145 555	1,206 1,276 455 228 273	2,540 2,618 662 335 398	4,605 4,459 860 452 657	4,808 4,686 864 512 720	4,974 4,974 999 542 763	5,426 5,332 1,069 583 892	5,926 5,817 1,206 668 967	6,717 6,564 1,429 811 1,062

¹Recipients included in more than one category for 1980–89. From 1988 to 1990 between 0.2 and 0.5 percent of recipients have unknown basis of eligibility. ²Aid to Families with Dependent Children.

Health, United States, 1991

³Includes some participants in Supplemental Security Income program and other people deemed medically needy in participating States.

NOTES: 1972 and 1975 data are for fiscal year ending June 30. All other years are for fiscal year ending September 30.

SOURCE: Bureau of Data Management and Strategy, Health Care Financing Administration; Unpublished data.

Table 140 (page 1 of 2). Medicaid recipients and medical vendor payments, according to type of service: United States, selected fiscal years 1972–90

Type of service	1972	1975	1980	1985	1986	1987	1988	1989	1990
Recipients				Nur	mber in milli	ons			
All recipients	17.6	22.0	21.6	21.8	22.5	23.1	22.9	23.5	25.3
				Perc	ent of recip	ients		23.5 17.7 0.4 2.4 0.6 3.8 66.7 17.9 15.1 48.3 10.2 33.0 2.6 67.7 6.7 10.7 0.7 19.5 \$ 54.5 100.0 24.5 2.7 12.2 12.2 16.3 6.3 0.9 0.6 5.2 2.3 1.1 4.7 6.8 0.4 0.3 0.0	
Inpatient services:									
General hospitals	16.1	15.6	17.0	15.7	15.7	16.3	16.7	17.7	18.2
Mental hospitals	0.2	0.3	0.3	0.3	0.2	0.2	0.3		0.4
Skilled nursing facility services	3.1	2.9	2.8	2.5	2.5	2.5	2.5		2.4
Intermediate care facility services:						2.0	2.0		 .
Mentally retarded		0.3	0.6	0.7	0.6	0.6	0.6	0.6	0.6
All other		3.1	3.7	3.8	3.7	3.7	3.8		3.4
Physician services	69.8	69.1	63.7	66.0	66.2	66.5	66.6		67.6
Dental services	13.6	17.9	21.5	21.4	22.9	22.2			
Other practitioner services	9.1	12.1	15.0	15.4			22.1		18.0
	29.6	33.8			15.3	15.3	15.2		15.3
Outpatient hospital services			44.9	46.2	47.5	47.5	46.0		49.0
Clinic services	2.8	4.9	7.1	9.7	9.0	9.4	9.8		11.1
Laboratory and radiological services	20.0	21.5	14.9	29.1	31.6	32.9	33.1		35.5
Home health services	0.6	1.6	1.8	2.5	2.6	2.6	2.5		2.8
Prescribed drugs	63.3	64.3	63.4	63.8	65.3	65.3	66.9	67.7	68.5
Family planning services		5.5	5.2	7.5	7.7	7.1	6.7	6.7	6.9
Early and periodic screening				8.7	9.5	9.7	10.0	10.7	11.7
Rural health clinic services				0.4	0.5	0.6	0.6	0.7	0.9
Other care	14.4	13.2	11.9	15.5	14.7	15.6	18.2	19.5	20.3
Vendor payments				Am	ount in billio	ons			
All payments	\$ 6.3	\$ 12.2	\$ 23.3	\$ 37.5	\$ 41.0	\$ 45.1	\$ 48.7	\$ 54.5	\$ 64.9
				Pero	ent distribu	tion			
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	100.0	100.0	100.0	100.0	100.0	100.0
Inpatient services:	40.0	07.0	07.5	25.0	05.0				
General hospitals	40.6	27.6	27.5	25.2	25.3	25.1	24.8		25.7
Mental hospitals	1.8	3.3	3.3	3.2	2.7	3.1	2.8		2.6
Skilled nursing facility services Intermediate care facility services:	23.3	19.9	15.8	13.5	13.8	13.2	13.0	12.2	12.4
Mentally retarded		3.1	8.5	12.6	12.4	12.4	12.4	12.2	11.3
All other		15.4	18.0	17.4	16.5	16.2	16.3		14.9
Physician services	12.6	10.0	8.0	6.3	6.2	6.2	6.1		6.2
Dental services	2.7	2.8	2.0	1.2	1.3	1.2	1.2		0.2
Other practitioner services	0.9	1.0	0.8	0.7	0.6	0.6	0.6		0.6
Outpatient hospital services	5.8	3.0	4.7	4.8	4.8	4.9	5.0		5.1
Clinic convices									
Clinic services	0.7	3.2	1.4	1.9	2.0	2.1	2.3		2.6
Laboratory and radiological services	1.3	1.0	0.5	0.9	1.0	1.1	1.1		1.1
Home health services	0.4	0.6	1.4	3.0	3.3	3.8	4.1		5.2
Prescribed drugs	8.1	6.7	5.7	6.2	6.6	6.6	6.8		6,8
Family planning services		0.5	0.3	0.5	0.6	0.5	0.4		0.4
Early and periodic screening				0.2	0.2	0.3	0.3	0.3	0.3
Rural health clinic services				0.0	0.0	0.0	0.0	0.0	0.1
Other care	1.8	1.9	1.9	2.5	2.7	2.7	2.9	3.5	3.7

See footnotes at end of table.

Table 140 (page 2 of 2). Medicaid recipients and medical vendor payments, according to type of service: United States, selected fiscal years 1972–90

Type of service	1972	1975	1980	1985	1986	1987	1988	1989	1990
Vendor payments per recipient					Amount				
Total payment per recipient	\$ 358	\$ 556	\$ 1,079	\$ 1,719	\$ 1,821	\$ 1,949	\$ 2,126	\$ 2,318	\$ 2,568
General hospitals	903	983	1,742	2,753	2,924	3,000	3,151	3,208	3,630
Mental hospitals	2,825	6,045	11,742	19,867	21,000	24,719	22,917	16,397	18,548
Skilled nursing facility services	2,665	3,863	6,081	9,274	9,912	10,432	10,974	11,809	13,356
Intermediate care facility services:				•		•	•	·	•
Mentally retarded		5,507	16,438	32,102	34,979	37,523	41,531	44,999	50.048
All other		2,764	5,326	7,882	8,180	8,575	9,149	9,994	11,236
Physician services	65	81	136	163	171	181	193	217	235
Dental services	71	86	99	98	103	105	114	118	130
Other practitioner services	37	48	61	75	73	74	82	89	96
Outpatient hospital services	70	50	113	178	185	203	229	250	269
Clinic services	82	358	209	337	398	441	490	523	602
Laboratory and radiological services	23	27	38	53	60	63	72	76	80
Home health services	229	204	847	2,093	2,280	2,775	3,541	4,225	4,733
Prescribed drugs	46	58	96	166	183	198	215	232	256
Family planning services		55	72	119	130	138	135	145	151
Early and periodic screening				45	48	51	54	58	67
Rural health clinic services			• • •	81	93	101	107	133	154
Other care	44	80	172	274	331	340	343	418	465
Outor outor	44	50	1/2	214	331	340	343	410	400

NOTES: 1972 and 1975 data are for fiscal year ending June 30. All other years are for fiscal year ending September 30.

SOURCE: Bureau of Data Management and Strategy, Health Care Financing Administration; Unpublished data.

Health, United States, 1991

Table 141. Department of Veterans Affairs health care expenditures and use, and persons treated according to selected characteristics: United States, selected fiscal years 1965-90

[Data are compiled by Department of Veterans Affairs]

	1965 ¹	1970¹	1975¹	1980	1985	1988	1989	1990
Health care expenditures				Amoun	t in millions			
All expenditures ²	\$1,150	\$1,689	\$3,328	\$5,981	\$8,936	\$10,230	\$10,949	\$11,500
				Percent	distribution			
All services	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
npatient hospital	81.9	71.3	66.4	64.3	60.3	53.9	54.1	57.5
Outpatient care	12.0	14.0	17.8	19.1	18.9	22.6	23.3	25.
and domiciliaries	2.9	4.3	4.8	5.1	5.4	6.5	6.7	7.
Community nursing homes	0.0 3.2	1.2 9.1	1.4 9.6	2.0 9.6	3.0 12.4	3.5 13.4	2.6 13.3	2.4 7.
	3.2	3.1	9.0	9.0	14.4	13.4	13.3	7.1
Health care use				Number	in thousands	;		
npatient hospital stays ⁴	731	787	1,114	1,248	1,306	1,086	1,028	1,029
Outpatient visits	5,987	7,312	14,630	17,971	19,601	23,232	22,643	22,602
and domiciliary stays	32	32	29	28	34	44	44	46
Community nursing home stays	0	15	22	29	39	42	32	29
Inpatients				Number	in thousands			
otal	•			Percent	distribution	650	617	598
otal						100.0	100.0	100.0
disability'eterans without service connected						36.9	38.2	38.9
disability						62.2	61.1	60.3
Low income						51.9 2.8	53.9 2.5	54.8 2.5
Other ⁶						2.6 5.6	4.2	2.8
Unknown						1.9	0.5	0.2
Ion-veterans						0.8	0.8	0.8
Outpatients				Number	in thousands			
otal						2,763	2,597	2,564
				Percent	distribution			
otal						100.0	100.0	100.0
eterans with service connected disability eterans without service connected						34.5	37.6	38.3
disability						48.4	50.3	49.8
Low income						34.5	39.9	41.1
Exempt ⁵						2.7	2.8	2.9
Other ⁶						5.7 5.5	5.2 2.4	3.6 2.2
Unknown						5.5 17.0	2.4 12.0	11.8
MOTE VOLULATION		-		-		17.0	12.0	11.

¹Data for fiscal year ending June 30; all other data for fiscal year ending September 30.

NOTES: The veteran population was estimated at 27 million in 1990 with 26 percent age 65 or over compared with 17 percent in 1980. Thirty percent had served prior to and during World War II, 16 percent during the Korean conflict, 31 percent during the Vietnam era, and 23 percent during peacetime.

SOURCE: Office of Policy and Planning and the Office of Finance and Information Resources Management, Department of Veterans Affairs: Unpublished data.

²Health care expenditures exclude construction, medical administration, and miscellaneous operating expenses.

³Includes miscellaneous benefits and services, contract hospitals, education and training, subsidies to State veterans hospitals, nursing homes, and domicillaries, and the Civilian Health and Medical Program of the Department of Veterans Affairs.

4One-day dialysis patients were included in fiscal years 1975, 1980, and 1985. Interfacility transfers were included in fiscal year 1990.

⁵Prisoner of war, exposed to agent orange, etc.

⁶Financial means tested veterans who receive medical care subject to copayments according to income level.

Table 142. Mental health expenditures, percent distribution, and per capita expenditures, according to type of mental health organization: United States, selected years 1969-88

[Data are based on inventories of mental health organizations]

Type of organization	1969	1975	1979	1983	1986	1988 ¹				
			Amoi	unt in millions						
All organizations	\$3,293	\$6,564	\$8,764	\$14,432	\$18,458	\$23,071				
State and county mental hospitals Private psychiatric hospitals Non-Federal general hospitals with	1,814 220	3,185 467	3,757 743	5,491 1,712	6,326 2,629	6,990 4,604				
separate psychiatric services Veterans Administration medical	298	621	723	2,176	2,878	3,617				
centers ²	450	699	848	1,316	1,338	1,290				
health centers	143	776	1,481	-	-	_				
emotionally disturbed children Freestanding psychiatric	123	279	436	573	978	1,311				
outpatient clinics	186 59	422 116	589 187	430 2,734	518 3,792	668 4,591				
	Percent distribution									
All organizations	100.0	100.0	100.0	100.0	100.0	100.0				
State and county mental hospitals Private psychiatric hospitals Non-Federal general hospitals with	55.1 6.7	48.5 7.1	42.9 8.5	38.0 11.9	34.4 14.2	30.2 20.0				
separate psychiatric services Veterans Administration medical	9.0	9.5	8.2	15.1	15.6	15.7				
centers ²	13.7	10.6	9.7	9.1	7.2	5.6				
health centers	4.4	11.8	16.9	-	_	_				
emotionally disturbed children Freestanding psychiatric	3.7	4.3	5.0	4.0	5.3	5.7				
outpatient clinics	5.6 1.8	6.4 1.8	6.7 2.1	3.0 18.9	2.8 20.5	2.9 19.9				
			Amou	nt per capita4						
All organizations	\$17	\$31	\$40	\$62	\$77	\$95				
State and county mental hospitals	9	15	17	24	26	29				
Private psychiatric hospitals Non-Federal general hospitals with	1	2	3	7	11	19				
separate psychiatric services Veterans Administration medical	2	3	3	9	12	15				
centers ²	2	3	4	6	6	5				
health centers	1	4	7	-	_	_				
emotionally disturbed children Freestanding psychiatric	1	1	2	2	4	5				
outpatient clinics	1 0	2 1	3 1	2 12	2 16	3 19				

NOTE: Changes in reporting procedures in 1983 affect the comparability of data with those from previous years.

SOURCES: Survey and Reports Branch, Division of Biometry and Applied Sciences, National Institute of Mental Health: R. W. Manderscheid and S. A. Barrett: Mental Health, United States, 1987. DHHS Pub. No. (ADM) 87–1518. U.S. Government Printing Office, 1987; Unpublished data.

¹Preliminary data.

²Includes Veterans Administration neuropsychiatric hospitals, general hospital psychiatric services, and psychiatric outpatient clinics.

²Includes Veterans Administration neuropsychiatric hospitals, general hospital psychiatric services, and psychiatric outpatient clinics. ³Includes freestanding psychiatric partial care organizations and multiservice mental health organizations. Multiservice mental health organizations were redefined in 1984; see Appendix I.

4Civilian population.

Table 143. State mental health agency per capita expenditures for mental health services, and average annual percent change, according to State: United States, selected fiscal years 1981–87

State	1981	1983	1985	1987	Average annual percent change 1981–87
United States.	\$ 27	\$ 31	\$ 35	\$ 38	5.9
Alabama Alaska. Arizona Arkansas California Colorado Connecticut Delaware District of Columbia ¹ Florida	20 38 10 17 28 24 32 44	24 41 10 20 29 25 39 51 23 23	28 45 12 24 34 28 44 46 28 26	29 50 16 23 30 30 56 41 130 25	6.5 4.8 8.4 5.7 0.7 3.6 9.9 -1.2
Georgia. Hawaii. Idaho Illinois. Indiana Iowa Kansas Kentucky Louisiana Maine	25 19 13 18 19 8 17 15 19 25	26 22 15 21 23 10 22 17 23 32	23 23 15 24 27 11 27 19 26 36	32 26 17 25 31 12 28 23 25 42	4.4 5.5 3.9 5.5 8.5 6.9 7.9 7.7 5.0 9.0
Maryland. Massachusetts. Michigan Minnesota ² Mississippi Missouri Montana Nebraska Nevada New Hampshire.	33 32 32 17 14 24 24 16 22 35	37 36 39 30 16 25 28 19 25 39	40 46 49 32 24 28 29 21 26 42	49 62 61 42 22 31 28 21 28 36	6.8 11.7 11.1 8.2 4.9 2.0 4.5 4.2 0.6
New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Oregon Pennsylvania Rhode Island	26 24 67 24 38 25 22 20 41 36	31 25 74 29 42 28 33 21 47 32	36 25 90 38 36 30 31 25 52 35	43 24 99 41 42 33 30 28 50 41	8.4 0.3 6.8 9.5 1.6 5.2 5.0 5.6 3.7 2.0
South Carolina. South Dakota Tennessee Texas Utah Vermont Virginia Washington West Virginia Wisconsin Wyoming.	31 17 18 13 13 32 23 18 20 22 23	33 21 20 16 16 40 29 24 20 27 28	33 22 23 17 17 44 32 30 22 28 31	45 27 24 18 19 44 35 37 23 31 30	6.6 7.7 5.3 5.9 6.5 5.4 7.5 12.9 2.6 4.6

¹Between 1985 and 1987, St. Elizabeths Hospital was transferred from the National Institute of Mental Health to the District of Columbia Office of Mental Health. ²Data for 1981 not comparable with 1983–87 data for Minnesota.

SOURCE: National Association of State Mental Health Program Directors and the National Association of State Mental Health Program Directors Research Institute, Inc.: Final Report: Funding Sources and Expenditures of State Mental Health Agencies: Revenue/Expenditure Study Results, Fiscal Year 1987. Apr. 1990.

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Appendix I Sources and Limitations of Data

Introduction

This report 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. The information was obtained from the data files and/or published reports of many governmental and nongovernmental agencies and organizations. In each case, the sponsoring agency or organization collected data using its own methods and procedures. Therefore, the data in this report vary considerably with respect to source, method of collection, definitions, and reference period.

Much of the data presented in the detailed tables are from the ongoing data collection systems of the National Center for Health Statistics. For an overview of these systems, see National Center for Health Statistics. M.G. Kovar: Data systems of the National Center for Health Statistics. Vital and Health Statistics. Series 1, No. 23. DHHS Pub. No. (PHS) 89-1325. Public Health Service. Hyattsville, Md. 1989. However, health care personnel data come primarily from the Bureau of Health Professions, Health Resources and Services Administration, and the American Medical Association. National health expenditures data were compiled by the Office of the Actuary, Health Care Financing Administration.

Although a detailed description and comprehensive evaluation of each data source is 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. They are limited by the amount of information a respondent remembers or is willing to report. Detailed medical information, such as precise diagnoses or the types of

operations performed, may not be known and so will not be reported. Conversely, health care providers, such as physicians and hospitals, usually have good diagnostic information but little or no information about the socioeconomic characteristics of individuals or the impact of illnesses on individuals.

The population 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. Thus, statistics are not included for military personnel, who are usually young; for institutionalized people, 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. People 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 impact on the data. Where possible, the tables have notes describing the universe and the method of data collection to enable the user to place his or her own evaluation on the data. In many instances, data do not add to totals because of rounding.

Overall estimates generally have relatively small sampling errors, but estimates for certain population subgroups may be based on small numbers 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-percent 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 time 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 small, considerable caution must be observed in interpreting the conditions described by the figures. Estimates that are unreliable because of large sampling errors or small numbers of events have been noted with asterisks in selected tables. The criteria used to designate unreliable estimates are indicated as notes to the applicable tables.

The descriptive summaries that follow provide a general overview of study design, methods of data collection, and reliability and validity of the data. More complete and detailed discussions are found in the publications referenced at the end of each summary. The data set or source is listed under the agency or organization that sponsored the data collection.

Department of Health and Human Services

Public Health Service

Centers for Disease Control

National Center for Health Statistics

National Vital Statistics System

Through the National Vital Statistics System, the National Center for Health Statistics (NCHS) collects and publishes data on births, deaths, marriages, and divorces in the United States. Fetal deaths are classified and tabulated separately from other deaths. The Division of Vital Statistics obtains information on births and deaths from the registration offices of all States, New York City, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and Guam. Geographic coverage for births and deaths has been complete since 1933.

Until 1972, microfilm copies of all death certificates and a 50-percent sample of birth certificates were received from all registration areas and processed by NCHS. Beginning 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 percent of their death and birth records and sent the entire data file

to NCHS on computer tapes. Currently, the data are sent to NCHS through the Vital Statistics Cooperative Program (VSCP), following the same procedures as the CHSS. The number of participating States grew from 6 in 1972 to 46 in 1984. All 50 States and the District of Columbia participated in the VSCP starting in 1985.

In most areas, practically all births and deaths are registered. The most recent test of the completeness of birth registration, conducted on a sample of births from 1964 to 1968, showed that 99.3 percent of all births in the United States during that period were registered. No comparable information is available for deaths, but it is generally believed that death registration in the United States is at least as complete as birth registration.

The standard certificates of birth, death, and fetal death 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.

Birth certificates in certain States and years do not provide specific data. Data on education of mother are not available from California, Texas, and Washington for 1980–88. In 1988, education was also missing for New York State outside of New York City. Data on education were not available from Alabama, Arkansas, California, Connecticut, Delaware, District of Columbia, Georgia, Idaho, Maryland, New Mexico, Pennsylvania, Texas, and Washington for 1970. Data on prenatal care were not available from Alabama, Alaska, Arkansas, Colorado, Connecticut, Delaware, Georgia, Idaho, Massachusetts, New Mexico, Pennsylvania, and Virginia for 1970. Data on marital status were not available from California, Connecticut, Georgia, Idaho, Maryland, Massachusetts, Montana, New Mexico, New York, Ohio, and Vermont for 1970.

Information on births of Hispanic parentage was available for 22 States in 1980 and 1981. The 22 States that included items on their birth certificates on the ethnic or Hispanic

origin of the mother and father were 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 these data also became available in Tennessee, and in 1983 the District of Columbia began reporting information on births of Hispanic parentage. In 1988 these data became available for Alabama, Connecticut, Kentucky, Massachusetts, Montana, North Carolina, and Washington; so that since 1988 information on births of Hispanic parentage is available for 30 States and the District of Columbia. In 1988 about 95 percent of the total U.S. Hispanic population resided in these States.

In 1987 information on deaths for persons of Hispanic origin was available for the District of Columbia and the following 18 States: Arizona, Arkansas, California, Colorado, Georgia, Hawaii, Illinois, Indiana, Kansas, Mississippi, Nebraska, New Jersey, New York (including New York City), North Dakota, Ohio, Texas, Utah, and Wyoming. In 1988 these data were also available in Alabama, Kentucky, Maine, Montana, North Carolina, Oregon, Rhode Island, and Washington. In 1989 information on deaths for persons of Hispanic origin was available in 44 States and the District of Columbia, which accounted for about 97 percent of the Hispanic population in the United States. The six States without Hispanic mortality data in 1989 are Connecticut, Louisiana, Maryland, New Hampshire, Oklahoma, and Virginia.

Provisional death rates by cause, age, race, and sex are estimated from the Current Mortality Sample. The Current Mortality Sample is a 10-percent systematic sample of death certificates received each month in the vital statistics offices in the 50 States, the District of Columbia, and the independent registration area of New York City. All death certificates received during the 1-month period are sampled regardless of the month or year in which the death occurred.

For more information, see: National Center for Health Statistics, Vital Statistics of the United States, 1987, Vol. I, DHHS Pub. No. (PHS) 89-1100 and Vol. II, Part A, DHHS Pub. No. (PHS) 90-1101, Public Health Service, Washington, U.S. Government Printing Office, 1991.

Population Estimates for Death Rates

The U.S. Bureau of the Census publishes annual population estimates needed as denominators to calculate national death rates for the white and black populations. In order to estimate death rates for other minority populations the Office of Analysis and Epidemiology, National Center for Health Statistics calculated 1987–89 annual population estimates for Asians, American Indians, and Hispanic persons in the following six age groups: under 1 year, 1–14 years, 15–24 years, 25–44 years, 45–64 years, and 65 years of age and over.

Population estimates for Asians and American Indians were calculated for the entire United States, and population estimates for Hispanics were calculated for the subset of States with Hispanic origin data on the death certificate.

Annual age-specific resident population estimates for Asians and American Indians were calculated using the method of iterative proportional fitting and the following data sources: (a) annual total resident population estimates for Asians and American Indians from the U.S. Bureau of the Census, (b) annual age-specific resident population estimates for the "all other" races group from the U.S. Bureau of the Census, (c) 1980 age-specific resident population estimates for Asians and American Indians from the U.S. Bureau of the Census, and (d) annual numbers of live births for Asian and American Indian mothers from the National Center for Health Statistics.

Annual age-specific resident population estimates for persons of Hispanic origin were calculated for those States reporting Hispanic mortality data using the following data sources from the U.S. Bureau of the Census: (a) 1980 age-specific Hispanic resident population estimates for each State and for the entire United States and (b) annual national age-specific Hispanic resident population estimates. For example, the 1987 Hispanic origin population 15–24 years of age in the mortality reporting States (18 States

and the District of Columbia) was estimated as the 1987 national population estimate for Hispanic persons 15–24 years multiplied by the proportion of all Hispanic persons 15–24 years who resided in the mortality reporting States in 1980.

National Linked File of Live Births and Infant Deaths

The national linked file of live births and infant deaths is a data file for research on infant mortality. It is comprised of linked vital records for infants born in a given year who died in that year or the next year before their first birthday. It includes all of the variables on the national natality file, as well as the medical information reported for the same infant on the death record and the age of the infant at death. The use of linked files avoids discrepancies in the reporting of race between the birth and infant death certificates. Although discrepancies are relatively rare for white and black infants, they can be substantial for other races. The match completeness for the 1983-86 files is 98 percent. The linked files are available after the regular vital statistics files because construction of the linked file requires 2 years of mortality data to be linked to each birth cohort. For more information, see: National Center for Health Statistics, K. Prager: Infant mortality by birthweight, age of mother, and other characteristics: United States, 1985 birth cohort. Monthly Vital Statistics Report. Forthcoming.

National Survey of Family Growth

Data from the National Survey of Family Growth (NSFG) are based on samples of women ages 15–44 years in the civilian noninstitutionalized population living in the coterminous United States. The first and second cycles excluded women who had never been married, except those with offspring in the household. The third and fourth cycles include all women ages 15–44 years, regardless of whether they have ever been married.

The purpose of the survey is to provide national data on the demographic and social factors associated with childbearing, adoption, and maternal and child health. These factors include sexual activity, marriage, unmarried

cohabitation, divorce and remarriage, contraception and sterilization, infertility, breastfeeding, pregnancy loss, low birth weight, and use of medical care for family planning, infertility, and prenatal care. Interviews are conducted in person by professional female interviewers using a standardized, printed questionnaire. The average interview length is about 1 hour.

Cycle I of the NSFG was conducted from June 1973-February 1974. The counties and independent cities of the United States were combined to form a frame of primary sampling units (PSU's), and 101 PSU's were selected as the first-stage sample. The next three stages produced a clustered sample of 28,998 households within the 101 PSU's. At 26,028 of these households (89.8 percent), household screener interviews were completed. These screeners produced a fifth-stage sample of 10,879 women of whom 9,797 were interviewed. Never-married women (except those with offspring in the household) were excluded from Cycle I.

Cycle II of NSFG was conducted from January–September 1976. The sample consisted of 27,162 households in 79 PSU's. Household screener interviews were completed at 25,479 of these households (93.8 percent). Of the 10,202 women in the sample, 8,611 were interviewed. Again, never- married women (except those with offspring in the household) were excluded from the sample for Cycle II.

Interviewing for Cycle III of the NSFG was conducted from August 1982–February 1983. The sample design was similar to that in Cycle II: 31,027 households were selected in 79 PSU's. Household screener interviews were completed in 29,511 households (95.1 percent). Of the 9,964 eligible women identified, 7,969 were interviewed. The sample for Cycle III included black women and women 15–19 years of age at higher rates than other women. Women of all marital statuses were interviewed in Cycle III.

Cycle IV was conducted between January and August 1988. The sample was obtained from households that had been interviewed in the 1985, 1986, or 1987 National Health Interview Surveys. Women living in Alaska and Hawaii were included, so that the survey covered women from the noninstitutionalized population of the entire United States. Interviews were completed with 8,450 women. As in previous cycles, black women were oversampled.

In order to produce estimates for the entire population of eligible women in the United States, data for the interviewed sample women were inflated by the reciprocal of the probability of selection at each stage of sampling and adjusted for both screener and interview nonresponse. Cycles I and II estimates for ever-married women were poststratified to benchmark population values for 12 age-race categories based on data from the Current Population Survey of the U.S. Bureau of the Census. Cycle III estimates were poststratified within 24 categories of age, race, and marital status. In Cycle IV, the poststratification was done within categories of age, race, marital status, and parity.

Quality control procedures for interviewer selection, interviewer training, field listing, and data processing were built into the NSFG to minimize nonsampling error and bias. In addition, the nonresponse adjustments in the estimator were designed to minimize the effect of nonresponse bias by assigning to nonrespondents the characteristics of similar respondents. Sampling errors for NSFG were estimated by balanced half-sample replication.

Detailed information on the NSFG sample design is available in the following reports: National Center for Health Statistics, D. K. French: National Survey of Family Growth, Cycle I, sample design, estimation procedures, and variance estimation. Vital and Health Statistics, Series 2, No. 76. DHEW Pub. No. (PHS) 78–1350. Public Health Service. Washington. U.S. Government Printing Office, Jan. 1979; National Center for Health Statistics, W. R. Grady: National Survey of Family Growth, Cycle II: Sample design, estimation procedures, and variance estimation. Vital and Health Statistics. Series 2, No. 87. DHHS Pub. No. (PHS) 81-1361. Public Health Service. Washington. U.S. Government Printing Office, Feb. 1981; and National Center for Health

Statistics, C. Bachrach, M. Horn, W. Mosher, and I. Shimizu: National Survey of Family Growth, Cycle III: Estimation procedures, weighting, and variance estimation. *Vital and Health Statistics*. Series 2, No. 98. DHHS Pub. No. (PHS) 85–1372. Public Health Service. Washington. U.S. Government Printing Office, Sept. 1985.

National Health Interview Survey

The National Health Interview Survey (NHIS) is a continuing nationwide sample survey in which data are collected through personal household interviews. Information is obtained on personal and demographic characteristics, illnesses, injuries, impairments, chronic conditions, utilization of health resources, and other health topics. The household questionnaire is reviewed each year, with special health topics being added or deleted. For most health topics, data are collected over an entire calendar vear.

The sample design plan of the NHIS follows a multistage probability design that permits a continuous sampling of the civilian noninstitutionalized population residing in the United States. The survey is designed in such a way that the sample scheduled for each week is representative of the target population and the weekly samples are additive over time. The response rate for the survey has been between 95 and 98 percent over the years.

In 1985, the NHIS adopted several new sample design features although, conceptually, the sampling plan remained the same as the previous design. Two major changes included reducing the number of primary sampling locations from 376 to 198 for sampling efficiency and oversampling the black population to improve the precision of the statistics.

The sample was designed so that a typical NHIS sample for the data collection years 1985–94 will consist of approximately 7,500 segments containing about 59,000 assigned households. Of these households, an expected 10,000 will be vacant, demolished, or occupied by persons not in the target population of the survey. The expected sample of 49,000 occupied households will yield a probability sample of about 127,000

persons. In 1989, there was a sample of 116,929 persons and in 1990, a sample of 119,631 persons.

A description of the survey design, the methods used in estimation, and general qualifications of the data obtained from the survey are presented in: National Center for Health Statistics, P. F. Adams and V. Benson: Current estimates from the National Health Interview Survey, United States, 1990. Vital and Health Statistics. Series 10, No. 181. DHHS Pub. No. (PHS) 92-1509. Public Health Service. Washington. U.S. Government Printing Office, Dec. 1991.

National Health and Nutrition Examination Survey

For the first program or cycle of the National Health Examination Survey (NHES I), 1960-62, data were collected on the total prevalence of certain chronic diseases as well as the distributions of various physical and physiological measures, including blood pressure and serum cholesterol levels. For that program, a highly stratified, multistage probability sample of 7,710 adults, of whom 86.5 percent were examined, 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 from the 1,900 geographic units. In 1971, a nutrition surveillance component was added and the survey name was changed to the National Health and Nutrition Examination Survey.

For more information on NHES I, see: National Center for Health Statistics: Cycle I of the National Health Examination Survey, sample and response, United States, 1960–62. T. Gordon and H. W. Miller. Vital and Health Statistics. Series 11, No. 1. PHS Pub. No. 1000. Public Health Service. Washington. U.S. Government Printing Office, May 1964.

In the first National Health and Nutrition Examination Survey (NHANES I), conducted from 1971 through 1974, a major purpose was to measure and monitor indicators of the nutritional 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.

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 sample design was a multistage, stratified probability sample of clusters of persons in land-based segments. The sample areas consisted of 65 primary sampling units (PSU's) selected from the 1,900 PSU's in the coterminous United States. 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 at known rates throughout the process.

Household interviews were completed for more than 96 percent of the 28,043 persons selected for the NHANES I sample, and about 75 percent (20,749) were examined.

For NHANES II, conducted from 1976–80, the nutrition component was expanded from the one fielded for NHANES I. In the medical area, primary emphasis was placed on diabetes, kidney and liver functions, allergy, and speech pathology.

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. NHANES II utilized a multistage probability design that involved selection of PSU's, segments (clusters of households) within PSU's, households, eligible persons, and finally, sample persons. The sample design provided for oversampling among those persons 6 months—5 years of age, those 60-74 years of age, and those living in poverty areas.

A sample of 27,801 persons was selected for NHANES II. Of this sample, 20,322 (73.1 percent) were examined.

The estimation procedure used to produce national statistics for NHANES I and NHANES II 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.

For more information on NHANES I, see: National Center for Health Statistics, H. W. Miller: Plan and operation of the National Health and Nutrition Examination Survey, United States, 1971-73. Vital and Health Statistics. Series 1, Nos. 10a and 10b. DHEW Pub. No. (HSM) 73-1310. Health Services and Mental Health Administration. Washington. U.S. Government Printing Office, Feb. 1973; and National Center for Health Statistics, A. Engel, R. S. Murphy, K. Maurer, and E. Collins: Plan and operation of the NHANES I Augmentation Survey of Adults 25-74 Years, United States, 1974-75. Vital and Health Statistics. Series 1, No. 14. DHEW Pub. No. (PHS) 78-1314. Public Health Service. Washington. U.S. Government Printing Office, June 1978.

For more information on NHANES II, see: National Center for Health Statistics, A. McDowell, A. Engel, J. T. Massey, and K. Maurer: Plan and operation of the Second National Health and Nutrition Examination Survey, 1976–80. Vital and Health Statistics. Series 1, No. 15. DHHS Pub. No. (PHS) 81–1317. Public Health Service. Washington. U.S. Government Printing Office, July 1981. For information on nutritional applications of these surveys, see: Yetley, E., and C. Johnson, 1987. Nutritional applications of the Health and Nutrition Examination Surveys (HANES). Ann Rev Nutr 7:441–63.

The Hispanic Health and Nutrition Examination Survey (HHANES), conducted during 1982–84, was similar in content and design to the previous National Health and Nutrition Examination Surveys. The major difference between HHANES and the previous national surveys is that HHANES employed 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 percent of the respective 1980 Mexican, Cuban and Puerto Rican-origin populations in the continental United States.

In the HHANES, three geographically and ethnically distinct populations were studied: Mexican Americans 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. In the Southwest 9,894 persons were selected (75 percent or 7,462 were examined), in Dade County 2,244 persons were selected (60 percent or 1,357 were examined), and in the Northeast 3,786 persons were selected (75 percent or 2,834 were examined).

For more information on HHANES, see: National Center for Health Statistics: Plan and operation of the Hispanic Health and Nutrition Examination Survey, 1982–84. Vital and Health Statistics. Series 1, No. 19. DHHS Pub No. (PHS) 85–1321. Public Health Service. Washington. U.S. Government Printing Office, Sept. 1985.

National Master Facility Inventory

The National Master Facility
Inventory (NMFI) is a comprehensive
file of inpatient health facilities in the
United States. The three broad
categories of facilities in NMFI are
hospitals, nursing and related care
homes, and other custodial or
remedial care facilities. To be
included in NMFI, hospitals must
have at least six inpatient beds;
nursing and related care homes and
other facilities must have at least
three inpatient beds.

NMFI is kept current by the periodic addition of names and addresses obtained from State licensing and other agencies for all newly established inpatient facilities. In addition, annual surveys of hospitals and periodic surveys of nursing homes and other facilities are conducted to update name and location, type of business, number of beds, and number of residents or patients in the facilities, and to identify those facilities that have gone out of business.

From 1968–75, the hospital survey was conducted in conjunction with

the American Hospital Association (AHA) Annual Survey of Hospitals. AHA performed the data collection for its member hospitals, while the National Center for Health Statistics (NCHS) collected the data for the approximately 400 non-AHA registered hospitals. Since 1976, however, all of the data collection has been performed by AHA.

Hospitals are requested to report data for the full year ending September 30. More than half of the responding hospitals used this reporting period for the 1982 survey. The remaining hospitals used various other reporting periods. The response rate for the 1982 hospital survey was about 90 percent and was 96 percent for the 1986 survey.

The nursing home and other facilities survey was conducted by NCHS in 1963, 1967, 1969, 1971, 1973, 1976, 1978, 1980, 1982, and 1986. In the 1980 and 1982 NMFI surveys, only nursing and related care homes were covered. In 1986, nursing and related care homes and facilities for the mentally retarded were covered and called the Inventory of Long-Term Care Places. In 1982, arrangements were made with 35 States for obtaining their data on nursing and related care homes. NCHS surveyed certain types of homes that were excluded from the State surveys.

Statistics derived from the hospital and nursing home and other facilities surveys were adjusted for both facility and item nonresponse. Missing items on the questionnaire were imputed, when possible, by using information reported by the same facility in a previous survey. When data were not available from a previous census for a responding facility, the data were imputed by using data from similar responding facilities. Similar facilities are defined as those with the same types of business, ownership, service, and approximately the same bed size.

For more detailed information on NMFI, see: National Center for Health Statistics, D. A. Roper: Nursing and related care homes as reported from the 1982 NMFI survey. Vital and Health Statistics. Series 14, No. 32. DHHS Pub. No. (PHS) 86–1827. Public Health Service. Washington. U.S. Government Printing Office, Sept. 1986; and

National Center for Health Statistics, A. Sirrocco. The 1986 Inventory of Long-Term Care Places: An overview of facilities for the mentally retarded. *Advance Data From Vital and Health Statistics*. No. 143. DHHS Pub. No. (PHS) 87–1250. Public Health Service. Hyattsville, Md., 1987.

National Hospital Discharge Survey

The National Hospital Discharge Survey (NHDS) is a continuing nationwide sample survey of short-stay hospitals in the United States. Before 1988 the scope of NHDS encompassed patients discharged from noninstitutional hospitals, exclusive of military and Veterans Administration hospitals, located in the 50 States and the District of Columbia. Only hospitals having six or more beds for patient use and those in which the average length of stay for all patients is less than 30 days are included in the survey. Beginning in 1988 the scope was altered slightly to include all general and children's general hospitals regardless of the length of stay. Although all discharges of patients from these hospitals are within the scope of the survey, discharges of newborn infants from all hospitals are excluded from this report as well as discharges of all patients from Federal hospitals.

The original sample 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, and hospitals were stratified according to bed size 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 sample hospital, a systematic random sample of discharges was selected from the daily listing sheet. Initially, the within-hospital sampling rates for selecting discharges varied inversely with the probability of hospital selection so that the overall probability of selecting a discharge was approximately the same across the sample. Those rates were adjusted for individual hospitals in subsequent years to control the reporting burden of those hospitals.

In 1985, for the first time, two data collection procedures were used

for the survey. The first was the traditional manual system of sample selection and data abstraction. In the manual system, sample selection and transcription of information from the hospital records to abstract forms were performed by either the hospital staff or representatives of the National Center for Health Statistics (NCHS) or both. The second was an automated method, used in approximately 17 percent of the sample hospitals in 1985, involving the purchase of data tapes from commercial abstracting services. Upon receipt of these tapes they were subject to NCHS sampling, editing, and weighting procedures.

In 1988, the NHDS was redesigned. The hospitals with the most beds and/or discharges annually were selected with certainty, but the remaining sample was selected using a three-stage stratified design. The first stage is a sample of the primary sampling units (PSU's) used by the National Health Interview Survey. Within PSU's, hospitals were stratified or arrayed by abstracting status (whether subscribing to a commercial abstracting service) and within abstracting status arrayed by type of service and bed size. Within these strata and arrays, a systematic sampling scheme with probability proportional to the number of discharges annually was used to select hospitals. The rates for systematic sampling of discharges within hospitals vary inversely with probability of hospital selection within PSU. Discharge records from hospitals submitting data via commercial abstracting services (approximately 34 percent of sample hospitals in 1990) were arrayed by primary diagnoses, patient sex and age group, and date of discharge prior to sampling. Otherwise, the procedures for sampling discharges within hospitals is the same as that

used in the prior design.

The basic unit of estimation for NHDS is the sample patient abstract. The estimation procedure involves inflation by the reciprocal of the probability of selection, adjustment for nonresponding hospitals and missing abstracts, and ratio adjustments to fixed totals. Of the 542 hospitals selected for the survey, 519 were within the scope of the survey, and 474 participated in the survey in

1990. Data were abstracted from about 267,000 medical records.

For more detailed information on the design of NHDS and the magnitude of sampling errors associated with NHDS estimates, see: National Center for Health Statistics, E. J. Graves: National Hospital Discharge Survey: Annual Summary, 1988. Vital and Health Statistics. Series 13, No. 106. DHHS Pub. No. (PHS) 91–1767. Public Health Service. Washington. U.S. Government Printing Office, Sept. 1991.

National Nursing Home Survey

The National Center for Health Statistics (NCHS) has conducted three National Nursing Home Surveys. The first survey was conducted from August 1973–April 1974; the second survey from May–December 1977; and the third from August 1985–January 1986.

Much of the background information and experience used to develop the first National Nursing Home Survey was obtained from a series of three ad hoc sample surveys of nursing and personal care homes called the Resident Places Surveys (RPS-1, -2, -3). The three surveys were conducted by the National Center for Health Statistics during April–June 1963, May–June 1964, and June-August 1969, respectively. During the first survey, RPS-1, data were collected on nursing homes, chronic disease and geriatric hospitals, nursing home units, and chronic disease wards of general and mental hospitals. RPS-2 concentrated mainly on nursing homes and geriatric hospitals. During the third survey, RPS-3, nursing and personal care homes in the coterminous United States were sampled.

For the initial National Nursing Home Survey (NNHS) conducted in 1973–74, the universe included only those nursing homes that provided some level of nursing care. Thus, homes providing only personal or domiciliary care were excluded. The sample of 2,118 homes was selected from the 17,685 homes that provided some level of nursing care and were listed in the 1971 National Master Facility Inventory (NMFI) or those that opened for business in 1972. Data were obtained from about 20,600 staff and 19,000 residents. Response rates were 97 percent for

facilities, 88 percent for expenditures, 98 percent for residents, and 82

percent for staff.

The scope of the 1977 NNHS encompassed all types of nursing homes, including personal care and domiciliary care homes. The sample of about 1,700 facilities was selected from 23,105 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. Data were obtained from about 13,600 staff, 7,000 residents, and 5,100 discharged residents. Response rates were 95 percent for facilities, 85 percent for expenses, 81 percent for staff, 99 percent for residents, and 97 percent for discharges.

The scope of the 1985 NNHS was similar to the 1977 survey in that it included all types of nursing homes. The sample of 1,220 homes was selected from a sampling frame of 20,479 nursing and related care homes. The frame consisted of all homes in the 1982 NMFI; homes identified in the 1982 Complement Survey of the NMFI as "missing" from the 1982 NMFI; facilities that opened for business between 1982 and June 1984; and hospital-based nursing homes obtained from the Health Care Financing Administration. Information on the facility was collected through a personal interview with the administrator. Accountants were asked to either complete a questionnaire on expenditures or provide a financial statement. Resident data were provided by a nurse familiar with the care provided to the resident. The nurse 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, a sample of registered nurses completed a self-administered questionnaire. Discharge data were based on information recorded in the medical record. Additional data about the current and discharged residents were obtained in telephone interviews with next of kin. Data were obtained from 1,079 facilities, 2,763 registered nurses, 5,243 current residents, and 6,023 discharges. Response rates were 93 percent for facilities, 68 percent for expenses, 80 percent for

registered nurses, 97 percent for residents, 95 percent for discharges, and 90 percent for next of kin.

Statistics for all three surveys were derived by a ratio-estimation procedure. Statistics were adjusted for failure of a home to respond, failure to fill out one of the questionnaires, and failure to complete an item on a questionnaire.

For more information on the 1973-74 NNHS, see: National Center for Health Statistics, M. R. Meiners: Selected operating and financial characteristics of nursing homes, United States, 1973-74 National Nursing Home Survey. Vital and Health Statistics. Series 13, No. 22. DHEW Pub. No. (HRA) 76-1773. Health Resources Administration. Washington, U.S. Government Printing Office, Dec. 1975. For more information on the 1977 NNHS, see: National Center for Health Statistics, J. F. Van Nostrand, A. Zappolo, E. Hing, et al.: The National Nursing Home Survey, 1977 Summary for the United States. Vital and Health Statistics. Series 13, No. 43. DHHS Pub. No. (PHS) 79-1794. Public Health Service. Washington. U.S. Government Printing Office, July 1979. For more information on the 1985 NNHS, see: National Center for Health Statistics, E. Hing, E. Sekscenski, G. Strahan: The National Nursing Home Survey, 1985 Summary for the United States. Vital and Health Statistics. Series 13, No. 97. DHHS Pub. No. (PHS) 89-1758. Public Health Service. Washington. U.S. Government Printing Office, Jan.

National Ambulatory Medical Care

The National Ambulatory Medical Care Survey (NAMCS) is a continuing national probability sample of ambulatory medical encounters. The scope of the survey covers physician-patient encounters in the offices of non-Federally employed physicians classified by the American Medical Association or American Osteopathic Association as "office-based, patient care" physicians. 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.

A multistage probability design is employed. The first-stage sample consists of 84 primary sampling units (PSU's) in 1985 and 112 PSU's in 1989 selected from about 1,900 such units into which the United States has been divided. In each sample PSU, a sample of practicing non-Federal office based physicians is selected from masterfiles 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. In 1989 the survey included all 50 states.

For the 1985 survey a sample of 5,032 physicians were selected. The physician response rate for 1985 was 70 percent providing data on 71,594 patient records. For the 1989 survey a sample of 2,535 physicians was selected. The physician response rate for 1989 was 74 percent providing data on 38,384 patient records.

The estimation procedure used in NAMCS basically has three components: inflation by the reciprocal of the probability of selection, adjustment for nonresponse, and ratio adjustment to fixed totals.

For more detailed information on the design of NAMCS and the magnitude of sampling errors associated with NAMCS estimates, see: National Center for Health Statistics, J. DeLozier and R. Gagnon. 1989 Summary: National Ambulatory Medical Care Survey. Advance Data From Vital and Health Statistics. No. 203. DHHS Pub. No. (PHS) 91-1250. Public Health Service. Hyattsville, Md. 1991.

National Center for Infectious Diseases

AIDS Surveillance

Acquired immunodeficiency syndrome (AIDS) surveillance is conducted by health departments in each State, territory, and the District of Columbia. 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 hospitalbased 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 without personal identifiers, which is coded and computerized either at the Centers for Disease Control (CDC) or at health departments from which it is then transmitted electronically to CDC.

AIDS surveillance data are used to detect epidemiologic trends, to identify unusual cases requiring follow up, and for publication in the *HIV/AIDS Surveillance Report*. Studies to determine the completeness of reporting of AIDS cases meeting the national surveillance definition suggest reporting at greater than or equal to 90 percent.

For more information on AIDS surveillance, contact: Chief, Surveillance Section, Surveillance and Evaluation Branch, AIDS Program, National Center for Infectious Diseases, Centers for Disease Control, Atlanta, Ga. 30333.

Epidemiology Program Office

National Notifiable Diseases Surveillance System

The Epidemiology Program Office (EPO) of the Centers for Disease Control (CDC), in partnership with the Council of State and Territorial Epidemiologists (CSTE), operates the National Notifiable Diseases Surveillance System. The purpose of this system is primarily to provide weekly provisional information on the occurrence of diseases defined as notifiable by CSTE. In addition, the system also provides summary data on an annual basis. State epidemiologists report cases of notifiable diseases to EPO, and EPO tabulates and publishes these data in the *Morbidity* and Mortality Weekly Report (MMWR) and the Summary of Notifiable Diseases, United States (entitled Annual Summary before 1985). Notifiable disease surveillance is used by public health practitioners at local, State, and national levels as part of

disease prevention and control activities.

Notifiable disease reports are received from 52 areas in the United States and 5 territories. To calculate U.S. rates, data reported by 50 States, New York City, and the District of Columbia, are used. (New York State is reported as Upstate New York, which excludes New York City).

Completeness of reporting varies because not all cases receive medical care and not all treated conditions are reported. Although State laws and regulations mandate disease reporting, reporting to CDC by States and territories is voluntary. Reporting of varicella (chickenpox) and mumps to CDC is not done by some States in which these diseases are not notifiable to local or State authorities. The number of areas reporting varicella was 31 in 1985, 33 in 1987 and 1988, 30 in 1989, and 31 in 1990. The number of areas reporting mumps was 48 in 1985, 49 in 1987, 48 in 1988, and 50 in 1989 and 1990.

Estimates of underreporting of some diseases have been made. For example, it is estimated that only 10 percent of cases of congenital rubella syndrome are reported. Only 10–15 percent of all measles cases were reported prior to the institution of the Measles Elimination Program in 1978; but now it is estimated that all cases are reported in most areas of the country. Data from a study of tetanus deaths suggest that only 40 percent of tetanus cases are reported to CDC.

For more information, see: Centers for Disease Control, Final 1990 reports of notifiable diseases, Morbidity and Mortality Weekly Report, 39(53), Public Health Service, DHHS, Atlanta, Ga., Oct. 1991, or write to Centers for Disease Control, Director, Division of Surveillance and Epidemiology, Atlanta, Ga. 30333.

National Center for Chronic Disease Prevention and Health Promotion

Abortion Surveillance

The Centers for Disease Control (CDC) acquires abortion service statistics by State of occurrence from three sources—central health agencies, hospitals and other medical

facilities, and the National Center for Health Statistics. Most of the central health agencies have established direct reporting systems, although a few collected data by surveying abortion facilities. Epidemiologic surveillance of abortion was initiated in eight States in 1969, and now statewide abortion data are also reported by the remaining States.

The total number of abortions reported to CDC is about 16 percent less than the total estimated independently by the Alan Guttmacher Institute, the research and development division of the Planned Parenthood Federation of America, Inc.

For more information, contact: Director, Division of Reproductive Health, Center for Health Promotion and Education, Centers for Disease Control, Atlanta, Ga. 30333.

National Center for Prevention Services

U.S. Immunization Survey

This system is the result of a contractual agreement between the Centers for Disease Control and the U.S. Bureau of the Census. Estimates from the U.S. Immunization Survey are based on data obtained during the third week of September in certain years for a subsample of households interviewed for the Current Population Survey, which is described separately in this appendix.

The reporting system contains demographic variables and vaccine history along with disease history when relevant to vaccine history. The system is used to estimate the immunization level of the Nation's child population against the vaccine-preventable diseases; from time to time, immunization level data on the adult population are collected.

The scope of the U.S. Immunization Survey covers the 50 States and the District of Columbia. For example, the 1981 sample included approximately 45,000 household units. Six thousand sample units were found to be vacant or otherwise not to be interviewed. Of the approximately 39,000 occupied households eligible for interview, about 1,500 were not interviewed because the occupants either were

not at home after repeated calls or were unavailable for some other reason.

The estimating procedure that was used involves the inflation of weighted sample results to independent estimates of the civilian noninstitutionalized population of the United States by age and race.

Starting in 1979, the questionnaire was modified to solicit information regarding the source of immunization responses given by the interviewee. This change was made to measure the percent of responses for which a family immunization record was the source of the information.

For more information about the survey methodology, contact: Director, Division of Immunization, Center for Preventive Services, Centers for Disease Control, Atlanta, Ga. 30333.

National Institute for Occupational Safety and Health

National Traumatic Occupational Fatalities Data Base

The National Traumatic Occupational Fatalities (NTOF) data base is compiled by the National Institute for Occupational Safety and Health (NIOSH) based on information taken from death certificates. Certificates are collected from 52 vital statistics reporting units (the 50 states, New York City, and the District of Columbia) based on the following criteria: (1) age 16 years or older; (2) an external cause of death (ICD-9, E800-E999); and (3) a positive response to the injury at work item.

There is no standardized definition of a work-related injury and no national guidelines exist regarding the completion of this item on the death certificate. Thus, numbers and rates of occupational injury deaths from NTOF should be regarded as the lower bound for the true number of these events. Denominator data for the calculation of rates by industry division were obtained from the U.S. Bureau of the Census' County Business Patterns, supplemented by employment data for agriculture derived from the U.S. Bureau of the Census' 1982 Census of Agriculture and public administration employment data taken from the Bureau of Labor Statistics' annual

average employment data for 1980-86. The rates presented are for the U.S. civilian labor force.

For further information on NTOF, contact: Director, Division of Safety Research, National Institute for Occupational Safety and Health, 944 Chestnut Ridge Road, Mailstop S-133, Morgantown, West Virginia 26505.

National Occupational Hazard Survey

The National Occupational Hazard Survey (NOHS) was conducted by the National Institute for Occupational Safety and Health (NIOSH) to obtain data on employee exposure to particular chemicals and physical agents in various industries.

A random sample of 4,636 urban workplaces was selected by the U.S. Department of Labor, Bureau of Labor Statistics. Because mining and government activities are not within the coverage of the Occupational Safety and Health Act and agricultural and rural areas were beyond the logistical capacity of the survey, the sample excluded those types of facilities. Included were facilities in 66 different two-digit Standard Industrial Classifications (SIC's), located in 67 standard metropolitan statistical areas. Field work was performed by 20 industrial hygiene surveyors who collected data from February 1972 through June 1974.

Information in Part I, elicited during a questionnaire interview of management, profiled the SIC and size of facility, along with its medical, safety, and industrial hygiene programs. Part II, the greatest part of the NOHS data, contained the recorded observations of the surveyor's management-escorted "walk-through" of all facility work areas. Part II listed, by job title, the number of employees who were potentially exposed to the same chemicals and physical agents. The surveyor recorded all materials and physical agents each employee group encountered, regardless of toxicity; hazardous nature; conditions of use; and the presence, absence, or effectiveness of any exposure control measures. For each potential exposure listed within an occupational group, the surveyor also recorded the duration, intensity, form, and the

control utilized and whether it functioned.

For more information on NOHS, see: National Institute for Occupational Safety and Health, National Occupational Hazard Survey, Vol. I, Survey manual, DHEW Pub. No. (NIOSH) 74-127; Vol. II, Data editing and data base development, DHEW Pub. No. (NIOSH) 77-213; Vol. III, Survey analysis and supplemental tables, DHEW Pub. No. (NIOSH) 78–114.

National Occupational Exposure Survey

During 1981-83, NIOSH conducted a second national survey of worksites, patterned after the NOHS. In this second survey, known as the National Occupational Exposure Survey (NOES), information was collected essentially identical to the NOHS in a sample of 4,490 facilities over a 30-month period.

For further information on NOES, see: National Institute for Occupational Safety and Health, National Occupational Exposure Survey, Field Guidelines, DHHS Pub.

No. (NIOSH) 86-116.

Health Resources and Services Administration

Bureau of Health Professions

Physician Supply Projections

Physician supply projections in this report are based on a model developed by the Bureau of Health Professions to forecast the supply of physicians by specialty, activity, and by State of practice. The 1986 supply of active physicians (M.D.'s) was used as the starting point for the most recent projections of active physicians. The major source of data used to obtain 1986 figures was the American Medical Association (AMA) Physician Masterfile.

In the first stage of the projections, graduates from U.S. schools of allopathic (M.D.) and osteopathic (D.O.) medicine and foreign-trained additions were estimated on a year-by-year basis. Estimates of first-year enrollments, student attrition, other medical school-related trends, and a model of

net foreign medical graduate immigration were used in deriving these annual additions. These year-by-year additions were then combined with the already existing active supply in a given year to produce a preliminary estimate of the active work force in each succeeding vear. These estimates were then reduced to account for mortality and retirement. Gender-specific mortality and retirement losses were computed by 5-year age cohorts on an annual basis, using age distributions and mortality and retirement rates based on AMA data.

For more information, see: Bureau of Health Professions, Seventh Report to the President and Congress on the Status of Health Personnel in the United States, DHHS Pub. No. HRS-P-OD-90-1, Health Resources and Services Administration, Rockville, Md.

Nurse Supply Estimates

Nursing estimates in this report are based on a model developed by the Bureau of Health Professions to meet the requirements of Section 951, P.L. 94–63. The model estimates the following for each State: (1) nurse population—those with current licenses to practice; (2) nurse supply—all practicing nurses either full or part time (or all of those available to practice at that time); and (3) full-time equivalent supply—nurses practicing full time plus one-half of those practicing part time (or available on that basis)

Each of the three estimates are divided into three levels of highest educational preparation: associate degree or diploma; baccalaureate; master's and doctorate.

Among the factors considered are new graduates, changes in educational status, nursing employment rates, age, migration patterns, death rates, and licensure phenomena. Data sources include data on nursing education from the National League for Nursing and data on licensure from the National Council of State Boards of Nursing. Data on the number and characteristics of registered nurses are based on data from the National Sample Survey of Registered Nurses conducted by the Division of Nursing, Bureau of Health Professions in March 1988.

Alcohol, Drug Abuse, and Mental Health Administration

National Institute on Alcohol Abuse and Alcoholism

National Survey of Drinking

Data on trends in alcohol consumption were drawn from national surveys funded by the National Institute on Alcohol Abuse and Alcoholism and the National Institute on Drug Abuse. The 1979 survey was based on self-reported consumption and was designed to represent adults 18 years of age and over living in households in the coterminous United States. A total of 1,772 interviews were conducted, representing a response rate of 66 percent.

For more information on the National Survey of Drinking, write: Laboratory for Epidemiology and Population Studies, National Institute on Alcohol Abuse and Alcoholism, 5600 Fishers Lane, Rockville, Md. 20857. For further information on alcoholism services, see: National Institute on Alcohol Abuse and Alcoholism, Characteristics of alcoholism services in the United States, 1984. Data from the September 1984 National Alcoholism and Drug Abuse Program Inventory. P. G. Reed and D. S. Sanchez. Division of Biometry and Epidemiology. June 1986.

National Institute on Drug Abuse

High School Senior Survey (Monitoring the Future Survey)

The High School Senior Survey is a large-scale epidemiological survey of drug abuse initiated by the National Institute on Drug Abuse (NIDA) in 1975 and conducted annually through a NIDA grant awarded to the University of Michigan's Institute for Social Research. Each year data are collected in 125-35 public and private high schools, yielding a sample of approximately 17,000 high school seniors. The survey design is a multi-stage random sample with stage one being the selection of particular geographic areas, stage two the selection of one or more high schools in each area, and stage three the selection of seniors within each high

school. Data are collected through written questionnaires administered in the classroom by the Institute for Social Research representatives. High school dropouts and absentees (on the day of the survey) are excluded from the survey. Data from the Census Bureau show that between 1980 and 1990 the percent of persons 16-24 years of age who had not finished high school and were not enrolled in school declined slightly from 11 to 9 percent of white persons; dropped from 19 to 13 percent of black persons; and remained stable at about one-third of Hispanic persons. For further information on the High School Senior Survey see: National Institute for Drug Abuse, Drug Use Among American High School Seniors, College Students, and Young Adults, 1975–1990, Volume 1. DHHS Pub. No. (ADM) 91–1813, U.S. Government Printing Office, 1991.

National Household Surveys on Drug Abuse

Data on trends in use of marijuana, cigarettes, and alcohol among youths 12–17 years of age and young adults 18–25 years of age are from the National Household Survey on Drug Abuse. The 1991 survey is the 11th in a series that began in 1971 under the auspices of the National Commission on Marijuana and Drug Abuse. Since 1974, the survey has been sponsored by the National Institute on Drug Abuse.

The survey covers the population group 12 years of age and over living in households in the United States. Alaska and Hawaii were included in the National Household Survey for the first time in 1991. Youths (12–17 years) and young adults (18–25 years of age) are oversampled as are black persons and Hispanics.

The most recent survey (1991) is based on home personal interviews of 32,594 randomly selected persons 12 years of age and over. The interview response rate in this survey was 85 percent for the youth and young adult sample.

For more information on the National Household Survey on Drug Abuse, see: Population Estimates, 1991. For further information on the National Household Survey on Drug Abuse, write: Division of Epidemiology and Prevention Research, National Institute on Drug Abuse, 5600 Fishers Lane, Rockwall II, Suite 6-15, Rockville, Md. 20857.

The Drug Abuse Warning Network

The Drug Abuse Warning Network (DAWN) is a large-scale, ongoing drug abuse data collection system based on information from emergency room and medical examiner facilities. DAWN collects information about those drug abuse occurrences that have resulted in a medical crisis or death. The major objectives of the DAWN data system include: the monitoring of drug abuse patterns and trends, identification of substances associated with drug abuse episodes, and the assessment of drug-related consequences and other health hazards.

Before 1989, DAWN data were collected from a nonrandom panel of emergency rooms located primarily in 21 metropolitan areas throughout the continental United States. The same group of emergency rooms contributed DAWN data during these years, and were referred to as a consistent panel. In 1989, the DAWN was redesigned from a nonrandom sample to a national probability sample of emergency rooms located throughout the continental United States. For the 1989 sample, a sample of 685 hospitals was selected from the American Hospital Association inventory of non-Federal short-stay hospitals. A response rate of 80 percent was obtained in 1990.

Within each facility, a designated DAWN reporter is responsible for identifying drug abuse episodes by reviewing official records and transcribing and submitting data on each case. For further information, see: The Drug Abuse Warning Network (DAWN), Annual Data, 1990, or write to: Division of Epidemiology and Prevention Research, National Institute on Drug Abuse, 5600 Fishers Lane, Rockwall II, Suite 6-15, Rockville, Md. 20857.

National Institute of Mental Health

Surveys of Mental Health Organizations

The Statistical Research Branch of the Division of Applied and Services Research conducts a biennial inventory of mental health organizations and general hospital mental health services (IMHO/GHMHS). One version is designed for specialty mental health organizations and another for non-Federal general hospitals with separate psychiatric services. The response rate to most of the items on these inventories is relatively high (90 percent or better) as is the rate for data presented in this report. However, for some inventory items, the response rate may be somewhat lower.

The IMHO/GHMHS is the primary source for National Institute of Mental Health (NIMH) data included in this report. This data system is based on questionnaires mailed every other year to mental health organizations in the United States, including psychiatric hospitals, non-Federal general hospitals with psychiatric services, Veterans Administration psychiatric services, residential treatment centers for emotionally disturbed children, freestanding outpatient psychiatric clinics, partial care organizations, and freestanding and multiservice mental health organizations, not elsewhere classified.

Federally funded community mental health centers (CMHC's) were included separately through 1980. In 1981, with the advent of block grants, the changes in definition of CMHC's, and the discontinuation of CMHC monitoring by NIMH, organizations formerly classified as CMHC's have been reclassified as other organization types, primarily "multiservice mental health organizations, not elsewhere classified" and "freestanding psychiatric outpatient clinics."

Beginning in 1983 any organization that provides services in any combination of two or more services (for example, outpatient plus partial care, residential treatment plus outpatient plus partial care) and is neither a hospital nor a residential treatment center for emotionally disturbed children is classified as a multiservice mental health organization. Before 1983 an organization had to have either inpatient or residential treatment services in combination with at least one other service to be a "multiservice mental health

organization." The result of this definitional change is to increase sharply the number of multiservice mental health organizations while decreasing the number of freestanding psychiatric outpatient clinics.

Other surveys conducted by the Statistical Research Branch encompass samples of patients admitted to State, county, and private mental hospitals, outpatient psychiatric services, and Veterans Administration psychiatric services. The purpose of these surveys is to determine the sociodemographic, clinical, and treatment characteristics of patients served by these facilities.

For more information, write: Statistical Research Branch, Division of Applied and Services Research, National Institute of Mental Health, Room 18C–07, 5600 Fishers Lane, Rockville, Md. 20857. For further information on mental health, see: National Institute of Mental Health, Mental Health, United States, 1990. R. W. Manderscheid and M. A. Sonnenschein, eds. DHHS Pub. No. (ADM) 90–1708, U.S. Government Printing Office, 1990.

National Institutes of Health

National Cancer Institute

Surveillance, Epidemiology, and End Results Program

In the Surveillance,
Epidemiology, and End Results
(SEER) Program the National
Cancer Institute (NCI) contracts with
11 population-based registries
throughout the United States and
Puerto Rico to provide data on all
residents diagnosed with cancer
during the year and to provide
current follow up information on all
previously diagnosed patients.

All patients included in this report were residents of one of the following geographic areas at the time of their initial diagnosis of cancer: Atlanta, Georgia; Detroit, Michigan; Seattle-Puget Sound, Washington; San Francisco-Oakland, California; Connecticut; Iowa; New Mexico; Utah; and Hawaii. Data from New Jersey were excluded because those data are available only since 1979. Further, data from Puerto Rico were

also excluded because this analysis focuses on trends occurring within the United States exclusive of its territories.

Population estimates used to calculate incidence rates are obtained from the U.S. Bureau of the Census. NCI uses estimation procedures as needed to obtain estimates for years/races not included in the data provided by the U.S. Bureau of the Census. 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.

Life tables used to determine normal life expectancy when calculating relative survival rates were obtained from the National Center for Health Statistics. Separate life tables are used for each race-sex-specific group included in the SEER Program.

For further information, see: National Cancer Institute, Cancer Statistics Review, 1973–89 by L. Gloeckler Ries et al., NIH Pub. No. 92–2789. Public Health Service, Bethesda, Md., 1992.

Health Care Financing Administration

Office of the Actuary

Estimates of National Health Expenditures

Estimates of expenditures for health (National Health Accounts) are compiled annually by type of expenditure and source of funds.

Estimates of expenditures for health services come from an array of sources. The American Hospital Association 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 services of health professionals (doctors, dentists, chiropractors, private duty nurses, therapists, podiatrists, etc.) are estimated using data from the Internal Revenue

Service and from tabulations on the operations of health maintenance organizations. Since 1977, data from the U.S. Bureau of the Census' Services Annual Survey and the quinquenniel census of Service Industries have been used to augment the IRS data. Expenditures for drugs and other medical nondurables and 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 and on industry data on prescription drug transactions. Those durable and nondurable products provided to inpatients in hospitals, nursing homes, those provided by licensed professionals, or through home health agencies are excluded here, but are included with the expenditure estimates for those 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 based upon revenue data from the National Nursing Home Survey conducted by the National Center for Health Statistics. Expenditures for construction include the erection or renovation of hospitals, nursing homes, medical clinics, and medical research facilities, but not for private office building providing office space for private practitioners. Expenditures for noncommercial research (the cost of commerical research by drug companies are assumed to be imbedded in the price charged for the product; to include this time again would result in double counting) are developed from information gathered by the National Institutes of Health.

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. Bureau of the Census' *Government Finances* and Social

Security Administration reports on State-operated Workers' Compensation programs. Federal and State-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 Health Care Financing Administration analyses of private health insurers. Information on out-of-pocket spending from the U.S. Bureau of Labor Statistics' Consumer Expenditure Survey, from the 1977 National Medical Care Expenditure Survey conducted by the National Center for Health Services Research and from private surveys conducted by the American Hospital Association, American Medical Association, and the American Dental Association is used to develop estimates of direct spending by consumers.

For more specific information on definitions, sources, and methods used in the National Health Accounts, see: National Health Expenditures, 1990, by the Office of National Health Statistics, Office of the Actuary, *Health Care Financing Review*, Vol. 13, No. 1, HCFA Pub. No. 03321, Health Care Financing Administration, Washington, U.S. Government Printing Office, October 1991.

Medicare Statistical System

The Medicare Statistical System (MSS) provides data for examining the program's effectiveness and for tracking the eligibility of enrollees and the benefits they use, the certification status of institutional providers, and the payments made for covered services. Records are maintained on about 33 million enrollees and 24,000 participating institutional providers; and about 420 million bills for services are processed annually.

The MSS contains four major computer files: the health insurance master file, the service provider file, the Hospital Insurance (HI) claims file, and the Supplementary Medical Insurance (SMI) payment records file.

The health insurance master file contains records for each aged and disabled enrollee and includes data on type of entitlement, deductible status, benefit period status and benefits used, as well as demographic information such as age, sex, race, and residence.

The service provider file contains information on hospitals, home health agencies, skilled nursing facilities, independent clinical laboratories, and suppliers of portable x ray or outpatient physical therapy services that participate in Medicare. For hospitals, data on number of beds, type of ownership and other characteristics are included.

The HI claims file contains information on the beneficiaries' entitlement and their use of benefits during the benefit period for hospital, skilled nursing facility, and home health agency services.

The SMI payment record file provides information on whether the enrollee has met the deductible and on amounts paid for physicians' services and other SMI-covered services and supplies.

Data from the Medicare statistical system provide information about enrollee use of benefits for a point in time or over an extended period. Statistical reports are produced on enrollment, characteristics of participating providers, reimbursements, and services used.

For further information on the Medicare statistical system, see: Health Care Financing Administration, Medicare Statistical File Manual, HCFA Pub. No. 03272, Baltimore, Md., July 1988.

Medicaid Data System

The majority of Medicaid data are compiled from forms submitted annually by State Medicaid agencies to the Health Care Financing Administration (HCFA) for Federal fiscal years ending September 30 on the Form HCFA-2082, Statistical Report on Medical Care: Eligibles, Recipients, Payments, and Services.

When using the data keep the following caveats in mind:

Counts of recipients and eligibles categorized by basis of eligibility generally count each person only once—based on the person's basis of eligibility as of first appearance on the Medicaid rolls during the Federal fiscal year covered by the report. Note, however, that some States report duplicated counts of recipients;

that is, they report an individual in as many categories as the individual had different eligibility statuses during the year. In such cases, the sum of all basis-of-eligibility cells will be greater than the "total recipients" number.

Expenditure data include payments for all claims adjudicated or paid during the fiscal year covered by the report. Note that this is not the same as summing payments for services that were rendered during the reporting period.

Some States fail to submit the HCFA-2082 for a particular year. When this happens, HCFA estimates the current year's HCFA-2082 data for missing States based upon prior year's submissions and information the State entered on Form HCFA-64 (the form States use to claim reimbursement for Federal matching funds for Medicaid).

■ HFCA-2082's submitted by States frequently contain obvious errors in one or more cells in the form. For cells obviously in error, HCFA estimates values that appear to be more reasonable.

For further information on Medicaid data, see: Health Care Financing Program Statistics: Analysis of State Medicaid Program Characteristics, 1986, by C. Howe and R. Terrell, HCFA Pub. No. 03249, Health Care Financing Administration, Baltimore, Md., U.S. Government Printing Office, Aug. 1987.

Department of Commerce

Bureau of the Census

U.S. Census of Population

The census of population has been taken in the United States every 10 years since 1790. In the 1980 census, data were collected on sex, race, age, and marital status from 100 percent of the enumerated population. More detailed information such as income, education, housing, occupation, and industry were collected from a 20-percent sample. The 20-percent sample was dichotomized by size of place of residence, with 50 percent of households in places of less than 2,500 population and 1 out of 6 households in places of 2,500 or more population receiving the more detailed questionnaire.

For more information on the 1980 census, see: U.S. Bureau of the Census, 1980 Census of Population and Housing, Users Guide, Part A Text, PHC 80-R1-A.

Current Population Survey

The Current Population Survey (CPS) is a household sample survey of the civilian noninstitutionalized population conducted monthly by the U.S. Bureau of the Census. The CPS provides estimates of employment, unemployment, and other characteristics of the general labor force, the population as a whole, and various other subgroups of the population.

A list of housing units from the 1980 census, supplemented by newly constructed units and households known to be missed in the 1980 census, provides the sampling frame in most areas for the present CPS. In some rural locations, current household listings of selected land areas serve as the frame.

The present CPS sample is located in 729 sample areas, with coverage in every State and the District of Columbia. In an average month during 1990, the number of housing units or living quarters eligible for the national sample was about 70,000, of which about 55,800 were interviewed households, and 2,600 were households at which the members were not available for interview. About 11,500 households were visited but were not eligible for interview.

The estimation procedure used involves inflation by the reciprocal of the probability of selection, adjustment for nonresponse, and ratio adjustment.

For more information, see: U.S. Bureau of the Census, *The Current Population Survey, Design and Methodology*, Technical Paper 40, Washington, U.S. Government Printing Office, Jan. 1978.

Population Estimates

National estimates are derived by use of decennial census data as benchmarks and of data available from various agencies as follows: births and deaths (Public Health Service); immigrants (Immigration and Naturalization Service); the Armed Forces (Department of Defense); net movement between Puerto Rico and the U.S. mainland (Puerto Rico Planning Board); and Federal employees abroad (Office of Personnel Management and Department of Defense). State estimates are based on similar data and also on a variety of data series, including school statistics from State departments of education and parochial school systems.

Current estimates are generally consistent with official decennial census figures and do not reflect the amount of estimated decennial census under enumeration.

For more information, see: U.S. Bureau of the Census, Estimates of the population of the United States, by age, sex, and race: 1980-1989, Current Population Reports, Series P-25, No. 1057, Washington, U.S. Government Printing Office, 1990.

Department of Labor

Bureau of Labor Statistics

Annual Survey of Occupational Injuries and Illnesses

Since 1971, the Bureau of Labor Statistics (BLS) has conducted an annual survey of establishments in the private sector to collect statistics on occupational injuries and illnesses. The Annual Survey of Occupational Injuries and Illnesses is based on records which employers maintain under the Occupational Safety and Health Act. Excluded from the survey are self-employed individuals; farmers with fewer than 11 employees; employers regulated by other Federal safety and health laws; and Federal, State, and local government agencies.

Data are obtained from a sample of approximately 280,000 establishments, that is, single physical locations where business is conducted or where services of industrial operations are performed. An independent sample is selected for each State and the District of Columbia that represents industries in that jurisdiction. The BLS then subsamples the State samples to select the establishments to be included 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). Occupational injuries include any injury-such as a cut, fracture, sprain, or amputation, which results from a work accident or from exposure involving a single incident in the work environment. Occupational illnesses are any abnormal condition or disorder, other than one resulting from an occupational injury, caused by exposure to environmental factors associated with employment. Lost workday cases are cases which involve days away from work, or days of restricted work activity, or both. The response rate is about 94 percent.

For more information, see: Bureau of Labor Statistics, Occupational Injuries and Illnesses in the United States by Industry, 1988. BLS Bulletin 2366, U.S. Department of Labor, Washington, August 1990.

Consumer Price Index

The Consumer Price Index 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 all-urban index (CPI-U) introduced in 1978 is representative of the buying habits of about 80 percent of the noninstitutionalized population of the United States.

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 to 1984, which equals 100. An increase of 22 percent, for example, is shown as 122. This 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 \$10 in 1982 to 1984 and to \$11.83 in 1988.

The most recent revision of the CPI, completed in 1987, reflected spending patterns based on the Survey of Consumer Expenditures from 1982 to 1984, the 1980 Census of Population, and the ongoing Point-of-Purchase Survey. Using this improved sample design, prices for the goods and services required to calculate the index are collected in 85 urban areas throughout the country and from about 21,000 retail and service establishments. In addition, data on rents are collected from about 40,000 tenants and 20,000 owner-occupied housing units. Food, fuels, and a few other items are priced monthly in all 85 locations. Prices of most other goods and services are collected bimonthly in the remaining areas. All price information is obtained through visits or calls by trained Bureau of Labor Statistics field representatives.

The 1987 revision changed the treatment of health insurance in the cost-weight definitions for medical care items. This change has no effect on the final 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 from other professional services, and inpatient and outpatient treatment from other hospital and

medical care services.

For more information, see: Bureau of Labor Statistics, Handbook of Methods, BLS Bulletin 2285, U.S. Department of Labor, Washington, April 1988; I. K. Ford and P. Sturm. CPI revision provides more accuracy in the medical care services component, Monthly Labor Review, U.S. Department of Labor, Bureau of Labor Statistics, Washington, April 1988.

Employment and Earnings

The Division of Monthly Industry Employment Statistics and the Division of Employment and Unemployment Analysis of the Bureau of Labor Statistics publish data on employment and earnings. The data are collected by the U.S. Bureau of the Census, State Employment Security Agencies, and State Departments of Labor in cooperation with BLS.

The major data source is the Current Population Survey (CPS), a household interview survey conducted monthly by the U.S. Bureau of the Census to collect labor force data for BLS. CPS is described separately in this appendix. Data based on establishment records are also

compiled each month from mail questionnaires by BLS, in cooperation with State agencies.

For more information, see: U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings, January 1991*, Vol. 38, No. 1, Washington, U.S. Government Printing Office, Jan. 1991.

Environmental Protection Agency

National Aerometric Surveillance Network

The Environmental Protection Agency (EPA), through extensive monitoring of activities conducted by Federal, State, and local air pollution control agencies, collects data on the six pollutants for which National Ambient Air Quality Standards have been set. These pollution control agencies submit data quarterly to EPA's National Aerometric Data Bank (NADB). There are about 3,400 total stations reporting. Data from some short-term or sporadic monitoring for such purposes as special studies and complaint investigations are usually not included in NADB because the data are not extensive enough to provide equitable comparisons with routine data from permanent monitoring sites.

For more information, see: Environmental Protection Agency, National Air Pollutant Emission Estimates, 1940–89, EPA-450/4-91-004, Research Triangle Park, N.C., Mar. 1991, or write to Office of Air Quality Planning and Standards, Environmental Protection Agency, Research Triangle Park, N.C. 27711.

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 forwarded on these questionnaires are supplemented, to the extent possible, by data taken from official national publications and by correspondence with the national statistical services. To insure comparability, rates, ratios, and percentages have been calculated in the Statistical Office of the United Nations.

Lack of international comparability between estimates arises from differences in concepts, definitions, and time of data collection. The comparability of population data is affected by several factors, including (1) the definitions of the total population, (2) the definitions used to classify the population into its urban and rural components, (3) difficulties relating to age reporting, (4) the extent of overor underenumeration, and (5) the 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.

For more information, see: United Nations, *Demographic Yearbook 1989*, Pub. No. ST/ESA/STAT/SER.R/17, United Nations, New York, N.Y., 1989.

World Health Statistics Annual

The World Health Organization (WHO) prepares the World Health Statistics Annual, an annual volume of information on vital statistics and causes of death designed for use by the medical and public health professions. Each volume is the result of a joint effort by the national health and statistical administrations of many countries, the United Nations, and WHO.

United Nations estimates of vital rates and population size and composition, where available, are reprinted directly in the *Statistics Annual*. For those countries for which the United Nations does not prepare demographic estimates, primarily smaller populations, the latest available data reported to the United Nations and based on reasonably complete coverage of events are used.

Information published on late fetal and infant mortality is based entirely on official national data either reported directly or made available to the World Health Organization.

Selected life table functions are calculated from the application of a uniform methodology to national mortality data provided to WHO, in order to enhance their value for international comparisons. The life table procedure used by WHO may often lead to discrepancies with national figures published by countries, due to differences in methodology or degree of age detail maintained in calculations.

The international comparability of estimates published in the World Health Statistics Annual is affected by the same problems discussed above for the Demographic Yearbook.

Cross-national differences in statistical definitions of vital events, in the completeness and accuracy of vital statistics data, and in the comparability of population data are the primary factors affecting comparability.

For more information, see: World Health Organization, World Health Statistics Annual 1990, World Health Organization, Geneva, Switzerland, 1990.

Alan Guttmacher Institute Abortion Survey

The Alan Guttmacher Institute (AGI) conducts an annual survey of abortion providers. Data are collected from hospitals, nonhospital clinics, and physicians identified as providers of abortion services. A universal survey of 3,092 hospitals, nonhospital clinics, and individual physicians was compiled. To assess the completeness of the provider and abortion counts, supplemental surveys were conducted of a sample of obstetriciangynecologists and a sample of hospitals (not in original universe) that were identified as providing abortion services through the AHA survey.

The number of abortions estimated by AGI is about 20 percent more than the number reported to the Centers for Disease Control.

For more information, write to: The Alan Guttmacher Institute, 111 5th Avenue, 11th Floor, New York, N.Y. 10003–1089.

American Association of Colleges of Osteopathic Medicine

The American Association of Colleges of Osteopathic Medicine compiles data on various aspects of osteopathic medical education for distribution to the profession, the government, and the public. Questionnaires are sent annually to all schools of osteopathic medicine requesting information on characteristics of applicants and students, curricula, faculty, grants, contracts, revenues, and expenditures. The response rate is 100 percent.

For more information, see: Annual Statistical Report, 1990, American Association of Colleges of Osteopathic Medicine, Rockville, Md., 1990.

American Dental Association

The Division of Educational Measurement of the American Dental Association conducts annual surveys of predoctoral dental educational institutions. The questionnaire, mailed to all dental schools, collects information on student characteristics, financial management, and curricula.

For more information, see: American Dental Association, Annual Report on Dental Education 1989/90. Chicago, Ill.

American Hospital Association

Annual Survey of Hospitals

Data from this survey are based on questionnaires that are sent to all hospitals in the United States and its associated areas accepted for registration by the American Hospital Association (AHA). In 1989, questionnaires were mailed to all hospitals on AHA files. Overall, 6,328 hospitals reported data, a response rate of 91 percent. For nonreporting hospitals and for the survey questionnaires of reporting hospitals on which some information was missing, estimates were made for all data except those on beds, bassinets, and facilities. Data for beds and bassinets of nonreporting hospitals were based on the most recent information available from those

hospitals. Facilities and services and inpatient service area data include only reporting hospitals and, therefore, do not include estimates.

Estimates of other types of missing data were based on data reported the previous year, if available. When unavailable, the estimates were based on data furnished by reporting hospitals similar in size, control, major service provided, length of stay, and geographic and demographic characteristics.

Hospitals are requested to report data for the full year ending September 30; 38.7 percent of the responding hospitals used this reporting period. In the 1989 survey, the remaining hospitals used various reporting periods.

For more information on the AHA Annual Survey of Hospitals, see: American Hospital Association, Hospital Statistics, 1990–91 Edition, Data from the American Hospital Association 1989 Annual Survey, Chicago, 1990.

American Medical Association

Physician Masterfile

A masterfile of physicians has been maintained by the American Medical Association (AMA) since 1906. Today, the Physician Masterfile contains data on almost every physician in the United States, both members and nonmembers of AMA, and on those graduates of American medical schools temporarily practicing overseas. The file also includes graduates of foreign medical schools who are in the United States and meet education standards for primary recognition as physicians.

Masterfile data are obtained from over 2,100 organizations and institutions. These data are collected and processed on an ongoing basis for the maintenance and updating of over 550,000 individual physician records.

A file is initiated on each individual upon entry into medical school or, in the case of foreign graduates, upon entry into the United States. A census of physicians is conducted every 4 years to update the file information on professional activities, specialization, and present employment status. Between censuses, AMA keeps the file current

by continuous checks of professional publications and State licensure notices for changes in any physician's activities. When a change is noted, the physician may be sent a questionnaire to verify the change.

For more information on the AMA Physician Masterfile, see: Division of Survey and Data Resources, American Medical Association, *Physician Characteristics and Distribution in the U.S.*, 1990 edition, Chicago, 1990.

Annual Census of Hospitals

From 1920 to 1953 the Council on Medical Education and Hospitals of the American Medical Association (AMA) conducted annual censuses of all hospitals registered by AMA.

In each annual census, questionnaires were sent to hospitals asking for the number of beds, bassinets, births, patients admitted, average census of patients, lists of staff doctors and interns, and other information of importance at the particular time. Response rates were always nearly 100 percent.

The community hospital data from 1940 and 1950 presented in this report were calculated using published figures from the AMA Annual Census of Hospitals. Although the hospital classification scheme used by AMA in published reports is not strictly comparable with the definition of community hospitals, methods were employed to achieve the greatest comparability possible.

For more information on the AMA Annual Census of Hospitals, see: American Medical Association, Hospital service in the United States, Journal of the American Medical Association, 116(11):1055-1144, 1941.

Association of American Medical Colleges

The 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 graduation 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: Association of American Medical Colleges Minority Students in Medical Education Facts and Figures V, June, 1989.

InterStudy

National Health Maintenance Organization Census

From 1976 to 1980 the Office of Health Maintenance Organizations conducted a census of health maintenance organizations (HMO). Since 1981, InterStudy has conducted the census. A questionnaire is sent to all HMO's in the United States asking for updated enrollment, profit status, and Federal qualification status. New HMO's are also asked to provide information on model type. When necessary, information is obtained, supplemented, or clarified by telephone. For nonresponding HMO's State-supplied information or the most current available data are used.

In 1985 a large increase in the number of HMO's and enrollment was partly attributable to a change in the categories of HMO's included in the census: Both Medicaid-only and Medicare-only HMO's have been added. Also component HMO's, which have their own discrete management, can be listed separately; whereas, previously the oldest HMO reported for all of its component or expansion sites, even when the components had different operational dates or were different model types.

For further information, see: InterStudy, National HMO Census: Annual Report on the Growth of HMO's in the U.S., 1982–1986 Editions; The InterStudy Edge, Spring 1987 and 1988 editions and 1989, 1990, volume 2. Excelsior, Minn., 1983–90.

National League for Nursing

The division of research of the National League for Nursing, conducts The Annual Survey of Schools of Nursing in October of each year. Questionnaires are sent to all graduate nursing programs (master's and doctoral), baccalaureate programs designed exclusively for RNs, basic RN programs (baccalaureate, associate degree, and diploma), and licensed practical nursing programs. A 100-percent response rate has been achieved for many years on questionnaire items on enrollments, first-time admissions, and graduates. Response rates of approximately 80 percent are achieved for other areas of inquiry.

For more information, see: National League for Nursing, Nursing Data Source 1990, N.Y.

Public Health Foundation

Association of State and Territorial Health Officials Reporting System

The Association of State and Territorial Health Officials (ASTHO) Reporting System, operated by the Public Health Foundation (PHF), is a statistical system that provides comprehensive information about the public health programs of State and local health departments. The Reporting System was established in 1970 by ASTHO in response to congressional requests for information about State health agency uses of block grant funds (that is, PHS Act, Section 314(d) grant monies). Data collected through the Reporting System are maintained in a comprehensive data base and are published in annual reports, chartbooks, and newsletters.

PHF, through the ASTHO Reporting System conducts an annual survey of the official State health agency (SHA) in each of the 50 States, the District of Columbia, and four U.S. territories. The survey includes extensive detail on the agencies' expenditures, funding sources, staffing, services, and activities.

Recently, PHF revised the ASTHO Reporting System's core data base to be outcome-oriented and focused on national health priorities. The new data base will provide the necessary data on States' efforts to meet the national objectives outlined by the Department of Health and Human Services in Healthy People 2000: National Health Promotion and Disease Prevention Objectives.

For more information, contact: Public Health Foundation, 1220 L Street, N.W., Suite 350, Washington, D.C. 20005.

Appendix II Glossary

General Terms

Social and Demographic Terms

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.

Age adjustment – Age adjustment, using the direct method, is the application of the age-specific rates in a population of interest to a standardized age distribution in order to eliminate the differences in observed rates that result from age differences in population composition. This adjustment is usually done when comparing two or more populations at one point in time or one population at two or more points in time.

In this report, the death rates are age adjusted to the U.S. population enumerated in 1940. Computations may be simplified by expressing the 1940 U.S. population on a per million basis (table I). 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 9 age groups, with under 1 and 1-4 years of age combined as one group and 75-84 and 85 years of age and over combined as one group. Second, cause-specific provisional death rates, which are based on 10 age groups

Table I. Standard million age distribution used to adjust death rates to the U.S. population in 1940

Age	Standard million
All ages	1,000,000
Under 1 year	15,343
1-4 years	64,718
5-14 years	170,355
15-24 years	181,677
25–34 years	162,066
35-44 years	139,237
45-54 years	117,811
55–64 years	80,294
65–74 years	48,426
75–84 years	17,303
85 years and over	2,770

Table II. Numbers of live births and mother's age groups used to adjust maternal mortality rates to live births in the United States in 1970

Mother's	s .	ag	<i>je</i>	,				Number
All ages					,			3,731,386
Under 20 years							٠.	656,460
20–24 years								1,418,874
25–29 years								994,904
30–34 years								427,806
35 years and over								233,342

with 1–4 and 5–14 years of age combined as one group. Maternal mortality rates for complications of pregnancy, childbirth, and the puerperium are calculated as the number of deaths per 100,000 live births. These rates are age adjusted to the live births in the United States in 1970 using the intervals for mother's age in table II.

The data from the National Health Interview Survey (NHIS), National Health Examination Survey (NHES), National Health and Nutrition Examination Survey (NHANES), National Ambulatory Medical Care Survey (NAMCS), and the National Hospital Discharge Survey (NHDS) are age adjusted to the 1970 civilian noninstitutionalized population. Most of the data from the NHIS, NAMCS, and NHDS are age adjusted using the following four age groups: under 15 years, 15-44 years, 45-64 years, and 65 years and over. The NHES and NHANES data are age adjusted using the following six age groups: 20-24 years, 25-34 years, 35-44 years, 45-54 years, 55-64 years, and 65-74 years. The 1970 civilian noninstitutionalized population used to age adjust data from each survey are shown in table III and derived as follows: Institutionalized population = (1 – proportion of total population not institutionalized on April 1, 1970) x total population on July 1, 1970. Civilian noninstitutionalized population = civilian population on July 1, 1970 – institutionalized population.

Average annual rate of change (percent change) — In this report, 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

Table III. Population and age groups used to adjust data to the U.S. civilian noninstitutionalized population in 1970: Selected surveys

Survey and age	Number in thousands
NHIS, NAMCS, and NHDS	Section of the section of
All ages	199,584
Under 15 years	57,745
15-44 years	81,189
45–64 years	41,537
65 years and over	19,113
NHIS health care coverage	
65 years and over	19,113
65–74 years	12,224
75 years and over	6,889
NHIS smoking data	
18 years and over	130,158
18–24 years	22,464
25–34 years	24,430
35-44 years	22,614
45-64 years	41,537
65 years and over	19,113
NHES and NHANES	
20-74 years	116,182
20-24 years	15,378
25–34 years	24,430
35–44 years	22,614
45-54 years	23,070
55-64 years	18,467
65–74 years	12,223

SOURCE: Calculated from U.S. Bureau of Census: Estimates of the Population of the United States by Age, Sex, and Race: 1970 to 1977. Population Estimates and Projections. *Current Population Reports*. Series P-25, No. 721, Washington. U.S. Government Printing Office, April 1978.

This geometric rate of change assumes that a variable increases or decreases at the same rate during each year between the two time periods.

Race—Beginning in 1976, the Federal Government's data systems classified individuals into the following racial groups: American Indian or Alaskan Native, Asian or Pacific Islander, black, and white.

Depending on the data source, the classification by race may be based on self-classification or on observation by an interviewer or other persons filling out the questionnaire. Starting in 1989, in the National Vital Statistics System, newborn infants are assigned the race of their mother. Before 1989, if the parents were of different races and one was white, the child was assigned the other parent's race. If either parent was Hawaiian, the child was classified as Hawaiian. In all other cases the child was assigned the father's race. Before 1964, the National Vital Statistics

System classified all births for which race was unknown as "white." Beginning in 1964 these births are classified according to information on the previous record. The National Health Interview Survey assigns children whose parents are of different races to the race of the mother.

Family income - For purposes of the National Health Interview Survey and 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. Family income, then, is the total income received by the members of a family (or by an unrelated individual) in the 12 months prior to interview, including wages, salaries, rents from property, interest, dividends, profits and fees from their own businesses, pensions, and help from relatives. Family income has generally been categorized into approximate quintiles in the tables.

Marital status – The population is classified through self-reporting into the categories married and unmarried. Married includes all married people including those separated from their spouses. Unmarried includes those who are single (never married), divorced, or widowed. The Abortion Surveillance Reports of the Centers for Disease Control classify separated people as unmarried for all States except Rhode Island.

Population – The U.S. Bureau of the Census collects and publishes data on several different types of population in the United States. Various statistical systems then use the appropriate population in calculating rates.

Total population 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 (for example, civilian Federal employees and dependents of members of the Armed Forces or other Federal employees) are not included.

Resident population is the population living in the United States. This includes members of the Armed Forces stationed in the United States and their families as well as foreigners working or studying here; it excludes foreign military, naval, and diplomatic personnel and their families located here and residing in embassies or similar quarters as well as Americans living abroad. The resident population is often the denominator when calculating birth and death rates and incidence of disease.

Civilian population is the resident population excluding members of the Armed Forces, however, families of members of the Armed Forces are included. This population is the denominator in rates calculated for the NCHS National Hospital Discharge Survey.

Civilian noninstitutionalized population is the civilian population not residing in institutions. Institutions include correctional institutions, detention homes, and training schools for juvenile delinquents; homes for the aged and dependent (for example, nursing homes and convalescent homes); homes for dependent and neglected children; homes and schools for the mentally or physically handicapped; homes for unwed mothers; psychiatric, tuberculosis, and chronic disease hospitals; and residential treatment centers. This population is the denominator in rates calculated for the National Center for Health Statistics' National Health Interview Survey, National Health and Nutrition Examination Survey, and National Ambulatory Medical Care Survey.

Poverty level – Poverty statistics are based on definitions 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 the poverty level. These thresholds are updated annually 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 \$12,675 in 1989 and \$12,091 in 1988.

Geographic Terms

Division and region – The 50 States and the District of Columbia are grouped for statistical purposes by the U.S. Bureau of the Census into 9 divisions within 4 regions. The groupings are as follows:

Northeast

New England
Maine, New Hampshire,
Vermont, Massachusetts,
Rhode Island, Connecticut
Middle Atlantic
New York, New Jersey,
Pennsylvania

Midwesť

East North Central
Ohio, Indiana, Illinois,
Michigan, Wisconsin
West North Central
Minnesota, Iowa, Missouri,
North Dakota, South Dakota,
Nebraska, Kansas

South

South Atlantic
Delaware, Maryland, District
of Columbia, Virginia, West
Virginia, North Carolina,
South Carolina, Georgia,
Florida

East South Central Kentucky, Tennessee, Alabama, Mississippi West South Central Arkansas, Louisiana, Oklahoma, Texas

West

Mountain
Montana, Idaho, Wyoming,
Colorado, New Mexico,
Arizona, Utah, Nevada
Pacific
Washington, Oregon,
California, Alaska, Hawaii

Registration area — The United States has separate registration areas for birth, death, marriage, and divorce statistics, which collect data annually from States whose registration data are at least 90-percent complete.

The death registration area was established in 1900 with 10 States and the District of Columbia, and the

birth registration area was established in 1915, also with 10 States and the District of Columbia. Both areas have covered the entire United States since 1933. Currently, Puerto Rico, the U.S. Virgin Islands, and Guam are also included, although in statistical tabulations they are not part of the U.S. total.

Reporting area – In the National Vital Statistics System, reporting requirements on birth certificates vary according to State. Thus, different numbers of States report various characteristics. For example, in 1986, the educational attainment of mother was reported in 47 States and the District of Columbia.

Metropolitan statistical area (MSA) – The definitions and titles of MSA's are established by the U.S. Office of Management and Budget with the advice of the Federal Committee on Metropolitan Statistical Areas. Generally speaking, an MSA consists of a county or group of counties containing at least one city (or twin cities) having a population of 50,000 or more plus adjacent counties that are metropolitan in character and are economically and socially integrated with the central city. In New England, towns and cities rather than counties are the units used in defining MSA's. There is no limit to the number of adjacent counties included in the MSA as long as they are integrated with the central city, nor is an MSA limited to a single State; boundaries may cross State lines. The metropolitan population in this report is based on MSA's as defined in the 1980 census and does not include any subsequent additions or changes.

Health Status and Determinants

Fertility

Abortion – The Centers for Disease Control's surveillance program counts legal abortions only. For surveillance purposes, legal abortion is defined as a procedure performed by a licensed physician or someone acting under the supervision of a licensed physician.

Birth rate—This measure divides the number of live births in a population in a given period by the resident population at the middle of that period. It is 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, or it may be related to the entire population.

Completed fertility rate — Sum of the central birth rates over all ages (14–49 years) of childbearing for a given birth cohort.

Gastation For

Gestation – For both the National Vital Statistics System and the Centers for Disease Control'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.

Live birth - In the World Health Organization's definition, also adopted by the United Nations and the National Center for Health Statistics, a live birth is the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of the pregnancy, which, after such separation, breathes or shows any other evidence of life such as heartbeat, umbilical cord pulsation, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached. Each product of such a birth is considered live born.

Live-birth order—In the National Vital Statistics System, this item from the birth certificate indicates the number of live births a woman has had, counting the birth being recorded.

Low birth weight — Before 1979 low birth weight was defined as 2,500 grams or less. Beginning in 1979, low birth weight is defined as less than 2,500 grams.

Mortality

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 utilizing the international rules for selecting the underlying cause of death from the reported conditions. For data years 1979–89 the International Classification of Diseases, Ninth Revision is used for coding. Earlier data used the then current revision of the International Classification of Diseases (tables IV and V).

Use of successive revisions for classification of diseases may introduce discontinuities in the comparability of cause-of-death statistics over time. For further discussion, see National Center for Health Statistics: Vital Statistics of the United States, 1987, Volume II, Mortality, Part A DHHS Pub. No. (PHS) 90–1101, Public Health Service, Washington, U.S. Government Printing Office, 1989.

Codes for HIV infection -Beginning with data for 1987, NCHS introduced category numbers *042-*044 for classifying and coding human immunodeficiency virus (HIV) infection, formerly referred to as human T-cell lymphotropic virus-III/lymphadenopathy-associated virus (HTLV-III/LAV) infection. The asterisk before the category numbers indicates that these codes are not part of the Ninth Revision of the International Classification of Diseases (ICD-9). For 1986 and previous years, deaths involving HIV infection were classified to Deficiency of cell-mediated immunity (ICD-9 No. 279.1), contained in the title All other diseases; to Pneumocystosis

Table IV. Revision of the *International Classification of Diseases*, according to year of conference by which adopted and years in use in United States

Revision of the International Classification of Diseases	Year of conference by which adopted	Years in use in United States
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-present

Table V. Cause-of-death codes, according to applicable revision of International Classification of Diseases

	Code numbers				
Cause of death	Sixth Revision	Seventh Revision	Eighth Revision	Ninth Revision	
Diseases of heart	400-402, 410-443	400-402, 410-443	390–398, 402, 404, 410–429	390–398, 402, 404–429	
Ischemic heart disease				410-414	
Cerebrovascular diseases	330-334	330-334	430-438	430-438	
Malignant neoplasms	140-205	140-205	140-209	140-208	
Respiratory system	160-164	160-164	160-163	160-165	
Colorectal	153-154	153-154	153-154	153, 154	
Breast	170	170	174	174, 175	
Prostate	177	177	185	185	
Chronic obstructive pulmonary diseases	241, 501, 502, 527.1	241, 501, 502, 527.1	490-493, 519.3	490-496	
Pneumonia and influenza	480-483, 490-493	480-483, 490-493	470-474, 480-486	480-487	
Chronic liver disease and cirrhosis	581	581	571	571	
Diabetes mellitus	260	260	250	250	
Nephritis, nephrotic syndrome, and	200	200	250	230	
nephrosis			- · · · ·	580-589	
Septicemia			***	038	
Atherosclerosis				440	
Accidents and adverse effects	E800-E962	E800~E962	E800-E949	E800-E949	
Motor vehicle accidents	E810-E835	E810-E835	E810-E823	E810-E825	
Suicide	E963, E970-E979	E963, E970-E979	E950-E959	E950-E959	
Homicide and legal intervention	E964, E980-E985	E964, E980-E985	E960-E978	E960-E978	
Complications of pregnancy, childbirth, and					
the puerperium	640-689	640-689	630-678	630-676	
Human immunodeficiency virus infection				*042-*044	
Drug-induced causes				292, 304, 305.2–305.9,	
Drug-modeed causes					
				E850-E858, E950.0-E950.5,	
Ale to the total and the same				E962.0, E980.0-E980.5	
Alcohol-induced causes				291, 303, 305.0, 357.5, 425.5,	
				535.3, 571.0–571.3, 790.3,	
Malignant neoplasm of peritoneum and				E860	
pleura			158, 163.0	158, 163	
Coalworkers' pneumoconiosis			515.1	500	
Asbestosis			515.2	501	
Silicosis			515.0	502	
OIIICOSIS		• • •	313.0	302	

(ICD-9 No. 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, beginning with 1987, cause-of-death data are not strictly comparable with data for earlier years.

Death rate—This measure is derived by dividing the number of deaths in a population in a given period by the resident population at the middle of that period. It is expressed as the number of deaths per 1,000 or 100,000 population. It may be restricted to deaths in specific age, race, sex, or geographic groups or it may be related to the entire population.

Cause-of-death ranking — Cause-of-death ranking is based on the List of 72 Selected Causes of Death and the category human immunodeficiency virus infection (*042–*044). The List of 72 Selected Causes of Death was adapted from one of the special lists for mortality tabulations recommended by the World Health Organization for use with the Ninth Revision of the International Classification of Diseases. Two group titles—major Health, United States, 1991

cardiovascular diseases and symptoms, signs, and ill-defined conditions - are not ranked. In addition, category titles that begin with the words "other" and "all other" are not ranked. The remaining category titles are ranked according to the number of deaths to determine the leading causes of death. When one of the titles that represents a subtotal is ranked (for example, accidents and adverse effects), its component parts (in this case, motor vehicle accidents and all other accidents and adverse effects) are not ranked.

Infant mortality—Infant mortality is the death of live-born children who have not reached their first birthday and is usually expressed as a rate (that is, the number of infant deaths during a year per 1,000 live births reported in the year).

International Classification of Diseases, Ninth Revision – The International Classification of Diseases (ICD) classifies mortality information for statistical purposes. ICD was first used in 1900 and has been revised about every 10 years since then. The Ninth Revision, published in 1977, is used to code U.S. mortality data beginning with data for 1979. The

clinical modification of the *Ninth Revision* is used to code U.S. morbidity data.

Both are arranged in 17 main chapters. Most of the diseases are arranged according to their principal anatomical site, with special chapters for infective and parasitic diseases; neoplasms; endocrine, metabolic, and nutritional diseases; mental diseases; complications of pregnancy and childbirth; certain diseases peculiar to the perinatal period; and ill-defined conditions. In addition, two supplemental classifications are provided: the classification of factors influencing health status and contact with health service and the classification of external causes of injury and poisoning.

Neonatal mortality rate — The neonatal mortality rate is the number of deaths under 28 days of age per 1,000 live births.

Postneonatal mortality rate – The postneonatal mortality rate is the number of deaths that occur from 28 days to 365 days after birth per 1,000 live births.

Fetal death rate—The fetal death rate is the number of fetal deaths with stated or presumed gestation of

20 weeks or more per 1,000 live births plus fetal deaths.

Late fetal death rate – The late fetal death rate is the number of fetal deaths with stated or presumed gestation of 28 weeks or more per 1,000 live births plus late fetal deaths.

Perinatal mortality rate—The perinatal mortality rate is the number of late fetal deaths plus infant deaths within 7 days of birth per 1,000 live births plus late fetal deaths.

Perinatal mortality ratio — The perinatal mortality ratio is the number of late fetal deaths plus infant deaths within 7 days of birth per 1,000 live births.

Feto-infant mortality rate — The feto-infant mortality rate is the number of fetal deaths with stated or presumed gestation of 28 weeks or more plus the number of infant deaths per 1,000 live births plus late fetal deaths.

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.

Years of potential life lost — Years of potential life lost are calculated over the age range from birth to 65 years. The number of deaths for each age group is multiplied by the years of life lost (the difference between 65 and the midpoint of the age group). For example, the death of a person age 15–24 years counts as 45 years of life lost. Then years of potential life lost are summed over all age groups. (Centers for Disease Control. MMWR. Dec. 19, 1986. Vol. 35, Supp. No. 2S.)

Determinants and Measures of Health

AIDS – Acquired immunodeficiency syndrome (AIDS) is an illness characterized by:

- One or more specified indicator diseases (listed in the complete case definition) and
- Either a positive test for human immunodeficiency virus (HIV) infection or absence of specified

causes of underlying immunodeficiency.

The AIDS case definition was changed in September 1987 to allow for the presumptive diagnosis of AIDS-associated diseases and conditions and to expand the spectrum of HIV-associated diseases reportable as AIDS. The list of expanded diseases includes HIV encephalopathy, HIV wasting syndrome, and others.

For more information, see: Centers for Disease Control. Revision of the CDC Surveillance Case definition for acquired immunodeficiency syndrome. *MMWR* 1987; 36 (suppl. no. 1S): 1S–15S.

Condition – A health condition is a departure from a state of physical or mental well-being. Conditions, except impairments, are coded according to the *International Classification of Diseases*, 9th Revision, Clinical Modification (ICD-9-CM).

Based on duration, there are two categories of conditions, acute and chronic. In the National Health Interview Survey, an acute condition is a condition that has lasted less than 3 months and has involved either a physician visit (medical attention) or restricted activity, and a chronic condition is any condition lasting 3 months or more or is one of certain conditions classified as chronic regardless of their time of onset. The National Nursing Home Survey uses a specific list of conditions classified as chronic, also disregarding time of onset.

Disability – Disability is any temporary or long-term reduction of a person's activity as a result of an acute or chronic condition. It is often measured in terms of the number of days that a person's activity has been reduced.

Disability day – The National Health Interview Survey identifies several types of days on which a person's usual activity is reduced because of illness or injury (reported for the 2-week period preceding the week of the interview). These short-term disability days are not mutually exclusive categories but are defined as follows:

A restricted-activity day is any day on which a person cuts down on his or her usual activities for more than one half day because of an illness or an injury.
Restricted-activity days are unduplicated counts of bed-disability, work-loss, and school-loss days as well as other days during which a person cuts down on his or her usual activities.

A bed-disability day is a day on which a person stays in bed for more than half of the daylight hours (or normal waking hours) because of a specific illness or injury. All hospital days are bed-disability days. Bed-disability days may also be work-loss or school-loss days.

A work-loss day is a day on which a person did not work at his or her job or business for at least half of his or her normal workday because of a specific illness or injury. The number of work-loss days is determined only for currently employed persons.

A school-loss day is a day on which a child did not attend school for at least half of his or her normal school day because of a specific illness or injury. School-loss days are determined only for children 5–17 years of age, beginning in 1982.

Incidence – Incidence is the number of cases of disease having their onset during a prescribed period of time and is often expressed as a rate (for example, the incidence of measles per 1,000 children 5–15 years of age during a year). Incidence is a measure of morbidity or other events that occur within a specified period of time.

Industry of employment — Industries are classified according to the Standard Industrial Classification (SIC) Manual of the Office of Management and Budget. Three editions of the SIC are used for coding of industry in this volume: the 1972 edition, the 1977 supplement to the 1972 edition and the 1987 edition. The changes between versions included a few detailed titles created to correct or clarify these industries or to recognize changes within the industry. Codes for major industrial divisions (table VI) were not changed between versions.

The category "Private sector" includes all industrial divisions except public administration and military. The category "Civilian sector"

Table VI. Codes for industries, according to the Standard Industrial Classification (SIC) Manual

Industry	Code numbers
Agriculture, forestry, and fishing	01–09
Mining	10–14
Construction.	15–17
Manufacturing.	20-39
Textile mill products	22
Apparel and other finished products made from fabrics	
and similar materials	23
Lumber and wood products, except furniture	24
Printing, publishing, and allied industries	27
Chemicals and allied products	28
Chemicals and allied products	30
Rubber and miscellaneous plastics products	32
Stone, clay, glass, and concrete products	33
Primary metal industries	00
	34
transportation equipment	04
•	35
equipment	00
	36
components, except computer equipment	37
Transportation equipment	31
Measuring, analyzing, and controlling instruments;	
photographic, medical and optical goods; watches and	
clocks	38
Miscellaneous manufacturing industries	39
Transportation, communication, and public utilities	40–49
Wholesale trade	50-51
Retail trade	52–59
Finance, insurance, and real estate	6067
Services	70–89
Public administration	91–97

includes "Private sector" and the public administration division. "Not classified" industry from death certificates includes establishments not elsewhere classified, inadequate information on the certificate to code the industry, or the following descriptions on the certificate; "housewife", "student", or "self-employed".

Limitation of activity—Each person identified by the National Health Interview Survey as having a chronic condition is classified according to the extent to which his or her activities are limited because of the condition as follows:

- Persons unable to carry on major activity
- Persons limited in the amount or kind of major activity performed
- Persons not limited in major activity but otherwise limited
- Persons not limited in activity

Major activity (or usual activity) – This is the principal activity of a person or of his or her age-sex group. For 1–5 years of age, it refers to ordinary play with other children; for 5–17 years of age, it refers to school attendance; for 18 years of age and over, it usually refers to a job, housework, or school attendance.

Notifiable disease – A notifiable disease is one that health providers

are required, usually by law, to report to State or local public health officials when diagnosed. Notifiable diseases are those of public interest by reason of their contagiousness, severity, or frequency.

Particulate matter—Particulate matter is defined as particles of solid or liquid matter in the air, including both nontoxic materials (soot, dust, and dirt) and toxic materials (lead, asbestos, suspended sulfates and nitrates, etc.).

Pollutant – A pollutant is any substance that renders the atmosphere or water foul or noxious to health.

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 (for example, the prevalence of diabetes per 1,000 persons during a year).

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 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.

Utilization and Resources

Ambulatory Care

Dental visit — The National Health Interview Survey counts visits to a dentist's office for treatment or advice, including services by a technician or hygienist acting under the dentist's supervision, as dental visits. Services provided to hospital inpatients are not included.

Office – In the National Health Interview Survey, an office refers to the office of any physician in private practice, including physicians connected with prepaid group practices. In the National Ambulatory Medical Care Survey, an office is any location for a physician's ambulatory practice other than hospitals, nursing homes, other extended care facilities, patients' homes, industrial clinics, college clinics, and family planning clinics. However, private offices in hospitals are included.

Physician contact—The National Health Interview Survey counts as a physician contact, a visit in person or by telephone to a doctor of medicine or doctor of osteopathy for the purpose of examination, diagnosis, treatment, or advice. The service may be provided directly by the physician or by a nurse or other person acting under the physician's supervision. Contacts involving services provided on a mass basis are not included nor are contacts for hospital inpatients.

Physician contacts are generally classified by the type of place of contact. In the National Health Interview Survey, this includes the office, hospital outpatient clinic or emergency room, telephone (advice given by a physician in a telephone call), home (any place in which a person was staying at the time a physician was called there), as well as other places.

In the National Ambulatory Medical Care Survey, 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.

Inpatient Care

Average daily census or average daily patients—This refers to the average number of inpatients receiving care each day during a reporting period, excluding newborns.

Average length of stay – In the National Hospital Discharge Survey, the average length of stay is the total number of patient days accumulated at the time of discharge, counting the date of admission but not the date of discharge by patients discharged during a reporting period, divided by the number of patients discharged.

As measured in the National Nursing Home Survey, *length of stay* for residents is the time from their admission until the reporting time, and the *length of stay for discharges* is the time between the date of admission and the date of discharge.

Bed – Any bed that is set up and staffed for use for inpatients is counted as a bed in a facility. In the National Master Facility Inventory, the count is of beds at the end of the reporting period; for the American Hospital Association, it is of the average number of beds during the entire period. 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.

Day—According to the American Hospital Association and National Master Facility Inventory, days or inpatient days are the number of adult and pediatric days of care rendered during a reporting period. Days of care for newborns are excluded.

In the National Health Interview Survey, hospital days during the year refer to the total number of hospital days occurring in the 12-month period prior to the interview week. A hospital day is a night spent in the hospital for persons admitted as inpatients to a hospital.

In the National Hospital Discharge Survey, days of care refer

to the total number of patient days accumulated by patients at the time of discharge from non-Federal 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. A patient is a person who is formally admitted to the inpatient service of the hospital for observation, care, diagnosis, or treatment.

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, excepting the period of stay of a well newborn infant.

According to the National Hospital Discharge Survey, American Hospital Association, and National Master Facility Inventory, this is the formal release of an inpatient by a hospital, that is, the termination of a period of hospitalization (including stays of 0 nights) by death or by disposition to a place of residence, nursing home, or another hospital. In this report, newborn infants are excluded.

In the National Nursing Home Survey, this is the formal release of a resident by a nursing home.

First-listed diagnosis – In the National Hospital Discharge Survey, this is the diagnosis listed first on the face sheet of the medical record.

Hospital – According to the American Hospital Association (AHA) and National Master Facility Inventory (NMFI), hospitals are institutions licensed as hospitals whose primary function is to provide diagnostic and therapeutic patient services for medical conditions and that have at least six beds, an organized physician staff, and continuous nursing services under the supervision of registered nurses. AHA data differ slightly from those of NMFI, because data from NMFI reflect osteopathic hospitals as well as hospitals not registered with AHA. Non-AHA hospitals comprise 5–10 percent of all hospitals in the country. The World Health Organization (WHO) considers an establishment a hospital if it is permanently staffed by at least one physician, can offer inpatient accommodation, and can provide active medical and nursing

Hospitals may be classified by type of service, ownership, and length of stay.

General hospitals provide both diagnostic and treatment services for patients with a variety of medical conditions, both surgical and nonsurgical. According to the WHO, these hospitals provide medical and nursing care for more than one category of medical discipline (for example, general medicine, specialized medicine, general surgery, specialized surgery, and obstetrics); excluded are hospitals, usually ones in rural areas, that provide a more limited range of care.

Psychiatric hospitals are ones whose major type of service is psychiatric care. (See Psychiatric Care section.)

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.

Federal hospitals are operated by the Federal Government.

Non-Federal government

hospitals are operated by State or local governments.

Nonprofit hospitals are operated by a church or other nonprofit organization.

Proprietary hospitals are operated for profit by individuals, partnerships, or corporations.

Community hospitals include all non-Federal short-stay hospitals classified by the American Hospital Association according to one of the following services: general medical and surgical; obstetrics and gynecology; eye, ear, nose, and throat; rehabilitation; orthopedic; other specialty; children's general; children's eye, ear, nose, and throat; children's rehabilitation; children's orthopedic; and children's other specialty.

Short-stay hospitals in the National Hospital Discharge Survey are those in which the average length of stay is less than 30 days. The American Hospital Association and National Master Facility Inventory define short-term hospitals as hospitals in which more than half the patients

Table VII. Codes for diagnostic categories from the International Classification of Diseases, 9th Revision, Clinical Modification

Diagnostic category	Code numbers
Females with delivery	V27
Human immunodeficiency virus (HIV)	042-044, 279.19, 795.8
Malignant neoplasms	140-208, 230-234
Benign neoplasms	210-229, 235-239
Diabetes	250
Psychoses	290-299
Alcohol dependence syndrome	303
Eye diseases and conditions	360-379
Otitis media and eustachian tube disorders	381–382
Diseases of heart	391-392.0, 393-398, 402, 404, 410-416
	420-429
Cerebrovascular diseases	430-438
Acute respiratory infection	460-466
Chronic disease of tonsils and adenoids	474
Pneumonia, all forms	480-486
Bronchitis, emphysema, and asthma	490-493
Inguinal hernia	550
Noninfectious enteritis and colitis	555-556, 558
Cholelithiasis	574
Hyperplasia of prostate	600
Inflammatory disease of female pelvic organs	614-616
Disorders of menstruation	626
Pregnancy with abortive outcome	630-639
Intervertebral disc disorders	722
Congenital anomalies	740-759
Fracture, all sites	800-829
Lacerations and open wounds	870-904

are admitted to units with an average length of stay of less than 30 days and long-term hospitals as ones in which more than half the patients are admitted to units with an average length of stay of 30 days or more. 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.

Registered hospitals are hospitals registered with the American Hospital Association. About 98 percent of hospitals are registered.

International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)—The ICD-9-CM is based on and is completely compatible with the International Classification of Diseases, Ninth Revision. The Ninth Revision is used to code mortality data (Mortality section), and ICD-9-CM is used to code morbidity data.

Diagnostic groupings and code number inclusions are shown in table VII; surgical groupings and code number inclusions are shown in table VIII; and diagnostic and other nonsurgical procedure groupings and code number inclusions are shown in table IX. Nursing care – Nursing care is the provision of any of the following services: application of dressings or bandages; bowel and bladder retraining; catheterization; enema; full bed bath; hypodermic,

intramuscular, or intravenous injection; irrigation; nasal feeding; oxygen therapy; and temperature-pulse-respiration or blood pressure measurement.

Nursing home — A nursing home is an establishment with three or more beds that provides nursing or personal care to the aged, infirm, or chronically ill. Definitions of nursing home types apply to data collected through 1977.

Nursing care homes must employ one or more full-time registered or licensed practical nurses and must provide nursing care to at least half the residents.

Personal care homes with nursing have some but fewer than half the residents receiving nursing care. In addition, such homes must employ one or more registered or licensed practical nurses or must provide administration of medications and treatments in accordance with physicians' orders, supervision of self-administered medications, or three or more personal services.

Personal care homes without nursing have no residents

Table VIII. Codes for surgical categories from the International Classification of Diseases, 9th Revision, Clinical Modification

Surgical category	Code numbers
Extraction of lens. Insertion of prosthetic lens (pseudophakos) Myringotomy Tonsillectomy, with or without adenoidectomy. Adenoidectomy without tonsillectomy. Direct heart revascularization (coronary bypass) Cardiac catheterization Pacemaker insertion or replacement.	13.1-13.6 13.7 20.0 28.2-28.3 28.6 36.1 37.21-37.23 37.7-37.8 42.24, 44.14, 44.15, 45.14, 45.15, 45.25, 45.27, 48.24, 48.26, 49.22, 49.23, 50.11, 50.12, 51.12, 51.14, 52.11, 52.12, 52.14,
Biopsies on the digestive system (Beginning in 1989). Appendectomy, excluding incidental. Cholecystectomy. Repair of inguinal hernia. Prostatectomy. Circumcision. Oophorectomy and salpingo-oophorectomy. Bilateral destruction or occlusion of fallopian tubes. Hysterectomy. Diagnostic dilation and curettage of uterus. Procedures to assist delivery (Prior to 1989).	54.22, 54.24 47.0 51.2 53.0-53.1 60.2-60.6 64.0 65.3-65.6 66.2-66.3 68.3-68.7 69.09 72-73
(Beginning in 1989) Cesarean section Repair of current obstetrical laceration Reduction of fracture (excluding skull, nose, and jaw) Excision or destruction of intervertebral disc and spinal fusion Excision of semilunar cartilage of knee Arthroplasty and replacement of hip (Prior to 1989) (Beginning in 1990) Operations on muscles, tendons, fascia, and bursa Biopsies on the integumentary system (breast, skin, and	72, 73.0–73.3, 73.6–73.8, 73.93–73.99 74.0–74.2, 74.4, 74.99 75.5–75.6 76.70, 76.78–76.79, 79.0–79.6 80.5, 81.0 80.6 81.5–81.6 81.40, 81.51–81.53 82–83.1, 83.3–83.9
subcutaneous tissue) Debridement of wound, infection, or burn	85.11–85.12, 86.11 86.22, 86.28

Table IX. Codes for diagnostic and other nonsurgical procedure categories from the International Classification of Diseases, 9th Revision, Clinical Modification

Procedure category	Code numbers
Spinal tap	03.31
Endoscopy of small intestine without biopsy	45.11-45.13
Endoscopy of large intestine without biopsy	45.21-45.24
Laparoscopy (excluding that for ligation and division of	
fallopian tubes)	54.21
Cystoscopy	57.31-57.32
Arthroscopy of knee	80.26
Computerized axial tomography (CAT scan)	87.03, 87.41, 87.71, 88.01, 88.38
Contrast myelogram	87.21
Billiary tract x ray	87.5
Arteriography using contrast material	88.4
Angiocardiography using contrast material	88.5
Diagnostic ultrasound	88.7
Electroencephalogram	89.14
Radioisotope scan	92.0–92.1
Application of cast or splint	93.51, 93.53–93.54

receiving nursing care. These homes provide administration of medications and treatments in accordance with physicians' orders, supervision of self-administered medications, or three or more personal services. Domiciliary care homes primarily provide supervisory care but also provide one or two personal services.

Certification of nursing homes – Facilities are certified by the Medicare and/or Medicaid program. Definitions of certification levels apply to data collected through 1985.

Skilled nursing facilities
provide the most intensive
nursing care available outside of
a hospital. 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 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 facilities are not certified as providers of care by Medicare or Medicaid.

Occupancy rate – The National Master Facility Inventory and American Hospital Association define hospital occupancy rate as the average daily census divided by the number of hospital beds during a reporting period. The occupancy rate for other facilities is calculated as the number of residents reported at the time of the interview divided by the number of beds reported.

Outpatient visit — According to the American Hospital Association, these are visits by patients not lodged in the hospital for medical, dental, or other services. (See Ambulatory Care section.)

Procedure – The National Hospital Discharge Survey (NHDS) defines a procedure as a surgical or nonsurgical operation, diagnostic procedure, or special treatment assigned by the physician to the medical record of patients discharged from the inpatient service of short-stay hospitals. In NHDS all terms listed on the face sheet of the medical record under captions such as "operation," "operative procedures," and "operations and/or special treatments" are transcribed in the

order listed. A maximum of four-4 digit codes are assigned per sample discharge according to ICD-9-CM and NHDS directives.

Diagnostic and other non-surgical procedures — These are procedures generally not considered to be surgery including diagnostic endoscopy and radiography, radiotherapy and related therapies, physical medicine and rehabilitiation, and other nonsurgical procedures. In 1989, the list of nonsurgical procedures was revised to include selected procedures previously classified as surgical procedures. For further discussion, see National Center for Health Statistics: National Hospital Discharge Survey: Annual Summary, 1989.

Surgical operations — These are all procedures except those listed under "nonsurgical procedures". In 1989, the list of surgical operations was revised, and certain procedures previously classified as surgical are now classified as nonsurgical.

Resident – In the National Nursing Home Survey, a resident is a person who has been formally admitted to but not discharged from an establishment.

Psychiatric Care

The definitions for psychiatric care are those used by the National Institute of Mental Health.

Admission – An individual is classified as an admission to a psychiatric organization by being a new admission, a readmission, a return from leave, or a transfer from another service of the same organization or another organization.

Inpatient care episodes—Episodes are defined as the number of residents in inpatient organizations at the beginning of the year, plus the

Table X. Mental Illness codes, according to applicable revision of the Diagnostic and Statistical Manual of Mental Disorders and International Classification of Diseases

Diagnostic category	DSM-II/ICDA-8	DSM-III/ICD-9-CM
Alcohol related. Drug related. Organic disorders (other than alcoholism and drug) Affective disorders Schizophrenia	291; 303; 309.13 294.3; 304; 309.14 290; 292; 293; 294 (except 294.3); 309.0; 309.2–309.9 296; 298.0; 300.4 295	291; 303; 305.0 292; 304; 305.1–305.9; 327; 328 290; 293; 294; 310 296; 298.0; 300.4; 301.11; 301.13 295; 299

total additions to these organizations during the year. Total additions during the year include new admissions and readmissions. In counting admissions rather than persons, the same individual may be counted more than once. First, if the same person is admitted more than once to a particular organization during the year, that person is counted as many times as admitted. Second, if the same person is admitted to two or more different organizations during the year, that person is counted as an admission for each organization.

Mental disorder - A mental disorder is any of several disorders listed in the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) or Diagnostic and Statistical Manual of Mental Disorders, Third Edition (DSM-III). Table IX shows diagnostic categories and code numbers for ICD-9-CM/DSM-III and corresponding codes for the International Classification of Diseases, Adapted for Use in the United States, 8th Revision (ICDA-8) and Diagnostic and Statistical Manual of Mental Disorders, Second Edition (DSM-II).

Mental health organization - A mental health organization is an administratively distinct public or private agency or institution whose primary concern is the provision of direct mental health services to the mentally ill or emotionally disturbed. Organizations include State and county and private psychiatric hospitals, psychiatric services of general hospitals, residential treatment centers for emotionally disturbed children, federally funded community mental health centers (before 1983), freestanding outpatient psychiatric clinics and partial care organizations, and multiservice mental health organizations. *

Psychiatric hospitals are hospitals primarily concerned with providing inpatient care and treatment for the mentally ill. Psychiatric inpatient units of Veterans Administration general hospitals and Veterans Administration neuropsychiatric hospitals are combined into the category Veterans Administration psychiatric hospitals because of their similarity in size, operation, and length of stay. Other

psychiatric hospitals include State and county mental hospitals and private mental hospitals.

General hospitals providing separate psychiatric services are general hospitals that provide psychiatric services in either a separate psychiatric inpatient, outpatient, or partial hospitalization service with assigned staff and space.

Residential treatment centers for emotionally disturbed children must meet all of the following criteria: (a) not licensed as a psychiatric hospital, and primary purpose is to provide individually planned mental health treatment services in conjunction with residential care; (b) has a clinical program that is directed by a psychiatrist, psychologist, social worker, or psychiatric nurse with a graduate degree; (c) serves children and youth primarily under the age of 18; and (d) the primary reason for the majority of admissions is mental illness classified by DMS-II/ICDA-8 or DSM-III/ICD-9-CM codes, other than mental retardation, developmental disability, and substance-related disorders.

Freestanding psychiatric outpatient clinics provide only ambulatory mental health services on either a regular or emergency basis. The medical responsibility for services is generally assumed by a psychiatrist.

Multiservice mental health organizations directly provide two or more of the program elements defined under service type and are not classifiable as a psychiatric or general hospital or as a residential treatment center for emotionally disturbed children. (The classification of a psychiatric or general hospital or a residential treatment center for emotionally disturbed children takes precedence over a multiservice classification, even if two or more services are offered.)

Service type – Service type refers to the kinds of mental health services available: inpatient care, residential treatment care, outpatient care, and partial care.

Inpatient care is the provision of 24-hour mental health care in a mental health hospital setting.

Residential treatment care is the provision of overnight mental health care in conjunction with an intensive treatment program in a setting other than a hospital. For example, residential treatment centers for emotionally disturbed children, as well as residential treatment centers for mentally ill adults are included.

Outpatient care is the provision of ambulatory mental health services for less than 3 hours at a single visit, on an individual, group, or family basis, usually in a clinic or similar organization. Emergency care on a walk-in basis, as well as care provided by mobile teams who visit patients outside these organizations are included, while all "Hotline" services are excluded.

Partial care treatment is a planned program of mental health treatment services generally provided in visits of 3 or more hours to groups of patients. Included are: treatment programs which emphasize intensive short-term therapy and rehabilitation; programs that focus on recreation, and/or occupational program activities, including sheltered workshops; education and training programs including special education classes, therapeutic nursery schools, and vocational training.

Personnel

Full-time equivalent employee (FTE) — The American Hospital Association and National Master Facility Inventory use an estimate of full-time equivalent employees that counts two part-time employees as one full-time employee, a full-time employee being someone working 35 hours or more a week. The National Nursing Home Survey uses an estimate of full-time employees that counts 35 hours of part-time employees' work per week as equivalent to one full-time employee.

The National Institute of Mental Health calculates full-time equivalent employees by counting the total hours worked by all full-time employees, part-time employees, and trainees in each staff discipline in 1 week, divided by 40, to indicate the number of person weeks.

Physician – Physicians are licensed doctors of medicine or osteopathy classified by the American Medical Association and others through self reporting as follows:

Active physicians or professionally active physicians are ones currently practicing, regardless of the number of hours worked per week. Federal physicians are employed by the Federal Government; non-Federal or civilian physicians are not.

Office-based physicians are physicians who spend the plurality of their time working in practices based in private offices; hospital-based physicians spend the plurality of their time as salaried physicians in hospitals.

Data for physicians are presented by type of education (doctors of medicine, doctors of osteopathy), place of education (U.S. medical graduates, foreign medical graduates), activity status (professionally active, inactive), employment setting (Federal, non-Federal), and area of specialty and geographic area.

Physician specialty—A physician specialty is any specific branch of medicine in which a physician may concentrate. The specialty classification used by the Bureau of Health Professions and National Ambulatory Medical Care Survey (NAMCS) follows these American Medical Association categories:

Primary care specialties include general practice (or family practice), internal medicine, and pediatrics.

Medical specialties include, along with internal medicine and pediatrics, the areas of allergy, cardiovascular disease, dermatology, gastroenterology, pediatric allergy and cardiology, and pulmonary diseases.

Surgical specialties include general surgery, neurological surgery, obstetrics and gynecology, ophthalmology, orthopedic surgery, otolaryngology, plastic surgery, colon and rectal surgery, thoracic surgery, and urology.

Other specialties covered by NAMCS are geriatrics, neurology, preventive medicine, psychiatry, and public health. Other

specialties covered by the Bureau of Health Professions are aerospace medicine, anesthesiology, child psychiatry, neurology, occupational medicine, pathology, physical medicine and rehabilitation, psychiatry, public health, and radiology.

Registered nursing education—Registered nursing data are shown by level of educational preparation, (baccalaureate education requires at least four years in a college or university setting, associate degree programs are based in community colleges and are usually two years in length, and diploma programs are based in hospitals and are usually three years in length).

Health Expenditures

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 the CPI shows trends in medical care prices based on specific indicators of hospital, medical, dental, and drug prices.

A revision of the CPI has been in use since January 1988, and changes are noted where applicable in this report.

Gross national product (GNP) and gross domestic product (GDP)—These are two broadly comparable measures of a nation's total output of goods and services. GNP represents the value of all goods and services produced for sale by the nation plus the estimated value of certain imputed outputs (i.e., goods and services that are neither bought nor sold). The GNP is the sum of: (1) consumption expenditures by both individuals and nonprofit organizations plus certain imputed values; (2) business investment in equipment, inventories, and new construction; (3) Federal, State, and local government purchases of goods and services; and (4) the sale of goods and services abroad minus purchases from abroad. GDP equals GNP plus an adjustment (typically small) for the value of productive services performed domestically by

foreign subjects minus the value of productive services performed abroad by nationals.

Health maintenance organization (HMO)—A prepaid health plan delivering comprehensive care to members through designated providers, having a fixed monthly payment for health care services, and requiring members to be in plan for a specified period of time (usually 1 year). HMO model types are:

Group—An HMO that delivers health services through a physician group that is controlled by the HMO unit or an HMO that contracts with one or more independent group practices to provide health services.

Individual Practice Association (IPA)—An HMO that contracts directly with physicians in independent practice, and/or contracts with one or more associations of physicians in independent practice, and/or contracts with one or more multispecialty group practices (but the plan is predominantly organized around solo-single specialty practices).

Mixed—An HMO that combines features of both group and IPA.

These definitions differ somewhat from those used by the Office of Health Maintenance Organizations for Federal designation.

Medicaid – This program is State operated and administered but has federal financial participation. Within certain broad federally-determined guidelines, States decide: who is eligible; the amount, duration, and scope of services covered; rates of payment for providers; and methods of administering the program. It provides health care services for certain low-income persons. Medicaid does not provide health services to all poor people in any State. It categorically covers participants in the Aid to Families with Dependent Children program and in the Supplemental Security Income program, as well as certain other people deemed to be medically needy in most States. The program was authorized in 1965 by title XIX of the Social Security Act.

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, 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. It consists of two separate but coordinated programs: hospital insurance (Part A) and supplementary medical insurance (Part B).

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 (for example, out-of-pocket payments, private health insurance, and government programs) and by type of expenditures (for example, hospital care, physician services, and drugs). Data are compiled from a variety of sources.

Health services and supplies expenditures are outlays for goods and services relating directly to patient care plus expenses for administering health insurance programs and for government public health activities. This category is equivalent to total national health expenditures minus expenditures for research and construction.

Personal health care expenditures—These are outlays for goods and services relating directly to patient care. The expenditures in this category are total national heatlh expenditures minus expenditures for research and construction, expenses for administering health insurance programs, and government public health activities.

Private expenditures 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 are outlays for services provided or paid for by Federal, State, and local government agencies or expenditures required by governmental mandate (such as workmen's compensation insurance payments).

Nursing home expenditures — These expenditures cover care rendered in skilled nursing and intermediate care facilities, including those for the mentally retarded. 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, expenses for administering health insurance programs, and government-public health activities.

State health agency (SHA)—The agency or department headed by the State or territorial health official. Generally, the SHA is responsible for setting State-wide public health priorities, carrying out national and State mandates, responding to public health hazards, and assuring access to health care for underserved State residents.

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health care	130	Cigarette smoking	62–65	Years of potential life lost	32

Health, United States, 1991 and Prevention Profile tables available on diskette



The 143 detailed tables from *Health, United States, 1991* and 32 tables from *Prevention Profile* are available on diskette from the Government Printing Office (GPO) for use with IBM-compatible personal computers. The tables are in Lotus 1-2-3 worksheet files. Lotus 1-2-3 version 2 or higher, or any program that can read WK1 files (e.g., Lotus Symphony and Microsoft Excel) is required to use these spreadsheets. The files have been compressed. To install these tables on your computer requires a minimum of 70 kilobytes of free memory, PC-DOS or MS-DOS version 2.0 or higher, and approximately 2 megabytes of hard disk space. Directions for decompressing and copying the tables to your hard disk will be provided with the diskette(s).

To order the tables on diskette, call GPO's electronic media order desk, (202) 512-2235. The tables are available in the following formats:

- 3.5" high-density diskette, cost: \$21.00
- 5.25" two double-density diskettes, cost for set of two: \$26.00
- 5.25" high-density diskette, cost: \$15.00

A guide to the tables, in spreadsheet format, is included on the diskette(s).

Questions about the diskette(s) or their contents should be directed to:

National Center for Health Statistics Scientific and Technical Information Branch 6525 Belcrest Road Hyattsville, MD 20782 Telephone (301) 436-8500

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