

# Healthy People 2000 Review 1992

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**U.S. Department of Health and Human Services**

Donna E. Shalala  
Secretary

**Public Health Service**

Philip R. Lee, M.D.  
Assistant Secretary for Health

**Centers for Disease Control and Prevention (CDC)**

Walter R. Dowdle, Ph.D.  
Acting Director

**National Center for Health Statistics**

Manning Feinleib, M.D., Dr. P.H.  
Director

# Preface

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The *Healthy People 2000 Review, 1992*, first in a series of profiles tracking the year 2000 objectives, is submitted by the Secretary 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. This report was compiled by the National Center for Health Statistics, Centers for Disease Control and Prevention (CDC). The National Committee on Vital and Health Statistics, the Office of Disease Prevention and Health Promotion, and lead agencies for the year 2000 objectives served in a review capacity.

*Healthy People 2000 Review* begins a series of annual profiles of the Nation's health as an integral part of the Department's disease prevention and health promotion initiative for the year 2000. This initiative was unveiled in September 1990 by the Secretary of the U.S. Department of Health and Human Services with the release of *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*. *Healthy People 2000 Review* continues the work of its predecessor, *Prevention Profile*, which monitored progress toward the 1990 goals and objectives. In this first year, the report provides tracking data, if available, for objectives and subobjectives in all priority areas. The year 2000 objectives will be tracked annually throughout the decade in this publication.

## Acknowledgments

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Overall responsibility for planning and coordinating the content of this volume rested with the *Healthy People 2000* staff, National Center for Health Statistics, under the general direction of Mary Anne Freedman.

The *Healthy People 2000 Review* was prepared by Kathleen M. Turczyn, with assistance from Susan E. Schober, Fred Seitz, Susan Hawk, and Christine M. Plepys under the guidance of Richard J. Klein and Mary Anne Freedman. Cheryl V. Rose, Christine M. Plepys, Mitchell B. Pierre, Jr., Ildy I. Shannon, Patricia A. Knapp, and Jean Williams provided computer programming assistance, and Gail R. Jones and Cheryl V. Rose provided statistical and graphic assistance.

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Publication of *Healthy People 2000 Review* would not have been possible without the contributions of many staff members throughout the National Center for Health Statistics and numerous other agencies. These people gave generously of their time and knowledge, providing data from their surveys and programs; their cooperation and assistance are gratefully acknowledged.

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## Symbols

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

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# Introduction

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## Background and Summary

*Healthy People 2000: National Health Promotion and Disease Prevention Objectives* (1) is a statement of national opportunities. This prevention initiative presents a national strategy for significantly improving the health of the American people in the decade preceding the year 2000. *Healthy People 2000* recognizes that lifestyle and environmental factors are major determinants in disease prevention and health promotion. It provides strategies to significantly reduce preventable death and disability, to enhance quality of life, and to reduce disparities in health status between various population groups within our society.

*Healthy People 2000* defines three broad goals: to increase the span of healthy life for Americans; to reduce health disparities among Americans; and to achieve access to preventive services for all Americans. These goals are supported by 300 specific objectives that set priorities for public health during the 1990's. Subobjectives for minorities and other special populations were also established to meet the unique needs and health problems of these populations. *Healthy People 2000* uses the three approaches of health promotion, health protection, and preventive services as organizing categories for 22 priority areas. For each of these priority areas, a U.S. Public Health Service agency was designated to develop an implementation plan and to coordinate activities directed toward attaining the objectives (see table A).

Work on the report began in 1987 with the establishment of a consortium that has grown to include over 300 national membership organizations and all the State health departments. The *Healthy People 2000* Consortium, facilitated by the Institute of Medicine of the National Academy of Sciences, helped the U.S. Public Health Service convene eight regional hearings at which over 750 individuals and organizations presented testimony. This testimony became the primary resource material for the working groups of professionals who crafted the health objectives. After further extensive public review and comment from more than 10,000 people, the objectives were refined, revised, and published as *Healthy People 2000*.

The first national health promotion and disease prevention objectives were set in 1979, to be achieved by 1990 (2). During the 1980's, progress toward the 1990 objectives was tracked in five *Prevention Profiles* (3) and in *The 1990 Health Objectives for the Nation: A Midcourse Review* (4). The *Healthy People 2000* Review will monitor the progress of the Nation's health promotion and disease prevention objectives for the year 2000 throughout this decade.

The Reviews will be published annually. *Healthy People 2000 Review, 1992* presents an overview of the current status of progress toward all of the year 2000 objectives. The Public Health Service reviews progress toward the year 2000 objectives periodically. Summaries of these reviews are published in *Public Health Service Progress Reports on Healthy People 2000* (5). This report contains the most recent national data available and supercedes data published in *Healthy People 2000*, progress review reports, and all other earlier publications containing national data on the year 2000 objectives.

There are 300 unduplicated main objectives. Some priority areas share identical objectives; there are 332 objectives counting the duplicates. Special targets were set for higher-risk population groups. These population groups include people with low incomes, people who are members of some racial and ethnic minority groups, and people with disabilities (1). There are 223 special population

targets excluding duplicates; with duplicates there are 284. Thus, without duplicates there are a total of 520 health promotion and disease prevention objectives and subobjectives for the year 2000; 616 with duplicates.

This summary of progress incorporates all priority area objectives and is therefore a duplicated count (i.e., 332 objectives). At this early point in the decade, three percent of objectives have already been met. Progress toward the targets has been made on another 28 percent of the objectives. Fifteen percent of the objectives show movement away from the targets. Data for four percent of the objectives show mixed results (these objectives have more than one data point to measure and have shown progress for some and movement away from the targets for others), and three percent have updates but show no change. Ten percent of the objectives have new baselines where baselines did not originally exist. Twenty-eight percent have no new data with which to evaluate progress. Baselines have yet to be obtained for ten percent of objectives. Data sources have been identified for all but one *Healthy People 2000* objective, which is listed in two priority areas.

Priority areas (PA's) showing the most progress are Heart Disease and Stroke (PA 15) with 9 of 17 objectives showing progress; Unintentional Injuries (PA 9) with 11 of 22 objectives showing progress including three objectives that have met or exceeded their targets; and Alcohol and Other Drugs (PA 4) with progress for 9 of 19 objectives including one objective that has exceeded its target.

Priority areas with the most objectives showing movement away from the targets are Maternal and Infant Health (PA 14) with five of 16 objectives in this category, and Diabetes and Chronic Disabling Conditions (PA 17) with six of 20 objectives in this category.

Ninety-two objectives have had no new data since the baseline published in *Healthy People 2000*. The priority areas with over half of their objectives in this category are Family Planning (PA 5) with six of 11 objectives, and Oral Health (PA 13) with 9 of 16 objectives.

## Organization and Scope of This Review

This *Review* is divided into four major sections—(1) a section on the general data issues involved in the monitoring of the year 2000 objectives, (2) a section highlighting the year 2000 goals and age-related objectives, (3) a section of 22 chapters, one for each *Healthy People 2000* priority area, and (4) a four-part section of information tables.

A number of major cross-cutting data issues involved in the monitoring of the objectives and subobjectives are presented in the first section. Because these issues relate to objectives in numerous priority areas, they are discussed here rather than in each individual chapter.

The second section highlights the year 2000 goals and progress toward the year 2000 age-related objectives, continuing the tracking of the five broad 1990 goals for the five major life stages.

The third section consists of 22 chapters, one for each *Healthy People 2000* priority area. Each chapter contains a discussion of specific data issues, a figure representing one of the priority area objectives, an objective status summary table, and the full text of the objectives in that priority area.

The text for each chapter presents a brief discussion of the reasons the priority area was included in the initiative, a summary of the overall status of the objectives, and monitoring data issues that are not obvious from the summary table or the text of the objective, such as proxy measures, differing tracking systems, and

operational definitions. A few caveats must be made regarding summaries of the progress (or lack of progress) on the objectives. At this early point in tracking, many summary statements are based on data from only 1 or 2 years beyond the baseline. Many data points are derived from sample surveys and are therefore subject to sampling and nonsampling errors. A small change between a baseline level and more recent information may or may not indicate progress toward achievement of the year 2000 target. A more thorough assessment of progress, taking into account trends over several years, will be made as the decade progresses.

Most figures show the progress of one of the priority area objectives toward the objective target. Some show the latest data for population groups that were targeted because of especially high risk. In some cases, choice of figures depended on the availability of data; the choice does not confer more relative importance to any of the objectives depicted.

The objective summary table presents the baselines, targets, and current progress toward the priority area objectives. Most baselines use 1987 data. The most current vital statistics data are from 1990; the most current estimates from the National Health Interview Survey are from 1991, and approximately one-quarter of the objectives are tracked with data from this survey.

There are four tables at the end of the *Review*. Table A lists the priority area lead agencies. Table B displays the cause-of-death categories used for the *Healthy People 2000* mortality objectives. Table C presents current data sources for all the *Healthy People 2000* objectives and subobjectives, and table D lists the Health Status Indicators developed for objective 22.1.

## Data Issues

There are several major cross-cutting data issues involved in the monitoring of the objectives and subobjectives. These include revised baselines, issues regarding minority group subobjectives, age-adjusted versus crude mortality rates, data source comparability, cause-of-death category issues, and years of healthy life.

### Revised Baselines

For a number of *Healthy People 2000* objectives, the baselines shown in this Review have been revised from the original baselines published in *Healthy People 2000*. Fifty revisions were the result of the revised Census population estimates and are discussed below. In priority area 14, 11 baselines were revised in response to a change in the method for tabulating the race of infants (see Chapter 14, Maternal and Infant Health). For 44 specific objectives (unduplicated), the baselines have been changed because of modifications in methodology, typographical errors, changes in data sources, or because the baseline data were based on preliminary analyses.

Except for objectives 6.3 and 7.6, which were revised by the lead agency responsible for achieving the objectives (table A), as of this writing, all *Healthy People 2000* targets are being shown as originally published.

### Revised Death Rates

The 1986–87 baselines for population-based mortality objectives and subobjectives tracked with data from the National Vital Statistics System (NVSS), as well as subsequent data for the 1980's, have been recomputed using intercensal population estimates based on the 1990 Census enumeration (see *Health, United States, 1992*,

Appendix I). Data for the three mortality objectives (4.1, 9.3, and 10.1) tracked by sources other than the NVSS are not revised for this reason. With the exception of American Indian/Alaska Native death rates (see below), the changes are relatively small. The objectives affected by this change are shown in table B. Cases where the recomputed baseline rate was the same as the original rate are denoted in the objective status tables by “no change.”

### **American Indian and Alaska Native Mortality Rates**

The baseline rates for some American Indian/Alaska Native (AI/AN) mortality subobjectives have been revised to reflect the new intercensal populations and the inclusion of the entire U.S. AI/AN population. The objectives affected by this change are:

4.2b	Cirrhosis deaths
6.1d/7.2d	Suicide deaths
7.1f	Homicide deaths
9.1a	Unintentional injury deaths
9.3d	Motor vehicle crash deaths
17.9b	Diabetes-related deaths

The original baselines and targets for these objectives were established using data from the 33 States in which AI/AN health services are provided by the Indian Health Service Regional Service Offices. The Indian Health Service provides health care to approximately 60 percent of the AI/AN population (5); most of the population served live on or near reservations. “Reservation States” include approximately 90 percent of the AI/AN population in the United States, but exclude some urban centers with large American Indian populations.

The revised baselines are substantially lower than the original figures. These large differences are partially due to the substantially larger intercensal population estimates (death rate denominators) based on the 1990 Census compared with those based on the 1980 Census. They may also reflect the relatively greater failure to identify AI/AN deaths on death certificates in non-Reservation States compared with Reservation States (7).

### **Minority Group Subobjectives**

The guideline for drafting the objectives required the identification of a data source to track progress before a subobjective for a minority or special population could be set. Although there are virtually no data gaps for existing subobjectives, lack of data sources prevented the establishment of subobjectives for some population groups. Many subpopulations are small and geographically clustered and cannot be measured through national surveys using standard sampling techniques. Developing techniques to assess the health of minorities and other special subpopulations will be a significant challenge during the coming decade.

Another concern is the availability of reliable denominator data. Although national surveys can provide numbers of responses for some subpopulations, intercensal population estimates may not be obtainable for these groups. County population estimates and State-specific estimates for major racial and ethnic subgroups may also be unavailable.

### **Age Adjustment**

Most of the original baselines for mortality objectives published in *Healthy People 2000* are derived from the National Vital Statistics System and are age adjusted to the 1940 population. Exceptions are objectives 4.1, 9.3, and 10.1. Data for 4.1 and 9.3 are crude rates from the National Highway and Traffic Safety Administration’s

Fatal Accident Reporting System (FARS); data for 10.1 are crude rates from the Department of Labor's Annual Survey of Occupational Injuries and Illnesses. Most of the previously published mortality subobjective baselines are age adjusted as well; the exceptions are subobjectives 4.1a (a crude rate from FARS), 9.1b, 9.1c, 9.5c, 9.6c, and 9.6d. With the publication of this Review, all mortality objectives and subobjectives, except for those tracked with FARS or Department of Labor data, will be tracked with age-adjusted rates (see *Health United States, 1992*, Appendix II).

### **Data Source Comparability**

For some objectives the baseline data source differs from the source that will be used to monitor progress. Comparability between different data sources or even within the same data source for different years is not assured. Unless the data for an objective are obtained from the same questions of the same survey system each year, unless operational definitions remain the same, and unless analytical techniques are constant, tracking can be compromised. Comparability, if an issue, is discussed in priority area chapters. For a number of objectives that will be tracked with the third National Health and Nutrition Examination Survey (NHANES III), proxy data from various surveys are being used until the NHANES III data are available. See table C for a list of sources for each *Healthy People 2000* objective.

### **Cause-of-death Terminology and Codes**

Twenty-four objectives (excluding duplicates) in *Healthy People 2000* are tracked using mortality data (table B). For most of these objectives, the cause-of-death terminology used in *Healthy People 2000* is different from that used in *Health, United States; Vital Statistics of the United States, Mortality*, and other NCHS publications; in some cases, the terminology and the identifying International Classification of Disease (ICD-9) codes are different (8).

Specifically, for five objectives, the terminology and the codes are different from those used for similar cause-of-death categories in the NCHS tabulation lists. One example, objective 7.1, concerns reduction of "homicides." Progress toward this objective is measured using ICD-9 numbers E960-E969. The NCHS tabulation lists generally use "Homicide and legal intervention" (ICD-9 numbers E960-E978), which includes police action. For 14 objectives, only the terminology differs; the defining ICD-9 identifying codes are the same. For example, objective 15.2 calls for reduction in mortality from "stroke;" NCHS tabulation lists use the term "Cerebrovascular diseases" (both use ICD-9 numbers 430-438). Only one objective, suicide, has the same title and the same code in both uses. The remaining four mortality objectives have no comparable category in NCHS publications. With the exception of heart disease, the differences between mortality rates defined by the *Healthy People 2000* ICD categories and those defined by the NCHS rubrics are relatively small, if not trivial.

### **Years of Healthy Life**

Increasing years of healthy life is one of the three *Healthy People 2000* goals and is included as three specific objectives (8.1, 17.1, and 21.1). The 1980 baseline has been updated to 1990, using a revised methodology developed by NCHS and external consultants. This interim measure, which will be used to monitor progress until the year 2000, combines mortality data from the National Vital Statistics System with health status data from the National Health Interview Survey. The definition and measurement of years of healthy life are still being refined; research will continue

in this area. The methodology used for the interim measure will be published elsewhere (9).

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# Year 2000 Goals and Age-Related Objectives

*Healthy People 2000* has three goals: to increase the span of healthy life for all Americans, to decrease health disparities among Americans, and to achieve access to preventive services for all Americans. In addition to these goals, there are four age-related objectives that cut across the 22 priority areas and the organizing categories of health promotion, health protection, and preventive services.

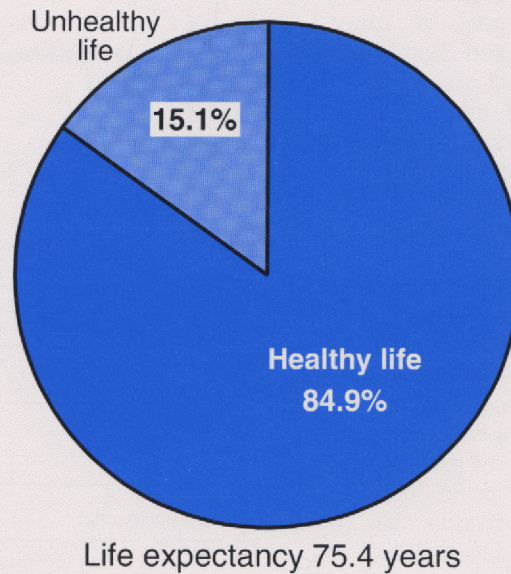
The primary goal recognizes the importance of preventing disability, as well as further impairment or morbidity for those people with disabilities, so that long life will be accompanied by good health. *Healthy People 2000* emphasizes the full range of functional capacity from infancy through old age, including measures of health outcomes.

Years of healthy life can be measured by modifying life expectancy by a value representing the portion of life spent in an "unhealthy" state (for example, impaired by disabilities, disease, or injuries). As figure 1 indicates, in 1990, life expectancy in the United States was 75.4 years while years of healthy life was 64.0. On average, Americans spend 85 percent of their lifespan in a healthy state. *Healthy People 2000* is directed at increasing this percentage. The measurement of years of healthy life is discussed in the Data Issues section of the Introduction.

Specific strategies are needed to assess the unique needs of disadvantaged and high-risk populations. The second goal is to reduce disparities in death, disease, and disability rates of these groups as compared with the total population. The specific groups targeted are racial and ethnic minority populations, people with low income, and people with disabilities.

*Healthy People 2000* also recognizes that many Americans lack access to an ongoing source of primary care and therefore to essential preventive services. The third goal addresses the many

**Figure 1. Years of healthy life: United States, 1990**



	1990
Healthy life . . . . .	64.0
Unhealthy life . . . . .	11.4

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System and National Health Interview Survey.

barriers to access to health care. These barriers include inadequate health insurance, the mal-distribution of primary care providers, geographic barriers, and language and cultural barriers.

The four age-related objectives continue the emphasis of the 1990 health initiative. The 1990 Objectives for the Nation (1) identified five broad quantifiable goals to reduce preventable death and disability among Americans at major life stages: as infants, children, adolescents and young adults, adults, and older adults. Impressive progress was made toward these goals during the 1980's (2).

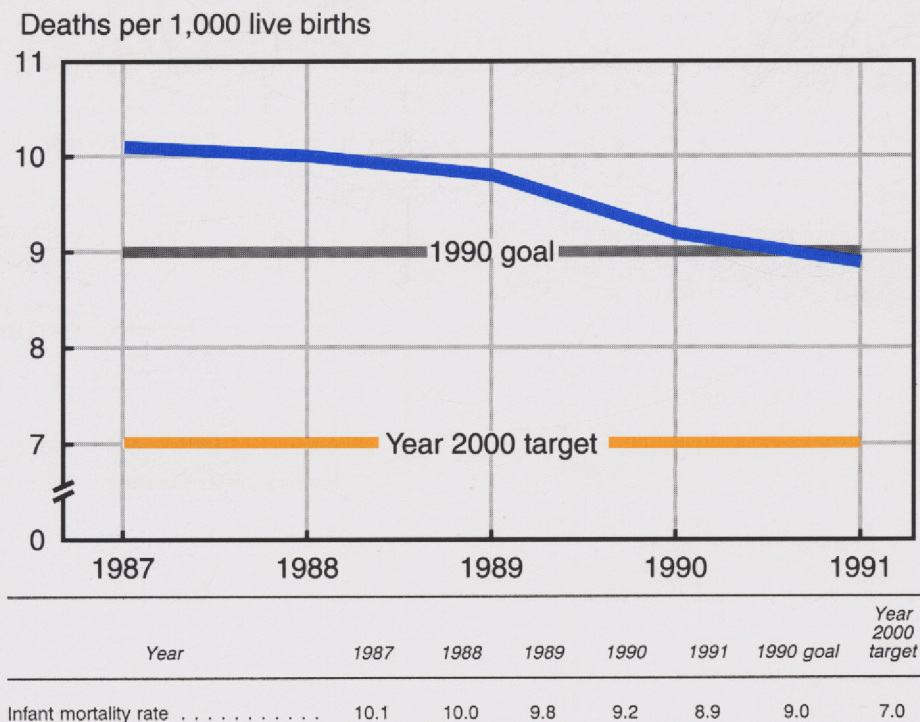
Continuing the tracking of the 1990 goals for infants and children, the year 2000 age-related objective is to reduce the infant mortality rate by approximately 30 percent to no more than 7 per 1,000 live births and reduce the death rate for children by 15 percent to no more than 28 per 100,000 children 1-14 years of age. The 1990 goal of 9 per 1,000 live births for infant mortality was reached and exceeded in 1991 (figure 2). For children, the 1990 goal was met by 1985 (figure 3). If the present rate of decline continues, the year 2000 target will be reached in 1993.

The year 2000 age-related objective for adolescents and young adults is to reduce the death rate by 15 percent to no more than 85 per 100,000 people 15-24 years of age. Death rates fluctuated between 1987 and 1990, showing little change and no decline (figure 4). They remain far above the 1990 goal of 93 and the year 2000 target.

For adults, the year 2000 age-related objective is to reduce the death rate by 20 percent to no more than 340 per 100,000 people 25-64 years of age. At the present average annual rate of decline of 1.6, the year 2000 objective will not be reached until 2009 (figure 5).

People who reach the age of 65 can now expect to live into their eighties (*Health, United States, 1992*, detailed table 27). The data regarding the years of healthy life indicate the likelihood that not all those years will be active and independent ones. Thus, improving the functional independence, not just the length, of later life is an important element in promoting the health of this age

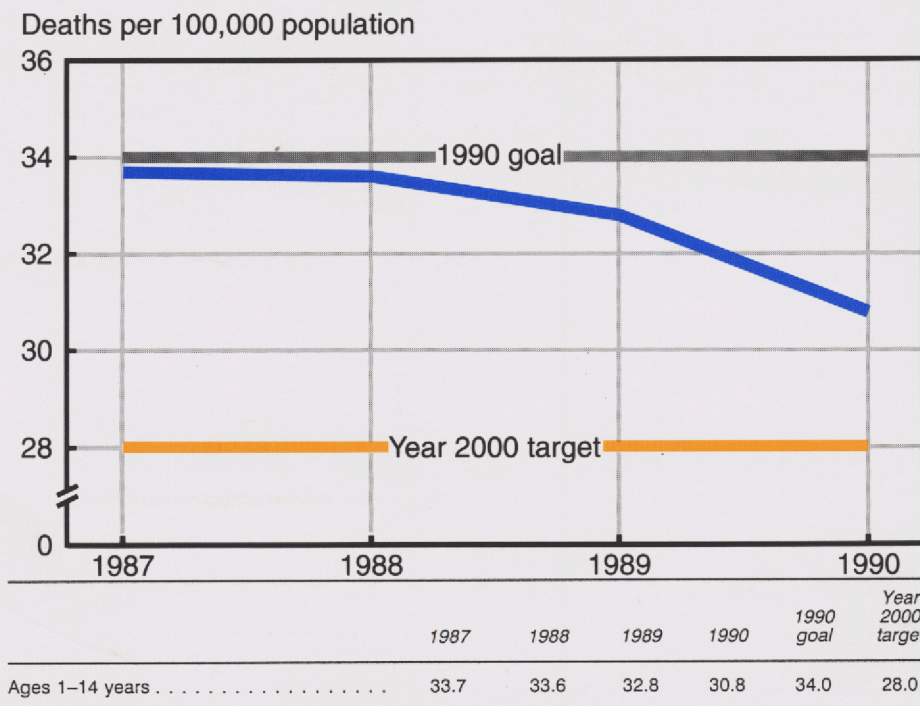
**Figure 2. Infant mortality rates: United States, 1987-91, 1990 goal and year 2000 target**



NOTE: 1991 data are provisional. Related tables in *Health, United States, 1992*, are 18-23 and 25.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System.

**Figure 3. Death rates for children 1-14 years of age: United States, 1987-90, 1990 goal and year 2000 target**



NOTE: Related tables in *Health, United States, 1992*, are 31, 34-37, 40, 42-45, 48 and 50.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System.

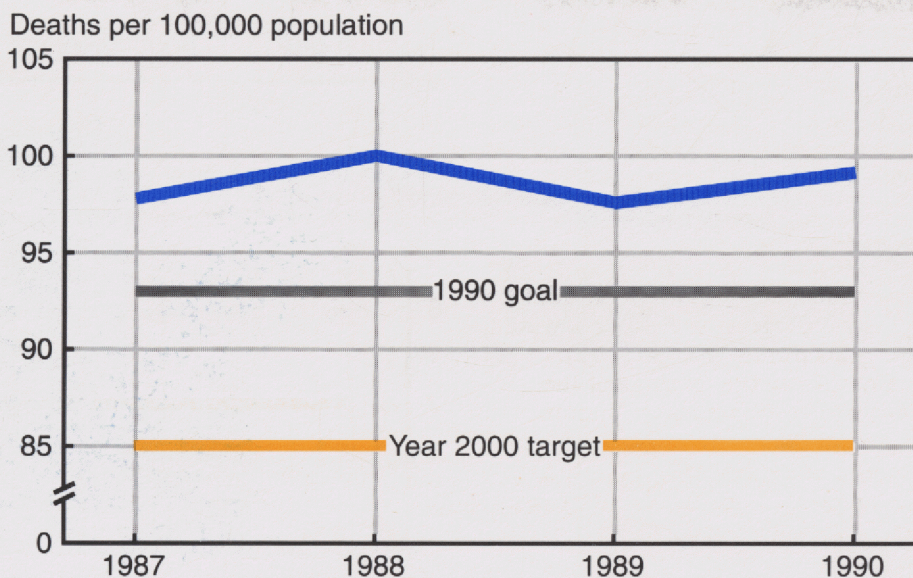


group. The 1990 goal for older adults was to reduce the average annual number of days of restricted activity due to acute and chronic conditions to fewer than 30 days per year. Because of the difficulties in interpreting the meaning of restricted activity days, the year 2000 age-related objective for older adults is to reduce to no more than 90 per 1,000 people the proportion of all people 65 years of age and over who have difficulty in performing two or more personal care activities, thereby preserving independence. Data beyond the baseline were available for noninstitutionalized people only (figure 6). For people 65 years of age and over the proportion who have difficulty remained the same between 1984 and 1986. For people 85 years of age and over, the proportion who have difficulty declined by about 9 percent between 1984 and 1986.

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**Figure 4. Death rates for adolescents and young adults 15-24 years of age: United States, 1987-90, 1990 goal and year 2000 target**

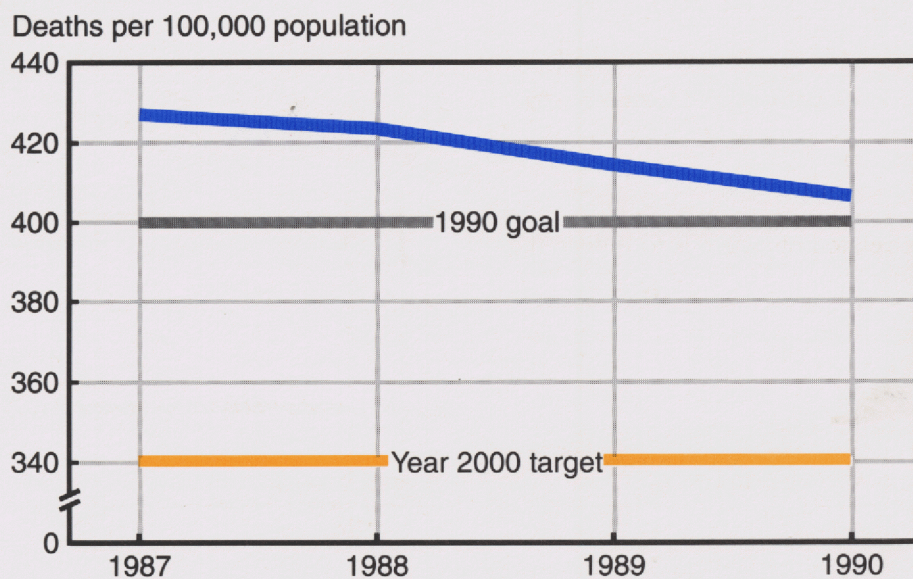


Year	1987	1988	1989	1990	1990 goal	Year 2000 target
Ages 15-24 years . . . . .	97.8	100.0	97.6	99.2	93.0	85.0

NOTE: Related tables in *Health, United States, 1992* are 31, 34-37, 40, 42-45, 48, and 50.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System.

**Figure 5. Death rates for adults 25-64 years of age: United States, 1987-90, 1990 goal and year 2000 target**

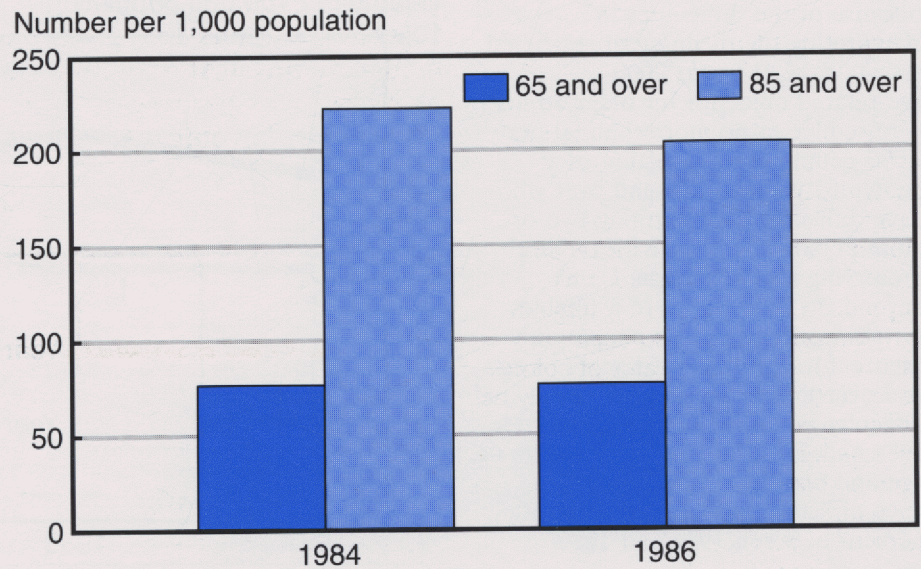


Year	1987	1988	1989	1990	1990 goal	Year 2000 target
Ages 25-64 years . . . . .	426.9	423.2	414.1	406.2	400.0	340

NOTE: Related tables in *Health, United States, 1992*, are 31-40, 42-45, 48, and 50.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System.

**Figure 6. Older noninstitutionalized adults who have difficulty in performing two or more personal care activities: United States, 1984 and 1986**



	1984	1986
Ages 65 years and over . . . . .	77	77
Ages 85 years and over . . . . .	223	204

NOTE: This objective is a duplicate of objective 17.3. A related table in *Health, United States, 1992*, is 61.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey.

# Priority Area 1

## Physical Activity and Fitness

### Background and Data Summary

Regular physical activity can help to prevent and manage coronary heart disease, hypertension, noninsulin-dependent diabetes mellitus, osteoporosis, obesity, and mental health problems such as depression and anxiety (1). Regular physical activity has also been associated with lower rates of colon cancer (2) and stroke (3), and may be linked to reduced back injury (4). On average, physically active people outlive those who are inactive (5). Regular physical activity can also help to maintain the functional independence of older adults and enhance the quality of life for people of all ages (6).

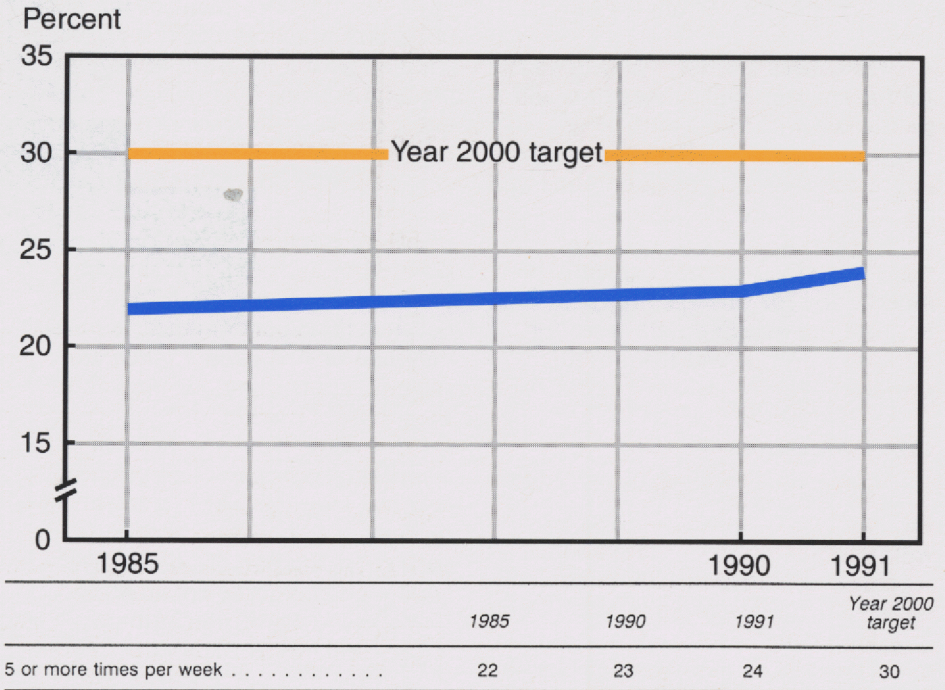
Of the 12 Physical Activity and Fitness objectives, one has been met (objective 1.10), four show progress toward the year 2000 targets (1.1, 1.3, 1.4, and 1.6) while two are moving away from the targets (1.2 and 1.7). Data for one objective (1.5), show no change, and data to update progress for the remaining four objectives (1.8, 1.9, 1.11, and 1.12) are not yet available. Trends for special population subgroups are mixed. The decline in coronary heart disease mortality has been slower in the black population than in the total population. For objective 1.4 (vigorous physical activity), 1991 data indicate that the target for adults with annual incomes of less than \$20,000 has been surpassed. The proportion of adults with a sedentary lifestyle may be increasing among the total population, although it has declined among people 65 years of age and over and people with disabilities.

### Data Issues

#### Definitions

Physical activity and fitness as a recognized risk factor for health outcomes is a relatively new concept, contributing to present difficulties in

**Figure 7. Persons 18–74 years of age who engage in light to moderate physical activity for at least 30 minutes per occasion 5 or more times per week: United States, 1985, 1990, 1991, and year 2000 target for objective 1.3**



SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey.

tracking some objectives. Calculations vary from simple counts (for example, weight-training 3 or more times a week) to complex formulas (for example, calculating average kilocalories expended per kilogram per day) (7). The intent of objective 1.3 (light to moderate physical activity) is to generate calorie-burning activity from a health standpoint by emphasizing the importance of regular physical activity that can be sustained throughout the lifespan. The sum of all physical activities performed at least 30 minutes per occasion 5 or more or 7 or more times a week regardless of the intensity has been defined as measuring this objective.

To measure the proportion of adults performing vigorous physical activity (1.4), the predicted maximum

cardiorespiratory capacity was estimated using age-sex based regression equations and then multiplying by 50 percent (see Note with the text of objective 1.4). Then all the activities that were performed for at least 20 minutes that had a kilocalorie value that was equal to or greater than that 50 percent level were counted (8,9). The estimated number of people who exercise vigorously were respondents who performed these activities 3 or more times per week.

### Comparability of Data Sources

The baseline data source for objective 1.3 was the Behavioral Risk Factor Surveillance System; because this objective will be tracked with the National Health Interview Survey

(NHIS), and 1985 data were available from this survey, the baseline has been revised to reflect the estimates from the NHIS. The method of measuring the objective has also been modified from that used in the baseline measure, although the revised estimate did not differ for people exercising 5 or more times per week. Although data from the NHIS were used for all 3 years (1985, 90 and 91), the questionnaire changed in 1991. Databases were made as similar as possible before estimates were made.

Objectives 1.3, 1.4, 1.6, 1.8, and 1.9 for children and adolescents will be tracked with the Youth Risk Behavior Survey (YRBS) for students in grades 9–12. Although baseline and tracking data are available for objectives 1.4, 1.8, and 1.9, trends for these objectives cannot currently be ascertained for this age group because the baseline data were for other age groups and from other sources.

### **Proxy Measures**

In late 1993 data comparable to the baseline on measured overweight will be available from the National Health and Nutrition Examination Survey III to measure progress. As an interim measure, self-reported overweight from the National Health Interview Survey (NHIS) is being used for objective 1.2. In comparisons of measured and self-reported heights and weights, women underestimate overweight and overestimate underweight, while men underestimate overweight and underweight (10,11).

Regular performance of physical activities that enhance and maintain muscular strength, muscular endurance, and flexibility (1.6) most likely requires participation in a variety of physical activities as not all activities will satisfy all three factors. However, scoring parameters for strength, endurance, and flexibility are not yet available. Until research into these areas can provide such measures, for adults this objective will be tracked using data on an activity that increases muscular strength only—weight-lifting. The 1991 data shown for students in grades 9–12 are based on self-reported participation in stretching exercises or

strengthening exercises that were done 4 or more days per week.

Objective 1.7 is to increase to at least 50 percent the proportion of overweight people who use sound dietary practices combined with regular physical activity to attain appropriate body weight. Respondents who reported they were overweight and were currently trying to lose weight or control their weight by eating fewer calories or exercising more were counted for this objective. However, an assessment of the quality of dietary practices has not yet been coupled with a measure of regular physical activity. The design of the questions used to track this objective changed between 1990 and 1991, and may have effected the estimates.

Objective 1.9 targets time spent in school physical education classes devoted to activities that may be readily carried into adulthood because their performance requires only one or two people (such as swimming, bicycling, jogging, and racquet sports). The proxy measure for this objective is the percent of class time spent in actual physical activity. The data used to track this objective are not comparable. 1983 data show the percent of physical education class time spent being physically active for all students. The YRBS updates, for students in grades 9–12, show the percent who exercised 20 or more minutes in physical education class 3–5 times a week in 1990, and the percent who exercised 30 or more minutes in physical education class 1 or more times a week in 1991.

**Table 1. Physical activity and fitness objective status**

Objective	1987 baseline		1990	1991	Target 2000
	Original	Revised			
<b>1.1 Coronary heart disease deaths (age adjusted per 100,000)</b> . . . . .	135	<sup>1</sup> No change	122	---	100
a. Blacks (age adjusted per 100,000) . . . . .	163	<sup>1</sup> 168	158	---	115
<b>1.2 Overweight prevalence</b>					
People 20 years and over . . . . .	<sup>2</sup> 26%	...	27%	28%	20%
Males . . . . .	<sup>2</sup> 24%	...	27%	28%	...
Females . . . . .	<sup>2</sup> 27%	...	27%	28%	...
Adolescents 12-19 years . . . . .	<sup>2</sup> 15%	...	---	---	15%
a. Low-income females 20 years and over . . . . .	<sup>3</sup> 37%	...	37%	39%	25%
b. Black females 20 years and over . . . . .	<sup>2</sup> 44%	...	42%	44%	30%
c. Hispanic females 20 years and over . . . . .	...	<sup>3</sup> 27%	33%	32%	25%
Mexican-American females . . . . .	<sup>4</sup> 39%	...	---	38%	...
Cuban females . . . . .	<sup>4</sup> 34%	...	---	---	...
Puerto Rican females . . . . .	<sup>4</sup> 37%	...	---	---	...
d. American Indians/Alaska Natives . . . . .	<sup>5</sup> 29-75%	...	---	40%	30%
e. People with disabilities . . . . .	<sup>3</sup> 36%	...	---	38%	25%
f. Females with high blood pressure . . . . .	<sup>2</sup> 50%	...	---	---	41%
g. Males with high blood pressure . . . . .	<sup>2</sup> 39%	...	---	---	35%
<b>1.3 Moderate physical activity</b>					
People 6 years and over . . . . .	---	...	---	---	30%
People 18-74 years					
5 or more times per week . . . . .	<sup>3</sup> 22%	<sup>3,6</sup> No change	23%	24%	...
7 or more times per week . . . . .	<sup>3</sup> 12%	<sup>3,6</sup> 16%	16%	17%	...
<b>1.4 Vigorous physical activity</b>					
Children and adolescents 6-17 years . . . . .	---	...	---	---	75%
Children and adolescents 10-17 years . . . . .	<sup>7</sup> 66%	...	---	---	...
Students in 9th-12th grade . . . . .	---	...	37%	---	...
People 18 years and over . . . . .	<sup>3</sup> 12%	...	---	14%	20%
a. Lower-income people 18 years and over (annual family income less than \$20,000) . . . . .	<sup>3</sup> 7%	...	---	13%	12%
<b>1.5 Sedentary lifestyle</b>					
People 6 years and over . . . . .	---	...	---	---	15%
People 18 years and over . . . . .	<sup>3</sup> 24%	...	---	24%	15%
a. People 65 years and over . . . . .	<sup>3</sup> 43%	...	---	29%	22%
b. People with disabilities . . . . .	<sup>3</sup> 35%	...	---	30%	20%
c. Lower-income people (annual family income less than \$20,000) . . . . .	<sup>3</sup> 32%	...	---	32%	17%
<b>1.6 Muscular strength, endurance, and flexibility</b>					
People 6 years and over . . . . .	---	...	---	---	40%
Students in 9th-12th grade					
Stretching 4 or more times per week . . . . .	...	...	---	43%	...
Strengthening 4 or more times per week . . . . .	...	...	---	37%	...
Weight-lifting					
People 18-64 years . . . . .	...	<sup>8</sup> 11%	---	16%	...
<b>1.7 Weight loss practices among overweight people 12 years and over.</b>					
Overweight females 18 years and over . . . . .	<sup>3</sup> 30%	...	29%	22%	...
Overweight males 18 years and over . . . . .	<sup>3</sup> 25%	...	22%	19%	...
<b>1.8 Daily school physical education</b>					
Students in 1st-12th grade . . . . .	<sup>9</sup> 36%	...	---	---	50%
Students in 9th-12th grade . . . . .	...	...	---	42%	...
<b>1.9 School physical education quality</b>					
All students . . . . .	<sup>10</sup> 27%	...	---	---	50%
Students in 9th-12th grade . . . . .	...	...	<sup>11</sup> 33%	<sup>12</sup> 49%	...
<b>1.10 Worksite fitness programs</b>					
50-99 employees . . . . .	<sup>3</sup> 14%	...	---	<sup>13</sup> 33%	20%
100-249 employees . . . . .	<sup>3</sup> 23%	...	---	<sup>13</sup> 47%	35%
250-749 employees . . . . .	<sup>3</sup> 32%	...	---	<sup>13</sup> 66%	50%
750 and more employees . . . . .	<sup>3</sup> 54%	...	---	<sup>13</sup> 83%	80%
<b>1.11 Community fitness facilities</b>					
Hiking, biking, and fitness trail miles . . . . .	<sup>14</sup> 1 per 71,000 people	...	---	---	1 per 10,000 people

**Table 1. Physical activity and fitness objective status – Con.**

<i>Objective</i>	<i>1987 baseline</i>		<i>1990</i>	<i>1991</i>	<i>Target 2000</i>
	<i>Original</i>	<i>Revised</i>			
Public swimming pools . . . . .	<sup>14</sup> 1 per 53,000 people	...	---	---	1 per 25,000 people
Acres of park and recreation open space . . . . .	<sup>14</sup> 1.8 per 1,000 people	...	---	---	4 per 1,000 people
<b>1.12 Clinician counseling about physical activity</b>					
Percent of sedentary patients . . . . .	<sup>15</sup> 30%	...	---	---	50%

<sup>1</sup>Data have been recomputed to reflect revised intercensal population estimates; see *Health, United States, 1992*, Appendix I.

<sup>2</sup>1976–80 data.

<sup>3</sup>1985 data.

<sup>4</sup>1982–84 data.

<sup>5</sup>1984–88 data for different tribes.

<sup>6</sup>Data source has been changed and data have been revised to reflect updated methodology; see Introduction.

<sup>7</sup>1984 data.

<sup>8</sup>1990 data.

<sup>9</sup>1984–86 data.

<sup>10</sup>1983 data.

<sup>11</sup>Percent who exercised 20 or more minutes in physical education class 3–5 times per week.

<sup>12</sup>Percent who exercised 30 or more minutes in physical education class 1 or more times per week.

<sup>13</sup>1992 data.

<sup>14</sup>1986 data.

<sup>15</sup>1988 data.

NOTE: Data sources are in table C.

# Physical Activity and Fitness Objectives

**1.1\*:** Reduce coronary heart disease deaths to no more than 100 per 100,000 people.

Duplicate objectives: 2.1, 3.1, and 15.1

**1.1a\*:** Reduce coronary heart disease deaths among blacks to no more than 115 per 100,000.

Duplicate objectives: 2.1a, 3.1a, and 15.1a

**1.2\*:** Reduce overweight to a prevalence of no more than 20 percent among people aged 20 and older and no more than 15 percent among adolescents aged 12–19.

*NOTE: For people aged 20 and older, overweight is defined as body mass index (BMI) equal to or greater than 27.8 for men and 27.3 for women. For adolescents, overweight is defined as BMI equal to or greater than 23.0 for males aged 12–14, 24.3 for males aged 15–17, 25.8 for males aged 18–19, 23.4 for females aged 12–14, 24.8 for females aged 15–17, and 25.7 for females aged 18–19. The values for adolescents are the age- and sex-specific 85th percentile values of the 1976–80 National Health and Nutrition Examination Survey (NHANES II), corrected for sample variation. BMI is calculated by dividing weight in kilograms by the square of height in meters. The cut points used to define overweight approximate the 120 percent of desirable body weight definition used in the 1990 objectives.*

Duplicate objectives: 2.3, 15.10, and 17.12

**1.2a\*:** Reduce overweight to a prevalence of no more than 25 percent among low-income women aged 20 and older.

Duplicate objectives: 2.3a, 15.10a, and 17.12a

**1.2b\*:** Reduce overweight to a prevalence of no more than 30 percent among black women aged 20 and older.

Duplicate objectives: 2.3b, 15.10b, and 17.12b

**1.2c\*:** Reduce overweight to a prevalence of no more than 25 percent among Hispanic women aged 20 and older.

Duplicate objectives: 2.3c, 15.10c, and 17.12c

**1.2d\*:** Reduce overweight to a prevalence of no more than 30 percent among American Indians and Alaska Natives.

Duplicate objectives: 2.3d, 15.10d, and 17.12d

**1.2e\*:** Reduce overweight to a prevalence of no more than 25 percent among people with disabilities.

Duplicate objectives: 2.3e, 15.10e, and 17.12e

**1.2f\*:** Reduce overweight to a prevalence of no more than 41 percent among women with high blood pressure.

Duplicate objectives: 2.3f, 15.10f, and 17.12f

**1.2g\*:** Reduce overweight to a prevalence of no more than 35 percent among men with high blood pressure.

Duplicate objectives: 2.3g, 15.10g, and 17.12g

**1.3\*:** Increase to at least 30 percent the proportion of people aged 6 and older who engage regularly, preferably daily, in light to moderate physical activity for at least 30 minutes per day.

*NOTE: Light to moderate physical activity is activity that requires sustained, rhythmic muscular movements, is at least equivalent to sustained walking, and is performed at less than 60 percent of maximum heart rate for age. Maximum heart rate equals roughly 220 beats per minute minus age. Examples may include*

walking, swimming, cycling, and dancing; gardening and yardwork; various domestic and occupational activities; and games and other childhood pursuits.

Duplicate objectives: 15.11 and 17.13

**1.4:** Increase to at least 20 percent the proportion of people aged 18 and older and to at least 75 percent the proportion of children and adolescents aged 6–17 who engage in vigorous physical activity that promotes the development and maintenance of cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion.

*NOTE: Vigorous physical activities are rhythmic, repetitive physical activities that use large muscle groups at 60 percent or more of maximum heart rate for age. An exercise heart rate of 60 percent of maximum heart rate for age is about 50 percent of maximal cardiorespiratory capacity and is sufficient for cardiorespiratory conditioning. Maximum heart rate equals roughly 220 beats per minute minus age.*

**1.4a:** Increase to at least 12 percent the proportion of lower-income people aged 18 and older (annual family income less than \$20,000) who engage in vigorous physical activity that promotes the development and maintenance of cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion.

**1.5:** Reduce to no more than 15 percent the proportion of people aged 6 and older who engage in no leisure-time physical activity.

*NOTE: For this objective, people with disabilities are people who report any limitation in activity due to chronic conditions.*

**1.5a:** Reduce to no more than 22 percent the proportion of people aged 65 and older who engage in no leisure-time physical activity.

**1.5b:** Reduce to no more than 20 percent the proportion of people with disabilities who engage in no leisure-time physical activity.

**1.5c:** Reduce to no more than 17 percent the proportion of lower-income people aged 18 and older (annual family income less than \$20,000) who engage in no leisure-time physical activity.

**1.6:** Increase to at least 40 percent the proportion of people aged 6 and older who regularly perform physical activities that enhance and maintain muscular strength, muscular endurance, and flexibility.

**1.7\*:** Increase to at least 50 percent the proportion of overweight people aged 12 and older who have adopted sound dietary practices combined with regular physical activity to attain an appropriate body weight.

Duplicate objective: 2.7:

**1.8:** Increase to at least 50 percent the proportion of children and adolescents in 1st–12th grade who participate in daily school physical education.

**1.9:** Increase to at least 50 percent the proportion of school physical education class time that students spend being physically active, preferably engaged in lifetime physical activities.

*NOTE: Lifetime activities are activities that may be readily carried into adulthood because they generally need only one or two people. Examples include swimming, bicycling, jogging, and racquet sports. Also counted as lifetime activities are vigorous social activities such as dancing. Competitive group sports and activities typically played only by young children such as group games are excluded.*

**1.10:** Increase the proportion of worksites offering employer-sponsored physical activity and fitness programs as follows:

Worksites with —	2000 target (percent)
50–99 employees	20
100–249 employees	35
250–749 employees	50
750 or more employees	80



**1.11:** Increase community availability and accessibility of physical activity and fitness facilities as follows:

Hiking, biking, and fitness trail miles: 1 per 10,000 people

Public swimming pools: 1 per 25,000 people

Acres of park and recreation open space: 4 per 1,000 people (250 people per managed acre)

**1.12:** Increase to at least 50 percent the proportion of primary care providers who routinely assess and counsel their patients regarding the frequency, duration, type, and intensity of each patient's physical activity practices.

\*Duplicate objective.

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# Priority Area 2 Nutrition

## Background and Data Summary

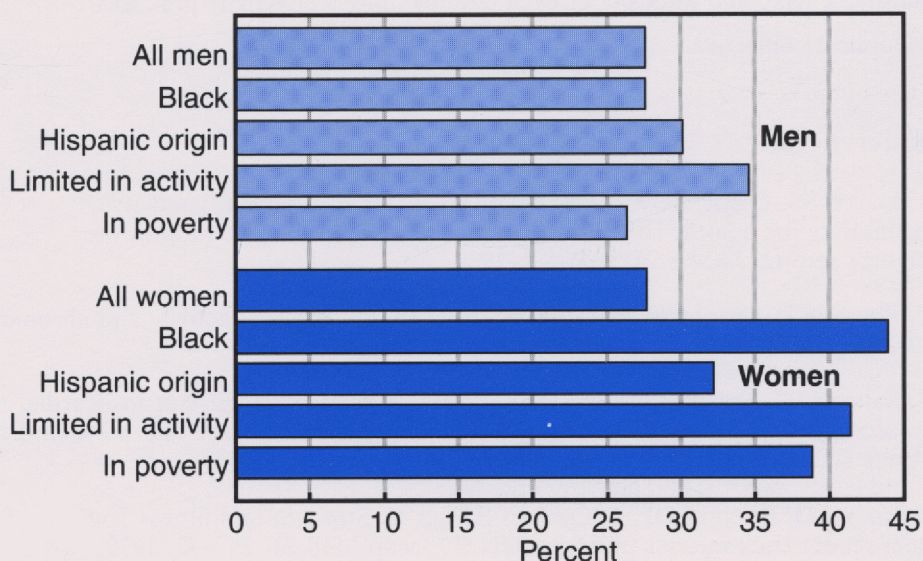
Dietary factors contribute substantially to preventable illness and premature death in the United States. For the majority of adults who do not smoke and do not drink excessively, what they eat is the most significant controllable risk factor affecting their long-term health (1). Five leading causes of death are associated with dietary factors: coronary heart disease, some types of cancer, stroke, noninsulin-dependent diabetes mellitus, and coronary artery disease (2). In general, once-prevalent nutrient deficiencies have been replaced by excesses and imbalances of other food components in the diet. Malnutrition still occurs in some groups of people, however, including those who are isolated or economically deprived.

Of the 21 objectives in this area, progress toward the targets has been made on five (objectives 2.1, 2.4, 2.13, 2.16, and 2.20). Coronary heart disease mortality continues to decline, although the decline is less marked among black Americans. Growth retardation among the high risk subpopulations has decreased, although data for all low income children 5 years and under are not available. More people are examining food labels when purchasing food, and an increased proportion of restaurants are offering low-fat and low-calorie selections. Additionally, the proportion of worksites with 50 or more employees that offer nutrition education and/or weight management programs for employees has increased.

Baselines have been obtained for two objectives (2.12 and 2.18). The new baseline for objective 2.12b (appropriate baby bottle feeding practices among American Indians and Alaska Natives) appears to indicate that the target of 65 percent has been exceeded. See definition of preventive bottle feeding practices (2.12) in priority area 13, duplicate objective 13.11.

Four objectives moved away from the target: cancer mortality (2.2), the

**Figure 8. Overweight adults 20–74 years of age according to selected characteristics targeted by year 2000 objective 2.3: United States, 1991**



	Total	Black	Hispanic origin	Limited in activity	In poverty
Men . . . . .	28	28	30	35	26
Women . . . . .	28	44	32	42	39

NOTE: Overweight is defined for men as body mass index greater than or equal to 27.8 kilograms/meter and for women as 27.3 kilograms/meter. Weights and heights were self-reported. A related table in *Health, United States, 1992*, is 73.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey.

proportion of the population that is overweight (2.3), the percent of overweight people engaging in weight-loss practices (2.7), and the proportion of breastfeeding mothers (2.11). Dietary fat intake has remained stable (2.5). Progress has been mixed for the proportion of people limiting their salt and sodium intake (2.9).

Five nutrition objectives have no new data (2.6, 2.8, 2.10 excluding 2.10e, 2.15, and 2.21), and three objectives do not yet have complete baseline data (2.14, 2.17, and 2.19).

Data from the third National Health and Nutrition Examination Survey (NHANES III) will provide estimates for objectives 2.6, 2.8, and 2.10.

## Data Issues

### Comparability of Data Sources

The evaluation of trends in dietary intake is affected by food composition data base changes and food coding decisions made during or between surveys. Trend data for two nutrition objectives have been obtained from different surveys with different methodologies or changes in method administration (2.3 and 2.9). Different food composition data bases were used over time for objective 2.5, although the method was primarily the same. Data for objective 2.7 were obtained from the same survey that asked a different set of questions in

different years (see discussion of duplicate objective 1.7 in priority area 1).

Tracking can also be affected by changing the population from which the survey sample is drawn. Growth retardation among low-income children (2.4) is tracked by the Pediatric Nutrition Surveillance System (PedNSS). PedNSS covered 41 States in 1988 and 46 States in 1991, with plans to expand coverage. The addition of States could affect the comparability of future results.

### **Proxy Measures**

Objective 2.3 (overweight) and 2.5 (dietary fat intake) will be measured by NHANES III. Until these data are available, self-reported data from the National Health Interview Survey for objective 2.3 and provisional estimates from the 1989 Continuing Survey of Food Intakes of Individuals for objective 2.5 are being used for tracking. The comparability of measured overweight and self-reported overweight (2.3) is discussed in priority area 1 (duplicate objective 1.2).

**Table 2. Nutrition objective status**

Objective	1987 baseline		1990	1991	Target 2000
	Original	Revised			
<b>2.1 Coronary heart disease deaths (age adjusted per 100,000)</b> . . . . .	1135	<sup>1,2</sup> No change	122	---	100
a. Blacks (age adjusted per 100,000) . . . . .	1163	<sup>1,2</sup> 168	158	---	115
<b>2.2 Cancer deaths (age adjusted per 100,000)</b> . . . . .	1133	<sup>1,2</sup> 134	135	---	130
<b>2.3 Overweight prevalence</b>					
People 20 years and over. . . . .	<sup>3</sup> 26%	...	27%	28%	20%
Males . . . . .	<sup>3</sup> 24%	...	27%	28%	...
Females . . . . .	<sup>3</sup> 27%	...	27%	28%	...
Adolescents 12–19 years . . . . .	<sup>3</sup> 15%	...	---	---	15%
a. Low-income females 20 years and over . . . . .	<sup>3</sup> 37%	...	37%	39%	25%
b. Black females 20 years and over . . . . .	<sup>3</sup> 44%	...	42%	44%	30%
c. Hispanic females 20 years and over . . . . .	...	<sup>4</sup> 27%	33%	32%	25%
Mexican-American females . . . . .	<sup>5</sup> 39%	...	---	38%	...
Cuban females . . . . .	<sup>5</sup> 34%	...	---	---	...
Puerto Rican females . . . . .	<sup>5</sup> 37%	...	---	---	...
d. American Indians/Alaska Natives . . . . .	<sup>6</sup> 29–75%	...	---	40%	30%
e. People with disabilities . . . . .	<sup>4</sup> 36%	...	---	38%	25%
f. Females with high blood pressure . . . . .	<sup>3</sup> 50%	...	---	---	41%
g. Males with high blood pressure . . . . .	<sup>3</sup> 39%	...	---	---	35%
<b>2.4 Growth retardation among low income children 5 years and under.</b> . . . .	<sup>7</sup> 16%	...	---	---	10%
a. Low-income black children under 1 year . . . . .	<sup>7</sup> 15%	...	15%	15%	10%
b. Low-income Hispanic children under 1 year . . . . .	<sup>7</sup> 13%	...	9%	8%	10%
c. Low-income Hispanic children 1 year . . . . .	<sup>7</sup> 16%	...	12%	11%	10%
d. Low-income Asian/Pacific Islander children 1 year . . . . .	<sup>7</sup> 14%	...	14%	13%	10%
e. Low-income Asian/Pacific Islander children age 2–4 years . . . . .	<sup>7</sup> 16%	...	14%	12%	10%
<b>2.5 Dietary fat intake among people 2 years and over</b>					
Percent of calories from total fat . . . . .	---	...	---	---	30%
Percent of calories from saturated fat . . . . .	---	...	---	---	10%
People 20–74 years					
Percent of calories from total fat . . . . .	<sup>3</sup> 36%	...	<sup>8</sup> 36%	---	...
Percent of calories from saturated fat . . . . .	<sup>3</sup> 13%	...	<sup>8</sup> 13%	---	...
Females 19–50 years					
Percent of calories from total fat . . . . .	<sup>4</sup> 36%	...	---	---	...
Percent of calories from saturated fat . . . . .	<sup>4</sup> 13%	...	---	---	...
<b>2.6 Daily intake of vegetables, fruits, and grain products</b>					
Adults (number of servings)					
Vegetables and fruits . . . . .	---	...	---	---	5.0
Grain products . . . . .	---	...	---	---	6.0
Females 19–50 years (number of servings)					
Vegetables and fruits . . . . .	<sup>9</sup> 2.5	...	---	---	...
Grain products . . . . .	<sup>9</sup> 3.0	...	---	---	...
<b>2.7 Weight loss practices among overweight people 12 years and over.</b> . . . .	---	...	---	---	50%
Overweight females 18 years and over . . . . .	<sup>4</sup> 30%	...	29%	22%	...
Overweight males 18 years and over . . . . .	<sup>4</sup> 25%	...	22%	19%	...
<b>2.8 Calcium intake</b>					
3 or more servings daily . . . . .					
People 12–24 years . . . . .	---	...	---	---	50%
Males 19–24 years . . . . .	<sup>9</sup> 14%	...	---	---	...
Females 19–24 years . . . . .	<sup>9</sup> 7%	...	---	---	...
Pregnant and lactating females . . . . .	<sup>9</sup> 24%	...	---	---	50%
2 or more servings daily					
People 25 years and over . . . . .	---	...	---	---	50%
Males 25–50 years . . . . .	<sup>9</sup> 23%	...	---	---	...
Females 25–50 years . . . . .	<sup>9</sup> 15%	...	---	---	...
<b>2.9 Salt and sodium intake</b>					
Prepare foods without adding salt . . . . .	<sup>4</sup> 54%	...	---	---	65%
Adults who avoid using salt at table . . . . .	<sup>4</sup> 68%	...	---	55%	80%
Adults who regularly purchase foods lower in sodium . . . . .	<sup>7</sup> 20%	...	---	36%	40%
<b>2.10 Iron deficiency</b>					
Children 1–4 years . . . . .	---	...	---	---	3%
Children 1–2 years . . . . .	<sup>3</sup> 9%	...	---	---	3%

**Table 2. Nutrition objective status—Con.**

Objective	1987 baseline		1990	1991	Target 2000
	Original	Revised			
Children 3–4 years . . . . .	<sup>3</sup> 4%	...	---	---	3%
Females of childbearing age (20–44 years) . . . . .	<sup>3</sup> 5%	...	---	---	3%
Iron deficiency prevalence					
a. Low-income children 1–2 years . . . . .	<sup>3</sup> 21%	...	---	---	10%
b. Low-income children 3–4 years . . . . .	<sup>3</sup> 10%	...	---	---	5%
c. Low-income females 20–44 years . . . . .	<sup>3</sup> 8%	...	---	---	4%
Anemia Prevalence					
d. Alaska Native children 1–5 years . . . . . <sup>10</sup>	22–28%	...	---	---	10%
e. Black, low-income pregnant females 15–44 years (third trimester) . . . . .	<sup>7</sup> 41%	...	41%	30%	20%
<b>2.11 Breastfeeding</b>					
During early postpartum period . . . . .	<sup>7</sup> 54%	...	52%	53%	75%
a. Low-income mothers . . . . .	<sup>7</sup> 32%	...	35%	33%	75%
b. Black mothers . . . . .	<sup>7</sup> 25%	...	16%	26%	75%
c. Hispanic mothers . . . . .	<sup>7</sup> 51%	...	44%	52%	75%
d. American Indian/Alaska Native mothers . . . . .	<sup>7</sup> 47%	...	47%	46%	75%
At age 5–6 months . . . . .	<sup>7</sup> 21%	...	18%	18%	50%
a. Low-income mothers . . . . .	<sup>7</sup> 9%	...	8%	9%	50%
b. Black mothers . . . . .	<sup>7</sup> 8%	...	7%	7%	50%
c. Hispanic mothers . . . . .	<sup>7</sup> 16%	...	14%	16%	50%
d. American Indian/Alaska Native mothers . . . . .	<sup>7</sup> 28%	...	27%	22%	50%
<b>2.12 Baby bottle tooth decay</b>					
Parents and caregivers who use preventive feeding practices . . . . .	...	<sup>11</sup> 51%	---	---	75%
a. Parents and caregivers with less than high school education . . . . .	...	<sup>11</sup> 31%	---	---	65%
b. American Indian/Alaska Native parents and caregivers . . . . .	...	<sup>12</sup> 74%	---	---	65%
<b>2.13 Use of food labels.</b> . . . .	<sup>7</sup> 74%	...	76%	---	85%
<b>2.14 Informative nutrition labeling</b>					
Processed foods . . . . .	<sup>7</sup> 60%	...	---	---	100%
Fresh and carry-away foods . . . . .	---	...	---	---	40%
<b>2.15 Availability of reduced-fat processed foods</b> . . . . .	<sup>13</sup> 2,500	...	---	---	5,000
<b>2.16 Low-fat, low-calorie restaurant food choices.</b> . . . .	<sup>8</sup> 70%	...	75%	---	90%
<b>2.17 Nutritious school and child care food services</b> . . . . .	---	...	---	---	90%
<b>2.18 Home-delivered meals for older adults</b> . . . . .	...	<sup>11</sup> 7%	---	---	80%
<b>2.19 Nutrition education in schools.</b> . . . .	---	...	---	---	75%
<b>2.20 Worksite nutrition/weight management programs</b>					
Nutrition education . . . . .	<sup>4</sup> 17%	...	---	<sup>14</sup> 31%	50%
Weight control . . . . .	<sup>4</sup> 15%	...	---	<sup>14</sup> 24%	50%
<b>2.21 Nutrition assessment, counseling, and referral by clinicians</b> . . . . .	<sup>7</sup> 40–50%	...	---	---	75%

<sup>1</sup>1987 data.

<sup>2</sup>Data have been recomputed to reflect revised intercensal population estimates; see *Health, United States, 1992*, Appendix I.

<sup>3</sup>1976–80 data.

<sup>4</sup>1985 data.

<sup>5</sup>1982–84 data.

<sup>6</sup>1984–88 data for different tribes.

<sup>7</sup>1988 data.

<sup>8</sup>1989 data.

<sup>9</sup>1985–86 data.

<sup>10</sup>1983–85 data.

<sup>11</sup>1991 data.

<sup>12</sup>1985–89 data.

<sup>13</sup>1986 data.

<sup>14</sup>1992 data.

NOTE: Data sources are in table C.

# Nutrition Objectives

**2.1\***: Reduce coronary heart disease deaths to no more than 100 per 100,000 people.

Duplicate objectives: 1.1, 3.1, and 15.1

**2.1a\***: Reduce coronary heart disease deaths among blacks to no more than 115 per 100,000 people.

Duplicate objectives: 1.1a, 3.1a, and 15.1a

**2.2\***: Reverse the rise in cancer deaths to achieve a rate of no more than 130 per 100,000 people.

*NOTE: In its publications, the National Cancer Institute age adjusts cancer death rates to the 1970 U.S. population. Using the 1970 standard, the equivalent target value for this objective would be 175 per 100,000.*

Duplicate objective: 16.1

**2.3\***: Reduce overweight to a prevalence of no more than 20 percent among people aged 20 and older and no more than 15 percent among adolescents aged 12–19.

*NOTE: For people aged 20 and older, overweight is defined as body mass index (BMI) equal to or greater than 27.8 for men and 27.3 for women. For adolescents, overweight is defined as BMI equal to or greater than 23.0 for males aged 12–14, 24.3 for males aged 15–17, 25.8 for males aged 18–19, 23.4 for females aged 12–14, 24.8 for females aged 15–17, and 25.7 for females aged 18–19. The values for adolescents are the age- and sex-specific 85th percentile values of the 1976–80 National Health and Nutrition Examination Survey (NHANES II), corrected for sample variation. BMI is calculated by dividing weight in kilograms by the square of height in meters. The cut points used to define overweight approximate the 120 percent of desirable body weight definition used in the 1990 objectives.*

Duplicate objectives: 1.2, 15.10, and 17.12

**2.3a\***: Reduce overweight to a prevalence of no more than 25 percent among low-income women aged 20 and older.

Duplicate objectives: 1.2a, 15.10a, and 17.12a

**2.3b\***: Reduce overweight to a prevalence of no more than 30 percent among black women aged 20 and older.

Duplicate objectives: 1.2b, 15.10b, and 17.12b

**2.3c\***: Reduce overweight to a prevalence of no more than 25 percent among Hispanic women aged 20 and older.

Duplicate objectives: 1.2c, 15.10c, and 17.12c

**2.3d\***: Reduce overweight to a prevalence of no more than 30 percent among American Indians and Alaska Natives.

Duplicate objectives: 1.2d, 15.10d, and 17.12d

**2.3e\***: Reduce overweight to a prevalence of no more than 25 percent among people with disabilities.

Duplicate objectives: 1.2e, 15.10e, and 17.12e

**2.3f\***: Reduce overweight to a prevalence of no more than 41 percent among women with high blood pressure.

Duplicate objectives: 1.2f, 15.10f, and 17.12f

**2.3g\***: Reduce overweight to a prevalence of no more than 35 percent among men with high blood pressure.

Duplicate objectives: 1.2g, 15.10g, and 17.12g

**2.4:** Reduce growth retardation among low-income children aged 5 and younger to less than 10 percent.

*NOTE: Growth retardation is defined as height-for-age below the fifth percentile of children in the National Center for Health Statistics' reference population.*

**2.4a:** Reduce growth retardation among low-income black children younger than age 1 to less than 10 percent.

**2.4b:** Reduce growth retardation among low-income Hispanic children younger than age 1 to less than 10 percent.

**2.4c:** Reduce growth retardation among low-income Hispanic children aged 1 to less than 10 percent.

**2.4d:** Reduce growth retardation among low-income Asian and Pacific Islander children aged 1 to less than 10 percent.

**2.4e:** Reduce growth retardation among low-income Asian and Pacific Islander children aged 2–4 to less than 10 percent.

**2.5\*:** Reduce dietary fat intake to an average of 30 percent of calories or less and average saturated fat intake to less than 10 percent of calories among people aged 2 and older.

Duplicate objectives: 15.9 and 16.7

**2.6\*:** Increase complex carbohydrate and fiber-containing foods in the diets of adults to five or more daily servings for vegetables (including legumes) and fruits, and to six or more daily servings for grain products.

Duplicate objective: 16.8

**2.7\*:** Increase to at least 50 percent the proportion of overweight people aged 12 and older who have adopted sound dietary practices combined with regular physical activity to attain an appropriate body weight.

Duplicate objective: 1.7

**2.8:** Increase calcium intake so at least 50 percent of youth aged 12–24 and 50 percent of pregnant and lactating women consume three or more servings daily of foods rich in calcium, and at least 50 percent of people aged 25 and older consume two or more servings daily.

*NOTE: The number of servings of foods rich in calcium is based on milk and milk products. A serving is considered to be 1 cup of skim milk or its equivalent in calcium (302 mg). The number of servings in this objective will generally provide approximately three-fourths of the 1989 Recommended Dietary Allowance (RDA) of calcium. The RDA is 1200 mg for people aged 12 through 24 years, 800 mg for people aged 25 and older, and 1200 mg for pregnant and lactating women.*

**2.9:** Decrease salt and sodium intake so at least 65 percent of home meal preparers prepare foods without adding salt, at least 80 percent of people avoid using salt at the table, and at least 40 percent of adults regularly purchase foods modified or lower in sodium.

**2.10:** Reduce iron deficiency to less than 3 percent among children aged 1 through 4 and among women of childbearing age.

*NOTE: Iron deficiency is defined as having abnormal results for two or more of the following tests: mean corpuscular volume, erythrocyte protoporphyrin, and transferrin saturation. Anemia is used as an index of iron deficiency. Anemia among Alaska Native children and among pregnant women in the third trimester was defined as hemoglobin less than 11 gm/dL or hematocrit less than 33 percent. For children and pregnant women, hematology is adjusted for altitude. In pregnant and non-pregnant women, hematology is also adjusted for smoking status. The above prevalences of iron deficiency and anemia may be due to inadequate dietary iron intakes or to inflammatory conditions and infections. For anemia, genetics may also be a factor.*

**2.10a:** Reduce iron deficiency to less than 10 percent among low-income children aged 1–2.

**2.10b:** Reduce iron deficiency to less than 5 percent among low-income children aged 3–4.

**2.10c:** Reduce iron deficiency to less than 4 percent among low-income women of childbearing age.

**2.10d:** Reduce the prevalence of anemia to less than 10 percent among Alaska Native children aged 1–5.

**2.10e:** Reduce the prevalence of anemia to less than 20 percent among black, low-income pregnant women (third trimester).

**2.11\*:** Increase to at least 75 percent the proportion of mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

Duplicate objective: 14.9

**2.11a\*:** Increase to at least 75 percent the proportion of low-income mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

Duplicate objective: 14.9a

**2.11b\*:** Increase to at least 75 percent the proportion of black mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

Duplicate objective: 14.9b

**2.11c\*:** Increase to at least 75 percent the proportion of Hispanic mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

Duplicate objective: 14.9c

**2.11d\*:** Increase to at least 75 percent the proportion of American Indian and Alaska Native mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

Duplicate objective: 14.9d

**2.12\*:** Increase to at least 75 percent the proportion of parents and caregivers who use feeding practices that prevent baby bottle tooth decay.

Duplicate objective: 13.11

**2.12a\*:** Increase to at least 65 percent the proportion of parents and caregivers with less than a high school education who use feeding practices that prevent baby bottle tooth decay.

Duplicate objective: 13.11a

**2.12b\*:** Increase to at least 65 percent the proportion of American Indian and Alaska Native parents and caregivers who use feeding practices that prevent baby bottle tooth decay.

Duplicate objective: 13.11b

**2.13:** Increase to at least 85 percent the proportion of people aged 18 and older who use food labels to make nutritious food selections.

**2.14:** Achieve useful and informative nutrition labeling for virtually all processed foods and at least 40 percent of fresh meats, poultry, fish, fruits, vegetables, baked goods, and ready-to-eat carry-away foods.



**2.15:** Increase to at least 5,000 brand items the availability of processed food products that are reduced in fat and saturated fat.

*NOTE: A brand item is defined as a particular flavor and/or size of a specific brand and is typically the consumer unit of purchase.*

**2.16:** Increase to at least 90 percent the proportion of restaurants and institutional food service operations that offer identifiable low-fat, low-calorie food choices, consistent with the Dietary Guidelines for Americans.

**2.17:** Increase to at least 90 percent the proportion of school lunch and breakfast services and child care food services with menus that are consistent with the nutrition principles in the Dietary Guidelines for Americans.

**2.18:** Increase to at least 80 percent the receipt of home food services by people aged 65 and older who have difficulty in preparing their own meals or are otherwise in need of home-delivered meals.

**2.19:** Increase to at least 75 percent the proportion of the Nation's schools that provide nutrition education from preschool–12th grade, preferably as part of quality school health education.

**2.20:** Increase to at least 50 percent the proportion of worksites with 50 or more employees that offer nutrition education and/or weight management programs for employees.

**2.21:** Increase to at least 75 percent the proportion of primary care providers who provide nutrition assessment and counseling and/or referral to qualified nutritionists or dietitians.

## **References**

1. U.S. Department of Health and Human Services. The Surgeon General's report on nutrition and health. Washington: Public Health Service. 1988.
2. U.S. Department of Health and Human Services. Healthy people 2000: National health promotion and disease prevention objectives. Washington: Public Health Service. 1991.

# Priority Area 3

## Tobacco

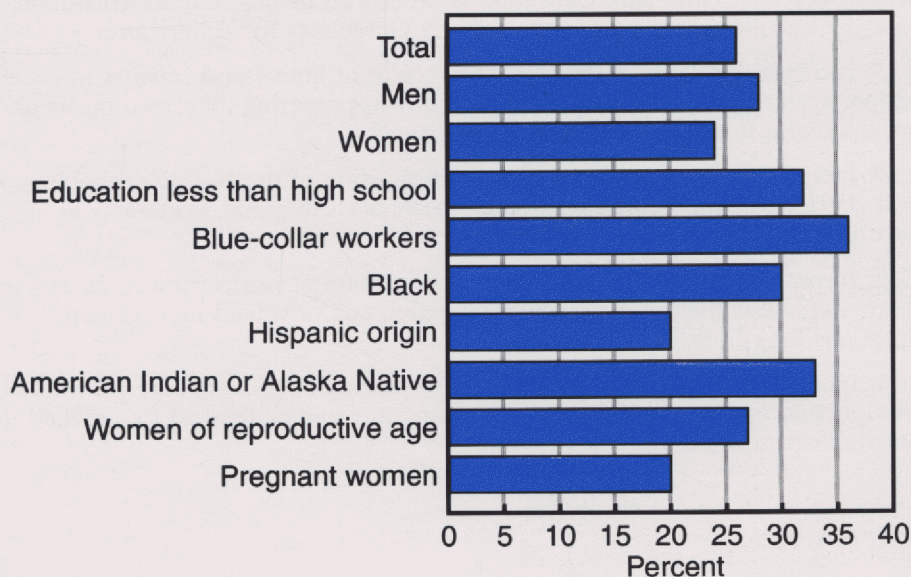
### Background and Data Summary

Tobacco use is responsible for more than one of every six deaths in the United States and is the most important single preventable cause of death and disease in our society (1). Cigarette smoking accounts for about 434,000 deaths yearly (2) including 21 percent of all coronary heart disease deaths, 87 percent of all lung cancer deaths, and 82 percent of all deaths from chronic obstructive pulmonary disease (1).

Smoking contributes substantially to chronic morbidity and disability as well. For example, in 1983–85, chronic bronchitis, emphysema, and lung cancer were the main causes of activity limitation for nearly 4 per 1,000 people in the United States and accounted for nearly 3 percent of all activity limitation (3). Cigarette smoking during pregnancy accounts for 29 to 42 percent of low-birth weight babies (4). Passive or involuntary smoking also causes disease, including lung cancer in healthy nonsmokers and respiratory problems in young children and infants. The prevalence of smoking among adults decreased from 40 percent in 1965 to 26 percent in 1991; however, the decline has been substantially slower among women than among men. The prevalence of smoking also remains disproportionately high among blue-collar workers, military personnel and American Indians and Alaska Natives.

Recent data show some progress towards achieving the objectives in the tobacco priority area. Data for eight objectives (3.1, 3.3, 3.4, 3.5, 3.6, 3.11, 3.12, and 3.13) show improvements toward the year 2000 targets. This includes declining mortality from coronary heart disease (3.1). However, coronary heart disease mortality is declining more slowly among black persons; a substantial decline must occur to achieve the year 2000 target for this population. Objectives 3.2 and 3.3 address slowing the rise of deaths due to lung cancer and chronic obstructive

**Figure 9. Current cigarette smokers among persons 20 years of age and over, according to selected characteristics targeted by year 2000 objective 3.4: United States, 1991**



Characteristics	Percent
Total	26
Men	28
Women	24
Education less than high school	32
Blue-collar workers	36
Black	30
Hispanic origin	20
American Indian or Alaska Native	33
Women 18–44 years	27
Pregnant women	20

NOTE: Related tables in *Health, United States, 1992*, are 64–67.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey.

pulmonary disease. If the current rate of increase in chronic obstructive lung disease mortality is maintained or reduced, the target for objective 3.3 will be met. No progress was observed toward slowing the rise of lung cancer deaths (3.2); nor was progress observed for objective 3.7.

Progress was mixed regarding smokeless tobacco use among youth (3.9). Smokeless tobacco use among adolescents aged 12–17 years declined over the period 1988 to 1991, but increased slightly among young men aged 18–24 years. Data beyond

baseline were not available for five objectives (3.8, 3.10, 3.14, 3.15, and 3.16).

### Data Issues

### Definitions

The proportion of people aged 20–24 years who smoke cigarettes regularly is used as a proxy measure for initiation of cigarette smoking by children and youth (objective 3.5). A

regular cigarette smoker is defined as a person who has smoked at least 100 cigarettes and who smokes currently.

The baseline for objective 3.7 (cessation of cigarette smoking early in pregnancy, with abstinence throughout pregnancy) is from a 1986 telephone interview of white women selected from the respondents to the 1985 National Health Interview Survey (NHIS) (5). Beginning with 1991, progress toward the target is being tracked using periodic supplements to the NHIS. The two surveys used different definitions for smoking before pregnancy and for the duration of quitting during pregnancy. The 1991 measure, focused on women who quit during the first trimester, is closer to the objective, but not comparable to the 1986 baseline that counted women who quit any time during pregnancy.

### **Comparability of Data Sources**

Information on objective 3.9 (smokeless tobacco use by males 12–24 years of age) is tracked by a combination of two surveys. Males 12–17 years of age are tracked by the National Household Survey on Drug Abuse (NHSDA). In this survey smokeless tobacco use is defined as any use of snuff or chewing tobacco in the preceding month. For males 18–24 years of age information is obtained from the National Health Interview Survey. A smokeless tobacco user is someone who has used either snuff or chewing tobacco at least 20 times and who currently uses either of these substances. However, information for males 18–25 years of age is also available from the NHSDA using the same definition as for the younger age group. As measured in the NHIS the proportion of men 18–24 years of age using smokeless tobacco increased from 8.9 percent in 1987 to 9.9 percent in 1991. The proportion among men 18–25 years of age was higher and decreased from 1988 to 1991 according to the NHSDA (12.3 percent in 1988 and 11.6 percent in 1991); differences may be due to sampling error.

**Table 3. Tobacco objective status**

Objective	1987 baseline		1990	1991	Target 2000
	Original	Revised			
<b>3.1 Coronary heart disease deaths (age adjusted per 100,000)</b> . . . . .	135	<sup>1</sup> No change	122	---	100
a. Blacks (age adjusted per 100,000) . . . . .	163	<sup>1</sup> 168	158	---	115
<b>3.2 Lung cancer deaths (age adjusted per 100,000)</b> . . . . .	37.9	<sup>1</sup> 38.5	39.9	---	42
<b>3.3 Slow the rise in chronic obstructive pulmonary disease deaths (age adjusted per 100,000)</b> . . . . .	18.7	<sup>1</sup> 18.9	19.7	---	25
<b>3.4 Cigarette smoking prevalence</b>					
People 20 years and over . . . . .	29%	...	26%	26%	15%
Males . . . . .	32%	...	28%	28%	...
Females . . . . .	27%	...	23%	24%	...
a. People with high school education or less 20 years and over . . . . .	34%	...	31%	32%	20%
b. Blue-collar workers 20 years and over . . . . .	36%	...	37%	36%	20%
c. Military personnel . . . . .	<sup>2</sup> 42%	...	---	<sup>3</sup> 35%	20%
d. Blacks 20 years and over . . . . .	34%	...	27%	30%	18%
e. Hispanics 20 years and over . . . . .	<sup>4</sup> 33%	...	24%	20%	18%
f. American Indians/Alaska Natives . . . . .	<sup>5</sup> 42-70%	...	38%	33%	20%
g. Southeast Asian males . . . . .	<sup>6</sup> 55%	...	<sup>7</sup> 35%	---	20%
h. Females of reproductive age (18-44 years) . . . . .	29%	...	26%	27%	12%
i. Pregnant females . . . . .	<sup>8</sup> 25%	...	19%	20%	10%
j. Females who use oral contraceptives . . . . .	<sup>9</sup> 36%	...	<sup>2</sup> 26%	---	10%
<b>3.5 Smoking initiation by children and adolescents</b> . . . . .	30%	...	26%	24%	15%
a. Lower socioeconomic status people 20-24 years . . . . .	40%	...	35%	31%	18%
<b>3.6 Smoking cessation attempts</b> . . . . .	<sup>10</sup> 34%	...	<sup>11</sup> 34%	39%	50%
<b>3.7 Smoking cessation during pregnancy</b> . . . . .	<sup>8</sup> 39%	...	---	31%	60%
a. Females with less than a high school education . . . . .	<sup>8,12</sup> 28%	...	---	21%	45%
<b>3.8 Children's exposure to smoke at home</b> . . . . .	<sup>10</sup> 39%	...	---	---	20%
<b>3.9 Smokeless tobacco use</b>					
Males 12-17 years . . . . .	26.6%	...	---	<sup>13</sup> 5.3%	4%
Males 18-24 years . . . . .	<sup>14</sup> 8.9%	...	---	9.9%	4%
a. American Indian/Alaska Native people 18-24 years . . . . .	<sup>15</sup> 18-64%	...	---	19.7%	10%
<b>3.10 Tobacco-use prevention education and tobacco-free schools</b>					
Tobacco free schools . . . . .	<sup>2</sup> 17%	...	---	---	100%
Tobacco use prevention curricula					
High school level . . . . .	<sup>2</sup> 78%	...	---	---	100%
Middle school . . . . .	<sup>2</sup> 81%	...	---	---	100%
Elementary school . . . . .	<sup>2</sup> 75%	...	---	---	100%
<b>3.11 Worksite smoking policies</b> . . . . .	---	...	---	---	75%
50 or more employees . . . . .	<sup>8</sup> 27%	...	---	<sup>3</sup> 59%	...
Medium and large companies . . . . .	54%	...	---	85%	...
<b>3.12 Clean indoor air laws</b>					
Number of States with laws restricting smoking in public places . . . . .	<sup>2,16</sup> 42	...	---	<sup>16</sup> 44	<sup>16</sup> 50
Number of States with restricted smoking in public workplaces . . . . .	<sup>2</sup> 31	...	---	<sup>16</sup> 35	<sup>16</sup> 50
Number of States with laws regulating smoking in private and public worksites . . . . .	<sup>2</sup> 13	...	---	<sup>16</sup> 16	<sup>16</sup> 50
<b>3.13 Laws prohibiting tobacco products sale and distribution to children 18 years and under</b> . . . . .	<sup>17</sup> 44	...	---	<sup>16</sup> 48	50
<b>3.14 Number of States with plans to reduce tobacco use</b> . . . . .	<sup>18</sup> 12	...	---	---	50
<b>3.15 Tobacco product advertising and promotion to youth</b> . . . . .	<sup>17</sup> Minimal	...	---	---	Eliminate
<b>3.16 Cessation counseling and follow-up by clinicians</b>					
Primary care . . . . .	<sup>10,19</sup> 52%	...	---	---	75%
Oral health care . . . . .	<sup>10,20</sup> 35%	...	---	---	75%

<sup>1</sup>Data have been recomputed to reflect revised intercensal population estimates; see *Health, United States, 1992*, Appendix I.  
<sup>2</sup>1988 data.  
<sup>3</sup>1992 data.  
<sup>4</sup>1982-84 data.  
<sup>5</sup>1979-87 data.  
<sup>6</sup>1984-88 data.  
<sup>7</sup>Vietnamese males only.  
<sup>8</sup>1985 data.  
<sup>9</sup>1983 data.  
<sup>10</sup>1986 data.

<sup>11</sup>1987 data.  
<sup>12</sup>Baseline for white females 20-44 years.  
<sup>13</sup>Used in past month.  
<sup>14</sup>1987-88 data.  
<sup>15</sup>1986-87 data.  
<sup>16</sup>Includes D.C.  
<sup>17</sup>1990 data.  
<sup>18</sup>1989 data.  
<sup>19</sup>Counseling more than 75 percent of smoking patients.  
<sup>20</sup>Counseling at least 75 percent of smoking patients.

NOTE: Data sources are in table C.

# Tobacco Objectives

**3.1\*:** Reduce coronary heart disease deaths to no more than 100 per 100,000 people.

Duplicate objectives: 1.1, 2.1, and 15.1

**3.1a\*:** Reduce coronary heart disease deaths among blacks to no more than 115 per 100,000 people.

Duplicate objectives: 1.1a, 2.1a, and 15.1a

**3.2\*:** Slow the rise in lung cancer deaths to achieve a rate of no more than 42 per 100,000 people.

*NOTE: In its publications, the National Cancer Institute age adjusts cancer death rates to the 1970 U.S. population. Using the 1970 standard, the equivalent target value for this objective would be 53 per 100,000.*

Duplicate objective: 16.2

**3.3:** Slow the rise in deaths from chronic obstructive pulmonary disease to achieve a rate of no more than 25 per 100,000 people.

*NOTE: Deaths from chronic obstructive pulmonary disease include deaths due to chronic bronchitis, emphysema, asthma, and other chronic obstructive pulmonary diseases and allied conditions.*

**3.4\*:** Reduce cigarette smoking to a prevalence of no more than 15 percent among people aged 20 and older.

*NOTE: A cigarette smoker is a person who has smoked at least 100 cigarettes and currently smokes cigarettes.*

Duplicate objectives: 15.12 and 16.6

**3.4a\*:** Reduce cigarette smoking to a prevalence of no more than 20 percent among people with a high school education or less aged 20 and older.

Duplicate objectives: 15.12a and 16.6a

**3.4b\*:** Reduce cigarette smoking to a prevalence of no more than 20 percent among blue-collar workers aged 20 and older.

Duplicate objectives: 15.12b and 16.6b

**3.4c\*:** Reduce cigarette smoking to a prevalence of no more than 20 percent among military personnel.

Duplicate objectives: 15.12c and 16.6c

**3.4d\*:** Reduce cigarette smoking to a prevalence of no more than 18 percent among blacks aged 20 and older.

Duplicate objectives: 15.12d and 16.6d

**3.4e\*:** Reduce cigarette smoking to a prevalence of no more than 18 percent among Hispanics aged 20 and older.

Duplicate objectives: 15.12e and 16.6e

**3.4f\*:** Reduce cigarette smoking to a prevalence of no more than 20 percent among American Indians and Alaska Natives.

Duplicate objectives: 15.12f and 16.6f

**3.4g\*:** Reduce cigarette smoking to a prevalence of no more than 20 percent among Southeast Asian men.

Duplicate objectives: 15.12g and 16.6g

**3.4h\*:** Reduce cigarette smoking to a prevalence of no more than 12 percent among women of reproductive age.

Duplicate objectives: 15.12h and 16.6h

**3.4i\*:** Reduce cigarette smoking to a prevalence of no more than 10 percent among pregnant women.

Duplicate objectives: 15.12i and 16.6i

**3.4j\*:** Reduce cigarette smoking to a prevalence of no more than 10 percent among women who use oral contraceptives.

Duplicate objectives: 15.12j and 16.6j

**3.5:** Reduce the initiation of cigarette smoking by children and youth so that no more than 15 percent have become regular cigarette smokers by age 20.

**3.5a:** Reduce the initiation of cigarette smoking by lower socioeconomic status youth so that no more than 18 percent have become regular cigarette smokers by age 20.

**3.6:** Increase to at least 50 percent the proportion of cigarette smokers aged 18 and older who stopped smoking cigarettes for at least one day during the preceding year.

**3.7:** Increase smoking cessation during pregnancy so that at least 60 percent of women who are cigarette smokers at the time they become pregnant quit smoking early in pregnancy and maintain abstinence for the remainder of their pregnancy.

**3.7a:** Increase smoking cessation during pregnancy so that at least 45 percent of women with less than a high school education who are cigarette smokers at the time they become pregnant quit smoking early in pregnancy and maintain abstinence for the remainder of their pregnancy.

**3.8:** Reduce to no more than 20 percent the proportion of children aged 6 and younger who are regularly exposed to tobacco smoke at home.

*NOTE: Regular exposure to tobacco smoke at home is defined as the occurrence of tobacco smoking anywhere in the home on more than three days each week.*

**3.9:** Reduce smokeless tobacco use by males aged 12–24 to a prevalence of no more than 4 percent.

*NOTE: For males aged 12–17, a smokeless tobacco user is someone who has used snuff or chewing tobacco in the preceding month. For males aged 18–24, a smokeless tobacco user is someone who has used either snuff or chewing tobacco at least 20 times and who currently uses snuff or chewing tobacco.*

**3.9a:** Reduce smokeless tobacco use by American Indian and Alaska Native youth to a prevalence of no more than 10 percent.

**3.10:** Establish tobacco-free environments and include tobacco use prevention in the curricula of all elementary, middle, and secondary schools, preferably as part of quality school health education.

**3.11:** Increase to at least 75 percent the proportion of worksites with a formal smoking policy that prohibits or severely restricts smoking at the workplace.

**3.12:** Enact in 50 States comprehensive laws on clean indoor air that prohibit or strictly limit smoking in the workplace and enclosed public places (including health care facilities, schools, and public transportation).

**3.13:** Enact and enforce in 50 States laws prohibiting the sale and distribution of tobacco products to youth younger than age 19.

*NOTE: Model legislation proposed by the Department of Health and Human Services (DHHS) recommends licensure of tobacco vendors, civil money penalties and license suspension or revocation for violations, and a ban on cigarette vending machines.*

**3.14:** Increase to 50 the number of States with plans to reduce tobacco use, especially among youth.

**3.15:** Eliminate or severely restrict all forms of tobacco product advertising and promotion to which youth younger than age 18 are likely to be exposed.

**3.16:** Increase to at least 75 percent the proportion of primary care and oral health care providers who routinely advise cessation and provide assistance and followup for all of their tobacco-using patients.

\*Duplicate objective.

## References

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# Priority Area 4 Alcohol and Other Drugs

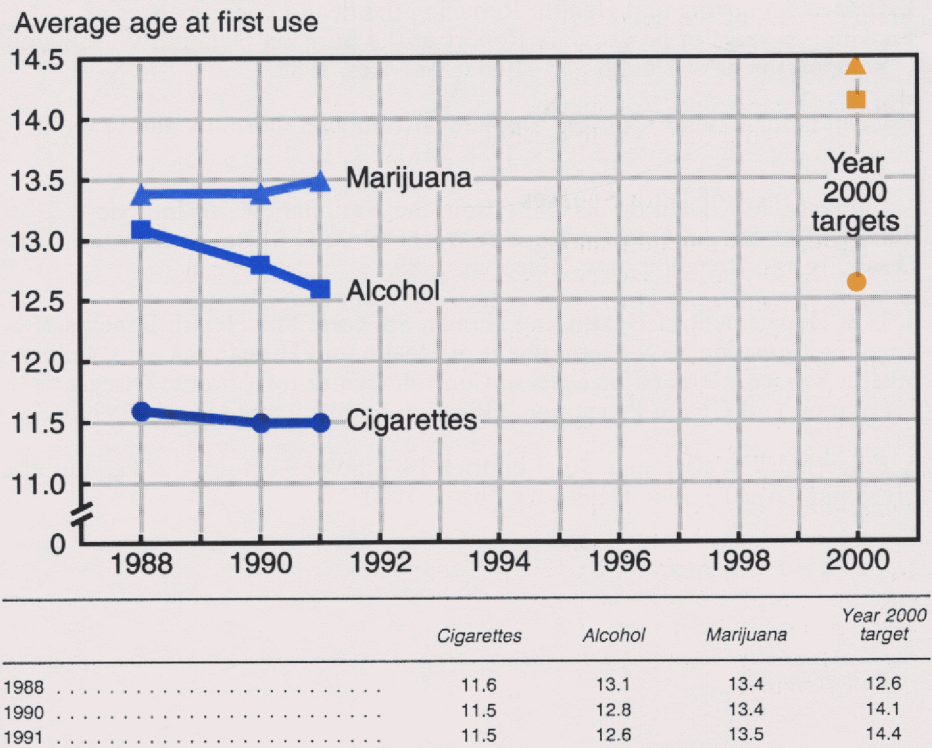
## Background and Data Summary

Large numbers of Americans have used illicit drugs and misused alcohol; these behaviors can have serious health and social consequences. Alcohol is implicated in nearly half of all deaths caused by motor vehicle crashes and fatal intentional injuries such as suicides and homicides (1). Alcohol is the principal contributor to cirrhosis, the ninth leading cause of death in the United States in 1990 (2, table 30). Intravenous drug users and their sexual partners are at high risk of infection with the human immunodeficiency virus.

The 1991 National Household Survey on Drug Abuse estimated that 19.5 million Americans had used marijuana in the past year, and 67.7 million had tried marijuana at least once (3). In the same year an estimated 23.7 million people had a history of cocaine use. 1991 data for objective 4.7 show that heavy alcohol use is very common among young people; 30 percent of high school seniors and 43 percent of college students had five or more drinks on one occasion in the previous 2-week period (a related table in *Health, United States* is 67).

Recent data indicate that progress is being made toward improving alcohol and other drug problems. Eight objectives (4.2, 4.3, 4.6, 4.8, 4.9, 4.10, 4.11, and 4.15) show improvement toward the year 2000 targets, and objective 4.1 has surpassed the target. Average age at first use among adolescents aged 12–17 years did not change substantially for either cigarettes or marijuana but declined markedly for alcohol (4.5). Heavy alcohol consumption has decreased among high school seniors but has increased among college students (4.7). New data were available to establish baseline information for two objectives, drug-related emergency room visits (4.4) and work sites with alcohol and other drug policies (4.14).

**Figure 10. Average age of first use of cigarettes, alcohol, and marijuana by adolescents 12–17 years of age: United States, 1988–91 and year 2000 targets for objective 4.5**



SOURCE: National Institute for Drug Abuse, National Household Survey of Drug Abuse.

No new data were available for two objectives (4.13 and 4.18) in this priority area; four objectives (4.12, 4.16, 4.17, and 4.19) have no baseline data.

### Data Issues

### Definitions

Cirrhosis deaths are tracked in objective 4.2 as an indicator of abusive alcohol consumption. The tracking variable included all deaths coded to ICD-9 571.0–571.9. This variable is more inclusive than alcoholic liver disease and cirrhosis (571.0–571.3). Alcohol-related liver disease is underreported; a significant proportion of these deaths are coded

to less specific categories such as 571.8 and 571.9. Estimates of the proportion of all cirrhosis deaths that are alcohol-related range from 41 to 95 percent (4).

Data from the National Vital Statistics System are used to track drug-related deaths (objective 4.3). Although the objective discusses drug-related deaths, it is tracked by a category of deaths that is more accurately called “drug-induced deaths” (a related table in *Health, United States* is 28). The category includes deaths whose underlying cause was drug dependence, nondependent use of drugs, and poisoning from drugs, all of which may include medically prescribed drugs. It excludes accidents,



homicides, and other causes indirectly related to drug use.

### **Data Source Description**

Alcohol-related motor vehicle crashes (4.1) are tracked using data from the Department of Transportation's Fatal Accident Reporting System (FARS). The FARS supplements death certificate data with information on the circumstances of the death to determine whether the death was alcohol related. The National Vital Statistics System does not specify alcohol-related motor vehicle crashes.

### **Comparability of Data Sources**

Alcohol consumption among people 18–20 years of age increased from 52 percent in 1990 to 57 percent in 1991. However, because the scope of the 1991 National Household Survey on Drug Abuse, used to measure this objective, was expanded to include college students living in dormitories, the results are not comparable to previous years. When the subsample of these college students is removed from the 1991 data, the proportion of young adults using alcohol in the past month (53 percent) is only slightly higher than the 1990 figure.

**Table 4. Alcohol and other drugs objective status**

Objective	1987 baseline		1990	1991	Target 2000
	Original	Revised			
<b>4.1 Alcohol-related motor vehicle deaths (per 100,000)</b> .....	9.8	...	8.9	7.9	8.5
a. American Indian/Alaska Native males .....	52.2	<sup>1</sup> 40.4	---	---	44.8
b. People 15–24 years .....	21.5	...	18.5	---	18.0
<b>4.2 Cirrhosis deaths (age adjusted per 100,000)</b> .....	9.1	<sup>2</sup> 9.2	8.6	---	6.0
a. Black males.....	22.0	<sup>2</sup> 22.6	20.0	---	12.0
b. American Indians/Alaska Natives .....	25.9	<sup>1</sup> 20.5	19.8	---	13.0
		<sup>2</sup> No			
<b>4.3 Drug-related deaths (age adjusted per 100,000)</b> .....	3.8	change	3.6	---	3.0
<b>4.4 Drug abuse-related emergency room visits (per 100,000)</b> .....	...	<sup>3</sup> 164.9	---	---	131.9
<b>4.5 Average age of first use (adolescents 12–17 years)</b>					
Cigarettes .....	<sup>4</sup> 11.6	...	11.5	11.5	12.6
Alcohol.....	<sup>4</sup> 13.1	...	12.8	12.6	14.1
Marijuana.....	<sup>4</sup> 13.4	...	13.4	13.5	14.4
<b>4.6 Use in past month by children and adolescents</b>					
Alcohol					
12–17 years.....	<sup>4</sup> 25.2%	...	24.5%	20.3%	12.6%
18–20 years.....	<sup>4</sup> 57.9%	...	52.3%	57.0%	29.0%
Marijuana					
12–17 years.....	<sup>4</sup> 6.4%	...	5.2%	4.3%	3.2%
18–25 years.....	<sup>4</sup> 15.5%	...	12.7%	13.0%	7.8%
Cocaine					
12–17 years.....	<sup>4</sup> 1.1%	...	0.6%	0.4%	0.6%
18–25 years.....	<sup>4</sup> 4.5%	...	2.2%	2.0%	2.3%
<b>4.7 Heavy drinking in past 2 weeks</b>					
High school seniors .....	<sup>5</sup> 33.0%	...	32.2%	29.8%	28.0%
College students.....	<sup>5</sup> 41.7%	...	41.0%	42.8%	32.0%
<b>4.8 Alcohol consumption (gallons per capita)</b> .....	2.54	...	<sup>5</sup> 2.46	---	2.0
<b>4.9 Perception of social disapproval by high school seniors</b>					
Heavy use of alcohol .....	<sup>5</sup> 56.4%	...	68.9%	67.4%	70.0%
Occasional use of marijuana .....	<sup>5</sup> 71.1%	...	80.5%	79.4%	85.0%
Trying cocaine once or twice .....	<sup>5</sup> 88.9%	...	91.5%	88.0%	95.0%
<b>4.10 Perception of harm by high school seniors</b>					
Heavy use of alcohol .....	<sup>5</sup> 44.0%	...	47.1%	48.6%	70.0%
Occasional use of marijuana .....	<sup>5</sup> 77.5%	...	77.8%	78.6%	90.0%
Trying cocaine once or twice .....	<sup>5</sup> 54.9%	...	59.4%	59.4%	80.0%
<b>4.11 Anabolic steroid use (ever used in lifetime)</b>					
Male high school seniors .....	<sup>5</sup> 4.7%	...	5.0%	3.6%	3.0%
<b>4.12 Number of States with access to treatment programs</b> .....	---	...	---	---	50
<b>4.13 Alcohol and drug education in schools</b> .....	---	...	---	---	100%
Provided students with some instruction .....	63%	...	---	---	...
Provided students with counseling.....	39%	...	---	---	...
Referred students for clinical assessments .....	23%	...	---	---	...
<b>4.14 Worksite alcohol and drug policies</b>					
Alcohol.....	...	<sup>6</sup> 88%	---	---	60%
Other Drugs.....	...	<sup>6</sup> 89%	---	---	60%
<b>4.15 Number of States with administrative license suspension/revocation laws</b> .....	<sup>7,8</sup> 28	...	---	<sup>8</sup> 29	<sup>8</sup> 50
<b>4.16 Number of States with policies to reduce minors' access to alcohol</b>	---	...	---	---	50
<b>4.17 Number of States with restrictions on promotion of alcohol to children and adolescents</b> .....	---	...	---	---	20
<b>4.18 Number of States with 0.04 alcohol concentration tolerance levels</b> ..	<sup>7</sup> 0	...	---	---	50
Number of States with 0.00 alcohol concentration tolerance levels .....	<sup>7</sup> 0	...	---	---	50
<b>4.19 Screening, counseling, and referral by clinicians</b> .....	---	...	---	---	75%

<sup>1</sup>Data have been revised to include the entire U.S. American Indian/Alaska Native population; see Introduction.

<sup>2</sup>Data have been recomputed to reflect revised intercensal population estimates; see *Health, United States, 1992*, Appendix I.

<sup>3</sup>1991 data.

<sup>4</sup>1988 data.

<sup>5</sup>1989 data.

<sup>6</sup>1992 data.

<sup>7</sup>1990 data.

<sup>8</sup>Includes Washington, DC.

NOTE: Data sources are in table C.

# Alcohol and Other Drugs Objectives

**4.1:** Reduce deaths caused by alcohol-related motor vehicle crashes to no more than 8.5 per 100,000 people.

**4.1a:** Reduce deaths among American Indian and Alaska Native men caused by alcohol-related motor vehicle crashes to no more than 44.8 per 100,000.

**4.1b:** Reduce deaths among people aged 15–24 caused by alcohol-related motor vehicle crashes to no more than 18 per 100,000.

**4.2:** Reduce cirrhosis deaths to no more than 6 per 100,000 people.

**4.2a:** Reduce cirrhosis deaths among black men to no more than 12 per 100,000.

**4.2b:** Reduce cirrhosis deaths among American Indians and Alaska Natives to no more than 13 per 100,000.

**4.3:** Reduce drug-related deaths to no more than 3 per 100,000 people.

**4.4:** Reduce drug abuse-related hospital emergency department visits by at least 20 percent.

**4.5:** Increase by at least 1 year the average age of first use of cigarettes, alcohol, and marijuana by adolescents aged 12–17.

**4.6:** Reduce the proportion of young people who have used alcohol, marijuana, and cocaine in the past month, as follows:

Substance and age	2000 target (percent)
Alcohol:	
12–17 years	12.6
18–20 years	29.0
Marijuana:	
12–17 years	3.2
18–25 years	7.8
Cocaine:	
12–17 years	0.6
18–25 years	2.3

**4.7:** Reduce the proportion of high school seniors and college students engaging in recent occasions of heavy drinking of alcoholic beverages to no more than 28 percent of high school seniors and 32 percent of college students.

*NOTE: Recent heavy drinking is defined as having five or more drinks on one occasion in the previous 2-week period as monitored by self-reports.*

**4.8:** Reduce alcohol consumption by people aged 14 and older to an annual average of no more than 2 gallons of ethanol per person.

**4.9:** Increase the proportion of high school seniors who perceive social disapproval associated with the heavy use of alcohol, occasional use of marijuana, and experimentation with cocaine, as follows:

	2000 target (percent)
Heavy use of alcohol	70
Occasional use of marijuana	85
Trying cocaine once or twice	95

*NOTE: Heavy drinking is defined as having five or more drinks once or twice each weekend.*

**4.10:** Increase the proportion of high school seniors who associate risk of physical or psychological harm with the heavy use of alcohol, regular use of marijuana, and experimentation with cocaine, as follows:

	2000 target (percent)
Heavy use of alcohol	70
Regular use of marijuana	90
Trying cocaine once or twice	80

*NOTE: Heavy drinking is defined as having five or more drinks once or twice each weekend.*

**4.11:** Reduce to no more than 3 percent the proportion of male high school seniors who use anabolic steroids.

**4.12:** Establish and monitor in 50 States comprehensive plans to ensure access to alcohol and drug treatment programs for traditionally underserved people.

**4.13:** Provide to children in all school districts and private schools primary and secondary school educational programs on alcohol and other drugs, preferably as part of quality school health education.

**4.14:** Extend adoption of alcohol and drug policies for the work environment to at least 60 percent of worksites with 50 or more employees.

**4.15:** Extend to 50 States administrative driver's license suspension/revocation laws or programs of equal effectiveness for people determined to have been driving under the influence of intoxicants.

**4.16:** Increase to 50 the number of States that have enacted and enforce policies, beyond those in existence in 1989, to reduce access to alcoholic beverages by minors.

**4.17:** Increase to at least 20 the number of States that have enacted statutes to restrict promotion of alcoholic beverages that are focused principally on young audiences.

**4.18:** Extend to 50 States legal blood alcohol concentration tolerance levels of .04 percent for motor vehicle drivers aged 21 and older and .00 percent for those younger than age 21.

**4.19:** Increase to at least 75 percent the proportion of primary care providers who screen for alcohol and other drug use problems and provide counseling and referral as needed.

\*Duplicate objective.

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# Priority Area 5

## Family Planning

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### Background and Data Summary

The formation and growth of families have significant public health and socio-psychological impact on society and individuals (1). Family planning, defined as the process of establishing the preferred number and spacing of children in one's family and selecting the means by which this is achieved, presupposes the importance of family and the importance of planning (2). Problems attendant to poor family planning exact a tremendous toll. Low birth weight (3), high rates of infant mortality (4), and inadequate family support (5) are some of the consequences of poor family planning.

Five of the 11 objectives in this priority area focus on the teenage population. More than three out of four young women and 85 percent of young men have had sexual intercourse by age 20. Each year, 1 out of 10 young women in this age group becomes pregnant. By age 20, approximately 40 percent of all women have been pregnant while 63 percent of black women have been pregnant. An estimated 84 percent of these teen pregnancies were unintended (2).

Updated data were available for four objectives. Objective 5.1 (adolescent pregnancy) moved away from the target, although there was a slight decline among black females. Objective 5.4 (adolescent postponement of sexual intercourse) also moved away from the target. Two objectives (5.5 and 5.6) showed mixed progress. Data from the Youth Risk Behavior Survey indicate that teenage male abstinence from sexual intercourse (5.5) increased slightly while female abstinence remained essentially unchanged. Contraceptive use (5.6) increased for high school males and females; combined (use of condom and pill) contraceptive use increased for males.

### Data Issues

#### Comparability of Data Sources

Data used to update objective 5.4 (postponement of sexual intercourse) came from the 1990 Youth Risk Behavior Survey (YRBS). The YRBS surveys adolescents in school; it misses dropouts, who may be at a higher risk. Information from the YRBS is only available by school grade and not age; therefore, the data are not exactly comparable to the baseline. Fifteen year old adolescents are compared with 10th graders and those 17 years of age compared with 12th graders.

#### Data Availability

Baseline data for four objectives (5.7, 5.9, 5.10, and 5.11) came from one-time surveys. An ongoing data source has not yet been established for three of these objectives (5.9, 5.10, and 5.11); data from the National Survey of Family Growth (NSFG) will be used to monitor the fourth objective (5.7). The NSFG, the data source for many of the family planning objectives, is conducted every 3 to 4 years.

**Table 5. Family planning objective status**

Objective	1988 Baseline		1990	1991	Target 2000
	Original	Revised			
<b>5.1 Adolescent pregnancy</b>					
Females 15–17 years (per 1,000) . . . . .	171.1	...	<sup>2</sup> 74.3	---	50
a. Black adolescent females 15–19 years . . . . .	1, <sup>3</sup> 186	...	<sup>2</sup> , <sup>3</sup> 184	---	120
b. Hispanic adolescent females 15–19 years . . . . .	1158	...	---	---	105
<b>5.2 Unintended pregnancy</b> . . . . .	56%	...	---	---	30%
a. Black females . . . . .	78%	...	---	---	40%
<b>5.3 Infertility</b>					
Married couples with wives 15–44 years . . . . .	7.9%	...	---	---	6.5%
a. Black couples . . . . .	12.1%	...	---	---	9%
b. Hispanic couples . . . . .	12.4%	...	---	---	9%
<b>5.4 Adolescents who ever had sexual intercourse</b>					
Adolescents 15 years					
Females . . . . .	27%	...	<sup>4</sup> 43%	<sup>4</sup> 45%	15%
Males . . . . .	33%	...	<sup>4</sup> 53%	<sup>4</sup> 51%	15%
Adolescents 17 years					
Females . . . . .	50%	...	<sup>5</sup> 67%	<sup>5</sup> 65%	40%
Males . . . . .	66%	...	<sup>5</sup> 76%	<sup>5</sup> 68%	40%
<b>5.5 Adolescent abstinence from sexual intercourse</b>					
Ever sexually active females 15–17 years . . . . .	26%	...	24%	25%	40%
Ever sexually active males 15–17 years . . . . .	...	33%	30%	36%	40%
<b>5.6 Contraception use by sexually active adolescents</b>					
Females 15–19 years					
First intercourse . . . . .	63%	...	---	---	90%
Recent intercourse . . . . .	78%	...	78%	81%	90%
Oral contraception and condom use at most recent intercourse . . . . .	2%	...	---	---	90%
High school males					
Recent intercourse . . . . .	...	<sup>6</sup> 78%	---	83%	90%
Oral contraception and condom use at most recent intercourse . . . . .	...	<sup>6</sup> 2.3%	---	3.3%	90%
Males 17–19 years					
Condom and oral contraception use at last intercourse . . . . .	...	15%	<sup>7</sup> 14%	---	90%
<b>5.7 Failure of contraceptive method</b> . . . . .	<sup>8</sup> 10%	...	---	---	5%
<b>5.8 Family discussion of human sexuality</b>					
People 13–18 years who have discussed sexuality with parents . . . . .	<sup>9</sup> 66%	...	---	---	85%
<b>5.9 Adoption information from pregnancy counselors</b> . . . . .	<sup>10</sup> 60%	...	---	---	90%
<b>5.10 Age-appropriate preconception counseling by clinicians</b> . . . . .	---	...	---	---	60%
<b>5.11 Clinic services for HIV and other sexually transmitted diseases</b> . . . . .	---	...	---	---	50%
Family planning clinics . . . . .	<sup>11</sup> 40%	...	---	---	...

<sup>1</sup>1985 data.

<sup>2</sup>1988 data.

<sup>3</sup>Adolescents other than white.

<sup>4</sup>10th grade students.

<sup>5</sup>12th grade students.

<sup>6</sup>1990 data.

<sup>7</sup>1990-91 data.

<sup>8</sup>1982 data.

<sup>9</sup>1986 data.

<sup>10</sup>1984 data.

<sup>11</sup>1989 data.

NOTE: Data sources are in table C.

# Family Planning Objectives

**5.1:** Reduce pregnancies among girls aged 17 and younger to no more than 50 per 1,000 adolescents.

*NOTE: For black and Hispanic adolescent girls, baseline data are unavailable for those aged 15–17. The targets for these two populations are based on data for women aged 15–19. If more complete data become available, a 35-percent reduction from baseline figures should be used as the target.*

**5.1a:** Reduce pregnancies among black adolescent girls aged 15–19 to no more than 120 per 1,000.

**5.1b:** Reduce pregnancies among Hispanic adolescent girls aged 15–19 to no more than 105 per 1,000.

**5.2:** Reduce to no more than 30 percent the proportion of all pregnancies that are unintended.

**5.2a:** Reduce to no more than 40 percent the proportion of all pregnancies among black women that are unintended.

**5.3:** Reduce the prevalence of infertility to no more than 6.5 percent.

*NOTE: Infertility is the failure of couples to conceive after 12 months of intercourse without contraception.*

**5.3a:** Reduce the prevalence of infertility among black women to no more than 9 percent.

**5.3b:** Reduce the prevalence of infertility among Hispanic couples to no more than 9 percent.

**5.4\*:** Reduce the proportion of adolescents who have engaged in sexual intercourse to no more than 15 percent by age 15 and no more than 40 percent by age 17.

Duplicate objectives: 18.3 and 19.9

**5.5:** Increase to at least 40 percent the proportion of ever sexually active adolescents aged 17 and younger who have abstained from sexual activity for the previous 3 months.

**5.6:** Increase to at least 90 percent the proportion of sexually active, unmarried people aged 19 and younger who use contraception, especially combined method contraception that both effectively prevents pregnancy and provides barrier protection against disease.

**5.7:** Increase the effectiveness with which family planning methods are used, as measured by a decrease to no more than 5 percent in the proportion of couples experiencing pregnancy despite use of a contraceptive method.

**5.8:** Increase to at least 85 percent the proportion of people aged 10–18 who have discussed human sexuality, including values surrounding sexuality, with their parents and/or have received information through another parentally endorsed source, such as youth, school, or religious programs.

*NOTE: This objective, which supports family communication on a range of vital personal health issues, will be tracked using the National Health Interview Survey, a continuing, voluntary, national sample survey of adults who report on household characteristics including such items as illnesses, injuries, use of health services, and demographic characteristics.*

**5.9:** Increase to at least 90 percent the proportion of pregnancy counselors who offer positive, accurate information about adoption to their unmarried patients with unintended pregnancies.

*NOTE: Pregnancy counselors are any providers of health or social services who discuss the management or outcome of pregnancy with a woman after she has received a diagnosis of pregnancy.*

**5.10\***: Increase to at least 60 percent the proportion of primary care providers who provide age-appropriate preconception care and counseling.

Duplicate objective: 14.12

**5.11\***: Increase to at least 50 percent the proportion of family planning clinics, maternal and child health clinics, sexually transmitted disease clinics, tuberculosis clinics, drug treatment centers, and primary care clinics that screen, diagnose, treat, counsel, and provide (or refer for) partner notification services for HIV infection and bacterial sexually transmitted diseases (gonorrhea, syphilis, and Chlamydia).

Duplicate objectives: 18.13 and 19.11

\*Duplicate objective.

## References

1. Billy JOG, et al. Final report: Effects of sexual activity on social and psychological development. Seattle. 1986.
2. 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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# Priority Area 6

## Mental Health and Mental Disorders

### Background and Data Summary

Mental health refers to an individual's ability to negotiate the daily challenges and social interactions of life without experiencing undue emotional or behavioral incapacity. Mental health and mental disorders can be affected by numerous factors ranging from biologic and genetic vulnerabilities, acute or chronic physical dysfunction, to environmental conditions and stresses.

Progress has been reported for 6 (objectives 6.1, 6.2, 6.5, 6.7, 6.8, and 6.11) of the 14 objectives in this area. Suicide (6.1), one of the most serious potential outcomes of mental disorders (1), declined slightly from the 1987 baseline. Adolescent suicide rates, while remaining stable for the past 3 years, are higher than the 1987 baseline. The suicide rate for American Indians and Alaska Natives did not change appreciably. Injurious suicide attempts among adolescents (6.2) showed a decline from the 1990 baseline and surpassed the year 2000 target of 1.8 percent. The prevalence of stress (6.5) has declined and a greater proportion of people suffering from depression (6.7) are receiving treatment.

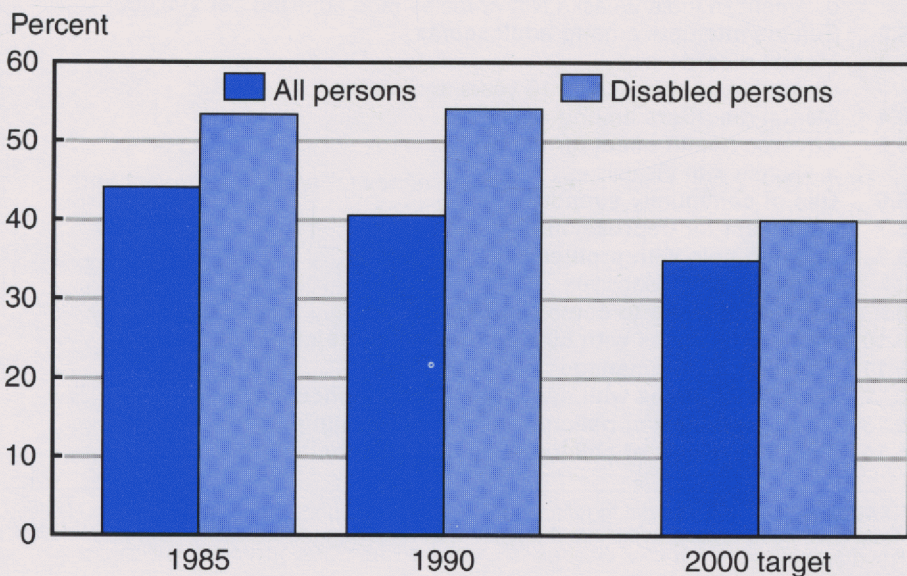
Trends for two objectives moved away from the year 2000 targets. Funding reductions caused the small decline in the number of State clearinghouses for mental health information (6.12). More people are *not* seeking help for stress related problems (6.9). A baseline of three States was established for objective 6.10 (suicide prevention in jails). Baseline data for objectives 6.13 and 6.14 will be available in late 1993. The three remaining objectives (6.3, 6.4, and 6.6) had no new data beyond the baseline.

### Data Issues

#### Definitions

The baseline for objective 6.3, the prevalence of mental disorders in

**Figure 11. Persons 18 years and over with adverse health effects of stress in the past year: United States, 1985, 1990, and year 2000 target for objective 6.5**



	1985	1990	Year 2000 target
All persons 18 years and over. . . . .	44.2	40.6	35
Disabled persons 18 years and over. . . . .	53.5	54.2	40

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey.

children and adolescents, was revised because the diagnostic categories (2) have been expanded considerably since the establishment of the baseline (3). The target was also revised to reflect the same proportional decline sought in the original baseline. This change will affect monitoring.

### Comparability of Data Sources

Several objectives will be tracked using a data source different from that used for the baseline. Objectives 6.4 (prevalence of mental disorders) and 6.7 (prevalence of depression) had baselines established by Epidemiological Catchment Area Studies, but will rely on the National Comorbidity Survey for future data.

Data to monitor progress for objective 6.2 are obtained from the Youth Risk Behavior Survey. These data reflect the number of suicide attempts in a 12-month period that required medical treatment.

**Table 6. Mental health and mental disorders objective status**

	Objective	1987 baseline		1990	1991	Target 2000
		Original	Revised			
<b>6.1 Suicide (age adjusted per 100,000)</b> .....		11.7	<sup>1</sup> No change	11.5	---	10.5
a. Adolescents 15–19 years (per 100,000) .....		10.3	<sup>1</sup> 10.2	11.1	---	8.2
b. Males 20–34 years (per 100,000) .....		25.2	<sup>1</sup> No change	25.1	---	21.4
c. White males 65 years and over (per 100,000).....		46.1	<sup>1</sup> 46.7	44.4	---	39.2
d. American Indian/Alaska Native males (age adjusted per 100,000)....		15	<sup>2</sup> 20.1	21.0	---	12.8
<b>6.2 Suicide attempts among adolescents</b> .....		...	<sup>3</sup> 2.1%	---	1.7%	1.8%
<b>6.3 Mental disorders</b>						
Children and adolescents 18 years and under .....		<sup>4</sup> 12%	<sup>5,6</sup> 20%	---	---	717%
<b>6.4 Mental disorders among adults</b> .....		<sup>8</sup> 12.6%	...	---	---	10.7%
<b>6.5 Adverse health effects from stress</b> .....		<sup>9</sup> 42.6%	<sup>6,9</sup> 44.2%	40.6%	---	35%
a. People with disabilities .....		<sup>9</sup> 53.5%	...	54.2%	---	40%
<b>6.6 Use of community support</b> .....		<sup>10</sup> 15%	...	---	---	30%
<b>6.7 Treatment for depression</b> .....		<sup>11</sup> 31%	...	<sup>12</sup> 36%	---	45%
<b>6.8 Seeking help with problems</b> .....		<sup>9</sup> 11.1%	...	12.5%	---	20%
a. People with disabilities .....		<sup>9</sup> 14.7%	...	17.0%	---	30%
<b>6.9 Not taking steps to control stress</b> .....		<sup>9</sup> 21%	<sup>6,9</sup> 24%	28%	---	5%
<b>6.10 Number of States with suicide prevention in jails</b> .....		...	<sup>13</sup> 3	---	---	50
<b>6.11 Worksite stress management programs</b> .....		<sup>9</sup> 26.6%	...	---	<sup>13</sup> 37.0%	40%
<b>6.12 Number of States with mutual help clearinghouses</b> .....		<sup>4</sup> 9	...	---	<sup>13</sup> 8	25
<b>6.13 Clinician review of patients' mental functioning</b> .....		---	...	---	---	50%
<b>6.14 Clinician review of childrens' mental functioning</b> .....		---	...	---	---	75%

<sup>1</sup>Data have been recomputed to reflect revised intercensal population estimates; see *Health, United States, 1992*, Appendix I.

<sup>2</sup>Data have been revised to include the entire U.S. American Indian/Alaska Native population; see Introduction

<sup>3</sup>1990 data.

<sup>4</sup>1989 data.

<sup>5</sup>1988 data.

<sup>6</sup>Data have been revised to reflect updated methodology; see Introduction.

<sup>7</sup>Target has been revised to reflect proportional reduction from revised baseline.

<sup>8</sup>1984 data.

<sup>9</sup>1985 data.

<sup>10</sup>1986 data.

<sup>11</sup>1982 data.

<sup>12</sup>1983 data.

<sup>13</sup>1992 data.

NOTE: Data sources are in table C.

# Mental Health and Mental Disorders Objectives

**6.1\*:** Reduce suicides to no more than 10.5 per 100,000 people.

Duplicate objective: 7.2

**6.1a\*:** Reduce suicides among youth aged 15–19 to no more than 8.2 per 100,000.

Duplicate objective: 7.2a

**6.1b\*:** Reduce suicides among men aged 20–34 to no more than 21.4 per 100,000.

Duplicate objective: 7.2b

**6.1c\*:** Reduce suicides among white men aged 65 and older to no more than 39.2 per 100,000.

Duplicate objective: 7.2c

**6.1d\*:** Reduce suicides among American Indian and Alaska Native men in Reservation States to no more than 12.8 per 100,000.

Duplicate objective: 7.2d

**6.2\*:** Reduce by 15 percent the incidence of injurious suicide attempts among adolescents aged 14–17.

Duplicate objective: 7.8

**6.3:** Reduce to less than 10 percent the prevalence of mental disorders among children and adolescents.

**6.4:** Reduce the prevalence of mental disorders (exclusive of substance abuse) among adults living in the community to less than 10.7 percent.

**6.5:** Reduce to less than 35 percent the proportion of people aged 18 and older who experienced adverse health effects from stress within the past year.

*NOTE: For this objective, people with disabilities are people who report any limitation in activity due to chronic conditions.*

**6.5a:** Reduce to less than 40 percent the proportion of people with disabilities who experienced adverse health effects from stress within the past year.

**6.6:** Increase to at least 30 percent the proportion of people aged 18 and older with severe, persistent mental disorders who use community support programs.

**6.7:** Increase to at least 45 percent the proportion of people with major depressive disorders who obtain treatment.

**6.8:** Increase to at least 20 percent the proportion of people aged 18 and older who seek help in coping with personal and emotional problems.

**6.8a:** Increase to at least 30 percent the proportion of people with disabilities who seek help in coping with personal and emotional problems.

**6.9:** Decrease to no more than 5 percent the proportion of people aged 18 and older who report experiencing significant levels of stress who do not take steps to reduce or control their stress.

**6.10\*:** Increase to 50 the number of States with officially established protocols that engage mental health, alcohol and drug, and public health authorities with corrections authorities to facilitate identification and appropriate intervention to prevent suicide by jail inmates.

Duplicate objective: 7.18

**6.11:** Increase to at least 40 percent the proportion of worksites employing 50 or more people that provide programs to reduce employee stress.

**6.12:** Establish mutual help clearinghouses in at least 25 States.

**6.13:** Increase to at least 50 percent the proportion of primary care providers who routinely review with patients their patients' cognitive, emotional, and behavioral functioning and the resources available to deal with any problems that are identified.

**6.14:** Increase to at least 75 percent the proportion of providers of primary care for children who include assessment of cognitive, emotional, and parent-child functioning with appropriate counseling, referral, and followup, in their clinical practices.

\*Duplicate objective

## References

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# Priority Area 7

## Violent and Abusive Behavior

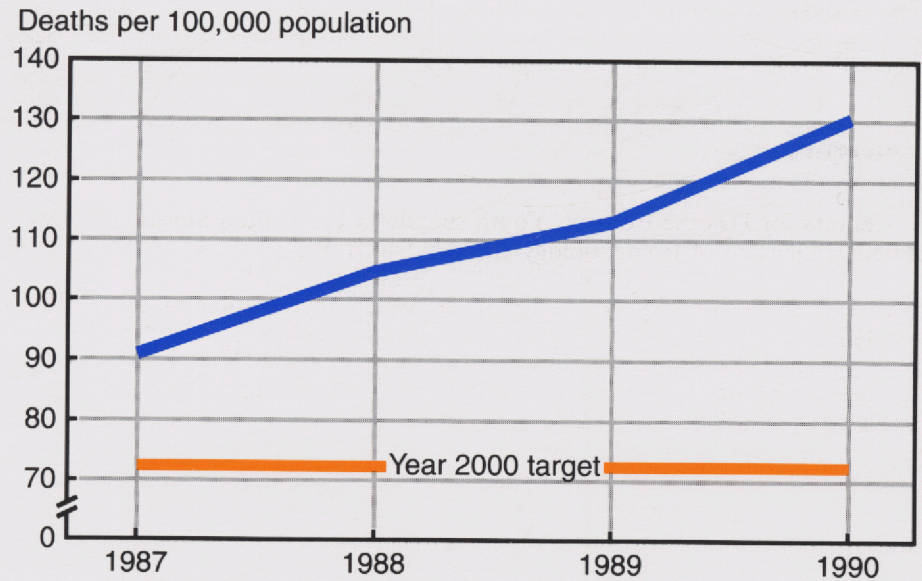
### Background and Data Summary

Violent and abusive behaviors continue to be major causes of death, injury, and stress in the United States. Suicide and homicide have resulted in over 50,000 deaths annually between 1985 and 1990 (table 30) (1) and victims of violence have exceeded 2 million persons annually (2). Violence creates extensive physical costs and emotional consequences for society (3). The widespread nature of these consequences may indicate that violence has become a routine part of social interaction in many domestic settings (4). It may also become a mode of behavior adopted by future generations raised in such settings (5). For these reasons, an area that has historically been the responsibility of the fields of law enforcement and social services has become a national public health priority.

Three of the 18 objectives (7.2, 7.7, and 7.8) in this priority area progressed toward the year 2000 targets. Suicides (7.2) have declined slightly for the total population; however, rates for some population subgroups have increased or remained the same. Rates of adolescent suicide (aged 15–19 years) have remained stable in 1988, 1989 and 1990, but are higher than the 1987 baseline. Suicide rates for American Indians and Alaska Natives have not changed appreciably from the 1987 baseline (see introduction). Rates of rape and attempted rape (7.7) have dropped and the target has been surpassed. Rape reporting, however, remains a sensitive issue, subject to a range of social and contextual influences (6). Injurious suicide attempts by adolescents (7.8) declined from the 1990 baseline and surpassed the year 2000 target. These data were obtained from the Youth Risk Behavior Survey and reflect suicide attempts in a 12-month period that required medical attention.

Movement away from the targets was reported for three objectives: homicides (7.1), weapon-related

**Figure 12. Death rates for homicide among black males 15–34 years of age: United States, 1987–90 and year 2000 target for objective 7.1**



	1987	1988	1989	1990	Year 2000 target
Black males 15–34 years. . . . .	91.1	104.9	113.2	130.5	72.4

NOTE: Death rates are age adjusted. ICD codes differ from similar categories published in *Health, United States* and elsewhere. See table A for specific codes. Related tables in *Health, United States, 1992*, are 28, 30, and 43.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System.

deaths (7.3), and assault injuries (7.6). The homicide rate for black males aged 15–34 years increased 43 percent between 1987 and 1990. Almost all of this increase is due to a sharp rise in firearm homicides (nonfirearm homicides were unchanged over the period), and it may be associated with increased violence related to drug trafficking. Weapon carrying has increased among young people (7).

The increase in weapon carrying appears linked to the increase in deaths from firearms (7.3). This rate increased by 12 percent from the 1987 baseline. In contrast, the rate of deaths from knives has remained stable for the past 4 years. The rate of injuries from crimes involving assaultive behavior (rape, robbery, and assault) rose to 11 per 1,000 in 1991.

Baseline data were established for five of the objectives (7.8, 7.9, 7.10, 7.13, and 7.18). Data to update progress were not available for three objectives (7.4, 7.5, and 7.15); these data are expected within the next 2 years. Five objectives remain without baseline data, although these should be established in the next 2 years as well (7.11, 7.12, 7.14, 7.16, and 7.17).

### Data Issues

#### Data Availability

Four objectives without baselines (7.11, 7.14, 7.16, and 7.17) relate to children and violence prevention. Baseline data on these objectives will be available in 1994.

**Table 7. Violent and abusive behavior objective status**

Objective	1987 baseline		1990	1991	Target 2000
	Original	Revised			
<b>7.1 Homicide (age adjusted per 100,000)</b> .....	8.5	<sup>1</sup> No change	10.1	---	7.2
a. Children 3 years and under (per 100,000) .....	3.9	<sup>1</sup> No change	4.4	---	3.1
b. Spouses 15-34 years (per 100,000) .....	1.7	...	<sup>2</sup> 1.5	---	1.4
c. Black males 15-34 years (per 100,000) .....	90.5	<sup>1</sup> 91.1	130.5	---	72.4
d. Hispanic males 15-34 years (per 100,000) .....	53.1	<sup>1</sup> 41.3	47.8	---	42.5
e. Black females 15-34 years (per 100,000) .....	20.0	<sup>1</sup> 20.2	22.1	---	16.0
f. American Indians/Alaska Natives (age adjusted per 100,000) ...	14.1	<sup>3</sup> 11.2	10.7	---	11.3
<b>7.2 Suicide (age adjusted per 100,000)</b> .....	11.7	<sup>1</sup> No change	11.5	---	10.5
a. Adolescents 15-19 years (per 100,000) .....	10.3	<sup>1</sup> 10.2	11.1	---	8.2
b. Males 20-34 years (per 100,000) .....	25.2	<sup>1</sup> No change	25.1	---	21.4
c. White males 65 years and over (per 100,000) .....	46.1	<sup>1</sup> 46.7	44.4	---	39.2
d. American Indian/Alaska Native males (age adjusted per 100,000) .....	15	<sup>3</sup> 20.1	21.0	---	<sup>1</sup> 10.4
<b>7.3 Weapon-related violent deaths (age adjusted per 100,000)</b> .....	14.8	<sup>1</sup> No change	16.5	---	12.6
Firearms (age adjusted per 100,000) .....	12.9	<sup>1</sup> 13.0	14.6	---	...
Knives (age adjusted per 100,000) .....	1.9	<sup>1</sup> 1.8	1.8	---	...
<b>7.4 Child abuse and neglect (per 1,000)</b> .....	<sup>4</sup> 25.2	...	---	---	less than 25.2
Incidence of types of maltreatment					
a. Physical abuse .....	<sup>4</sup> 5.7	...	---	---	less than 5.7
b. Sexual abuse .....	<sup>4</sup> 2.5	...	---	---	less than 2.5
c. Emotional abuse .....	<sup>4</sup> 3.4	...	---	---	less than 3.4
d. Neglect .....	<sup>4</sup> 15.9	...	---	---	less than 15.9
<b>7.5 Partner abuse (per 1,000)</b> .....	<sup>5</sup> 30.0	...	---	---	27.0
<b>7.6 Assault injuries (per 100,000)</b> .....	<sup>4</sup> 11.1	<sup>4,6</sup> 9.7	10.3	11.0	<sup>7</sup> 8.7
<b>7.7 Rape and attempted rape (per 100,000)</b> .....	<sup>4</sup> 120	...	100	---	108
Incidence of rape and attempted rape					
a. Females 12-34 years .....	<sup>4</sup> 250	...	206	---	225
<b>7.8 Suicide attempts among adolescents</b> .....	...	<sup>8</sup> 2.1%	---	1.7%	1.8%
<b>7.9 Physical fighting among adolescents 14-17 years (incidents per 100 students per month)</b> .....	...	<sup>9</sup> 137	---	---	110
<b>7.10 Weapon-carrying by adolescents 14-17 years (incidents per 100 students per month)</b> .....	...	<sup>9</sup> 107	---	---	86
<b>7.11 Inappropriate storage of weapons</b> .....	---	...	---	---	20% reduction
<b>7.12 Emergency room protocols for victims of violence</b> .....	---	...	---	---	90%
<b>7.13 Number of States with child death review systems</b> .....	...	<sup>9</sup> 33	---	---	45
<b>7.14 Number of States that follow-up abused children</b> .....	---	...	---	---	30
<b>7.15 Battered women turned away from shelters</b> .....	40%	...	---	---	10%
<b>7.16 Conflict resolution education in schools</b> .....	---	...	---	---	50%
<b>7.17 Comprehensive violence prevention programs</b> .....	---	...	---	---	80%
<b>7.18 Number of States with suicide prevention in jails</b> .....	...	<sup>10</sup> 3	---	---	50

<sup>1</sup>Data have been recomputed to reflect revised intercensal population estimates; see *Health, United States, 1992*, Appendix I.

<sup>2</sup>1989 data.

<sup>3</sup>Data have been revised to include the entire U.S. American Indian/Alaska Native population; see Introduction.

<sup>4</sup>1986 data.

<sup>5</sup>1985 data.

<sup>6</sup>Baseline has been revised to reflect updated methodology.

<sup>7</sup>Target has been revised to reflect proportional reduction from revised baseline.

<sup>8</sup>1990 data.

<sup>9</sup>1991 data.

<sup>10</sup>1992 data.

NOTE: Data sources are in table C.

# Violent and Abusive Behavior Objectives

**7.1:** Reduce homicides to no more than 7.2 per 100,000 people.

**7.1a:** Reduce homicides among children aged 3 and younger to no more than 3.1 per 100,000 children.

**7.1b:** Reduce homicides among spouses aged 15–34 to no more than 1.4 per 100,000.

**7.1c:** Reduce homicides among black men aged 15–34 to no more than 72.4 per 100,000.

**7.1d:** Reduce homicides among Hispanic men aged 15–34 to no more than 42.5 per 100,000.

**7.1e:** Reduce homicides among black women aged 15–34 to no more than 16.0 per 100,000.

**7.1f:** Reduce homicides among American Indians and Alaska Natives in Reservation States to no more than 11.3 per 100,000.

**7.2\*:** Reduce suicides to no more than 10.5 per 100,000 people.

Duplicate objective: 6.1

**7.2a\*:** Reduce suicides among youth aged 15–19 to no more than 8.2 per 100,000.

Duplicate objective: 6.1a

**7.2b\*:** Reduce suicides among men aged 20–34 to no more than 21.4 per 100,000.

Duplicate objective: 6.1b

**7.2c\*:** Reduce suicides among white men aged 65 and older to no more than 39.2 per 100,000.

Duplicate objective: 6.1c

**7.2d\*:** Reduce suicides among American Indian and Alaska Native men in Reservation States to no more than 12.8 per 100,000.

Duplicate objective: 6.1d

**7.3:** Reduce weapon-related violent deaths to no more than 12.6 per 100,000 people from major causes.

**7.4:** Reverse to less than 25.2 per 1,000 children the rising incidence of maltreatment of children younger than age 18.

**7.4a:** Reverse to less than 5.7 per 1,000 children the rising incidence of physical abuse of children younger than age 18.

**7.4b:** Reverse to less than 2.5 per 1,000 children the rising incidence of sexual abuse of children younger than age 18.

**7.4c:** Reverse to less than 3.4 per 1,000 children the rising incidence of emotional abuse of children younger than age 18.

**7.4d:** Reverse to less than 15.9 per 1,000 children the rising incidence of neglect of children younger than age 18.

**7.5:** Reduce physical abuse directed at women by male partners to no more than 27 per 1,000 couples.

**7.6:** Reduce assault injuries among people aged 12 and older to no more than 10 per 1,000.

**7.7:** Reduce rape and attempted rape of women aged 12 and older to no more than 108 per 100,000 women.

- 7.7a: Reduce rape and attempted rape of women aged 12–34 to no more than 225 per 100,000.
- 7.8\*: Reduce by 15 percent the incidence of injurious suicide attempts among adolescents aged 14–17.
- Duplicate objective: 06.02
- 7.9: Reduce by 20 percent the incidence of physical fighting among adolescents aged 14–17.
- 7.10: Reduce by 20 percent the incidence of weapon-carrying by adolescents aged 14–17.
- 7.11: Reduce by 20 percent the proportion of people who possess weapons that are inappropriately stored and therefore dangerously available.
- 7.12: Extend protocols for routinely identifying, treating, and properly referring suicide attempters, victims of sexual assault, and victims of spouse, elder, and child abuse to at least 90 percent of hospital emergency departments.
- 7.13: Extend to at least 45 States implementation of unexplained child death review systems.
- 7.14: Increase to at least 30 the number of States in which at least 50 percent of children identified as neglected or physically or sexually abused receive physical and mental evaluation with appropriate followup as a means of breaking the intergenerational cycle of abuse.
- 7.15: Reduce to less than 10 percent the proportion of battered women and their children turned away from emergency housing due to lack of space.
- 7.16: Increase to at least 50 percent the proportion of elementary and secondary schools that teach nonviolent conflict resolution skills, preferably as a part of quality school health education.
- 7.17: Extend coordinated, comprehensive violence prevention programs to at least 80 percent of local jurisdictions with populations over 100,000.
- 7.18\*: Increase to 50 the number of States with officially established protocols that engage mental health, alcohol and drug, and public health authorities with corrections authorities to facilitate identification and appropriate intervention to prevent suicide by jail inmates.

Duplicate objective: 6.10

\*Duplicate objective.

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# Priority Area 8 Educational and Community-Based Programs

## Background and Data Summary

Community-based interventions attempt to reach groups of people outside of traditional health care settings. Many of these programs are community-based, designed for people who meet in diverse settings, such as students within a school, employees at a worksite, or members of civic or religious groups. Other programs are planned to be community-wide. These health promotion programs can reach large numbers of people with intensive and effective interventions; in addition, they are relatively easy to implement. While community-based programs may address a single risk factor or health problem, many programs are starting to take a more comprehensive, and often more positive, approach to health and well-being. Community-based programs also increasingly recognize the importance of addressing the social and physical environment in which behavior occurs.

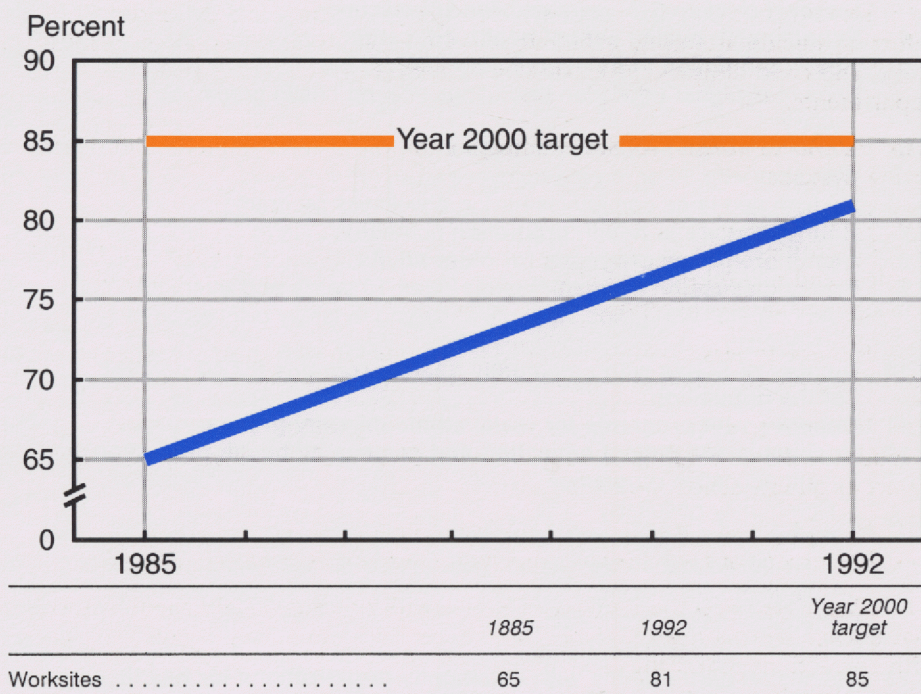
Of the 14 Educational and Community-Based Programs objectives, 4 are progressing toward the year 2000 targets (objectives 8.3, 8.6, 8.9, and 8.12), while none are moving away from the targets. New baselines were established this year for three objectives (8.1, 8.2, and 8.14). Baselines for the remaining seven objectives are not yet available.

### Data Issues

#### Years of Healthy Life

The concept of increasing years of healthy life is one of the three *Healthy People 2000* goals, and is included as three specific objectives (8.1, 17.1, and 21.1). See the introduction to the *Healthy People 2000 Review* for a discussion of years of healthy life.

**Figure 13. Percent of worksites offering health promotion activities: United States, 1985, 1992, and year 2000 target for objective 8.6**



SOURCE: Office of the Assistant Secretary for Health, Office of Disease Prevention and Health Promotion.

### Data Source Description

Objectives 8.2 (completion of high school) and 8.3 (preschool child development programs) and their targets are consistent with the National Education Goals for these areas. The data used to track these objectives come from the National Center for Education Statistics.

### Data Availability

Objective 8.9 addresses the proportion of people aged 10 years and older who have discussed any of several health-related issues with family members in the last month. Until a broader variable is available,

progress is being measured by the percent of 9th–12th graders engaging in family discussions about HIV/AIDS. Similarly, objective 8.14, which focuses on the proportion of people served by effective local health departments, is being monitored by the proportion of health departments carrying out the core functions of public health.

Because of the nature of many of the objectives, this chapter poses as significant a challenge in obtaining relevant data to measure progress as any *Healthy People 2000* priority area. A concerted effort will be made over the decade to locate complete data sources for those objectives that are only being partially measured.

**Table 8. Educational and community based programs objective status**

Objective	Baseline		1990	1991	Target 2000
	Original	Revised			
<b>8.1 Years of healthy life</b>	162.0	<sup>2,3</sup> 64.0	---	---	65
a. Blacks	156.0	<sup>2,3</sup> No change	---	---	60
b. Hispanics	162.0	<sup>2,3,4</sup> 64.8	---	---	65
c. People 65 years and over <sup>5</sup>	112.0	<sup>2,3</sup> 11.9	---	---	14
<b>8.2 Completion of high school</b>					
People 19–20 years	<sup>6</sup> 79%	<sup>2,3</sup> 83%	---	---	90%
<b>8.3 Preschool child development programs</b>					
Eligible children 4 years afforded opportunity to enroll in Head Start	<sup>2</sup> 47%	...	---	55%	100%
Disabled children 3–5 years enrolled in preschool	---	...	---	56%	100%
<b>8.4 Schools with quality school health education</b>	---	...	---	---	75%
<b>8.5 Health promotion in postsecondary institutions</b>					
Percent of higher education institutions offering health promotion activities	<sup>7</sup> 20%	...	---	---	50%
<b>8.6 Worksite health promotion activities</b>					
Worksites with 50 or more employees	<sup>8</sup> 65%	...	---	<sup>9</sup> 81%	85%
Medium and large companies having a wellness program	<sup>8</sup> 63%	...	---	---	...
<b>8.7 Hourly workers in health promotion activities</b>	---	...	---	---	20%
<b>8.8 Health promotion programs for older adults</b>	---	...	---	---	90%
<b>8.9 Family discussion of health issues-ages 10 years and over</b>	...	...	---	---	75%
Among 9th–12th grade students engaging in family discussion of HIV/AIDS	...	<sup>10</sup> 54%	53%	61%	...
<b>8.10 Number of States with community health programs for 40 percent of the population</b>	---	...	---	---	40%
<b>8.11 Counties with programs for racial/ethnic minority groups</b>	---	...	---	---	50%
<b>8.12 Hospital-based patient education and community health promotion</b>					
Patient education programs					
Community hospitals	<sup>11</sup> 66%	<sup>3,12</sup> 68%	86%	---	90%
Health maintenance organizations	---	...	---	---	90%
Health education classes	...	...	<sup>12</sup> 75%	---	...
Nutrition counseling	...	...	<sup>12</sup> 85%	---	...
Community health promotion					
Community hospitals	<sup>10</sup> 60%	...	77%	---	90%
<b>8.13 Television partnerships with community organizations for health promotion</b>	---	...	---	---	75%
<b>8.14 Effective public health systems</b>					
Local health departments reporting					
Health assessment	...	...	---	---	90%
Behavioral risk assessment	...	<sup>2</sup> 33%	---	---	...
Morbidity data	...	<sup>2</sup> 49%	---	---	...
Reportable disease	...	<sup>2</sup> 87%	---	---	...
Vital records and statistics	...	<sup>2</sup> 64%	---	---	...
Surveillance chronic disease	...	<sup>2</sup> 55%	---	---	...
Surveillance communicable disease	...	<sup>2</sup> 92%	---	---	...
Policy development functions and services					
Health code development and enforcement	...	<sup>2</sup> 59%	---	---	...
Health planning	...	<sup>2</sup> 57%	---	---	...
Health assurance					
Health education	...	<sup>2</sup> 74%	---	---	...
Child health	...	<sup>2</sup> 84%	---	---	...
Immunizations	...	<sup>2</sup> 92%	---	---	...
Prenatal care	...	<sup>2</sup> 59%	---	---	...
Primary care	...	<sup>2</sup> 22%	---	---	...

<sup>1</sup>1980 data.

<sup>2</sup>1990 data.

<sup>3</sup>Data have been revised to reflect updated methodology; see Introduction.

<sup>4</sup>Estimated based on preliminary data

<sup>5</sup>Years of healthy life remaining at age 65.

<sup>6</sup>1989 data for people 20–21 years.

<sup>7</sup>1989–90 data.

<sup>8</sup>1985 data.

<sup>9</sup>1992 data.

<sup>10</sup>1989 data.

<sup>11</sup>1987 data.

<sup>12</sup>1988 data.

NOTE: Data sources are in table C.

# Educational and Community-Based Programs Objectives

**8.1\*:** Increase years of healthy life to at least 65 years.

*NOTE: Years of healthy life is a summary measure of health that combines mortality (quantity of life) and morbidity and disability (quality of life) into a single measure. For people aged 65 and older, active life-expectancy, a related summary measure, also will be tracked.*

Duplicate objectives: 17.1 and 21.1

**8.1a\*:** Increase years of healthy life among black persons to at least 60 years.

Duplicate objectives: 17.1a and 21.1a

**8.1b\*:** Increase years of healthy life among Hispanics to at least 65 years.

Duplicate objectives: 17.1b and 21.1b

**8.1c\*:** Increase years of healthy life among people aged 65 and older to at least 14 years remaining at age 65.

Duplicate objectives: 17.1c and 21.1c

**8.2:** Increase the high school graduation rate to at least 90 percent, thereby reducing risks for multiple problem behaviors and poor mental and physical health.

*NOTE: This objective and its target are consistent with the National Education Goal to increase high school graduation rates.*

**8.3:** Achieve for all disadvantaged children and children with disabilities access to high quality and developmentally appropriate preschool programs that help prepare children for school, thereby improving their prospects with regard to school performance, problem behaviors, and mental and physical health.

*NOTE: This objective and its target are consistent with the National Education Goal to increase school readiness and its objective to increase access to preschool programs for disadvantaged and disabled children.*

**8.4:** Increase to at least 75 percent the proportion of the Nation's elementary and secondary schools that provide planned and sequential kindergarten–12th grade quality school health education.

**8.5:** Increase to at least 50 percent the proportion of postsecondary institutions with institution wide health promotion programs for students, faculty, and staff.

**8.6:** Increase to at least 85 percent the proportion of workplaces with 50 or more employees that offer health promotion activities for their employees, preferably as part of a comprehensive employee health promotion program.

**8.7:** Increase to at least 20 percent the proportion of hourly workers who participate regularly in employer-sponsored health promotion activities.

**8.8:** Increase to at least 90 percent the proportion of people aged 65 and older who had the opportunity to participate during the preceding year in at least one organized health promotion program through a senior center, lifecare facility, or other community-based setting that serves older adults.

**8.9:** Increase to at least 75 percent the proportion of people aged 10 and older who have discussed issues related to nutrition, physical activity, sexual behavior, tobacco, alcohol, other drugs, or safety with family members on at least one occasion during the preceding month.

**8.10:** Establish community health promotion programs that separately or together address at least three of the Healthy People 2000 priorities and reach at least 40 percent of each State's population.

**8.11:** Increase to at least 50 percent the proportion of counties that have established culturally and linguistically appropriate community health promotion programs for racial and ethnic minority populations.

*NOTE: This objective will be tracked in counties in which a racial or ethnic group constitutes more than 10 percent of the population.*

**8.12:** Increase to at least 90 percent the proportion of hospitals, health maintenance organizations, and large group practices that provide patient education programs, and to at least 90 percent the proportion of community hospitals that offer community health promotion programs addressing the priority health needs of their communities.

**8.13:** Increase to at least 75 percent the proportion of local television network affiliates in the top 20 television markets that have become partners with one or more community organizations around one of the health problems addressed by the Healthy People 2000 objectives.

**8.14:** Increase to at least 90 percent the proportion of people who are served by a local health department that is effectively carrying out the core functions of public health.

*NOTE: The core functions of public health have been defined as assessment, policy development, and assurance. Local health department refers to any local component of the public health system, defined as an administrative and service unit of local or State government concerned with health and carrying some responsibility for the health of a jurisdiction smaller than a State.*

\*Duplicate objective.

# Priority Area 9

## Unintentional Injuries

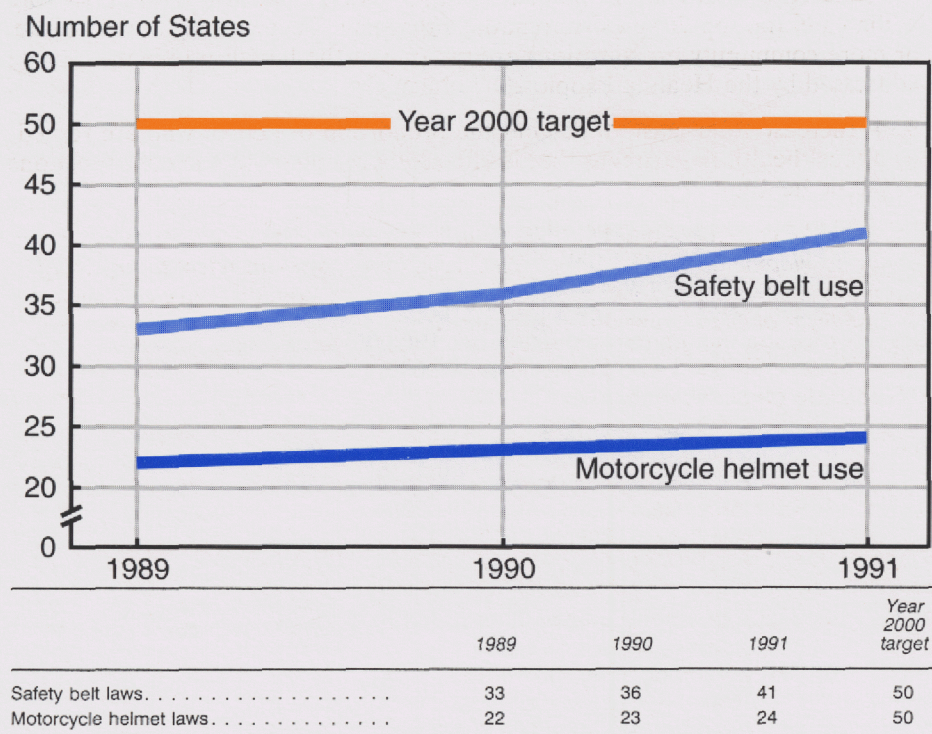
### Background and Data Summary

Unintentional injuries are the fourth leading cause of death in the United States, accounting for more than 90,000 deaths annually (table 30) (1). They are a major cause of disabilities and hospitalization and have significant impact on health care costs (2). For example, the National Highway Traffic Safety Administration has estimated that motor vehicle crashes alone cost the United States \$75 billion annually (3). The 22 objectives in this area focus on a wide range of mechanical, legislative, and educational means to reduce the occurrence of these events.

Progress toward the year 2000 targets was made on 11 objectives (9.1, 9.2, 9.3, 9.5, 9.6, 9.8, 9.9, 9.12, 9.13, 9.14, and 9.17). In a few cases (9.3, 9.8, and 9.9), the year 2000 target has been equaled or surpassed. Much of this progress is in areas related to motor vehicle fatalities, injuries, and use of vehicle occupant restraints (9.3, 9.9, and 9.12). This improvement may be attributable to reduction in the amount of driving and alcohol consumption during the recent economic slowdown. The recent increases in the number of States with seat belt laws, helmet laws (4), and programs targeting drivers under the influence of alcohol (5) also contributed to the declines in these areas. The national rate of residential fire deaths (9.6) and all special populations monitored as subobjectives show declining rates. These improvements may be associated with increased use of smoke detectors (9.17).

The hospitalization rates for hip fractures (9.7) and spinal cord injuries (9.10) increased, indicating movement away from the year 2000 target. Baseline data were established for objective 9.16. Objectives 9.4, 9.15, and 9.22 did not change. Data to monitor progress was unavailable for two objectives (9.11 and 9.19), and three objectives (9.18, 9.20, and 9.21) still require baseline data.

**Figure 14. Number of States with laws requiring safety belt and motorcycle helmet use for all ages: United States, 1989–91 and year 2000 target for objective 9.14**



SOURCE: National Highway Traffic Safety Administration.

### Data Issues

#### Data Source Description

Data for objective 9.3 (motor vehicle crash deaths) are crude rates from the Fatal Accident Reporting System (FARS). See the introduction for a discussion of crude and age-adjusted rates and priority area 4 for a description of FARS. The rates for 9.3d (American Indian and Alaska Natives) are age-adjusted data from the National Vital Statistics System.

**Table 9. Unintentional injuries objective status**

Objective	1987 baseline		1990	1991	Target 2000
	Original	Revised			
<b>9.1 Unintentional injury deaths (age adjusted per 100,000)</b> .....	34.5	<sup>1</sup> 34.7	32.5	---	29.3
a. American Indians/Alaska Natives (age adjusted per 100,000) ...	82.6	<sup>2</sup> 66.0	59.0	---	66.1
b. Black males (age adjusted per 100,000).....	64.9	<sup>1</sup> 68.0	62.4	---	51.9
c. White males (age adjusted per 100,000).....	53.6	<sup>1</sup> 49.8	46.4	---	42.9
<b>9.2 Unintentional injury hospitalizations (per 100,000)</b> .....	<sup>3,4</sup> 887	<sup>3-5</sup> 832	<sup>4</sup> 780	<sup>4</sup> 764	754
<b>9.3 Motor vehicle crash-related deaths</b>					
Per 100 million vehicle miles traveled (VMT).....	2.4	...	2.1	1.9	1.9
Age adjusted per 100,000 people.....	18.8	<sup>5</sup> 19.2	17.9	16.3	16.8
a. Children 14 years and under (per 100,000).....	6.2	...	5.3	---	5.5
b. People 15-24 years (per 100,000).....	36.9	...	33.3	---	33
c. People 70 years and over (per 100,000).....	22.6	...	23.9	---	20
d. American Indians/Alaska Natives (age adjusted per 100,000) ...	46.8	<sup>2</sup> 37.7	33.2	---	39.2
e. Motorcyclist (per 100 million VMT).....	40.9	...	33.8	---	33.0
(per 100,000).....	1.7	...	1.3	---	1.5
f. Pedestrians (per 100,000).....	3.1	<sup>5</sup> 2.8	2.6	---	2.7
<b>9.4 Fall-related deaths (age adjusted per 100,000)</b> .....	2.7	No change	2.7	---	2.3
a. People 65-84 years (per 100,000).....	18.0	<sup>1</sup> 18.1	17.8	---	14.4
b. People 85 years and over (per 100,000).....	131.2	<sup>1</sup> 133.0	143.1	---	105.0
c. Black males 30-69 years (per 100,000).....	8.0	<sup>1</sup> 8.1	6.8	---	5.6
<b>9.5 Drowning deaths (age adjusted per 100,000)</b> .....	2.1	No change	1.9	---	1.3
a. Children aged 4 and under (per 100,000).....	4.2	<sup>1</sup> 4.3	3.4	---	2.3
b. Males 15-34 years (per 100,000).....	4.5	No change	4.0	---	2.5
c. Black males (age adjusted per 100,000).....	6.6	No change	5.0	---	3.6
<b>9.6 Residential fire deaths (age adjusted per 100,000)</b> .....	1.5	<sup>1</sup> 1.7	1.5	---	1.2
a. Children 4 years and under (per 100,000).....	4.4	<sup>1</sup> 4.5	3.5	---	3.3
b. People 65 years and over (per 100,000).....	4.4	<sup>1</sup> 4.9	4.1	---	3.3
c. Black males (age adjusted per 100,000).....	5.7	<sup>1</sup> 6.4	5.2	---	4.3
d. Black females (age adjusted per 100,000).....	3.4	<sup>1</sup> 3.3	2.7	---	2.6
e. Residential fire deaths caused by smoking.....	17%	<sup>5</sup> 26%	<sup>6</sup> 17%	---	5%
<b>9.7 Hip fractures among older adults (per 100,000)</b> .....	<sup>3</sup> 714	...	776	814	607
a. White females 85 years and over.....	<sup>3,2</sup> 721	...	3,075	3,791	2,177
<b>9.8 Nonfatal poisoning (per 100,000)</b> .....	<sup>7</sup> 103	<sup>5,7</sup> 108	76	---	88
a. Among children 4 years and under.....	<sup>7</sup> 650	<sup>5,7</sup> 648	729	---	520
<b>9.9 Nonfatal head injuries (per 100,000)</b> .....	<sup>3</sup> 125	<sup>3,5</sup> 118	110	104	106
<b>9.10 Nonfatal spinal cord injuries (per 100,000)</b> .....	<sup>3</sup> 5.9	<sup>3,5</sup> 5.3	4.4	6.4	5.0
a. Males.....	<sup>3</sup> 8.9	<sup>3,5</sup> 9.6	6.9	9.8	7.1
<b>9.11 Secondary disabilities associated with head and spinal cord injuries</b>					
Head injuries (per 100,000).....	<sup>7</sup> 20.0	...	---	---	16.0
Spinal cord injuries (per 100,000).....	<sup>7</sup> 3.2	...	---	---	2.6
<b>9.12 Motor vehicle occupant protection systems</b>	<sup>3</sup> 42%	...	49%	59%	85%
a. Children 4 years and under.....	<sup>3</sup> 84%	...	84%	85%	95%
<b>9.13 Helmet use by motorcyclists and bicyclists</b>					
Motorcyclists.....	<sup>3</sup> 60%	...	60%	62%	80%
Bicyclists.....	<sup>3</sup> 8%	...	---	5-10%	50%
<b>9.14 Safety belt and helmet use laws</b>					
Number of States with safety belt laws <sup>7</sup> .....	<sup>6</sup> 33	...	36	41	50
Number of States with Motorcycle Helmet Use Laws <sup>8</sup> .....	<sup>6</sup> 22	...	23	24	50
<b>9.15 Number of States with handgun design to protect children</b> ....	<sup>6</sup> 0	...	0	---	50
<b>9.16 Fire suppression sprinkler installation (number of localities)</b> ...	...	<sup>6</sup> 700	---	---	2,000
<b>9.17 Residences with smoke detectors</b> .....	<sup>6</sup> 81%	...	82%	---	100%
<b>9.18 Injury prevention instruction in schools</b> .....	---	...	---	---	50%
<b>9.19 Protective equipment in sporting and recreation events</b> .....	---	...	---	---	100%
National Collegiate Athletic Association					
Football.....	<sup>3</sup> Required	...	---	---	...
Hockey.....	<sup>3</sup> Required	...	---	---	...
Lacrosse.....	<sup>3</sup> Required	...	---	---	...
High school football.....	<sup>3</sup> Required	...	---	---	...
Amateur boxing.....	<sup>3</sup> Required	...	---	---	...
Amateur ice hockey.....	<sup>3</sup> Required	...	---	---	...

**Table 9. Unintentional injuries objective status – Con.**

Objective	1987 baseline		1990	1991	Target 2000
	Original	Revised			
9.20 Number of States with design standards for roadway safety .....	---	...	---	---	30
9.21 Injury prevention counseling by primary care providers .....	---	...	---	---	50%
9.22 Number of States with linked emergency medical services and trauma systems .....	2	...	<sup>6</sup> 2	---	50

<sup>1</sup>Data have been recomputed to reflect revised intercensal population estimates; see *Health, United States, 1992*, Appendix I.

<sup>2</sup>Data have been revised to include the entire U.S. American Indian/Alaska Native population; see Introduction.

<sup>3</sup>1988 data.

<sup>4</sup>Data include unintentional and intentional injuries and injuries where the intent was not known.

<sup>5</sup>Data have been revised to reflect updated methodology; see Introduction.

<sup>6</sup>1989 data.

<sup>7</sup>1986 data.

<sup>8</sup>DC also has a safety belt law.

<sup>9</sup>DC and Puerto Rico also have motorcycle helmet laws.

NOTE: Data sources are in table C.

# Unintentional Injuries Objectives

**9.1:** Reduce deaths caused by unintentional injuries to no more than 29.3 per 100,000 people.

**9.1a:** Reduce deaths among American Indians and Alaska Natives caused by unintentional injuries to no more than 66.1 per 100,000 people.

**9.1b:** Reduce deaths among black males caused by unintentional injuries to no more than 51.9 per 100,000 people.

**9.1c:** Reduce deaths among white males caused by unintentional injuries to no more than 42.9 per 100,000.

**9.2:** Reduce nonfatal unintentional injuries so that hospitalizations for this condition are no more than 754 per 100,000 people.

**9.3:** Reduce 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.

**9.3a:** Reduce deaths among children aged 14 and younger caused by motor vehicle crashes to no more than 5.5 per 100,000.

**9.3b:** Reduce deaths among youth aged 15–24 caused by motor vehicle crashes to no more than 33 per 100,000.

**9.3c:** Reduce deaths among people aged 70 and older caused by motor vehicle crashes to no more than 20 per 100,000.

**9.3d:** Reduce deaths among American Indians and Alaska Natives caused by motor vehicle crashes to no more than 39.2 per 100,000.

**9.3e:** Reduce deaths among motorcyclists caused by motor vehicle crashes to no more than 33 per 100 million vehicle miles traveled and 1.5 per 100,000.

**9.3f:** Reduce deaths among pedestrians caused by motor vehicle crashes to no more than 2.7 per 100,000.

**9.4:** Reduce deaths from falls and fall-related injuries to no more than 2.3 per 100,000 people.

**9.4a:** Reduce deaths among people aged 65–84 from falls and fall-related injuries to no more than 14.4 per 100,000.

**9.4b:** Reduce deaths among people aged 85 and older from falls and fall-related injuries to no more than 105 per 100,000.

**9.4c:** Reduce deaths among black men aged 30–69 from falls and fall-related injuries to no more than 5.6 per 100,000.

**9.5:** Reduce drowning deaths to no more than 1.3 per 100,000 people.

**9.5a:** Reduce drowning deaths among children aged 4 and younger to no more than 2.3 per 100,000.

**9.5b:** Reduce drowning deaths among men aged 15–34 to no more than 2.5 per 100,000.

**9.5c:** Reduce drowning deaths among black males to no more than 3.6 per 100,000.

**9.6:** Reduce residential fire deaths to no more than 1.2 per 100,000 people.

**9.6a:** Reduce residential fire deaths among children aged 4 and younger to no more than 3.3 per 100,000.

**9.6b:** Reduce residential fire deaths among people aged 65 and older to no more than 3.3 per 100,000.

**9.6c:** Reduce residential fire deaths among black males to no more than 4.3 per 100,000.



**9.6d:** Reduce residential fire deaths among black females to no more than 2.6 per 100,000.

**9.6e:** Reduce residential fire deaths from residential fires caused by smoking to no more than 5 percent.

**9.7:** Reduce hip fractures among people aged 65 and older so that hospitalizations for this condition are no more than 607 per 100,000 people.

**9.7a:** Reduce hip fractures among white women aged 85 and older so that hospitalizations for this condition are no more than 2,177 per 100,000.

**9.8:** Reduce nonfatal poisoning to no more than 88 emergency department treatments per 100,000 people.

**9.8a:** Reduce nonfatal poisoning among children aged 4 and younger to no more than 520 emergency department treatments per 100,000.

**9.9:** Reduce nonfatal head injuries so that hospitalizations for this condition are no more than 106 per 100,000 people.

**9.10:** Reduce nonfatal spinal cord injuries so that hospitalizations for this condition are no more than 5.0 per 100,000 people.

**9.10a:** Reduce nonfatal spinal cord injuries among males so that hospitalizations for this condition are no more than 7.1 per 100,000.

**9.11:** Reduce the incidence of secondary disabilities associated with injuries of the head and spinal cord to no more than 16 and 2.6 per 100,000 people, respectively.

*NOTE: Secondary disabilities are defined as those medical conditions secondary to traumatic head or spinal cord injury that impair independent and productive lifestyles.*

**9.12:** Increase use of occupant protection systems, such as safety belts, inflatable safety restraints, and child safety seats, to at least 85 percent of motor vehicle occupants.

**9.12a:** Increase use of occupant protection systems, such as safety belts, inflatable safety restraints, and child safety seats, to at least 95 percent of motor vehicle occupants aged 4 and younger.

**9.13:** Increase use of helmets to at least 80 percent of motorcyclists and at least 50 percent of bicyclists.

**9.14:** Extend to 50 States laws requiring safety belt and motorcycle helmet use for all ages.

**9.15:** Enact in 50 States laws requiring that new handguns be designed to minimize the likelihood of discharge by children.

**9.16:** Extend to 2,000 local jurisdictions the number whose codes address the installation of fire suppression sprinkler systems in those residences at highest risk for fires.

**9.17:** Increase the presence of functional smoke detectors to at least one on each habitable floor of all inhabited residential dwellings.

**9.18:** Provide academic instruction on injury prevention and control, preferably as part of quality school health education, in at least 50 percent of public school systems (grades K–12).

**9.19\*:** Extend requirement of the use of effective head, face, eye, and mouth protection to all organizations, agencies, and institutions sponsoring sporting and recreation events that pose risks of injury.

Duplicate objective: 13.16

**9.20:** Increase to at least 30 the number of States that have design standards for signs, signals, markings, lighting, and other characteristics of the roadway environment to improve the visual stimuli and protect the safety of older drivers and pedestrians.

**9.21:** Increase to at least 50 percent the proportion of primary care providers who routinely provide age appropriate counseling on safety precautions to prevent unintentional injury.

**9.22:** Extend to 50 States emergency medical service and trauma systems linking prehospital, hospital, and rehabilitation services in order to prevent trauma deaths and long-term disability.

\*Duplicate objective.

## References

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3. National Highway Traffic Safety Administration. The economic cost of society of motor vehicle accidents. Washington. 1987.
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# Priority Area 10 Occupational Safety and Health

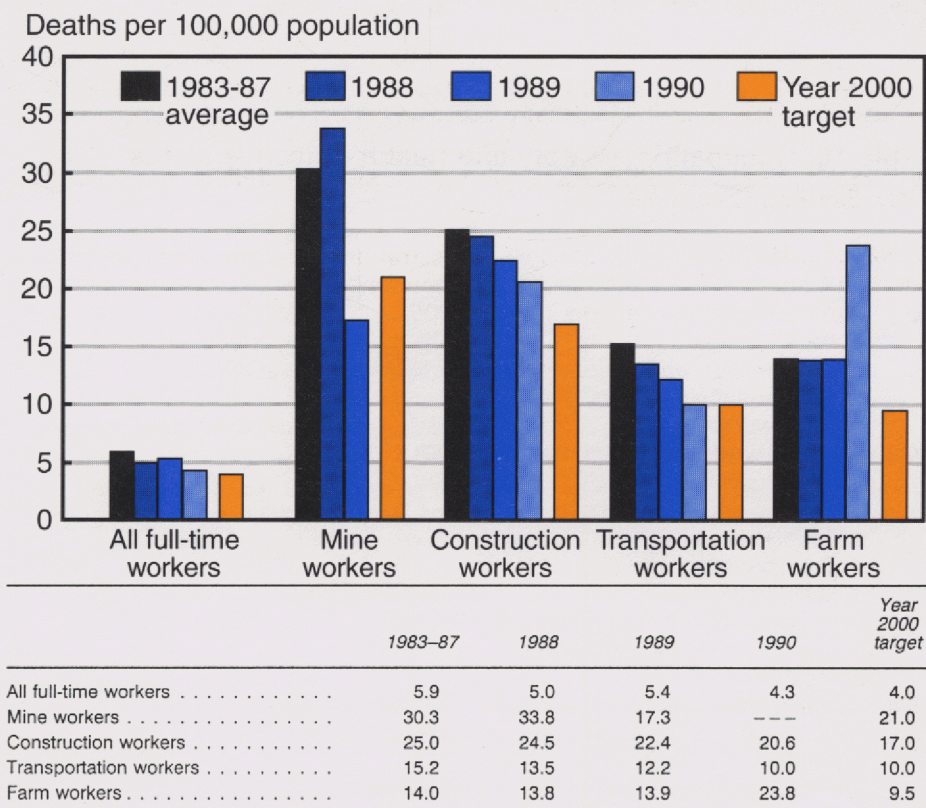
## Background and Data Summary

Work-related injuries and deaths are an important public health problem. Although work-related deaths have declined slightly from a 1983-87 average of 6 per 100,000 workers to a rate of 4.3 in 1990, work-related injuries remain above the 1983-87 average of 7.7 per 100 (8.3 in 1990 (1) and 7.9 in 1991 (2)). The leading cause of occupational deaths is motor vehicle accidents (3); reductions in this area are, in part, a consequence of increased legislation and enforcement of seat belt laws.

Some specific professions (such as mining, construction, farming and nursing) have higher levels of mortality and morbidity, due to physical and environmental demands (4). Work-related deaths for some of these groups have declined from the 1983-87 averages. Mine-worker deaths dropped to 17.3 per 100,000 in 1989 which is below the year 2000 target (21 per 100,000). Data on mine-workers were not available for 1990, but rates for construction workers and transportation workers declined. The rate for farm workers increased to a level of 23.8 per 100,000 in 1990; there was no concomitant increase in work-related injuries among farm workers during this time period. Many work-related deaths and injuries are among younger, newer workers, who may require safety training and other initiatives to further reduce work-related mortality and morbidity (5).

Five of the 15 objectives in this priority area moved toward the year 2000 targets (10.1, 10.5, 10.6, 10.10, and 10.13). The new baseline established for objective 10.6 (worksite mandates for use of occupant protection systems) surpassed the year 2000 target. Since seat belt use is a component of this objective, the achievement of the target level is probably a result of increased legislation and enforcement of State seat belt laws.

**Figure 15. Death rates for work-related injuries among full-time workers according to selected occupations: United States, 1983-90, and year 2000 targets for objective 10.1**



NOTE: Death rates are crude rates. Related tables in *Health, United States, 1992*, are 46, 47, and 75. The data in tables 46, 47, and 75 are age-adjusted.

SOURCE: Bureau of Labor Statistics, Annual Summary of Occupational Injuries and Illnesses.

Two objectives (10.2, nonfatal occupation-related injuries and 10.4, occupational skin disorders) remained relatively stable between 1988 and 1991, but were higher than the 1987 baseline. Objective 10.3 (cumulative trauma disorders) continued to increase between 1987 and 1991. Occupational lead exposure (10.8) increased considerably, but the number of States reporting also increased from 7 to 10.

Baselines were established for objectives 10.9 (hepatitis immunization), 10.12 (health and safety programs), and 10.14 (State safety and health programs for small

businesses). Three objectives (10.7, 10.11, and 10.15) remain without baseline data; the data is expected in mid-1993.

## Data Issues

### Description of Data Source

Work-related injury deaths (10.1) are tracked by the Bureau of Labor Statistics (BLS) of the Department of Labor (1). These data are compiled from a survey of employer logs of deaths among current employees. The rates are crude rates and may differ from age-adjusted rates calculated by

NIOSH and shown in other tables in Health United States.

The data are based on surveys; thus they do not capture all occupational deaths. While occupational deaths are a relatively rare event, comparisons of BLS data with other data sources suggest that there is considerable underreporting in the survey (6). Some of the disparity is attributable to differences

in the reporting of unintentional injuries which occur on the job as "work-related" (7). To address this problem, BLS will begin using the Census of Fatal Occupational Injuries (CFOI) to report 1992 work-related mortality. As this reporting mechanism will employ multiple sources to capture work-related deaths, the rates will probably increase.

**Table 10. Occupational safety and health objective status**

Objective	1987 baseline		1990	1991	Target 2000
	Original	Revised			
<b>10.1 Work-related injury deaths (per 100,000)</b> .....	16	...	4.3	---	4
a. Mine workers.....	<sup>1</sup> 30.3	...	<sup>2</sup> 17.3	---	21
b. Construction workers.....	<sup>1</sup> 25.0	...	20.6	---	17
c. Transportation workers.....	<sup>1</sup> 15.2	...	10.0	---	10
d. Farm workers.....	<sup>1</sup> 14.0	...	23.8	---	9.5
<b>10.2 Nonfatal work-related injuries (per 100)</b> .....	7.7	...	8.3	7.9	6
a. Construction workers.....	14.9	...	14.1	12.8	10
b. Nursing and personal care workers.....	12.7	...	15.4	15.0	9
c. Farm workers.....	12.4	...	12.3	11.1	8
d. Transportation workers.....	8.3	...	8.4	9.1	6
e. Mine workers.....	8.3	...	8.1	7.1	6
<b>10.3 Cumulative trauma disorders (per 100,000)</b> .....	100	...	241	297	60
a. Manufacturing industry workers.....	355	...	867	---	150
b. Meat product workers.....	3,920	...	8,245	---	2,000
<b>10.4 Occupational skin disorders (per 100,000)</b> .....	64	...	79	77	55
<b>10.5 Hepatitis B infections among occupationally exposed workers (number of cases)</b> .....	6,200	<sup>3</sup> 3,090	1,258	2,576	1,250
<b>10.6 Worksite occupant protection system mandates</b> .....	...	<sup>4</sup> 82.4%	---	---	75%
<b>10.7 Occupational noise exposure</b> .....	---	...	---	---	15%
<b>10.8 Occupational lead exposure</b> .....	<sup>5</sup> 4,804	...	4,531	<sup>6</sup> 7,842	0
<b>10.9 Hepatitis B immunizations among occupationally exposed workers</b> ...	...	<sup>2</sup> 37%	---	---	90%
<b>10.10 Number of States with occupational health and safety plans</b> .....	<sup>2</sup> 10	...	---	<sup>4</sup> 32	50
<b>10.11 Number of States with occupational lung disease exposure standards</b> .....	---	...	---	---	50
<b>10.12 Worksite health and safety programs</b> .....	...	<sup>4</sup> 63.8%	---	---	70%
<b>10.13 Worksite back injury prevention and rehabilitation programs</b> .....	<sup>7</sup> 28.6%	...	---	<sup>4</sup> 32.5%	50%
<b>10.14 Number of States with programs for small business safety and health</b> .....	...	<sup>8</sup> 26	---	---	50
<b>10.15 Clinician assessment of occupational health exposures</b> .....	---	...	---	---	75%

<sup>1</sup>1983-1987 average.

<sup>2</sup>1989 data.

<sup>3</sup>Data have been revised to reflect updated methodology; see Introduction.

<sup>4</sup>1992 data.

<sup>5</sup>1988 data in seven States.

<sup>6</sup>1992 data in 10 States.

<sup>7</sup>1985 data.

<sup>8</sup>1991 data.

NOTE: Data sources are in table C.

# Occupational Safety and Health Objectives

**10.1:** Reduce deaths from work-related injuries to no more than 4 per 100,000 full-time workers.

**10.1a:** Reduce deaths among mine workers from work-related injuries to no more than 21 per 100,000 full-time workers.

**10.1b:** Reduce deaths among construction workers from work-related injuries to no more than 17 per 100,000 full-time workers.

**10.1c:** Reduce deaths among transportation workers from work-related injuries to no more than 10 per 100,000 full-time workers.

**10.1d:** Reduce deaths among farm workers from work-related injuries to no more than 9.5 per 100,000 full-time workers.

**10.2:** Reduce work-related injuries resulting in medical treatment, lost time from work, or restricted-work activity to no more than 6 cases per 100 full-time workers.

**10.2a:** Reduce work-related injuries among construction workers resulting in medical treatment, lost time from work, or restricted-work activity to no more than 10 cases per 100 full-time workers.

**10.2b:** Reduce work-related injuries among nursing and personal care workers resulting in medical treatment, lost time from work, or restricted-work activity to no more than 9 cases per 100 full-time workers.

**10.2c:** Reduce work-related injuries among farm workers resulting in medical treatment, lost time from work, or restricted-work activity to no more than 8 cases per 100 full-time workers.

**10.2d:** Reduce work-related injuries among transportation workers resulting in medical treatment, lost time from work, or restricted-work activity to no more than 6 cases per 100 full-time workers.

**10.2e:** Reduce work-related injuries among mine workers resulting in medical treatment, lost time from work, or restricted-work activity to no more than 6 cases per 100 full-time workers.

**10.3:** Reduce cumulative trauma disorders to an incidence of no more than 60 cases per 100,000 full-time workers.

**10.3a:** Reduce cumulative trauma disorders among manufacturing industry workers to an incidence of no more than 150 cases per 100,000 full-time workers.

**10.3b:** Reduce cumulative trauma disorders among meat product workers to an incidence of no more than 2,000 cases per 100,000 full-time workers.

**10.4:** Reduce occupational skin disorders or diseases to an incidence of no more than 55 per 100,000 full-time workers.

**10.5\*:** Reduce hepatitis B infections among occupationally exposed workers to an incidence of no more than 1,250 cases.

Duplicate objective: 20.3e

**10.6:** Increase to at least 75 percent the proportion of worksites with 50 or more employees that mandate employee use of occupant protection systems, such as seatbelts, during all work-related motor vehicle travel.

**10.7:** Reduce to no more than 15 percent the proportion of workers exposed to average daily noise levels that exceed 85 dBA.

**10.8:** Eliminate exposures that result in workers having blood lead concentrations greater than 25 ug/dL of whole blood.

**10.9\*:** Increase hepatitis B immunization levels to 90 percent among occupationally exposed workers.

Duplicate objective: 20.11

**10.10:** Implement occupational safety and health plans in 50 States for the identification, management, and prevention of leading work-related diseases and injuries within the State.

**10.11:** Establish in 50 States exposure standards adequate to prevent the major occupational lung diseases to which their worker populations are exposed (byssinosis, asbestosis, coal workers' pneumoconiosis, and silicosis).

**10.12:** Increase to at least 70 percent the proportion of worksites with 50 or more employees that have implemented programs on worker health and safety.

**10.13:** Increase to at least 50 percent the proportion of worksites with 50 or more employees that offer back injury prevention and rehabilitation programs.

**10.14:** Establish in 50 States either public health or labor department programs that provide consultation and assistance to small businesses to implement safety and health programs for their employees.

**10.15:** Increase to at least 75 percent the proportion of primary care providers who routinely elicit occupational health exposures as a part of patient history and provide relevant counseling.

\*Duplicate objective.

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# Priority Area 11 Environmental Health

## Background and Data Summary

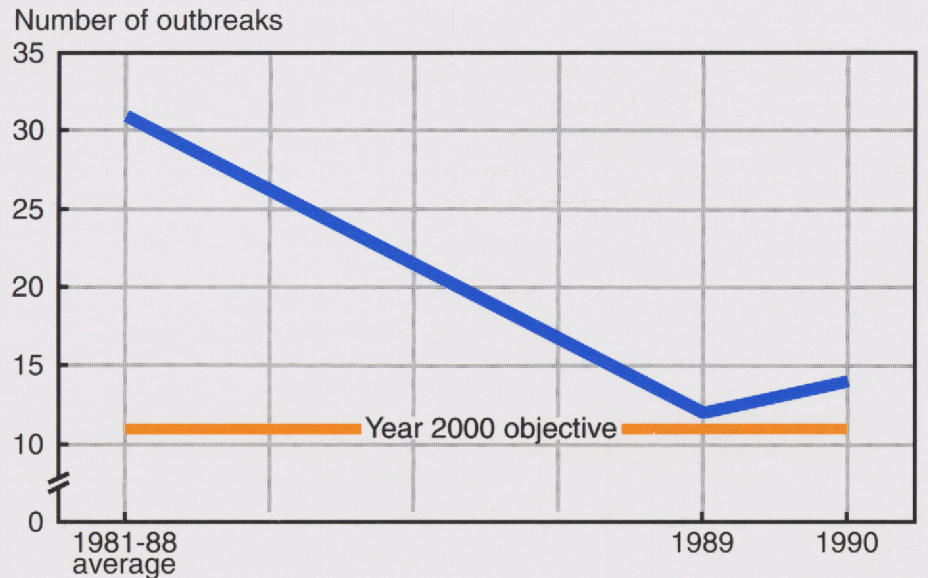
Environmental factors play a fundamental role in health and disease. One of the most famous public health interventions to control disease (cholera) succeeded through control of a contaminated public water supply (1). Despite this historic and other more recent successes, the etiology linking toxic exposure to disease is not well documented (2). The monitoring of public exposure to toxins and research into the relationship of toxic exposure to health and disease are important due to the increasing public and commercial use of hazardous substances (3).

Research may clarify current ambiguity about exposure thresholds. Dioxin continues to be the focus of research (4), but lead has been shown to have toxic effects at even lower exposure levels than originally believed (5,6). Research will aid priority setting among environmental and public health interventions.

The 16 objectives in this priority area cover a broad range of exposure media, including air, water, soil, and groundwater. They also include a variety of sources, such as radon, toxic chemicals, waterborne disease, and lead. Five of the objectives (11.3, 11.5, 11.7, 11.12, and 11.13) showed some progress towards the year 2000 targets. Two (11.12, and 11.13) relate to radon; despite extensive publicity about radon during the late 1980's and early 1990's, the rate of progress on these objectives is minimal.

Two objectives (11.1 and 11.9) showed movement away from the year 2000 targets. Asthma morbidity (11.1) increased slightly and the proportion of people who receive water that meets safe drinking water standards (11.9) decreased slightly from the 1989 baseline. Baseline data were established for objective 11.14 (health risks from hazardous waste); updated information shows an increase in the number of National Priorities List (NPL) sites, health

**Figure 16. Outbreaks of waterborne disease: United States, 1981–88 average, 1989, 1990, and year 2000 target for objective 11.3**



	1981-88	1989	1990	Year 2000 target
Outbreaks . . . . .	31	12	14	11

SOURCE: Centers for Disease Control and Prevention, Waterborne Surveillance System.

assessments and the number of sites with public health concerns. This objective is discussed further in the data issues section. Baseline data were also established for objective 11.11.

Data to assess progress were not available for six objectives (11.2, 11.4, 11.6, 11.8, 11.10, and 11.15). Two of these, blood lead levels (11.4) and programs to recycle waste (11.15), have received considerable public attention during recent years. Objective 11.16, State monitoring plans for tracking sentinel diseases, remains without baseline.

### Data Issues

### Definitions

The list of toxic agents used to monitor objective 11.7 (toxic agent

releases) has been revised by the Agency for Toxic Substances and Disease Registry (ATSDR) and Environmental Protection Agency's EPA and will be revised annually by the two agencies. This will pose problems in data comparability. The ATSDR is exploring ways to provide continued monitoring of this objective.

Objective 11.14 (health risks from hazardous waste sites) is currently tracked using the number of sites on the National Priorities List (NPL), the number of health assessments conducted at these sites, and the number of sites with public health concerns or hazards. No numeric target was identified in the original publication of *Healthy People 2000*.

The number of NPL sites, assessments, and sites with public health concerns frequently change

and will probably continue to increase due to the identification of additional sites and the duration of time required to clean up NPL sites (3). Additionally, EPA is currently revising its method of NPL site identification and prioritization, so future additions to the NPL list may be based on different criteria. The comparability of the indicators being used to track this objective will be reviewed when these changes are implemented.

Of critical importance to monitoring progress for this objective is a measure of those sites which posed a health concern or hazard in the past but have subsequently been remediated. With the addition of this information, a ratio of sites which posed threats but have been remediated to sites which pose a threat could be used to track this objective. A target for the year 2000 could then be derived using estimates of required time for clean up and EPA workload data. The ATSDR is currently exploring mechanisms to address these issues.



**Table 11. Environmental health objective status**

Objective	1988 Baseline		1990	1991	Target 2000
	Original	Revised			
<b>11.1 Asthma hospitalizations (per 100,000)</b> .....	<sup>1</sup> 188	...	192	196	160
a. Blacks and other nonwhites .....	<sup>1</sup> 334	...	340	349	265
b. Children 14 years and under .....	<sup>1</sup> 284	...	308	339	225
<b>11.2 Mental retardation (per 1,000 school aged children)</b> .....	<sup>2</sup> 2.7	...	---	---	2
<b>11.3 Waterborne diseases (number of outbreaks)</b> .....	<sup>3</sup> 31	...	14	---	11
a. People served by community water systems .....	<sup>3</sup> 13	...	---	---	6
<b>11.4 Blood lead levels exceeding 15 &amp; 25 mg/dL</b> .....	<sup>4</sup> 3 million & 234,000	...	---	---	500,000 & 0
a. Inner-city low-income black children .....	<sup>4</sup> 234,900 & 36,700	...	---	---	75,000 & 0
<b>11.5 People in counties meeting criteria air pollutants</b> .....	49.7%	...	<sup>5</sup> 69.4%	65.3%	85%
Ozone .....	53.6%	...	74.2%	72.0%	85%
Carbon monoxide .....	87.8%	...	91.1%	92.0%	85%
Nitrogen dioxide .....	96.6%	...	96.5%	96.5%	85%
Sulfur dioxide .....	99.3%	...	99.4%	98.0%	85%
Particulates .....	89.4%	...	92.3%	91.4%	85%
Lead .....	99.3%	...	97.8%	94.1%	85%
Total (any of above pollutants) .....	49.7%	...	69.4%	65.3%	85%
<b>11.6 Radon testing</b> .....	<sup>5</sup> Less than 5%	...	---	---	40%
a. Homes with smokers and former smokers .....	---	...	---	---	50%
b. Homes with children .....	---	...	---	---	50%
<b>11.7 Toxic agent releases</b>					
DHHS list of carcinogens (billion pounds) .....	0.32	...	<sup>5</sup> 0.30	---	0.24
ATSDR list of the most toxic chemicals (billion pounds)					
200 substances .....	2.62	...	<sup>5</sup> 2.40	---	2.60
250 substances .....	...	3.70	<sup>5</sup> 3.30	---	...
<b>11.8 Solid waste (average pounds per person per day)</b> .....	4.0	...	---	---	3.6
<b>11.9 People receiving safe drinking water</b> .....	74%	...	73%	---	85%
<b>11.10 Contaminated surface water</b> .....	25%	...	---	---	15%
<b>11.11 Homes tested for lead-based paint</b> .....	...	<sup>6</sup> 75%	---	---	50%
<b>11.12 Number of States with construction standards to minimize radon concentrations</b> .....	<sup>5</sup> 1	...	3	---	35
<b>11.13 Disclosure of lead and radon concentrations (number of States)</b>					
Disclosure of lead .....	<sup>5</sup> 2	...	2	5	30
Disclosure of radon .....	<sup>5</sup> 1	...	3	5	30
<b>11.14 Significant health risks from hazardous waste sites (Indicators)</b> .....					
Sites on list .....	<sup>8</sup> 1,082	...	---	<sup>9</sup> 1,357	...
Health assessments conducted .....	<sup>8</sup> 1,000	...	---	<sup>9</sup> 1,422	...
Sites with public health concerns/hazards .....	...	<sup>8</sup> 124	---	<sup>9</sup> 254	...
<b>11.15 Counties with programs for recyclable materials and household hazardous waste</b> .....	<sup>1</sup> 850	programs in 41 States	...	---	75%
<b>11.16 Number of States that track sentinel environmental diseases</b> .....	---	...	---	---	35

<sup>1</sup>1987 data.

<sup>2</sup>1985-88 data.

<sup>3</sup>1981-88 data.

<sup>4</sup>1984 data.

<sup>5</sup>1989 data.

<sup>6</sup>1991 data.

<sup>7</sup>Data represent proportion of people with homes built before 1950 who report that their paint has been analyzed for lead content.

<sup>8</sup>1990 data.

<sup>9</sup>1992 data.

NOTE: Data sources are in table C.

# Environmental Health Objectives

**11.1:** Reduce asthma morbidity, as measured by a reduction in asthma hospitalizations to no more than 160 per 100,000 people.

**11.1a:** Reduce asthma morbidity among blacks and other nonwhites, as measured by a reduction in asthma hospitalizations to no more than 265 per 100,000 people.

**11.1b:** Reduce asthma morbidity among children, as measured by a reduction in asthma hospitalizations to no more than 225 per 100,000 people.

**11.2\*:** Reduce the prevalence of serious mental retardation among school-aged children to no more than 2 per 1,000 children.

Duplicate objective: 17.8

**11.3:** Reduce outbreaks of waterborne disease from infectious agents and chemical poisoning to no more than 11 per year.

*NOTE: Community water systems are public or investor-owned water systems that serve large or small communities, subdivisions, or trailer parks with at least 15 service connections or 25 year-round residents.*

**11.3a:** Reduce outbreaks of waterborne disease from infectious agents and chemical poisoning among people served by community water systems to no more than 6 per year.

**11.4:** Reduce the prevalence of blood lead levels exceeding 15 ug/dL and 25 ug/dL among children aged 6 months–5 years to no more than 500,000 and zero, respectively.

**11.4a:** Reduce the prevalence of blood lead levels exceeding 15 ug/dL and 25 ug/dL among inner-city low-income black children (annual family income less than \$6,000 in 1984 dollars) to no more than 75,000 and zero, respectively.

**11.5:** Reduce human exposure to criteria air pollutants, as measured by an increase to at least 85 percent in the proportion of people who live in counties that have not exceeded any Environmental Protection Agency standard for air quality in the previous 12 months.

*NOTE: An individual living in a county that exceeds an air quality standard may not actually be exposed to unhealthy air. Of all criteria air pollutants, ozone is the most likely to have fairly uniform concentrations throughout an area. Exposure is to criteria air pollutants in ambient air. Due to weather fluctuations, multi-year averages may be the most appropriate way to monitor progress toward this objective.*

**11.6:** Increase to at least 40 percent the proportion of homes in which homeowners/occupants have tested for radon concentrations and that have either been found to pose minimal risk or have been modified to reduce risk to health.

**11.6a:** Increase to at least 50 percent the proportion of homes with smokers and former smokers in which homeowners/occupants have tested for radon concentrations and that have either been found to pose minimal risk or have been modified to reduce risk to health.

**11.6b:** Increase to at least 50 percent the proportion of homes with children in which homeowners/occupants have tested for radon concentrations and that have either been found to pose minimal risk or have been modified to reduce risk to health.

**11.7:** Reduce human exposure to toxic agents by confining total pounds of toxic agents released into the air, water, and soil each year to no more than:

0.24 billion pounds of those toxic agents included on the Department of Health and Human Services list of carcinogens.

2.6 billion pounds of those toxic agents included on the Agency for Toxic Substances and Disease Registry list of the most toxic chemicals.

**11.8:** Reduce human exposure to solid waste-related water, air, and soil contamination, as measured by a reduction in average pounds of municipal solid waste produced per person each day to no more than 3.6 pounds.

**11.9:** Increase to at least 85 percent the proportion of people who receive a supply of drinking water that meets the safe drinking water standards established by the Environmental Protection Agency.

*NOTE: Safe drinking water standards are measured using Maximum Contaminant Level (MCL) standards set by the Environmental Protection Agency which define acceptable levels of contaminants. See objective 11.3 for definition of community water systems.*

**11.10:** Reduce potential risks to human health from surface water, as measured by a decrease to no more than 15 percent in the proportion of assessed rivers, lakes, and estuaries that do not support beneficial uses, such as fishing and swimming.

*NOTE: Designated beneficial uses, such as aquatic life support, contact recreation (swimming), and water supply, are designated by each State and approved by the Environmental Protection Agency. Support of beneficial use is a proxy measure of risk to human health, as many pollutants causing impaired water uses do not have human health effects (for example, siltation and impaired fish habitat).*

**11.11:** Perform testing for lead-based paint in at least 50 percent of homes built before 1950.

**11.12:** Expand to at least 35 the number of States in which at least 75 percent of local jurisdictions have adopted construction standards and techniques that minimize elevated indoor radon levels in those new building areas locally determined to have elevated radon levels.

*NOTE: Since construction codes are frequently adopted by local jurisdictions rather than States, progress toward this objective also may be tracked using the proportion of cities and counties that have adopted such construction standards.*

**11.13:** Increase to at least 30 the number of States requiring that prospective buyers be informed of the presence of lead-based paint and radon concentrations in all buildings offered for sale.

**11.14:** Eliminate significant health risks from National Priority List hazardous waste sites, as measured by performance of clean-up at these sites sufficient to eliminate immediate and significant health threats as specified in health assessments completed at all sites.

*NOTE: The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 required the Environmental Protection Agency to develop criteria for determining priorities among hazardous waste sites and to develop and maintain a list of these priority sites. The resulting list is called the National Priorities List (NPL).*

**11.15:** Establish programs for recyclable materials and household hazardous waste in at least 75 percent of counties.

**11.16:** Establish and monitor in at least 35 States plans to define and track sentinel environmental diseases.

*NOTE: Sentinel environmental diseases include lead poisoning, other heavy metal poisoning (e.g., cadmium, arsenic, and mercury), pesticide poisoning, carbon monoxide poisoning, heatstroke, hypothermia, acute chemical poisoning, methemoglobinemia, and respiratory diseases triggered by environmental factors (e.g., asthma).*

\*Duplicate objective.

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# Priority Area 12

## Food and Drug Safety

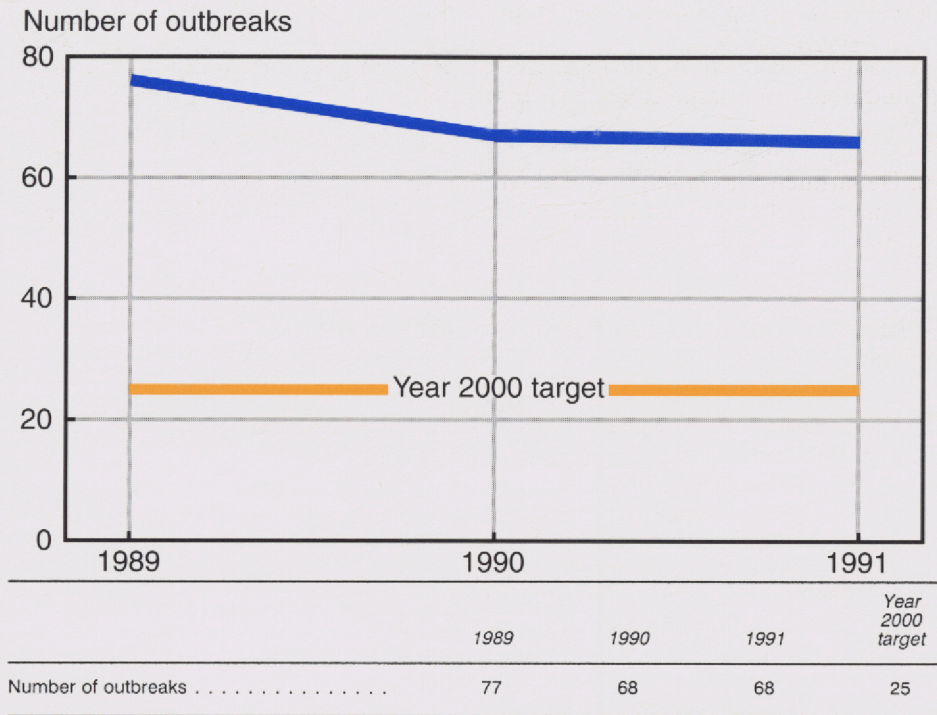
### Background and Data Summary

The development of systems to protect consumers from dangers posed by unapproved food additives, pesticides, food contaminants, and drugs has been a major public health accomplishment. Despite effective food and drug safety procedures, this country still experiences outbreaks of foodborne diseases and incidents of therapeutic drug-related illness and death. Foodborne disease outbreaks sometimes result from failures in protective systems, but are more often the result of improper food handling. *Salmonella enteritidis*, *Campylobacter jejuni*, *Escherichia coli* 0157:H7, and *Listeria monocytogenes* are four of the most common foodborne pathogens in the United States, based on numbers of reported cases and the severity of illness. Children, the very old, and people with immunological deficiencies are at increased risk of infection and death resulting from infection.

Older adults, who use more prescription and nonprescription medicines than younger people, are at increased risk of suffering adverse drug reactions. The physiological changes associated with increasing age and particular diseases and conditions may alter the effects of drugs. In addition, use of multiple medications increases the risk of an adverse outcome.

The food and drug safety priority area contains six objectives that address reductions in foodborne diseases and precautions to reduce adverse medication interactions, especially among older people. Reported outbreaks of infections due to *Salmonella enteritidis* fell from 77 outbreaks in 1989 to 68 outbreaks in 1991 (objective 12.2). Data beyond baseline information are not available for three objectives (12.1, 12.3, and 12.4) and baseline levels still need to be established for two objectives (12.5 and 12.6) Objective 12.5 seeks to increase the proportion of pharmacies and other dispensers of prescription

**Figure 17. Outbreaks due to *Salmonella enteritidis*: United States, 1989–91 and year 2000 target for objective 12.2**



SOURCE: Centers for Disease Control and Prevention, National Center for Infectious Diseases, *Salmonella* Surveillance System.

medications that use linked systems to warn of potential adverse drug reactions. The Omnibus Budget Reconciliation Act of 1990 provides statutory impetus for States to move toward this objective. Fifteen States currently plan to install point-of-sale, electronic drug claims processing systems in all their pharmacies that serve the Medicaid population by January 1994 (1).

### Data Issues

#### Data Source Descriptions

Various surveillance systems of the Centers for Disease Control and Prevention (CDC), including the *Salmonella* Surveillance System, the

*Campylobacter* Surveillance System, and the Bacterial Meningitis Surveillance System are used to monitor progress for objectives 12.1 and 12.2. The *Salmonella* Surveillance System is a passive laboratory-based system that uses reports from 49 States, the Food and Drug Administration, and the Department of Agriculture. This system measures the incidence of infection from salmonella species (12.1) and the number of outbreaks caused by *Salmonella enteritidis* (12.2). Many factors, including the intensity of surveillance, the severity of the illness, access to medical care, and association with a recognized outbreak, affect whether the infection will be reported. Reporting is incomplete; the incidence of

salmonellosis is substantially underreported.

The Campylobacter Surveillance System is also a passive system that receives weekly reports of laboratory isolates of campylobacter. The number of participating States has increased each year. Surveillance mechanisms, including laboratory isolation procedures, vary from State to State. These issues must be taken into account when interpreting trends in campylobacter incidence.

The incidence of foodborne *Listeria monocytogenes* is measured

using the Bacterial Meningitis Surveillance System. This is an active, laboratory-based surveillance system conducted in six States; it counts all cases of bacterial meningitis and other invasive bacterial diseases caused by the five most common pathogens causing bacterial meningitis, including *Listeria monocytogenes*. The participating surveillance areas represent several regions throughout the country and a population of 33.5 million, 14 percent of the U.S. population.

A surveillance system to track the incidence of *E. Coli* 0157:H7 is not available. Estimates of the incidence of cases of this disease are obtained from special studies (2,3). A survey of State public health laboratories conducted by CDC in 1989 demonstrated that *E. Coli* 0157:H7 has been detected in most areas of the United States (4). Laboratory methods varied from State to State; improved surveillance data are needed to determine trends in incidence.

**Table 12. Food and drug safety objective status**

	<i>Objective</i>	<i>Baseline 1987</i>	<i>1990</i>	<i>1991</i>	<i>Target 2000</i>
<b>12.1</b>	<b>Foodborne infections (cases per 100,000)</b>				
	Salmonella species . . . . .	18	---	---	16
	Campylobacter jejuni. . . . .	50	---	---	25
	Escherichia coli 0157:H7. . . . .	8	---	---	4
	Listeria monocytogenes . . . . .	0.7	---	---	0.5
<b>12.2</b>	<b><i>Salmonella enteritidis</i> outbreaks . . . . .</b>	177	68	68	25
<b>12.3</b>	<b>Refrigeration and cutting board practices</b>				
	For refrigeration of perishable foods. . . . .	<sup>2</sup> 70%	---	---	75%
	For washing cutting boards with soap . . . . .	<sup>2</sup> 66%	---	---	75%
	For washing utensils with soap. . . . .	<sup>2</sup> 55%	---	---	75%
<b>12.4</b>	<b>Food protection standards (proportion of States)</b>				
	Institutional food operations currently using FDA's model codes. . . . .	<sup>3</sup> 20%	---	---	70%
	Using "Unicode". . . . .	<sup>3</sup> 0%	---	---	70%
<b>12.5</b>	<b>Pharmacies with linked systems . . . . .</b>	---	---	---	75%
<b>12.6</b>	<b>Providers reviewing medication for older patients . . . . .</b>	---	---	---	75%

<sup>1</sup>1989 data.

<sup>2</sup>1988 data.

<sup>3</sup>1990 data.

NOTE: Data sources are in table C.

# Food and Drug Safety Objectives

**12.1:** Reduce infections caused by key foodborne pathogens to incidences of no more than:

Disease	2000 target (per 100,000)
Salmonella species	16
Campylobacter	25
Escherichia coli 0157:H7	4
Listeria monocytogenes	0.5

**12.2:** Reduce outbreaks of infections due to Salmonella enteritidis to fewer than 25 outbreaks yearly.

**12.3:** Increase to at least 75 percent the proportion of households in which principal food preparers routinely refrain from leaving perishable food out of the refrigerator for over 2 hours and wash cutting boards and utensils with soap after contact with raw meat and poultry.

**12.4:** Extend to at least 70 percent the proportion of States and territories that have implemented model food codes for institutional food operations and to at least 70 percent the proportion that have adopted the new uniform food protection code ("Unicode") that sets recommended standards for regulation of all food operations.

**12.5:** Increase to at least 75 percent the proportion of pharmacies and other dispensers of prescription medications that use linked systems to provide alerts to potential adverse drug reactions among medications dispensed by different sources to individual patients.

**12.6:** Increase to at least 75 percent the proportion of primary care providers who routinely review with their patients aged 65 and older all prescribed and over-the-counter medicines taken by their patients each time a new medication is prescribed.

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# Priority Area 13

## Oral Health

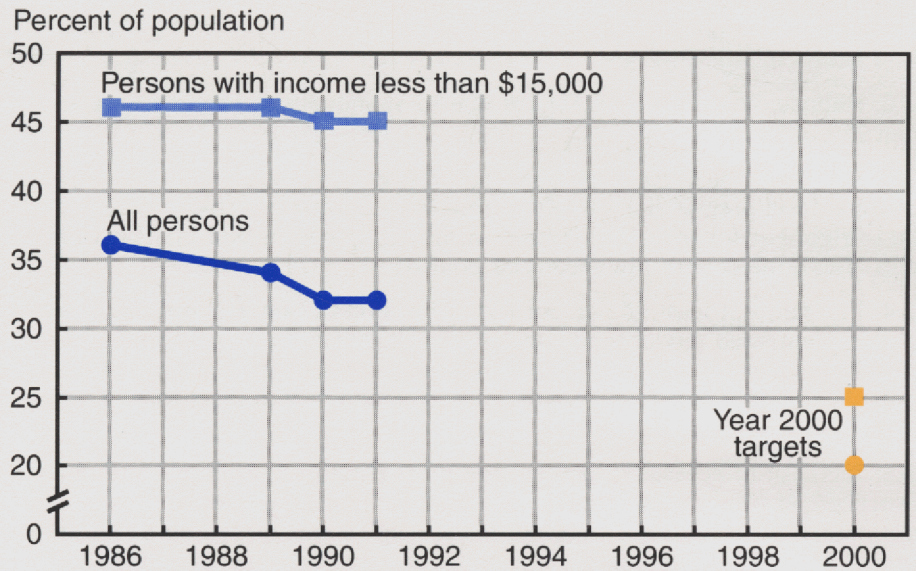
### Background and Data Summary

Oral diseases are among the most common health problems in the United States. Even though the overall prevalence of dental caries among school-aged children has declined steadily since the 1940's, half of them have had at least some decay in their permanent teeth (1). Among people aged 40–44 years, an average of more than 30 tooth surfaces have been affected by decay (1). Periodontal diseases are also a chronic problem. For example, 40 to 50 percent of adults (1) and 60 percent of 15-year olds experience gingival infections (2). Despite a steady decline in tooth loss over the past several decades, 36 percent of people 65 years of age and over have lost all of their natural teeth (3). Expenditures for dental care are projected to reach \$40 billion in 1992 (4). In 1989 dental visits or problems resulted in 148 hours missed from work per 100 employed people, 117 hours missed from school per 100 school-aged children, and 17 days with restricted activity per 100 people among the total U.S. population (5).

Progress has been made toward achievement of oral health objectives. Small improvements were observed in the proportion of 8- and 14-year olds who had received dental sealants (objective 13.8) and there have been small increases in the proportion of adults who have had a regular dental visit in the preceding year (13.14). Complete tooth loss (13.4) is less common in older adults overall, although there has been no change among those with lower incomes. Oral cancer mortality rates (13.7) have decreased modestly among men and women aged 45–74 years.

Objective 13.12, regarding the proportion of children who have visited a dentist in the past year, is moving away from the target. Recent data beyond the baseline are not available for nine objectives in this priority area. However, for two of these objectives (13.1 and 13.2) recent data are available for the subobjectives targeting American

**Figure 18. Percent of persons 65 years and over who have lost all of their natural teeth: United States, 1986–91 and year 2000 targets for objective 13.4**



	1986	1989	1990	1991	Year 2000 target
All persons 65 years and over. . . . .	36	34	32	32	20
Persons 65 years and over with income less than \$15,000 . . . . .	46	46	45	45	25

NOTE: A related table in *Health, United States, 1992*, is 82.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey.

Indians and Alaska Natives. These data show mixed results. Information on dental caries among 6–8 year-old children are not comparable to baseline, which showed prevalence separately for primary and permanent teeth. Among 15 year-olds, prevalence of dental caries declined slightly. Untreated dental caries increased among 6–8 year-olds and declined among 15 year-olds.

New data are available to establish baselines for objective 13.11 and the subobjectives on the proportion of parents and caregivers who use feeding practices that prevent baby bottle tooth decay. For the total population and for caregivers with less than a high school

education, feeding practices that prevent baby bottle tooth decay were determined for children aged 6–23 months who had ever used a bottle. The preventive feeding practices included children no longer using a bottle and children not given a bottle at bedtime (excluding bottles with plain water) in the past 2 weeks. Although new data were not available for topical and systemic fluoride use among people in areas without fluoridated water (13.10), data are provided that show the proportion of people using these products in the United States overall. Baseline data on oral examination and services requirements for institutions other than nursing facilities (13.13) are not yet available.



## **Data Issues**

### **Proxy Measures**

Nationally representative data on topical or systemic fluoride use among people not receiving optimally fluoridated public water are not readily obtainable. It is difficult to identify a national sample of people who are not served by a fluoridated water system. Survey interview methods are limited because many people cannot accurately state the fluoridation status of their water supply. For example, in the 1990 National Health Interview Survey (NHIS), 21 percent of respondents believed that the purpose of water fluoridation was to purify water and 17 percent did not know the reason (6). Presumably, these people and possibly others would also not correctly identify whether their water supply was fluoridated. For this reason, additional baseline data for this objective is use of fluoridated products among all U.S. residents. The measurement of use of fluoride products among people without fluoridated water is estimated from the 1989 NHIS data and information on water fluoridation patterns in the United States.

### **Comparability of Data Sources**

Information on the proportion of 5 year old children and adults aged 35 years and older who visited a dentist in the past 12 months (13.12 and 13.14, respectively) is obtained from supplements to the NHIS. In 1986 and 1989 these data were obtained from a knowledgeable respondent who provided information for all people in the household. The question on dental visits in the past 12 months followed questions about dental visits and problems in the past 2 weeks. The question on visits in the past 2 weeks was not included in the 1991 survey. These may have differentially affected recall about visits in the past 12 months. Among adults, a person sampled from each family provided information only for himself or herself and not others in the household in the 1991 survey.

**Table 13. Oral health objective status**

Objective	1986-87 baseline		1990	1991	Target 2000
	Original	Revised			
<b>13.1 Dental caries</b>					
Children 6-8 years	53%	...	---	---	35%
Adolescents 15 years	78%	...	---	---	60%
a. Children 6-8 years whose parents have less than high school education	70%	...	---	---	45%
b. American Indian/Alaska Native children 6-8 years					
Primary or permanent teeth	---	...	---	88%	45%
Primary teeth	192%	...	---	---	...
Permanent teeth	152%	...	---	---	...
c. Black children 6-8 years	61%	...	---	---	40%
d. American Indian/Alaska Native adolescents 15 years					
Permanent teeth	193%	...	---	91%	70%
<b>13.2 Untreated dental caries</b>					
Children 6-8 years	27%	...	---	---	20%
a. Children whose parents have less than a high school education	43%	...	---	---	30%
b. American Indian/Alaska Native children	164%	...	---	70%	35%
c. Black children	38%	...	---	---	25%
d. Hispanic children	236%	...	---	---	25%
Adolescents 15 years	23%	...	---	---	15%
a. Adolescents whose parents have less than a high school education	41%	...	---	---	25%
b. American Indian/Alaska Native adolescents	184%	...	---	59%	40%
c. Black adolescents	38%	...	---	---	20%
d. Hispanic adolescents	231-47%	...	---	---	25%
<b>13.3 No tooth loss</b>					
People 35-44 years	31%	...	---	---	45%
<b>13.4 Complete tooth loss</b>					
People 65 years and over	436%	...	32%	32%	20%
a. Low-income people (annual family income less than \$15,000)	446%	...	45%	45%	25%
<b>13.5 Gingivitis</b>					
People 35-44 years	42%	...	---	---	30%
a. Low-income people (annual family income less than \$12,000)	50%	...	---	---	35%
b. American Indians/Alaska Natives	195%	...	---	96%	50%
c. Hispanics	---	...	---	---	50%
Mexican Americans	274%	...	---	---	...
Cubans	279%	...	---	---	...
Puerto Ricans	282%	...	---	---	...
<b>13.6 Periodontal diseases</b>					
People 35-44 years	24%	...	---	---	15%
<b>13.7 Oral cancer deaths</b>					
Males 45-74 years (per 100,000)	512.1	5,613.6	13.4	---	10.5
Females 45-74 years (per 100,000)	54.1	5,64.8	4.6	---	4.1
<b>13.8 Protective sealants</b>					
Children 8 years	11%	...	717%	---	50%
Adolescents 14 years	8%	...	713%	---	50%
<b>13.9 Water fluoridation</b>					
People served by optimally fluoridated water	762%	7,861%	---	---	75%
<b>13.10 Topical and systemic fluorides</b>					
People in nonfluoridated areas who use fluoride	750%	...	---	---	85%
US-wide data people using:					
Toothpaste containing fluoride	...	494%	---	---	...
Fluoride mouthrinse					
Children and adolescents 6-17 years	...	722.0%	---	---	...
People 18 years and over	...	77.7%	---	---	...
Fluoride supplements					
Children and adolescents 2-16	...	710.3%	---	---	...

**Table 13. Oral health objective status – Con.**

Objective	1986–87 baseline		1990	1991	Target 2000
	Original	Revised			
<b>13.11 Baby bottle tooth decay</b>					
Parents and caregivers who use preventive feeding practices . . . . .	...	<sup>9</sup> 51%	---	---	75%
a. Parents and caregivers with less than high school education . . . . .	...	<sup>9</sup> 31%	---	---	65%
b. American Indian/Alaska Native parents and caregivers . . . . .	...	<sup>10</sup> 74%	---	---	65%
<b>13.12 Oral health screening, referral, and follow-up</b>					
Children 5 years who visited the dentist in the past year . . . . .	<sup>4</sup> 66%	...	<sup>7</sup> 60%	63%	90%
<b>13.13 Oral health care at institutional facilities</b> . . . . .	---	...	---	---	100%
Nursing facilities . . . . .	<sup>11</sup> Required	...	---	---	...
Federal prisons . . . . .	---	...	---	---	...
Nonfederal prisons . . . . .	---	...	---	---	...
Juvenile homes . . . . .	---	...	---	---	...
Detention facilities . . . . .	---	...	---	---	...
<b>13.14 Regular dental visits</b>					
People 35 years and over . . . . .	<sup>4</sup> 54%	...	<sup>7</sup> 55%	58%	70%
a. Edentulous people . . . . .	<sup>4</sup> 11%	...	<sup>7</sup> 13%	13%	50%
b. People 65 years and over . . . . .	<sup>4</sup> 42%	...	<sup>7</sup> 43%	47%	60%
<b>13.15 Oral health care for infants with cleft lip and/or palate</b>					
Number of States with existing systems for recording and referring infants . . . . .	<sup>12</sup> 25	...	---	---	40
<b>13.16 Protective equipment in sporting and recreation events</b> . . . . .	---	...	---	---	100%
National Collegiate Athletic Association					
Football . . . . .	<sup>12</sup> Required	...	---	---	...
Hockey . . . . .	<sup>12</sup> Required	...	---	---	...
Lacrosse . . . . .	<sup>12</sup> Required	...	---	---	...
High school football . . . . .	<sup>12</sup> Required	...	---	---	...
Amateur boxing . . . . .	<sup>12</sup> Required	...	---	---	...
Amateur ice hockey . . . . .	<sup>12</sup> Required	...	---	---	...

<sup>1</sup>1983–84 data.

<sup>2</sup>1982–84 data.

<sup>3</sup>1985–86 data.

<sup>4</sup>1986 data.

<sup>5</sup>1987 data.

<sup>6</sup>Data have been recomputed to reflect revised intercensal population estimates; see *Health, United States, 1992*, Appendix I.

<sup>7</sup>1989 data.

<sup>8</sup>Data have been revised. Original data were estimated based on preliminary analyses; see introduction.

<sup>9</sup>1991 data.

<sup>10</sup>1985-89 data.

<sup>11</sup>1990 data.

<sup>12</sup>1988 data.

NOTE: Data sources are in table C.

## Oral Health Objectives

**13.1:** Reduce dental caries (cavities) so that the proportion of children with one or more caries (in permanent or primary teeth) is no more than 35 percent among children aged 6–8 and no more than 60 percent among adolescents aged 15.

**13.1a:** Reduce dental caries (cavities) so that the proportion of children with one or more caries (in permanent or primary teeth) is no more than 45 percent among children aged 6–8 whose parents have less than high school education.

**13.1b:** Reduce dental caries (cavities) so that the proportion of children with one or more caries (in permanent or primary teeth) is no more than 45 percent among American Indian and Alaska Native children aged 6–8.

**13.1c:** Reduce dental caries (cavities) so that the proportion of children with one or more caries (in permanent or primary teeth) is no more than 40 percent among black children aged 6–8.

**13.1d:** Reduce dental caries (cavities) so that the proportion of adolescents with one or more caries (in permanent teeth) is no more than 70 percent among American Indian and Alaska Native adolescents aged 15.

**13.2:** Reduce untreated dental caries so that the proportion of children with untreated caries (in permanent or primary teeth) is no more than 20 percent among children aged 6–8 and no more than 15 percent among adolescents aged 15.

**13.2a:** Reduce untreated dental caries so that the proportion of lower socioeconomic status children (those whose parents have less than a high school education) with untreated dental caries (in permanent or primary teeth) is no more than 30 percent among children aged 6–8 and no more than 25 percent among adolescents aged 15.

**13.2b:** Reduce untreated dental caries so that the proportion of American Indian and Alaska Native children with untreated caries (in permanent or primary teeth) is no more than 35 percent among children aged 6–8 and no more than 40 percent among adolescents aged 15.

**13.2c:** Reduce untreated dental caries so that the proportion of black children with untreated caries (in permanent or primary teeth) is no more than 25 percent among children aged 6–8 and no more than 20 percent among adolescents aged 15.

**13.2d:** Reduce untreated dental caries so that the proportion of Hispanic children with untreated caries (in permanent or primary teeth) is no more than 25 percent among children aged 6–8 and no more than 25 percent among adolescents aged 15.

**13.3:** Increase to at least 45 percent the proportion of people aged 35–44 who have never lost a permanent tooth due to dental caries or periodontal diseases.

*NOTE: Never lost a permanent tooth is having 28 natural teeth exclusive of third molars.*

**13.4:** Reduce to no more than 20 percent the proportion of people aged 65 and older who have lost all of their natural teeth.

**13.4a:** Reduce to no more than 25 percent the proportion of low-income people (annual family income less than \$15,000) aged 65 and older who have lost all of their natural teeth.

**13.5:** Reduce the prevalence of gingivitis among people aged 35–44 to no more than 30 percent.

**13.5a:** Reduce the prevalence of gingivitis among low-income people (annual family income less than \$12,500) aged 35–44 to no more than 35 percent.

**13.5b:** Reduce the prevalence of gingivitis among American Indians and Alaska Natives aged 35–44 to no more than 50 percent.

**13.5c:** Reduce the prevalence of gingivitis among Hispanics aged 35–44 to no more than 50 percent.

**13.6:** Reduce destructive periodontal diseases to a prevalence of no more than 15 percent among people aged 35–44.

*NOTE: Destructive periodontal disease is one or more sites with 4 millimeters or greater loss of tooth attachment.*

**13.7:** Reduce deaths due to cancer of the oral cavity and pharynx to no more than 10.5 per 100,000 men aged 45–74 and 4.1 per 100,000 women aged 45–74.

**13.8:** Increase to at least 50 percent the proportion of children who have received protective sealants on the occlusal (chewing) surfaces of permanent molar teeth.

*NOTE: Progress toward this objective will be monitored based on prevalence of sealants in children at ages 8 and 14, when first and second molars, respectively are erupted.*

**13.9:** Increase to at least 75 percent the proportion of people served by community water systems providing optimal levels of fluoride.

*NOTE: Optimal levels of fluoride are determined by the mean maximum daily air temperature over a 5-year period and range between 0.7 and 1.2 parts of fluoride per one million parts of water (ppm).*

**13.10:** Increase use of professionally or self-administered topical or systemic (dietary) fluorides to at least 85 percent of people not receiving optimally fluoridated public water.

**13.11\*:** Increase to at least 75 percent the proportion of parents and caregivers who use feeding practices that prevent baby bottle tooth decay.

Duplicate objective: 2.12

**13.11a\*:** Increase to at least 65 percent the proportion of parents and caregivers with less than a high school education who use feeding practices that prevent baby bottle tooth decay.

Duplicate objective: 2.12a

**13.11b\*:** Increase to at least 65 percent the proportion of American Indian and Alaska Native parents and caregivers who use feeding practices that prevent baby bottle tooth decay.

Duplicate objective: 2.12b

**13.12:** Increase to at least 90 percent the proportion of all children entering school programs for the first time who have received an oral health screening, referral, and followup for necessary diagnostic, preventive, and treatment services.

*NOTE: School programs include Head Start, prekindergarten, kindergarten, and first grade.*

**13.13:** Extend to all long-term institutional facilities the requirement that oral examinations and services be provided no later than 90 days after entry into these facilities.

*NOTE: Long term institutional facilities include nursing homes, prisons, and juvenile homes, and detention facilities.*

**13.14:** Increase to at least 70 percent the proportion of people aged 35 and older using the oral health care system during each year.

**13.14a:** Increase to at least 50 percent the proportion of edentulous people using the oral health care system during each year.

**13.14b:** Increase to at least 60 percent the proportion of people aged 65 and older using the oral health care system during each year.

**13.15:** Increase to at least 40 the number of States that have an effective system for recording and referring infants with cleft lips and/or palates to craniofacial anomaly teams.

**13.16\*:** Extend requirement of the use of effective head, face, eye, and mouth protection to all organizations, agencies, and institutions sponsoring sporting and recreation events that pose risk of injury.

Duplicate objective: 9.19

\*Duplicate objective

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# Priority Area 14 Maternal and Infant Health

## Background and Data Summary

Improving the health of mothers and infants is a national challenge. Of every 1,000 babies born in the United States each year, about 9 die before their first birthday (1). Although the infant mortality rate in the United States continues to decline and has reached an all-time low, in recent years the pace of progress has slowed. Important measures of increased risk of infant death, such as incidence of low birth weight and receipt of prenatal care, show little or no recent improvement. The mortality rate for black infants is twice the rate for white infants, and there is evidence that this difference is increasing (2).

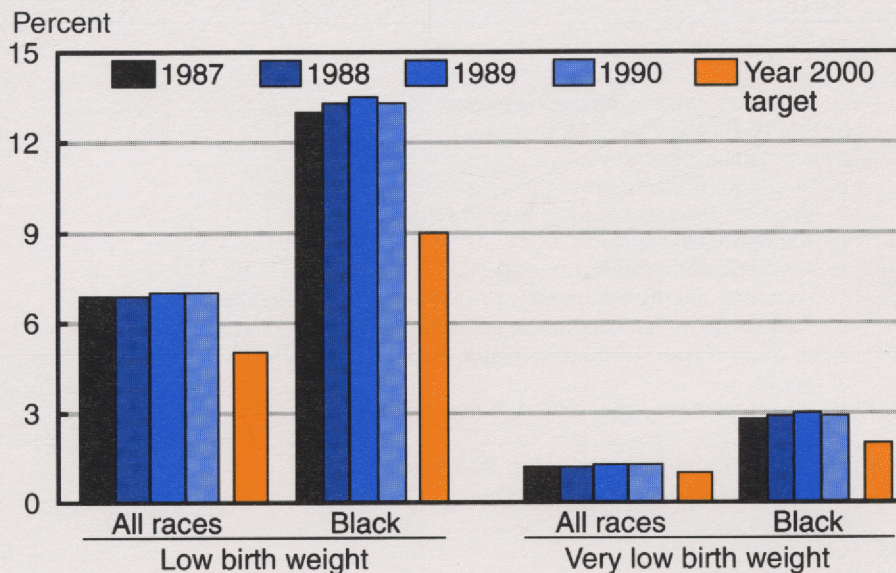
Of the 16 Maternal and Infant Health objectives for the total population, 7 moved toward the year 2000 targets (objectives 14.1, 14.2, 14.6, 14.7, 14.8, 14.10, and 14.15); 5 moved away from the targets (14.3, 14.4, 14.5, 14.9, and 14.11). Data to update progress for the remaining four objectives are not yet available. For some objectives, even though the overall objective is showing progress, the picture for minority racial subgroups is less encouraging. For example, although the overall infant, neonatal, and postneonatal mortality rates are declining (objective 14.1, 14.1d, and 14.1g), postneonatal rates among black infants (14.1h) are not improving. Further reductions in infant mortality and morbidity will require a focus on strategies to modify the behaviors and lifestyles that affect birth outcomes.

## Data Issues

### Definitions

In 1989 NCHS changed the method for tabulating race for live births, assigning to the infant the race of mother rather than using the previous, more complicated algorithm for race of child. This change affects the natality data by race in this chapter. In addition, because live

**Figure 19. Proportion of live births that are low birth weight and are very low birth weight by race of mother: United States, 1987-90 and year 2000 targets for objective 14.5**



	1987	1988	1989	1990	Year 2000 target
Low birth weight (All races) . . . . .	6.9	6.9	7.0	7.0	5
Low birth weight (Black) . . . . .	13.0	13.3	13.5	13.3	9
Very low birth weight (All races) . . . . .	1.2	1.2	1.3	1.3	1
Very low birth weight (Black) . . . . .	2.8	2.9	3.0	2.9	2

NOTE: Related tables in *Health, United States, 1992*, are 8, 11, and 12. See definition of birth weight in *Health, United States, 1992*, Appendix II.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System.

births comprise the denominator of infant (including neonatal and postneonatal), maternal mortality, and fetal death rates, these rates are also affected. These changes are described in the technical notes and in greater detail in a 1991 NCHS publication (3).

Quantitatively, the change in the basis for tabulating live births by race results in more births to the white population and fewer births to the black population and other races. Because of changes in the denominators, infant mortality rates (14.1), fetal death rates (14.2), and maternal mortality rates (14.3) under the new classification tend to be

lower for white infants and higher for infants of other races than they would be when computed by the previous method. Conversely, natality measures such as percent low birth weight (14.5) and percent receiving early care (14.11) tend to be higher for white births and lower for births of other races.

The special target populations for racial subgroups in this priority area are being monitored with the "new" data by race of mother. Therefore, the original baselines (by race of child) for these racial subgroups have been recomputed by race of mother to allow comparable trend comparisons.

Studies indicate that infant mortality for minorities other than blacks from the annual vital statistics files have been seriously underestimated (4). Therefore, infant

mortality (objective 14.1) for American Indians and Alaska Natives and for Puerto Ricans is being monitored through data from the

Linked Infant Birth and Infant Death Files, which categorizes deaths by the race of mother as reported on the birth certificate.

**Table 14. Maternal and infant health objective status**

Objective	1987 baseline		1990	1991	Target 2000
	Original	Revised			
<b>14.1 Infant mortality (per 1,000 live births)</b>	10.1	...	9.2	18.9	7
a. Blacks	17.9	<sup>2</sup> 18.8	18.0	---	11
b. American Indians/Alaska Natives	<sup>3</sup> 12.5	<sup>2,3</sup> 13.4	<sup>4</sup> 13.0	---	8.5
c. Puerto Ricans	<sup>3</sup> 12.9	...	<sup>4</sup> 9.9	---	8
d. Neonatal mortality	6.5	...	5.8	15.5	4.5
e. Neonatal mortality among blacks	11.7	<sup>2</sup> 12.3	11.6	---	7
f. Neonatal mortality among Puerto Ricans	<sup>3</sup> 8.6	...	<sup>4</sup> 6.7	---	5.2
g. Postneonatal mortality	3.6	...	3.4	13.4	2.5
h. Postneonatal mortality among blacks	6.1	<sup>2</sup> 6.4	6.4	---	4
i. Postneonatal mortality among American Indians/Alaska Natives	<sup>3</sup> 6.5	<sup>2,3</sup> 7.0	<sup>4</sup> 6.8	---	4
j. Postneonatal mortality among Puerto Ricans	<sup>3</sup> 4.3	...	<sup>4</sup> 3.2	---	2.8
<b>14.2 Fetal deaths (per 1,000 live births plus fetal deaths)</b>	7.6	...	7.5	---	5
a. Blacks	12.8	<sup>2</sup> 13.5	13.7	---	7.5
<b>14.3 Maternal mortality (per 100,000 live births)</b>	6.6	...	8.2	---	3.3
a. Blacks	14.2	<sup>2</sup> 14.9	22.4	---	5
<b>14.4 Fetal alcohol syndrome (per 1,000 live births)</b>	0.22	...	0.41	---	0.12
a. American Indians/Alaska Natives	4.0	...	5.2	---	2.0
b. Blacks	0.8	...	1.4	---	0.4
<b>14.5 Low birth weight</b>	6.9%	...	7.0%	---	5%
Very low birth weight	1.2%	...	1.3%	---	1%
a. Low-birth weight blacks	12.7%	<sup>2</sup> 13.0%	13.3%	---	9%
b. Very-low birth weight blacks	2.7%	<sup>2</sup> 2.8%	2.9%	---	2%
<b>14.6 Recommended weight gain during pregnancy</b>	<sup>5</sup> 67%	<sup>5,6</sup> 68%	<sup>7</sup> 75%	---	85%
<b>14.7 Severe complications of pregnancy (per 100 deliveries)</b>	22	...	18	18	15
<b>14.8 Cesarean delivery (per 100 deliveries)</b>	24.4	...	23.5	23.5	15
a. Primary (first time) cesarean delivery	17.4	...	16.8	17.1	12
b. Repeat cesarean deliveries (among woman with previous cesarean delivery)	91.2	...	79.6	75.8	65
<b>14.9 Breastfeeding</b>					
During early postpartum period	<sup>7</sup> 54%	...	52%	53%	75%
a. Low-income mothers	<sup>7</sup> 32%	...	35%	33%	75%
b. Black mothers	<sup>7</sup> 25%	...	16%	26%	75%
c. Hispanic mothers	<sup>7</sup> 51%	...	44%	52%	75%
d. American Indian/Alaska Native mothers	<sup>7</sup> 47%	...	47%	46%	75%
At 5-6 months	<sup>7</sup> 21%	...	18%	18%	50%
a. Low-income mothers	<sup>7</sup> 9%	...	8%	9%	50%
b. Black mothers	<sup>7</sup> 8%	...	7%	7%	50%
c. Hispanic mothers	<sup>7</sup> 16%	...	14%	16%	50%
d. American Indian/Alaska Native mothers	<sup>7</sup> 28%	...	27%	22%	50%
<b>14.10 Alcohol, tobacco, and drug use during pregnancy</b>					
Abstinence from					
Tobacco	<sup>8</sup> 75%	...	79%	80%	90%
Alcohol	---	...	<sup>7</sup> 79%	---	Increase by 20%
Cocaine	---	...	<sup>7</sup> 99%	---	Increase by 20%
Marijuana	---	...	<sup>7</sup> 98%	---	Increase by 20%
<b>14.11 Prenatal care in the first trimester (percent of live births)</b>	76.0%	...	75.8%	---	90%
a. Blacks	61.1%	<sup>2</sup> 60.8%	60.6%	---	90%
b. American Indians/Alaska Natives	60.2%	<sup>2</sup> 57.6%	57.9%	---	90%
c. Hispanics	61.0%	...	60.2%	---	90%



**Table 14. Maternal and infant health objective status – Con.**

Objective	1987 baseline		1990	1991	Target 2000
	Original	Revised			
<b>14.12 Age-appropriate preconception counseling by clinicians</b> .....	---	...	---	---	60%
<b>14.13 Counseling on detection of fetal abnormalities</b> .....	...	<sup>7</sup> 29%	---	---	90%
<b>14.14 Pregnant women and infants receiving risk-appropriate care</b> .....	---	...	---	---	90%
<b>14.15 Newborn screening and treatment</b>					
Screened by State-sponsored programs for genetic disorders and other conditions .....	---	...	---	---	95%
Testing positive for disease and receiving appropriate treatment. ....	---	...	---	---	90%
Sickle cell screening .....	<sup>9</sup> 33%	...	<sup>10</sup> 89%	---	...
Black infants .....	<sup>9</sup> 57%	...	<sup>11</sup> 77%	---	...
Newborns diagnosed positive for sickle cell anemia receiving treatment.	---	...	95%	---	...
Galactosemia screening (38 states) .....	70%	...	97%	---	...
Newborns diagnosed positive for galactosemia receiving treatment ....	---	...	100%	---	...
<b>14.16 Babies receiving primary care</b> .....	---	...	---	---	90%

<sup>1</sup>Provisional data.

<sup>2</sup>Data have been revised to reflect the change in tabulating births from the race of the child to the race of the mother; see *Health, United States, 1992*, Appendix I.

<sup>3</sup>1984 data.

<sup>4</sup>1987 data.

<sup>5</sup>1980 data for married females who had a full-term live birth and prenatal care.

<sup>6</sup>Data have been revised to reflect updated methodology; see Introduction.

<sup>7</sup>1988 data.

<sup>8</sup>1985 data.

<sup>9</sup>Based on 20 States reporting.

<sup>10</sup>Based on 43 States reporting.

<sup>11</sup>Based on 9 States reporting.

NOTE: Data sources are in table C.

# Maternal and Infant Health Objectives

**14.1:** Reduce the infant mortality rate to no more than 7 per 1,000 live births.

*NOTE: Infant mortality is deaths of infants under 1 year; neonatal mortality is deaths of infants under 28 days; and postneonatal mortality is deaths of infants aged 28 days up to 1 year.*

**14.1a:** Reduce the infant mortality rate among blacks to no more than 11 per 1,000 live births.

**14.1b:** Reduce the infant mortality rate among American Indians and Alaska Natives to no more than 8.5 per 1,000 live births.

**14.1c:** Reduce the infant mortality rate among Puerto Ricans to no more than 8 per 1,000 live births.

**14.1d:** Reduce the neonatal mortality rate to no more than 4.5 per 1,000 live births.

**14.1e:** Reduce the neonatal mortality rate among blacks to no more than 7 per 1,000 live births.

**14.1f:** Reduce the neonatal mortality rate among Puerto Ricans to no more than 5.2 per 1,000 live births.

**14.1g:** Reduce the postneonatal mortality rate to no more than 2.5 per 1,000 live births.

**14.1h:** Reduce the postneonatal mortality rate among blacks to no more than 4 per 1,000 live births.

**14.1i:** Reduce the postneonatal mortality rate among American Indians and Alaska Natives to no more than 4 per 1,000 live births.

**14.1j:** Reduce the postneonatal mortality rate among Puerto Ricans to no more than 2.8 per 1,000 live births.

**14.2:** Reduce the fetal death rate (20 or more weeks of gestation) to no more than 5 per 1,000 live births plus fetal deaths.

**14.2a:** Reduce the fetal death rate (20 or more weeks of gestation) among blacks to no more than 7.5 per 1,000 live births plus fetal deaths.

**14.3:** Reduce the maternal mortality rate to no more than 3.3 per 100,000 live births.

*NOTE: The objective uses the maternal mortality rate as defined by the National Center for Health Statistics. However, if other sources of maternal mortality data are used, a 50-percent reduction in maternal mortality is the intended target.*

**14.3a:** Reduce the maternal mortality rate among black women to no more than 5 per 100,000 live births.

**14.4:** Reduce the incidence of fetal alcohol syndrome to no more than 0.12 per 1,000 live births.

**14.4a:** Reduce the incidence of fetal alcohol syndrome among American Indians and Alaska Natives to no more than 2 per 1,000 live births.

**14.4b:** Reduce the incidence of fetal alcohol syndrome among blacks to no more than 0.4 per 1,000 live births.

**14.5:** Reduce low birth weight to an incidence of no more than 5 percent of live births and very low birth weight to no more 1 percent of live births.

*NOTE: Low birth weight is weight at birth of less than 2,500 grams; very low birth weight is weight at birth of less than 1,500 grams.*

**14.5a:** Reduce low birth weight among blacks to an incidence of no more than 9 percent of live births and very low birth weight to no more 2 percent of live births.

**14.6:** Increase to at least 85 percent the proportion of mothers who achieve the minimum recommended weight gain during their pregnancies.

*NOTE: Recommended weight gain is pregnancy weight gain recommended in the 1990 National Academy of Science's report, Nutrition During Pregnancy.*

**14.7:** Reduce severe complications of pregnancy to no more than 15 per 100 deliveries.

*NOTE: Severe complications of pregnancy will be measured using hospitalizations due to pregnancy-related complications.*

**14.8:** Reduce the cesarean delivery rate to no more than 15 per 100 deliveries.

**14.8a:** Reduce the primary (first time) cesarean delivery rate to no more than 12 per 100 deliveries.

**14.8b:** Reduce the repeat cesarean delivery rate to no more than 65 per 100 deliveries among women who had a previous cesarean delivery.

**14.9\*:** Increase to at least 75 percent the proportion of mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

Duplicate objective: 2.11

**14.9a\*:** Increase to at least 75 percent the proportion of low-income mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

Duplicate objective: 2.11a

**14.9b\*:** Increase to at least 75 percent the proportion of black mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

Duplicate objective: 2.11b

**14.9c\*:** Increase to at least 75 percent the proportion of Hispanic mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

Duplicate objective: 2.11c

**14.9d\*:** Increase to at least 75 percent the proportion of American Indian and Alaska Native mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

Duplicate objective: 2.11d

**14.10:** Increase abstinence from tobacco use by pregnant women to at least 90 percent and increase abstinence from alcohol, cocaine, and marijuana by pregnant women by at least 20 percent.

**14.11:** Increase to at least 90 percent the proportion of all pregnant women who receive prenatal care in the first trimester of pregnancy.

**14.11a:** Increase to at least 90 percent the proportion of pregnant black women who receive prenatal care in the first trimester of pregnancy.

**14.11b:** Increase to at least 90 percent the proportion of pregnant American Indian and Alaska Native women who receive prenatal care in the first trimester of pregnancy.

**14.11c:** Increase to at least 90 percent the proportion of pregnant Hispanic women who receive prenatal care in the first trimester of pregnancy.

**14.12\*:** Increase to at least 60 percent the proportion of primary care providers who provide age-appropriate preconception care and counseling.

Duplicate objective: 05.10

**14.13:** Increase to at least 90 percent the proportion of women enrolled in prenatal care who are offered screening and counseling on prenatal detection of fetal abnormalities.

*NOTE: This objective will be measured by tracking use of maternal serum alpha-feto protein screening tests.*

**14.14:** Increase to at least 90 percent the proportion of pregnant women and infants who receive risk-appropriate care.

*NOTE: This objective will be measured by tracking the proportion of very low-birth weight infants (less than 1,500 grams) born in facilities covered by a neonatologist 24 hours a day.*

**14.15:** Increase to at least 95 percent the proportion of newborns screened by State-sponsored programs for genetic disorders and other disabling conditions and to 90 percent the proportion of newborns testing positive for disease who receive appropriate treatment.

*NOTE: As measured by the proportion of infants served by programs for sickle cell anemia and galactosemia. Screening programs should be appropriate for State demographic characteristics.*

**14.16:** Increase to at least 90 percent the proportion of babies aged 18 months and younger who receive recommended primary care services at the appropriate intervals.

\*Duplicate objective.

## References

1. National Center for Health Statistics. Births, marriages, divorces, and deaths for 1991. Monthly vital statistics report; vol 40 no 12. Hyattsville, Maryland: Public Health Service. 1992.
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3. National Center for Health Statistics. Advance report of final natality statistics, 1989. Monthly vital statistics report; vol 40 no 8, suppl. Hyattsville, Maryland: Public Health Service. Dec 1991.
4. Hahn, RA, Mulinare J, Teutsh SM. Inconsistencies in coding of race and ethnicity between birth and death in U.S. infants: A new look at infant mortality, 1983 through 1985. JAMA 267:259-263. 1992

# Priority Area 15

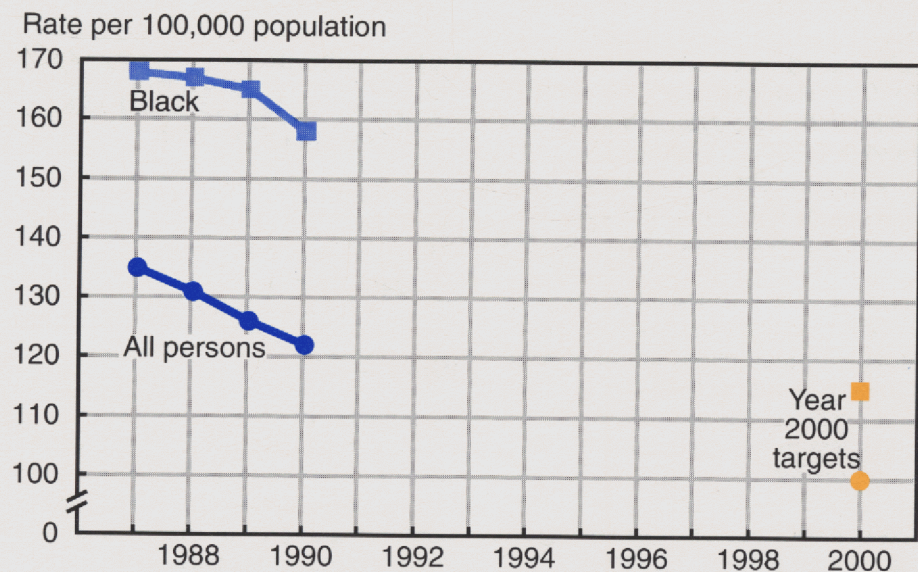
## Heart Disease and Stroke

### Background

Over the past 15 years the death rate for cardiovascular disease has declined dramatically: 35 percent for all cardiovascular disease, 40 percent for coronary heart disease, and more than 50 percent for stroke. Even so, cardiovascular diseases—primarily coronary heart disease and stroke—kill nearly as many Americans as all other diseases combined (1). Cardiovascular disease is also among the leading causes of disability (2). The major modifiable risk factors for cardiovascular disease are high blood pressure, high blood cholesterol, and cigarette smoking. Other important risk factors are obesity, physical inactivity, and diabetes mellitus. Approximately 26 percent of adults have high blood pressure (3). Overall, black persons have a higher prevalence of high blood pressure than white persons. About 60 million adults have high blood cholesterol requiring medical advice and intervention (4,5). Twenty-six percent of adults are current cigarette smokers (See chapter 3, Tobacco).

Of 17 objectives in the heart disease and stroke priority area, data for nine objectives show improvements toward meeting the year 2000 targets (objectives 15.1, 15.2, 15.4, 15.5, 15.11, 15.12, 15.13, 15.14, and 15.17). Mortality due to coronary heart disease (15.1) and stroke (15.2) declined from the 1987 baseline through 1990 in the population as a whole; however, for both causes of death, black persons have much higher mortality rates and the decline in mortality over the same time period was much less substantial. A small improvement in the proportion of adults who have ever had their blood cholesterol checked was noted for the period 1988 to 1991 (15.14). Information is not available regarding the proportion of adults who have had their cholesterol checked in the preceding 5 years as specified in the objective. New baseline data were obtained for

**Figure 20. Age-adjusted death rates for coronary heart disease: United States, 1987–90 and year 2000 targets for objective 15.1**



	1987	1988	1989	1990	Year 2000 target
All races	135	131	126	122	100
Black	168	167	165	158	115

NOTE: Death rates are age adjusted. ICD codes differ from similar categories published in *Health, United States* and elsewhere. See table A for specific codes. Related tables in *Health, United States, 1992*, are 28 and 35 for diseases of heart.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System.

one objective (15.16). Self-reported data for proxy tracking of objective 15.10 (proportion of the population that is overweight) indicate movement away from the target. The rate of end stage renal disease (15.3) is also moving away from the target. Data on dietary fat intake (15.9) showed no change. Recent data are not available for three objectives (15.6, 15.7, and 15.8). Baseline data are needed for objective 15.15.

### Data Issues

### Definitions

Objective 15.4 addresses the proportion of people with hypertension whose blood pressure is

under control. High blood pressure is defined as blood pressure greater than 140/90 mm Hg. The estimates used to track this objective define control as using antihypertensive medication only and do not include nonpharmacologic treatments (such as weight loss, low sodium diets or restriction of alcohol) as a method of keeping blood pressure under control. The 1976–80 baseline is from the second National Health and Nutrition Examination Survey (NHANES II), which covered people 18–74 years of age; 1988–91 preliminary data from the NHANES III are for people 18 years and over. The 1982–84 baseline originally published in *Healthy People 2000* (2) from the Seven States Study, representing the medians of data from selected States, will no longer be used for tracking this objective. In

1976–80, among all people with high blood pressure (whether aware or unaware of their condition), only 11 percent were on medication and had their condition under control; 1988–91 preliminary data indicate that 21 percent of people with hypertension had their condition under control. Among people being treated for hypertension, 33 percent were controlling their high blood pressure in 1976–80; the proportion has increased to 43 percent based on 1988–91 preliminary data.

Objective 15.5 refers to people with high blood pressure who are aware of their condition defined by self-reported data and not blood pressure measurement. Data from the National Health Interview Survey (NHIS) are used to measure progress towards increasing the proportion of people with high blood pressure who are taking action to help control their blood pressure. People with high blood pressure are defined as those who report being told that they had high blood pressure on two or more occasions by a doctor or other health professional. Respondents with a history of high blood pressure were asked whether they used the following methods to control blood pressure: taking medication, dieting to lose weight, cutting down on salt, and exercising.

### **Comparability of Data Sources**

Objective 15.13 addresses blood pressure screening and whether people know if their blood pressure is normal or high. Data for the 1985 baseline and for 1990 show the proportion of people 18 years of age and over who had their blood pressure measured within the preceding 2 years by a health professional or other trained observer and who can state the diastolic and systolic values of the measure. The proportion of adults 18 years and over who had their blood pressure checked within the previous 2 years and who could state whether their blood pressure was high, normal, or low was 86 percent in 1990 and 85 percent in 1991. This measure is not available for the 1985 baseline.

Objective 15.14, proportion of people who have had their blood cholesterol checked within the preceding 5 years, has been tracked with three different surveys. The

baseline data are from the 1988 Health and Diet Survey; 1990 data are from the Cholesterol Awareness Survey; and 1991 data are from the NHIS. Data from these three surveys indicate that the percent of the population who have ever had their blood cholesterol measured is increasing. However, these differences may be due in part to survey differences.

### **Data Availability**

Objectives 15.6, 15.7, and 15.8, which address mean serum cholesterol level, high blood cholesterol prevalence, and awareness of a high blood cholesterol condition, will be measured by the NHANES III. Data from the first 3 years of this survey will be available in mid-1993.

### **Proxy Measures**

Objectives 15.9 (dietary fat intake) and 15.10 (overweight) will be measured by the NHANES III. Provisional estimates from the 1989 Continuing Survey of Food Intakes for Individuals for objective 15.9 and self-reported data from the NHIS for objective 15.10 are being used to track these objectives until NHANES III data are available.

See priority area 1 for a discussion of self-reported height and weight (15.10), as well as light to moderate physical activity (15.11).

**Table 15. Heart disease and stroke objective status**

Objective	1987 baseline		1990	1991	Target 2000
	Original	Revised			
<b>15.1 Coronary heart disease deaths (age adjusted per 100,000)</b> . . . . .	135	<sup>1</sup> No change	122	---	100
a. Blacks (age adjusted per 100,000) . . . . .	163	<sup>1</sup> 168	158	---	115
<b>15.2 Stroke deaths (age adjusted per 100,000)</b> . . . . .	30.3	<sup>1</sup> 30.4	27.7	---	20.0
a. Blacks (age adjusted per 100,000) . . . . .	51.2	<sup>1</sup> 52.5	48.4	---	27.0
<b>15.3 End-stage renal disease (per 100,000)</b> . . . . .	13.9	<sup>2</sup> 14.4	18.4	---	13.0
a. Blacks . . . . .	32.4	<sup>2</sup> 34.0	43.0	---	30.0
<b>15.4 Controlled high blood pressure<sup>3</sup></b>					
People with high blood pressure 18 years and over . . . . .	<sup>4,5</sup> 11%	...	<sup>6</sup> 21%	---	50%
a. Males with high blood pressure . . . . .	<sup>3</sup> 6%	...	<sup>6</sup> 16%	---	40%
<b>15.5 Taking action to control blood pressure</b>					
People 18 years and over . . . . .	<sup>7</sup> 79%	...	80%	---	90%
a. White hypertensive males 18–34 years . . . . .	<sup>7</sup> 51%	...	54%	---	80%
b. Black hypertensive males 18–34 years . . . . .	<sup>7</sup> 63%	...	56%	---	80%
<b>15.6 Mean serum cholesterol level (mg/dL)</b>					
People 20–74 years . . . . .	<sup>4</sup> 213	...	---	---	200
<b>15.7 High blood cholesterol prevalence</b>					
People 20–74 years . . . . .	<sup>4</sup> 27%	...	---	---	20%
<b>15.8 Awareness of high blood cholesterol condition</b>					
Adults with high blood cholesterol . . . . .	<sup>8</sup> 30%	...	---	---	60%
<b>15.9 Dietary fat intake among people 2 years and over</b>					
People 2 years and over					
Percent of calories from total fat . . . . .	---	...	---	---	30%
Percent of calories from saturated fat . . . . .	---	...	---	---	10%
People 20–74 years					
Percent of calories from total fat . . . . .	<sup>4</sup> 36%	...	<sup>9</sup> 36%	---	...
Percent of calories from saturated fat . . . . .	<sup>4</sup> 13%	...	<sup>9</sup> 13%	---	...
Females 19–50 years					
Percent of calories from total fat . . . . .	<sup>7</sup> 36%	...	---	---	...
Percent of calories from saturated fat . . . . .	<sup>7</sup> 13%	...	---	---	...
<b>15.10 Overweight prevalence</b>					
People 20 years and over . . . . .	<sup>4</sup> 26%	...	27%	28%	20%
Males . . . . .	<sup>4</sup> 24%	...	27%	28%	...
Females . . . . .	<sup>4</sup> 27%	...	27%	28%	...
Adolescents 12–19 years . . . . .	<sup>4</sup> 15%	...	---	---	15%
a. Low-income females 20 years over . . . . .	<sup>4</sup> 37%	...	37%	39%	25%
b. Black females 20 years and over . . . . .	<sup>4</sup> 44%	...	42%	44%	30%
c. Hispanic females 20 years and over . . . . .	...	<sup>6</sup> 27%	33%	32%	25%
Mexican-American females . . . . .	<sup>10</sup> 39%	...	---	38%	...
Cuban females . . . . .	<sup>10</sup> 34%	...	---	---	...
Puerto Rican females . . . . .	<sup>10</sup> 37%	...	---	---	...
d. American Indians/Alaska Natives . . . . .	<sup>11</sup> 29–75%	...	---	40%	30%
e. People with disabilities . . . . .	<sup>6</sup> 36%	...	---	38%	25%
f. Females with high blood pressure . . . . .	<sup>3</sup> 50%	...	---	---	41%
g. Males with high blood pressure . . . . .	<sup>3</sup> 39%	...	---	---	35%
<b>15.11 Moderate physical activity</b>					
People 6 years and over . . . . .	---	...	---	---	30%
People 18–74 years					
5 or more times per week . . . . .	<sup>7,12</sup> 22%	<sup>7,12</sup> No change	23%	24%	...
7 or more times per week . . . . .	<sup>7,12</sup> 12%	<sup>7,12</sup> 16%	16%	17%	...
<b>15.12 Cigarette smoking prevalence</b>					
People 20 years and over . . . . .	29%	...	26%	26%	15%
Males . . . . .	32%	...	28%	28%	...
Females . . . . .	27%	...	23%	24%	...
a. People with high school education or less					
20 years and over . . . . .	34%	...	31%	32%	20%
b. Blue-collar workers 20 years and over . . . . .	36%	...	37%	36%	20%
c. Military personnel . . . . .	<sup>13</sup> 42%	...	---	<sup>14</sup> 35%	20%
d. Blacks 20 years and over . . . . .	34%	...	27%	30%	18%
e. Hispanics 20 years and over . . . . .	<sup>10</sup> 33%	...	24%	20%	18%

**Table 15. Heart disease and stroke objective status – Con.**

Objective	1987 baseline		1990	1991	Target 2000
	Original	Revised			
f. American Indians/Alaska natives . . . . .	<sup>15</sup> 42–70%	...	38%	33%	20%
g. Southeast Asian males . . . . .	<sup>11</sup> 55%	...	<sup>16</sup> 35%	---	20%
h. Females of reproductive age (18–44 years) . . . . .	29%	...	26%	27%	12%
i. Pregnant females . . . . .	<sup>7</sup> 25%	...	19%	20%	10%
j. Females who use oral contraceptives . . . . .	<sup>17</sup> 36%	...	<sup>13</sup> 26%	---	10%
<b>15.13 Knowledge of blood pressure values</b>					
People 18 years and over . . . . .	<sup>7</sup> 61%	...	67%	---	90%
<b>15.14 Blood cholesterol checked in past 5 years</b>					
People 18 years and over . . . . .	---	...	---	---	75%
Ever checked . . . . .	<sup>13</sup> 59%	...	65%	63%	...
Within past 2 years . . . . .	52%	...	---	50%	...
<b>15.15 Primary care providers who provide appropriate therapy for high blood cholesterol . . . . .</b>	---	...	---	---	75%
<b>15.16 Worksite blood pressure/cholesterol education programs</b>					
High blood pressure and/or cholesterol activity . . . . .	<sup>14</sup> 35%	...	---	---	50%
High blood pressure activity . . . . .	<sup>7</sup> 16.5%	...	---	---	...
Nutrition education activity . . . . .	<sup>7</sup> 16.8%	...	---	---	...
<b>15.17 Laboratory accuracy in cholesterol measurement</b>	<sup>5</sup> 53%	...	<sup>18</sup> 84%	---	90%

<sup>1</sup>Data have been recomputed to reflect revised intercensal population estimates; see *Health, United States, 1992*, Appendix I.  
<sup>2</sup>Data have been revised. Original data were estimated based on preliminary analyses; see Introduction.  
<sup>3</sup>The published 1982–84 Seven States Study baseline of 24 percent of adults 18 years and over with hypertension who are controlling their high blood pressure will not be used for tracking.  
<sup>4</sup>1976–80 data.  
<sup>5</sup>People 18–74 years.  
<sup>6</sup>1988–91 provisional estimates from NHANES III for people 18 years and over.  
<sup>7</sup>1985 data.  
<sup>8</sup>Data source for updates has changed; previously published tracking data will be replaced.  
<sup>9</sup>1989 data.  
<sup>10</sup>1982–84 data.  
<sup>11</sup>1984–88 data.  
<sup>12</sup>Data source has been changed and data have been revised to reflect updated methodology; see Introduction.  
<sup>13</sup>1988 data.  
<sup>14</sup>1992 data.  
<sup>15</sup>1979–87 data.  
<sup>16</sup>Vietnamese males only.  
<sup>17</sup>1983 data.  
<sup>18</sup>1987 data.

NOTE: Data sources are in table C.



# Heart Disease and Stroke Objectives

**15.1\*:** Reduce coronary heart disease deaths to no more than 100 per 100,000 people.

Duplicate objectives: 1.1, 2.1, and 3.1

**15.1a\*:** Reduce coronary heart disease deaths among blacks to no more than 115 per 100,000 people.

Duplicate objectives: 1.1a, 2.1a, and 3.1a

**15.2:** Reduce stroke deaths to no more than 20 per 100,000 people.

**15.2a:** Reduce stroke deaths among blacks to no more than 27 per 100,000.

**15.3:** Reverse the increase in end-stage renal disease (requiring maintenance dialysis or transplantation) to attain an incidence of no more than 13 per 100,000.

**15.3a:** Reverse the increase in end-stage renal disease (requiring maintenance dialysis or transplantation) among black persons to attain an incidence of no more than 30 per 100,000.

**15.4:** Increase to at least 50 percent the proportion of people with high blood pressure whose blood pressure is under control.

*\*\*NOTE: People with high blood pressure have blood pressure equal to or greater than 140 mm Hg systolic and/or 90 mm Hg diastolic and/or take antihypertensive medication. Blood pressure control is defined as maintaining a blood pressure less than 140 mm Hg systolic and 90 mm Hg diastolic. Nonpharmacologic treatment (e.g., through weight loss, low sodium diets, or restriction of alcohol) is not included.*

**15.4a:** Increase to at least 40 percent the proportion of men with high blood pressure whose blood pressure is under control.

**15.5:** Increase to at least 90 percent the proportion of people with high blood pressure who are taking action to help control their blood pressure.

*\*\*NOTE: Self-reported data are used for this objective. People with high blood pressure are defined as people who have been told that they have high blood pressure on two or more occasions by a doctor or other health professional. Actions to control blood pressure include taking medication, dieting to lose weight, cutting down on salt, and exercising.*

**15.5a:** Increase to at least 80 percent the proportion of white hypertensive men aged 18–34 who are taking action to help control their blood pressure.

**15.5b:** Increase to at least 80 percent the proportion of black hypertensive men aged 18–34 who are taking action to help control their blood pressure.

**15.6:** Reduce the mean serum cholesterol level among adults to no more than 200 mg/dL.

**15.7:** Reduce the prevalence of blood cholesterol levels of 240 mg/dL or greater to no more than 20 percent among adults.

**15.8:** Increase to at least 60 percent the proportion of adults with high blood cholesterol who are aware of their condition and are taking action to reduce their blood cholesterol to recommended levels.

*NOTE: "High blood cholesterol" means a level that requires diet and, if necessary, drug treatment. Action to control high blood cholesterol include keeping medical appointments, making recommended dietary changes (e.g., reducing saturated fat, total fat, and dietary cholesterol), and, if necessary, taking prescribed medication.*

**15.9\***: Reduce dietary fat intake to an average of 30 percent of calories or less and average saturated fat intake to less than 10 percent of calories among people aged 2 and older.

Duplicate objectives: 2.5 and 16.7

**15.10\***: Reduce overweight to a prevalence of no more than 20 percent among people aged 20 and older and no more than 15 percent among adolescents aged 12–19.

*NOTE: For people aged 20 and older, overweight is defined as body mass index (BMI) equal to or greater than 27.8 for men and 27.3 for women. For adolescents, overweight is defined as BMI equal to or greater than 23.0 for males aged 12–14, 24.3 for males aged 15–17, 25.8 for males aged 18–19, 23.4 for females aged 12–14, 24.8 for females aged 15–17, and 25.7 for females aged 18–19. The values for adolescents are the age- and gender-specific 85th percentile values of the 1976–80 National Health and Nutrition Examination Survey (NHANES II), corrected for sample variation. BMI is calculated by dividing weight in kilograms by the square of height in meters. The cut points used to define overweight approximate the 120 percent of desirable body weight definition used in the 1990 objectives.*

Duplicate objectives: 1.2, 2.3, and 17.12

**15.10a\***: Reduce overweight to a prevalence of no more than 25 percent among low-income women aged 20 and older.

Duplicate objectives: 1.2a, 2.3a, and 17.12a

**15.10b\***: Reduce overweight to a prevalence of no more than 30 percent among black women aged 20 and older.

Duplicate objectives: 1.2b, 2.3b, and 17.12b

**15.10c\***: Reduce overweight to a prevalence of no more than 25 percent among Hispanic women aged 20 and older.

Duplicate objectives: 1.2c, 2.3c, and 17.12c

**15.10d\***: Reduce overweight to a prevalence of no more than 30 percent among American Indians and Alaska Natives.

Duplicate objectives: 1.2d, 2.3d, and 17.12d

**15.10e\***: Reduce overweight to a prevalence of no more than 25 percent among people with disabilities.

Duplicate objectives: 1.2e, 2.3e, and 17.12e

**15.10f\***: Reduce overweight to a prevalence of no more than 41 percent among women with high blood pressure aged 20 and older.

Duplicate objectives: 1.2f, 2.3f, and 17.12f

**15.10g\***: Reduce overweight to a prevalence of no more than 35 percent among men with high blood pressure aged 20 and older.

Duplicate objectives: 1.2g, 2.3g, and 17.12g

**15.11\***: Increase to at least 30 percent the proportion of people aged 6 and older who engage regularly, preferably daily, in light to moderate physical activity for at least 30 minutes per day.

*NOTE: Light to moderate physical activity requires sustained, rhythmic muscular movements, is at least equivalent to sustained walking, and is performed at less than 60 percent of maximum heart rate for age. Maximum heart rate equals roughly 220 beats per minute minus age. Examples may include walking, swimming, cycling, dancing, gardening and yard work, various domestic and occupational activities, and games and other childhood pursuits.*

Duplicate objectives: 1.3 and 17.13

**15.12\*:** Reduce cigarette smoking to a prevalence of no more than 15 percent among people aged 20 and older.

*NOTE: A cigarette smoker is a person who has smoked at least 100 cigarettes and currently smokes cigarettes.*

Duplicate objectives: 3.4 and 16.6

**15.12a\*:** Reduce cigarette smoking to a prevalence of no more than 20 percent among people aged 20 and older with a high school education or less.

Duplicate objectives: 3.4a and 16.6a

**15.12b\*:** Reduce cigarette smoking to a prevalence of no more than 20 percent among blue-collar workers aged 20 and older.

Duplicate objectives: 3.4b and 16.6b

**15.12c\*:** Reduce cigarette smoking to a prevalence of no more than 20 percent among military personnel.

Duplicate objectives: 3.4c and 16.6c

**15.12d\*:** Reduce cigarette smoking to a prevalence of no more than 18 percent among blacks aged 20 and older.

Duplicate objectives: 3.4d and 16.6d

**15.12e\*:** Reduce cigarette smoking to a prevalence of no more than 18 percent among Hispanics aged 20 and older.

Duplicate objectives: 3.4e and 16.6e

**15.12f\*:** Reduce cigarette smoking to a prevalence of no more than 20 percent among American Indians and Alaska Natives.

Duplicate objectives: 3.4f and 16.6f

**15.12g\*:** Reduce cigarette smoking to a prevalence of no more than 20 percent among Southeast Asian men.

Duplicate objectives: 3.4g and 16.6g

**15.12h\*:** Reduce cigarette smoking to a prevalence of no more than 12 percent among women of reproductive age.

Duplicate objectives: 3.4h and 16.6h

**15.12i\*:** Reduce cigarette smoking to a prevalence of no more than 10 percent among pregnant women.

Duplicate objectives: 3.4i and 16.6i

**15.12j\*:** Reduce cigarette smoking to a prevalence of no more than 10 percent among women who use oral contraceptives.

Duplicate objectives: 3.4j and 16.6j

**15.13:** Increase to at least 90 percent the proportion of adults who have had their blood pressure measured within the preceding 2 years and can state whether their blood pressure was normal or high.

*NOTE: A blood pressure measurement within the preceding 2 years refers to a measurement by a health professional or other trained observer.*

**15.14:** Increase to at least 75 percent the proportion of adults who have had their blood cholesterol checked within the preceding 5 years.

**15.15:** Increase to at least 75 percent the proportion of primary care providers who initiate diet and, if necessary, drug therapy at levels of blood cholesterol consistent with current management guidelines for patients with high blood cholesterol.

*NOTE: Current treatment recommendations are outlined in detail in the Report of the Expert Panel on the Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults, released by the National Cholesterol Education Program in 1987. Guidelines appropriate for children are currently being established. Treatment recommendations are likely to be refined over time. Thus, for the year 2000, "current" means whatever recommendations are then in effect.*

**15.16:** Increase to at least 50 percent the proportion of worksites with 50 or more employees that offer high blood pressure and/or cholesterol education and control activities to their employees.

**15.17:** Increase to at least 90 percent the proportion of clinical laboratories that meet the recommended accuracy standard for cholesterol measurement.

\*Duplicate objective.

\*\*Updated from original note in *Healthy People 2000*.

## References

1. National Center for Health Statistics. Health, United States, 1992. Hyattsville, Maryland: Public Health Service. 1993.
2. U.S. Department of Health and Human Services. Healthy people 2000: National health promotion and disease prevention objectives for the nation. Washington: Public Health Service. 1991.
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4. National Heart, Lung, and Blood Institute. Fifth report of the joint national committee on detection, evaluation, and treatment of high blood pressure. Joint National Committee V. U.S. Department of Health and Human Services. 1993.
5. Sempos C, Fulwood R, Haines C, et al. The prevalence of high blood cholesterol levels among adults in the United States. *JAMA* 262: 45-52. 1989.
6. Sempos, C, et. al. Divergence of the recent trends in coronary mortality for the four major race-sex groups in the United States. *Am J Public Health* 78: 1422-7. 1988.

# Priority Area 16 Cancer

## Background and Data Summary

Cancer accounts for nearly one out of every four deaths in the United States (1). Cancer is not one disease, but a constellation of more than 1,000 different diseases, each characterized by the uncontrolled growth and spread of abnormal cells. Of the 250 million Americans now living, about 75 million will eventually have cancer. While the incidence of cancer has increased in the past two decades, death rates for those under 55 have fallen. More people are surviving cancer now than several decades ago (2). Research has demonstrated that many cancers can be prevented or, if detected and treated at early stages, cured.

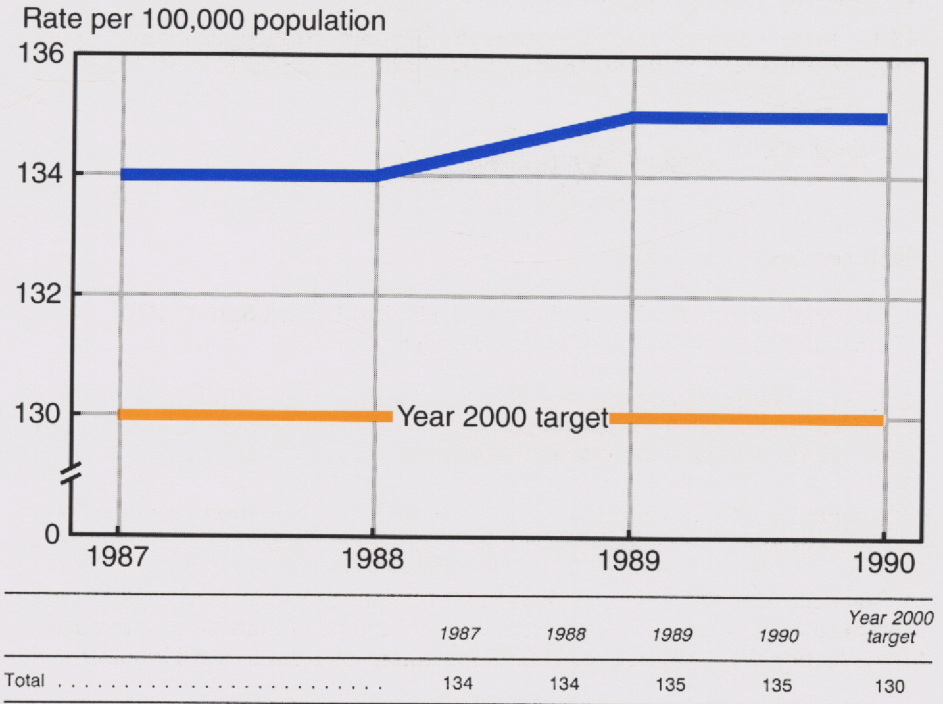
Recent data indicate that progress toward the year 2000 objectives has been made for three of the objectives (16.5, 16.6, and 16.10) in this priority area. The trends in the overall cancer death rate (16.1) and the breast cancer death rate (16.3) are moving away from the target, while lung cancer mortality (16.2) is rising at a rate, which at its current pace, would not meet the target before the year 2000. Two objectives (16.4 and 16.7) show no change from the baseline figures. Complete data were unavailable to update progress for the remaining eight objectives.

## Data Issues

### Age-Adjusted Death Rates

The death rates shown in objectives 16.1–16.5 have been age-adjusted to the 1940 U.S. population. (See Appendix II for more information on age-adjusted rates.) The National Cancer Institute age adjusts cancer deaths to the 1970 U.S. population. When the 1970 standard population is used, the equivalent baseline, interim, and target rates are all somewhat higher than those generated using the 1940 population.

**Figure 21. Age-adjusted death rates for cancer: United States, 1987–90 and year 2000 target for objective 16.1**



NOTE: Related tables in *Health, United States, 1992*, are 28–31, 37–39, and 50.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System.

## Data Availability

Only partial data were available to update progress for several objectives. For objective 16.11 (the proportion of women receiving a clinical breast exam and a mammogram), the 1991 data from the National Health Interview Survey (NHIS) report mammogram only. Similarly, the 1991 data on Pap smears (16.12) are for women with a uterine cervix who have had a Pap test in the past 12 months. Data on ever receiving a Pap test and receiving a Pap test in the preceding 1–3 years were not obtained in the 1991 survey. Complete data to measure objectives 16.11 and 16.12 will be available from the 1993 NHIS.

**Table 16. Cancer objective status**

Objective	1987 baseline		1990	1991	Target 2000
	Original	Revised			
<b>16.1 Cancer deaths (age adjusted per 100,000)</b> . . . . .	133	<sup>1</sup> 134	135	---	130
<b>16.2 Lung cancer deaths (age adjusted per 100,000)</b> . . . . .	37.9	<sup>1</sup> 38.5	39.9	---	42.0
<b>16.3 Breast cancer deaths (age adjusted per 100,000)</b> . . . . .	22.9	<sup>1</sup> 23.0	23.1	---	20.6
<b>16.4 Cervical cancer deaths (age adjusted per 100,000)</b> . . . . .	2.8	change	2.8	---	1.3
<b>16.5 Colorectal cancer deaths (age adjusted per 100,000)</b> . . . . .	14.4	<sup>1</sup> 14.7	13.8	---	13.2
<b>16.6 Cigarette smoking prevalence</b>					
People 20 years and over . . . . .	29%	...	26%	26%	15%
Males . . . . .	32%	...	28%	28%	...
Females . . . . .	27%	...	23%	24%	...
a. People with high school education or less					
20 years and over . . . . .	34%	...	31%	32%	20%
b. Blue-collar workers 20 years and over . . . . .	36%	...	37%	36%	20%
c. Military personnel . . . . .	<sup>2</sup> 42%	...	---	<sup>3</sup> 35%	20%
d. Blacks 20 years and over . . . . .	34%	...	27%	30%	18%
e. Hispanics 20 years and over . . . . .	<sup>4</sup> 33%	...	24%	20%	18%
f. American Indians/Alaska Natives . . . . .	<sup>5</sup> 42-70%	...	38%	33%	20%
g. Southeast Asian males . . . . .	<sup>6</sup> 55%	...	<sup>7</sup> 35%	---	20%
h. Females of reproductive age (18-44 years) . . . . .	29%	...	26%	27%	12%
i. Pregnant females . . . . .	<sup>8</sup> 25%	...	19%	20%	10%
j. Females who use oral contraceptives . . . . .	<sup>9</sup> 36%	...	<sup>2</sup> 26%	---	10%
<b>16.7 Dietary fat intake among people 2 years and over</b>					
People 2 years and over					
Percent of calories from total fat . . . . .	---	...	---	---	30%
Percent of calories from saturated fat . . . . .	---	...	---	---	10%
People 20-74 years					
Percent of calories from total fat . . . . .	<sup>10</sup> 36%	...	<sup>11</sup> 36%	---	...
Percent of calories from saturated fat . . . . .	<sup>10</sup> 13%	...	<sup>11</sup> 13%	---	...
Females 19-50 years					
Percent of calories from total fat . . . . .	<sup>8</sup> 36%	...	---	---	...
Percent of calories from saturated fat . . . . .	<sup>8</sup> 13%	...	---	---	...
<b>16.8 Daily intake of vegetables, fruits, and grain products</b>					
Adults (number of servings)					
Vegetables and fruits . . . . .	---	...	---	---	5
Grain products . . . . .	---	...	---	---	6
Women aged 19-50 (number of servings)					
Vegetables and fruits . . . . .	<sup>8</sup> 2.5	...	---	---	...
Grain products . . . . .	<sup>8</sup> 3.0	...	---	---	...
<b>16.9 Actions to reduce sun exposure</b> . . . . .	---	...	---	---	60%
<b>16.10 Tobacco, diet, and cancer screening and counseling by clinicians</b> . . . . .	<sup>12,13</sup> 52%	...	<sup>11,13</sup> 96%	---	75%
<b>16.11 Breast examination and mammogram</b>					
Females 40 years and over (ever received) . . . . .	36%	...	60%	---	80%
Females 50 years and over (preceding 1-2 years) . . . . .	25%	...	47%	<sup>14</sup> 54%	60%
Ever received					
a. Hispanic females 40 years and over . . . . .	20%	...	52%	---	80%
b. Low-income females 40 years and over (annual family income less than \$10,000) . . . . .	22%	...	41%	---	80%
c. Females 40 years and over with less than high school education . . . . .	23%	...	45%	---	80%
d. Females 70 years and over . . . . .	25%	...	48%	---	80%
e. Black females 40 years and over . . . . .	28%	...	53%	---	80%
Received within preceding 2 years					
a. Hispanic females 50 years and over . . . . .	18%	...	42%	<sup>14</sup> 54%	60%
b. Low-income females 50 years and over (annual family income less than \$10,000) . . . . .	15%	...	31%	<sup>14</sup> 39%	60%
c. Females 50 years and over with less than high school education . . . . .	16%	...	34%	<sup>14</sup> 40%	60%
d. Females 70 years and over . . . . .	18%	...	37%	<sup>14</sup> 45%	60%
e. Black females 50 years and over . . . . .	19%	...	42%	<sup>14</sup> 48%	60%
<b>16.12 Pap test</b>					
Ever received . . . . .	88%	...	---	---	95%
Received within preceding 3 years . . . . .	75%	...	---	<sup>15</sup> 59%	85%

**Table 16. Cancer objective status—Con.**

Objective	1987 baseline		1990	1991	Target 2000
	Original	Revised			
Ever received					
a. Hispanic females 18 years and over . . . . .	75%	...	---	---	95%
b. Females 70 years and over . . . . .	76%	...	---	---	95%
c. Females 18 years and over with less than high school education ...	79%	...	---	---	95%
d. Low-income females 18 years and over (annual family income less than \$10,000) . . . . .	80%	...	---	---	95%
Received within preceding 3 years					
a. Hispanic females 18 years and over . . . . .	66%	...	---	<sup>15</sup> 58%	80%
b. Females 70 years and over . . . . .	44%	...	---	<sup>15</sup> 33%	70%
c. Females 18 years and over with less than high school education ...	58%	...	---	<sup>15</sup> 45%	75%
d. Low-income females 18 years and over (annual family income less than \$10,000) . . . . .	64%	...	---	<sup>15</sup> 50%	80%
<b>16.13 Fecal occult blood test and proctosigmoidoscopy</b>					
Received fecal occult blood testing within preceding 2 years . . . . .	27%	...	---	---	50%
Ever received proctosigmoidoscopy . . . . .	25%	...	---	---	40%
People 65 years and over with routine checkup in past 2 years who had a fecal blood test . . . . .	...	...	---	36%	...
<b>16.14 Oral, skin, and digital rectal examinations</b>					
People 50 years and over (during past year) . . . . .	27%	...	---	---	40%
<b>16.15 Pap test quality</b>					
Monitoring cytology laboratory . . . . .	---	...	---	---	100%
<b>16.16 Mammogram facilities certified by American College of Radiology . .</b>	<sup>16</sup> 18- 21%	...	---	---	80%

<sup>1</sup>Data have been recomputed to reflect revised intercensal population estimates; see *Health, United States, 1992*, Appendix I.

<sup>2</sup>1988 data.

<sup>3</sup>1992 data.

<sup>4</sup>1982-84 data.

<sup>5</sup>1979-87 data.

<sup>6</sup>1984-88 data.

<sup>7</sup>Vietnamese males only.

<sup>8</sup>1985 data.

<sup>9</sup>1983 data.

<sup>10</sup>1976-80 data.

<sup>11</sup>1989 data.

<sup>12</sup>1985-86 data.

<sup>13</sup>Data reflect tobacco screening and counseling only.

<sup>14</sup>Mammogram only.

<sup>15</sup>Females with uterine cervix who had a Pap test in past 12 months.

<sup>16</sup>1990 data.

NOTE: Data sources are in table C.

# Cancer Objectives

**16.1\*:** Reverse the rise in cancer deaths to achieve a rate of no more than 130 per 100,000 people.

*NOTE: In its publications the National Cancer Institute age adjusts cancer death rates to the 1970 U.S. population. Using the 1970 standard, the equivalent target value for this objective would be 175 per 100,000.*

Duplicate objective: 2.2

**16.2\*:** Slow the rise in lung cancer deaths to achieve a rate of no more than 42 per 100,000 people.

*NOTE: In its publications the National Cancer Institute age adjusts cancer death rates to the 1970 U.S. population. Using the 1970 standard, the equivalent target value for this objective would be 53 per 100,000.*

Duplicate objective: 3.2

**16.3:** Reduce breast cancer deaths to no more than 20.6 per 100,000 women.

*NOTE: In its publications the National Cancer Institute age adjusts cancer death rates to the 1970 U.S. population. Using the 1970 standard, the equivalent target value for this objective would be 25.2 per 100,000.*

**16.4:** Reduce deaths from cancer of the uterine cervix to no more than 1.3 per 100,000 women.

*NOTE: In its publications the National Cancer Institute age adjusts cancer death rates to the 1970 U.S. population. Using the 1970 standard, the equivalent target value for this objective would be 1.5 per 100,000.*

**16.5:** Reduce colorectal cancer deaths to no more than 13.2 per 100,000 people.

*NOTE: In its publications the National Cancer Institute age adjusts cancer death rates to the 1970 U.S. population. Using the 1970 standard, the equivalent target value for this objective would be 18.7 per 100,000.*

**16.6\*:** Reduce cigarette smoking to a prevalence of no more than 15 percent among people aged 20 and older.

*NOTE: A cigarette smoker is a person who has smoked at least 100 cigarettes and currently smokes cigarettes.*

Duplicate objectives: 3.4 and 15.12

**16.6a\*:** Reduce cigarette smoking to a prevalence of no more than 20 percent among people aged 20 and older with a high school education or less.

Duplicate objectives: 3.4a and 15.12a

**16.6b\*:** Reduce cigarette smoking to a prevalence of no more than 20 percent among blue-collar workers aged 20 and older.

Duplicate objectives: 3.4b and 15.12b

**16.6c\*:** Reduce cigarette smoking to a prevalence of no more than 20 percent among military personnel.

Duplicate objectives: 3.4c and 15.12c

**16.6d\*:** Reduce cigarette smoking to a prevalence of no more than 18 percent among blacks aged 20 and older.

Duplicate objectives: 3.4d and 15.12d

**16.6e\*:** Reduce cigarette smoking to a prevalence of no more than 18 percent among Hispanics aged 20 and older.

Duplicate objectives: 3.4e and 15.12e



**16.6f\*:** Reduce cigarette smoking to a prevalence of no more than 20 percent among American Indians and Alaska Natives.

Duplicate objectives: 3.4f and 15.12f

**16.6g\*:** Reduce cigarette smoking to a prevalence of no more than 20 percent among Southeast Asian men.

Duplicate objectives: 3.4g and 15.12g

**16.6h\*:** Reduce cigarette smoking to a prevalence of no more than 12 percent among women of reproductive age.

Duplicate objectives: 3.4h and 15.12h

**16.6i\*:** Reduce cigarette smoking to a prevalence of no more than 10 percent among pregnant women.

Duplicate objectives: 3.4i and 15.12i

**16.6j\*:** Reduce cigarette smoking to a prevalence of no more than 10 percent among women who use oral contraceptives.

Duplicate objectives: 3.4j and 15.12j

**16.7\*:** Reduce dietary fat intake to an average of 30 percent of calories or less and average saturated fat intake to less than 10 percent of calories among people aged 2 and older.

*NOTE: The inclusion of a saturated fat target in this objective should not be interpreted as evidence that reducing only saturated fat will reduce cancer risk. Epidemiologic and experimental animal studies suggest that the amount of fat consumed rather than the specific type of fat can influence the risk of some cancers.*

Duplicate objectives: 2.5 and 15.9

**16.8\*:** Increase complex carbohydrate and fiber-containing foods in the diets of adults to five or more daily servings for vegetables (including legumes) and fruits, and to six or more daily servings for grain products.

Duplicate objective: 2.6

**16.9:** Increase to at least 60 percent the proportion of people of all ages who limit sun exposure, use sunscreens and protective clothing when exposed to sunlight, and avoid artificial sources of ultraviolet light (e.g. sun lamps, tanning booths).

**16.10:** Increase to at least 75 percent the proportion of primary care providers who routinely counsel patients about tobacco use cessation, diet modification, and cancer screening recommendations.

**16.11:** Increase to at least 80 percent the proportion of women aged 40 and older who have ever received a clinical breast examination and a mammogram, and to at least 60 percent those aged 50 and older who have received them within the preceding 1 to 2 years.

**16.11a:** Increase to at least 80 percent the proportion of Hispanic women aged 40 and older who have ever received a clinical breast examination and a mammogram, and to at least 60 percent those aged 50 and older who have received them within the preceding 1 to 2 years.

**16.11b:** Increase to at least 80 percent the proportion of low-income (annual family income less than \$10,000 ) women aged 40 and older who have ever received a clinical breast examination and a mammogram, and to at least 60 percent those aged 50 and older who have received them within the preceding 1 to 2 years.

**16.11c:** Increase to at least 80 percent the proportion of women with less than a high school education aged 40 and older who have ever received a clinical breast examination and a mammogram, and to at least 60 percent

those aged 50 and older who have received them within the preceding 1 to 2 years.

**16.11d:** Increase to at least 80 percent the proportion of women aged 70 and older who have ever received a clinical breast examination and a mammogram, and to at least 60 percent those who have received them within the preceding 1 to 2 years.

**16.11e:** Increase to at least 80 percent the proportion of black women aged 40 and older who have ever received a clinical breast examination and a mammogram, and to at least 60 percent those aged 50 and older who have received them within the preceding 1 to 2 years.

**16.12:** Increase to at least 95 percent the proportion of women aged 18 and older with uterine cervix who have ever received a Pap test, and to at least 85 percent those who received a Pap test within the preceding 1 to 3 years.

**16.12a:** Increase to at least 95 percent the proportion of Hispanic women aged 18 and older with uterine cervix who have ever received a Pap test, and to at least 80 percent those who received a Pap test within the preceding 1 to 3 years.

**16.12b:** Increase to at least 95 percent the proportion of women aged 70 and older with uterine cervix who have ever received a Pap test, and to at least 70 percent those who received a Pap test within the preceding 1 to 3 years.

**16.12c:** Increase to at least 95 percent the proportion of women aged 18 and older with less than a high school education with uterine cervix who have ever received a Pap test, and to at least 75 percent those who received a Pap test within the preceding 1 to 3 years.

**16.12d:** Increase to at least 95 percent the proportion of low-income women (annual family income less than \$10,000) aged 18 and older with uterine cervix who have ever received a Pap test, and to at least 80 percent those who received a Pap test within the preceding 1 to 3 years.

**16.13:** Increase to at least 50 percent the proportion of people aged 50 and older who have received fecal occult blood testing within the preceding 1 to 2 years, and to at least 40 percent those who have ever received proctosigmoidoscopy.

**16.14:** Increase to at least 40 percent the proportion of people aged 50 and older visiting a primary care provider in the preceding year who have received oral, skin, and digital rectal examinations during one such visit.

**16.15:** Ensure that Pap tests meet quality standards by monitoring and certifying all cytology laboratories.

**16.16:** Ensure that mammograms meet quality standards by monitoring and certifying at least 80 percent of mammography facilities.

\*Duplicate objective.

## References

1. National Center for Health Statistics. Advance report of final mortality statistics, 1990. Monthly vital statistics report; vol 41 no 7, suppl. Hyattsville, Maryland: Public Health Service. 1993.
2. National Cancer Institute. Cancer control objectives for the nation: 1985–2000. Bethesda, Maryland: National Cancer Institute Monographs. 2(1986). 1986.

# Priority Area 17 Diabetes and Chronic Disabling Conditions

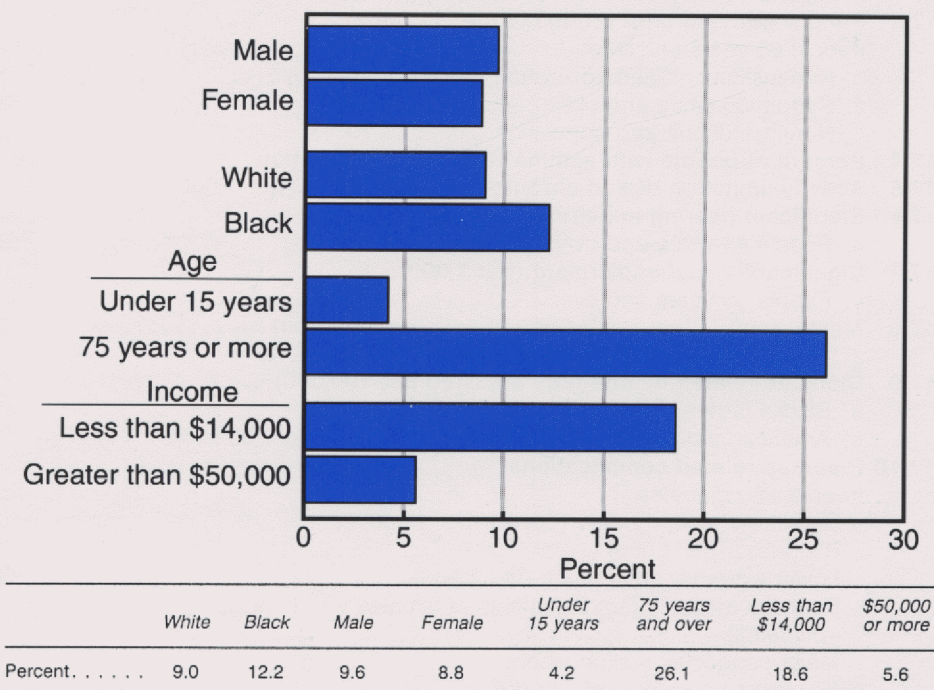
## Background and Data Summary

As the population of the United States grows older, the problems posed by chronic and disabling conditions increasingly demand the Nation's attention. Chronic conditions such as heart disease, cancer, stroke, and lung and liver disease are joined in importance by other chronic and disabling conditions, such as diabetes, arthritis, deformities or orthopedic impairments, hearing and visual impairments, and mental retardation.

Disability, defined by a limitation of the ability to perform major activities caused by chronic conditions, affected about 10 percent of Americans in 1991 (1). Over 30 million people have functional limitations that interfere with their daily activities, and about 10 million have limitations that prevent them from working, attending school, or maintaining a household. The underlying impairments most often responsible for these conditions are arthritis, heart disease, back conditions, lower extremity impairments, and intervertebral disk disorders (2). For those under age 18 years the most frequent causes of activity limitation are asthma, mental retardation, mental illness, and hearing and speech impairments.

Five objectives (17.7, 17.11, 17.13, 17.14, and 17.19) are moving toward the year 2000 targets. Six (17.2, 17.4, 17.5, 17.6, 17.10, 17.12) are moving away from the targets. People with self-care problems (17.3) showed no change for the total noninstitutionalized population. Diabetes-related mortality (17.9) also showed no change for the total population, although the black and American Indian subobjectives are moving away from the targets. As with a number of other Healthy People 2000 priority areas, missing data is a problem: for the remaining seven objectives, four have no baseline and three have no data beyond the baseline.

**Figure 22. Limitation of major activity caused by chronic conditions, according to selected characteristics targeted by year 2000 objective 17.2: United States, 1991**



NOTE: A related table in *Health, United States, 1992*, is 61.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey.

Objective 17.19 calls for the voluntary establishment of policies or programs for the hiring of people with disabilities. Since this objective was created, Congress has passed the Americans with Disabilities Act of 1990 that prohibits all employers from discriminating against "a qualified disabled individual because of the disability in regard to job application procedures, hiring, advancement . . . (3)." As a result, this objective has been achieved via legislation.

### Data Issues

#### Years of Healthy Life

Years of Healthy Life (17.1) is discussed in the introduction.

### Data Availability

The 1984-85 baseline figures for 17.3 were derived by combining estimates for the noninstitutionalized population from the National Health Interview Survey with data for the nursing home population from the National Nursing Home Survey. At the present time, only data for the noninstitutionalized population are available to update progress.

### Proxy Measures

See priority area 1 (Physical Activity and Fitness) for a discussion of self-reported height and weight (17.12), as well as light to moderate physical activity (17.13).

**Table 17. Diabetes and chronic disabling conditions objective status**

Objective	1987 baseline		1990	1991	Target 2000
	Original	Revised			
<b>17.1 Years of healthy life</b>	162.0	<sup>2,3</sup> 64.0	---	---	65
		No			
a. Blacks	156.0	change	---	---	60
b. Hispanics	162.0	<sup>2,3</sup> 464.8	---	---	65
c. People 65 years and over <sup>5</sup>	112.0	<sup>2,3</sup> 11.9	---	---	14
<b>17.2 Limitation in activity due to chronic conditions</b>	9.4%	...	9.3%	9.6%	8%
a. Low-income people (annual family income less than \$10,000)	18.9%	...	19.2%	19.6%	15%
b. American Indians/Alaska Natives	<sup>6</sup> 13.4%	...	<sup>7</sup> 12.3%	<sup>8</sup> 12.0%	11%
c. Blacks	11.2%	...	10.7%	11.0%	9%
<b>17.3 People with self care problems (per 1,000)</b>					
People 65 years and over	<sup>9</sup> 111	...	---	---	90
Non-institutionalized population	<sup>10</sup> 77	...	<sup>11</sup> 77	---	...
a. People 85 years and over	<sup>9</sup> 371	...	---	---	325
Non-institutionalized population	<sup>10</sup> 223	...	<sup>11</sup> 204	---	...
<b>17.4 Percent of people with asthma with activity limitation</b>	<sup>12</sup> 19.4%	...	<sup>7</sup> 20.4%	<sup>8</sup> 21.8%	10%
<b>17.5 Activity limitation due to chronic back conditions (per 1,000)</b>	<sup>12</sup> 21.9	...	<sup>7</sup> 23.7	<sup>8</sup> 25.1	19.0
<b>17.6 Significant hearing impairment (per 1,000)</b>	<sup>12</sup> 88.9	...	<sup>7</sup> 89.5	<sup>8</sup> 89.7	82.0
a. People 45 years and over	<sup>12</sup> 203	...	<sup>7</sup> 206	<sup>8</sup> 206	180
<b>17.7 Significant visual impairment (per 1,000)</b>	<sup>12</sup> 34.5	...	<sup>7</sup> 32.5	<sup>8</sup> 31.7	30.0
a. People 65 years and over	<sup>12</sup> 87.7	...	<sup>7</sup> 81.8	<sup>8</sup> 78.0	70.0
<b>17.8 Mental retardation (per 1,000 school aged children)</b>	<sup>13</sup> 2.7	...	---	---	2.0
		<sup>11,14</sup> No			
<b>17.9 Diabetes-related deaths (age adjusted per 100,000)</b>	<sup>11</sup> 38	change	38	---	34
a. Blacks (age adjusted per 100,000)	<sup>11</sup> 65	<sup>11,14</sup> 67	71	---	58
b. American Indians/Alaska Natives (age adjusted per 100,000)	<sup>11</sup> 54	<sup>11,14</sup> 46	53	---	48
<b>17.10 Diabetes-related complications</b>					
People with diabetes					
End-stage renal disease (ESRD) (per 1,000)	<sup>15</sup> 1.5	...	<sup>16</sup> 2.0	---	1.4
Blindness (per 1,000)	2.2	...	2.5	---	1.4
Lower extremity amputation (per 1,000)	<sup>15</sup> 8.2	...	8.3	---	4.9
Perinatal mortality (among infants of females with established diabetes)	5%	...	---	---	2%
Major congenital malformations	8%	...	---	---	4%
ESRD due to diabetes (per 1,000)					
a. Blacks with diabetes	<sup>17</sup> 2.2	...	<sup>16</sup> 3.1	---	2.0
b. American Indians/Alaska Natives with diabetes	<sup>17</sup> 2.1	...	<sup>12</sup> 2.2	---	1.9
Lower extremity amputations due to diabetes					
c. Blacks with diabetes (per 1,000)	<sup>18</sup> 10.2	<sup>15</sup> 8.8	8.2	---	6.1
<b>17.11 Diabetes incidence and prevalence</b>					
Total population (per 1,000)					
Incidence of diabetes	<sup>12</sup> 2.9	<sup>2,12</sup> No change	<sup>7</sup> 2.6	---	2.5
Prevalence of diabetes	<sup>12</sup> 28	<sup>2,12</sup> No change	<sup>7</sup> 26	---	25
Special populations-prevalence of diabetes (per 1,000)					
a. American Indians/Alaska Natives	<sup>15</sup> 69	...	67	63	62
b. Puerto Ricans	<sup>19</sup> 55	...	---	---	49
c. Mexican Americans	<sup>19</sup> 54	...	---	---	49
d. Cuban Americans	<sup>19</sup> 36	...	---	---	32
e. Blacks	<sup>12</sup> 36	...	<sup>7</sup> 35	---	32
<b>17.12 Overweight prevalence</b>					
People 20 years and over	<sup>20</sup> 26%	...	27%	28%	20%
Males	<sup>20</sup> 24%	...	27%	28%	...
Females	<sup>20</sup> 27%	...	27%	28%	...
Adolescents 12-19 years	<sup>20</sup> 15%	...	---	---	15%
a. Low-income females 20 years and over	<sup>20</sup> 37%	...	37%	39%	25%
b. Black females 20 years and over	<sup>20</sup> 44%	...	42%	44%	30%
c. Hispanic females 20 years and over	...	<sup>21</sup> 27%	33%	32%	25%
Mexican-American females	<sup>19</sup> 39%	...	---	38%	...
Cuban females	<sup>19</sup> 34%	...	---	---	...
Puerto Rican females	<sup>19</sup> 37%	...	---	---	...
d. American Indians/Alaska Natives	<sup>22</sup> 29-75%	...	---	40%	30%

**Table 17. Diabetes and chronic disabling conditions objective status**

Objective	1987 baseline		1990	1991	Target 2000
	Original	Revised			
e. People with disabilities . . . . .	<sup>10</sup> 36%	...	---	38%	25%
f. Females with high blood pressure . . . . .	<sup>20</sup> 50%	...	---	---	41%
g. Males with high blood pressure . . . . .	<sup>20</sup> 39%	...	---	---	35%
<b>17.13 Moderate physical activity</b>					
People 6 years and over . . . . .	---	...	---	---	30%
People 18-74 years					
5 or more times per week . . . . .	<sup>21</sup> 22%	<sup>21,23</sup> No change	23%	24%	...
7 or more times per week . . . . .	<sup>21</sup> 12%	<sup>21,23</sup> 16%	16%	17%	...
<b>17.14 Patient education for people with chronic and disabling conditions . .</b>	---	...	---	---	40%
a. People with diabetes . . . . .	<sup>24</sup> 32% (classes) <sup>24</sup> 68% (coun- seling)	...	<sup>16</sup> 33.1%	39%	75%
b. People with asthma . . . . .	---	...	---	9%	50%
<b>17.15 Clinician assessment of childhood development . . . . .</b>	---	...	---	---	80%
<b>17.16 Earlier detection of significant hearing impairment in children (average age in months) . . . . .</b>	24-30	...	---	27	12
<b>17.17 Clinician assessment of cognitive and other functioning in older adults . . . . .</b>	---	...	---	---	60%
<b>17.18 Providers who counsel about estrogen replacement therapy . . . . .</b>	---	...	---	---	90%
<b>17.19 Employment of people with disabilities</b>					
Percent of worksites with voluntary policy . . . . .	<sup>11</sup> 37%	...	<sup>25</sup> 100%	<sup>25</sup> 100%	75%
<b>17.20 Service systems for children with or at risk of chronic and disabling conditions (number of States) . . . . .</b>	---	...	---	---	50

<sup>1</sup>1980 data.

<sup>2</sup>Data have been revised to reflect updated methodology; see Introduction.

<sup>3</sup>1990 data.

<sup>4</sup>Estimate based on preliminary data.

<sup>5</sup>Years of healthy life remaining at age 65.

<sup>6</sup>1983-85 data.

<sup>7</sup>1988-90 data.

<sup>8</sup>1989-91 data.

<sup>9</sup>1984-85 data.

<sup>10</sup>1984 data.

<sup>11</sup>1986 data.

<sup>12</sup>1986-88 data.

<sup>13</sup>1985-88 data.

<sup>14</sup>Data have been recomputed to reflect revised intercensal population estimates; see *Health, United States, 1992*, Appendix I.

<sup>15</sup>1987 data.

<sup>16</sup>1989 data.

<sup>17</sup>1983-86 data.

<sup>18</sup>1984-87 data.

<sup>19</sup>1982-84 data.

<sup>20</sup>1976-80 data.

<sup>21</sup>1985 data.

<sup>22</sup>1984-88 data.

<sup>23</sup>Data source has been changed and data have been revised to reflect updated methodology; see Introduction.

<sup>24</sup>1983-84 data.

<sup>25</sup>Achieved through passage of the Americans with Disabilities Act of 1990.

NOTE: Data sources are in table C.

# Diabetes and Chronic Disabling Conditions Objectives

**17.1\*:** Increase years of healthy life to at least 65 years.

*NOTE: Years of healthy life is a summary measure of health that combines mortality (quantity of life) and morbidity and disability (quality of life) into a single measure. For people aged 65 and older, active life-expectancy, a related summary measure, also will be tracked.*

Duplicate objectives: 8.1 and 21.1

**17.1a\*:** Increase years of healthy life among blacks to at least 60 years.

Duplicate objectives: 8.1a and 21.1a

**17.1b\*:** Increase years of healthy life among Hispanics to at least 65 years.

Duplicate objectives: 8.1b and 21.1b

**17.1c\*:** Increase years of healthy life among people aged 65 and older to at least 14 more years of healthy life.

Duplicate objectives: 8.1c and 21.1c

**17.2:** Reduce to no more than 8 percent the proportion of people who experience a limitation in major activity due to chronic conditions.

*NOTE: Major activity refers to the usual activity for one's age-sex group whether it is working, keeping house, going to school, or living independently. Chronic conditions are defined as conditions that either (1) were first noticed 3 or more months ago, or (2) belong to a group of conditions such as heart disease and diabetes, which are considered chronic regardless of when they began.*

**17.2a:** Reduce to no more than 15 percent the proportion of low-income people (annual family income of less than \$10,000 in 1988) who experience a limitation in major activity due to chronic conditions.

**17.2b:** Reduce to no more than 11 percent the proportion of American Indians and Alaska Natives who experience a limitation in major activity due to chronic conditions.

**17.2c:** Reduce to no more than 9 percent the proportion of blacks who experience a limitation in major activity due to chronic conditions.

**17.3:** Reduce to no more than 90 per 1,000 people the proportion of all people aged 65 and older who have difficulty in performing two or more personal care activities, thereby preserving independence.

*NOTE: Personal care activities are bathing, dressing, using the toilet, getting in and out of bed or chair, and eating.*

Duplicate objective: Age-related objective for people aged 65 and older

**17.3a:** Reduce to no more than 300 per 1,000 people the proportion of all people aged 85 and older who have difficulty in performing two or more personal care activities, thereby preserving independence.

Duplicate objective: Age-related objective for people aged 65 and older

**17.4:** Reduce to no more than 10 percent the proportion of people with asthma who experience activity limitation.

*NOTE: Activity limitation refers to any self-reported limitation in activity attributed to asthma.*

**17.5:** Reduce activity limitation due to chronic back conditions to a prevalence of no more than 19 per 1,000 people.

*NOTE: Chronic back conditions include intervertebral disk disorders, curvature of the back or spine, and other self-reported chronic back impairments such as*

*permanent stiffness or deformity of the back or repeated trouble with the back. Activity limitation refers to any self-reported limitation in activity attributed to a chronic back condition.*

**17.6:** Reduce significant hearing impairment to a prevalence of no more than 82 per 1,000 people.

*NOTE: Hearing impairment covers the range of hearing deficits from mild loss in one ear to profound loss in both ears. Generally, inability to hear sounds at levels softer (less intense) than 20 decibels (dB) constitutes abnormal hearing. Significant hearing impairment is defined as having hearing thresholds for speech poorer than 25 dB. However, for this objective, self-reported hearing impairment (that is, deafness in one or both ears or any trouble hearing in one or both ears) will be used as a proxy measure for significant hearing impairment.*

**17.6a:** Reduce significant hearing impairment among people aged 45 and older to a prevalence of no more than 180 per 1,000.

**17.7:** Reduce significant visual impairment to a prevalence of no more than 30 per 1,000 people.

*NOTE: Significant visual impairment is generally defined as a permanent reduction in visual acuity and/or field of vision that is not correctable with eyeglasses or contact lenses. Severe visual impairment is defined as inability to read ordinary news print even with corrective lenses. For this objective, self-reported blindness in one or both eyes and other self-reported visual impairments (that is, any trouble seeing with one or both eyes even when wearing glasses or color blindness) will be used as a proxy measure for significant visual impairment.*

**17.7a:** Reduce significant visual impairment among people aged 65 and older to a prevalence of no more than 70 per 1,000.

**17.8\*:** Reduce the prevalence of serious mental retardation in school-aged children to no more than 2 per 1,000 children.

*NOTE: Serious mental retardation is defined as an Intelligence Quotient (I.Q.) less than 50. This includes individuals defined by the American Association of Mental Retardation as profoundly retarded (I.Q. of 20 or less), severely retarded (I.Q. of 21–35), and moderately retarded (I.Q. of 36–50).*

Duplicate objective: 11.2

**17.9:** Reduce diabetes-related deaths to no more than 34 per 100,000.

**17.9a:** Reduce diabetes-related deaths among blacks to no more than 58 per 100,000.

**17.9b:** Reduce diabetes-related deaths among American Indians and Alaska Natives to no more than 48 per 100,000.

**17.10:** Reduce the most severe complications of diabetes as follows:

Complications among people with diabetes:	2000 target
End-stage renal disease	1.4 per 1,000
Blindness	1.4 per 1,000
Lower extremity amputation	4.9 per 1,000
Perinatal mortality <sup>1</sup>	2 percent
Major congenital malformation	4 percent

<sup>1</sup>Among infants of women with established diabetes

*NOTE: End-stage renal disease (ESRD) is defined as requiring dialysis or transplantation and is limited to ESRD due to diabetes. Blindness refers to blindness due to diabetic eye disease.*

**17.10a:** Reduce end-stage renal disease due to diabetes among black persons with diabetes to no more than 2 per 1,000.

**17.10b:** Reduce end-stage renal disease due to diabetes among American Indians and Alaska Natives with diabetes to no more than 1.9 per 1,000.

**17.10c:** Reduce lower extremity amputations due to diabetes among blacks with diabetes to no more than 6.1 per 1,000.

**17.11:** Reduce diabetes to an incidence of no more than 2.5 per 1,000 people and a prevalence of no more than 25 per 1,000 people.

**17.11a:** Reduce diabetes among American Indians and Alaska Natives to a prevalence of no more than 62 per 1,000.

**17.11b:** Reduce diabetes among Puerto Ricans to a prevalence of no more than 49 per 1,000.

**17.11c:** Reduce diabetes among Mexican Americans to a prevalence of no more than 49 per 1,000.

**17.11d:** Reduce diabetes among Cuban Americans to a prevalence of no more than 32 per 1,000.

**17.11e:** Reduce diabetes among blacks to a prevalence of no more than 32 per 1,000.

**17.12\*:** Reduce overweight to a prevalence of no more than 20 percent among people aged 20 and older and no more than 15 percent among adolescents aged 12–19.

*NOTE: For people aged 20 and older, overweight is defined as body mass index (BMI) equal to or greater than 27.8 for men and 27.3 for women. For adolescents, overweight is defined as BMI equal to or greater than 23.0 for males aged 12–14, 24.3 for males aged 15–17, 25.8 for males aged 18–19, 23.4 for females aged 12–14, 24.8 for females aged 15–17, and 25.7 for females aged 18–19. The values for adolescents are the age- and gender-specific 85th percentile values of the 1976–80 National Health and Nutrition Examination Survey (NHANES II), corrected for sample variation. BMI is calculated by dividing weight in kilograms by the square of height in meters. The cut points used to define overweight approximate the 120 percent of desirable body weight definition used in the 1990 objectives.*

Duplicate objectives: 1.2, 2.3, and 15.10

**17.12a\*:** Reduce overweight to a prevalence of no more than 25 percent among low-income women aged 20 and older.

Duplicate objectives: 1.2a, 2.3a, and 15.10a

**17.12b\*:** Reduce overweight to a prevalence of no more than 30 percent among black women aged 20 and older.

Duplicate objectives: 1.2b, 2.3b, and 15.10b

**17.12c\*:** Reduce overweight to a prevalence of no more than 25 percent among Hispanic women aged 20 and older.

Duplicate objectives: 1.2c, 2.3c, and 15.10c

**17.12d\*:** Reduce overweight to a prevalence of no more than 30 percent among American Indians and Alaska Natives.

Duplicate objectives: 1.2d, 2.3d, and 15.10d

**17.12e\*:** Reduce overweight to a prevalence of no more than 25 percent among people with disabilities.

Duplicate objectives: 1.2e, 2.3e, and 15.10e

**17.12f\*:** Reduce overweight to a prevalence of no more than 41 percent among women with high blood pressure aged 20 and older.

Duplicate objectives: 1.2f, 2.3f, and 15.10f

**17.12g\*:** Reduce overweight to a prevalence of no more than 35 percent among men with high blood pressure aged 20 and older.

Duplicate objectives: 1.2g, 2.3g, and 15.10g



**17.13\*:** Increase to at least 30 percent the proportion of people aged 6 and older who engage regularly, preferably daily, in light to moderate physical activity for at least 30 minutes per day.

*NOTE: Light to moderate physical activity requires sustained, rhythmic muscular movements, is at least equivalent to sustained walking, and is performed at less than 60 percent of maximum heart rate. Maximum heart rate equals roughly 220 beats per minute minus age. Examples may include walking, swimming, cycling, dancing, gardening and yardwork, various domestic and occupational activities, and games and other childhood pursuits.*

Duplicate objectives: 1.3 and 15.11

**17.14:** Increase to at least 40 percent the proportion of people with chronic and disabling conditions who receive formal patient education including information about community and self-help resources as an integral part of the management of their condition.

**17.14a:** Increase to at least 75 percent the proportion of people with diabetes who receive formal patient education including information about community and self-help resources as an integral part of the management of their condition.

**17.14b:** Increase to at least 50 percent the proportion of people with asthma who receive formal patient education including information about community and self-help resources as an integral part of the management of their condition.

**17.15:** Increase to at least 80 percent the proportion of providers of primary care for children who routinely refer or screen infants and children for impairments of vision, hearing, speech and language, and assess other developmental milestones as part of well-child care.

**17.16:** Reduce the average age at which children with significant hearing impairment are identified to no more than 12 months.

**17.17:** Increase to at least 60 percent the proportion of providers of primary care for older adults who routinely evaluate people aged 65 and older for urinary incontinence and impairments of vision, hearing, cognition, and functional status.

**17.18:** Increase to at least 90 percent the proportion of perimenopausal women who have been counseled about the benefits and risks of estrogen replacement therapy (combined with progestin, when appropriate) for prevention of osteoporosis.

**17.19:** Increase to at least 75 percent the proportion of worksites with 50 or more employees that have a voluntarily established policy or program for the hiring of people with disabilities.

*NOTE: Voluntarily established policies and programs for the hiring of people with disabilities are encouraged for worksites of all sizes. This objective is limited to worksites with 50 or more employees for tracking purposes.*

**17.20:** Increase to 50 the number of States that have service systems for children with or at risk of chronic and disabling conditions, as required by Public Law 101-239.

*NOTE: Children with or at risk of chronic and disabling conditions, often referred to as children with special health care needs, include children with psychosocial as well as physical problems. This population encompasses children with a wide variety of actual or potential disabling conditions, including children with or at risk for cerebral palsy, mental retardation, sensory deprivation, developmental disabilities, spina bifida, hemophilia, other genetic disorders, and health-related educational and behavioral problems. Service systems for such children are organized networks of comprehensive, community-based, coordinated, and family-centered services.*

\*Duplicate objective.

## References

1. National Center for Health Statistics. Unpublished data from the National Health Interview Survey.
2. LaPlante MP. Data on disability from the National Health Interview Survey, 1983–85. An Info Use Report. Washington: National Institute on Disability and Rehabilitation Research. 1988.
3. Americans with Disabilities Act of 1990. Public Law 101–336, 101st Congress. Washington: July 26, 1990.

# Priority Area 18

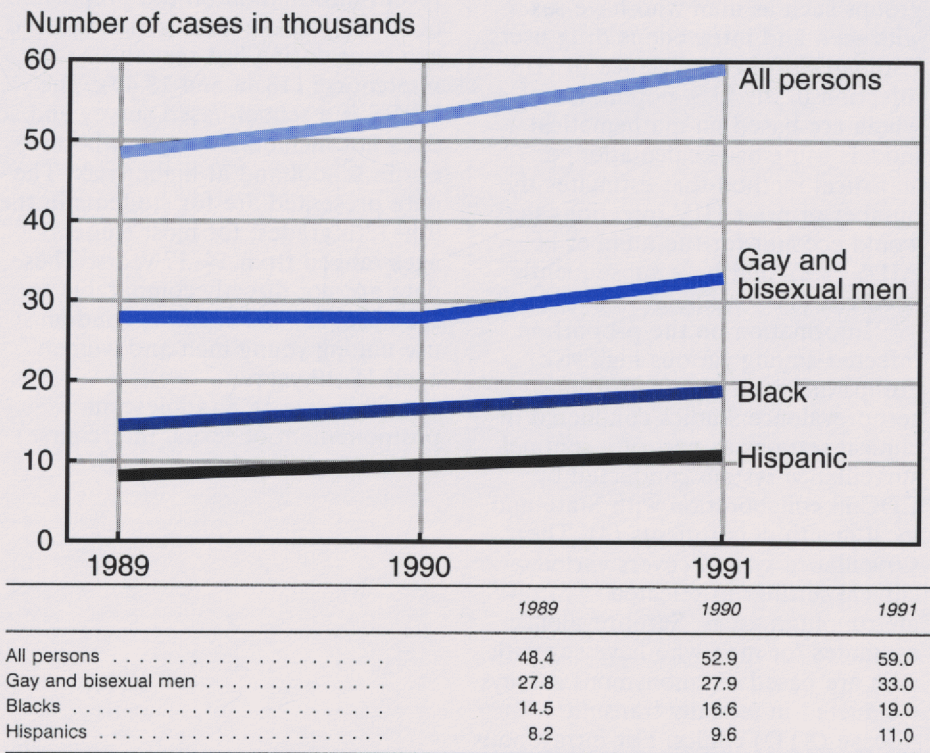
## HIV Infection

### Background and Data Summary

An estimated 1 million people in the United States are infected with the human immunodeficiency virus (HIV) (1). By the end of 1993, a projected total of 390,000 to 480,000 cases of AIDS will have been reported (1). This projection is based on the case definition used prior to the latest revision in January 1993. Although antimicrobial treatment extends survival, no treatment is yet available to prevent death among people with acquired immunodeficiency syndrome (AIDS). HIV and AIDS are a growing threat to the health of the nation and will continue to make major demands on health and social services systems for decades.

Data beyond baseline are available for 5 of the 14 objectives in this priority area. The first two objectives (18.1 and 18.2) aim to slow the rise in the number of AIDS cases and the prevalence of HIV infection. In 1991 the number of new AIDS cases reported was about 10 percent higher than the 1989 baseline figure (18.1). This pattern was similar for special population subgroups. At the current rate of increase, the number of cases for the total and special populations will exceed the year 2000 targets. The prevalence of HIV infection among the total population is still estimated at 400 per 100,000 people, showing no change from the baseline in 1989 (18.2). National data are not available regarding seroprevalence among men who have sex with men or among intravenous drug users. Data from the 1990 Youth Risk Behavior Survey on the history of sexual intercourse among adolescents show a worsening situation (18.3). The same survey shows the proportion of sexually active, teenage females whose partners used condoms at the last sexual intercourse (18.4a) increased since 1988, but a decrease in the proportion of sexually active, teenage males who use condoms (18.4b). Data for objective 18.7 on the risk of transfusion-transmitted HIV infection show an improvement toward the

**Figure 23. Annual incidence of diagnosed AIDS cases according to selected characteristics targeted by year 2000 objective 18.1: United States, 1989-91**



NOTE: Related tables in *Health, United States, 1992*, are 53-58.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Center for Infectious Diseases.

year 2000 goal. Recent data are available to establish a baseline for objective 18.12 on the proportion of cities with outreach programs to contact drug abusers and deliver HIV risk reduction messages.

### Data Issues

#### Definition

In January 1993 a new AIDS case definition was implemented for the AIDS Surveillance System (2). The new definition adds pulmonary tuberculosis, recurrent pneumonia, and invasive cervical cancer to the list of diseases that indicate that AIDS has fully developed among HIV-infected people. In addition, the new definition includes HIV-infected people with a CD4 cell count below

200 cells per microliter of blood, regardless of whether those persons have opportunistic infections, neoplasms, or any other symptoms of HIV infection. It is expected that the expanded definition could increase cases reported in 1993 by approximately 75 percent.

#### Data Source Description

Data on the annual number of diagnosed AIDS cases are available from the AIDS Surveillance System of the Centers for Disease Control. Completeness of reporting varies by geographic region and patient population. Recent research shows that the completeness of reporting was 92 percent for hospitalized patients diagnosed with AIDS through 1988 (3). The data for

monitoring the objective are adjusted for delayed and incomplete reporting (1).

### Data Availability

No national data are available that directly measure HIV seroprevalence among the general population or that provide nationally representative estimates for high risk groups such as men who have sex with men and intravenous drug users. Estimates of the prevalence of HIV infection in the U.S. population as a whole are based on mathematical models using back calculation, a statistical method that estimates the number of prior HIV infections that would account for the number of AIDS cases that have subsequently occurred (1).

Information on the proportion infected among various high risk groups has been obtained from seroprevalence studies conducted in clinical settings as part of a sentinel surveillance system conducted by CDC in collaboration with State and local health departments (4). The surveillance system covers various clinical settings in selected metropolitan areas. Seroprevalence estimates for men who have sex with men are based on anonymous surveys conducted in sexually transmitted disease (STD) clinics. For intravenous drug users, estimates are based on surveys among drug users entering treatment programs. Clients attending STD clinics and drug treatment programs are not representative of all persons with these high risk behaviors. In addition, there is considerable geographic variation in seroprevalence in both groups. For these reasons, data beyond baseline are not presented here on HIV seroprevalence levels in high risk groups.

National estimates of the total number of intravenous drug users are needed to properly measure progress towards meeting objective 18.5, which addresses the proportion of intravenous drug users in treatment. Enumeration of intravenous drug users is difficult because of the illegality of the behavior. In addition, surveys such as the National Household Survey on Drug Abuse will miss an unknown proportion of intravenous drug users who are homeless, institutionalized, or difficult to locate. The 1991 National

Household Survey on Drug Abuse estimated there were approximately one million people who had used needles to inject illicit drugs in the past year (5).

### Comparability of Data Sources

The 1990 Youth Risk Behavior Survey (YRBS) provides the most recent information on the proportion of sexually active teenagers who used condoms during last sexual intercourse (18.4a and 18.4b). The YRBS is a school-based survey and so does not include teenagers who are not in school and at higher risk. The data presented are for students in the 9th–12th grades; for most students, ages ranged from 14–17 years. These data are not directly comparable to the baseline, which shows condom use among young men and women aged 15–19 years.

Objective 18.3 (adolescent postponement of sexual intercourse) is discussed in priority area 5.

**Table 18. HIV objective status**

Objective	1989 baseline		1990	1991	Target 2000
	Original	Revised			
<b>18.1 AIDS (number of diagnosed cases per year)</b> .....	44,000-50,000	<sup>1</sup> 48,400	52,900	<sup>2</sup> 59,000	98,000
a. Gay and bisexual males .....	26,000-28,000	<sup>1</sup> 27,800	27,900	<sup>2</sup> 33,000	48,000
b. Blacks .....	14,000-15,000	<sup>1</sup> 14,500	16,600	<sup>2</sup> 19,000	37,000
c. Hispanics .....	7,000-8,000	<sup>1</sup> 8,200	9,600	<sup>2</sup> 11,000	18,000
<b>18.2 HIV infection (per 100,000)</b> .....	400	...	400	---	800
a. Homosexual males .....	2,000-42,000	...	---	---	20,000
b. Intravenous drug abusers .....	30,000-40,000	...	---	---	40,000
c. Females giving birth to live-born infants .....	150	...	150	---	100
<b>18.3 Adolescents who ever had sexual intercourse</b>					
Adolescents 15 years					
Females .....	<sup>3</sup> 27%	...	<sup>4</sup> 43%	<sup>4</sup> 45%	15%
Males .....	<sup>3</sup> 33%	...	<sup>4</sup> 53%	<sup>4</sup> 51%	15%
Adolescents 17 years					
Females .....	<sup>3</sup> 50%	...	<sup>5</sup> 67%	<sup>5</sup> 65%	40%
Males .....	<sup>3</sup> 66%	...	<sup>5</sup> 76%	<sup>5</sup> 68%	40%
<b>18.4 Condom use at last sexual intercourse</b>					
Sexually active unmarried females 15-44 years .....	<sup>3</sup> 19%	...	---	---	50%
a. Sexually active females 15-19 years .....	<sup>3</sup> 26%	...	<sup>6</sup> 40%	<sup>6</sup> 38%	60%
b. Sexually active males 15-19 years .....	<sup>3</sup> 57%	...	<sup>6</sup> 49%	<sup>6</sup> 54%	75%
c. Intravenous drug abusers .....	---	...	---	---	60%
<b>18.5 IV-drug abusers in treatment</b> .....	11%	...	---	---	50%
<b>18.6 IV-drug abusers using uncontaminated drug paraphernalia</b> .....	<sup>7</sup> 25-30%	<sup>1,8</sup> 30.8%	---	---	50%
<b>18.7 Risk of transfusion-transmitted HIV infection (units of blood)</b> .....	1 per 40,000-150,000	...	1 per 225,000	...	1 per 250,000
<b>18.8 Testing for HIV infection (HIV infected people)</b> .....	15%	...	---	---	80%
<b>18.9 Clinician counseling to prevent HIV and other sexually transmitted disease</b> .....	<sup>9</sup> 10%	...	---	---	75%
a. Providers practicing in high incidence areas .....	---	...	---	---	90%
<b>18.10 HIV education in schools</b>					
Students in grades 4th-12th .....	66%	...	---	---	95%
<b>18.11 HIV education in colleges and universities</b> .....	---	...	---	---	90%
<b>18.12 Outreach programs for drug abusers (cities with populations greater than 100,000)</b> .....	...	<sup>8</sup> 35%	---	---	90%
<b>18.13 Clinic services for HIV and other sexually transmitted diseases</b> .....	---	...	---	---	50%
Family planning clinics .....	40%	...	---	---	...
<b>18.14 Occupational exposure to HIV</b> .....	---	...	---	---	100%

<sup>1</sup>Data have been revised. Original data were estimated based on preliminary analysis; see Introduction.

<sup>2</sup>Estimated from first half of 1991.

<sup>3</sup>1988 data.

<sup>4</sup>10th grade students.

<sup>5</sup>12th grade students.

<sup>6</sup>9th-12th grade students.

<sup>7</sup>1989 data.

<sup>8</sup>1991 data.

<sup>9</sup>1987 data.

NOTE: Data sources are in table C.

# HIV Infection Objectives

**18.1:** Confine annual incidence of diagnosed AIDS cases to no more than 98,000 cases.

*NOTE: Targets for this objective are equal to upper bound estimates of the incidence of diagnosed AIDS cases projected for 1993.*

**18.1a:** Confine annual incidence of diagnosed AIDS cases among gay and bisexual men to no more than 48,000 cases.

**18.1b:** Confine annual incidence of diagnosed AIDS cases among blacks to no more than 37,000 cases.

**18.1c:** Confine annual incidence of diagnosed AIDS cases among Hispanics to no more than 18,000 cases.

**18.2:** Confine the prevalence of HIV infection to no more than 800 per 100,000 people.

**18.2a:** Confine the prevalence of HIV infection among homosexual men to no more than 20,000 per 100,000 homosexual men.

**18.2b:** Confine the prevalence of HIV infection among intravenous drug abusers to no more than 40,000 per 100,000 intravenous drug abusers.

**18.2c:** Confine the prevalence of HIV infection among women giving birth to live-born infants to no more than 100 per 100,000.

**18.3\*:** Reduce the proportion of adolescents who have engaged in sexual intercourse to no more than 15 percent by age 15 and no more than 40 percent by age 17.

Duplicate objectives: 5.4 and 19.9

**18.4\*:** Increase to at least 50 percent the proportion of sexually active, unmarried people who used a condom at last sexual intercourse.

*NOTE: Strategies to achieve this objective must be undertaken sensitively to avoid indirectly encouraging or condoning sexual activity among teens who are not yet sexually active.*

Duplicate objective: 19.10

**18.4a\*:** Increase to at least 60 percent the proportion of sexually active, unmarried young women aged 15–19 whose partners used a condom at last sexual intercourse.

Duplicate objective: 19.10a

**18.4b\*:** Increase to at least 75 percent the proportion of sexually active, unmarried young men aged 15–19 who used a condom at last sexual intercourse.

Duplicate objective: 19.10b

**18.4c\*:** Increase to at least 60 percent the proportion of intravenous drug abusers who used a condom at last sexual intercourse.

Duplicate objective: 19.10c

**18.5:** Increase to at least 50 percent the estimated proportion of all intravenous drug abusers who are in drug abuse treatment programs.

**18.6:** Increase to at least 50 percent the estimated proportion of intravenous drug abusers not in treatment who use only uncontaminated drug paraphernalia (“works”).

**18.7:** Reduce to no more than 1 per 250,000 units of blood and blood components the risk of transfusion-transmitted HIV infection.

**18.8:** Increase to at least 80 percent the proportion of HIV-infected people who have been tested for HIV infection.

**18.9\*:** Increase to at least 75 percent the proportion of primary care and mental health care providers who provide age-appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

*NOTE: Primary care providers include physicians, nurses, nurse practitioners, and physician assistants. Areas of high AIDS and sexually transmitted disease incidence are cities and States with incidence rates of AIDS cases, HIV seroprevalence, gonorrhea, or syphilis that are at least 25 percent above the national average.*

Duplicate objective: 19.14

**18.9a\*:** Increase to at least 90 percent the proportion of primary care and mental health care providers who practice in areas of high AIDS and sexually transmitted disease incidence, who provide age appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 19.14a

**18.10:** Increase to at least 95 percent the proportion of schools that have age-appropriate HIV education curricula for students in 4th–12th grade, preferably as part of quality school health education.

**18.11:** Provide HIV education for students and staff in at least 90 percent of colleges and universities.

**18.12:** Increase to at least 90 percent the proportion of cities with populations over 100,000 that have outreach programs to contact drug abusers (particularly intravenous drug abusers) to deliver HIV risk reduction messages.

*NOTE: HIV risk reduction messages include messages about reducing or eliminating drug use, entering drug treatment, disinfection of injection equipment if still injecting drugs, and safer sex practices.*

**18.13\*:** Increase to at least 50 percent the proportion of family planning clinics, maternal and child health clinics, sexually transmitted disease clinics, tuberculosis clinics, drug treatment centers, and primary care clinics that screen, diagnose, treat, counsel, and provide (or refer for) partner notification services for bacterial sexually transmitted diseases (gonorrhea, syphilis, and chlamydia).

Duplicate objectives: 5.11 and 19.11

**18.14:** Extend to all facilities where workers are at risk for occupational transmission of HIV regulations to protect workers from exposure to blood borne infections, including HIV infection.

*NOTE: The Occupational Safety and Health Administration (OSHA) is expected to issue regulations requiring worker protection from exposure to blood borne infections, including HIV, during 1991. Implementation of the OSHA regulations would satisfy this objective.*

\*Duplicate objective.

## References

1. Centers for Disease Control. Estimates of HIV prevalence and projected AIDS cases: Summary of a workshop, October 31–November 1, 1989. MMWR 39: 110–19. 1990.
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# Priority Area 19

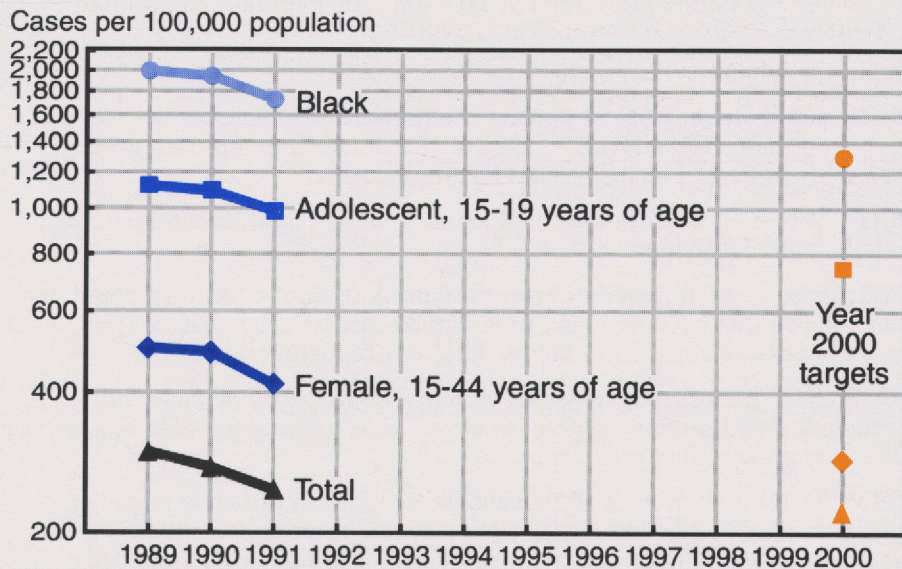
## Sexually Transmitted Diseases

### Background and Data Summary

In 1989, excluding infection with the human immunodeficiency virus (HIV), almost 12 million cases of sexually transmitted diseases were reported, 86 percent of them in people aged 15–29 years (1). By age 21, approximately one of every five young people has required treatment for a sexually transmitted disease (2). Women and children suffer a disproportionate amount of the sexually transmitted disease burden, with pelvic inflammatory disease, sterility, ectopic pregnancy, blindness, cancer associated with human papilloma virus, fetal and infant deaths, birth defects, and mental retardation among the most serious complications. Ethnic and racial minorities also shoulder a disproportionate share of the sexually transmitted disease burden, experiencing higher rates of disease and disability than the population as a whole. The total societal cost of sexually transmitted diseases exceeds \$3.5 billion annually, with the cost of pelvic inflammatory disease (PID) and PID-associated ectopic pregnancy and infertility alone exceeding \$2.6 billion (2).

Results toward achieving the sexually transmitted disease objectives are mixed. Data to monitor progress are available for 9 of the 15 objectives. For four objectives, trends are in a positive direction; recent data show reduced incidence of gonorrhea (objective 19.1), nongonococcal urethritis (19.2), primary and secondary syphilis (19.3), and pelvic inflammatory disease (19.6) compared with baseline rates. The incidence of primary and secondary syphilis has increased among black persons, in contrast to a decrease in the population as a whole. A worsening situation has been seen for three objectives. The incidence of congenital syphilis (19.4), the number of sexually transmitted hepatitis B cases (19.7), and percent of adolescents having sexual intercourse

Figure 24. Annual incidence of gonorrhea, according to selected characteristics: United States, 1989–91 and year 2000 targets for objective 19.1



	1989	1990	1991	Year 2000 target
Total . . . . .	300	278	249	225
Black . . . . .	1,990	1,938	1,720	1,300
Adolescent 15–19 years . . . . .	1,123	1,098	991	750
Female 15–44 years . . . . .	501	493	419	290

NOTE: Related table in *Health, United States, 1992*, is 52.

SOURCE: Centers for Disease Control and Prevention, National Center for Prevention Services, Gonorrhea Surveillance System.

(19.9) have increased and are moving away from the year 2000 targets. The annual number of first physician office visits for genital herpes increased from the 1988 baseline, while first physician office visits for genital warts decreased (19.5). The proportion of sexually active teenage females whose partners used condoms at their last sexual intercourse (19.10a) has increased compared with baseline data, showing an improvement toward the year 2000 target. However, a reverse trend was seen among teenage males (19.10b). Data subsequent to baseline measures are unavailable for six objectives (19.8, 19.11–19.15). In addition,

baseline data are not yet available for two subobjectives: condom use among intravenous drug users (19.10c) and counseling on HIV and STD prevention by providers practicing in high incidence areas (19.14a).

### Data Issues

### Definition

In January 1988 CDC issued new guidelines for classifying and reporting cases of congenital syphilis. The new definition is more useful for public health surveillance; the previous definition involved physical



examination, laboratory and radiographic results, and follow-up serological data (3). Follow-up information was often difficult to obtain and led to delayed and underreporting. In addition, the clinical criteria excluded stillbirths to mothers with untreated syphilis. The new surveillance guidelines provide criteria that can be obtained soon after delivery. The new case definition includes criteria for

presumptive and confirmed cases of syphilis in infants and children and includes stillbirths. A presumptive case includes all infants whose mothers have untreated or inadequately treated syphilis at delivery (4). Thus, an increased number of cases will be reported using the new guidelines. The new case reporting criteria were fully implemented by States in 1991. The data presented for objective 19.4 on

the incidence of congenital syphilis per 100,000 live births in 1989 and 1990 have been adjusted to reflect the expected rate if the new case definition had been used in all States.

### Comparability of Data Sources

The history of sexual intercourse among adolescents (19.9) is discussed in priority area 5. Condom use at last sexual intercourse (19.10) is discussed in priority area 18.

**Table 19. Sexually transmitted diseases objective status**

Objective	1988 baseline		1990	1991	Target 2000
	Original	Revised			
<b>19.1 Gonorrhea (per 100,000)</b> .....	1300	...	278	249	225
a. Blacks .....	<sup>1</sup> 1,990	...	1,938	1,720	1,300
b. Adolescents 15–19 years .....	<sup>1</sup> 1,123	...	1,098	991	750
c. Females 15–44 years .....	<sup>1</sup> 501	...	493	419	290
<b>19.2 Nongonococcal urethritis (per 100,000)</b> .....	215	...	<sup>1</sup> 200	170	170
<b>19.3 Primary and secondary syphilis (per 100,000)</b> .....	<sup>1</sup> 18.1	...	20.1	17.3	10
a. Blacks .....	<sup>1</sup> 118	...	143	124	65
<b>19.4 Congenital syphilis (per 100,000 live births)</b> .....	<sup>1</sup> 100.0	...	78.3	103.4	50
<b>19.5 Annual number of first time consultations<sup>2</sup></b>					
Genital herpes .....	167,000	<sup>3</sup> 163,000	<sup>1</sup> 172,000	285,000	142,000
Genital warts .....	451,000	<sup>3</sup> 290,000	<sup>1</sup> 275,000	282,000	385,000
<b>19.6 Pelvic inflammatory disease incidence (per 100,000)</b>					
Females 15–44 years .....	311	...	261	234	250
<b>19.7 Sexually transmitted Hepatitis B (number of cases)</b> .....	<sup>4</sup> 58,300	<sup>4,5</sup> 47,593	47,881	58,393	30,500
<b>19.8 Repeat gonorrhea infection</b> .....	<sup>4</sup> 20%	...	---	---	15%
<b>19.9 Adolescents who ever had sexual intercourse</b>					
Adolescents 15 years					
Females .....	27%	...	<sup>6</sup> 43%	<sup>6</sup> 45%	15%
Males .....	33%	...	<sup>6</sup> 53%	<sup>6</sup> 51%	15%
Adolescents 17 years					
Females .....	50%	...	<sup>7</sup> 67%	<sup>7</sup> 65%	40%
Males .....	66%	...	<sup>7</sup> 76%	<sup>7</sup> 68%	40%
<b>19.10 Condom use at last sexual intercourse</b>					
Sexually active unmarried females 15–44 years .....	19%	...	---	---	50%
a. Sexually active females 15–19 years .....	25%	<sup>8</sup> 26%	<sup>9</sup> 40%	<sup>9</sup> 38%	60%
b. Sexually active males 15–19 years .....	57%	...	<sup>9</sup> 49%	<sup>9</sup> 54%	75%
c. Intravenous drug abusers .....	---	...	---	---	60%
<b>19.11 Clinic services for HIV and other sexually transmitted diseases</b> ...	---	...	---	---	50%
Family planning clinics .....	<sup>1</sup> 40%	...	---	---	...
<b>19.12 Sexually transmitted disease education in schools</b> .....	95%	...	---	---	100%
<b>19.13 Correct management of sexually transmitted disease cases by primary care providers</b> .....	70%	...	---	---	90%
<b>19.14 Clinician counseling to prevent HIV and other sexually transmitted diseases</b> .....	<sup>4</sup> 10%	...	---	---	75%
a. Providers practicing in high incidence areas .....	---	...	---	---	90%
<b>19.15 Partner notification of exposure to sexually transmitted diseases</b>					
Patients with bacterial sexually transmitted diseases .....	20%	...	---	---	50%

<sup>1</sup>1989 data.

<sup>2</sup>As measured by first time visits to physicians' offices.

<sup>3</sup>Data have been revised to reflect updated methodology; see Introduction.

<sup>4</sup>1987 data.

<sup>5</sup>Data have been revised. Original data were estimated based on preliminary analyses; see Introduction.

<sup>6</sup>10th grade students.

<sup>7</sup>12th grade students.

<sup>8</sup>Baseline was revised due to error in original publication.

<sup>9</sup>9th–12th grade students.

NOTE: Data sources are in table C.

# Sexually Transmitted Diseases Objectives

**19.1:** Reduce gonorrhea to an incidence of no more than 225 cases per 100,000 people.

**19.1a:** Reduce gonorrhea among blacks to an incidence of no more than 1,300 cases per 100,000.

**19.1b:** Reduce gonorrhea among adolescents aged 15–19 to no more than 750 cases per 100,000.

**19.1c:** Reduce gonorrhea among women aged 15–44 to no more than 290 cases per 100,000.

**19.2:** Reduce Chlamydia trachomatis infections, as measured by a decrease in the incidence of nongonococcal urethritis to no more than 170 cases per 100,000 people.

**19.3:** Reduce primary and secondary syphilis to an incidence of no more than 10 cases per 100,000 people.

**19.3a:** Reduce primary and secondary syphilis among blacks to an incidence of no more than 65 cases per 100,000.

**19.4:** Reduce congenital syphilis to an incidence of no more than 50 cases per 100,000 live births.

**19.5:** Reduce genital herpes and genital warts, as measured by a reduction to 142,000 and 385,000, respectively, in the annual number of first-time consultations with a physician for the conditions.

**19.6:** Reduce the incidence of pelvic inflammatory disease, as measured by a reduction in hospitalizations for pelvic inflammatory disease to no more than 250 per 100,000 women aged 15–44.

**19.7\*:** Reduce sexually transmitted hepatitis B infection to no more than 30,500 cases.

Duplicate objectives: 20.03b and 20.03c, combined

**19.8:** Reduce the rate of repeat gonorrhea infection to no more than 15 percent within the previous year.

*NOTE: As measured by a reduction in the proportion of gonorrhea patients who, within the previous year, were treated for a separate case of gonorrhea.*

**19.9\*:** Reduce the proportion of adolescents who have engaged in sexual intercourse to no more than 15 percent by age 15 and no more than 40 percent by age 17.

Duplicate objectives: 5.4 and 18.3

**19.10\*:** Increase to at least 50 percent the proportion of sexually active, unmarried people who used a condom at last sexual intercourse.

Duplicate objective: 18.4

**19.10a\*:** Increase to at least 60 percent the proportion of sexually active, unmarried young women aged 15–19 whose partner used a condom at last sexual intercourse.

Duplicate objective: 18.4a

**19.10b\*:** Increase to at least 75 percent the proportion of sexually active, unmarried young men aged 15–19 who used a condom at last sexual intercourse.

Duplicate objective: 18.4b

**19.10c\*:** Increase to at least 60 percent the proportion of intravenous drug abusers who used a condom at last sexual intercourse.

Duplicate objective: 18.4c

**19.11\*:** Increase to at least 50 percent the proportion of family planning clinics, maternal and child health clinics, sexually transmitted disease clinics, tuberculosis clinics, drug treatment centers, and primary care clinics that screen, diagnose, treat, counsel, and provide (or refer for) partner notification services for bacterial sexually transmitted diseases (gonorrhea, syphilis, and chlamydia).

Duplicate objectives: 5.11 and 18.13

**19.12:** Include instruction in sexually transmitted disease transmission prevention in the curricula of all middle and secondary schools, preferably as part of quality school health education.

*NOTE: Strategies to achieve this objective must be undertaken sensitively to avoid indirectly encouraging or condoning sexual activity among teens who are not yet sexually active.*

**19.13:** Increase to at least 90 percent the proportion of primary care providers treating patients with sexually transmitted diseases who correctly manage cases, as measured by their use of appropriate types and amounts of therapy.

**19.14\*:** Increase to at least 75 percent the proportion of primary care and mental health care providers who provide age-appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

*NOTE: Primary care providers include physicians, nurses, nurse practitioners, and physician assistants. Areas of high AIDS and sexually transmitted disease incidence are cities and States with incidence rates of AIDS cases, HIV seroprevalence, gonorrhea, or syphilis that are at least 25 percent above the national average.*

Duplicate objective: 18.9

**19.14a\*:** Increase to at least 90 percent the proportion of primary care and mental health care providers who practice in areas of high AIDS and sexually transmitted disease incidence who provide age appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 18.9a

**19.15:** Increase to at least 50 percent the proportion of all patients with bacterial sexually transmitted diseases (gonorrhea, syphilis, and chlamydia) who are offered provider referral services.

*NOTE: Provider referral (previously called contact tracing) is the process whereby health department personnel directly notify the sexual partners of infected individuals of their exposure to an infected individual.*

\*Duplicate objective.

## References

1. Centers for Disease Control. Division of STD/HIV prevention annual report, 1989. Atlanta, Georgia: U.S. Department of Health and Human Services. 1990.
2. Washington AE, Arno PS, Brooks MA. The economic costs of pelvic inflammatory disease. *JAMA* 255: 1735–8. 1986.
3. Kaufman RE, Jones OG, Blount JH, Wiesner PJ. Questionnaire survey of reported early congenital syphilis: Problems in diagnosis, prevention, and treatment. *Sex Transm Dis* 4: 135–9. 1977.
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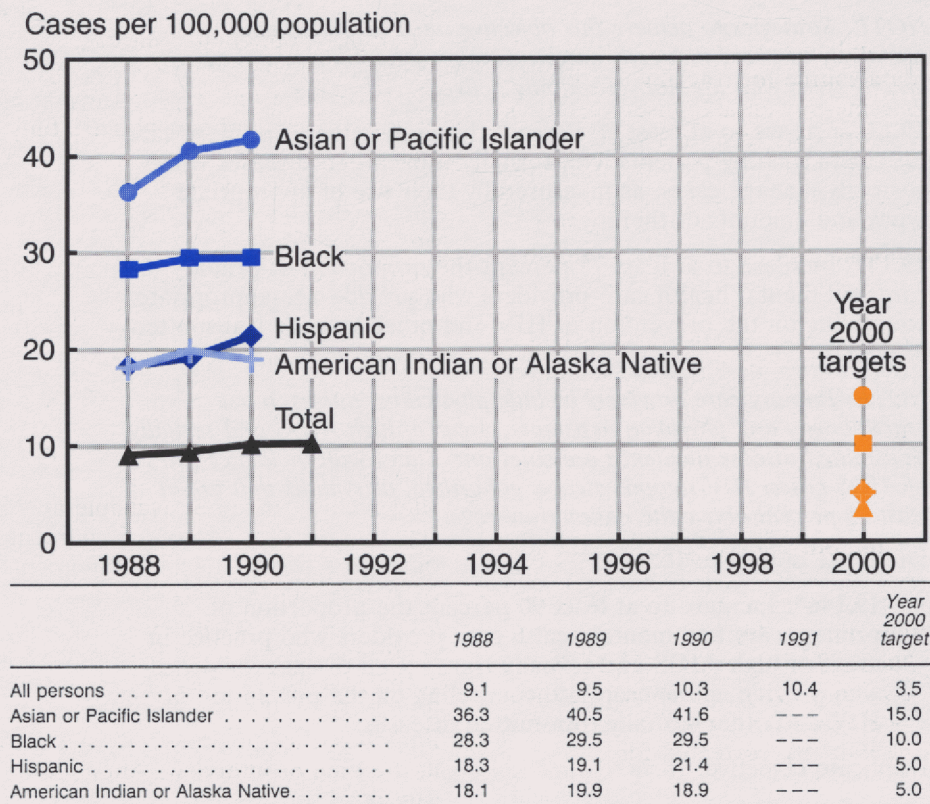
# Priority Area 20 Immunization and Infectious Diseases

## Background and Data Summary

The reduction in incidence of infectious diseases is a significant public health achievement of this century. Much of this progress is a result of improvements in basic hygiene, food production and handling, and water treatment. The development and widespread use of vaccines has been instrumental in reducing the incidence of many infectious diseases. For others, antimicrobial agents have greatly reduced illness and death. Despite the progress that has been made, infectious diseases remain an important cause of illness and death in the United States. The very young, older adults, and members of minority groups are at increased risk for many infectious diseases. Each of the causative agents of infectious diseases, even those that are currently rare, pose a potential threat of recurrence or development of resistance to current treatment. For example, susceptibility to active tuberculosis among persons infected with HIV has contributed to an increase in the number of tuberculosis cases after a steady decline since the 1950's (1). Outbreaks of multiple drug-resistant tuberculosis cases have occurred in recent years. A number of newly recognized infectious diseases have emerged. Recent examples include Legionnaires' Disease, toxic shock syndrome, Lyme disease, and the wide spectrum of diseases associated with the human immunodeficiency virus (HIV).

Recent data indicate mixed results regarding trends toward achieving the year 2000 objectives in the immunization and infectious diseases priority area. For 3 of the 19 objectives (20.3, 20.13, and 20.15) there is progress toward achieving the year 2000 targets. This includes an overall reduction in the incidence of viral hepatitis (20.3). The target for hepatitis C has been surpassed. Among the special population targets

**Figure 25. Annual incidence of tuberculosis, according to race and ethnicity: United States, 1988-91 and year 2000 targets for objective 20.4**



NOTE: A related table in *Health, United States, 1992*, is table 52.

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

for hepatitis B, a dramatic reduction in the number of cases has occurred among intravenous drug users, surpassing the number targeted for the year 2000. However, hepatitis B cases have increased among heterosexually active people and men who have sex with men.

Five objectives (20.2, 20.4, 20.9, 20.12, and 20.18) are moving away from the target. These include increased morbidity from various infectious diseases, including pneumonia and influenza (20.2), tuberculosis (20.4), and middle ear infections among children (20.9). Mixed results are shown for four other objectives (20.1, 20.6, 20.10, and

20.11). Cases of many vaccine-preventable diseases increased since baseline, although declines were observed for mumps and pertussis (20.1). Although the number of measles cases in 1991 was considerably higher than the number reported in 1988, the 1991 data show a decline from the number of cases reported in 1989 and 1990. Hepatitis A reported among international travelers has declined, while malaria and typhoid cases have increased (20.6). Restricted activity related to pneumonia decreased among children less than 5 years old but increased among those 65 years and older (20.10). New data are available to

establish baseline measures for three objectives (20.5, 20.8, and 20.16). Data are not yet available to establish baseline measures for three objectives (20.14, 20.17, and 20.19) or to provide a measure after baseline for one objective (20.7).

## Data Issues

### Data Source Description

The National Notifiable Disease Surveillance System (NNDSS) is the data source for tracking cases of vaccine-preventable diseases (20.1). Interim data from this system are routinely published in the Morbidity and Mortality Weekly Report. Final data, used to track objective 20.1, are published in the Annual Summary of Notifiable Diseases (2). Detailed epidemiologic analyses of data from NNDSS are sometimes published in special surveillance reports. Data in these reports may not agree exactly with reports published in the Morbidity and Mortality Weekly Report because of differences in timing or refinements in case definition. The NNDSS is the data source for specific disease surveillance systems, such as the Viral Hepatitis Surveillance System and the Tuberculosis Morbidity Data System (20.3 and 20.4). In the case of the Viral Hepatitis Surveillance System, the data are corrected for underreporting.

### Definition

Epidemic-related pneumonia and influenza deaths are defined as those that are above the normal yearly fluctuations of mortality. The data cannot be obtained directly from published mortality figures. Each year expected numbers of pneumonia and influenza deaths are calculated through a cyclical regression model using data for previous years but excluding data for the periods when mortality was known to be raised by influenza epidemics (3). Epidemic-related deaths are defined as those that exceed by 1.645 standard deviations the expected number based on the model.

### Comparability of Data Sources

Recent data on immunization levels among children less than 2

years old are not directly comparable with the baseline data (20.11). The revised baseline was obtained from the 1985 United States Immunization Survey and shows the range of antigen-specific vaccination levels at the time of interview among children 2 years old. The specific immunization levels were 54 percent for polio, 61 percent for measles-containing vaccines, and 64 percent for diphtheria-tetanus-pertussis (DTP). The 1991 figure of 37 percent, obtained from the National Health Interview Survey (NHIS), represents the proportion of children 2 years of age who are fully immunized for measles-mumps-rubella (MMR), polio, and DTP at the time of interview. The antigen-specific immunization levels were 52 percent for polio, 67 percent for DTP and 80 percent for MMR (a related table in *Health, United States, 1992*, is 51, which shows data for 1-4 year-olds).

The NHIS may have underestimated immunization levels among 2 year old children for whom shot records were not available at time of interview. Among 52 percent of white respondents and 40 percent of respondents of all other races who either had shot records or who reported that the child had never received a vaccination, 56 percent of 2 year old children were fully immunized for polio, MMR, and DTP at the time of interview. Among the same group of respondents, 47 percent of the 2 year olds were fully immunized by their second birthday.

**Table 20. Immunization and infectious diseases objective status**

Objective	1987 baseline		1990	1991	Target 2000
	Original	Revised			
<b>20.1 Vaccine-preventable diseases (number of cases)</b>					
Diphtheria among people 25 years and under	11	...	2	2	0
Tetanus among people 25 years and under	13	...	6	4	0
Polio (wild-type virus)	10	...	0	0	0
Measles	13,058	...	26,527	9,411	0
Rubella	1225	...	1,125	1,401	0
Congenital Rubella Syndrome	16	...	11	47	0
Mumps	14,866	...	5,292	4,264	500
Pertussis	13,450	...	4,570	2,719	1,000
<b>20.2 Epidemic-related pneumonia and influenza deaths among older adults (per 100,000)</b>	<sup>2</sup> 9.1	...	<sup>3</sup> 12.0	---	7.3
<b>20.3 Viral hepatitis (cases per 100,000)</b>					
Hepatitis B (HBV)	63.5	...	50.6	42.6	40.0
Hepatitis A	31.0	<sup>4</sup> 33.0	37.9	29.0	23.0
Hepatitis C	18.3	...	13.1	8.3	13.7
HBV Cases (number of cases)					
a. Intravenous drug abusers	30,000	<sup>4</sup> 44,348	17,615	12,666	22,500
b. Heterosexually active people	33,000	<sup>4</sup> 33,995	33,971	43,795	22,000
c. Homosexual males	25,300	<sup>4</sup> 13,598	13,840	14,598	8,500
d. Children of Asians/Pacific Islanders	8,900	<sup>4</sup> 10,817	8,807	7,514	1,800
e. Occupationally exposed workers	6,200	<sup>4</sup> 3,090	1,258	2,576	1,250
f. Infants	3,500	<sup>4</sup> 3,863	3,003	2,235	550
New Carriers					
g. Alaska Natives	15	...	15	15	1
<b>20.4 Tuberculosis (cases per 100,000)</b>	<sup>1</sup> 9.1	...	10.3	10.4	3.5
a. Asians/Pacific Islanders	<sup>1</sup> 36.3	...	41.6	---	15.0
b. Blacks	<sup>1</sup> 28.3	...	29.5	---	10.0
c. Hispanics	<sup>1</sup> 18.3	...	21.4	---	5.0
d. American Indians/Alaska Natives	<sup>1</sup> 18.1	...	18.9	---	5.0
<b>20.5 Surgical wound and nosocomial infections</b>					
Surgical wound infection rates (per 100 operations)					
Low risk patients	...	<sup>5</sup> 1.1	---	---	1.0
Medium-low risk patients	...	<sup>5</sup> 3.2	---	---	2.9
Medium-high risk patients	...	<sup>5</sup> 6.3	---	---	5.7
High risk patients	...	<sup>5</sup> 14.4	---	---	13.0
Device-associated nosocomial infection rates (per 1,000 device-days)					
Bloodstream Infections					
Medical/Coronary ICUs	...	<sup>5</sup> 6.9	---	---	6.2
Surgical/Medical-Surgical ICUs	...	<sup>5</sup> 5.3	---	---	4.8
Pediatric ICUs	...	<sup>5</sup> 11.4	---	---	10.3
Urinary Tract Infections					
Medical/Coronary ICUs	...	<sup>5</sup> 10.7	---	---	9.6
Surgical/Medical-Surgical ICUs	...	<sup>5</sup> 7.6	---	---	6.8
Pediatric ICUs	...	<sup>5</sup> 5.8	---	---	5.2
Pneumonia					
Medical/Coronary ICUs	...	<sup>5</sup> 12.8	---	---	11.5
Surgical/Medical-Surgical ICUs	...	<sup>5</sup> 17.6	---	---	15.8
Pediatric ICUs	...	<sup>5</sup> 4.7	---	---	4.2
<b>20.6 Illness among international travelers (number of cases)</b>					
Typhoid fever	280	...	386	351	140
Hepatitis A	1,280	<sup>4</sup> 4,475	3,962	3,730	640
Malaria	2,000	<sup>4</sup> 932	<sup>6</sup> 1,102	1,021	1,000
<b>20.7 Bacterial meningitis (per 100,000)</b>	<sup>7</sup> 6.3	<sup>4</sup> 76.5	---	---	4.7
a. Alaska Natives	33	...	---	17	8
<b>20.8 Diarrhea among children in child care centers</b>					
Children 0-6 years	...	<sup>8</sup> 32%	---	---	24%
Children 0-3 years	...	<sup>8</sup> 38%	---	---	28%
<b>20.9 Ear infections among children (restricted activity days per 100 children)</b>					
	131	<sup>9</sup> 135.4	125.0	155.7	105.0

**Table 20. Immunization and infectious diseases objective status—Con.**

Objective	1987 baseline		1990	1991	Target 2000
	Original	Revised			
<b>20.10 Pneumonia-related illness (restricted activity days per 100 people)</b>					
People 65 years and over . . . . .	48.0	<sup>8</sup> 19.1	46.2	78.5	38.0
Children 4 years and under . . . . .	27.0	<sup>8</sup> 29.4	51.3	24.1	24.0
<b>20.11 Immunization (percent immunized)</b>					
Basic immunization series among children					
Children 2 years and under . . . . .	<sup>10</sup> 70–80%	<sup>9,11</sup> 54–64%	---	<sup>12</sup> 37%	90%
Children in licensed child care facilities . . . . .	94%	<sup>9,13</sup> 94–95%	<sup>13</sup> 94–96%	<sup>13</sup> 94–96%	95%
Children in kindergarten through post-secondary education institutions . . . . .	97%	<sup>9,13</sup> 97–98%	<sup>13</sup> 97–98%	<sup>13</sup> 96–98%	95%
Pneumococcal pneumonia and influenza immunizations					
Institutionalized chronically ill people or older people . . . . .	---	...	---	---	80%
Non-institutionalized high risk populations . . . . .	<sup>10</sup> 10–20%	<sup>9,14</sup> 14–30%	---	<sup>15</sup> 16%	60%
Hepatitis B immunizations					
Infants of antigen-positive mothers . . . . .	...	<sup>9</sup> 40%	---	---	90%
Occupationally exposed workers . . . . .	...	<sup>6</sup> 37%	---	---	90%
IV-drug users in drug treatment programs . . . . .	---	...	---	---	50%
Homosexual males . . . . .	---	...	---	---	50%
<b>20.12 Post exposure rabies treatments (number)</b> . . . . .	18,000	...	---	18,800	9,000
<b>20.13 Immunization laws (number of States)</b> . . . . .	<sup>16,17</sup> 10	<sup>6,9</sup> 10–49	---	<sup>18</sup> 34–50	50
<b>20.14 Provision of immunizations by clinicians</b> . . . . .	---	...	---	---	90%
<b>20.15 Financial barriers to immunization</b>					
Employment-based insurance plans that provide coverage for immunizations					
Conventional insurance plans . . . . .	<sup>6</sup> 45%	...	47%	---	100%
Preferred Provider Organization plans . . . . .	<sup>6</sup> 62%	...	65%	---	100%
Health Maintenance Organization plans . . . . .	<sup>6</sup> 98%	...	98%	---	100%
<b>20.16 Public health department provision of immunizations</b> . . . . .	...	<sup>16</sup> 37–70%	---	---	90%
<b>20.17 Local health programs to identify tuberculosis</b> . . . . .	---	...	---	---	90%
<b>20.18 Preventive therapy for tuberculosis</b> (percent of infected persons completing therapy) . . . . .	66.3%	...	63.0%	---	85%
<b>20.19 Laboratory capability for influenza diagnosis</b>					
Tertiary care hospitals . . . . .	---	...	---	---	85%
Secondary care hospitals and HMOs . . . . .	---	...	---	---	50%

<sup>1</sup>1988 data.

<sup>2</sup>1980–87 data.

<sup>3</sup>1986–88 data.

<sup>4</sup>Data have been revised. Original data were estimated based on preliminary analysis; see Introduction.

<sup>5</sup>1986–90 data.

<sup>6</sup>1989 data.

<sup>7</sup>1986 data.

<sup>8</sup>1991 data.

<sup>9</sup>Data have been revised to reflect updated methodology; see Introduction.

<sup>10</sup>1985 data.

<sup>11</sup>1985 data; range of antigen-specific immunization levels among 2 year old children (see text).

<sup>12</sup>Proportion of 2 year old children who have received all the recommended doses of diphtheria-tetanus-pertussis, measles-mumps-rubella, and polio (see text).

<sup>13</sup>Range of antigen-specific immunization levels.

<sup>14</sup>1989 data; among people 65 years and over, 14 percent received pneumococcal vaccine and 30 percent received influenza vaccine.

<sup>15</sup>Proportion of people 65 years and over who received both pneumococcal and influenza vaccines; 21 percent received pneumococcal vaccine and 42 percent received influenza vaccine.

<sup>16</sup>1990 data.

<sup>17</sup>Includes Washington, DC.

<sup>18</sup>1992 data.

NOTE: Data sources are in table C.

# Immunization and Infectious Diseases

## Objectives

**20.1:** Reduce indigenous cases of vaccine-preventable diseases as follows:

Disease	2000 target
Diphtheria among people aged 25 and younger	0
Tetanus among people aged 25 and younger	0
Polio (wild-type virus)	0
Measles (indigenous)	0
Rubella	0
Congenital Rubella Syndrome	0
Mumps	500
Pertussis	1,000

**20.2:** Reduce epidemic-related pneumonia and influenza deaths among people aged 65 and older to no more than 7.3 per 100,000 people.

*NOTE: Epidemic-related pneumonia and influenza deaths are those that occur above and beyond the normal yearly fluctuations of mortality. Because of the extreme variability in epidemic-related deaths from year to year, the target is a 3-year average.*

**20.3\*:** Reduce viral hepatitis as follows:

Hepatitis B (HBV): 40 per 100,000 people  
 Hepatitis A: 23 per 100,000 people  
 Hepatitis C: 13.7 cases per 100,000 people

Duplicate objectives: 19.07, 10.5

**20.3a:** Reduce Hepatitis B (HBV) among intravenous drug abusers to no more than 22,500 cases per 100,000.

**20.3b\*:** Reduce Hepatitis B (HBV) among heterosexually active people to no more than 22,000 cases per 100,000.

Duplicate objective: 19.7

**20.3c\*:** Reduce Hepatitis B (HBV) among homosexual men to no more than 8,500 cases per 100,000.

Duplicate objective: 19.7

**20.3d:** Reduce Hepatitis B (HBV) among children of Asian and Pacific Islanders to no more than 1,800 cases per 100,000.

**20.3e\*:** Reduce Hepatitis B (HBV) among occupationally exposed workers to no more than 1,250 cases per 100,000.

Duplicate objective: 10.5

**20.3f:** Reduce Hepatitis B (HBV) among infants to no more than 550 new carriers per 100,000.

**20.3g:** Reduce Hepatitis B (HBV) among Alaska Natives to no more than 1 case per 100,000.

**20.4:** Reduce tuberculosis to an incidence of no more than 3.5 cases per 100,000 people.

**20.4a:** Reduce tuberculosis among Asians and Pacific Islanders to an incidence of no more than 15 cases per 100,000.

**20.4b:** Reduce tuberculosis among blacks to an incidence of no more than 10 cases per 100,000.

**20.4c:** Reduce tuberculosis among Hispanics to an incidence of no more than 5 cases per 100,000.

**20.4d:** Reduce tuberculosis among American Indians and Alaska Natives to an incidence of no more than 5 cases per 100,000.



**20.5:** Reduce by at least 10 percent the incidence of surgical wound infections and no socomial infections in intensive care patients.

**20.6:** Reduce selected illness among international travelers as follows:

Typhoid fever: 140 cases  
Hepatitis A: 640 cases  
Malaria: 1,000 cases

**20.7:** Reduce bacterial meningitis to no more than 4.7 cases per 100,000 people.

**20.7a:** Reduce bacterial meningitis among Alaska Natives to no more than 8 cases per 100,000 people.

**20.8:** Reduce infectious diarrhea by at least 25 percent among children in licensed child care centers and children in programs that provide an Individualized Education Program (IEP) or Individualized Health Plan (IHP).

**20.9:** Reduce acute middle ear infections among children aged 4 and younger, as measured by days of restricted activity or school absenteeism, to no more than 105 days per 100 children.

**20.10:** Reduce pneumonia-related days of restricted activity as follows:

38 days per 100 people aged 65 and older.  
24 days per 100 children aged 4 and younger.

**20.11:** Increase immunization levels as follows:

Basic immunization series among children under age 2: at least 90 percent.

Basic immunization series among children in licensed child care facilities and kindergarten through post-secondary education institutions: at least 95 percent.

Pneumococcal pneumonia and influenza immunization among institutionalized chronically ill or older people: at least 80 percent.

Pneumococcal pneumonia and influenza immunization among noninstitutionalized, high-risk populations, as defined by the Immunization Practices Advisory Committee: at least 60 percent.

Hepatitis B immunization among high-risk populations, including infants of surface antigen-positive mothers to at least 90 percent; occupationally exposed workers to at least 90 percent; IV-drug users in drug treatment programs to at least 50 percent; and homosexual men to at least 50 percent.

Duplicate objective for occupationally exposed workers: 10.9

**20.12:** Reduce postexposure rabies treatments to no more than 9,000 per year.

**20.13:** Expand immunization laws for schools, preschools, and day care settings to all States for all antigens.

**20.14:** Increase to at least 90 percent the proportion of primary care providers who provide information and counseling about immunizations and offer immunizations as appropriate for their patients.

**20.15:** Improve the financing and delivery of immunizations for children and adults so that virtually no American has a financial barrier to receiving recommended immunizations.

**20.16:** Increase to at least 90 percent the proportion of public health departments that provide adult immunization for influenza, pneumococcal disease, hepatitis B, tetanus, and diphtheria.

**20.17:** Increase to at least 90 percent the proportion of local health departments that have ongoing programs for actively identifying cases of tuberculosis and latent infection in populations at high risk for tuberculosis.

*NOTE: Local health department refers to any local component of the public health system, defined as an administrative and service unit of local or State*

*government concerned with health and carrying some responsibility for the health of a jurisdiction smaller than a State.*

**20.18:** Increase to at least 85 percent the proportion of people found to have tuberculosis infection who completed courses of preventive therapy.

**20.19:** Increase to at least 85 percent the proportion of tertiary care hospital laboratories and to at least 50 percent the proportion of secondary care hospital and health maintenance organization laboratories possessing technologies for rapid viral diagnosis of influenza.

\*Duplicate objective

## References

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2. Centers for Disease Control. Summary of notifiable diseases, United States, 1990. MMWR 39(53). 1991.
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# Priority Area 21 Clinical Preventive Services

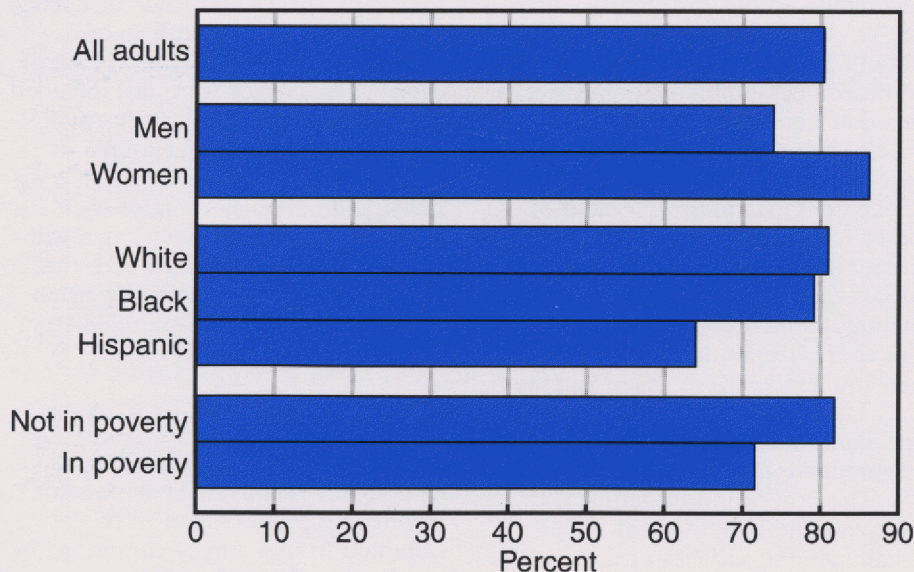
## Background and Data Summary

Clinical preventive services are those disease prevention and health promotion services—immunizations, screening for early detection of disease or risk factors, and patient counseling—that are delivered to individuals in a health care setting. The U.S. Clinical Preventive Services Task Force, a panel of prevention experts appointed by the U.S. Public Health Service, has reviewed the full range of scientific literature on clinical preventive services and developed scientifically sound recommendations for specific services based on age, gender, and other risk factors (1).

Preventive services for specific diseases and health-related behaviors are addressed in other priority areas of *Healthy People 2000*. For example, receipt of pap smears, clinical breast exams, and mammography are addressed in the cancer priority area. The objectives in this priority area support those objectives by considering clinical preventive services as a complete package and addressing barriers that impede access to and use of these services.

Data are available for only two objectives (21.3 and 21.8) to assess trends towards meeting the eight Clinical Preventive Services objectives, although recent data are available to establish baseline measures for four other objectives (21.2, 21.4, 21.5, and 21.7). Data from the 1991 NHIS on the proportion of people who have a specific source of ongoing primary care show a slight decline from the 1986 baseline for the population as a whole and for Hispanics and people with low incomes (21.3). Over the same time period, the proportion of black persons who had a specific source of primary care did not change. In 1991 the proportion of black persons who had a specific source of care was similar to that in the population as a whole, whereas the proportion was lower among Hispanics and

**Figure 26. Adults with a usual source of medical care, according to selected characteristics related to year 2000 objective 21.3: United States, 1991**



Characteristics	1991
All adults . . . . .	80
Men . . . . .	74
Women . . . . .	86
White . . . . .	81
Black . . . . .	79
Hispanic . . . . .	64
Not in poverty . . . . .	82
In poverty . . . . .	72

NOTE: Related tables in *Health, United States, 1992*, are 78–81.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey.

low-income people. Information on degrees awarded to minorities in the health professions for the academic year 1990–91 show slight improvements toward meeting the year 2000 target (21.8). The baseline for 21.1 has been revised. No baseline has been established for 21.6.

### Data Issues

#### Years of Healthy Life

See the introduction for a discussion of years of healthy life.

### Definition

Receipt of all of the screening and immunization services and at least one of the counseling services, at the appropriate interval, and as recommended by the U.S. Preventive Services Task Force is considered in objective 21.2. The recommendations vary by age, gender, and risk group; several of the objective's special population targets correspond to age groups specified by the Task Force. Questions to establish receipt of clinical preventive services among

persons 19 years of age and over were included in the Health Promotion and Disease Prevention Supplement of the 1991 NHIS and were used to establish a baseline for this objective. The supplement provides information on all of the recommended immunizations and screening components, including the history, physical examination, and laboratory and diagnostic recommendations; counseling services and specific recommendations for high risk groups are not addressed. Information was obtained on the interval since last routine check-up by a medical doctor or other health care professional and receipt of several of the recommended services at the last check-up. Questions on receipt of other recommended services, namely immunizations, pap tests, clinical breast examinations, and mammograms were asked separately. For these, respondents of appropriate age and gender were asked whether they had received the service within a specific interval, usually the interval recommended by the Task Force.

The proportion of people receiving the minimum set of recommended services at the appropriate interval is quite low; among people 65 years of age and over, no one received the complete set of preventive services. However, much larger proportions of people have received components of the recommended services, for example the history, physical examination, laboratory diagnostic procedures, and immunizations. The measure for older people may be influenced by the way the information is obtained in the NHIS supplement. Older people are likely to have more frequent visits to health professionals for various health problems, which should increase the likelihood of receiving preventive services. However, complete preventive services may not be received at the last regular check-up as specified in some of the NHIS questions.

In 1989, 16 percent of the U.S. population less than 65 years old did not have health care coverage, neither private insurance, Medicare, Medicaid, nor a military plan. This measure is used to establish a baseline for objective 21.4, financial barriers to receiving recommended clinical preventive services. However,

this only provides a partial measure for the objective since many health insurance plans do not provide full coverage for preventive health care. In 1988, 41 percent of employer-sponsored health insurance plans covered adult physical examinations, 56 percent covered well baby care, and 69 percent covered preventive diagnostic tests (2).

In 1990 people who indicated emergency rooms as the usual place they went if they were sick or needed advice about their health were included as having a usual source of care, whereas they were not included in 1991. In 1990, 0.6 percent of all people who had a usual source of care as defined above indicated a hospital emergency room as their usual source (3). This objective will continue to be monitored with the NHIS; emergency rooms as a usual source of care will be excluded from the estimates.

### **Comparability of Data Sources**

Baseline data on the proportion of people who have a specific source of ongoing primary care were obtained from a survey conducted by the Robert Wood Johnson Foundation (4). Recent information for this objective is available from the NHIS. Some differences in this measure between the baseline and more recent years may be accounted for by differences in survey methods.

**Table 21. Clinical preventive services objective status**

Objective	Baseline		1990	1991	Target 2000
	Original	Revised			
<b>21.1 Years of healthy life</b> .....	162.0	2,364.0	---	---	65
a. Blacks .....	156.0	2,3No change	---	---	60
b. Hispanics .....	162.0	2,3,464.8	---	---	65
c. People 65 years and over .....	112.0	2,3,511.9	---	---	414
<b>21.2 Receipt of recommended services</b> .....	...	6,72%	---	---	50%
a. Infants up to 24 months .....	...	---	---	---	90%
b. Children 2–12 years .....	...	---	---	---	80%
c. Adolescents 13–18 years .....	...	---	---	---	50%
d. People 19–39 years .....	...	63%	---	---	40%
e. People 40–64 years .....	...	62%	---	---	40%
f. People 65 years and over .....	...	60%	---	---	40%
g. Low-income people .....	...	6,72%	---	---	50%
h. Blacks .....	...	6,73%	---	---	50%
i. Hispanics .....	...	6,72%	---	---	50%
j. Asians/Pacific Islanders .....	...	6,73%	---	---	50%
k. American Indians/Alaska Natives .....	...	6,73%	---	---	70%
l. People with disabilities .....	...	6,71%	---	---	80%
<b>21.3 Access to primary care (percent with source of care)</b> .....	82%	...	77%	80%	95%
a. Hispanics .....	70%	...	77%	64%	95%
b. Blacks .....	80%	...	75%	79%	95%
c. Low-income people .....	80%	...	71%	72%	95%
<b>21.4 Financial barriers to receipt of clinical preventive services</b> .....	---	...	---	---	0%
Proportion without health care coverage	...	...	---	---	...
People under 65 years .....	...	916%	---	---	...
<b>21.5 Clinical preventive services from publicly funded programs (proportion of eligible people)</b> .....	---	...	---	---	90%
Federal programs	...	...	---	---	...
Screening .....	...	1010–100%	---	---	...
Counseling .....	...	1040–100%	---	---	...
Immunizations .....	...	1010–96%	---	---	...
<b>21.6 Provision of recommended services by primary care providers</b> ..	---	...	---	---	50%
<b>21.7 Local health department assurance of access to essential clinical preventive service</b>	---	...	---	---	90%
Proportion of people served .....	---	...	---	---	90%
Proportion of local health departments providing:	...	...	---	---	...
Health education .....	...	1174%	---	---	...
Child health .....	...	1184%	---	---	...
Immunizations .....	...	1192%	---	---	...
Prenatal care .....	...	1159%	---	---	...
Primary care .....	...	1122%	---	---	...
<b>21.8 Racial/ethnic minority representation in the health professions</b>	...	...	---	---	...
Degrees Awarded To:	...	...	---	---	...
Blacks .....	125.0%	...	---	135.7%	8.0%
Hispanics .....	123.0%	...	---	134.3%	6.4%
American Indians/Alaska Natives .....	120.3%	...	---	130.4%	0.6%

<sup>1</sup>1980 data.

<sup>2</sup>1990 data.

<sup>3</sup>Data have been revised to reflect updated methodology; see Introduction.

<sup>4</sup>Estimate based on preliminary data.

<sup>5</sup>Years of healthy life remaining at age 65.

<sup>6</sup>1991 data.

<sup>7</sup>Among people 19 years and over.

<sup>8</sup>1986 data.

<sup>9</sup>1989 data.

<sup>10</sup>1991–92 data.

<sup>11</sup>1990 data.

<sup>12</sup>1985–86 data.

<sup>13</sup>Academic year 1990–91.

NOTE: Data sources are in table C.

# Clinical Preventive Services Objectives

**21.1\*:** Increase years of healthy life to at least 65 years.

*NOTE: Years of healthy life is a summary measure of health that combines mortality (quantity of life) and morbidity and disability (quality of life) into a single measure. For people aged 65 and older, active life-expectancy, a related summary measure, also will be tracked.*

Duplicate objectives: 8.1 and 17.1

**21.1a\*:** Increase years of healthy life among blacks to at least 60 years.

Duplicate objectives: 8.1 and 17.1a

**21.1b\*:** Increase years of healthy life among Hispanics to at least 65 years.

Duplicate objectives: 8.1b and 17.1b

**21.1c\*:** Increase years of healthy life among people aged 65 and older to at least 14 years remaining.

Duplicate objectives: 8.1c and 17.1c

**21.2:** Increase to at least 50 percent the proportion of people who have received, as a minimum within the appropriate interval, all of the screening and immunization services and at least one of the counseling services appropriate for their age and gender as recommended by the U.S. Preventive Services Task Force.

**21.2a:** Increase to at least 90 percent the proportion of infants up to 24 months who have received, as a minimum within the appropriate interval, all of the screening and immunization services and at least one of the counseling services appropriate for their age and gender as recommended by the U.S. Preventive Services Task Force.

**21.2b:** Increase to at least 80 percent the proportion of children aged 2–12 who have received, as a minimum within the appropriate interval, all of the screening and immunization services and at least one of the counseling services appropriate for their age and gender as recommended by the U.S. Preventive Services Task Force.

**21.2c:** Increase to at least 50 percent the proportion of adolescents aged 13–18 who have received, as a minimum within the appropriate interval, all of the screening and immunization services and at least one of the counseling services appropriate for their age and gender as recommended by the U.S. Preventive Services Task Force.

**21.2d:** Increase to at least 40 percent the proportion of adults aged 19–39 who have received, as a minimum within the appropriate interval, all of the screening and immunization services and at least one of the counseling services appropriate for their age and gender as recommended by the U.S. Preventive Services Task Force.

**21.2e:** Increase to at least 40 percent the proportion of adults aged 40–64 who have received, as a minimum within the appropriate interval, all of the screening and immunization services and at least one of the counseling services appropriate for their age and gender as recommended by the U.S. Preventive Services Task Force.

**21.2f:** Increase to at least 40 percent the proportion of adults aged 65 and older who have received, as a minimum within the appropriate interval, all of the screening and immunization services and at least one of the counseling services appropriate for their age and gender as recommended by the U.S. Preventive Services Task Force.

**21.2g:** Increase to at least 50 percent the proportion of low-income people who have received, as a minimum within the appropriate interval, all of the screening and immunization services and at least one of the counseling

services appropriate for their age and gender as recommended by the U.S. Preventive Services Task Force.

**21.2h:** Increase to at least 50 percent the proportion of blacks who have received, as a minimum within the appropriate interval, all of the screening and immunization services and at least one of the counseling services appropriate for their age and gender as recommended by the U.S. Preventive Services Task Force.

**21.2i:** Increase to at least 50 percent the proportion of Hispanics who have received, as a minimum within the appropriate interval, all of the screening and immunization services and at least one of the counseling services appropriate for their age and gender as recommended by the U.S. Preventive Services Task Force.

**21.2j:** Increase to at least 50 percent the proportion of Asians and Pacific Islanders who have received, as a minimum within the appropriate interval, all of the screening and immunization services and at least one of the counseling services appropriate for their age and gender as recommended by the U.S. Preventive Services Task Force.

**21.2k:** Increase to at least 70 percent the proportion of American Indians and Alaska Natives who have received, as a minimum within the appropriate interval, all of the screening and immunization services and at least one of the counseling services appropriate for their age and gender as recommended by the U.S. Preventive Services Task Force.

**21.2l:** Increase to at least 80 percent the proportion of people with disabilities who have received, as a minimum within the appropriate interval, all of the screening and immunization services and at least one of the counseling services appropriate for their age and gender as recommended by the U.S. Preventive Services Task Force.

**21.3:** Increase 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.

**21.3a:** Increase to at least 95 percent the proportion of Hispanics who have a specific source of ongoing primary care for coordination of their preventive and episodic healthcare.

**21.3b:** Increase to at least 95 percent the proportion of blacks who have a specific source of ongoing primary care for coordination of their preventive and episodic health care.

**21.3c:** Increase to at least 95 percent the proportion of low-income people who have a specific source of ongoing primary care for coordination of their preventive and episodic health care.

**21.4:** Improve financing and delivery of clinical preventive services so that virtually no American has a financial barrier to receiving, at a minimum, the screening, counseling, and immunization services recommended by the U.S. Preventive Services Task Force.

**21.5:** Assure that at least 90 percent of people for whom primary care services are provided directly by publicly funded programs are offered, at a minimum, the screening, counseling, and immunization services recommended by the U.S. Preventive Services Task force.

*NOTE: Publicly funded programs that provide primary care services directly include federally funded programs such as the Maternal and Child Health Program, Community and Migrant Health Centers, and the Indian Health Service as well as primary care service settings funded by State and local governments. This objective does not include services covered indirectly through the Medicare and Medicaid programs.*

**21.6:** Increase to at least 50 percent the proportion of primary care providers who provide their patients with the screening, counseling, and immunization services recommended by the U.S. Preventive Services Task Force.

21.7: Increase to at least 90 percent the proportion of people who are served by a local health department that assesses and assures access to essential clinical preventive services.

*NOTE: Local health department refers to any local component of the public health system, defined as an administrative and service unit of local or State government concerned with health and carrying some responsibility for the health of a jurisdiction smaller than a State.*

21.8: Increase the proportion of all degrees in the health professions and allied and associated health profession fields awarded to members of underrepresented racial and ethnic minority groups as follows:

	2000 Target (percent)
Blacks	8.0
Hispanics	6.4
American Indians and Alaska Natives	0.6

\*Duplicate objective.

## References

1. U.S. Preventive Services Task Force. Guide to clinical preventive services: An assessment of the effectiveness of 169 interventions. Report of the U.S. Preventive Services Task Force. Baltimore, Maryland: Williams and Wilkins. 1989.
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3. Unpublished data, 1990 National Health Interview Survey.
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## Priority Area 22 Surveillance and Data Systems

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Public health surveillance is the systematic collection, analysis, and use of health information. Surveillance is essential to understanding the health status of a population and planning effective prevention programs. The Institute of Medicine identified this assessment activity as one of the core functions of public health (1).

Surveillance is critical in all health agencies: federal, State, and local. State and local data are needed to assess health needs and to implement and evaluate community health programs. Achievement of the year 2000 objectives depends in part on our ability to monitor and compare progress toward the objectives at all levels of government.

We must also be able to measure the health status of special populations. Morbidity, mortality, health behaviors, access to and use of health services vary markedly by age, race, gender, and socio-economic status. Therefore, many of the objectives throughout Healthy People 2000 are targeted toward racial and ethnic minorities, elderly people, and people with chronic disabilities.

Some important health issues could not be addressed in the year 2000 objectives since national data to accurately characterize the problems were unavailable. The lack of data at the State and local levels are even greater concerns. Thus, several objectives in priority area 22 are directed toward enhancing data systems in States and communities. Similarly, objectives address the identification of and response to data gaps related to minorities and other special populations.

The first part of objective 22.1, development of Health Status Indicators, has been achieved. The consensus set of 18 indicators was published in July 1991 (2). National data for the Health Status Indicators were published in October 1992 (3). A summary of the national data for the Health Status Indicators is shown

in table D. The achievement of the other part of this objective will be measured by tracking the use of the indicators by State and local health departments.

Work has begun on the remainder of the objectives in priority area 22. Objective 22.2 is close to being achieved. The Centers for Disease Control and Prevention (CDC) has expanded its role in supporting State assessment activities related to the year 2000 objectives. As this *Healthy People 2000 Review* demonstrates, the Department of Health and Human Services is committed to tracking the course of each priority area.

**Table 22. Surveillance and data systems objective status**

Objective	1989 baseline		1990	1991	Target 2000
	Original	Revised			
<b>22.1 Health status indicators</b>					
Develop . . . . .	...	<sup>1</sup> Indicators selected	---	---	...
Establish use (number of States) . . . . .	---	...	---	---	40
Monitoring some indicators . . . . .	...	<sup>2</sup> 48	---	---	...
Providing HSI data to local health departments . . . . .	...	<sup>2</sup> 36	---	---	...
<b>22.2 National data sources</b> . . . . .	<sup>3</sup> 77%	...	---	<sup>2</sup> 99%	100%
a. State level data for at least two-thirds of the objectives (number of States) . . . . .	23	<sup>1</sup> 22	---	<sup>2</sup> 26	35
<b>22.3 Comparable data collection procedures</b>					
Federal, State, and local agencies . . . . .	...	<sup>3</sup> 12%	---	<sup>2</sup> 14%	100%
<b>22.4 Gaps in health data</b>					
Identify . . . . .	---	...	---	---	100%
Establish mechanisms to meet needs . . . . .	---	...	---	---	100%
<b>22.5 Periodic analysis and publication of data (number of States)</b> . . . . .	20	...	---	---	50
a. Analysis for racial and ethnic groups (number of States) . . . . .	...	<sup>2</sup> ,419	---	---	25
<b>22.6 Number of States with data transfer systems</b> . . . . .	30	...	---	---	50
National Electronic Telecommunications System for Surveillance (NETSS) . . . . .	...	<sup>2</sup> 50	---	---	...
Public Health Laboratory Information System (PHLIS) . . . . .	...	<sup>2</sup> 37%	---	---	...
<b>22.7 Timely release of national data</b> . . . . .	---	...	---	---	100%
1991-92 data . . . . .	...	<sup>2</sup> 38%	---	---	...
1990 data . . . . .	...	<sup>2</sup> 23%	---	---	...

<sup>1</sup>1991 data.

<sup>2</sup>1992 data.

<sup>3</sup>1990 data.

<sup>4</sup>27 States have at least one racial/ethnic group comprising at least 10 percent of their population; 19 published vital statistics data for these racial/ethnic groups.

NOTE: Data sources are in table C.

# Surveillance and Data Systems Objectives

**22.1:** Develop a set of health status indicators appropriate for Federal, State, and local health agencies, and establish use of the set in at least 40 States.

**22.2:** Identify, and create where necessary, national data sources to measure progress toward each of the year 2000 national health objectives.

**22.2a:** Identify, and create where necessary, State level data for at least two-thirds of the objectives in at least 35 States.

**22.3:** Develop and disseminate among Federal, State, and local agencies procedures for collecting comparable data for each of the year 2000 national health objectives and incorporate these into Public Health Service data collection systems.

**22.4:** Develop and implement a national process to identify significant gaps in the nation's disease prevention and health promotion data, including data for racial and ethnic minorities, people with low incomes, and people with disabilities, and establish mechanisms to meet these needs.

*NOTE: Disease prevention and health promotion data include disease status, risk factors, and services receipt data. Public health problems include such issue areas as HIV infection, domestic violence, mental health, environmental health, occupational health, and disabling conditions.*

**22.5:** Implement in all States periodic analysis and publication of data needed to measure progress toward objectives for at least 10 of the priority areas of the national health objectives.

*NOTE: Periodic is at least once every 3 years. Objectives include, at a minimum, one from each objectives category: health status, risk reduction, and services and protection.*

**22.5a:** Implement in at least 25 States periodic analysis and publication of data needed to measure State progress toward the national health objectives for each racial or ethnic group that makes up at least 10 percent of the State population.

**22.6:** Expand in all States systems for the transfer of health information related to the national health objectives among Federal, State, and local agencies.

*NOTE: Information related to the national health objectives includes State and national level baseline data, disease prevention and health promotion evaluation results, and data generated to measure progress.*

**22.7:** Achieve timely release of national surveillance and survey data needed by health professionals and agencies to measure progress toward the national health objectives.

*NOTE: Timely release (publication of provisional or final data or public use data tapes) should be based on the use of the data, but is at least within one year of the end of data collection.*

## References

1. Institute of Medicine. The future of public health. Washington: National Academy Press. 1988.
2. Centers for Disease Control. Consensus set of health indicators for the general assessment of community health status, United States. MMWR 40(27) 449-51. 1991.
3. Klein RJ, Hawk SA. Health status indicators: Definitions and national data. Statistical notes; vol 1 no 3. Hyattsville, Maryland: National Center for Health Statistics. 1992.

**Table A. Priority area lead agencies**

<i>Priority area</i>	<i>Lead agency</i>
01 Physical Activity and Fitness	President's Council on Physical Fitness and Sports
02 Nutrition	National Institutes of Health Food and Drug Administration
03 Tobacco	Centers for Disease Control and Prevention Substance Abuse and Mental Health Services Administration
04 Alcohol and Other Drugs	Office of Population Affairs
05 Family Planning	Substance Abuse and Mental Health Services Administration
06 Mental Health and Mental Disorders	Centers for Disease Control and Prevention
07 Violent and Abusive Behavior	Centers for Disease Control and Prevention Health Resources and Services Administration
08 Educational and Community-Based Programs	Centers for Disease Control and Prevention
09 Unintentional Injuries	Centers for Disease Control and Prevention
10 Occupational Safety and Health	National Institutes of Health Centers for Disease Control and Prevention
11 Environmental Health	Food and Drug Administration
12 Food and Drug Safety	National Institutes of Health Centers for Disease Control and Prevention
13 Oral Health	Health Resources and Services Administration
14 Maternal and Infant Health	National Institutes of Health
15 Heart Disease and Stroke	National Institutes of Health
16 Cancer	National Institutes of Health Centers for Disease Control and Prevention
17 Diabetes and Chronic Disabling Conditions	National Institutes of Health Centers for Disease Control and Prevention
18 HIV Infection	National AIDS Program Office
19 Sexually Transmitted Diseases	Centers for Disease Control and Prevention
20 Immunization and Infectious Diseases	Centers for Disease Control and Prevention
21 Clinical Preventive Services	Health Resources and Services Administration Centers for Disease Control and Prevention
22 Surveillance and Data Systems	Centers for Disease Control and Prevention

**Table B. Mortality objective cause-of-death categories**

Objective number	Healthy People 2000		Mortality tabulation lists	
	Cause of death <sup>1</sup>	ICD-9 identifying codes	Cause of death	ICD-9 identifying codes
1.1	Coronary Heart Disease	410-414, 402, 429.2	Diseases of heart	390-398, 402, 404-429, 410-414
1.1a	[Blacks]			
2.1	See 1.1			
2.1a	See 1.1a			
2.2	Cancer (all sites)	140-208	Malignant neoplasms, including neoplasms of lymphatic hematopoietic tissues	(Same as HP2000)
3.1	See 1.1			
3.1a	See 1.1a			
3.2	Lung cancer	162.2-162.9	Malignant neoplasms of trachea, bronchus and lung	162
3.3	Chronic obstructive pulmonary disease	490-496	Chronic obstructive pulmonary diseases and allied conditions	(Same as HP2000)
4.1	Alcohol-related motor vehicle crashes	E810-E819 <sup>2</sup>	No comparable category	...
4.1a	[American Indians/Alaska Natives]			
4.1b	[Ages 15-24]			
4.2	Cirrhosis	571	Chronic liver disease and cirrhosis	(Same as HP2000)
4.2a	[Black males]			
4.2b	[American Indians/Alaska Natives]			
4.3	Drug-related deaths	292, 304, 305.2-305.9, E850-E858, E950.0-E950.5, E962.0, E980.0-E980.5	Drug induced causes	(Same as HP2000)
6.1	Suicides	E950-E959	(Same as HP2000)	(Same as HP2000)
6.1a	[Ages 15-19]			
6.1b	[Males 20-34]			
6.1c	[White males 65 and older]			
6.1d	[American Indian/Alaska Native males]			
7.1	Homicides	E960-E969	Homicide and legal intervention	E960-E978
7.1a	[Children 0-3]			
7.1b	[Spouses 15-34]			
7.1c	[Black males 15-34]			
7.1d	[Hispanic males 15-34]			
7.1e	[Black females 15-34]			
7.1f	[American Indians/Alaska Natives]			
7.2	See 6.1			
7.2a	See 6.1a			
7.2b	See 6.1b			
7.2c	See 6.1c			
7.2d	See 6.1d			

**Table B. Mortality objective cause-of-death categories – Con.**

Objective number	Healthy People 2000		Mortality tabulation lists	
	Cause of death <sup>1</sup>	ICD-9 identifying codes	Cause of death	ICD-9 identifying codes
7.3	Firearm injuries	E922.0–E922.3, E922.8–E922.9, E955.0–E955.4, E965.0–E965.4, E970, E985.0–E985.4	No comparable category	...
	Knife injuries	E920.3, E956, E966 E986, E974 E800–E949	No comparable category	...
9.1	Unintentional injuries		Accidents and adverse effects	(Same as HP2000)
9.1a	[American Indians/Alaska Natives]			
9.1b	[Black males]			
9.1c	[White males]			
9.3	Motor vehicle crashes	E810–E825	Motor vehicle accidents	(Same as HP2000)
9.3a	[Ages 14 and younger]			
9.3b	[Ages 15–24]			
9.3c	[Ages 70 and older]			
9.3d	[American Indians/Alaska Natives]			
9.3e	[Motorcyclists]			
9.3f	[Pedestrians]			
9.4	Falls and fall-related injuries	E880–E888	Accidental falls	(Same as HP2000)
9.4a	[Ages 65–84]			
9.4b	[Ages 85+]			
9.4c	[Black males 30–69]			
9.5	Drowning	E830, E832, E910	Accidental drowning and submersion	E910
9.5a	[Ages 0–4]			
9.5b	[Males 15–34]			
9.5c	[Black males]			
9.6	Residential fires	E890–E899	Accidents caused by fire and flames (place of accident-home)	(Same as HP2000)
9.6a	[Ages 0–4]			
9.6b	[Ages 65 and older]			
9.6c	[Black males]			
9.6d	[Black females]			
10.1	Work-related injuries <sup>3</sup>	E800–E999	No comparable category	...
10.1a	[Mine workers]			
10.1b	[Construction workers]			
10.1c	[Transportation workers]			
10.1d	[Farm workers]			
13.7	Cancer of the oral cavity and pharynx	140–149	Malignant neoplasms of lip, oral cavity, and pharynx	(Same as HP2000)
14.3	Maternal mortality	630–676	Complications of pregnancy, childbirth, and the puerperium or maternal mortality	(Same as HP2000)
14.3a	[Blacks]			

15.1	See 1.1			
15.1a	See 1.1a			
15.2	Stroke	430-438	Cerebrovascular diseases	(Same as HP2000)
15.2a	[Blacks]	See 2.2		
16.1	See 2.2			
16.2	See 3.2			
16.3	Breast cancer in women	174	Malignant neoplasm of female breast	(Same as HP2000)
16.4	Cancer of the uterine cervix	180	Malignant neoplasm of cervix uteri	(Same as HP2000)
16.5	Colorectal cancer	153.0-154.3, 154.8, 159.0	Malignant neoplasms of colon, rectum, rectosigmoid junction, and anus	153, 154
16.5	Colorectal cancer	153.0-154.3, 154.8, 159.0	Malignant neoplasms of colon, rectum, rectosigmoid junction, and anus	153, 154
17.9	Diabetes-related deaths <sup>3</sup>	250	Diabetes mellitus <sup>1</sup>	(Same as HP2000)
17.9a	[Blacks]			
17.9b	[American Indians/Alaska Natives]			
20.2	Epidemic-related pneumonia and influenza deaths for ages 65 and over	480-487	No comparable category	...

<sup>1</sup>Healthy People 2000 uses multiple-cause-of-death data.

<sup>2</sup>Includes only those deaths assigned to E810-E819 that were alcohol related; see Priority Area 4, Alcohol and Other Drugs.

<sup>3</sup>Unless otherwise specified, Healthy People 2000 uses underlying-cause-of-death data.

**Table C. Data sources for the Healthy People 2000 objectives and subobjectives**

[\*Indicates duplicate objective]

<i>Priority area</i>	<i>Objective number</i>	<i>Data source</i>
Physical Activity	1.1*, 1.1a	National Vital Statistics System, CDC, NCHS.
	1.2*, 1.2a,b	Baseline: National Health and Nutrition Examination Survey, CDC, NCHS. Updates: National Health Interview Survey, CDC, NCHS.
	1.2c	Baseline: Hispanic Health and Nutrition Examination Survey, CDC, NCHS. Updates: National Health Interview Survey, CDC, NCHS.
	1.2d	Baseline: Indian Health Service, Office of Planning, Evaluation, and Legislation, Program Statistics Division. Updates: National Health Interview Survey, CDC, NCHS.
	1.2e	National Health Interview Survey, CDC, NCHS.
	1.2f,g	National Health and Nutrition Examination Survey, CDC, NCHS.
	1.3*	Original baseline: Behavioral Risk Factor Surveillance System, CDC, NCCDPHP. National Health Interview Survey, CDC, NCHS.
	1.4	Baseline: For ages 10–17, National Children and Youth Fitness Study I, OASH, ODPHP. Updates: For grades 9–12, Youth Risk Behavior Survey, CDC, NCCDPHP. For ages 18 and over, National Health Interview Survey, CDC, NCHS.
	1.4a	National Health Interview Survey, CDC, NCHS.
	1.5, 1.5a–c	National Health Interview Survey, CDC, NCHS.
	1.6	National Health Interview Survey, CDC, NCHS. Youth Risk Behavior Survey, CDC, NCCDPHP
	1.7*	National Health Interview Survey, CDC, NCHS.
	1.8	Baseline for grades 5–12: National Children and Youth Fitness Study I, OASH, ODPHP. Baseline for grades 1–4: National Children and Youth Fitness Study II, OASH, ODPHP. Update: Youth Risk Behavior Survey, CDC, NCCDPHP.
	1.9	Baseline: Siedentop D. <i>Developing Teaching Skills in Physical Education</i> . Palo Alto, Ca. Mayfield. 1983. Update: Youth Risk Behavior Survey, CDC, NCCDPHP.
	1.10	National Survey of Worksite Health Promotion Activities, OASH, ODPHP.
	1.11	Baseline: McDonald BL. and Cordell HK. <i>Local Opportunities for Americans: Final Report of the Municipal and County Park and Recreation Study</i> , Alexandria, Va: National Recreation and Park Association, 1988.
	1.12	Baseline: 1988 American College of Physicians Membership Survey of Prevention Practices in Adult Medicine. Updates: Primary Care Providers Survey, OASH, ODPHP.
Nutrition	2.1*, 2.1a	National Vital Statistics System, CDC, NCHS.
	2.2*	National Vital Statistics System, CDC, NCHS.
	2.3*, 2.3a,b	Baseline: National Health and Nutrition Examination Survey, CDC, NCHS. Updates: National Health Interview Survey, CDC, NCHS.
	2.3c	Baseline: Hispanic Health and Nutrition Examination Survey, CDC, NCHS. Updates: National Health Interview Survey, CDC, NCHS.
	2.3d	Baseline: Indian Health Service, Office of Planning, Evaluation, and Legislation, Program Statistics Division. Updates: National Health Interview Survey, CDC, NCHS.
	2.3e	National Health Interview Survey, CDC, NCHS.
	2.3f,g	National Health and Nutrition Examination Survey, CDC, NCHS.
2.4, 2.4a–e	Pediatric Nutrition Surveillance System, CDC, NCCDPHP.	



**Table C. Data sources for the Healthy People 2000 objectives and subobjectives—Con.**

[\*Indicates duplicate objective]

<i>Priority area</i>	<i>Objective number</i>	<i>Data source</i>
	2.5*	Baseline: National Health and Nutrition Examination Survey, CDC, NCHS. Continuing Survey of Food Intakes by Individuals, USDA. 1989 Update: Continuing Survey of Food Intakes by Individuals, USDA.
	2.6*	Continuing Survey of Food Intakes by Individuals, USDA.
	2.7*	National Health Interview Survey, CDC, NCHS.
	2.8	Baseline: Continuing Survey of Food Intakes by Individuals, USDA. National Health and Nutrition Examination Survey III (Future).
	2.9	1985 Baseline: Continuing Survey of Food Intakes by Individuals, USDA. 1988 Baseline: Health and Diet Survey, FDA. 1991 Updates: National Health Interview Survey, CDC, NCHS.
	2.10, 2.10a–c	National Health and Nutrition Examination Survey, CDC, NCHS.
	2.10d	Survey of American Indians/Alaska Natives, CDC and Indian Health Service, Office of Planning, Evaluation, and Legislation, Program Statistics Division.
	2.10e	Pregnancy Nutrition Surveillance System, CDC, NCCDPHP.
	2.11*	Ross Laboratories Mothers Survey.
	2.11a–d	Pediatric Nutrition Surveillance System, CDC, NCCDPHP.
	2.12*, 2.12a	National Health Interview Survey, CDC, NCHS.
	2.12b	Baseline: 1990 Baby Bottle Tooth Decay 5-Year Evaluation Report, Indian Health Service, Dental Services Branch.
	2.13	Health and Diet Survey, FDA.
	2.14	Food Label and Package Survey, FDA. Fresh Fruit and Produce Survey, FDA (Future).
	2.15	Nielsen Company National Scantrack.
	2.16	Survey of Chain Operators, National Restaurant Association.
	2.17	School Nutrition Dietary Assessment, USDA (Future).
	2.18	National Health Interview Survey, CDC, NCHS.
	2.19	National Survey of School Health Education Activities, CDC, NCCDPHP (Future).
	2.20	National Survey of Worksite Health Promotion Activities, OASH, ODPHP.
	2.21	Primary Care Providers Survey, OASH, ODPHP.
Tobacco	3.1*, 3.1a	National Vital Statistics System, CDC, NCHS.
	3.2*	National Vital Statistics System, CDC, NCHS.
	3.3	National Vital Statistics System, CDC, NCHS.
	3.4*, 3.4a,b,d,h,i	National Health Interview Survey, CDC, NCHS.
	3.4c	Worldwide Survey of Substance Abuse and Health Behaviors Among Military Personnel, DOD, OASD.
	3.4e	Baseline: Hispanic Health and Nutrition Examination Survey CDC, NCHS. Updates: National Health Interview Survey, CDC, NCHS.
	3.4f	Baseline: CDC, 1987. Updates: National Health Interview Survey, CDC, NCHS.
	3.4g	Baseline: Local Surveys. Update: Jenkins CH. Cancer risks and prevention practices among Vietnamese refugees. <i>Western J of Med</i> 153:34-9. 1990.
	3.4j	Behavioral Risk Factor Surveillance System, CDC, NCCDPHP.
	3.5,3.5a	National Health Interview Survey, CDC, NCHS.

**Table C. Data sources for the Healthy People 2000 objectives and subobjectives – Con.**

[\*Indicates duplicate objective]

<i>Priority area</i>	<i>Objective number</i>	<i>Data source</i>
	3.6	Baseline: Adult Use of Tobacco Survey, CDC, NCCDPHP. Updates: National Health Interview Survey, CDC, NCHS.
	3.7, 3.7a	National Health Interview Survey, CDC, NCHS.
	3.8	Baseline: Adult Use of Tobacco Survey, CDC, NCCDPHP. Updates: National Health Interview Survey, CDC, NCHS (Future).
	3.9	For males 18–24 years of age, National Health Interview Survey, CDC, NCHS. For males 12–17 years of age, National Household Survey on Drug Abuse, SAMHSA.
	3.9a	Baseline: National Medical Expenditure Survey of American Indians/Alaska Natives, PHS, NCHSR. Updates: National Health Interview Survey, CDC, NCHS.
	3.10	National Survey of School Districts' Nonsmoking Policies, NSBA, ACS, ALA, and AHA.
	3.11	For worksites with 50 or more employees, National Survey of Worksite Health Promotion Activities, OASH, ODPHP. For medium and large companies, Nationwide Survey on Smoking in the Workplace, CDC, OSH; Bureau of National Affairs; American Society for Personnel Administration.
	3.12	Baseline: State Legislative Action on Tobacco Issues, PHF. Updates: Office on Smoking and Health Legislative Tracking, CDC, NCCDPHP.
	3.13	Baseline: Association of State and Territorial Health Officials Reporting System: Cancer and Cardiovascular Diseases Survey, PHF. Updates: Office on Smoking and Health Legislative Tracking, CDC, NCCDPHP.
	3.14	Baseline: Association of State and Territorial Health Officials Reporting System: Cancer and Cardiovascular Diseases Survey, PHF; Updates: Association of State and Territorial Health Officials Survey of State Tobacco Prevention and Control Activities (Future); Office on Smoking and Health Legislative Tracking, CDC, NCCDPHP (Future).
	3.15	Baseline: Federal Trade Commission data reported by Office on Smoking and Health, CDC, NCCDPHP. Updates: Association of State and Territorial Health Officials Reporting System: Cancer and Cardiovascular Diseases Survey, PHF (Future).
	3.16	Baseline for internists: Wells, et al. <i>Physicians Practice Study</i> , AJP 76:1009–13. 1986. Baseline for dentists: Secker-Walker, et al. <i>Statewide Survey of Dentists' Smoking Cessation Advice</i> . JADA 118:37–40. 1989. Updates: Primary Care Providers Survey, OASH, ODPHP (Future).
Alcohol and Other Drugs	4.1, 4.1a–b	Fatal Accident Reporting System, NHTSA.
	4.2, 4.2a–b	National Vital Statistics System, CDC, NCHS. Indian Health Service Administrative Statistics, IHS.
	4.3	National Vital Statistics System, CDC, NCHS.
	4.4	Drug Abuse Warning Network, SAMHSA, OAS.
	4.5	National Household Survey of Drug Abuse, SAMHSA, OAS.
	4.6	National Household Survey of Drug Abuse, SAMHSA, OAS.
	4.7	Monitoring the Future (High School Senior Survey), NIH, NIDA.

**Table C. Data sources for the Healthy People 2000 objectives and subobjectives – Con.**

[\*Indicates duplicate objective]

<i>Priority area</i>	<i>Objective number</i>	<i>Data source</i>
	4.8	Alcohol Epidemiology Data System, NIH, NIAAA.
	4.9	Monitoring the Future (High School Senior Survey), NIH, NIDA.
	4.10	Monitoring the Future (High School Senior Survey), NIH, NIDA.
	4.11	Monitoring the Future (High School Senior Survey), NIH, NIDA.
	4.12	State Substance Abuse Services Plans, SAMHSA, CSAT (Future).
	4.13	<i>Report to Congress and the White House on the Nature and Effectiveness of Federal, State, and Local Drug Prevention Education Programs.</i> U.S. Department of Education. 1987.
	4.14	National Survey of Worksite Health Promotion Activities, OASH, ODPHP.
	4.15	Office of Alcohol and State Programs, NHTSA.
	4.16	Substance Abuse Block Grant Program, SAMHSA, CSAP, CSAT (Future).
	4.17	Substance Abuse Block Grant Program, SAMHSA, CSAP, CSAT (Future).
	4.18	Office of Alcohol and State Programs, NHTSA (Future).
	4.19	Primary Care Providers Survey, OASH, ODPHP (Future).
Family Planning	5.1, 5.1a,b	Abortion Provider Survey, Alan Guttmacher Institute. 1989.
		National Vital Statistics System, CDC, NCHS.
		National Survey of Family Growth, CDC, NCHS.
	5.2, 5.2a	Baseline: National Survey of Family Growth, CDC, NCHS. Updates: National Survey of Family Growth, Telephone Reinterview. CDC, NCHS (Future).
		Pregnancy Risk Assessment Monitoring System, CDC (Future).
	5.3, 5.3a,b	Baseline: National Survey of Family Growth, CDC, NCHS. Updates: National Survey of Family Growth, Telephone Reinterview, CDC, NCHS (Future).
	5.4*	Baseline: National Survey of Family Growth, CDC, NCHS. National Survey of Adolescent Males, NIH, NICHD. Updates: Youth Risk Behavior Survey, CDC, NCCDPHP.
	5.5	Baseline: National Survey of Family Growth, CDC, NCHS. Youth Risk Behavior Survey, CDC, NCCDPHP.
	5.6	Baseline: National Survey of Family Growth, CDC, NCHS. Youth Risk Behavior Survey, CDC, NCCDPHP.
		National Survey of Adolescent Males, NIH, NICHD.
	5.7	Baseline: Forrest, TD and Singh S. Public Sector Savings Resulting from Expenditures for Contraceptive Services. <i>Family Planning Perspectives</i> 22(1):6–15. 1990.
		Updates: National Survey of Family Growth, CDC, NCHS (Future).
		Pregnancy Risk Assessment Monitoring System, CDC, NCCDPHP (Future).
		National Survey of Adolescent Males, NIH, NICHD (Future).
	5.8	Baseline: Planned Parenthood Federation of America, Inc., 1986.
		Update: National Survey of Family Growth, CDC, NCHS (Future).
		National Survey of Adolescent Males, NIH, NICHD (Future).
		National Health Interview Survey, CDC, NCHS (Future).
	5.9	Baseline: Mech EB. Unpublished. 1984. Orientation of Pregnancy Counselors Toward Adoption.
	5.10*	Primary Care Providers Survey, OASH, ODPHP.

**Table C. Data sources for the Healthy People 2000 objectives and subobjectives—Con.**

[\*Indicates duplicate objective]

<i>Priority area</i>	<i>Objective number</i>	<i>Data source</i>
	5.11*	National Questionnaire on Provision of STD and HIV Services by Family Planning Clinics, PHS, OPA.
Mental Health and Mental Disorders	6.1*, 6.1a–d	National Vital Statistics System, CDC, NCHS. Indian Health Service, Office of Planning, Evaluation, and Legislation, Program Statistics Division.
	6.2*	Youth Risk Behavior Survey, CDC, NCCDPHP.
	6.3	Baseline (revised): Bird HR. Estimates of the prevalence of childhood maladjustment in a community survey in Puerto Rico. Archives of Gen Psychiatry 45:1120–26. 1988. Costello EJ, et al. Psychiatric disorders in pediatric primary care: Prevalence risk factors. Archives of Gen Psychiatry 45:1107–16. 1988 Updates: Child Epidemiologic Catchment Area Study, NIH, NIMH (Future).
	6.4	Baseline: Epidemiologic Catchment Area Study, NIH, NIMH. Updates: National Comorbidity Study, NIH, NIMH (Future). National Health and Nutrition Examination Survey, CDC, NCHS. (Future).
	6.5, 6.5a	National Health Interview Survey, CDC, NCHS.
	6.6	National Institute of Mental Health Community Support Program Client Follow-Up Study, SAMHSA.
	6.7	Baseline: Epidemiologic Catchment Area Study, NIH NIMH. Updates: National Comorbidity Survey NIH, NIMH (Future).
	6.8, 6.8a	National Health Interview Survey, CDC, NCHS.
	6.9	“Prevention Index,” Rodale Press, Inc.
	6.10*	National Center on Institutions and Alternatives. CDC, NCIPC.
	6.11	National Survey of Worksite Health Promotion Activities, OASH, ODPHP.
	6.12	Baseline: National Council of Self-Help Clearinghouses and Public Health. Updates: National Network of Mutual Help Centers (Future).
	6.13	Primary Care Providers Survey, OASH, ODPHP.
	6.14	Primary Care Providers Survey, OASH, ODPHP.
Violent and Abusive Behavior	7.1, 7.1a–e	National Vital Statistics System, CDC, NCHS.
	7.1f	Indian Health Service, Office of Planning, Evaluation, and Legislation, Program Statistics Division.
	7.2*, 7.2a–c	National Vital Statistics System, CDC, NCHS.
	7.2d	Indian Health Service, Office of Planning, Evaluation, and Legislation, Program Statistics Division.
	7.3	National Vital Statistics System, CDC, NCHS.
	7.4, 7.4a–d	National Incidence of Child Abuse and Neglect Survey, Office of Human Development, NCCAN.
	7.5	National Family Violence Survey, NIH, NIMH. National Crime Survey, Department of Justice, Bureau of Justice Statistics.
	7.6	National Crime Survey, Department of Justice, Bureau of Justice Statistics.
	7.7, 7.7a	National Crime Survey, Department of Justice, Bureau of Justice Statistics.
	7.8*	Youth Risk Behavior Survey, CDC, NCCDPHP.
	7.9	Youth Risk Behavior Survey, CDC, NCCDPHP.
	7.10	Youth Risk Behavior Survey, CDC, NCCDPHP.
	7.11	National Health Interview Survey, CDC, NCHS (Future).

**Table C. Data sources for the Healthy People 2000 objectives and subobjectives – Con.**

[\*Indicates duplicate objective]

<i>Priority area</i>	<i>Objective number</i>	<i>Data source</i>
	7.12	Joint Accreditation Survey, Joint Commission on the Accreditation of Healthcare Organizations (Future). American Hospital Association. American Medical Association (Future).
	7.13	Baseline: Annual 50 State Survey, National Committee for Prevention of Child Abuse. Update: National Incidence of Child Abuse and Neglect Survey, Office of Human Development, NCCAN (Future).
	7.14	Annual 50 State Survey, National Committee for Prevention of Child Abuse (Future). National Incidence of Child Abuse and Neglect Survey, Office of Human Development, NCCAN (Future).
	7.15	Domestic Violence Statistical Survey, National Coalition Against Domestic Violence.
	7.16	National Survey of School Health Education Activities, CDC, NCCDPHP (Future).
	7.17	National Committee for Prevention of Child Abuse (Future). CDC, NCIPC (Future).
	7.18*	National Center on Institutions and Alternatives, CDC, NCIPC.
Educational and Community-Based Programs	8.1*, 8.1a–c	National Health Interview Survey, CDC, NCHS. National Vital Statistics System, CDC, NCHS.
	8.2	National Center for Education Statistics, National Education Goals Panel.
	8.3	Head Start Bureau: Administration on Children, Youth, and Families; Administration for Children and Families. National Center for Education Statistics, National Education Goals Panel.
	8.4	National Survey of School Health Education Activities, CDC, NCCDPHP.
	8.5	Health Promotion on Campus Survey and Directory, American College Health Association.
	8.6	Baseline: Health Research Institute Biennial Survey, Health Research Institute. Baseline and Updates: National Survey of Worksite Health Promotion Activities, OASH, ODPHP.
	8.7	National Health Interview Survey, CDC, NCHS (Future).
	8.8	Catalog of Local Health Promotion Programs, National Elder Care Institute on Health Promotion, American Association of Retired Persons. State Units of Aging Reporting System, National Association of State Units of Aging.
	8.9	Baseline: Youth Risk Behavior Survey, CDC, NCCDPHP. Updates: National Health Interview Survey, CDC, NCHS (Future).
	8.10	American Hospital Association Annual Survey (Community Health Promotion Section). Public Health Impact Data Base, PHF.
	8.11	Community Demonstration Projects Review, PHS, OMH. Health Education Resource Management System, IHS. Hispanic Chronic Disease Prevention Project, National Coalition of Hispanic Health and Human Services Organizations. Bilingual Service Delivery Project, Association of State and Territorial Health Officials.
	8.12	Annual Survey of Hospitals, American Hospital Association. HMO Industry Profile, Group Health Association of America, Inc.

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[\*Indicates duplicate objective]

<i>Priority area</i>	<i>Objective number</i>	<i>Data source</i>
	8.13	Survey to be developed and administered by a private or voluntary partner, in cooperation with ODPHP.
	8.14	National Profile of Local Health Departments, National Association of County Health Officials. Profile of State and Territorial Public Health Systems, CDC, ASTHO. State Mortality and Morbidity Data, CDC.
Unintentional injuries	9.1, 9.1a–c	National Vital Statistics System, CDC, NCHS.
	9.2	National Hospital Discharge Survey, CDC, NCHS.
	9.3, 9.3a–c,e,f	Fatal Accident Reporting System, DOT, NHTSA.
	9.3d	Indian Health Service, Office of Planning, Evaluation, and Legislation, Program Statistics Division.
	9.4, 9.4a–c	National Vital Statistics System, CDC, NCHS.
	9.5, 9.5a–c	National Vital Statistics System, CDC, NCHS.
	9.6, 9.6a–d	National Vital Statistics System, CDC, NCHS.
	9.6e	National Fire Incident Reporting System, FEMA, US Fire Administration.
	9.7, 9.7a	National Hospital Discharge Survey, CDC, NCHS.
	9.8, 9.8a	National Electronic Injury Surveillance System, Consumer Product Safety Commission, Directorate for Epidemiology.
	9.9	National Hospital Discharge Survey, CDC, NCHS.
	9.10, 9.10a	National Hospital Discharge Survey, CDC, NCHS.
	9.11	National Head and Spinal Cord Injury Survey, NIH, NINCDS.
	9.12, 9.12a	Baseline: 19 Cities Survey, DOT, NHTSA. Updates: Population weighted State surveys, DOT, NHTSA.
	9.13	Youth Risk Behavior Survey, CDC, NCCDPHP (Future). National Health Interview Survey, CDC, NCHS (Future). Baseline: 19 Cities Survey, DOT, NHTSA. Updates: Youth Risk Behavior Survey, CDC, NCCDPHP.
	9.14	DOT, NHTSA.
	9.15	CDC, NCIPC.
9.16	Baseline: FEMA, US Fire Administration. Updates: International Association of Fire Chiefs (Future). FEMA, US Fire Administration.	
9.17	FEMA, US Fire Administration.	
9.18	CDC, NCCDPHP.	
9.19*	CDC, NCPS. NIH, NIDR.	
9.20	DOT, FHA.	
9.21	Primary Care Providers Survey, OASH, ODPHP.	
9.22	CDC, NCIPC.	
Occupational Safety and Health	10.1, 10.1a–d	Annual Survey of Occupational Injuries and Illnesses, DOL, BLS.
	10.2, 10.2a,b	Annual Survey of Occupational Injuries and Illnesses, DOL, BLS.
	10.3	Annual Survey of Occupational Injuries and Illnesses, DOL, BLS.
	10.4	Annual Survey of Occupational Injuries and Illnesses, DOL, BLS.
	10.5*	Viral Hepatitis Surveillance System, CDC, NCID.
	10.6	National Survey of Worksite Health Promotion Activities, OASH, ODPHP.
	10.7	Occupational Hearing Conservation Database, CDC, NIOSH (Future).
10.8	Adult Elevated Blood Lead Level Registries, CDC, NIOSH.	
10.9*	Regulatory Impact Analysis of OSHA Final Rule on Occupational Exposure to Bloodborne Pathogens, DOL, OSHA, ORA.	

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[\*Indicates duplicate objective]

<i>Priority area</i>	<i>Objective number</i>	<i>Data source</i>
Environmental Health	10.10	Association of State and Territorial Health Officials Reporting System: Unintentional Injuries Survey, PHF.
	10.11	CDC, NIOSH (Future).
	10.12	National Survey of Worksite Health Promotion Activities, OASH, ODPHP.
	10.13	National Survey of Worksite Health Promotion Activities, OASH, ODPHP.
	10.14	CDC, NIOSH.
	10.15	Primary Care Providers Survey, OASH, ODPHP (Future).
	11.1, 11.1a,b	National Hospital Discharge Survey, CDC, NCHS.
	11.2*	Metropolitan Atlanta Development Disabilities Study, CDC, NCEH.
	11.3, 11.3a	Waterborne Surveillance System, CDC, NCEH.
	11.4, 11.4a	National Health and Nutrition Examination Survey, CDC, NCHS. CDC State-Based Surveillance for Childhood Lead Poisoning. State & Local Childhood Lead Prevention Programs.
	11.5	National Air Quality and Emissions Trends Report, EPA.
	11.6, 11.6a,b	Baseline: OPA, OAR, Office of Radiation Programs. Updates: National Health Interview Survey, CDC, NCHS (Future).
	11.7	Toxic Chemical Release Inventory, EPA, OPPTS. ATSDR List of Priority Hazardous Substances. DHHS Annual Report on Carcinogens.
	11.8	Baseline: Characterization of Municipal Solid Waste in the United States: 1990 Update, EPA. Updates: EPA, Office of Solid Waste and Emergency Response. EPA, Office of Pollution Prevention.
	11.9	EPA Federal Reporting Data Base. EPA, Office of Ground Water and Drinking Water.
Food and Drug Safety	11.10	National Water Quality Inventory, EPA, Office of Water.
	11.11	National Health Interview Survey, CDC, NCHS.
	11.12	Environmental Law Institute.
	11.13	Alliance to End Childhood Lead Poisoning.
	11.14	National Priorities List, EPA, OSWER.
	11.15	Federal Environmental Progress and Challenges, EPA's Updates.
	11.16	CDC, NCEH.
	12.1	Bacterial Meningitis Surveillance System, CDC, NCID. Campylocacter Surveillance System, CDC, NCID. Salmonella Surveillance System, CDC, NCID.
	12.2	Salmonella Surveillance System, CDC, NCID.
	12.3	Diet-Health Knowledge Survey, USDA, ASFCS.
	12.4	Inspectional Standardization of Institutional Food Service Regulatory Officials, FDA, ORO. Listing of Confirmed Code Adoptions by Local, State, and National Jurisdictions, CFSAN, FDA.
12.5	Food and Drug Administration.	
Oral Health	12.6	Primary Care Providers Survey, OASH, ODPHP.
	13.1, 13.1c	National Survey of Dental Caries in U.S. School Children, 1986-1987, NIH, NIDR.
	13.1a	North Carolina Oral Health School Survey, North Carolina Division of Dental Health, University of North Carolina School of Public Health.
	13.1b,d	Survey of Oral Health, 1983-1984, Indian Health Service, Dental Services Branch. Update: 1991 Oral Health Status and Treatment Needs Survey of American Indians/Alaska Natives, Indian Health Service, Dental Services Branch.

**Table C. Data sources for the Healthy People 2000 objectives and subobjectives – Con.**

[\*Indicates duplicate objective]

<i>Priority area</i>	<i>Objective number</i>	<i>Data source</i>
	13.2, 13.2c	Baseline: National Survey of Dental Caries in U.S. School Children, 1986–1987, NIH, NIDR.
	13.2a	Baseline: North Carolina Oral Health School Survey, North Carolina Division of Dental Health, University of North Carolina School of Public Health.
	13.2b	Baseline: Survey of Oral Health, 1983–1984, Indian Health Service, Dental Services Branch.
	13.2d	Baseline: Hispanic Health and Nutrition Examination Survey, CDC, NCHS. Update: 1991 Oral Health Status and Treatment Needs Survey of American Indians/Alaska Natives, Indian Health Service, Dental Services Branch.
	13.3	Baseline: National Survey of Oral Health in U.S. Employed Adults and Seniors, 1985–1986, NIH, NIDR.
	13.4, 13.4a	Baseline: National Health Interview Survey, CDC, NCHS.
	13.5, 13.5a	National Survey of Oral Health in U.S. Employed Adults and Seniors, 1985–1986, NIH, NIDR.
	13.5b	Baseline: Survey of Oral Health, 1983–1984, Indian Health Service, Dental Services Branch. Update: 1991 Oral Health Status and Treatment Needs Survey of American Indians/Alaska Natives, Indian Health Service, Dental Services Branch.
	13.5c	Baseline: Hispanic Health and Nutrition Examination Survey, CDC, NCHS.
	13.6	Baseline: National Survey of Oral Health in U.S. Employed Adults and Seniors, 1985–1986, NIH, NIDR.
	13.7	National Vital Statistics System, CDC, NCHS.
	13.8	Baseline: National Survey of Dental Caries in U.S. School Children, 1986–1987, NIH, NIDR. Updates: National Health Interview Survey, CDC, NCHS.
	13.9	CDC, NCPS.
	13.10	National Health Interview Survey, CDC, NCHS.
	13.11*, 13.11a	National Health Interview Survey, CDC, NCHS.
	13.11b	Baseline: 1990 Baby Bottle Tooth Decay 5-Year Evaluation Report, Indian Health Service, Dental Services Branch.
	13.12	National Health Interview Survey (1986, 1989, 1991), CDC, NCHS.
	13.13	Health Care Financing Administration. National Commission on Correctional Health Care (Future).
	13.14	National Health Interview Survey (1986, 1989, 1991), CDC, NCHS.
	13.15	Baseline: State Public Health Dentists Survey, Illinois State Health Department.
	13.16*	CDC, NCPS. NIH, NIDR.
Maternal and Infant Health	14.1, 14.1a–j	National Vital Statistics System, CDC, NCHS.
	14.2, 14.2a	National Vital Statistics System, CDC, NCHS.
	14.3, 14.3a	National Vital Statistics System, CDC, NCHS.
	14.4, 14.4a,b	Births Defects Monitoring System, CDC, NCEH.
	14.5, 14.5a,b	National Vital Statistics System, CDC, NCHS.
	14.6	Baseline: National Natality Survey, CDC, NCHS. Updates: National Maternal and Infant Health Survey, CDC, NCHS.
	14.7	National Vital Statistics System, CDC, NCHS.
	14.8, 14.8a,b	National Hospital Discharge Survey, CDC, NCHS.
	14.9*	Ross Laboratories Mother Survey.
	14.9a–d	Pediatric Nutrition Surveillance System, CDC, NCCDPHP.



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<i>Priority area</i>	<i>Objective number</i>	<i>Data source</i>
Heart Disease and Stroke	14.10	Baseline: National Health Interview Survey, CDC, NCHS. Updates: National Maternal and Infant Health Survey, CDC, NCHS. National Vital Statistics System, CDC, NCHS. National Health Interview Survey, CDC, NCHS.
	14.11, 14.11a–c	National Vital Statistics System, CDC, NCHS.
	14.12*	Primary Care Providers Survey, OASH, ODPHP.
	14.13	College of American Pathologists. Foundation for Blood Research.
	14.14	Annual Report to Congress Summarizing State Reports required under title V under the MCH Block Grant, MCHB, HRSA.
	14.15	Council of Regional Networks for Genetic Services.
	14.16	Primary Care Providers Survey, OASH, ODPHP.
	15.1*, 15.1a	National Vital Statistics System, CDC, NCHS.
	15.2, 15.2a	National Vital Statistics System, CDC, NCHS.
	15.3, 15.3a	End Stage Renal Disease Medicare Reimbursement Data, HCFA, Bureau of Data Management and Strategy.
	15.4	National Health and Nutrition Examination Survey, CDC, NCHS.
	15.4a	Baseline: 1982–89 Seven States Study, NIH. Updates: National Health and Nutrition Examination Survey, CDC, NCHS (Future).
	15.5, 15.5a,b	National Health Interview Survey, CDC, NCHS.
	15.6	National Health and Nutrition Examination Survey, CDC, NCHS.
	15.7	National Health and Nutrition Examination Survey, CDC, NCHS.
	15.8	Baseline: Health and Diet Survey, FDA. Update: National Health and Nutrition Examination Survey, CDC, NCHS (Future).
	15.9*	Baseline: National Health and Nutrition Examination Survey, CDC, NCHS. Continuing Survey of Food Intakes by Individuals, USDA. 1989 Update: Continuing Survey of Food Intakes by Individuals, USDA.
	15.10*, 15.10a,b	Baseline: National Health and Nutrition Examination Survey, CDC, NCHS. Updates: National Health Interview Survey, CDC, NCHS.
	15.10c	Baseline: Hispanic Health and Nutrition Examination Survey, CDC, NCHS. Updates: National Health Interview Survey, CDC, NCHS.
	15.10d	Baseline: Indian Health Service, Office of Planning, Evaluation, and Legislation, Program Statistics Division. Updates: National Health Interview Survey, CDC, NCHS.
	15.10e	National Health Interview Survey, CDC, NCHS.
	15.10f,g	National Health and Nutrition Examination Survey, CDC, NCHS.
	15.11*	National Health Interview Survey, CDC, NCHS. Original baseline: Behavioral Risk Factor Surveillance System, CDC, NCCDPHP.
15.12, 15.12a,b,d,h,i	National Health Interview Survey, CDC, NCHS.	
15.12c	Worldwide Survey of Substance Abuse and Health Behaviors Among Military Personnel, DoD, OASD.	
15.12e	Baseline: Hispanic Health and Nutrition Examination Survey, CDC, NCHS. Updates: National Health Interview Survey, CDC, NCHS.	
15.12f	Baseline: CDC, 1987. Updates: National Health Interview Survey, CDC, NCHS.	

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<i>Priority area</i>	<i>Objective number</i>	<i>Data source</i>
Cancer	15.12g	Baseline: Local Surveys. Update: Jenkins CH. Cancer risks and prevention practices among Vietnamese refugees. <i>Western J of Med</i> 153:34–9. 1990.
	15.12j	Behavioral Risk Factor Surveillance System, CDC, NCCDPHP.
	15.13	National Health Interview Survey, CDC, NCHS.
	15.14	Baseline: Health and Diet Survey, FDA. 1990 Update: Cholesterol Awareness Survey, NHLBI, NIH. 1991 Update: National Health Interview Survey, CDC, NCHS.
	15.15	Primary Provider Care Survey, OASH, ODPHP (Future).
	15.16	National Survey of Worksite Health Promotion Activities, OASH, ODPHP.
	15.17	Comprehensive Chemistry Survey of Laboratories Using Enzymatic Methods, College of American Pathologists.
	16.1*	National Vital Statistics System, CDC, NCHS.
	16.2*	National Vital Statistics System, CDC, NCHS.
	16.3	National Vital Statistics System, CDC, NCHS.
	16.4	National Vital Statistics System, CDC, NCHS.
	16.5	National Vital Statistics System, CDC, NCHS.
	16.6*, 16.6a,b,d,h,i	National Health Interview Survey, CDC, NCHS.
	16.6c	Worldwide Survey of Substance Abuse and Health Behaviors Among Military Personnel, DoD, OASD.
	16.6e	Baseline: Hispanic Health and Nutrition Examination Survey, CDC, NCHS. Updates: National Health Interview Survey, CDC, NCHS.
	16.6f	Baseline: CDC, 1987. Updates: National Health Interview Survey, CDC, NCHS.
	16.6g	Baseline: Local Surveys. Update: Jenkins CH. Cancer risks and prevention practices among Vietnamese refugees. <i>Western J of Med</i> 153:34–9. 1990.
	16.6j	Behavioral Risk Factor Surveillance System, CDC, NCCDPHP.
	16.7*	Baseline: National Health and Nutrition Examination Survey, CDC, NCHS. Continuing Survey of Food Intakes by Individuals, USDA. 1989 Update: Continuing Survey of Food Intakes by Individuals, USDA.
	16.8*	Continuing Survey of Food Intakes by Individuals, USDA.
	16.9	National Health Interview Survey. CDC, NCHS.
	16.10	Baseline: Wells, et al, 1986 Updates: 1989 Survey of Physician's Attitudes and Practices in Early Cancer Detection, NCI. Primary Care Providers Survey, OASH, ODPHP (Future).
	16.11, 16.11a–d	National Health Interview Survey, CDC, NCHS.
	16.12, 16.12a–d	National Health Interview Survey, CDC, NCHS.
	16.13	National Health Interview Survey, CDC, NCHS.
	16.14	National Health Interview Survey, CDC, NCHS.
	16.15	National Cancer Institute, Division of Cancer Prevention and Control Surveillance Program.
16.16	American College of Radiology.	
Diabetes and Chronic Disabling Conditions	17.1*, 17.1a–c	National Vital Statistics System, CDC, NCHS. National Health Interview Survey, CDC, NCHS.
	17.2, 17.2a–c	National Health Interview Survey, CDC, NCHS.
	17.3, 17.3a	Baseline: National Health Interview Survey, CDC, NCHS. National Nursing Home Survey, CDC, NCHS. Updates: National Health Interview Survey, CDC, NCHS.

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<i>Priority area</i>	<i>Objective number</i>	<i>Data source</i>
	17.4	National Health Interview Survey, CDC, NCHS.
	17.5	National Health Interview Survey, CDC, NCHS.
	17.6, 17.6a	National Health Interview Survey, CDC, NCHS.
	17.7, 17.7a	National Health Interview Survey, CDC, NCHS.
	17.8*	Metropolitan Atlanta Developmental Disabilities Study, CDC, NCEH.
	17.9, 17.9a,b	National Vital Statistics System, CDC, NCHS.
	17.10	Massachusetts Blind Registry, Massachusetts Commission on the Blind. Health Care Financing Administration, Bureau of Data Management and Strategy.
	17.10a,b,c	National Health Interview Survey, CDC, NCHS. National Hospital Discharge Survey, CDC, NCHS. Health Care Financing Administration Bureau of Data Management and Strategy National Hospital Discharge Survey National Hospital Discharge Survey, CDC, NCHS. Program Statistics, PHS, IHS.
	17.11, 17.11e	National Health Interview Survey, CDC, NCHS.
	17.11a	Ambulatory Utilization Data, Indian Health Service.
	17.11b–d	Baseline: Hispanic Health and Nutrition Examination Survey, CDC, NCHS.
	17.12*, 17.12a,b	Baseline: National Health and Nutrition Examination Survey, CDC, NCHS.
	17.12c	Updates: National Health Interview Survey, CDC, NCHS. Baseline: Hispanic Health and Nutrition Examination Survey, CDC, NCHS.
	17.12d	Updates: National Health Interview Survey, CDC, NCHS. Baseline: Indian Health Service, Office of Planning Evaluation and Legislation, Program Statistics Division.
	17.12e	Updates: National Health Interview Survey, CDC, NCHS.
	17.12f,g	National Health Interview Survey, CDC, NCHS. National Health and Nutrition Examination Survey, CDC, NCHS.
	17.13*	Original baseline: Behavioral Risk Factor Surveillance System, CDC, NCCDPHP. National Health Interview Survey, CDC, NCHS.
	17.14, 17.14a,b	Baseline: Halpern M. The impact of diabetes education in Michigan. Diabetes 38(2):151A, 1989. Updates: National Health Interview Survey, CDC, NCHS.
	17.15	Primary Care Providers Survey, OASH, ODPHP.
	17.16	Baseline: Annual Survey of Hearing Impaired Children and Youth, Commission on Education of the Deaf. Updates: National Health Interview Survey, CDC, NCHS.
	17.17	Primary Care Providers Survey, OASH, ODPHP.
	17.18	National Health Interview Survey, CDC, NCHS (Future).
	17.19	Baseline: Survey of Persons with Disability, International Center for the Disabled.
	17.20	Annual Report to Congress summarizing State reports required under Title V MCH Block Grant, MCHB, HRSA.
HIV Infection	18.1, 18.1a–c	AIDS Surveillance System, CDC, NCID.
	18.2, 18.2a–c	CDC, NCID.
	18.3*	Baseline: National Survey of Family Growth, CDC, NCHS. National Survey of Adolescent Males, NIH, NICHD. Updates: Youth Risk Behavior Survey, CDC, NCCDPHP.
	18.4*	National Survey of Family Growth, CDC, NCHS.
	18.4a	Baseline: National Survey of Family Growth, CDC, NCHS. Updates: Youth Risk Behavior Survey, CDC, NCCDPHP.
	18.4b	Baseline: National Survey of Adolescent Males, NIH, NICHD. Updates: Youth Risk Behavior Survey, CDC, NCCDPHP.

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<i>Priority area</i>	<i>Objective number</i>	<i>Data source</i>
	18.4c	None.
	18.5	SAMHSA.
	18.6	National AIDS Demonstration Research Program, NIH, NIDA.
	18.7	CDC, NCID.
	18.8	HIV Counseling and Testing Data Sites System, CDC, NCPS.
	18.9	Baseline: Primary Care Physician Survey of Sexual History-taking and Counseling Practices, Lewis GE and Freeman HE. Western Journal of Medicine, 147: 165–7. 1987. Updates: Primary Care Providers Survey, OASH, ODPHP.
	18.9a	Primary Care Providers Survey, OASH, ODPHP.
	18.10	AIDS education: Public school programs require more student information and teacher training, GAO, 1990.
	18.11	American College Health Association (Future).
	18.12	CDC, NCPS.
	18.13	National Questionnaire on Provision of STD and HIV Services by Family Planning Clinics, PHS, OPA.
	18.14	OSHA.
Sexually Transmitted Diseases	19.1, 19a–c	Sexually Transmitted Disease Surveillance System, CDC, NCPS.
	19.2	National Disease and Therapeutic Index, IMS America, Ltd.
	19.3, 19.3a	Sexually Transmitted Disease Surveillance System, CDC, NCPS.
	19.4	Sexually Transmitted Disease Surveillance System, CDC, NCPS.
	19.5	National Disease and Therapeutic Index, IMS America, Ltd.
	19.6	National Hospital Discharge Survey, CDC, NCHS.
	19.7*	Viral Hepatitis Surveillance System, CDC, NCID.
	19.8	Sexually Transmitted Disease Surveillance System, CDC, NCPS.
	19.9*	Baseline: National Survey of Family Growth, CDC, NCHS. National Survey of Adolescent Males, NIH, NICHD. Updates: Youth Risk Behavior Survey, CDC, NCCDPHP.
	19.10*	National Survey of Family Growth, CDC, NCHS.
	19.10a	Baseline: National Survey of Family Growth, CDC, NCHS. Updates: Youth Risk Behavioral Survey, CDC, NCCDPHP.
	19.10b	Baseline: National Survey of Adolescent Males, NIH, NICHD. Updates: Youth Risk Behavioral Survey, CDC, NCCDPHP.
	19.10c	None.
	19.11*	National Questionnaire on Provision of STD and HIV Services by Family Planning Clinics, PHS, OPA.
	19.12	Baseline: Risk and Responsibility: Teaching Sex Education in America's Schools Today, Survey of Large School Districts on Sex and AIDS Education, Alan Guttmacher Institute, New York. 1989.
	19.13	National Disease and Therapeutic Index, IMS Americas, Ltd.
	19.14*	Baseline: Primary Care Physician Survey of Sexual History-taking and Counseling Practices, Lewis GE and Freeman HE. Western Journal of Medicine, 147: 165–7. 1987. Updates: Primary Care Providers Survey, OASH, ODPHP.
	19.14a	Primary Care Providers Survey, OASH, ODPHP.
	19.15	Sexually Transmitted Disease Surveillance System, CDC, NCPS.

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<i>Priority area</i>	<i>Objective number</i>	<i>Data source</i>
Immunization and Infectious Diseases	20.1	National Notifiable Disease Surveillance System, CDC, EPO.
	20.2	CDC, NCID and NCHS.
	20.3*, 20.3a–g	Viral Hepatitis Surveillance System, CDC, NCID.
	20.4, 20.4a–d	Tuberculosis Morbidity Data, CDC, NCPS.
	20.5	National Nosocomial Infection Surveillance System, CDC, NCID.
	20.6	Malaria Surveillance System, CDC, NCID. Typhoid Surveillance System, CDC, NCID. Viral Hepatitis Surveillance System, CDC, NCID.
	20.7, 20.7a	Bacterial Meningitis Surveillance System, CDC, NCID.
	20.8	National Health Interview Survey, CDC, NCHS.
	20.9	National Health Interview Survey, CDC, NCHS.
	20.10	National Health Interview Survey, CDC, NCHS.
	20.11	United States Immunization Survey, CDC, NCPS. State Immunization Survey, CDC, NCPS. National Health Interview Survey, CDC, NCHS. Perinatal Hepatitis B Screening Grant Program, CDC, NCID. Regulatory Impact Analysis of OSHA Final Rule on Occupational Exposure to Bloodborne Pathogens, DOL, OSHA, ORA.
	20.12	Rabies Vaccine and Immune Globulin Manufacturers Sales Data, CDC, NCID.
	20.13	Survey of Immunization Laws, CDC, NCPS.
	20.14	Primary Care Providers Survey, OASH, ODPHP.
	20.15	Health Insurance Association of America Employer Survey, Health Insurance Association of America.
	20.16	Immunization Grant Program Profiles, CDC, NCPS.
	20.17	Tuberculosis Screening and Preventive Therapy Summary Reports, CDC, NCPS.
	20.18	Tuberculosis Program Management Report Data on Completion of Preventive Therapy, CDC, NCPS.
	20.19	Survey of Laboratories using Rapid Viral Diagnosis of Influenza, CDC, NCID.
	Clinical Preventive Services	21.1, 21.1(a–c)
21.2, 21.2d–l		National Health Interview Survey, CDC, NCHS.
21.2a–c		National Health Interview Survey, CDC, NCHS (Future).
21.3, 21.3a–c		Baseline: 1986 Access to Health Care Survey, Robert Wood Johnson Foundation. Updates: National Health Interview Survey, CDC, NCHS.
21.4		National Health Interview Survey, CDC, NCHS.
21.5		BHCDA Survey, HRSA, OPEL. Survey of Federal Programs, HRSA, OPEL.
21.6		Primary Care Providers Survey, OASH, ODPHP.
21.7		National Profile of Local Health Departments, National Association of County Health Officials.
21.8		Minorities and Women in the Health Fields, HRSA, BHP.
Surveillance and Data Systems	22.1	CDC, NCHS.
	22.2	Baseline: ODPHP (National data); Public Health Foundation (State data). Updates: CDC, NCHS.
	22.3	CDC, NCHS.
	22.4	Subcommittee on State and Community Health Statistics, NCVHS (Future).
	22.5	Public Health Foundation.
	22.6	CDC, IRMO, and NCHS.
	22.7	CDC.

**Table D. Health Status Indicators**

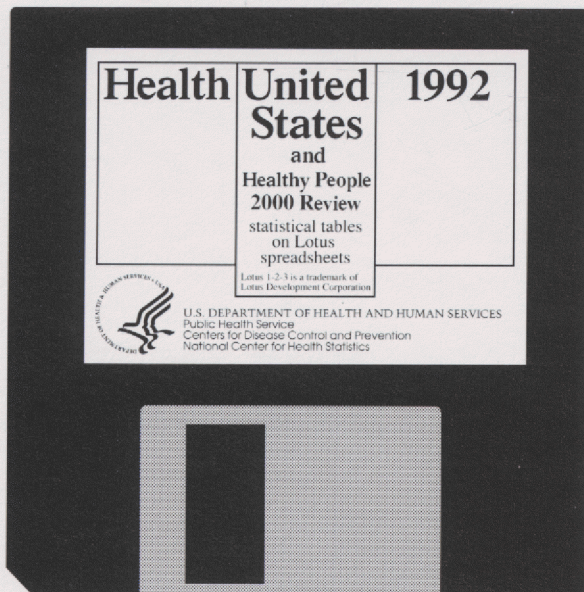
<i>Health status indicators</i>	<i>1990</i>
Race/ethnicity-specific infant mortality as measured by the rate (per 1,000 live births) of deaths among infants under one year of age.	9.2
White	7.6
Black	18.0
American Indian	13.0 (data are for 1987)
Chinese	7.3 "
Japanese	6.2 "
Filipino	6.6 "
Other Asian or Pacific Islander	7.9 "
Hispanic origin	8.2 "
Total deaths per 100,000 population. (ICD-9 nos. 0-E999) <sup>1</sup>	520.2
Motor vehicle crash deaths per 100,000 population. (ICD-9 nos. E810-E825) <sup>1</sup>	18.5
Work-related injury deaths per 100,000 population.	2.3
Suicides per 100,000 population. (ICD-9 nos. E950-E959) <sup>1</sup>	11.5
Homicides per 100,000 population. (ICD-9 nos. E960-E978) <sup>1</sup>	10.2
Lung cancer deaths per 100,000 population. (ICD-9 no. 162) <sup>1</sup>	39.9
Female breast cancer deaths per 100,000 women. (ICD-9 no. 174) <sup>1</sup>	23.1
Cardiovascular disease deaths per 100,000 population. (ICD-9 nos. 390-448) <sup>1</sup>	189.8
Reported incidence (per 100,000 population) of acquired immunodeficiency syndrome.	18.1 (data are for 1992)
Reported incidence (per 100,000 population) of measles.	3.8 (data are for 1991)
Reported incidence (per 100,000 population) of tuberculosis.	10.4 "
Reported incidence (per 100,000 population) of primary and secondary syphilis	17.3 "
Prevalence of low birth weight as measured by the percentage of live born infants weighing under 2,500 grams at birth.	7.0
Births to adolescents (ages 10-17 years) as a percentage of total live births	4.7
Prenatal care as measured by the percentage of mothers delivering live infants who did not receive care during the first trimester of pregnancy.	24.2
Childhood poverty, as measured by the proportion of children under 15 years of age living in families at or below the poverty level.	21.4
Proportion of persons living in counties exceeding U.S. Environmental Protection Agency standards for air quality during the previous year.	32

<sup>1</sup>Age adjusted to the 1940 population.



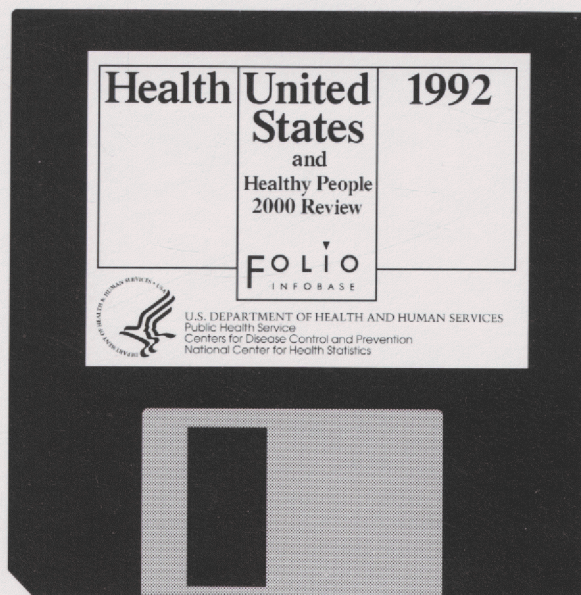
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