

HEALTHY
PEOPLE

2000

*National Health Promotion and
Disease Prevention Objectives*

*Healthy People
2000 Review
1998-99*



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



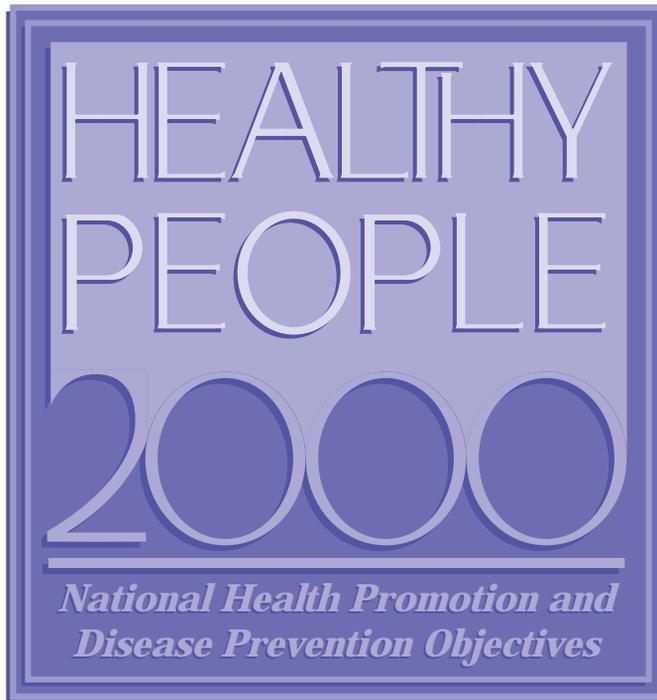
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Preface

The *Healthy People 2000 Review, 1998–99*, sixth in a series of profiles tracking the year 2000 objectives, is submitted by the Secretary of Health and Human Services to 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, Office of Disease Prevention and Health Promotion, Healthy People 2000 Steering Committee, and lead agencies for the year 2000 objectives served in a review capacity.

Healthy People 2000 Review, which replaces the *Prevention Profiles* that monitored the 1990 national health objectives, continues the series of profiles of the Nation's health objectives 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*. This publication provides the latest available tracking data for objectives and subobjectives in all priority areas throughout the decade. The 1995 Midcourse review modifications to the objectives have been incorporated.

Acknowledgments

Overall responsibility for planning and coordinating the content of the volume rested with the Division of Health Promotion Statistics, Office of Analysis, Epidemiology, and Health Promotion, National Center for Health Statistics (NCHS), under the general direction of Diane K. Wagener and Richard J. Klein.

The production of the *Healthy People 2000 Review, 1998–99* was accomplished by several working teams coordinated by Colleen M. Ryan and Kathleen M. Turczyn. Team members included Elizabeth W. Jackson, Insun Kim, Richard J. Klein, Cheryl V. Rose, Colleen M. Ryan, J. Fred Seitz, Kathleen M. Turczyn, and Jean F. Williams. Additional computer programming and administrative support was provided by Jeffrey N. Percy, Thomas C. Socey, Veronica D. Adams, and Kawoanna Wiggins.

Publications management and editorial review were provided by Gail V. Johnson and Rolfe W. Larson. The designer was Sarah M. Hinkle. Graphics were supervised by Stephen L. Sloan. Production was done by Annette F. Holman. Printing was managed by Joan D. Burton.

Publication of *Healthy People 2000 Review, 1998–99* would not have been possible without the contributions of many staff members throughout NCHS and numerous other agencies, particularly Debbie Maiese, Office of Disease Prevention and Health Promotion. These people gave generously of their time and knowledge; their cooperation and assistance are gratefully acknowledged.

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Introduction

Background

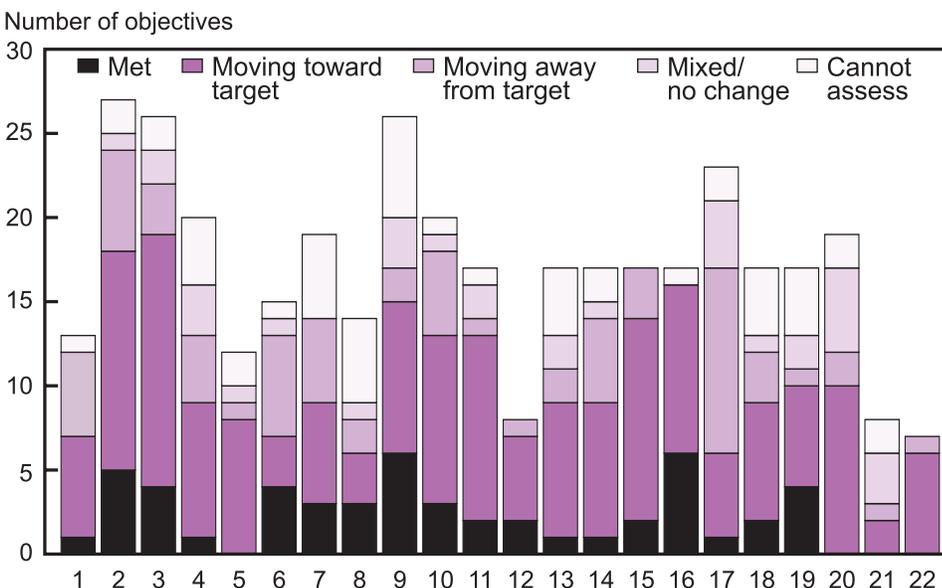
Healthy People 2000: National Health Promotion and Disease Prevention Objectives (1) presents a national prevention strategy for significantly improving the health of the American people. *Healthy People 2000* identifies three broad goals and 319 objectives. The goals focus on increasing the span of healthy life, reducing health disparities, and achieving access to preventive services for everyone. The objectives are organized into 22 priority areas. For each of these priority areas, one or more U.S. Public Health Service (PHS) agencies are designated to coordinate activities directed toward attaining the objectives (see appendix table I).

The Public Health Service periodically reviews progress toward the year 2000 objectives for specific priority areas and for special population groups in briefings with the Surgeon General and Assistant Secretary for Health. Summaries of these briefings are published as part of *Public Health Service Progress Review Reports on Healthy People 2000* (2) and are available on the internet at http://odphp.osophs.dhhs.gov/pubs/hp2000/prog_rvw.htm. The *Healthy People 2000 Review* series, which began with *Healthy People 2000 Review, 1992* (3), presents an overview of the current status of progress toward all of the national year 2000 objectives. The 1992–94 *Reviews* (3–5) reported on the objectives as published in the 1990 *Healthy People 2000* (1). Beginning with the 1995–96 *Review* (6), the current status of progress toward the year 2000 targets includes all additions and modifications that resulted from the 1995 PHS midcourse review of the *Healthy People 2000* objectives (7) (see the Midcourse Modifications section in the appendix). The *Healthy People 2000* objectives, tracking data, and additional information are available on the Internet at <http://www.health.gov/healthypeople> (see the Additional Sources of Monitoring Data and Information section in the appendix).

Summary of Progress

There are 319 unduplicated main objectives. Because some priority areas

Figure 1. Healthy People 2000 objectives: Summary of progress by priority area



Priority area	Met	Moved toward target	Moved away from target	Mixed/no change	Cannot assess	Total
1.....	1	6	5	0	1	13
2.....	5	13	6	1	2	27
3.....	4	15	3	2	2	26
4.....	1	8	4	3	4	20
5.....	0	8	1	1	2	12
6.....	4	3	6	1	1	15
7.....	3	6	5	0	5	19
8.....	3	3	2	1	5	14
9.....	6	9	2	3	6	26
10.....	3	10	5	1	1	20
11.....	2	11	1	2	1	17
12.....	2	5	1	0	0	8
13.....	1	8	2	2	4	17
14.....	1	8	5	1	2	17
15.....	2	12	3	0	0	17
16.....	6	10	0	0	1	17
17.....	1	5	11	4	2	23
18.....	2	7	3	1	4	17
19.....	4	6	1	2	4	17
20.....	1	9	2	5	2	19
21.....	0	2	1	3	2	8
22.....	0	6	1	0	0	7

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

share identical objectives, there is a total of 376 objectives including the duplicates. Subobjectives for minorities and other special populations were established to address increased health risks or disparities compared with the total population. There are 319

subobjectives; with duplicates, there are 429 (7).

Movement either toward or away from the target is determined by the direction of the change between the

baseline and the most recent data point. Some of these changes are relatively small and may be within what could be expected on the basis of sampling or random variation. For objectives with more than one measure (“compound” objectives), if data show trends in different directions, progress is labeled as “mixed.” For compound objectives with partial data, progress is determined by the direction of the measure(s) with data (for example, objective 12.3). Finally, a few objectives are very broad in scope and tracking data are not available; in these cases the subobjectives are being used to track progress (for example, objective 17.14). The following summary of progress is based on the 319 unduplicated objectives. Current data indicate that 15 percent of the objectives have met the year 2000 targets. Movement toward the targets has been made for another 44 percent of the objectives, and 18 percent show movement away from the targets. Data for 6 percent of the objectives show mixed results and 3 percent show no change from the baseline. Thirty-five objectives (11 percent) have baseline data but have no additional data with which to evaluate progress (several objectives in this category have supplemental data that cannot be used for determination of progress). Two new baselines were obtained this year (for objectives 8.8 and 8.11). Baselines have yet to be obtained for 9 objectives (3 percent) (see Priority Area 22). **Figure 1** shows the progress of the objectives by priority area.

Organization and Scope of this Review

This *Review* is organized into four major sections. The introductory section includes a brief history of *Healthy People 2000* and a summary of the progress of all year 2000 objectives.

The second section is a chart section. Each year, beginning with the 1995–96 issue, the *Review* focuses on special population groups targeted by *Healthy People 2000*. This year, a selection of subobjectives for people at different life stages is highlighted with a series of charts showing the latest data on progress toward the subobjective targets. The choice of charts is meant to be illustrative and does not confer more relative importance to any of the

subobjectives shown than to subobjectives not shown.

The third section consists of 22 chapters, one for each *Healthy People 2000* priority area. Each chapter contains a summary data table, a text discussion of specific data issues, a chart representing one of the priority area objectives, and the full text of the objectives in that priority area. Baseline data that have been revised from those published in the *Healthy People 2000 Midcourse Review and 1995 Revisions* (7) are indicated with a footnote “a” in the data table.

The text for each chapter includes a brief discussion of the public health significance of the priority area, data highlights, a summary of the progress for the objectives, and data issues that may not be apparent from the summary table or the text of the objective, such as proxy measures, differing tracking systems, and operational definitions.

Most charts show the movement of one of the priority area objectives toward or away from the objective target. Some show the latest data for special population subobjectives. As in the chart section, the choice of charts does not confer more relative importance to any of the objectives shown.

An appendix and eight appendix tables comprise the fourth section. The appendix presents and discusses major data issues involved in the monitoring of the objectives and subobjectives. Sources of additional information on *Healthy People 2000* are also presented.

■ **Table I** lists the priority area lead agencies

■ **Table II** lists the acronyms used in the list of data sources in the chapter data summary tables

■ **Table III** displays the cause-of-death categories used for the *Healthy People 2000* mortality objectives compared with the cause-of-death categories used for the mortality tabulations published by the National Center for Health Statistics

■ **Table IV** lists ICD–9–CM codes used for objectives tracked by the National Hospital Discharge Survey

■ **Table V** shows trends in the Health Status Indicators developed for objective 22.1

■ **Table VI** presents the latest available Health Status Indicators data for racial and Hispanic-origin population groups

■ **Table VII** shows progress since the 1987 baseline for the age-related

objectives; these four *Healthy People 2000* objectives continue monitoring the data for the five major life-stage goals of the 1990 health promotion and disease prevention initiative (8)

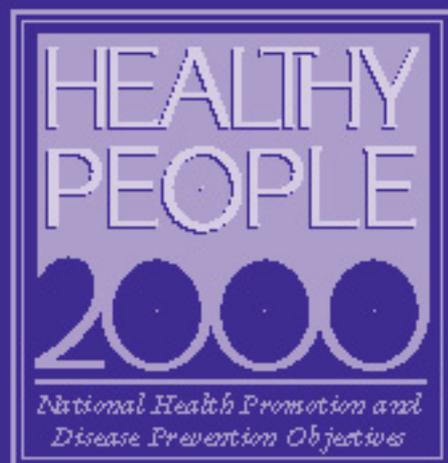
■ **Table VIII** lists the publications in the *Healthy People 2000 Statistical Notes* series to date.

Healthy People 2010

The *Healthy People 2010* objectives are currently under development. The draft objectives were available for public comment during fall 1998. The final objectives will be developed during 1999 and will be published in January 2000. For more information on *Healthy People 2010*, see <http://web.health.gov/healthypeople/>.

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2. U.S. Department of Health and Human Services. *Public Health Service progress review reports on healthy people 2000*. Washington: Public Health Service. 1991–93.
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*Charting Special
Populations:
Life-Stage Objectives*

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Charting Special Populations: Life-Stage Objectives

This special chart section focuses on objectives in *Healthy People 2000* that are important to people at different stages in life. Included in the 26 charts are selected data from objectives targeting infants and children, adolescents and young adults, adults, and older adults.

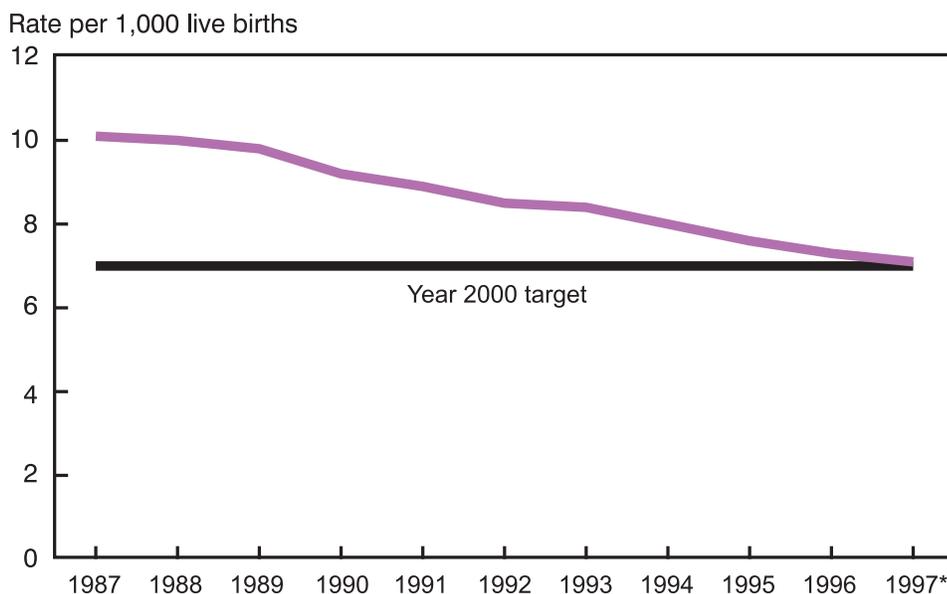
The figures shown are illustrative; the choice of objectives and subobjectives does not confer more relative importance to those shown than to others.

Infant Mortality

Status: moving toward target

Between 1987 and 1997, infant mortality rates have declined steadily. At the current average annual rate of decline, the year 2000 target of 7 infant deaths per 1,000 live births will be met in 1998.

Figure A. Infant mortality rates: United States, 1987–97, and year 2000 target for objective 14.1

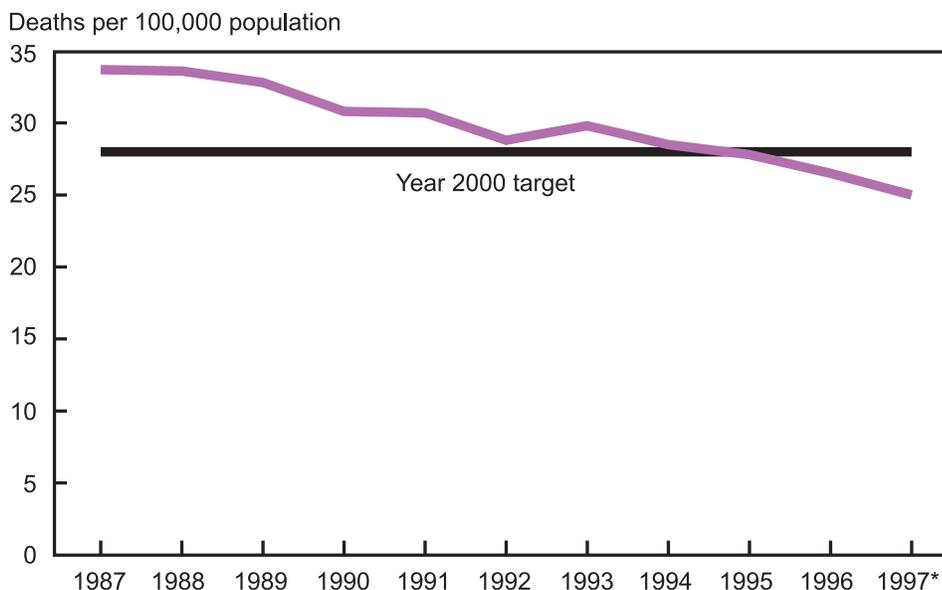


Deaths: 1–14 Years

Status: target met

Death rates for children 1–14 years have declined by 26 percent from the 1987 baseline to surpass the year 2000 target of 28 deaths per 100,000 population. Preliminary 1997 data indicate a death rate of 25 per 100,000 population for this age group.

Figure B. Death rates for children 1–14 years: United States, 1987–97, and year 2000 target

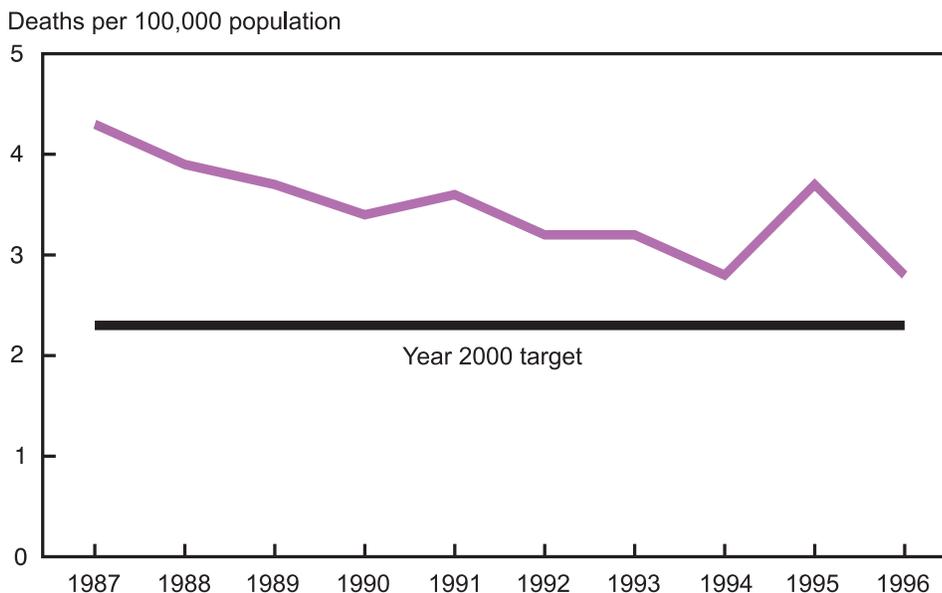


Deaths From Drowning

Status: moving toward target

The drowning death rate for children 4 years and under was 2.8 in 1996. This is a decrease from the rate of 3.7 recorded for 1995 and equals the rate observed in 1994.

Figure C. Death rates from drowning for children 4 years and under: United States, 1987–96, and year 2000 target for objective 9.5a

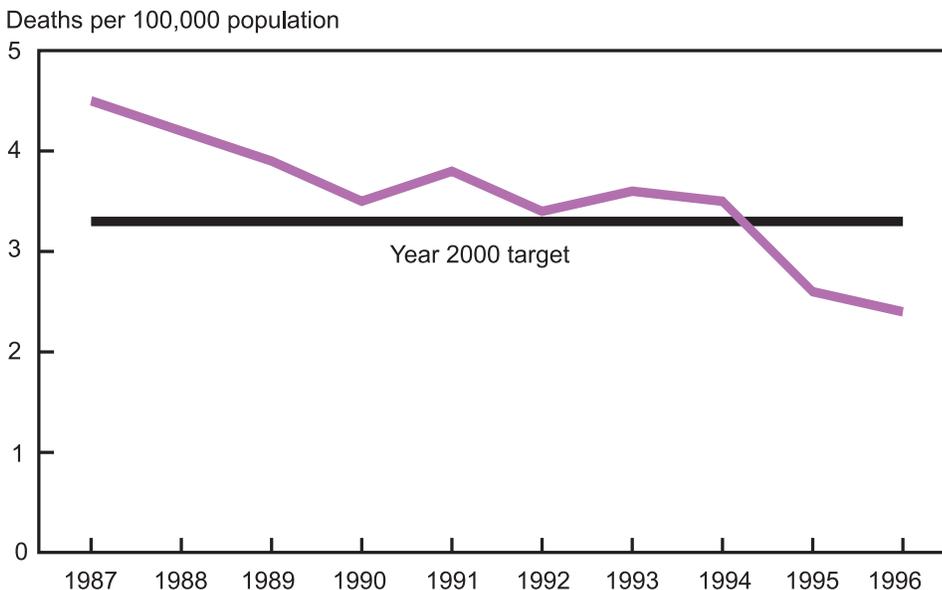


Deaths From Fire

Status: target met

The death rate from fire for children 4 years and under was 2.4 in 1996. The year 2000 target of 3.3 deaths per 100,000 children in this age group was met in 1995.

Figure D. Death rates from fires for children 4 years and under: United States, 1987–96, and year 2000 target for objective 9.6a

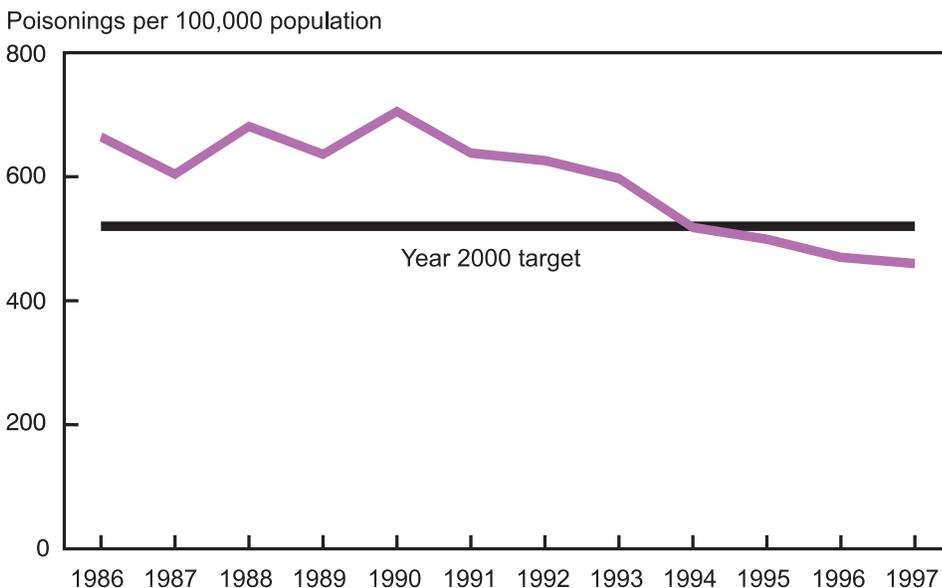


Nonfatal Poisonings

Status: target met

Although the method for calculating nonfatal poisoning rates among children 4 years and under has changed since the establishment of the year 2000 objective, the target of 520 poisonings per 100,000 children in this group was surpassed in 1995 and has improved consistently since then. (See Priority Area 9 text for more information.)

Figure E. Nonfatal poisoning rates among children 4 years and under: United States, 1986–97, and year 2000 target for objective 9.8a

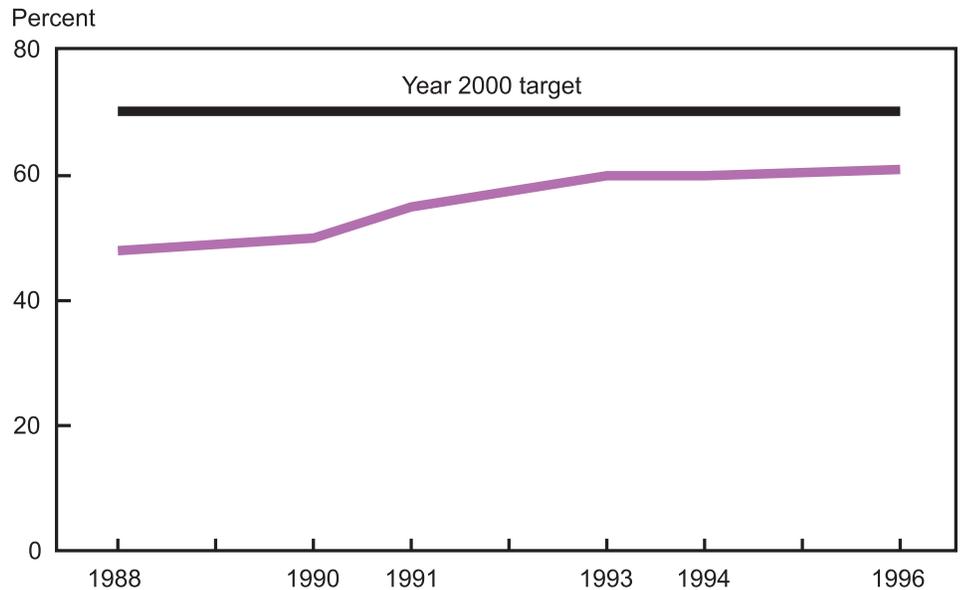


Motor Vehicle Child Safety

Status: moving toward target

The proportion of children 4 years and under using child restraint systems such as safety belts and child safety seats has increased from 48 percent in 1988 to 61 percent in 1996 approaching the year 2000 target of 70 percent.

Figure F. Proportion of children 4 years and under using motor vehicle occupant protection systems: United States, selected years 1988–96, and year 2000 target for objective 9.12a

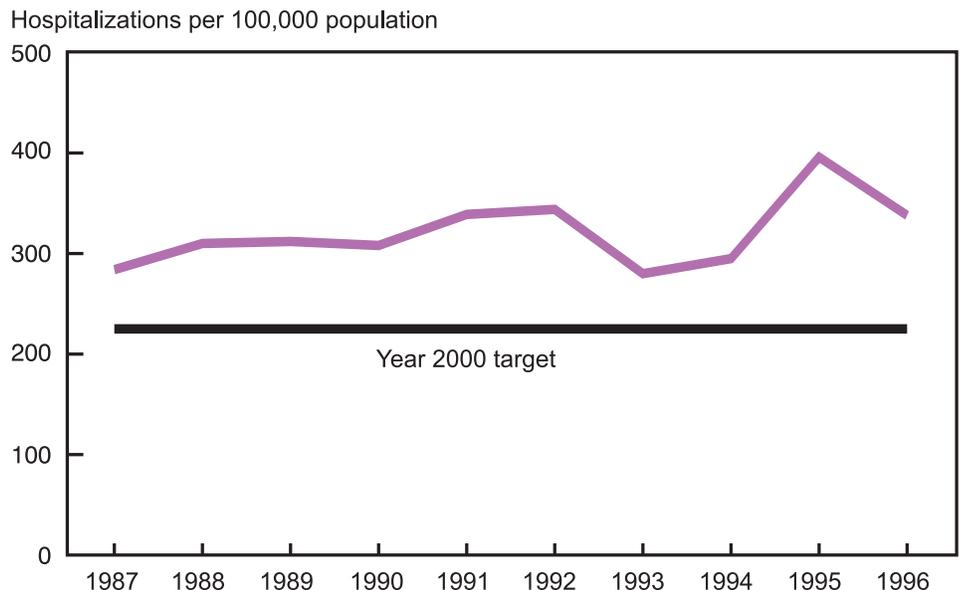


Asthma Hospitalization

Status: moving away from target

The rate of hospitalization from asthma for children 14 years and under was 338 per 100,000 population in 1996. This is an improvement compared with the 1995 rate of 396, although it is still considerably above the baseline rate (284) observed in 1987.

Figure G. Asthma hospitalization rates for children 14 years and under: United States, 1987–96, and year 2000 target for objective 11.1b

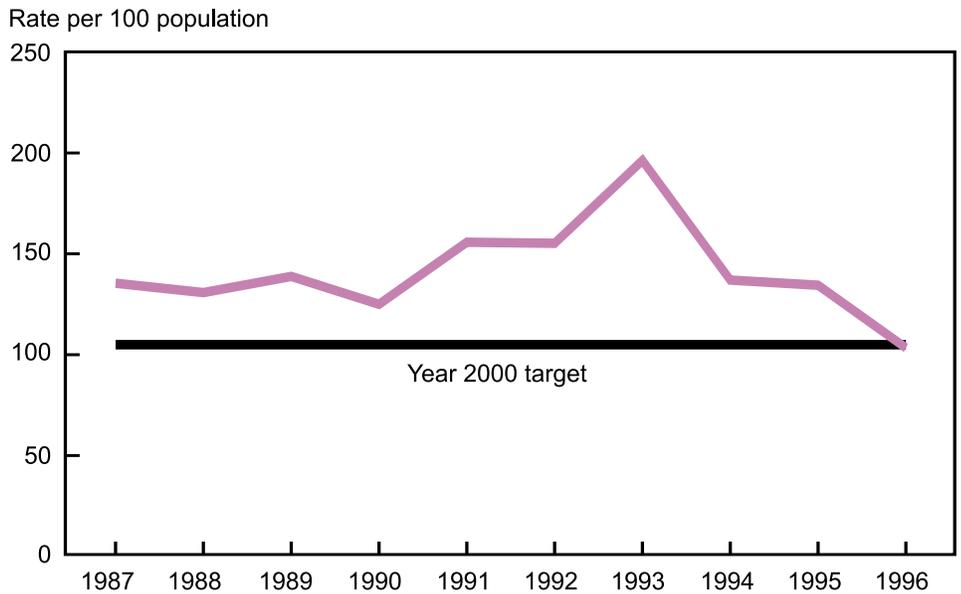


Activity Limitation due to Ear Infections

Status: target met

For every 100 children 4 years and under, there were 103.4 restricted activity days due to acute middle ear infection in 1996. The target of 105.0 restricted activity days has been met.

Figure H. Restricted activity days due to acute middle ear infection among children 4 years and under: United States, 1987–96, and year 2000 target for objective 20.9

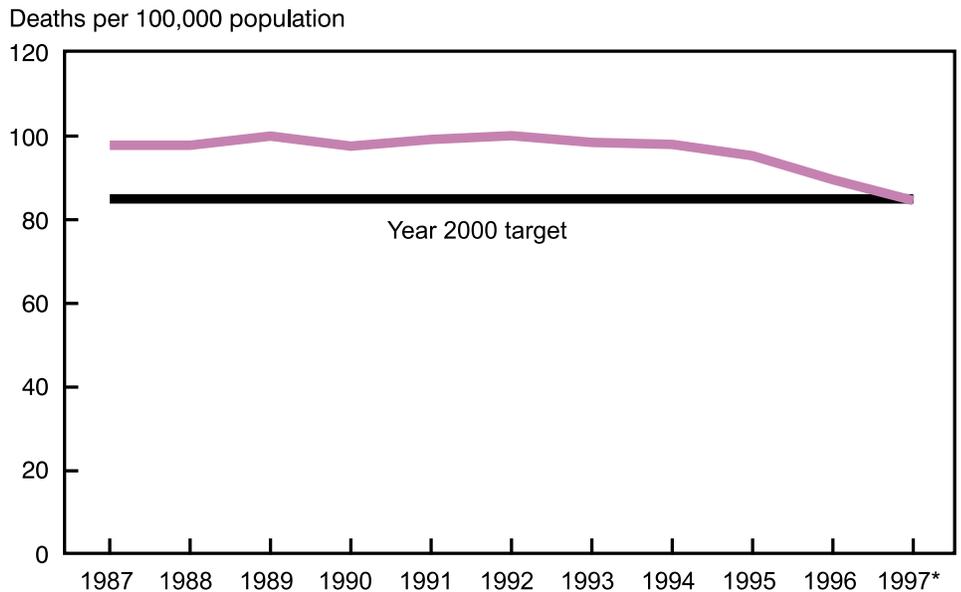


Deaths: 15–24 Years

Status: target met

Death rates for adolescents and young adults 15–24 years have declined over the past decade to 84.6 per 100,000 in 1997; meeting the year 2000 target of 85 per 100,000.

Figure J. Death rates for adolescents and young adults 15–24 years: United States, 1987–97, and year 2000 target

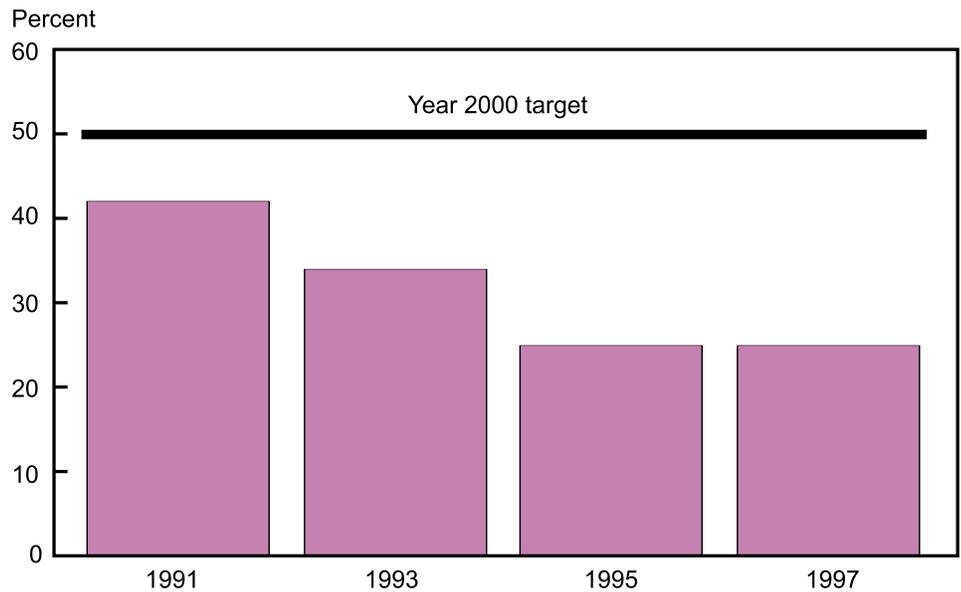


Physical Education

Status: moving away from target

In 1997, 27 percent of the students in grades 9–12 participated in daily school physical education. Although this latest figure is slightly higher than the 1995 rate, it is 36 percent lower than the proportion observed in 1991. Unless there is a significant change in the trend, it is unlikely that the year 2000 goal of 50 percent will be met.

Figure K. Proportion of students in grades 9–12 who participated in daily school physical education: United States, 1991, 1993, 1995, 1997, and year 2000 target for objective 1.8

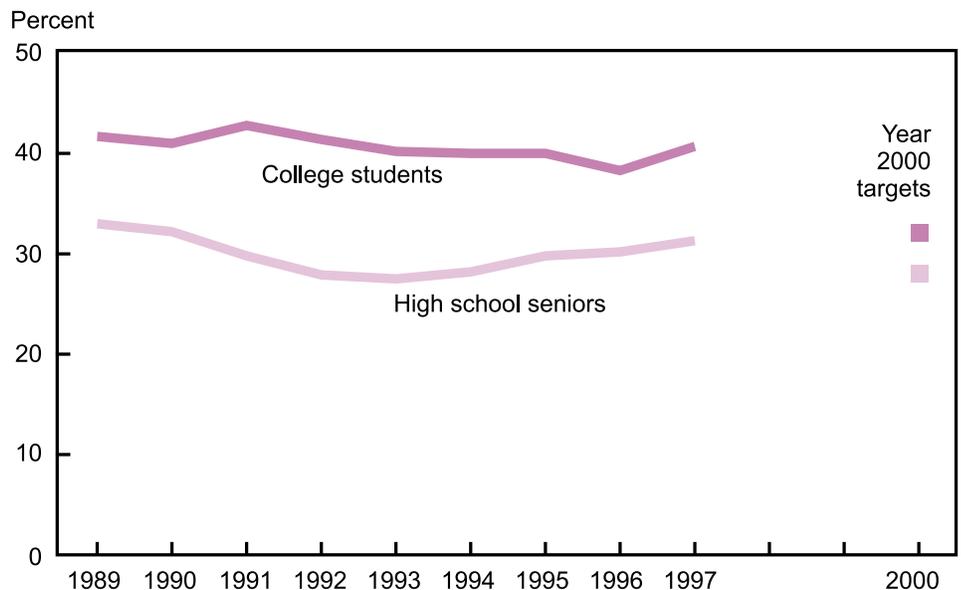


Heavy Drinking

Status: moving toward target

After declining to a low of 28 percent in 1993, heavy drinking among high school seniors increased to 31 percent in 1997. Among college students, heavy drinking has varied very little between 1989 and 1997. At 41 percent in 1997, heavy drinking among college students is far above the year 2000 target of 32 percent.

Figure L. Proportion of high school seniors and college students who report heavy drinking: United States, 1989–97, and year 2000 targets for objective 4.7



Adolescent Substance Use

Status: mixed trends

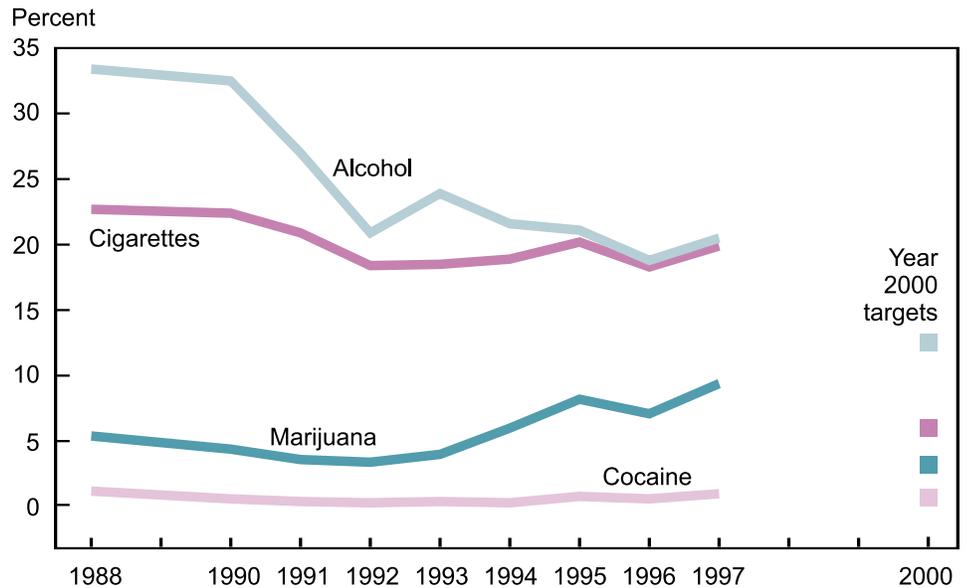
Although alcohol use for adolescents 12–17 years decreased 39 percent between 1988 and 1997, the percent of this age group using alcohol is still well above the year 2000 target of 12.6 percent.

Current marijuana use for adolescents decreased between 1988 and 1992. In 1993, the trend reversed and by 1997 the rate was almost twice the year 2000 target.

In 1996, cocaine use was one-half the rate of use observed in 1988 and had met the year 2000 target. These gains were reversed and in 1997, the rate was almost as high as it was a decade ago.

Current cigarette usage declined from 1988 to 1992 and then remained relatively unchanged until 1994. The use rate has fluctuated between 1994 and 1997.

Figure M. Proportion of adolescents 12–17 years who have used alcohol, marijuana, cocaine, or cigarettes in the past month: United States, 1988, 1990–97, and year 2000 targets for objective 4.6 (3.20)

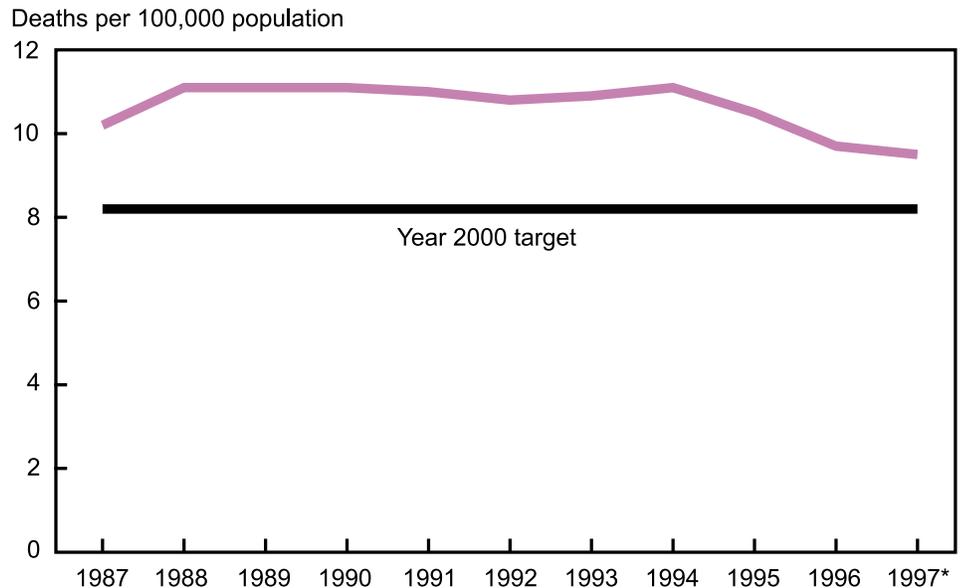


Suicide

Status: moving toward target

Suicide rates among adolescents 15–19 years are lower than they have been in the past decade. The rates have dropped substantially since 1994 to a preliminary rate of 9.5 per 100,000 in 1997.

Figure N. Suicide rates among adolescents 15–19 years: United States, 1987–97, and year 2000 target for objective 6.1a (7.2a)

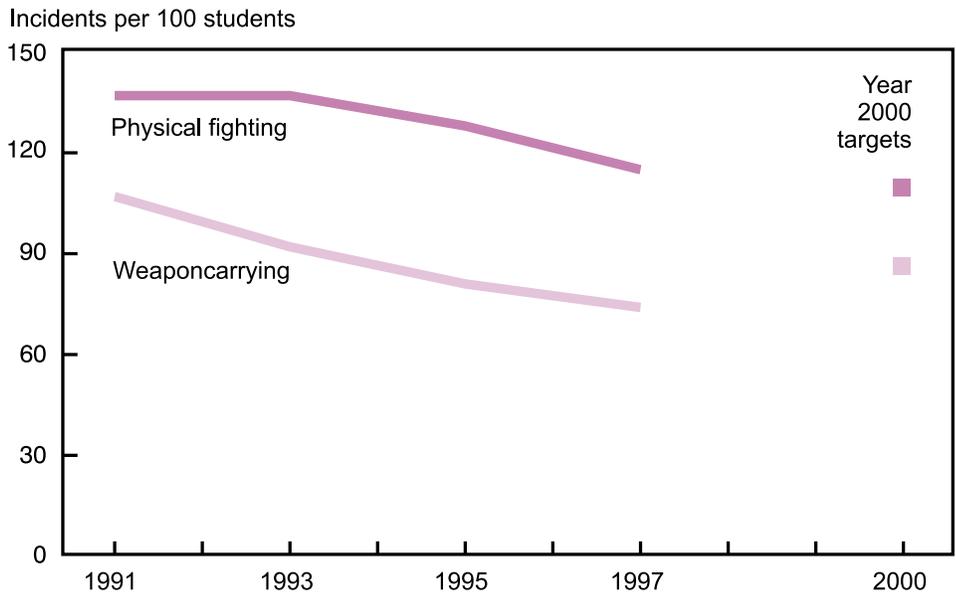


Fighting and Weapon-carrying

Status: moving toward target

Among adolescents 14–17 years, monthly incidents of physical fighting and weapon carrying have both decreased substantially. By 1997, the year 2000 target for weapon carrying had been surpassed and the incidence of physical fighting was very close to the year 2000 target.

Figure O. Monthly incidents of physical fighting and weapon-carrying among adolescents 14–17 years: United States, 1991, 1993, 1995, 1997, and year 2000 targets for objectives 7.9 and 7.10

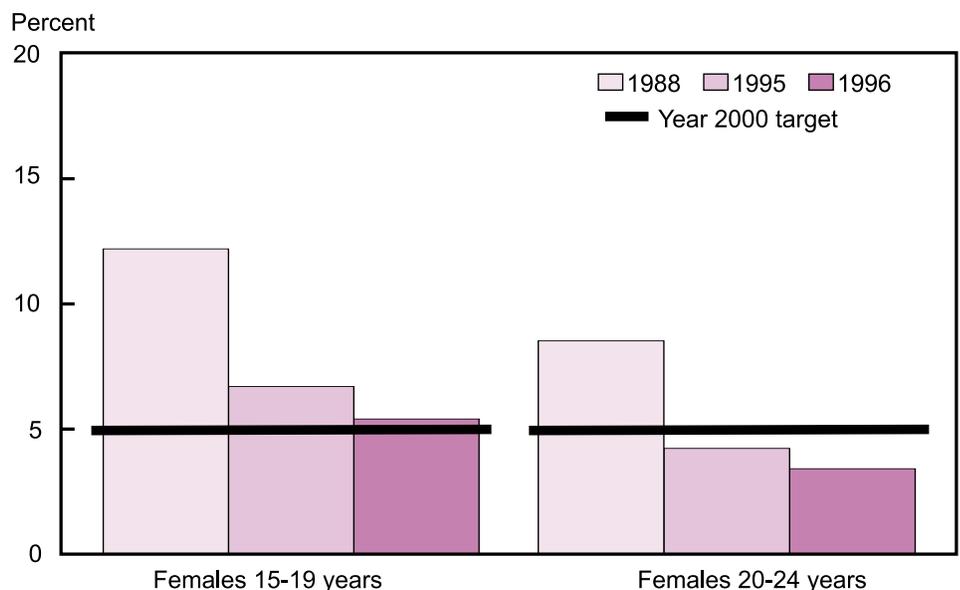


Chlamydia Trachomatis

Status: moving toward target

A clear downward trend is evident in the prevalence of *chlamydia trachomatis* among women 15–24 years. The older females (20–24 years) in this group have already surpassed the year 2000 target of 5 percent. If the declining trend among the younger females (15–19 years) continues, this age group will also meet the target by 2000.

Figure P. Prevalence of *chlamydia trachomatis* among young women 15–24 years: United States, 1988, 1995, 1996, and year 2000 targets for objective 19.2

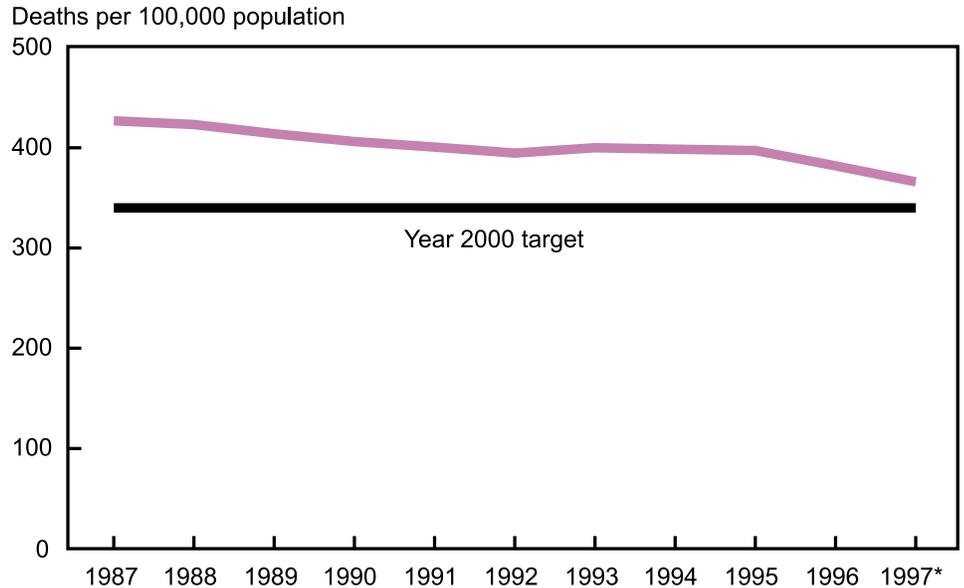


Deaths: 25–64 Years

Status: moving toward target

Preliminary 1997 data indicate that death rates for adults 25–64 years have declined 14 percent since 1987. At the current rate of decline, the year 2000 target of 340 deaths per 100,000 will not be met.

Figure Q. Death rates for adults 25–64 years: United States, 1987–97, and year 2000 target



Nonfatal Work-Related Injuries

Status: mixed trends

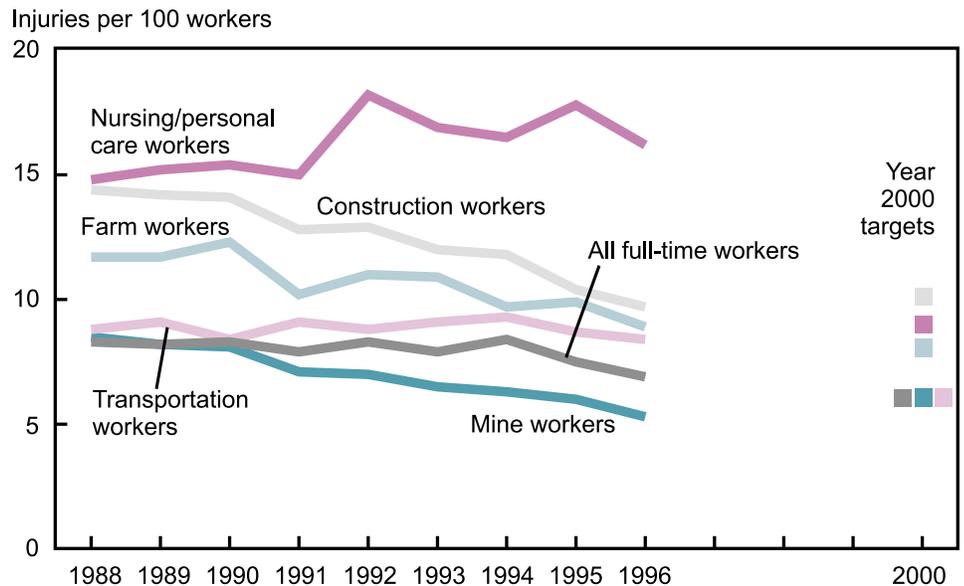
The year 2000 targets for the incidence of nonfatal work-related injuries that resulted in medical treatment, lost time from work, or restricted work activity have been met for construction and mine workers.

The rates for all full-time workers have fluctuated, but show a general decline. At the current annual average change in rates, the year 2000 target of 6 per 100 workers will not be met.

Rates for transportation workers are also generally declining, but are not expected to reach the target. Generally, declining rates for farm workers indicate that the target will be reached by 2000.

Nursing and personal care workers are the only group of employees tracked for this objective for whom rates are moving away from the year 2000 target, presenting a major challenge to the public health community.

Figure R. Incidence of nonfatal work-related injuries: United States, 1988–96, and year 2000 targets for objective 10.2

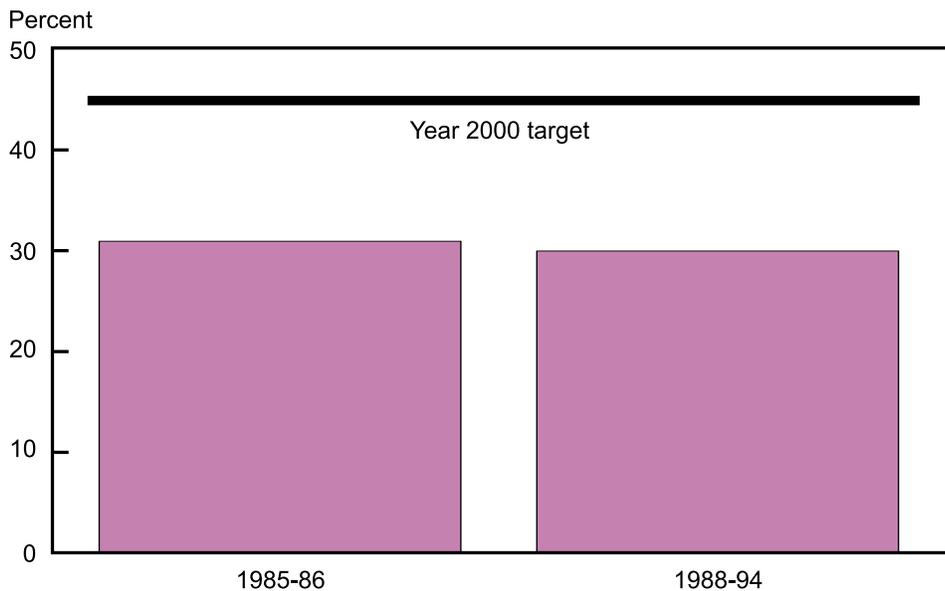


Loss of Permanent Teeth

Status: moving away from target

The proportion of people 35–44 years who have never lost a permanent tooth to dental caries or periodontal diseases has changed slightly between the 1985–86 and 1988–94 reporting periods. At about 30 percent, the rate is far below the year 2000 target of 45 percent.

Figure S. Proportion of people 35–44 years who have never lost a permanent tooth due to dental caries or periodontal disease: United States, 1985–86, 1988–94, and year 2000 target for objective 13.3

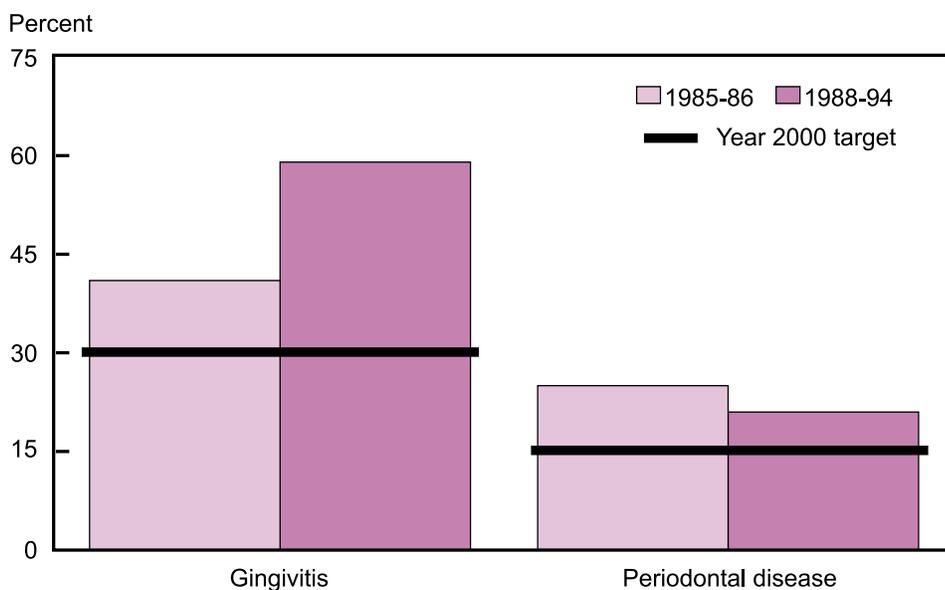


Gum Disease

Status: mixed trends

There has been some improvement in the prevalence of periodontal disease between the 1985–86 and 1988–94 reporting periods (25 percent vs. 21 percent) for people 35–44 years. However this is not true for gingivitis. The prevalence of gingivitis has increased from 41 to 48 percent for the same group during that time period.

Figure T. Prevalence of gingivitis and periodontal disease in people 35–44 years: United States, 1985–86, 1988–94, and year 2000 targets for objectives 13.5 and 13.6

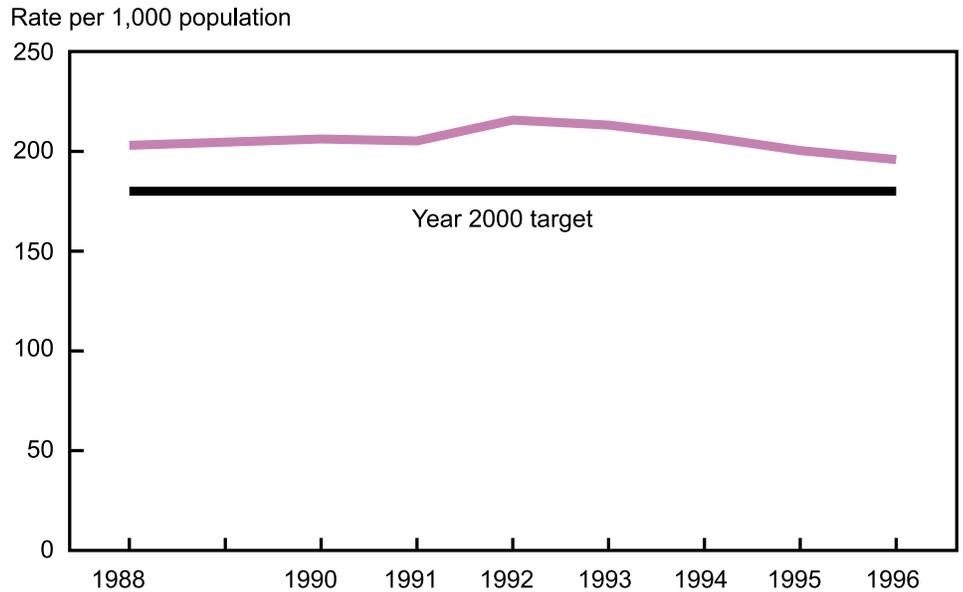


Hearing Impairment

Status: moving toward target

The prevalence of significant hearing impairment for people 45 years and over has fluctuated between 1986–88 and 1994–96. The most recent data for 1993–95 and 1994–96, show declines below the baseline for the first time in the decade (from 203.0 per 1,000 in 1986–88 to 195.9 per 1,000 in 1994–96).

Figure U. Prevalence of significant hearing impairment in people 45 years and over: United States, 1986–88, 1988–96, and year 2000 target for objective 17.6

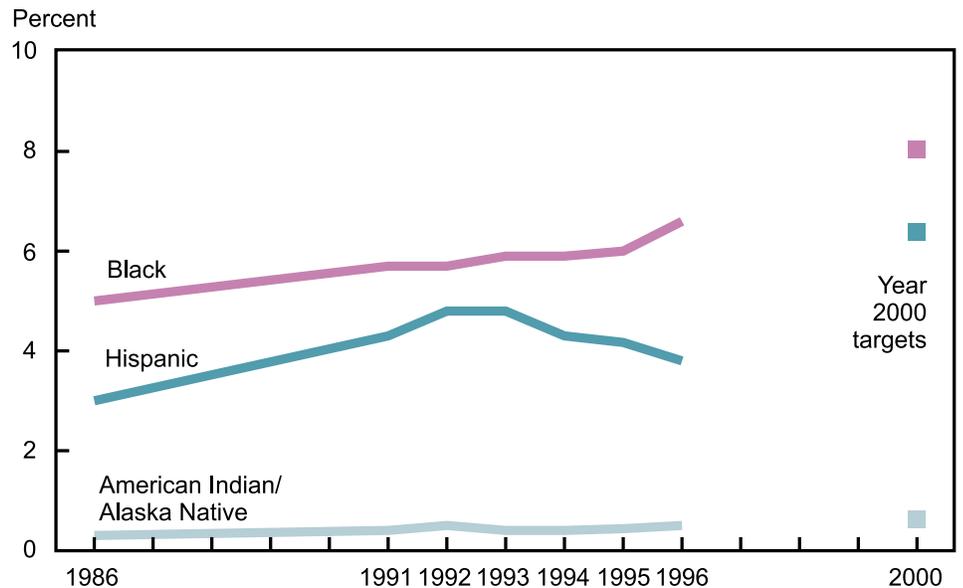


Degrees Awarded

Status: moving toward target

Between academic years 1985–86 and 1995–96, the proportion of health profession degrees awarded to blacks and American Indians/Alaska Natives have increased. For Hispanics, the proportion of degrees awarded peaked from 1991 to 1993 and have since regressed to slightly above the 1985–86 baseline level.

Figure W. Proportion of degrees in health professions awarded to members of under-represented racial and ethnic minority groups: United States, 1985–96, and year 2000 targets for objective 21.8

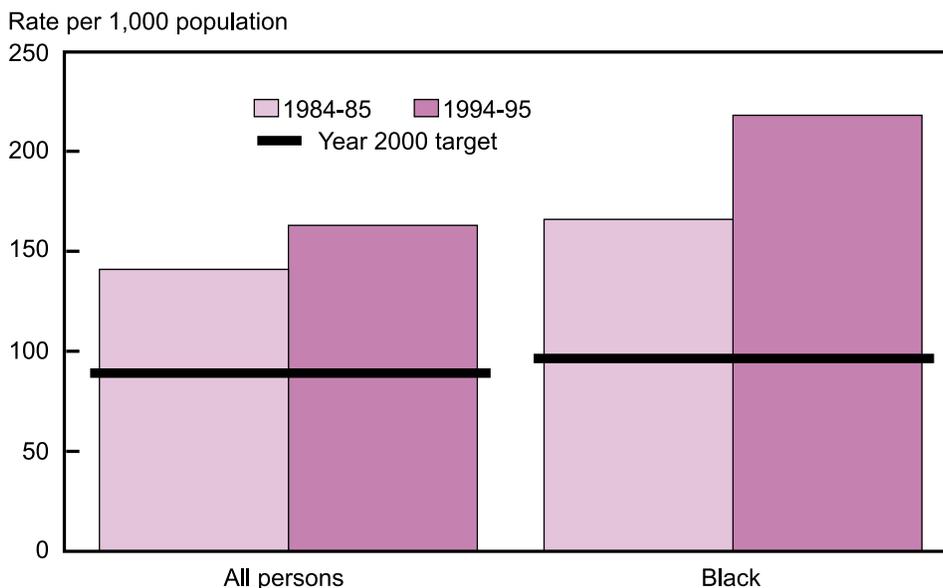


Difficulty Performing Self-Care Activities

Status: moving away from target

Difficulty performing two or more self-care activities among people 70 years and over has increased between 1984–85 and 1994–95. Among the total population 70 years and over, there has been a 16-percent increase in this decade—from 141 to 163 per 1,000 population; among the black population in this age group, the increase has been 31 percent—from 166 to 218 per 1,000 population.

Figure Y. People 70 years and over who have difficulty performing two or more personal care activities: United States, 1984–85 and 1994–95, and year 2000 targets for objective 17.3 (1.13)

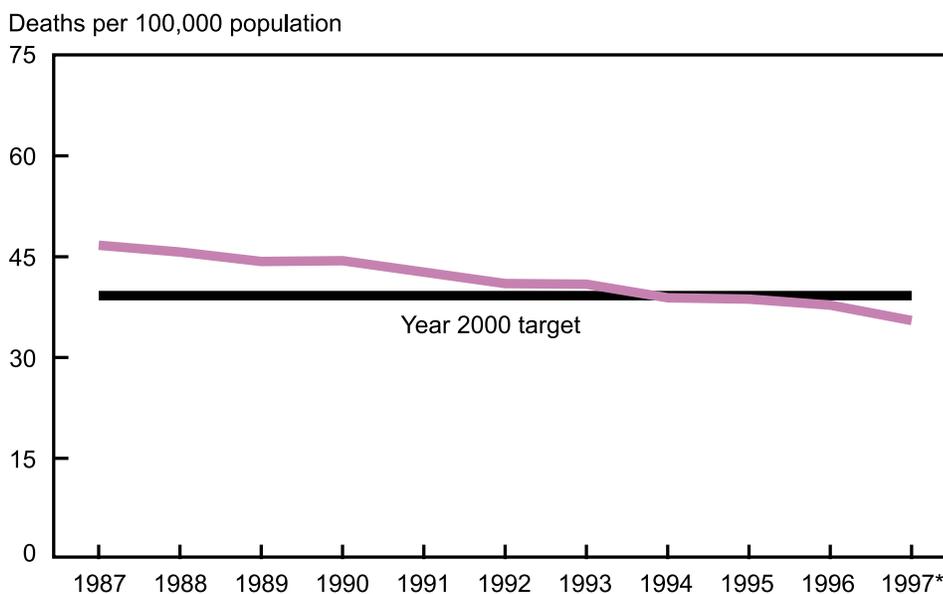


Suicide

Status: target met

The year 2000 target for the reduction of suicide rates for white males 65 years and over was met in 1994. Since then, the rate has declined even further, reaching a preliminary rate of 35.5 in 1997.

Figure Z. Suicide rates for white males 65 years and over: United States, 1987–97, and year 2000 target for objective 6.1c (7.2c)

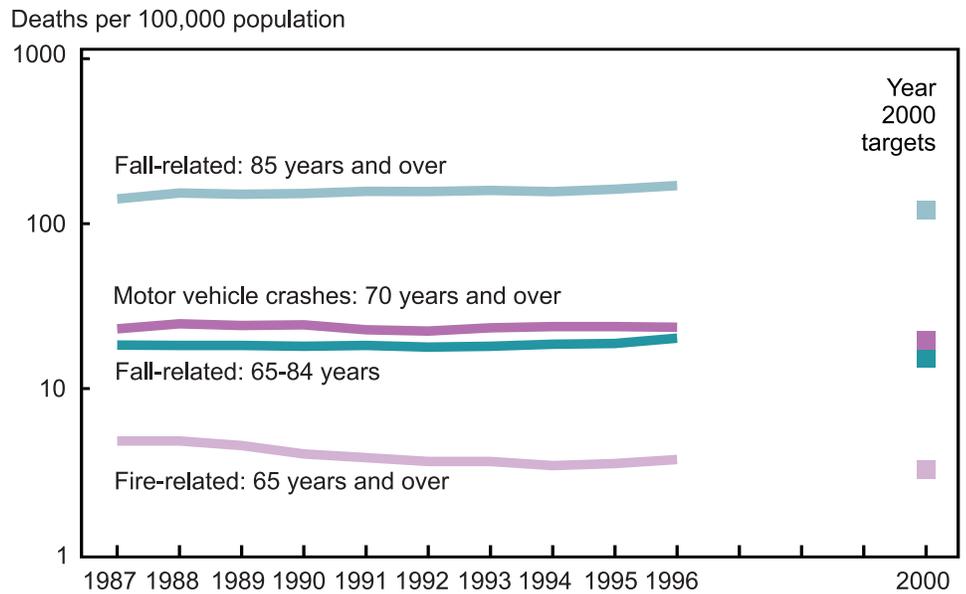


Deaths From Injury

Status: mixed trends

The rates of death for older Americans resulting from falls and motor vehicle crashes have increased over the last decade, while the rate of death from fires have decreased. As the nation's population ages, and the proportion of "elderly elderly" increases, progress in these areas will become more challenging.

Figure AA. Death rates for selected causes of unintentional injury among older Americans: United States, 1987–96, and year 2000 targets for objectives 9.3c, 9.4a–b, 9.6b

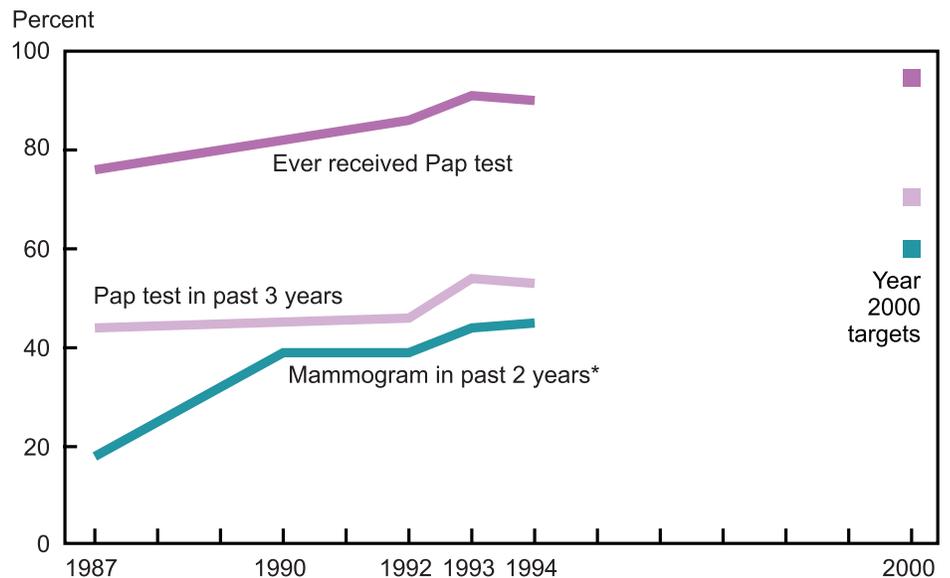


Mammograms and Pap Tests

Status: moving toward target

The proportion of females 70 years and over receiving breast examinations and mammograms in the past 2 years more than doubled between 1987 and 1994 (18 percent and 45 percent, respectively). For this same age group, the proportion ever receiving Pap tests and receiving Pap tests in the past 3 years increased as well, but not as dramatically.

Figure BB. Proportion of females 70 years and over receiving mammograms and Pap tests: United States, 1987, 1990, 1992–94, and year 2000 targets for objectives 16.11d and 16.12b

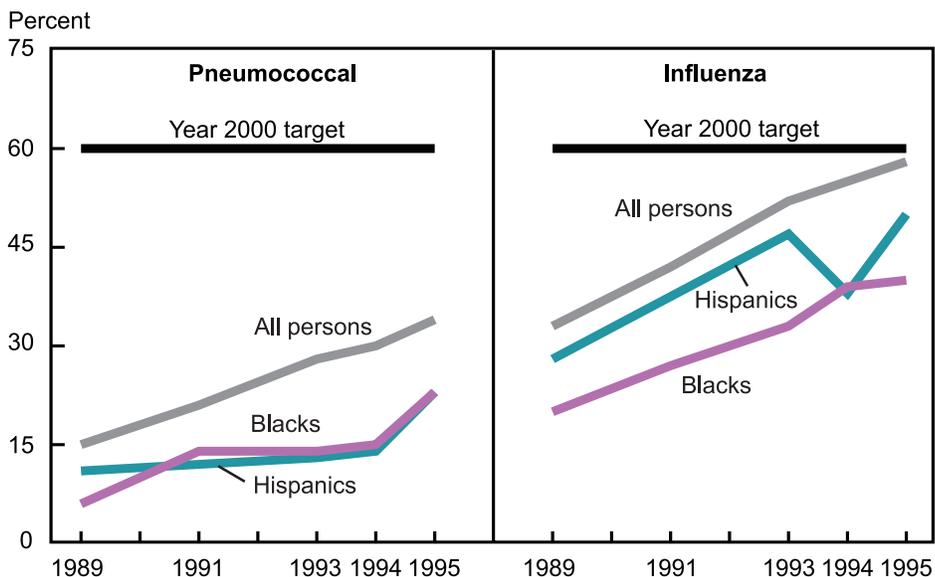


Immunizations

Status: moving toward target

Between 1989 and 1995, the proportion of all persons 65 years and over who ever received pneumococcal immunization more than doubled. For the total population the increase was from 15 to 34 percent, for blacks it increased from 6 to 23 percent, and for Hispanics the increase was from 11 to 23 percent. The percentages of all persons in this same age group who received an influenza immunization in the past year also increased dramatically. The percentage of blacks immunized doubled followed by the total population and Hispanics, which nearly doubled.

Figure CC. Proportion of people 65 years and over who ever received a pneumococcal immunization and the proportion of people 65 years and over who received an influenza immunization in the past year: United States, 1989, 1991, 1993–95, and year 2000 targets for objective 20.11



Data Tables for Figures A–CC

Figure A. Infant mortality rates: United States, 1987–97, and year 2000 target for objective 14.1

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	Year 2000 target
Infant mortality (deaths under 1 year per 1,000 live births)	10.1	10.0	9.8	9.2	8.9	8.5	8.4	8.0	7.6	7.3	P7.1	7

PPreliminary data.

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

Figure B. Death rates for children 1–14 years: United States, 1987–97, and year 2000 target

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	Year 2000 target
Children 1–14 years (total deaths per 100,000)	33.7	33.6	32.8	30.8	30.7	28.8	29.8	28.5	27.8	26.5	P25.0	28

PPreliminary data.

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

Figure C. Death rates from drowning for children 4 years and under: United States, 1987–96, and year 2000 target for objective 9.5a

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Year 2000 target
Children 4 years and under	4.3	3.9	3.7	3.4	3.6	3.2	3.2	2.8	3.7	2.8	2.3

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

Figure D. Death rates from fires for children 4 years and under: United States, 1987–96, and year 2000 target for objective 9.6a

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Year 2000 target
Children 4 years and under	4.5	4.2	3.9	3.5	3.8	3.4	3.6	3.5	2.6	2.4	3.3

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

Figure E. Nonfatal poisoning rates among children 4 years and under: United States, 1986–97, and year 2000 target for objective 9.8a

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	Year 2000 target
Children 4 years and under	664	604	681	636	705	638	626	597	518	499	470	460	520

SOURCE: Consumer Product Safety Commission, Directorate for Epidemiology, National Electronic Injury Surveillance System.

Figure F. Proportion of children 4 years and under using motor vehicle occupant protection systems: United States, selected years 1988–96, and year 2000 target for objective 9.12a

	1988	1990	1991	1993	1994	1996	Year 2000 target
Children 4 years and under	48%	50%	55%	60%	60%	61%	70%

SOURCES: U.S. Department of Transportation, National Highway Traffic Safety Administration. For 1988–91, 19 Cities Survey; For 1993, Population Weighted State Surveys; For 1994 and 1996, National Occupant Protection Use Surveys.

Figure G. Asthma hospitalization rates for children 14 years and under: United States, 1987–96, and year 2000 target for objective 11.1b

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Year 2000 target
Children 14 years and under	284	310	312	308	339	344	280	295	396	338	225

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

Figure H. Restricted activity days due to acute middle ear infection among children 4 years and under: United States, 1987–96, and year 2000 target for objective 20.9

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Year 2000 target
Ear infections	135.4	130.8	138.8	125.0	155.7	155.2	196.3	137.0	134.4	103.4	105.0

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

Figure J. Death rates for adolescents and young adults 15–24 years: United States, 1987–97, and year 2000 target

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	Year 2000 target
Adolescents and young adults 15–24 years (total deaths per 100,000)	97.8	97.8	100.0	97.6	100.1	95.6	98.5	98.0	95.3	89.6	^P 84.6	85

^PPreliminary data.

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

Figure K. Proportion of students in grades 9–12 who participated in daily school physical education: United States, 1991, 1993, 1995, 1997, and year 2000 target for objective 1.8

	1991	1993	1995	1997	Year 2000 target
Students in grades 9–12	42%	34%	25%	27%	50%

SOURCE: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Youth Risk Behavior Survey.

Figure L. Proportion of high school seniors and college students who report heavy drinking: United States, 1989–97, and year 2000 targets for objective 4.7

	1989	1990	1991	1992	1993	1994	1995	1996	1997	Year 2000 target
High school seniors	33.0%	32.2%	29.8%	27.9%	27.5%	28.2%	29.8%	30.2%	31.3%	28.0%
College students	41.7%	41.0%	42.8%	41.4%	40.2%	40.0%	40.0%	38.3%	40.7%	32.0%

NOTE: Heavy drinking is defined as 5 or more drinks on one occasion in the past 2 weeks.

SOURCE: National Institutes of Health, National Institute on Drug Abuse, Monitoring the Future Study.

Figure M. Proportion of adolescents 12–17 years who have used alcohol, marijuana, cocaine or cigarettes in the past month: United States, 1988, 1990–97, and year 2000 targets for objective 4.6 (3.20)

	1988	1990	1991	1992	1993	1994	1995	1996	1997	Year 2000 target
Alcohol	33.4%	32.5%	27.0%	20.9%	23.9%	21.6%	21.1%	18.8%	20.5%	12.6%
Marijuana	5.4%	4.4%	3.6%	3.4%	4.0%	6.0%	8.2%	7.1%	9.4%	3.2%
Cocaine	1.2%	0.6%	0.4%	0.3%	0.4%	0.3%	0.8%	0.6%	1.0%	0.6%
Cigarettes	22.7%	22.4%	20.9%	18.4%	18.5%	18.9%	20.2%	18.3%	19.9%	6.0%

SOURCE: Substance Abuse and Mental Health Services Administration, Office of the Assistant Secretary, National Household Survey on Drug Abuse.

Figure N. Suicide rates among adolescents 15–19 years: United States, 1987–97, and year 2000 target for objective 6.1a (7.2a)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	Year 2000 target
Adolescents 15–19 years	10.2	11.1	11.1	11.1	11.0	10.8	10.9	11.1	10.5	9.7	^P 9.5	8.2

^PPreliminary data.

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

Figure O. Monthly incidents of physical fighting and weapon-carrying among adolescents 14–17 years: United States, 1991, 1993, 1995, 1997, and year 2000 targets for objectives 7.9 and 7.10

	1991	1993	1995	1997	Year 2000 target
Physical fighting	137	137	128	115	110
Weapon-carrying	107	92	81	74	86

SOURCE: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Youth Risk Behavior Survey.

Figure P. Prevalence of *Chlamydia trachomatis* among young women 15–24 years: United States, 1988, 1995, 1996, and year 2000 targets for objective 19.2

	1988	1995	1996	Year 2000 target
Females 15–19 years	12.2%	6.7%	5.4%	5%
Females 20–24 years	8.5%	4.2%	3.4%	5%

SOURCE: Centers for Disease Control and Prevention, National Center for HIV, STD, and TB Prevention, Sexually Transmitted Disease Surveillance System.

Figure Q. Death rates for adults 25–64 years: United States, 1987–97, and year 2000 target

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	Year 2000 target
Adults 25–64 years (total deaths per 100,000)	426.9	423.2	414.1	406.2	400.7	394.7	400.1	398.6	397.3	382.0	^P 366.1	340

^PPreliminary data.

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

Figure R. Incidence of nonfatal work-related injuries: United States, 1988–96, and year 2000 targets for objective 10.2

	1988	1989	1990	1991	1992	1993	1994	1995	1996	Year 2000 target
Full-time workers	8.3	8.2	8.3	7.9	8.3	7.9	8.4	7.5	6.9	6
Construction workers	14.4	14.2	14.1	12.8	12.9	12.0	11.8	10.4	9.7	10
Nursing and personal care workers	14.8	15.2	15.4	15.0	18.2	16.9	16.5	17.8	16.2	9
Farm workers	11.7	11.7	12.3	10.2	11.0	10.9	9.7	9.9	8.9	8
Transportation workers	8.8	9.1	8.4	9.1	8.8	9.1	9.3	8.7	8.4	6
Mine workers	8.5	8.2	8.1	7.1	7.0	6.5	6.3	6.0	5.3	6

NOTE: Nonfatal work-related injuries are injuries occurring at work that resulted in medical treatment, lost time from or restricted work activity.

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

Figure S. Proportion of people 35–44 years who have never lost a permanent tooth due to dental caries or periodontal disease: United States, 1985–86, 1988–94, and year 2000 target for objective 13.3

	1985–86	1988–94	Year 2000 target
No tooth loss	31.0%	30.0%	45.0%

SOURCES: Data for 1985–86: National Institutes of Health, National Institute for Dental Research, National Survey of Oral Health in U.S. Employed Adults and Seniors. Data for 1988–94: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health and Nutrition Examination Survey.

Figure T. Prevalence of gingivitis and periodontal disease in people 35–44 years: United States, 1985–86, 1988–94, and year 2000 targets for objectives 13.5 and 13.6

	1985–86	1988–94	Year 2000 target
Gingivitis	41%	48%	30%
Periodontal disease	25%	21%	15%

SOURCE: Data for 1985–86: National Institutes of Health, National Institute for Dental Research, National Survey of Oral Health in U.S. Employed Adults and Seniors. Data for 1988–94: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health and Nutrition Examination Survey.

Figure U. Prevalence of significant hearing impairment in people 45 years and over: United States, 1986–88, 1990–96, and year 2000 target for objective 17.6

	1986–88	1988–90	1989–91	1990–92	1991–93	1992–94	1993–95	1994–96	Year 2000 target
Significant hearing impairment	203.0	206.2	205.2	215.7	213.2	207.4	200.4	195.9	180.0

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

Figure W. Proportion of degrees in health professions awarded to members of under-represented racial and ethnic minority groups: United States, 1985–96, and year 2000 targets for objective 21.8

	1985–86	1990–91	1991–92	1992–93	1993–94	1994–95	1995–96	Year 2000 target
Black	5.0%	5.7%	5.7%	5.9%	5.9%	6.0%	6.6%	8.0%
Hispanic	3.0%	4.3%	4.8%	4.8%	4.3%	4.1%	3.8%	6.4%
American Indian/Alaska Native	0.3%	0.4%	0.5%	0.4%	0.4%	0.4%	0.5%	0.6%

SOURCE: Health Resources and Services Administration, Bureau of Health Professions, Minorities and Women in the Health Fields.

Figure Y. People 70 years and over who have difficulty performing two or more personal care activities: United States, 1984–85 and 1994–95, and year 2000 targets for objective 17.3 (1.13)

	1984–85	1994–95	Year 2000 target
All persons	141	163	90
Black	166	218	98

NOTE: Personal care activities are bathing, dressing, using the toilet, getting in and out of bed or chair, and eating.

SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey and National Nursing Home Survey.

Figure Z. Suicide rates for white males 65 years and over: United States, 1987–97, and year 2000 target for objective 6.1c (7.2c)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	Year 2000 target
White male 65 years and over	46.7	45.7	44.3	44.4	42.7	41.0	40.9	38.9	38.7	37.8	P35.5	39.2

P Preliminary data.

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

Figure AA. Death rates for selected causes of unintentional injury among older Americans: United States, 1987–96, and year 2000 targets for objectives 9.3c, 9.4a–b, 9.6b

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Year 2000 target
Motor vehicle crash deaths											
People 70 years and over	22.6	24.2	23.7	23.9	22.3	21.9	22.9	23.3	23.3	23.1	20.0
Fall-related injury deaths											
People 65–84 years	18.1	18.0	18.0	17.8	18.0	17.6	17.8	18.3	18.5	19.9	14.4
People 85 years and over	133.0	144.1	141.6	143.1	147.5	147.3	149.5	147.0	152.0	159.6	105.0
Fire-related deaths											
People 65 years and over	4.9	4.9	4.6	4.1	3.9	3.7	3.7	3.5	3.6	3.8	3.3

SOURCES: Centers for Disease Control and Prevention, National Center Health Statistics, National Vital Statistics System. For motor vehicle crash deaths: U.S. Department of Transportation, National Highway Traffic Safety Administration, Fatality Analysis Reporting System.

Figure BB. Proportion of females 70 years and over receiving mammograms and Pap tests: United States, 1987, 1990, 1992–94, and year 2000 targets for objectives 16.11d and 16.12b

	1987	1990	1992	1993	1994	Year 2000 target
Mammogram and clinical breast exam in past 2 year . .	18%	39%	39%	44%	45%	60%
Pap test						
Ever received	76%	---	86%	91%	90%	95%
Received in past 3 years	44%	---	46%	54%	53%	70%

--- Data are unavailable.

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

Figure CC. Proportion of people 65 years and over who ever received a pneumococcal immunization and the proportion of people 65 years and over who received an influenza immunization in the past year: United States, 1989, 1991, 1993–95, and year 2000 targets for objective 20.11

	1989	1991	1993	1994	1995	Year 2000 target
Pneumococcal immunization						
All persons	15%	21%	28%	30%	34%	60%
Black persons	6%	---	14%	15%	23%	60%
Hispanic persons	11%	---	12%	14%	23%	60%
Influenza immunization						
All persons	33%	42%	52%	55%	58%	60%
Black persons	20%	---	32%	39%	40%	60%
Hispanic persons	28%	---	47%	38%	40%	60%

--- Data are unavailable.

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



Priority Areas

Priority Area 1 Physical Activity and Fitness

Background

The adoption and maintenance of a physically active lifestyle is essential for a healthy life. Physical activity has been known for decades to have protective effects for several chronic diseases, including coronary heart disease, hypertension, noninsulin-dependent diabetes mellitus, osteoporosis, colon cancer, and depression and anxiety (1,2). On average, physically active people outlive those who are inactive (3–5). 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 (6–8).

Data Summary

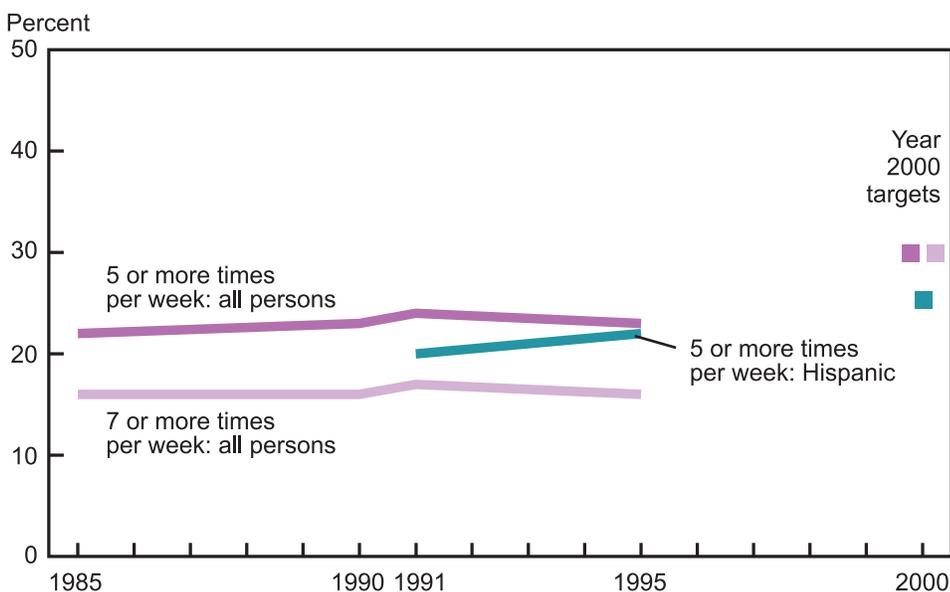
Highlights

Coronary heart disease death rates (objective 1.1) continue to decline for the total population and for the black population, although rates are declining more slowly among blacks. Overweight prevalence (1.2) has increased substantially among adolescents and adults between 1976–80 and 1988–94, moving further away from the targets for the total population and for all special populations. The proportion of the population reporting physical activity (1.3, 1.4, 1.6) has remained essentially unchanged, and progress is very limited (see figure 2). Participation in daily school physical education (1.8) has been declining for students in grades 9–12, and the number of minutes of active physical education class time reflect a slow downward trend as well (1.9). The proportion of nurse practitioners who counsel 81–100 percent of sedentary patients about physical activity has increased (1.12).

Summary of Progress

Of the 13 physical activity and fitness objectives, objective 1.10, worksite fitness programs, has met the year 2000 targets; 6 additional objectives show progress toward the targets (1.1, 1.3, 1.4, 1.5, 1.6, and 1.12);

Figure 2. Proportion of people 18 years and over participating in light-to-moderate physical activity: United States, 1985, 1990, 1991, 1995, and year 2000 targets for objective 1.3



	1985	1990	1991	1995	Year 2000 target
5 or more times per week	22%	23%	24%	23%	30%
Hispanic 18 years and over . . . . .	...	...	20%	22%	25%
7 or more times per week	16%	16%	17%	16%	30%

... Not applicable.

NOTE: For years 1985 and 1990, data are for ages 18–64 only.

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

and 5 are moving away from the targets (1.2, 1.7, 1.8, 1.9, and 1.13). Data to update progress for objective 1.11 are not yet available. For objectives 1.3–1.5, which target the physical activity levels of adults and children, data are not available for children 6–17 years. Progress for objective 1.12 (clinician counseling about physical activity) is based on the reports of nurse practitioners only.

Data Issues

Definitions

Operational definitions and data collection specifications for all year 2000 objectives in Priority Area 1 have been published in the National Center for Health Statistics *Statistical Notes* series (9). Data issues are discussed and references are cited for expanded discussions of the data systems that provide data for the national objectives.

Where appropriate, the text of the questionnaire items used to measure the objectives is also provided. See the appendix for further information.

Coronary heart disease deaths (objective 1.1) are defined by ICD–9 codes 402, 410–414, and 429.2. These codes are different from the codes used to define the category “Diseases of heart,” which often appears in published tables (see appendix text and table II).

Physical activity and fitness as a recognized risk factor for health outcomes is still a relatively new concept, contributing to present difficulties in tracking some objectives with appropriate operational definitions. Calculations vary from simple counts (for example, weight-training three or more times a week) to complex formulas (for example, calculating average kilocalories expended per kilogram per day) (10). There is a growing appreciation of the benefits of developing a pattern of regular physical

activity; thus the intent of objective **1.3** (light-to-moderate physical activity) is to generate calorie-burning activity 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 five or more or seven 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- and sex-based regression equations and then multiplying by 50 percent (see Note with the text of objective **1.4**). Next, 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 (11,12). The estimated number of people who exercise vigorously were respondents who performed these activities three or more times per week.

Overweight (**1.2**) for adults is defined as a body mass index (BMI) at or above the sex-specific 85th percentile of the 1976–80 Second National Health and Nutrition Survey (NHANES II) reference population 20–29 years of age. For adolescents, overweight is the sex- and age-specific 85th percentile from NHANES II (see Note with the text of objective **1.2**). BMI cutoff points for adults are 27.8 kilograms per meter squared for males, and 27.3 kilograms per meter squared for females. Current international research indicates that a lower BMI of 25 kilograms per meter squared may be more clinically relevant to increased risk of cardiovascular disease (13,14).

The 1984–85 baseline figures for objective **1.13** were derived by combining estimates for the noninstitutionalized population from the 1984 NHIS Supplement on Aging (SOA) with data for those in nursing homes from the 1985 National Nursing Home Survey (NNHS). The 1984 SOA asked about seven specific personal care activities, also referred to as activities of daily living (ADLs) for persons 65 years and over. Because of the way the questions were asked on the NNHS, only five ADLs were used for tracking this objective. The numerator included respondents to the SOA who said they had “any difficulty” performing at least two ADLs combined with patients for

whom administrators reported to the NNHS as “receiving assistance” with at least two ADLs. The denominator for the baseline was the civilian, noninstitutionalized population 65 years and over plus the nursing home population 65 years and over. The update for this objective is derived from combined data from the 1994 NHIS Second Supplement on Aging (SOA II) and data from the 1995 NNHS using the same questions as were used for the baseline. However, because of the way data were collected in the SOA II, the 1994–95 update is for persons 70 years and over. The 1984–85 data were also computed for ages 70 years and over to provide a comparison with the 1994–95 update.

Comparability of Data Sources

Overweight (**1.2**) is being tracked with two data sources. The primary data source is NHANES, which provided baseline data for most of the overweight objectives and the 1988–94 updates; these data are derived from measured height and weight. The second data source is the National Health Interview Survey (NHIS). This survey provides interim estimates shown in an earlier publication (15), updates for Hispanic females and American Indians/Alaska Natives, and all data for people with disabilities. NHIS estimates are based on self-reported heights and weights and are not comparable with the actual measured data from NHANES: prevalence estimates of overweight from self-reported height and weight are lower. Trends from the NHIS self-report measures, like those from NHANES, show a steady increase in prevalence of overweight; this increase is, however, different in magnitude from that observed in the data derived from measured height and weight.

Objective **1.3** (light-to-moderate physical activity) is being tracked with the NHIS. The list of activities asked by the NHIS has not been identical from year to year. The 1985 and 1990 surveys did not ask about some activities for people 65 years and over; thus, the data shown are for people 18–64 years of age. The 1991 and 1995 surveys asked about some different activities than the previous surveys, but people of all age groups were asked the same questions. Because of these differences, data from 1985 and 1990 are not comparable to 1991 and 1995 data.

The 1985 and 1992 data for objective **1.10** are from the National Survey of Worksite Health Promotion Activities, which were telephone surveys of nongovernment worksites. Worksites were sampled because different worksites within the same company could have different sets of health promotion activities. Both active (for example, classes) and passive (for example, brochures) methods were counted as worksite health promotion activities. The 1995 update is from the CDC-sponsored Worksite Benchmark Survey, which used a methodology very similar to the 1992 survey, but did not include passive methods (for example, brochures) of health promotion (16,17).

Data for objective **1.12**, clinician counseling about physical activity, were obtained from three different surveys, making statements about trends problematic. The 1988 baseline of 30 percent from the American College of Physicians (ACP) survey was a random stratified sample of ACP members drawn from 21 geographic regions yielding an initial sample of 1,251 internists. The sampling frame for internists in the 1992 Primary Care Provider Surveys (PCPS) also contained a random stratified sample of ACP members, but was drawn from four geographic regions with oversampling of female members, yielding an initial sample of 1,200 internists. Additional provider groups sampled in the 1992 PCPS included pediatricians, nurse practitioners, obstetricians/gynecologists, and family physicians. The data on inquiry for objective **1.12** refer to the proportion of health care providers who routinely provided service to 81–100 percent of their clients. Data on formulation of an exercise plan represent the proportion of providers who routinely provide this service to 81–100 percent of their clients who need this intervention. Because inquiry and counseling services are not reimbursable services, documenting their provision has proven to be difficult.

The Prevention in Primary Care Study (PPCS) was conducted in 1997–98 to update data from the PCPS. The design and items included in the 1997–98 study were similar to the PCPS, but a slightly different sampling frame was used, and some items included in the 1992 surveys were not included in the PPCS. The professionals were sampled from listings of all licensed, active practitioners in the U.S.

whose practices were at least 50 percent primary care. Because of low response rates from the other provider groups, updates are available only for nurse practitioners.

Proxy Measures

Regular performance of physical activities that enhance and maintain muscular strength, muscular endurance, and flexibility (1.6) generally 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 (weightlifting) and an activity that increases flexibility (stretching) from the NHIS. The 1991, 1993, 1995, and 1997 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 from the Youth Risk Behavior Survey (YRBS).

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 to the NHIS identified as overweight based on their self-reported heights and weights who reported they were currently trying to lose weight or control their weight by eating fewer calories and exercising more were defined as using sound dietary practices 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 1985 and 1990 NHIS questionnaires asked respondents specifically if they were eating fewer calories to lose weight and if they were increasing their physical activity to lose weight. In 1991, 1993, and 1995, eating fewer calories and exercising more were among a list of 10 possible methods of losing weight in response to the question, “Are you currently doing any of these things to control your weight?” Respondents were asked this question if they reported they were trying to lose weight or stay about the same.

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 1983 baseline data show the percent of physical education class time spent being physically active for all students. The YRBS data for students in grades 9–12 show the percent who exercised in physical education class 21 or more minutes 3–5 times a week and 30 or more minutes 1 or more times per week. The 1994 data from the School Health Policies and Programs Study (SHPPS) show the proportion of physical education teachers using class time to involve students in actual physical activities.

References

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Table 1. Physical activity and fitness objective status

<i>Objective</i>		<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
1.1*	Coronary heart disease deaths (age adjusted per 100,000)	1987	135	122	118	114	114	110	108	105	---	100
	a. Black	1987	168	158	156	151	154	147	147	140	---	115
1.2*	Overweight prevalence (Based on measured height and weight unless otherwise indicated)											
	People 20–74 years	1976–80	26%	---	---	---	---	¹ 35%	---	---	---	20%
	Male	1976–80	24%	---	---	---	---	¹ 34%	---	---	---	20%
	Female	1976–80	27%	---	---	---	---	¹ 37%	---	---	---	20%
	Adolescents 12–19 years	1976–80	15%	---	---	---	---	¹ 24%	---	---	---	15%
	a. Low-income female 20–74 years	1976–80	37%	---	² 47%	---	---	---	---	---	---	25%
	b. Black female 20–74 years	1976–80	44%	---	---	---	---	¹ 52%	---	---	---	30%
	c. Hispanic female 20–74 years . . . . .	...	---	---	---	---	---	---	---	---	---	25%
	Hispanic female 20 years and over (self-reported) . . . . .	...	---	33%	32%	32%	33%	32%	35%	---	---	...
	Mexican American female 20–74 years	1982–84	39%	---	---	---	---	¹ 50%	---	---	---	...
	Cuban female 20–74 years	1982–84	34%	---	---	---	---	---	---	---	---	...
	Puerto Rican female 20–74 years	1982–84	37%	---	---	---	---	---	---	---	---	...
	d. American Indian/Alaska Native 20 years and over	1984–88	29–75%	---	³ 40%	³ 36%	³ 48%	³ 34%	³ 43%	---	---	30%
	e. People with disabilities 20 years and over (self-reported)	1985	36%	---	38%	37%	38%	38%	40%	---	---	25%
	f. Female with high blood pressure 20–74 years	1976–80	50%	---	---	---	---	---	---	---	---	41%
	g. Male with high blood pressure 20–74 years	1976–80	39%	---	---	---	---	---	---	---	---	35%
	h. Mexican American male 20–74 years	1982–84	30%	---	---	---	---	¹ 37%	---	---	---	25%
1.3*	Light to moderate physical activity											
	People 6 years and over . . . . .	...	---	---	---	---	---	---	---	---	---	30%
	People 18–74 years											
	5 or more times per week	1985	⁴ 22%	^{4,5} 23%	24%	---	---	---	23%	---	---	30%
	7 or more times per week	1985	⁴ 16%	^{4,5} 16%	17%	---	---	---	16%	---	---	30%
	a. Hispanic 18 years and over											
	5 or more times per week	1991	20%	...	...	---	---	---	22%	---	---	25%
1.4	Vigorous physical activity											
	Children and adolescents 6–17 years . . . . .	...	---	---	---	---	---	---	---	---	---	75%
	Children and adolescents 10–17 years	1984	^a 59%	---	---	---	---	---	---	---	---	75%
	Students in grades 9–12 . . . . .	...	---	---	64%	---	66%	---	64%	---	64%	75%
	People 18 years and over	1985	12%	---	16%	---	---	---	16%	---	---	20%
	a. Lower-income people 18 years and over	1985	7%	---	15%	---	---	---	14%	---	---	12%
	b. Black 18 years and over	1991	^a 13%	...	...	---	---	---	13%	---	---	17%
	c. Hispanic 18 years and over	1991	^a 14%	...	...	---	---	---	14%	---	---	17%
1.5	Sedentary lifestyle											
	People 6 years and over . . . . .	...	---	---	---	---	---	---	---	---	---	15%
	People 18 years and over	1985	24%	26%	24%	---	---	---	23%	---	---	15%
	a. People 65 years and over	1985	43%	---	29%	---	---	---	27%	---	---	22%
	b. People with disabilities	1985	35%	34%	30%	---	---	---	29%	---	---	20%
	c. Lower-income people	1985	32%	33%	32%	---	---	---	28%	---	---	17%
	d. Black 18 years and over	1991	28%	...	...	---	---	---	28%	---	---	20%
	e. Hispanic 18 years and over	1991	34%	...	...	---	---	---	31%	---	---	25%
	f. American Indian/Alaska Native 18 years and over	1991	29%	...	...	---	---	---	23%	---	---	21%

Table 1. Physical activity and fitness objective status—Con.

<i>Objective</i>		<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
1.6	Muscular strength, endurance, and flexibility											
	People 6 years and over . . . . .	...	---	---	---	---	---	---	---	---	---	40%
	Students in grades 9–12											
	Strengthening 4 or more times per week . . . . .	...	---	---	37%	---	39%	---	38%	---	38%	...
	Stretching 4 or more times per week . . . . .	...	---	---	43%	---	44%	---	41%	---	40%	...
	People 18–64 years											
	Weightlifting	1990	11%	...	16%	---	---	---	18%	---	---	40%
	Stretching . . . . .	...	---	---	27%	---	---	---	32%	---	---	...
1.7*	Sound weight loss practices among overweight people 12 years and over . . . . .	...	---	---	---	---	---	---	---	---	---	50%
	Overweight male 18 years and over	1985	25%	22%	19%	---	17%	---	15%	---	---	50%
	Overweight female 18 years and over	1985	30%	29%	22%	---	19%	---	19%	---	---	50%
	a. Overweight Hispanic male 18 years and over	1991	15%	...	...	---	11%	---	13%	---	---	24%
	b. Overweight Hispanic female 18 years and over	1991	13%	...	...	---	16%	---	16%	---	---	22%
1.8	Daily school physical education											
	Students in grades 1–12	1984–86	36%	---	---	---	---	---	---	---	---	50%
	Students in grades 9–12 . . . . .	...	---	---	42%	---	34%	---	25%	---	27%	...
	Students in middle/junior high schools											
	For 1 year . . . . .	...	---	---	---	---	---	12%	---	---	---	...
	For 2 or more years . . . . .	...	---	---	---	---	---	30%	---	---	---	...
	Students in senior high schools											
	For 1 year . . . . .	...	---	---	---	---	---	29%	---	---	---	...
	For 2 years . . . . .	...	---	---	---	---	---	18%	---	---	---	...
	For 3 years . . . . .	...	---	---	---	---	---	9%	---	---	---	...
1.9	Active physical education class time											
	All students	1983	27%	---	---	---	---	---	---	---	---	50%
	Students in grades 9–12											
	21 or more minutes, 3–5 times per week . . . . .	...	---	---	37%	---	35%	---	33%	---	32%	...
	30 or more minutes, 1 or more times per week . . . . .	...	---	---	24%	---	25%	---	22%	---	21%	...
	Physical education teachers devoting more than one class period to:											
	Jogging . . . . .	...	---	---	---	---	---	47%	---	---	---	...
	Tennis . . . . .	...	---	---	---	---	---	30%	---	---	---	...
	Aerobic dance . . . . .	...	---	---	---	---	---	30%	---	---	---	...
	Walking . . . . .	...	---	---	---	---	---	15%	---	---	---	...
	Swimming . . . . .	...	---	---	---	---	---	14%	---	---	---	...
1.10	Worksite fitness programs											
	50–99 employees	1985	14%	---	---	33%	---	---	---	---	---	20%
	100–249 employees	1985	23%	---	---	47%	---	---	---	---	---	35%
	250–749 employees	1985	32%	---	---	66%	---	---	---	---	---	50%
	750 and more employees	1985	54%	---	---	83%	---	---	---	---	---	80%
	Group classes, workshops, or lectures . . . . .	...	...	...	...	21%	---	---	19%	---	---	80%

Table 1. Physical activity and fitness objective status—Con.

	<i>Objective</i>	<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
1.11	Community fitness facilities											
	Hiking, biking, and fitness trail miles	1986	1 per 71,000 people	---	---	---	---	---	---	---	---	1 per 10,000 people
	Public swimming pools	1986	1 per 53,000 people	---	---	---	---	---	---	---	---	1 per 25,000 people
	Acres of park and recreation open space	1986	1.8 per 1,000 people	---	---	---	---	---	---	---	---	4 per 1,000 people
1.12	Clinician counseling about physical activity											
	Percent of sedentary patients	1988	30%	---	---	---	---	---	---	---	---	50%
	Percent of clinicians routinely providing services to 81–100% of patients Inquiry about exercise habits											
	Pediatricians . . . . .	...	---	---	---	16%	---	---	---	---	6,7---	50%
	Nurse practitioners . . . . .	...	---	---	---	30%	---	---	---	---	6,41%	50%
	Obstetricians/gynecologists . . . . .	...	---	---	---	14%	---	---	---	---	6,7---	50%
	Internists . . . . .	...	---	---	---	40%	---	---	---	---	6,7---	50%
	Family physicians . . . . .	...	---	---	---	19%	---	---	---	---	6,7---	50%
	Formulation of an exercise plan											
	Pediatricians . . . . .	...	---	---	---	16%	---	---	---	---	6,7---	50%
	Nurse practitioners . . . . .	...	---	---	---	14%	---	---	---	---	6,27%	50%
	Obstetricians/gynecologists . . . . .	...	---	---	---	13%	---	---	---	---	6,7---	50%
	Internists . . . . .	...	---	---	---	25%	---	---	---	---	6,7---	50%
	Family physicians . . . . .	...	---	---	---	18%	---	---	---	---	6,7---	50%
1.13*	People with difficulty performing self-care activities (per 1,000)											
	People 65 years and over	1984–85	111	---	---	---	---	---	---	---	---	90
	People 70 years and over	1984–85	^a 141	---	---	---	---	---	⁸ 163	---	---	90
	a. People 85 years and over	1984–85	371	---	---	---	---	---	⁸ 471	---	---	325
	b. Black 65 years and over	1984–85	^a 132	---	---	---	---	---	---	---	---	98
	Black 70 years and over	1984–85	^a 166	---	---	---	---	---	⁸ 218	---	---	98

--- Data not available.

... Category not applicable.

^aBaseline has been revised.

¹1988–94 data, 20 years and over.

²1988–91 data.

³Estimate derived from self-reported height and weight.

⁴Data are for people 18–64 years.

⁵Operational definition changed for subsequent tracking data.

⁶1997–98 data.

⁷Response rate for this group was too low to produce reliable estimates.

⁸1994–95 data.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

<i>Objective number</i>	<i>Data source</i>
1.1*,1.1a	National Vital Statistics System, CDC, NCHS.
1.2*,1.2a,b,f,g	National Health and Nutrition Examination Survey, CDC, NCHS
1.2c,h	Data for Hispanic: National Health Interview Survey, CDC, NCHS. Baseline for Mexican American, Cuban, Puerto Rican: Hispanic Health and Nutrition Examination Survey, CDC, NCHS. Updates for Mexican American: National Health and Nutrition Examination Survey, CDC, NCHS.
1.2d	Baseline: IHS, OPEL. Updates: National Health Interview Survey, CDC, NCHS.
1.2e	National Health Interview Survey, CDC, NCHS.
1.3*,1.3a	National Health Interview Survey, CDC, NCHS.
1.4	Baseline: For ages 10–17, National Children and Youth Fitness Study I, OPHS, ODPHP. 1991–97 for grades 9–12: Youth Risk Behavior Survey, CDC, NCCDPHP. Baseline and updates for ages 18 and over: National Health Interview Survey, CDC, NCHS.
1.4a–c	National Health Interview Survey, CDC, NCHS.
1.5, 1.5a–f	National Health Interview Survey, CDC, NCHS.
1.6	For students in grades 9–12: Youth Risk Behavior Survey, CDC, NCCDPHP. For people 18–64: National Health Interview Survey, CDC, NCHS.
1.7*, 1.7a–b	National Health Interview Survey, CDC, NCHS.
1.8	Baseline for grades 5–12: National Children and Youth Fitness Study I, OPHS, ODPHP. Baseline for grades 1–4: National Children and Youth Fitness Study II, OPHS, ODPHP. Baseline and updates for grades 9–12: Youth Risk Behavior Survey, CDC, NCCDPHP. For students in middle/junior and senior high schools: School Health Policies and Programs Study, CDC, NCCDPHP.
1.9	Baseline for all students: Siedentop D. Developing Teaching Skills in Physical Education. Palo Alto, CA, Mayfield. 1983. Data for grades 9–12: Youth Risk Behavior Survey, CDC, NCCDPHP. For physical education teachers: School Health Policies and Programs Study, CDC, NCCDPHP.
1.10	National Survey of Worksite Health Promotion Activities, OPHS, ODPHP. 1995 data: Business Responds to AIDS Benchmark Survey, CDC, NCHSTP.
1.11	Baseline: McDonald BL and Cordell HK. Local Opportunities for Americans: Final Report of the Municipal and County Park and Recreation Study, Alexandria, VA: National Recreation and Park Association. 1988.
1.12	Baseline: American College of Physicians Membership Survey of Prevention Practices in Adult Medicine. 1992 data: Primary Care Provider Surveys, OPHS, ODPHP. 1998 data: Prevention in Primary Care Study, American College of Preventive Medicine.
1.13*, 1.13a–b	National Health Interview Survey, CDC, NCHS. National Nursing Home Survey, CDC, NCHS.

*Duplicate objective. See full text of objective following this table.

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 modified age- and sex-specific 85th percentile values of the 1976–80 National Health and Nutrition Examination Survey (NHANES II). 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

1.2h*: Reduce overweight to a prevalence of no more than 25 percent among Mexican-American men.

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

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 and is at least equivalent to sustained walking. 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

1.3a*: Increase to at least 25 percent the proportion of Hispanics aged 18 and older who

engage in light to moderate physical activity for at least 30 minutes per day 5 or more times per week.

Duplicate objectives: 15.11a and 17.13a

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.

1.4b: Increase to at least 17 percent the proportion of blacks aged 18 and older 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.

1.4c: Increase to at least 17 percent the proportion of Hispanics aged 18 and older 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.

1.5d: Reduce to no more than 20 percent the proportion of blacks aged 18 and older who engage in no leisure-time physical activity.

1.5e: Reduce to no more than 25 percent the proportion of Hispanics aged 18 and older who engage in no leisure-time physical activity.

1.5f: Reduce to no more than 21 percent the proportion of American Indians/Alaska Natives aged 18 and older 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

1.7a*: Increase to at least 24 percent the proportion of overweight Hispanic males aged 18 and older who have adopted sound dietary practices combined with regular physical activity to attain an appropriate body weight.

Duplicate objective: 2.7a

1.7b*: Increase to at least 22 percent the proportion of overweight Hispanic females aged 18 and older who have adopted sound dietary practices combined with regular physical activity to

attain an appropriate body weight.

Duplicate objective: 2.7b

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.

1.13*: 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: 17.3 and age-related objective for people aged 65 and older

1.13a*: Reduce to no more than 325 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: 17.3a

1.13b*: Reduce to no more than 98 per 1,000 people the proportion of blacks aged 65 and older who have difficulty in performing two or more personal care activities, thereby preserving independence.

Duplicate objective: 17.3b

*Duplicate objective.

Priority Area 2 Nutrition

Background

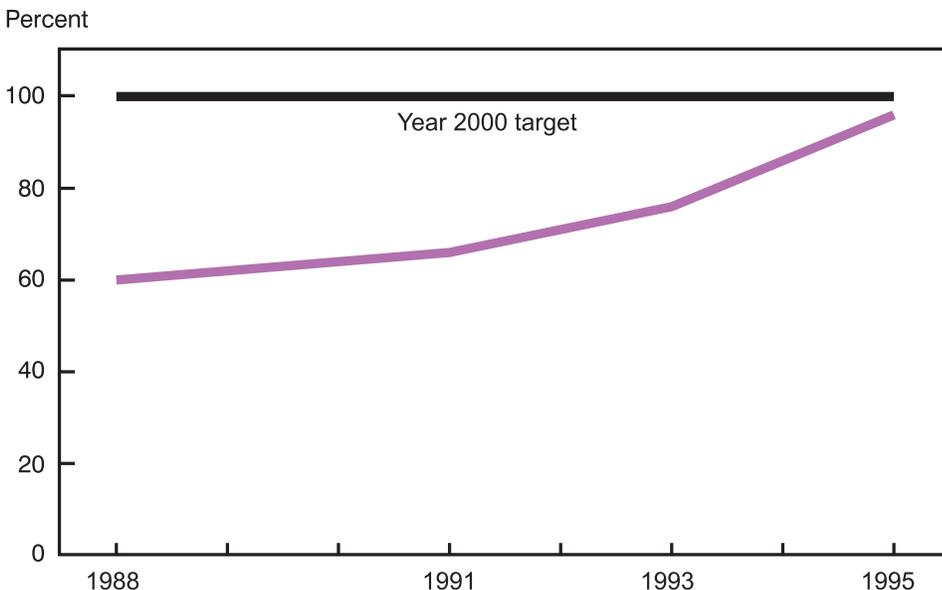
Nutrition is essential for sustenance, growth and development, health, and well-being. Nutritional (dietary) factors contribute substantially to the burden of preventable illness and premature death in the United States and to the Nation's economic burden (1). For the majority of adults who do not smoke and do not drink excessively, what they eat is the most significant controllable risk factor affecting their long-term health (2). Five major causes of death are associated with dietary factors: coronary heart disease, some types of cancer, stroke, noninsulin-dependent diabetes mellitus, and coronary artery disease (3). In general, once-prevalent nutrient deficiencies have been replaced by excesses and imbalances of other food components in the diet. There is a disproportionate consumption of foods high in fat, often at the expense of food high in complex carbohydrates, fiber, and other substances conducive to good health found in vegetables, fruits, and grain products (4). Aspects of undernutrition still occur in some groups of people, however, particularly among those who are isolated or economically deprived.

Data Summary

Highlights

Two thirds of the targets for the nutrition objectives have been met or are moving in the desired direction. Coronary heart disease (2.1) and stroke (2.22) mortality continue to decline for the total population. The age-adjusted death rates for all cancer (2.2) and for colorectal cancer (2.23) have surpassed the year 2000 targets. The average dietary fat intake (2.5) among people ages 2 years and over (expressed as percent of calories from fat) has declined slightly and the proportion of the population that meets the dietary guidelines for fat has increased. The average number of servings of fruits and vegetables consumed by the population has increased as has the proportion of the population that has met the dietary guidelines for consuming fruits and

Figure 3. Proportion of processed foods sold in supermarkets that have informative food labeling: United States, 1988–95, and year 2000 target for objective 2.14



	1988	1991	1993	1995	Year 2000 target
Processed foods	60%	66%	76%	96%	100%

SOURCES: Food and Drug Administration, Food Label and Package Survey.

vegetables (2.6). Grain products consumed by the population surpassed the year 2000 target, and consumption of grain products also exceeded the target (2.6). Iron deficiency prevalence (2.10) has decreased for low-income children 1–2 and 3–4 years, but has remained the same for all children in these age groups. More processed foods that are sold in supermarkets have useful and informative nutrition labeling (part of 2.14); see figure 3.

A few of the nutrition objectives are showing movement away from the targets. Overweight prevalence (2.3) has increased substantially for adolescents and adults and for all targeted special population groups. Concomitant with the increase in overweight prevalence, the proportion of self-reported overweight adults who report using exercise and diet to lose weight (2.7) has declined. The proportion of the population that met recommendations for consumption of calcium-rich foods (2.8) has also declined; the lowest proportion is among female adolescents and young adults. For females 20–44 years of age, iron deficiency has increased for the total

population and for those with low income (2.10). Data for 1993–95 indicate a continuing increase in diabetes incidence (2.24).

Summary of Progress

Of the 27 objectives in this area, 5 objectives (2.2, 2.4, 2.15, 2.23, and 2.25) have met the targets. Progress toward the targets has been made on 13 objectives (2.1, 2.5, 2.6, 2.11, 2.13, 2.14, 2.16, 2.18–2.20, 2.22, 2.26, and 2.27). Six objectives moved away from the target: 2.3, 2.7, 2.8, 2.10, 2.21, and 2.24. The status of objective 2.21 (nutrition assessment, counseling, and referral) is based on a very small decline reported by nurse practitioners only. Objective 2.9 (salt and sodium intake) shows mixed results. Two objectives have no new data beyond the baseline with which to measure progress (2.12 and 2.17).

Data Issues

Definitions

Coronary heart disease deaths (2.1) are defined by ICD–9 codes 402,

410–414, and 429.2. These are different from the codes used to define the category “Diseases of heart” which often appears in published tables (see appendix text and [table II](#).)

Overweight (**2.3**) for adults is defined as a body mass index (BMI) at or above the sex-specific 85th percentile of the 1976–80 Second National Health and Nutrition Examination Survey (NHANES II) reference population 20–29 years of age. For adolescents, overweight is defined as the sex- and age-specific 85th percentile from NHANES II (see Note with the text of objective **2.3**). BMI cutoff points for adults are 27.8 kilograms per meter squared for males, and 27.3 kilograms per meter squared for females. Current international research indicates that a lower BMI of 25 kilograms per meter squared may be more clinically relevant to increased risk of cardiovascular disease (5,6).

Estimates for objective **2.6** (fruit, vegetable, and grain intakes) exclude fruits and vegetables eaten as part of potato chips, condiments, fruit-flavored candies, jellies, and jams.

Updates for iron deficiency (**2.10**) from the 1988–94 NHANES III data were made as comparable as possible to the 1976–80 NHANES II estimates to allow for trend comparisons. Three methods are used to determine iron deficiency: mean corpuscular volume (MCV), erythrocyte protoporphyrin, and transferrin saturation. Iron deficiency is defined as having abnormal results for two or more methods. In 1988–94, MCV cutoff points were raised by one unit in order to account for differences in MCV values of the reference population at or below the median between NHANES II and NHANES III and known differences in hematocrit measurements (centrifugation in NHANES II versus electronic measurements in NHANES III) and possible methods differences in red blood cell counts (both surveys used electronic measurements but NHANES III data showed counts that appeared lower).

Objective **2.12** addresses feeding practices that prevent baby bottle tooth decay. The measure used to establish a baseline for this objective for the total population, caregivers with less than a high school education (**2.12a**), blacks (**2.12c**), and Hispanics (**2.12d**) is for children 6–23 months old. For this objective, feeding practices to prevent

baby bottle tooth decay include: child no longer using a bottle, never used a bottle, or if the child is still using a bottle, that no bottle was given at bedtime (excluding bottles with plain water) during the past 2 weeks.

Objective **2.14** targets nutrition labeling of food products; labeling of fresh produce and fresh fish is measured by the percentage of retail food stores that provides nutrition labeling. In 1990, the Nutrition Labeling and Education Act mandated the periodic assessment of actions taken by food retailers to provide consumers with nutrition information for raw agricultural commodities and raw fish, in particular to determine whether food retailers could achieve and maintain substantial compliance with guidelines for a voluntary nutrition labeling program. Guidelines for the nutrition labeling of these raw foods were issued in November 1991. A baseline survey conducted in August and September 1991, before the guidelines were issued, determined that virtually no food retailers provided complete nutrition labeling for these foods. Baseline estimates for objective **2.14** published elsewhere (7,8) for fresh produce and fresh seafood have been revised based on this survey and a reinterpretation of the available data. The first followup survey to assess compliance with the final rule was conducted in November and December 1992. The dramatic increase from 1991 to 1992 in the percentage of retail food stores providing nutrition labeling information for raw produce and for raw fish represents a highly significant response to both the Nutrition Labeling and Education Act and the Food and Drug Administration’s implementation of regulations.

High blood cholesterol (**2.25**) is defined as serum cholesterol levels of 240 mg/dL (9). Objective **2.26** addresses the proportion of people with hypertension whose blood pressure is under control. High blood pressure is defined as blood pressure greater than 140 mm Hg systolic and/or 90 mm Hg diastolic and/or taking antihypertensive medication. The estimates used to track this objective define control as using antihypertensive medication only and do not include other nonpharmacologic treatments such as weight loss, low sodium diets, and restriction of alcohol.

Data Source Descriptions

Growth retardation among low-income children (**2.4**) and breast feeding among American Indian/Alaska Native mothers (**2.11d**) are tracked by the Pediatric Nutrition Surveillance System (PedNSS). The number of participating States and Indian tribes has varied from year to year. The fluctuations in the scope of surveillance could affect the comparability of estimates.

Data for **2.11** and **2.11a–c** are from the Ross Mothers’ Survey (RMS) conducted by Abbot Laboratories. The RMS is an ongoing survey that is periodically mailed to a probability sample of new mothers selected from a list of names that represents approximately 80 percent of all national births. Mothers are asked to recall the type of milk their baby was fed in the hospital and in each subsequent month up to the month of the survey. Mothers are considered to be breastfeeding if they used either human milk exclusively or human milk in combination with a supplemental bottled formula or cow’s milk.

In 1988–96, the questionnaires were mailed to mothers at the time their babies were 6 months old. In 1997 the methodology changed and questionnaires were mailed to a larger sample of mothers with babies 1–12 months of age. Therefore, although the overall sample is now approximately double the pre-1997 size, the number in the sample for each month (including 6 months) is considerably smaller than that of previous years. This change affects the stability of the 6-month figures now used to monitor this objective. Also beginning with data year 1997, the RMS no longer collects information on family income. Information on education of mother is available from the survey to measure socioeconomic status.

The data on inquiry about diet and nutrition for objective **2.21** are from the Primary Care Provider Surveys (PCPS), which were drawn from a random stratified sample of members of the American College of Physicians from four geographic regions. Provider groups sampled included internists, pediatricians, nurse practitioners, obstetricians/gynecologists, and family physicians. In 1992 response rates varied from 50–80 percent across these groups. The data on formulation of a

diet and nutrition plan represent the proportion of providers who routinely delivered these services to 81–100 percent of their clients who needed the plan. The Prevention in Primary Care Study (PPCS) was conducted in 1997–98 to update data from the PCPS. The design and items included in the 1997–98 study were similar to the PCPS, but a slightly different sampling frame was used and some items included in the 1992 surveys were not included in the PPCS. The professionals were sampled from listings of all licensed, active practitioners in the United States whose practices were at least 50 percent primary care. Because of low response rates from the other provider groups, updates are available only for nurse practitioners.

Comparability of Data Sources

Overweight (2.3) is being tracked with two data sources. The primary data source is NHANES, which provided baselines and the 1988–94 updates for most of the overweight objectives and subobjectives; these data are derived from measured height and weight. The second data source is the National Health Interview Survey (NHIS). This survey provides interim estimates shown in an earlier publication (10), updates for Hispanic females and American Indians/Alaska Natives, and all data for people with disabilities. NHIS estimates are based on self-reported heights and weights and are not comparable with the actual measured data from NHANES: prevalence estimates of overweight from self-reported height and weight tend to be lower than estimates from measured height and weight. Trends from the NHIS self-report measures, like those from NHANES, show a steady increase in prevalence of overweight; this increase is, however, different in magnitude from that observed in the data derived from measured height and weight.

For the use of food labels by adults (2.13) the 1988 baseline measure and 1990 and 1994 updates are from the Health and Diet Survey, Food and Drug Administration. After giving a description of food labels, respondents were asked if they read food labels. The 1991 and 1993 updates from the NHIS asked respondents how often they read food labels for calories, fat, and/or cholesterol content. Respondents answering “always,” “often,” or “sometimes” were considered to be

making nutritious food selections using the food labels.

The 1985 and 1992 data for objective 2.20 are from the National Surveys of Worksite Health Promotion Activities, which were telephone surveys of nongovernment worksites. Worksites were sampled, because different worksites within the same company could have different sets of health promotion activities. Both active (for example, classes) and passive (for example, brochures) methods were counted as worksite health promotion activities. The 1995 update is from the CDC-sponsored Worksite Benchmark Survey, which used a methodology very similar to the 1992 survey, but did not include passive methods of health promotion (11,12).

Proxy Measures

Objective 2.7 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 and exercising more were included in this objective. However, an assessment of the quality of dietary practices has not yet been coupled with a measure of regular physical activity. The 1985 and 1990 questionnaires asked respondents specifically if they were eating fewer calories to lose weight and if they were increasing their physical activity to lose weight. In 1991, 1993, and 1995, eating fewer calories and exercising more were among a list of 10 possible methods of losing weight in response to the question, “Are you currently doing any of these things to control your weight?” Respondents were asked this question if they reported they were trying to lose weight or stay about the same.

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Table 2. Nutrition objective status

	Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	Target 2000
2.1*	Coronary heart disease deaths (age adjusted per 100,000)	1987	135	122	118	114	114	110	108	105	---	100
	a. Black	1987	168	158	156	151	154	147	147	140	---	115
2.2*	Cancer deaths (age adjusted per 100,000)	1987	134	135	135	133	133	132	130	128	^P 125	130
	a. Black	1990	182	...	179	178	177	174	172	168	^P 162	175
2.3*	Overweight prevalence (Based on measured height and weight unless otherwise indicated)											
	People 20-74 years	1976-80	26%	---	---	---	---	^{1,2} 35%	---	---	---	20%
	Male	1976-80	24%	---	---	---	---	^{1,2} 34%	---	---	---	20%
	Female	1976-80	27%	---	---	---	---	^{1,2} 37%	---	---	---	20%
	Adolescents 12-19 years	1976-80	15%	---	---	---	---	¹ 24%	---	---	---	15%
	a. Low-income female 20-74 years.	1976-80	37%	---	³ 47%	---	---	---	---	---	---	25%
	b. Black female 20-74 years.	1976-80	44%	---	---	---	---	^{1,2} 52%	---	---	---	30%
	c. Hispanic female 20-74 years . . . . .	...	---	---	---	---	---	---	---	---	---	25%
	Hispanic female 20 years and over (self-reported). . . . .	...	---	33%	32%	32%	33%	32%	35%	---	---	...
	Mexican American female 20-74 years.	1982-84	39%	---	---	---	---	^{1,2} 50%	---	---	---	...
	Cuban female 20-74 years.	1982-84	34%	---	---	---	---	---	---	---	---	...
	Puerto Rican female 20-74 years.	1982-84	37%	---	---	---	---	---	---	---	---	...
	d. American Indian/Alaska Native 20 years and over.	1984-88	29-75%	---	⁴ 40%	⁴ 36%	⁴ 48%	⁴ 34%	⁴ 43%	---	---	30%
	e. People with disabilities 20 years and over (self-reported)	1985	36%	---	38%	37%	38%	38%	40%	---	---	25%
	f. Female with high blood pressure 20-74 years	1976-80	50%	---	---	---	---	---	---	---	---	41%
	g. Male with high blood pressure 20-74 years	1976-80	39%	---	---	---	---	---	---	---	---	35%
	h. Mexican American male 20-74 years	1982-84	30%	---	---	---	---	^{1,2} 37%	---	---	---	25%
2.4	Growth retardation among low-income children 5 years and under	1988	11%	9%	9%	8%	8%	8%	8%	8%	8%	10%
	a. Low-income black children under 1 year.	1988	15%	15%	15%	15%	16%	16%	15%	15%	15%	10%
	b. Low-income Hispanic children under 1 year	1988	13%	9%	8%	8%	7%	7%	7%	7%	7%	10%
	c. Low-income Hispanic children 1 year	1988	16%	12%	11%	9%	9%	8%	8%	8%	8%	10%
	d. Low-income Asian/Pacific Islander children 1 year.	1988	14%	14%	13%	12%	11%	11%	12%	11%	11%	10%
	e. Low-income Asian/Pacific Islander children 2-4 years.	1988	16%	14%	12%	11%	10%	10%	10%	9%	8%	10%
2.5*	Dietary fat intake among people 2 years and over⁵											
	National Health and Nutrition Examination Survey											
	Average percent of calories from total fat.	1976-80	⁶ 36%	---	---	---	---	134%	---	---	---	30%
	Average percent of calories from saturated fat.	1976-80	⁶ 13%	---	---	---	---	112%	---	---	---	10%
	Percent who met goal for fat	1988-94	^a 27%	...	...	...	...	...	---	---	---	50%
	Percent who met goal for saturated fat	1988-94	^a 29%	...	...	...	...	...	---	---	---	50%
	Continuing Survey of Food Intakes by Individuals											
	Average percent of calories from total fat.	1989-91	34%	...	...	---	---	33%	33%	33%	---	30%
	Average percent of calories from saturated fat.	1989-91	12%	...	...	---	---	11%	11%	11%	---	10%
	Percent who met goal for fat	1989-91	22%	...	...	---	---	32%	33%	34%	---	50%
	Percent who met goal for saturated fat	1989-91	21%	...	...	---	---	34%	35%	36%	---	50%

Table 2. Nutrition objective status—Con.

Objective		Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	Target 2000
2.6*	Average daily intake of vegetables, fruits, and grain products among people 2 years and over⁵											
	Average number of servings											
	Vegetables and fruits	1989–91	4.1	...	...	---	---	4.6	4.7	4.7	---	5.0
	Grain products	1989–91	5.8	...	...	---	---	6.7	6.8	6.9	---	6.0
	Proportion who met Dietary Guidelines goal											
	Vegetables and fruits	1989–91	29%	...	...	---	---	36%	37%	35%	---	50%
	Grain products	1989–91	40%	...	...	---	---	50%	53%	52%	---	50%
2.7*	Sound weight loss practices among overweight people 12 years and over . . . . .	...	---	---	---	---	---	---	---	---	---	50%
	Overweight male 18 years and over	1985	25%	22%	19%	---	17%	---	15%	---	---	50%
	Overweight female 18 years and over	1985	30%	29%	22%	---	19%	---	19%	---	---	50%
	a. Overweight Hispanic male 18 years and over	1991	15%	...	...	---	11%	---	13%	---	---	24%
	b. Overweight Hispanic female 18 years and over	1991	13%	...	...	---	16%	---	16%	---	---	22%
2.8	Foods rich in calcium (percent who consume)⁵											
	Average of 3 or more servings daily											
	People 11–24 years	1989–91	20%	...	...	---	---	17%	16%	15%	---	50%
	Pregnant and lactating females ⁷	1989–91	22%	...	...	---	---	20%	17%	13%	---	50%
	Average of 2 or more servings daily ⁸											
	Children 2–10 years	1989–91	48%	...	...	---	---	42%	41%	47%	---	75%
	People 25 years and over	1989–91	21%	...	...	---	---	20%	20%	21%	---	50%
	Proportion who met average daily goal											
	a. Female 11–24 years	1989–91	13%	...	...	---	---	11%	10%	8%	---	50%
2.9	Salt and sodium intake (18 years and over)											
	Prepare foods without adding salt	1989–90	43%	...	---	---	---	---	---	---	---	65%
	Rarely or never use salt at table	1989–91	60%	...	...	---	---	56%	58%	62%	---	80%
	Regularly purchase foods with reduced salt and sodium content	1988	20%	---	---	---	---	---	19%	---	---	40%
2.10	Iron deficiency prevalence											
	Children 1–4 years . . . . .	...	---	---	---	---	---	16%	---	---	---	3%
	Children 1–2 years	1976–80	9%	---	---	---	---	19%	---	---	---	3%
	Children 3–4 years	1976–80	4%	---	---	---	---	14%	---	---	---	3%
	Females of childbearing age (20–44 years)	1976–80	5%	---	---	---	---	18%	---	---	---	3%
	a. Low-income children 1–2 years	1976–80	21%	---	---	---	---	113%	---	---	---	10%
	b. Low-income children 3–4 years	1976–80	10%	---	---	---	---	16%	---	---	---	5%
	c. Low-income female 20–44 years	1976–80	8%	---	---	---	---	112%	---	---	---	4%
	Anemia prevalence											
	d. Alaska Native children 1–5 years	1983–85	22–28%	⁹ 38%	⁹ 32%	⁹ 31%	⁹ 29%	⁹ 27%	⁹ 27%	---	---	10%
	e. Black, low-income pregnant female 15–44 years (third trimester)	1988	41%	41%	42%	43%	44%	43%	45%	44%	---	20%

Table 2. Nutrition objective status—Con.

<i>Objective</i>		<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
2.11*	Breastfeeding											
	During early postpartum period ¹⁰	1988	54%	52%	53%	54%	56%	57%	60%	59%	62%	75%
	a. Low-income mothers	1988	32%	35%	33%	35%	38%	40%	42%	42%	---	75%
	b. Black mothers	1988	25%	16%	26%	28%	31%	33%	37%	37%	41%	75%
	c. Hispanic mothers	1988	51%	44%	52%	52%	56%	58%	61%	61%	64%	75%
	d. American Indian/Alaska Native mothers	1988	47%	47%	46%	53%	51%	44%	52%	54%	56%	75%
	At age 6 months	1988	^a 20%	18%	18%	19%	19%	20%	22%	22%	26%	50%
	a. Low-income mothers	1988	9%	8%	8%	9%	10%	10%	11%	12%	---	50%
	b. Black mothers	1988	^a 7%	6%	7%	8%	9%	10%	11%	11%	15%	50%
	c. Hispanic mothers	1988	^a 14%	13%	15%	16%	16%	18%	20%	20%	25%	50%
	d. American Indian/Alaska Native mothers	1988	28%	27%	22%	24%	28%	24%	24%	24%	25%	50%
2.12*	Baby bottle tooth decay											
	Parents and caregivers 18 years and over who use preventive feeding practices	1991	55%	---	---	---	---	---	---	---	---	75%
	a. Parents and caregivers with less than high school education	1991	36%	---	---	---	---	---	---	---	---	65%
	b. American Indian/Alaska Native parents and caregivers	1985-89	74%	---	---	---	---	---	---	---	---	65%
	c. Black parents and caregivers	1991	48%	---	---	---	---	---	---	---	---	65%
	d. Hispanic parents and caregivers	1991	39%	---	---	---	---	---	---	---	---	65%
2.13	Use of food labels among people 18 years and over	1988	74%	76%	---	---	---	74%	75%	---	---	85%
	Read food labels for calories, fat, and/or cholesterol content	---	---	---	64%	---	66%	---	66%	---	---	---
2.14	Informative nutrition labeling											
	Processed foods	1988	60%	---	66%	---	76%	---	96%	---	---	100%
	Fresh produce	1991	^a Less than 1%	---	---	76%	---	75%	---	73%	---	90%
	Fresh seafood	1991	^a 0%	---	---	73%	---	75%	---	71%	---	90%
	Fresh meat/poultry	1995	^a 67%	---	---	---	---	---	---	---	---	90%
	Carry-away foods	---	---	---	---	---	---	---	---	---	---	40%
2.15	Availability of reduced-fat processed foods	1986	2,500	---	5,618	---	---	---	---	---	---	5,000
2.16	Low-fat, low-calorie restaurant food choices											
	Proportion of large chain restaurants offering at least one low-fat, low-calorie item	1989	70%	75%	---	---	---	---	---	---	---	90%
2.17	Nutritious school and child care food services	---	---	---	---	---	---	---	---	---	---	90%
	Schools offering lunches with an average of:											
	30% or less of calories from total fat	1992	1%	---	---	---	---	---	---	---	---	---
	Less than 10% of calories from saturated fat	1992	Less than 1%	---	---	---	---	---	---	---	---	---
	Schools offering breakfasts in USDA program with an average of:											
	30% or less of calories from total fat	1992	44%	---	---	---	---	---	---	---	---	---
	Less than 10% of calories from saturated fat	1992	4%	---	---	---	---	---	---	---	---	---
	Schools with initiatives to reduce fat											
	Drained browned meat prior to serving	---	---	---	---	---	---	94%	---	---	---	---
	Spooned solid fat from chilled meat or poultry	---	---	---	---	---	---	79%	---	---	---	---
	Did not provide butter or margarine	---	---	---	---	---	---	31%	---	---	---	---

Table 2. Nutrition objective status—Con.

Objective		Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	Target 2000
2.18	Receipt of home-delivered meals for people 65 years and over in need	1991	^a 48%	...	...	---	48%	---	50%	---	---	80%
2.19	Nutrition education in schools	...	---	---	---	---	---	---	---	---	---	75%
	Proportion of States requiring nutrition education	1990	60%	...	---	---	---	69%	---	---	---	...
	Nutrition education in at least one class:											
	Middle/junior high schools	...	---	---	---	---	---	83%	---	---	---	...
	Senior high schools	...	---	---	---	---	---	85%	---	---	---	...
2.20	Worksite nutrition/weight management programs											
	Nutrition education	1985	17%	---	---	31%	---	---	---	---	---	50%
	Weight control	1985	15%	---	---	24%	---	---	---	---	---	50%
	Nutrition education and/or weight control	...	---	---	---	37%	---	---	---	---	---	50%
	Nutrition or cholesterol group classes, workshops, or lectures	...	---	---	---	17%	---	---	18%	---	---	50%
	Weight management group classes, workshops, or lectures	...	---	---	---	15%	---	---	14%	---	---	50%
2.21	Nutrition assessment, counseling, and referral by clinician	1988	40–50%	---	---	---	---	---	---	---	---	75%
	Percent of clinicians routinely providing service to 81–100% of patients											
	Inquiry about diet/nutrition											
	Pediatricians	...	---	---	---	53%	---	---	---	---	^{11,12} ---	75%
	Nurse practitioners	...	---	---	---	46%	---	---	---	---	¹¹ 43%	75%
	Obstetricians/gynecologists	...	---	---	---	15%	---	---	---	---	^{11,12} ---	75%
	Internists	...	---	---	---	36%	---	---	---	---	^{11,12} ---	75%
	Family physicians	...	---	---	---	19%	---	---	---	---	^{11,12} ---	75%
	Formulation of a diet/nutrition plan											
	Pediatricians	...	---	---	---	31%	---	---	---	---	^{11,12} ---	75%
	Nurse practitioners	...	---	---	---	31%	---	---	---	---	¹¹ 31%	75%
	Obstetricians/gynecologists	...	---	---	---	19%	---	---	---	---	^{11,12} ---	75%
	Internists	...	---	---	---	33%	---	---	---	---	^{11,12} ---	75%
	Family physicians	...	---	---	---	24%	---	---	---	---	^{11,12} ---	75%
2.22*	Stroke deaths (age adjusted per 100,000)	1987	30.4	27.7	26.8	26.2	26.5	26.5	26.7	26.4	^P 25.9	20.0
	a. Black	1987	52.5	48.4	46.8	45.0	45.0	45.4	45.0	44.2	^P 42.0	27.0
2.23*	Colorectal cancer deaths (age adjusted per 100,000)	1987	14.7	13.8	13.5	13.2	13.1	13.0	12.8	12.3	---	13.2
	a. Black	1990	18.1	...	17.5	17.3	17.6	17.3	17.4	16.9	---	16.5
2.24*	Diabetes incidence and prevalence											
	Total population (per 1,000)											
	Incidence of diabetes	1986–88	2.9	¹³ 2.6	¹⁴ 2.5	¹⁵ 2.4	¹⁶ 2.8	¹⁷ 3.1	¹⁸ 3.4	---	---	2.5
	Prevalence of diabetes	1986–88	28	¹³ 26	¹⁴ 27	¹⁵ 28	¹⁶ 30	¹⁷ 30	¹⁸ 31	¹⁹ 31	---	25
	Prevalence of diabetes (per 1,000)											
	a. American Indian/Alaska Native ²⁰	1987	69	67	---	67	70	73	---	---	---	62
	b. Puerto Rican 20–74 years	1982–84	55	---	---	---	---	---	---	---	---	49
	c. Mexican American 20–74 years	1982–84	54	---	---	---	---	¹⁶ 66	---	---	---	49
	d. Cuban American 20–74 years	1982–84	36	---	---	---	---	---	---	---	---	32
	e. Black (all ages)	1986–88	36	¹³ 36	¹⁴ 36	¹⁵ 36	¹⁶ 38	¹⁷ 40	¹⁸ 42	¹⁹ 44	---	32

Table 2. Nutrition objective status—Con.

<i>Objective</i>		<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
2.25*	High blood cholesterol prevalence											
	People 20–74 years	1976–80	27%	---	---	---	---	¹ 19%	---	---	---	20%
	Male 20–74 years	1976–80	25%	---	---	---	---	¹ 18%	---	---	---	20%
	Female 20–74 years	1976–80	29%	---	---	---	---	¹ 20%	---	---	---	20%
2.26*	Controlled high blood pressure											
	People 18–74 years with high blood pressure	1976–80	11%	---	³ 29%	---	---	---	---	---	---	50%
	a. Male 18–74 years with high blood pressure	1976–80	6%	---	³ 22%	---	---	---	---	---	---	40%
	b. Mexican American 18–74 years with high blood pressure	1988–91	14%	...	...	---	---	---	---	---	---	50%
	c. Female 70 years and over with high blood pressure	1988–91	19%	...	...	---	---	---	---	---	---	50%
2.27*	Mean serum cholesterol level (mg/dL)											
	People 20–74 years	1976–80	213	---	---	---	---	¹ 203	---	---	---	200
	Male 20–74 years	1976–80	211	---	---	---	---	¹ 202	---	---	---	200
	Female 20–74 years	1976–80	215	---	---	---	---	¹ 204	---	---	---	200

--- Data not available.

... Category not applicable.

^aBaseline has been revised.

^pPreliminary data.

¹1988–94 data.

²People 20 years and over.

³1988–91 data.

⁴Estimate derived from self-reported height and weight.

⁵Estimates are from 1-, 2-, or 3-day dietary data. See text for explanation.

⁶For people up to 74 years.

⁷Estimate may be unreliable because of small cell size and/or large coefficients of variation.

⁸Excluding pregnant/lactating females and breastfed children.

⁹Low-income children 1–4 years.

¹⁰Breastfed in hospital.

¹¹1997–98 data.

¹²Response rate for this group was too low to produce reliable estimates.

¹³1988–90 data.

¹⁴1989–91 data.

¹⁵1990–92 data.

¹⁶1991–93 data.

¹⁷1992–94 data.

¹⁸1993–95 data.

¹⁹1994–96 data.

²⁰Data are for American Indian/Alaska Native 15 years and over in Indian Health Service areas only.

NOTE: Data include revisions and, therefore, may differ from data previously published.

<i>Objective number</i>	<i>Data source</i>
2.1*, 2.1a	National Vital Statistics System, CDC, NCHS.
2.2*, 2.2a	National Vital Statistics System, CDC, NCHS.
2.3*, 2.3a,b,f,g	National Health and Nutrition Examination Survey, CDC, NCHS.
2.3c, h	Data for Hispanic: National Health Interview Survey, CDC, NCHS. Baselines for Mexican American, Cuban, Puerto Rican: Hispanic Health and Nutrition Examination Survey, CDC, NCHS. Updates for Mexican American: National Health and Nutrition Examination Survey, CDC, NCHS.
2.3d	Baseline: IHS, OPEL. Updates: National Health Interview Survey, CDC, NCHS.
2.3e	National Health Interview Survey, CDC, NCHS.
2.4, 2.4a–e	Pediatric Nutrition Surveillance System, CDC, NCCDPHP.
2.5*	1976–80 baselines and 1988–94 updates: National Health and Nutrition Examination Survey, CDC, NCHS. 1989–91 baselines and 1994–96 updates: Continuing Survey of Food Intakes by Individuals, USDA.
2.6*	Continuing Survey of Food Intakes by Individuals, USDA.
2.7*, 2.7a–b	National Health Interview Survey, CDC, NCHS.
2.8, 2.8a	Continuing Survey of Food Intakes by Individuals, USDA.
2.9	Preparing foods and use of salt at table: Continuing Survey of Food Intakes by Individuals, USDA. Purchasing reduced-salt foods: Health and Diet Survey, FDA.
2.10, 2.10a–c	National Health and Nutrition Examination Survey, CDC, NCHS.
2.10d	Baseline: Survey of American Indians/Alaska Natives, CDC; IHS, OPEL. Updates: Pediatric Nutrition Surveillance System, CDC, NCCDPHP.
2.10e	Pregnancy Nutrition Surveillance System, CDC, NCCDPHP.
2.11*, 2.11a–c	Ross Laboratories Mothers Survey.
2.11d	Pediatric Nutrition Surveillance System, CDC, NCCDPHP.
2.12*, 2.12a,c,d	National Health Interview Survey, CDC, NCHS.
2.12b	1990 Baby Bottle Tooth Decay 5-year Evaluation Report, IHS.
2.13	Use of food labels: Health and Diet Survey, FDA. Read food labels: National Health Interview Survey, CDC, NCHS.
2.14	Baseline and updates for processed foods: Food Label and Package Survey, FDA. Baselines and updates for fresh produce and seafood: Nutrition Labeling of Raw Produce and Raw Fish, FDA. Baseline for fresh meat/poultry: Nutritional Labeling/Safe Handling Information Study: Raw Meat and Poultry, USDA.
2.15	Nielsen Company National Scantrack.
2.16	Survey of Chain Operators, National Restaurant Association.
2.17	For lunches and breakfasts: School Nutrition and Dietary Assessment Study, USDA. For initiatives to reduce dietary fat: School Health Policies and Programs Study, CDC, NCCDPHP.
2.18	National Health Interview Survey, CDC, NCHS.
2.19	Baseline: National Survey of School Health Education Activities, CDC, NCCDPHP. Update: School Health Policies and Programs Study, CDC, NCCDPHP.
2.20	National Survey of Worksite Health Promotion Activities, OPHS, ODPHP.
2.21	1995 data: Business Responds to AIDS Benchmark Survey, CDC, NCHSTP. 1988 baseline: Lewis CE. Disease prevention and health promotion practices of primary care physicians in the United States. <i>Am J Prev Med</i> 4:9–16. 1988. 1992 data: Primary Care Provider Surveys, OPHS, ODPHP. 1998 data: Prevention in Primary Care Study, American College of Preventive Medicine.
2.22*, 2.22a	National Vital Statistics System, CDC, NCHS.

<i>Objective number</i>	<i>Data source</i>
2.23*, 2.23a	National Vital Statistics System, CDC, NCHS.
2.24*, 2.24e	National Health Interview Survey, CDC, NCHS.
2.24a	Ambulatory Utilization Data, IHS.
2.24b-d	Baseline: Hispanic Health and Nutrition Examination Survey, CDC, NCHS. Update for Mexican American: National Health and Nutrition Examination Survey, CDC, NCHS.
2.25*	National Health and Nutrition Examination Survey, CDC, NCHS.
2.26*, 2.26a-c	National Health and Nutrition Examination Survey, CDC, NCHS.
2.27*	National Health and Nutrition Examination Survey, CDC, NCHS.

*Duplicate objective. See full text of objective following this table.

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

2.2a*: Reverse the rise in cancer deaths to achieve a rate of no more than 175 per 100,000 blacks.

Duplicate objective: 16.1a

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 modified age- and sex-specific 85th percentile values of the 1976–80 National Health and Nutrition Examination Survey (NHANES II). 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

2.3h*: Reduce overweight to a prevalence of no more than 25 percent among Mexican-American men.

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

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 derived from 1971–74 NHANES I.

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. In addition, increase to at least 50 percent the proportion of people aged 2 and older who meet the Dietary Guidelines' average daily goal of no more than 30 percent of calories from fat, and increase to at least 50 percent the proportion of people aged 2 and older who meet the average daily goal of less than 10 percent of calories from saturated fat.

Duplicate objectives: 15.9 and 16.7

2.6*: Increase complex carbohydrate and fiber-containing foods in the diets of people aged 2 and older to an average of five or more daily servings for vegetables (including legumes) and fruits, and to an average of six or more daily servings for grain products. In addition, increase to at least 50 percent the proportion of people aged 2 and older who meet the Dietary Guidelines' average daily goal of five or more servings of vegetables/fruits, and increase to at least 50 percent the proportion who meet the goal of six or more servings of grain products.

NOTE: The definition of vegetables, fruits, grain products, and serving size designations are derived from The Food Guide Pyramid. Vegetable, fruit, and grain ingredients from mixtures are included in the total, and fractions of servings are counted.

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

2.7a*: Increase to at least 24 percent the proportion of overweight Hispanic males aged 18 and older who have adopted sound dietary practices combined with regular physical activity to attain an appropriate body weight.

Duplicate objective: 1.7a

2.7b*: Increase to at least 22 percent the proportion of overweight Hispanic females aged 18 and older who have adopted sound dietary practices combined with regular physical activity to attain an appropriate body weight.

Duplicate objective: 1.7b

2.8: Increase calcium intake so at least 50 percent of people aged 11–24 and 50 percent of pregnant and lactating women consume an average of three or more daily servings of foods rich in calcium, and at least 75 percent of children aged 2–10 and 50 percent of people aged 25 and older consume an average of two or more servings daily.

NOTE: Calcium-rich foods are defined for this purpose as milk and milk products, and the recommended number of servings and the age groupings are based on The Food Guide Pyramid and on the National Research Council's Recommended Dietary Allowance (RDA) for calcium, respectively. Milk and milk product ingredients in mixtures are included, and fractions of servings are counted.

2.8a: Increase calcium intake so at least 50 percent of females aged 11–24 consume an average of three or more daily servings of foods rich in calcium.

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 was defined as hemoglobin less than 11 gm/dL or hematocrit less than 34 percent. For pregnant women in the third trimester, anemia was defined according to CDC criteria. 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

NOTE: The definition used for breastfeeding includes exclusive use of human milk or the use of human milk with a supplemental bottle of formula or cow's milk.

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

2.12c*: Increase to at least 65 percent the proportion of black parents and caregivers who use feeding practices that prevent baby bottle tooth decay.

Duplicate objective: 13.11c

2.12d*: Increase to at least 65 percent the proportion of Hispanic parents and caregivers who

use feeding practices that prevent baby bottle tooth decay.

Duplicate objective: 13.11d

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 ready-to-eat carry-away foods. Achieve compliance by at least 90 percent of retailers with the voluntary labeling of fresh meats, poultry, seafood, fruits, and vegetables.

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 comprehensive 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.

2.22*: Reduce stroke deaths to no more than 20 per 100,000 people.

Duplicate objectives: 3.18 and 15.2

2.22a*: Reduce stroke deaths among blacks to no more than 27 per 100,000.

Duplicate objectives: 3.18a and 15.2a

2.23*: Reduce colorectal cancer deaths to no more than 13.2 per 100,000 people.

Duplicate objective: 16.5

2.23a*: Reduce colorectal cancer deaths among blacks to no more than 16.5 per 100,000.

Duplicate objective: 16.5a

2.24*: 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.

Duplicate objective: 17.11

2.24a*: Reduce diabetes among American Indians and Alaska Natives to a prevalence of no more than 62 per 1,000.

Duplicate objective: 17.11a

2.24b*: Reduce diabetes among Puerto Ricans to a prevalence of no more than 49 per 1,000.

Duplicate objective: 17.11b

2.24c*: Reduce diabetes among Mexican-Americans to a prevalence of no more than 49 per 1,000.

Duplicate objective: 17.11c

2.24d*: Reduce diabetes among Cuban Americans to a prevalence of no more than 32 per 1,000.

Duplicate objective: 17.11d

2.24e*: Reduce diabetes among blacks to a prevalence of no more than 32 per 1,000.

Duplicate objective: 17.11e

2.25*: Reduce the prevalence of blood cholesterol levels of 240 mg/dL or greater to no more than 20 percent among adults.

Duplicate objective: 15.7

2.26*: 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. Control of hypertension does not include nonpharmacologic treatment.

Duplicate objective: 15.4

2.26a*: Increase to at least 40 percent the proportion of men with high blood pressure whose blood pressure is under control.

Duplicate objective: 15.4a

2.26b*: Increase to at least 50 percent the proportion of Mexican-Americans with high blood pressure whose blood pressure is under control.

Duplicate objective: 15.4b

2.26c*: Increase to at least 50 percent the proportion of women 70 years and older with high blood pressure whose blood pressure is under control.

Duplicate objective: 15.4c

2.27*: Reduce the mean serum cholesterol level among adults to no more than 200 mg/dL.

Duplicate objective: 15.6

*Duplicate objective.

Priority Area 3 Tobacco

Background

Tobacco use is responsible for approximately one of every five deaths in the United States and is the single most important preventable cause of death and disease in our society (1,2). Cigarette smoking accounts for approximately 430,000 deaths yearly (3), 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 is responsible for more than 5 million years of potential life lost each year (2). One of every three young people who become regular smokers will die of a smoking-related disease (4). If current smoking patterns continue, an estimated 25 million persons in the United States who are alive today will die prematurely from smoking-related illnesses, including an estimated 5 million persons now under 18 years of age (3).

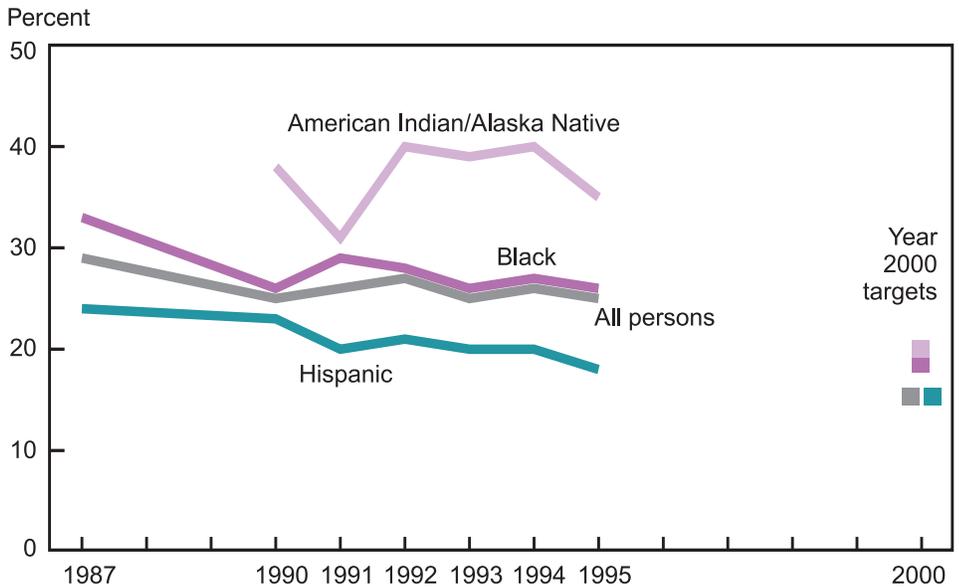
Smoking contributes substantially to chronic morbidity and disability as well. In 1993, smoking-related illnesses cost the Nation \$50 billion in health care costs (5). In 1990, estimated indirect losses due to smoking were approximately \$47 billion (6). Additionally, in 1995, the total smoking-attributable costs related to complicated births among pregnant smokers was an estimated \$1.4 billion (7). Cigarette smoking during pregnancy accounts for 17–26 percent of low-birthweight babies (8). Environmental tobacco smoke also causes disease, including lung cancer in healthy nonsmokers and respiratory problems in young children and infants (9). The prevalence of smoking remains disproportionately high among blue-collar workers, military personnel, and American Indians and Alaska Natives.

Data Summary

Highlights

Many objectives in the tobacco priority area are showing progress. Coronary heart disease mortality (3.1) is declining for the total population. Lung

Figure 4. Prevalence of cigarette smoking for persons 18 years and over, by race and Hispanic origin: United States, 1987–95, and year 2000 targets for objective 3.4



	1987	1990	1991	1992	1993	1994	1995	Year 2000 target
All persons	29%	25%	26%	27%	25%	26%	25%	15%
Black	33%	26%	29%	28%	26%	27%	26%	18%
Hispanic	24%	23%	20%	21%	20%	20%	18%	15%
American Indian/ Alaska Native	---	38%	31%	40%	39%	40%	35%	20%

--- Data not available.

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

cancer mortality (3.2) and chronic obstructive lung disease mortality (3.3) have slowed to rates that should stay below the year 2000 targets. Cigarette-smoking prevalence (3.4) has declined somewhat since the 1987 baseline; however, it has remained essentially unchanged since 1990. The proportion of high school seniors who smoke remains at approximately 20 percent, but has declined slightly from baseline (10). Smoking cessation attempts among the general public have increased (3.6), but they have decreased among pregnant women (3.7). Smokeless tobacco use (3.9) is declining among adolescent males and young men under 25 years of age. There has been an increase in the proportion of schools and worksites with smoking policies (3.10 and 3.11). All States have enacted laws prohibiting the sale and distribution of tobacco products to youth under 18 years of age (3.13; see figure 4); however, these laws are often not

enforced (11). The average age of first use for cigarettes has increased (3.19), although the proportion of high school seniors reporting a perception of social disapproval for smoking cigarettes is declining (3.21) and reports of perception of the harm caused by smoking cigarettes is essentially unchanged (3.22). The proportion of nurse practitioners who report asking about tobacco use and discussing strategies to quit smoking with their patients has increased (3.16).

Summary of Progress

Three objectives (3.2, 3.14, and 3.17) have met the year 2000 targets. Data for 18 objectives (3.1, 3.3–3.6, 3.8–3.13, 3.16, 3.18, 3.19, 3.20 (cigarettes), 3.22 (smoking one or more packs of cigarettes daily), 3.23, and 3.26) show improvements toward the year 2000 targets. Although data for compound objectives 3.20 and 3.22 indicate mixed progress overall, data for cigarettes show movement toward the

targets. Objectives **3.7**, **3.21** (cigarette smoking), and **3.25** are moving away from the targets. Data beyond baseline were not available for two objectives (**3.15** and **3.24**).

Data Issues

Definitions

Coronary heart disease deaths (**3.1**) are defined by ICD-9 codes 402, 410-414, and 429.2. These are different from the codes used to define the category "Diseases of heart" which often appears in published tables (see appendix text and [table II](#)).

Beginning in 1992, the definition of current smoker (**3.4**) was modified to specifically include persons who smoked only some days. Prior to 1992, a current smoker was defined by the questions: "Have you ever smoked 100 cigarettes in your lifetime?" and "Do you smoke now?" In 1992, data were collected and analyzed for half the respondents using these smoking questions and for the other half of respondents using a revised smoking question: "Do you smoke everyday, some days, or not at all?" The 1992 estimate combines data collected using both sets of questions. Updates after 1992 are based completely on the revised definition, which is considered a more complete estimate of smoking prevalence. The effect of the new definition is a small increase in the number of smokers.

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) (12). Beginning with 1991, progress toward the target is being tracked using periodic supplements to the NHIS. The 1985 and 1991 surveys used different definitions for smoking before pregnancy and for the duration of quitting during pregnancy. The 1991 measure, which focused on women who quit during the first trimester, is closer to the intent of the objective but not comparable with the 1985 baseline that counted women who quit any time during pregnancy.

For objective **3.8** (children's exposure to tobacco smoke at home), the definition of regular exposure is defined as the occurrence of tobacco smoking anywhere in the home on 4 or more days each week.

Objective **3.25** seeks to reduce the number of States with preemptive clean indoor air laws. Preemptive laws prevent local jurisdictions from enacting more stringent restrictions than the State law or restrictions that vary from the State law (13).

Comparability of Data Sources

Information on objective **3.9** (smokeless tobacco use by males 12-24 years of age) is tracked by 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 NHIS. The NHIS defines a smokeless tobacco user as someone who has used either snuff or chewing tobacco at least 20 times and who currently uses either of these substances every day or some days. Information for males 18-25 years of age is also available from the NHSDA using the same definition as for the younger age group. According to the NHSDA, smokeless tobacco use among males 18-24 years shows a similar downward trend to that observed from the NHIS. The smokeless tobacco use prevalence estimate from NHSDA is higher than the NHIS estimate (11.7 percent compared with 8.2 percent in 1992). Differences between the NHSDA and the NHIS may be due to differences in the definition of smokeless tobacco use between the two surveys and/or methodological differences in survey administration (written answer sheets in the NHSDA and verbal responses in the NHIS).

Data Source Descriptions

The 1985 and 1992 data for objective **3.11** (worksite smoking policies) are from the National Survey of Worksite Health Promotion Activities, which were telephone surveys of nongovernment worksites. Worksites were sampled because different worksites within the same company could have different sets of health promotion activities. Both active (for example, classes) and passive (for example, brochures) methods were counted as worksite health promotion activities. The 1995 update comes from the CDC-sponsored Worksite Benchmark Survey, which used a methodology very similar to the 1992 survey, but did not include passive

methods of health promotion (14,15).

The NHSDA is used to measure objectives **3.9**, **3.19**, and **3.20** regarding substance use among adolescents and young people. Beginning in 1991, the survey was expanded to include college students living in residence halls. In 1994, an improved questionnaire and editing procedures were introduced, which affects comparability with previous years. Additionally, in 1994, data were collected for cigarettes using a self-administered questionnaire, unlike previous years where questions regarding cigarette smoking were asked by the interviewers. This change in questionnaire administration greatly increased the cigarette-use estimates among adolescents, most likely due to the increased confidentiality of the new methodology. The trend data for all substances in objective **3.20** have been recalculated to adjust for these differences and to produce comparable estimates from 1988 to 1997.

Data for objective **3.16**, cessation counseling and followup by clinicians, were obtained from several different surveys, making statements about trends somewhat problematic. The 1986 baselines for dentists were obtained from the Statewide Survey of Dentists, and the updates are from the National Survey of Dentists. The 1986 baseline for internists is from the American College of Physicians (ACP) Membership Survey of Prevention Practices in Adult Medicine. The sampling frame for internists in the 1992 Primary Care Provider Surveys (PCPS) contained a random stratified sample of ACP members drawn from four geographic regions with oversampling of female members, yielding an initial sample of 1,200 internists. Additional provider groups sampled in the 1992 PCPS included pediatricians, nurse practitioners, obstetricians/gynecologists, and family physicians. The Primary Care Providers Survey data on inquiry for objective **3.16** refer to the proportion of providers who routinely provided service to 81-100 percent of their clients. Counseling data to discuss strategies to quit smoking represent the proportion of providers who routinely delivered these services to 81-100 percent of their clients who needed the intervention. Reporting of counseling could have been independent of the assessment made by the clinician.

The Prevention in Primary Care Study (PPCS) was conducted in 1997–98 to update data from the 1992 PCPS. The design and items included in the 1997–98 study were similar to the PCPS, but a slightly different sampling frame was used and some items included in the 1992 surveys were not included in the PPCS. The providers were sampled from listings of all licensed, active practitioners in the United States whose practices were at least 50 percent primary care. Because of low response rates from the other provider groups, updates are available only for nurse practitioners.

Proxy Measures

The proportion of people 20–24 years of age who currently smoke cigarettes is used as a proxy measure for initiation of cigarette smoking by children and youth (objective 3.5). The proxy data indicate a downward trend that differs from data from other sources (16).

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Table 3. Tobacco objective status

Objective		Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	Target 2000
3.1*	Coronary heart disease deaths (age adjusted per 100,000)	1987	135	122	118	114	114	110	108	105	---	100
	a. Black	1987	168	158	156	151	154	147	147	140	---	115
3.2*	Slow the rise in lung cancer deaths (age adjusted per 100,000)	1987	38.5	39.9	39.6	39.3	39.3	38.7	38.3	37.8	---	42
	a. Female	1990	25.6	...	25.8	26.3	26.5	26.6	26.9	26.8	---	27
	b. Black male	1990	86.1	...	83.1	81.2	80.7	77.6	75.7	73.4	---	91
3.3	Slow the rise in chronic obstructive pulmonary disease deaths (age adjusted per 100,000)	1987	18.9	19.7	20.1	19.9	21.4	21.0	20.8	21.0	^p 21.4	25
3.4*	Cigarette smoking prevalence											
	People 18 years and over	1987	29%	25%	26%	¹ 27%	25%	26%	25%	---	---	15%
	Male	1987	31%	28%	28%	¹ 29%	28%	28%	27%	---	---	15%
	Female	1987	27%	23%	23%	¹ 25%	22%	23%	23%	---	---	15%
	a. People with high school education or less											
	20 years and over	1987	34%	31%	31%	¹ 32%	30%	31%	30%	---	---	20%
	b. Blue-collar workers 18 years and over	1987	41%	36%	36%	¹ 36%	34%	39%	36%	---	---	20%
	c. Military personnel	1988	42%	---	---	¹ 35%	---	---	32%	---	---	20%
	d. Black 18 years and over	1987	33%	26%	29%	¹ 28%	26%	27%	26%	---	---	18%
	e. Hispanic 18 years and over	1987	24%	23%	20%	¹ 21%	20%	20%	18%	---	---	15%
	f. American Indian/Alaska Native 18 years and over	1979–87	² 42–70%	38%	31%	¹ 40%	39%	40%	35%	---	---	20%
	g. Southeast Asian male	1984–88	55%	³ 35%	³ 36–41%	---	---	---	---	---	---	20%
	h. Females of reproductive age (18–44 years)	1987	29%	26%	27%	¹ 28%	26%	27%	26%	---	---	12%
	i. Pregnant female	1985	25%	19%	20%	---	20%	---	18%	---	---	10%
	j. Females who use oral contraceptives	1983	36%	⁴ 26%	---	---	---	---	24%	---	---	10%
3.5	Smoking initiation by children and adolescents (proxy 20–24 years)	1987	30%	26%	24%	28%	27%	30%	26%	---	---	15%
	a. Lower socioeconomic status people 20–24 years ⁵	1987	40%	35%	33%	38%	38%	39%	31%	---	---	18%
3.6	Smoking cessation attempts	1986	34%	---	56%	46%	47%	46%	46%	---	---	50%
3.7	Smoking cessation during pregnancy	1985	⁶ 39%	---	31%	---	---	---	---	---	---	60%
	a. Females with less than a high school education	1985	⁶ 28%	---	21%	---	---	---	---	---	---	45%
3.8*	Children's exposure to smoke at home (6 years and under) . . .	1986	39%	---	32%	---	27%	27%	---	---	---	20%
3.9*	Smokeless tobacco use											
	Male 12–17 years	1988	6.6%	---	5.3%	4.8%	3.9%	5.1%	4.9%	3.5%	---	4%
	Male 18–24 years	1987	8.9%	---	9.9%	8.2%	7.8%	6.9%	---	---	---	4%
	a. American Indian/Alaska Native 18–24 years	1986–87	18–64%	---	7	7	7	7	---	---	---	10%
3.10	Tobacco-use prevention education and tobacco-free schools											
	School districts providing tobacco-free environments	1988	17%	---	---	---	---	⁸ 36.5%	---	---	---	100%
	School districts providing antismoking education											
	High school	1988	78%	---	---	---	---	90.7%	---	---	---	100%
	Middle school	1988	81%	---	---	---	---	82.5%	---	---	---	100%
	Elementary school	1988	75%	---	---	---	---	---	---	---	---	100%

Table 3. Tobacco objective status—Con.

Objective		Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	Target 2000
3.11*	Worksites with smoking policies											
	Policy that bans smoking or limits it to separately ventilated areas 50 or more employees	1985	27%	---	---	59%	---	---	---	---	---	100%
	Any smoking policy											
	Medium and large companies	1987	54%	---	85%	---	---	---	---	---	---	100%
	50 or more employees . . . . .	...	---	---	---	86%	---	---	87%	---	---	...
3.12*	Number of States with comprehensive laws for clean indoor air⁹											
	Private workplaces	1995	^a 1	...	...	...	...	...	...	1	1	51
	Public workplaces	1995	^a 9	...	...	...	...	...	...	9	12	51
	Restaurants	1995	2	...	...	...	...	...	...	3	3	51
	Public transportation	1995	^a 17	...	...	...	...	...	...	17	17	51
	Hospitals	1995	^a 8	...	...	...	...	...	...	8	8	51
	Day care centers	1995	21	...	...	...	...	...	...	21	21	51
	Grocery stores	1995	^a 4	...	...	...	...	...	...	4	4	51
3.13	Number of States with tobacco product sale and distribution to youth laws⁹											
	Number of States enforcing laws to achieve buy rates no higher than 20 percent	1990	45	...	50	50	51	51	51	51	51	51
	Number of States enforcing laws to achieve buy rates no higher than 20 percent . . . . .	...	---	---	---	---	---	---	---	---	¹⁰ 4	...
3.14	Number of States with plans to reduce tobacco use	1989	12	---	---	⁹ 35	---	⁹ 39	---	⁹ 51	⁹ 51	51
3.15	Tobacco product advertising and promotion to youth	1990	Minimal restrictions	...	---	---	---	---	---	---	---	Eliminate or severely restrict
3.16	Cessation counseling and followup by clinicians											
	Percent of clinicians routinely providing service to at least 75% of patients											
	Inquiry about smoking											
	General dentists	1986	26%	---	---	---	---	32.8%	---	---	---	75%
	Advised patients about smoking (among patients reporting smoking)											
	General dentists	1986	35%	---	---	---	---	64.8%	---	---	---	75%
	Internists (including sub-specialists)	1986	52%	---	---	---	---	---	---	---	---	75%
	Primary care providers	1986	63%	---	---	---	---	---	---	---	---	75%
	Inquiry about smokeless tobacco use											
	General dentists . . . . .	...	---	---	---	---	---	14.4%	---	---	---	...
	Advised patients about smokeless tobacco use (among patients reporting smokeless tobacco use)											
	General dentists . . . . .	...	---	---	---	---	---	75.0%	---	---	---	...
	Percent of clinicians routinely providing service to 81-100% of patients											
	Inquiry about tobacco use											
	Pediatricians . . . . .	...	---	---	---	33%	---	---	---	---	^{11,12} ---	75%
	Nurse practitioners . . . . .	...	---	---	---	51%	---	---	---	---	¹¹ 66%	75%

Table 3. Tobacco objective status—Con.

	<i>Objective</i>	<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
	Obstetricians/gynecologists . . . . .	...	---	---	---	49%	---	---	---	---	11,12_	75%
	Internists . . . . .	...	---	---	---	75%	---	---	---	---	11,12_	75%
	Family physicians . . . . .	...	---	---	---	59%	---	---	---	---	11,12_	75%
	Discussion of strategies to quit smoking											
	Pediatricians . . . . .	...	---	---	---	19%	---	---	---	---	11,12_	75%
	Nurse practitioners . . . . .	...	---	---	---	20%	---	---	---	---	11,12_	75%
	Obstetricians/gynecologists . . . . .	...	---	---	---	28%	---	---	---	---	11,12_	75%
	Internists . . . . .	...	---	---	---	50%	---	---	---	---	11,12_	75%
	Family physicians . . . . .	...	---	---	---	43%	---	---	---	---	11,12_	75%
3.17*	Oral cancer deaths (per 100,000)											
	Male 45–74 years	1987	13.6	13.4	12.7	12.2	12.1	11.1	11.0	10.7	P10.3	10.5
	Female 45–74 years	1987	4.8	4.6	4.6	4.3	4.2	4.0	3.9	3.5	P3.5	4.1
	a. Black male 45–74 years	1990	29.4	...	26.9	27.3	26.2	25.2	23.4	22.6	P20.6	26.0
	b. Black female 45–74 years	1990	6.9	...	6.9	6.0	5.8	5.7	6.4	5.0	P5.2	6.9
3.18*	Stroke deaths (age adjusted per 100,000)	1987	30.4	27.7	26.8	26.2	26.5	26.5	26.7	26.4	P25.9	20.0
	a. Black	1987	52.5	48.4	46.8	45.0	45.0	45.4	45.0	44.2	P42.0	27.0
3.19*	Average age of first use (adolescents 12–17 years)											
	Cigarettes	1988	11.6	11.5	11.5	11.7	11.7	12.2	12.3	12.4	---	12.6
	Alcohol	1988	13.1	12.8	12.6	13.0	12.9	12.8	12.8	13.1	---	14.1
	Marijuana	1988	13.4	13.4	13.5	13.8	13.9	14.1	13.8	14.4	---	14.4
3.20*	Use in past month by adolescents and young adults¹³											
	Alcohol											
	12–17 years	1988	33.4%	32.5%	27.0%	20.9%	23.9%	21.6%	21.1%	18.8%	20.5%	12.6%
	18–20 years	1994	54.6%	...	...	...	...	...	54.1%	50.1%	53.4%	29.0%
	Hispanic 12–17 years	1988	31.9%	24.2%	28.3%	20.3%	22.0%	18.3%	18.7%	19.9%	18.8%	12.0%
	Marijuana											
	12–17 years	1988	5.4%	4.4%	3.6%	3.4%	4.0%	6.0%	8.2%	7.1%	9.4%	3.2%
	18–25 years	1988	15.3%	12.7%	12.9%	10.9%	11.1%	12.1%	12.0%	13.2%	12.8%	7.8%
	Cocaine											
	12–17 years	1988	1.2%	0.6%	0.4%	0.3%	0.4%	0.3%	0.8%	0.6%	1.0%	0.6%
	18–25 years	1988	4.8%	2.3%	2.2%	2.0%	1.6%	1.2%	1.3%	2.0%	1.2%	2.3%
	Hispanic 12–17 years	1988	1.4%	2.0%	1.4%	1.3%	1.1%	0.7%	0.8%	1.1%	1.0%	0.6%
	Hispanic 18–25 years	1994	2.2%	...	...	...	...	...	1.1%	2.1%	1.5%	1.0%
	Cigarettes											
	12–17 years	1988	^a 22.7%	22.4%	20.9%	18.4%	18.5%	18.9%	20.2%	18.3%	19.9%	6.0%
3.21*	Perception of social disapproval by high school seniors											
	Heavy use of alcohol	1989	56.4%	59.0%	58.1%	60.8%	58.5%	59.1%	58.0%	57.8%	56.4%	70%
	Occasional use of marijuana	1989	71.1%	76.4%	75.8%	79.2%	73.8%	69.1%	65.4%	63.1%	59.9%	85%
	Trying cocaine once or twice	1989	88.9%	90.5%	91.8%	92.2%	91.1%	91.4%	91.1%	89.2%	87.3%	95%
	Smoking one or more packs of cigarettes per day	1987	74.2%	75.3%	74.0%	76.2%	71.8%	72.4%	69.2%	69.3%	68.5%	95%
3.22*	Perception of harm by high school seniors											
	Heavy use of alcohol	1989	44.0%	47.1%	48.6%	49.0%	48.3%	46.5%	45.2%	49.5%	43.0%	70%
	Regular use of marijuana	1989	77.5%	77.8%	78.6%	76.5%	72.5%	65.0%	60.8%	59.9%	58.1%	90%

Table 3. Tobacco objective status—Con.

	<i>Objective</i>	<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
	Trying cocaine once or twice	1989	54.9%	59.4%	59.4%	56.8%	57.6%	57.2%	53.7%	54.2%	53.6%	80%
	Smoking one or more packs of cigarettes per day	1987	68.6%	68.2%	69.4%	69.2%	69.5%	67.6%	65.6%	68.2%	68.7%	95%
	Using smokeless tobacco regularly	1987	^a 30.0%	34.2%	37.4%	35.5%	38.9%	36.6%	33.2%	37.4%	38.6%	95%
3.23	Tobacco excise tax (percent of retail price)											
	Cigarettes	1993	31.4%	...	...	...	...	31.0%	31.6%	30.5%	31.5%	50%
	Smokeless tobacco	1993	11.8%	...	...	...	...	---	13.8%	---	¹⁴ 13.0%	50%
3.24	Treatment for nicotine addiction											
	Health plans offering treatment	1985	11%	---	---	---	---	---	---	---	---	100%
3.25*	Preemptive clean indoor air laws											
	States with laws	1995	17	...	...	...	...	...	...	19	18	0
3.26	Number of States with laws banning cigarette vending machines in areas accessible to minors⁹	1995	^a 12	...	...	...	...	...	...	14	19	51

--- Data not available.
 ... Category not applicable.
^aBaseline has been revised.
^pPreliminary data.
¹In 1992, the definition of "current" changed to include "some days" (intermittent smoking).
²Estimates for different tribes.
³Vietnamese men only.
⁴1988 data.
⁵Among people 20-24 years with a high school education or less.
⁶Baseline for white females 20-24 years.
⁷Data are unreliable. Relative standard error is greater than 30 percent.
⁸Middle/junior high and senior high schools only.
⁹Includes the District of Columbia.
¹⁰1996-97 data.
¹¹1997-98 data.
¹²Response rate for this group was too low to produce reliable estimates.
¹³In 1994, estimates for drug use were restricted to a core set of questions in contrast to the coding procedure in prior years. The trend data have been recalculated to adjust for these differences and to produce comparable estimates from 1988 to 1996.
¹⁴Method of calculation modified in 1997.

NOTE: Data include revisions and, therefore, may differ from data previously published.

<i>Objective number</i>	<i>Data source</i>
3.1*, 3.1a	National Vital Statistics System, CDC, NCHS.
3.2*, 3.2a,b	National Vital Statistics System, CDC, NCHS.
3.3	National Vital Statistics System, CDC, NCHS.
3.4*, 3.4a,b,d,e,h	National Health Interview Survey, CDC, NCHS.
3.4c	Worldwide Survey of Substance Abuse and Health Behaviors Among Military Personnel, DoD, OASD.
3.4f	Baseline: CDC, 1987. Updates: National Health Interview Survey, CDC, NCHS.
3.4g	Baseline: Local surveys. 1990 update: Jenkins CNH. Cancer risks and prevention practices among Vietnamese refugees. <i>Western J of Med</i> 153:34–9. 1990. 1991 update: Jenkins CNH, et al. Tobacco use in Vietnam: Prevalence, predictors, and the role of the transnational tobacco corporations. <i>JAMA</i> 227(21):1726–31. 1997; Jenkins CNH, et al. The effectiveness of a media-led intervention to reduce smoking among Vietnamese-American men. <i>AJPH</i> 87(6):1031–4. 1997.
3.4i	Baseline and 1991 update: National Health Interview Survey, CDC, NCHS. 1993 update: National Health and Pregnancy Survey, NIH, NIDA. 1995 update: National Survey of Family Growth, CDC, NCHS.
3.4j	1983 baseline and 1988 update: Behavioral Risk Factor Surveillance System, CDC, NCCDPHP. 1995 update: National Survey of Family Growth, CDC, NCHS.
3.5, 3.5a	National Health Interview Survey, CDC, NCHS.
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.
3.9*	For males 18–24 years, National Health Interview Survey, CDC, NCHS. For males 12–17 years, National Household Survey on Drug Abuse, SAMHSA, OAS.
3.9a	Baseline: National Medical Expenditure Survey of American Indian/Alaska Native, PHS, NCHSR. Updates: National Health Interview Survey, CDC, NCHS.
3.10	Baseline: National Survey of School Districts' Nonsmoking Policies, NSBA, ACS, ALA, and AHA. Updates: School Health Policies and Programs Study, CDC, NCCDPHP.
3.11*	Baseline, 1991, and 1992 updates for worksites with 50 or more employees: National Survey of Worksite Health Promotion Activities, OPHS, ODPHP. 1995 data: Business Responds to AIDS Benchmark Survey, CDC, NCHSTP. 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*	Office on Smoking and Health Legislative Tracking System, 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 System, CDC, NCCDPHP. 1997 data for States enforcing laws: Synar Regulation Implementation: "Report to Congress on FY 1997 State Compliance," SAMHSA, February 1998.
3.14	Baseline: Association of State and Territorial Health Officials Reporting System: Cancer and Cardiovascular Diseases Survey, PHF. 1992 and 1994 updates: Association of State and Territorial Health Officials Survey of State Activities on Tobacco Prevention and Control, PHF. 1996 update: Office on Smoking and Health, CDC, NCCDPHP; Public Health Applications Branch, NIH, NCI; California Department of Health Services.
3.15	Federal Trade Commission data reported by Office on Smoking and Health, CDC, NCCDPHP.
3.16	Baseline for internists: Wells, et al. Physicians Practice Study, <i>AJPH</i> 76:1009–13. 1986. Baseline for dentists: Secker-Walker, et al. Statewide Survey of Dentists' Smoking Cessation Advice. <i>JADA</i> 118:37–40. 1989. Updates for dentists: National Survey of Dentists' and Hygienists' Tobacco Control Activities, University of Florida.

<i>Objective number</i>	<i>Data source</i>
	1992 data for primary care providers: Primary Care Provider Surveys, OPHS, ODPHP.
	1997-98 data for primary care providers: Prevention in Primary Care Study, American College of Preventive Medicine.
3.17*, 3.17a-b	National Vital Statistics System, CDC, NCHS.
3.18*, 3.18a	National Vital Statistics System, CDC, NCHS.
3.19*	National Household Survey on Drug Abuse, SAMHSA, OAS.
3.20*	National Household Survey on Drug Abuse, SAMHSA, OAS.
3.21*	Monitoring the Future, NIH, NIDA.
3.22*	Monitoring the Future, NIH, NIDA.
3.23	"The Tax Burden on Tobacco," The Tobacco Institute, 1995, and the Office on Smoking and Health, CDC, NCCDPHP.
3.24	Gelb BD. Preventive Medicine and Employee Productivity. Harvard Business Review 64(2):12. 1985.
3.25*	Office on Smoking and Health Legislative Tracking System, CDC, NCCDPHP.
3.26	Office on Smoking and Health Legislative Tracking System, CDC, NCCDPHP.

*Duplicate objective.

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 values for this objective differ from those presented here.

Duplicate objective: 16.2

3.2a*: Slow the rise in lung cancer deaths among females to no more than 27 per 100,000.

Duplicate objective: 16.2a

3.2b*: Slow the rise in lung cancer deaths among black males to no more than 91 per 100,000.

Duplicate objective: 16.2b

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 18 and older.

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 18 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 18 and older.

Duplicate objectives: 15.12d and 16.6d

3.4e*: Reduce cigarette smoking to a prevalence of no more than 15 percent among Hispanics aged 18 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.

Duplicate objective: 11.17

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.

Duplicate objective: 13.17

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

Duplicate objective: 13.17a

<p>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 comprehensive school health education.</p> <p>3.11*: Increase to 100 percent the proportion of worksites with a formal smoking policy that prohibits or severely restricts smoking at the workplace.</p> <p>Duplicate objective: 10.18</p> <p>3.12*: Enact in 50 States and the District of Columbia comprehensive laws on clean indoor air that prohibit smoking or limit it to separately ventilated areas in the workplace and enclosed public places.</p> <p>Duplicate objective: 10.19</p> <p>3.13: Enact in 50 States and the District of Columbia laws prohibiting the sale and distribution of tobacco products to youth younger than age 18. Enforce these laws so that the buy rate in compliance checks conducted in all 50 States and the District of Columbia is no higher than 20 percent.</p> <p>3.14: Establish in 50 States and the District of Columbia plans to reduce tobacco use, especially among youth.</p> <p>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.</p> <p>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.</p> <p>3.17*: 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.</p> <p>Duplicate objectives: 13.7 and 16.17</p> <p>3.17a*: Reduce deaths due to cancer of the oral cavity and pharynx to no more than 26.0 per 100,000 among black males aged 45–74.</p> <p>Duplicate objectives: 13.7a and 16.17a</p> <p>3.17b*: Reduce deaths due to cancer of the oral cavity and pharynx to no more than 26.0 per</p>	<p>100,000 among black females aged 45–74.</p> <p>Duplicate objectives: 13.7b and 16.17b</p> <p>3.18*: Reduce stroke deaths to no more than 20 per 100,000 people.</p> <p>Duplicate objectives: 2.22 and 15.2</p> <p>3.18a*: Reduce stroke deaths among blacks to no more than 27 per 100,000.</p> <p>Duplicate objectives: 2.22a and 15.2a</p> <p>3.19*: Increase by at least 1 year the average age of first use of cigarettes, alcohol, and marijuana by adolescents aged 12–17.</p> <p>Duplicate objective: 4.5</p> <p>3.20*: Reduce the proportion of young people who have used alcohol, marijuana, and cocaine, or cigarettes in the past month as follows:</p> <table border="0" style="margin-left: 20px;"> <tr> <td style="text-align: right;">Substance and age</td> <td style="text-align: right;">2000 target (percent)</td> </tr> <tr> <td colspan="2">Alcohol:</td> </tr> <tr> <td style="padding-left: 20px;">12–17 years</td> <td style="text-align: right;">12.6</td> </tr> <tr> <td style="padding-left: 20px;">18–20 years</td> <td style="text-align: right;">29.0</td> </tr> <tr> <td colspan="2">Marijuana:</td> </tr> <tr> <td style="padding-left: 20px;">12–17 years</td> <td style="text-align: right;">3.2</td> </tr> <tr> <td style="padding-left: 20px;">18–25 years</td> <td style="text-align: right;">7.8</td> </tr> <tr> <td colspan="2">Cocaine:</td> </tr> <tr> <td style="padding-left: 20px;">12–17 years</td> <td style="text-align: right;">0.6</td> </tr> <tr> <td style="padding-left: 20px;">18–25 years</td> <td style="text-align: right;">2.3</td> </tr> <tr> <td style="text-align: right;">Use in past month</td> <td style="text-align: right;">2000 target (percent)</td> </tr> <tr> <td colspan="2">Alcohol:</td> </tr> <tr> <td style="padding-left: 20px;">Hispanic 12–17 years</td> <td style="text-align: right;">12.0</td> </tr> <tr> <td colspan="2">Cocaine:</td> </tr> <tr> <td style="padding-left: 20px;">Hispanic 12–17 years</td> <td style="text-align: right;">0.6</td> </tr> <tr> <td style="padding-left: 20px;">Hispanic 18–25 years</td> <td style="text-align: right;">1.0</td> </tr> <tr> <td colspan="2">Cigarettes:</td> </tr> <tr> <td style="padding-left: 20px;">12–17 years</td> <td style="text-align: right;">6.0</td> </tr> </table> <p><i>NOTE: The targets of this objective are consistent with the goals established by the Office of National Drug Control Policy, Executive Office of the President.</i></p> <p>Duplicate objective: 4.6</p> <p>3.21*: Increase the proportion of high school seniors who perceive social disapproval of heavy use of alcohol, occasional use of marijuana, and experimentation with cocaine, or regular use of tobacco, as follows:</p> <table border="0" style="margin-left: 20px;"> <tr> <td style="text-align: right;">Heavy use of alcohol</td> <td style="text-align: right;">2000 target (percent) 70</td> </tr> </table>	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	Use in past month	2000 target (percent)	Alcohol:		Hispanic 12–17 years	12.0	Cocaine:		Hispanic 12–17 years	0.6	Hispanic 18–25 years	1.0	Cigarettes:		12–17 years	6.0	Heavy use of alcohol	2000 target (percent) 70	<table border="0" style="width: 100%;"> <tr> <td style="width: 80%;">Occasional use of marijuana</td> <td style="text-align: right;">85</td> </tr> <tr> <td>Trying cocaine once or twice</td> <td style="text-align: right;">95</td> </tr> <tr> <td>Smoking one or more packs of cigarettes per day</td> <td style="text-align: right;">95</td> </tr> </table> <p><i>NOTE: Heavy drinking is defined as having five or more drinks once or twice each weekend. The Monitoring the Future Survey defines regular use of cigarettes as smoking one or more packs daily.</i></p> <p>Duplicate objective: 4.9</p> <p>3.22*: Increase the proportion of high school seniors who associate physical or psychological harm with the heavy use of alcohol, occasional use of marijuana, experimentation with cocaine, or regular use of tobacco, as follows:</p> <table border="0" style="margin-left: 20px;"> <tr> <td style="width: 80%;"></td> <td style="text-align: right;">2000 target (percent)</td> </tr> <tr> <td>Heavy use of alcohol</td> <td style="text-align: right;">70</td> </tr> <tr> <td>Regular use of marijuana</td> <td style="text-align: right;">90</td> </tr> <tr> <td>Trying cocaine once or twice</td> <td style="text-align: right;">80</td> </tr> <tr> <td>Smoking one or more packs of cigarettes per day</td> <td style="text-align: right;">95</td> </tr> <tr> <td>Using smokeless tobacco regularly</td> <td style="text-align: right;">95</td> </tr> </table> <p><i>NOTE: Heavy drinking is defined as having five or more drinks once or twice each weekend. The Monitoring the Future Survey defines regular use of cigarettes as smoking one or more packs daily.</i></p> <p>Duplicate objective: 4.10</p> <p>3.23: Increase the average (State and Federal combined) tobacco excise tax to at least 50 percent of the average retail price of all cigarettes and smokeless tobacco.</p> <p>3.24: Increase to 100 percent the proportion of health plans that offer treatment of nicotine addiction (e.g., tobacco use cessation counseling by health care providers, tobacco use cessation classes, prescriptions for nicotine replacement therapies, and/or other cessation services).</p> <p>3.25*: Reduce to zero the number of States that have clean indoor air laws preempting stronger clean indoor air laws on the local level.</p> <p>Duplicate objective: 10.20</p> <p>3.26: Enact in 50 States and the District of Columbia laws banning cigarette vending machines except in places inaccessible to minors.</p> <p>* Duplicate objective.</p>	Occasional use of marijuana	85	Trying cocaine once or twice	95	Smoking one or more packs of cigarettes per day	95		2000 target (percent)	Heavy use of alcohol	70	Regular use of marijuana	90	Trying cocaine once or twice	80	Smoking one or more packs of cigarettes per day	95	Using smokeless tobacco regularly	95
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Priority Area 4 Substance Abuse: Alcohol and Other Drugs

Background

Substance abuse and substance abuse-related problems are among society's most pervasive health and social concerns. Millions of Americans consume alcohol in quantities and frequencies that place them and others at risk for alcohol-related disease, unintentional injuries, and crime. Alcohol use is associated with more than 45 percent of all motor vehicle crash fatalities, roughly one-third of the homicides and suicides, and 22 percent of all fatal boating accident victims were reported intoxicated at the time of death (1). While current figures are significantly lower than those observed in the 1980's, some 100,000 people die each year in the United States as a result of alcohol (1).

The abuse of illicit drugs has also had a profound impact on the Nation's health. The relationship between injecting drug use and acquired immunodeficiency syndrome (AIDS) transmission is well known. Illicit drug abuse and related HIV/AIDS account for at least 12,000 deaths annually. Injecting drug abuse is also associated with hepatitis B and C infection (2). The use of cocaine, nitrites, and other substances can produce cardiac irregularities and heart failure, convulsions, and seizures. Long-term consequences such as chronic depression, sexual dysfunction, and psychosis may also result from drug use.

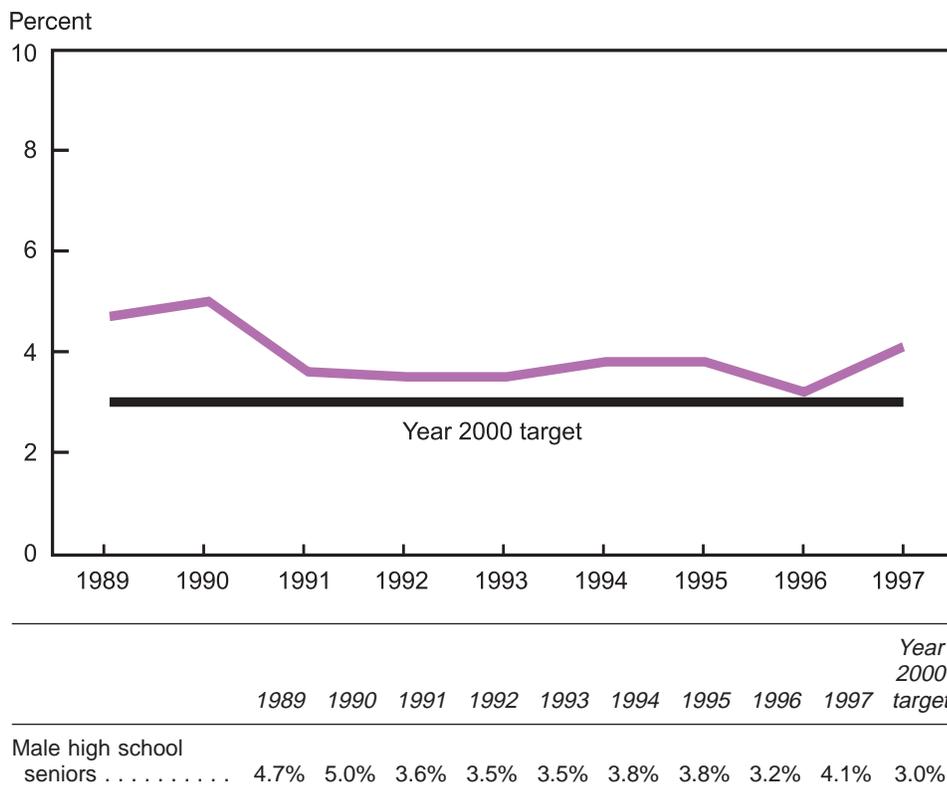
It costs every man, woman, and child in America nearly \$1,000 annually to cover the costs of health care, law enforcement, motor vehicle crashes, crime, and lost productivity due to substance abuse (3).

Data Summary

Highlights

According to the National Household Survey on Drug Abuse, marijuana was the most commonly used illicit drug in 1997. Marijuana use among adolescents has been generally rising since 1992 (objective 4.6). This

Figure 5. Proportion of male high school seniors using anabolic steroids: United States, 1989–97, and year 2000 target for objective 4.11



SOURCE: National Institutes of Health, National Institute on Drug Abuse, Monitoring the Future.

upward trend in marijuana use is basically confined to adolescents, and is an extremely broad change, showing up among virtually every demographic subgroup. This trend is supported by data for objectives 4.9 and 4.10, which show a continuing decline in the proportion of high school seniors who perceive social disapproval of occasional use of marijuana and physical and psychological harm from regular use of marijuana. Past-month marijuana use among young adults (18–25 years), however, has fluctuated slightly and the 1997 level is about the same as it was in 1990.

In response to this recent trend, the Youth Substance Abuse Prevention Initiative has been mounted by the Secretary of Health and Human Services. Its primary goal is to reverse the upward trend by the end of 2002, and reduce past-month use of marijuana among adolescents 12–17 years of age by 25 percent, using the 1995 data (8.2 percent) as a baseline.

Alcohol-related motor vehicle crash death rates (4.1) have declined markedly since 1987. These gains are attributed in part to the passage of administrative license revocation legislation in 40 States, including the District of Columbia (objective 4.15), and legislation to lower blood alcohol concentration tolerance levels to 0.08 percent for people 21 years and over in 15 States, and zero tolerance (0.02 percent and lower) for drivers younger than 21 years in 46 States including the District of Columbia (objective 4.18). Other indicators of alcohol misuse, such as cirrhosis deaths (4.2), alcohol use in the past month by adolescents (4.6), heavy drinking by high school seniors and college students (4.7), and per capita alcohol consumption (4.8) have also shown improvement from baseline measures. Although the cirrhosis death rate has declined for the total population since the 1987 baseline, it has increased slightly among American Indians or Alaska Natives.

While considerably less popular than alcohol or other illicit drugs, anabolic steroid use among high school seniors (objective **4.11**) has also declined slightly (see [figure 5](#)).

Summary of Progress

Data to assess trends toward the year 2000 targets are available for 16 of the 20 objectives in this priority area. The target for objective **4.12** has been met, and the target for objective **4.14** has been surpassed. Progress toward targets is shown for 8 objectives (**4.1**, **4.2**, **4.5**, **4.7**, **4.8**, **4.11**, **4.15**, and **4.18**). Trends are moving away from targets for three objectives (**4.3**, **4.4**, and **4.9**). Mixed results are shown for three objectives (**4.6**, **4.10**, and **4.19**). No updates are available for objectives **4.13**, **4.16**, **4.17**, and **4.20**.

Data Issues

Definitions

All deaths attributed to chronic liver disease and cirrhosis (whether or not they are specified as alcohol related) are tracked in objective **4.2** as an indicator of abusive alcohol consumption. The entries on death certificates are often not specific enough to identify all alcohol-related liver disease deaths. Estimates of the proportion of the total chronic liver disease and 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.” 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 unintentional injuries, homicides, and other causes indirectly related to drug use. See [appendix table III](#) for a list of specific ICD–9 codes.

Data Source Descriptions

Alcohol-related motor vehicle crashes (**4.1**) are tracked using data from the Department of Transportation’s Fatality Analysis Reporting System (formerly the 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.

The 1992 baselines for objective **4.14** are from the National Survey of Worksite Health Promotion Activities, which was a telephone survey of nongovernment worksites. Worksites were sampled, because different worksites within the same company could have different sets of health promotion activities. Both active (for example, classes) and passive (for example, brochures) methods were counted as worksite health promotion activities. The 1995 update is from the CDC-sponsored Worksite Benchmark Survey, which used a methodology very similar to the 1992 survey, but did not include passive methods of health promotion (5,6).

The 1992 data on inquiry about alcohol consumption and other drug abuse for objective **4.19** are from Primary Care Provider Surveys (PCPS). The sample was drawn from the membership rolls of professional organizations for pediatricians, nurse practitioners, family physicians, obstetricians/gynecologists, and internists. Response rates varied from 50–80 percent across these groups. The data on inquiry (from PCPS) about work-related risks represent the proportion of providers who routinely queried 81–100 percent of their patients about these risks. The data on counseling refer to the proportion of providers who routinely provided these services to patients who needed the services. The Prevention in Primary Care Study (PPCS) was conducted in 1997–98. The design and items included in the 1997–98 study were similar to the PCPS, but the sampling frame was slightly different and some items included in the 1992 surveys were not included in the PPCS. The professionals were sampled from listings of all licensed, active practitioners in the United States whose practices were at least 50 percent primary care. Because of low response rates from the other provider groups, updates are available only for nurse practitioners.

Comparability of Data Sources

The National Household Survey on Drug Abuse is used to measure

objectives **4.5** and **4.6** regarding substance use among adolescents and young people. Beginning in 1991, the survey was expanded to include college students living in residence halls. Thus, results for people 18–25 years old for marijuana and cocaine use and people 18–20 years old for alcohol use are not directly comparable with measures from previous years. Additionally, an improved questionnaire and editing procedures were introduced with the 1994 survey, which restricted determination of drug use to a core set of questions in contrast to a broader coding procedure in prior years. The trend data for all substances in objective **4.6** have been recalculated to adjust for these differences and to produce comparable estimates from 1988 to 1997.

References

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Table 4. Substance abuse: Alcohol and other drugs objective status

Objective	Baseline											Target
	year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	2000	
4.1* Alcohol-related motor vehicle deaths (per 100,000)	1987	9.8	8.9	7.9	6.9	6.8	6.4	6.6	6.5	---	5.5	
a. American Indian/Alaska Native male	1987	40.4	34.3	32.2	31.4	26.8	28.0	---	---	---	35.0	
b. People 15–24 years	1987	21.5	18.5	17.2	14.1	13.8	13.1	12.9	12.9	---	12.5	
4.2 Cirrhosis deaths (age adjusted per 100,000)	1987	9.2	8.6	8.3	8.0	7.9	7.9	7.6	7.5	^P 7.2	6	
a. Black male	1987	22.6	20.0	17.4	17.2	16.1	15.9	14.7	13.8	^P 12.5	12	
b. American Indian/Alaska Native	1987	20.5	19.8	20.4	21.6	21.0	21.4	24.3	20.7	---	10	
c. Hispanic ¹	1990	^a 14.2	...	13.8	13.5	13.4	13.7	12.9	12.6	---	10	
4.3 Drug-related deaths (age adjusted per 100,000)	1987	3.8	3.6	3.8	4.3	4.8	5.0	5.1	5.2	^P 4.6	3	
a. Black	1990	5.7	...	6.6	6.8	8.3	8.6	8.5	8.0	^P 6.6	3	
b. Hispanic ¹	1990	4.3	...	3.9	5.6	6.4	6.0	6.0	5.9	---	3	
4.4 Drug abuse-related emergency room visits (per 100,000)	1991	175.8	...	...	191.4	203.9	225.2	222.5	207.2	---	140.6
4.5* Average age of first use (adolescents 12–17 years)												
Cigarettes	1988	11.6	11.5	11.5	11.7	11.7	12.2	12.3	12.4	---	12.6	
Alcohol	1988	13.1	12.8	12.6	13.0	12.9	12.8	12.6	13.1	---	14.1	
Marijuana	1988	13.4	13.4	13.5	13.8	13.9	14.1	13.8	14.4	---	14.4	
4.6* Use in past month by adolescents and young adults ²												
Alcohol												
12–17 years	1988	33.4%	32.5%	27.0%	20.9%	23.9%	21.6%	21.1%	18.8%	20.5%	12.6%	
18–20 years	1994	54.6%	...	...	...	...	...	54.1%	50.1%	53.4%	29.0%
Hispanic 12–17 years	1988	31.9%	24.2%	28.3%	20.3%	22.0%	18.3%	18.7%	19.9%	18.8%	12.0%	
Marijuana												
12–17 years	1988	5.4%	4.4%	3.6%	3.4%	4.0%	6.0%	8.2%	7.1%	9.4%	3.2%	
18–25 years	1988	15.3%	12.7%	12.9%	10.9%	11.1%	12.1%	12.0%	13.2%	12.8%	7.8%	
Cocaine												
12–17 years	1988	1.2%	0.6%	0.4%	0.3%	0.4%	0.3%	0.8%	0.6%	1.0%	0.6%	
18–25 years	1988	4.8%	2.3%	2.2%	2.0%	1.6%	1.2%	1.3%	2.0%	1.2%	2.3%	
Hispanic 12–17 years	1988	1.4%	2.0%	1.4%	1.3%	1.1%	0.7%	0.8%	1.1%	1.0%	0.6%	
Hispanic 18–25 years	1994	2.2%	...	...	...	...	...	1.1%	2.1%	1.5%	1.0%
Cigarettes												
12–17 years	1988	22.7%	22.4%	20.9%	18.4%	18.5%	18.9%	20.2%	18.3%	19.9%	6.0%	
4.7 Heavy drinking in past 2 weeks ³												
High school seniors	1989	33.0%	32.2%	29.8%	27.9%	27.5%	28.2%	29.8%	30.2%	31.3%	28.0%	
College students	1989	41.7%	41.0%	42.8%	41.4%	40.2%	40.0%	40.0%	38.3%	40.7%	32.0%	
4.8 Alcohol consumption (gallons per capita, persons 14 years and over)	1987	2.54	2.46	2.31	2.31	2.25	2.21	---	---	---	2.0	
4.9* Perception of social disapproval by high school seniors												
Heavy use of alcohol	1989	56.4%	59.0%	58.1%	60.8%	58.5%	59.1%	58.0%	57.8%	56.4%	70%	
Occasional use of marijuana	1989	71.1%	76.4%	75.8%	79.2%	73.8%	69.1%	65.4%	63.1%	59.9%	85%	
Trying cocaine once or twice	1989	88.9%	90.5%	91.8%	92.2%	91.1%	91.4%	91.1%	89.2%	87.3%	95%	
Smoking one or more packs of cigarettes per day	1987	74.2%	75.3%	74.0%	76.2%	71.8%	72.4%	69.2%	69.3%	68.5%	95%	
4.10* Perception of harm by high school seniors												
Heavy use of alcohol	1989	44.0%	47.1%	48.6%	49.0%	48.3%	46.5%	45.2%	49.5%	43.0%	70%	
Regular use of marijuana	1989	77.5%	77.8%	78.6%	76.5%	72.5%	65.0%	60.8%	59.9%	58.1%	90%	

Table 4. Substance abuse: Alcohol and other drugs objective status—Con.

Objective	Baseline	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	Target
	year										2000
Trying cocaine once or twice	1989	54.9%	59.4%	59.4%	56.8%	57.6%	57.2%	53.7%	54.2%	53.6%	80%
Smoking one or more packs of cigarettes per day	1987	68.6%	68.2%	69.4%	69.2%	69.5%	67.6%	65.6%	68.2%	68.7%	95%
Using smokeless tobacco regularly	1987	30.0%	34.2%	37.4%	35.5%	38.9%	36.6%	33.2%	37.4%	38.6%	95%
4.11 Anabolic steroid use											
Male high school seniors	1989	4.7%	5.0%	3.6%	3.5%	3.5%	3.8%	3.8%	3.2%	4.1%	3.0%
4.12 Number of States with access to treatment programs	1996	50	...	...	...	...	...	...	...	---	50
4.13 Alcohol and drug education in schools	1996	86%	...	...	...	...	...	...	...	---	100%
Provided students with some instruction	1987	63%	---	---	---	---	---	---	---	---	100%
Provided students with counseling	1987	39%	---	---	---	---	---	---	---	---	100%
Referred students for clinical assessments	1987	23%	---	---	---	---	---	---	---	---	100%
Provided students with instruction in at least one course											
Middle/junior and senior high schools . . . . .	...	---	---	---	---	---	90.4%	---	---	---	100%
4.14 Worksite alcohol and drug policies 50 or more employees	...	---	---	---	---	---	---	---	---	---	60%
Alcohol	1992	88%	...	...	...	---	---	92%	---	---	60%
Other drugs	1992	89%	...	...	...	---	---	96%	---	---	60%
4.15 Number of States with administrative license suspension/revocation laws⁴	1990	29	...	30	---	35	38	---	---	40	51
4.16 Number of States with policies to reduce minors' access to alcohol	1996	46	...	...	...	...	...	...	...	---	50
4.17 Number of States with restrictions on promotion of alcohol to children and adolescents	1996	13	...	...	...	...	...	...	...	---	20
4.18 Number of States with blood alcohol concentration tolerance levels											
Zero tolerance (0.02% or less) for people under 21 years	1993	9	...	...	...	...	421	---	438	446	50
0.08% for people 21 years and over	1993	7	...	...	...	...	11	---	14	15	50
4.19 Screening, counseling, and referral by clinicians	...	---	---	---	---	---	---	---	---	---	75%
Percent of clinicians routinely providing service to 81-100% of patients											
Inquiry about alcohol consumption (12 years and over)											
Pediatricians	1992	29%	...	...	...	---	---	---	---	5.6	75%
Nurse practitioners	1992	45%	...	...	...	---	---	---	---	52%	75%
Obstetricians/gynecologists	1992	34%	...	...	...	---	---	---	---	5.6	75%
Internists	1992	63%	...	...	...	---	---	---	---	5.6	75%
Family physicians	1992	39%	...	...	...	---	---	---	---	5.6	75%
Inquiry about other drug use (12 years and over)											
Pediatricians	1992	28%	...	...	...	---	---	---	---	5.6	75%
Nurse practitioners	1992	43%	...	...	...	---	---	---	---	36%	75%
Obstetricians/gynecologists	1992	32%	...	...	...	---	---	---	---	5.6	75%
Internists	1992	34%	...	...	...	---	---	---	---	5.6	75%
Family physicians	1992	23%	...	...	...	---	---	---	---	5.6	75%
Referral to alcohol treatment											
Pediatricians	1992	26%	...	...	...	---	---	---	---	5.6	75%
Nurse practitioners	1992	19%	...	...	...	---	---	---	---	22%	75%
Obstetricians/gynecologists	1992	24%	...	...	...	---	---	---	---	5.6	75%
Internists	1992	33%	...	...	...	---	---	---	---	5.6	75%

Table 4. Substance abuse: Alcohol and other drugs objective status—Con.

<i>Objective</i>	<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
Family physicians	1992	28%	...	...	...	---	---	---	---	5,6_---	75%
Referral to drug abuse treatment											
Pediatricians	1992	32%	...	...	...	---	---	---	---	5,6_---	75%
Nurse practitioners	1992	19%	...	...	...	---	---	---	---	⁵ 25%	75%
Obstetricians/gynecologists	1992	28%	...	...	...	---	---	---	---	5,6_---	75%
Internists	1992	35%	...	...	...	---	---	---	---	5,6_---	75%
Family physicians	1992	28%	...	...	...	---	---	---	---	5,6_---	75%
4.20 Number of States with Hospitality Resource Panels	1994	8	...	...	...	...	...	---	---	---	30

--- Data not available.

... Category not applicable.

^aBaseline has been revised.

^pPreliminary data.

¹Excludes data from States lacking an Hispanic-origin item on their death certificate or for which Hispanic-origin data were not of sufficient quality. See appendix.

²In 1994, estimates for drug use were restricted to a core set of questions in contrast to the coding procedure in prior years. The trend data have been recalculated to adjust for these differences and to produce comparable estimates from 1988 to 1997.

³Recent heavy drinking is defined as having 5 or more drinks on 1 occasion in the previous 2-week period as monitored by self-reports.

⁴Includes the District of Columbia.

⁵1997–98 data.

⁶Response rate for this group was too low to produce reliable estimates.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

<i>Objective number</i>	<i>Data source</i>
4.1*, 4.1b	Fatality Analysis Reporting System, DOT, NHTSA.
4.1a	Fatality Analysis Reporting System, DOT, NHTSA, and National Vital Statistics System, CDC, NCHS.
4.2, 4.2a-c	National Vital Statistics System, CDC, NCHS.
4.3, 4.3a-b	National Vital Statistics System, CDC, NCHS.
4.4	Drug Abuse Warning Network, SAMHSA, OAS.
4.5*	National Household Survey on Drug Abuse, SAMHSA, OAS.
4.6*	National Household Survey on Drug Abuse, SAMHSA, OAS.
4.7	Monitoring the Future, NIH, NIDA.
4.8	Alcohol Epidemiology Data System, NIH, NIAAA.
4.9*	Monitoring the Future, NIH, NIDA.
4.10*	Monitoring the Future, NIH, NIDA.
4.11	Monitoring the Future, NIH, NIDA.
4.12	Substance Abuse Prevention and Treatment Block Grant Applications, SAMHSA, CSAT.
4.13	1987 baseline: Report to Congress and the White House on the Nature and Effectiveness of Federal, State, and Local Drug Prevention Education Programs. DOE. 1987. 1996 baseline: Substance Abuse Prevention and Treatment Block Grant Applications, SAMHSA, CSAT. 1994 data: School Health Policies and Programs Study, CDC, NCCDPHP.
4.14	Baseline: National Survey of Worksite Health Promotion Activities, OPHS, ODPHP. Update: Business Responds to AIDS Benchmark Survey, CDC, NCHSTP.
4.15	Baseline: Office of Alcohol and State Programs, DOT, NHTSA. Updates: Office of Safety Recommendations, DOT, NHTSA.
4.16	Substance Abuse Prevention and Treatment Block Grant Applications, SAMHSA, CSAT.
4.17	Substance Abuse Prevention and Treatment Block Grant Applications, SAMHSA, CSAT.
4.18	Baseline: Office of Alcohol and State Programs, DOT, NHTSA. Updates: Office of Safety Recommendations, DOT, NHTSA.
4.19	Baseline: Primary Care Provider Surveys, OPHS, ODPHP. Update: Prevention in Primary Care Study, American College of Preventive Medicine.
4.20	California Coordinating Council on Responsible Beverage Service, National Survey Report.

*Duplicate objective.

Substance Abuse: Alcohol and Other Drugs Objectives

4.1*: Reduce deaths caused by alcohol-related motor vehicle crashes to no more than 5.5 per 100,000 people.

Duplicate objective: 9.23

4.1a*: Reduce deaths among American Indian and Alaska Native men caused by alcohol-related motor vehicle crashes to no more than 35.0 per 100,000.

Duplicate objective: 9.23a

4.1b*: Reduce deaths among people aged 15–24 caused by alcohol-related motor vehicle crashes to no more than 12.5 per 100,000.

Duplicate objective: 9.23b

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 10 per 100,000.

4.2c: Reduce cirrhosis deaths among Hispanics to no more than 10 per 100,000.

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

4.3a: Reduce drug-related deaths among blacks to no more than 3 per 100,000.

4.3b: Reduce drug-related deaths among Hispanics to no more than 3 per 100,000.

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.

Duplicate objective: 3.19

4.6*: Reduce the proportion of young people who have used alcohol, marijuana, and cocaine, or cigarettes 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
Use in past month	2000 target (percent)
Alcohol:	
Hispanic 12–17 years	12.0
Cocaine:	
Hispanic 12–17 years	0.6
Hispanic 18–25 years	1.0
Cigarettes:	
12–17 years	6.0

NOTE: The targets of this objective are consistent with the goals established by the Office of National Drug Control Policy, Executive Office of the President.

Duplicate objective: 3.20

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 of heavy use of alcohol, occasional use of marijuana, and experimentation with cocaine, or regular use of tobacco, as follows:

	2000 target (percent)
Heavy use of alcohol	70
Occasional use of marijuana	85
Trying cocaine once or twice	95
Smoking one or more packs of cigarettes per day	95

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

Future Survey defines regular use of cigarettes as smoking one or more packs daily.

Duplicate objective: 3.21

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

Heavy use of alcohol	70
Regular use of marijuana	90
Trying cocaine once or twice	80
Smoking one or more packs of cigarettes per day	95
Using smokeless tobacco regularly	95

NOTE: Heavy drinking is defined as having five or more drinks per occasion in the previous 2-week period. The Monitoring the Future Survey defines regular use of cigarettes as smoking one or more packs daily.

Duplicate objective: 3.22

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 comprehensive 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 .08 percent for motor vehicle drivers aged 21 and older and zero tolerance (.02 percent and lower) 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.

4.20: Increase to 30 the number of States with Hospitality Resource Panels (including representatives from State regulatory, public health, and highway safety agencies, law enforcement, insurance associations, alcohol retail and licensed beverage associations) to ensure a process of management and server training and define standards of responsible hospitality.

*Duplicate objective.

Priority Area 5 Family Planning

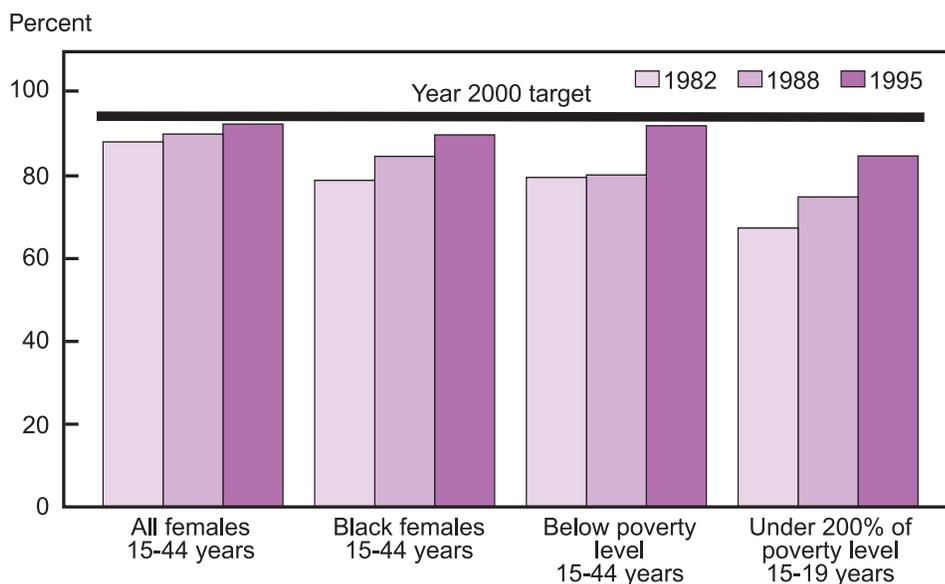
Background

Family planning is the process of establishing the preferred number and spacing of children in one's family and selecting the means by which this is achieved (1). Problems attendant to poor family planning exact serious health and social costs. Low birthweight (2), high rates of infant mortality (3), and inadequate monetary and family support (4) are some of the consequences of poor family planning. Research suggests that educating young potential parents about the financial, welfare, and social costs of pregnancy may improve decision making, which, in turn, may reduce the likelihood of an unintended pregnancy (5). Despite advances in contraceptive technology and demonstrated effectiveness of prevention initiatives, nearly half of all pregnancies in the United States are unintended (6). While data show a decline in the rates of unintended pregnancy (which may be attributable to higher rates of contraceptive use and improved quality of contraceptives) (7), more needs to be done to insure that all pregnancies are intended (4).

It is encouraging to note that data from the National Survey of Family Growth (NSFG) indicate that the proportion of females age 15–19 who have ever had sexual intercourse dropped from 55 percent in 1990 to 50 percent in 1995. Reduction of sexual activity at early ages is an important public health objective because sexual activity at early ages is associated with more partners and more frequent intercourse and the concomitant risks of disease and unintended pregnancy (8). The proportions of both males and females 15 years of age who engaged in sexual intercourse during the past 3 months also have declined.

The proportions of females age 15–19 using contraception at first and most recent intercourse have also increased between 1988 and 1995 (14 and 6 percent, respectively). Adolescents are more likely to use contraceptives, especially condoms, at first intercourse; black adolescent females are particularly likely to use injectable and implant contraceptives (9). It should be noted, however, that a high proportion of

Figure 6. Proportion of females 15–44 years at risk for unintended pregnancy who used contraception in the past month: United States, 1982, 1988, 1995, and year 2000 target for objective 5.12



	1982	1988	1995	Year 2000 target
All females 15–44 years	88.2%	90.1%	92.5%	95%
Black females 15–44 years	78.9%	84.7%	89.9%	95%
Females 15–44 years below poverty level	79.6%	80.2%	92.1%	95%
Females 15–19 years under 200% of poverty level	67.4%	74.9%	84.8%	95%

SOURCES: Forrest JD and Sing S. The Sexual and Reproductive Behavior of American Women, 1982–88. *Family Planning Perspectives* 22(5):206–14. 1990; Centers for Disease Control and Prevention, National Center for Health Statistics, National Survey of Family Growth.

schools are providing human sexuality education to teens, which may influence their sexual behavior. Data from the School Health Policies and Programs Study indicate that 80 percent of junior and senior high schools have required classes that include discussion of human sexuality. Nearly half the States require that a course in human sexuality be taught in at least one grade. Of the 12 objectives in this priority area, 5 focus on pregnancy prevention efforts for the teenage population.

While adolescent females receive considerable attention in family planning initiatives, all women of childbearing age require assistance with family planning. Data from the 1995 NSFG show that 49 percent of pregnancies are unintended; this is a decrease of 12 percent since 1988. This is still higher than other developed countries; Canada's rate is 39 percent and only

6 percent in the Netherlands (7). However, use of contraceptives increased by about 4 percent among women 15–44 who are at risk for unintended pregnancy between 1988 and 1995 (see figure 6); this may have contributed to the decline in unintended pregnancies.

Data Summary

Highlights

The pregnancy rate (5.1) for females 15–17 years of age has decreased by 11 percent between 1990 and 1995, the abortion rate (a component of the pregnancy rate) has dropped by 25 percent during the same time period (see Data Issues). Live births (another component of pregnancy) for females 15–17 years of age decreased by 13 percent between 1990

and 1997 (1997 data are preliminary). The pregnancy rate for girls 10–14 years of age also declined during the same time period. The pregnancy rate for Hispanic adolescents 15–19 years of age increased by 4.5 percent between 1990 and 1995. It should be noted that pregnancy rates have been recalculated based on the 1995 estimates of fetal loss in the NSFG (see [Data Issues](#)).

Summary of Progress

Eight objectives (5.1–5.3, 5.5, 5.6, 5.8, 5.11, and 5.12) show progress toward the year 2000 targets. Progress for objective 5.4 (adolescent postponement of sexual intercourse) is mixed. Fewer 15-year-old males and females and fewer 17-year-old males have engaged in sexual intercourse. The proportion of 17-year-old females have increased very slightly. Objective 5.10 shows movement away from the target; this determination is based on limited data, showing only nurse practitioners. Fewer nurse practitioners provided family planning counseling and other services to clients (see [Data Issues](#)). Data were not available to update two objectives (5.7 and 5.9).

Data Issues

Data Source Descriptions

Data for objective 5.1 (adolescent pregnancy) are based on three outcomes of pregnancy: live births, fetal losses, and abortions. Data on live births are collected annually through the National Vital Statistics System. For Hispanic births, it should be noted that the number of States reporting Hispanic origin data in their vital statistics has increased during the monitoring period. (see [appendix](#)). Data on fetal losses come from the NSFG, which is conducted at multiyear intervals; the most recent data available are from 1995. The 1995 data show higher rates than previously reported. Fetal loss rates are affected by the degree to which losses are detected at very early gestations; it is believed that these estimates reflect more complete reporting, rather than a “real” increase in the fetal loss rate.

Estimates of the number of abortions come from the Abortion Provider Survey, conducted by the Alan Guttmacher Institute (AGI). This is a biennial survey of clinics and other

health facilities that perform abortions. Because the proportion of abortions performed in hospitals has declined and the number performed in physicians’ offices has increased, AGI staff estimate that as many as one-half of the office-based abortions may be missed in the survey. The data from the Abortion Provider Survey are adjusted using demographic characteristics of women obtaining abortions (in States that report abortions to CDC) to produce national estimates. The diversity of sources and the variability of reporting intervals complicate tracking of this objective.

The baseline data on inquiry about family planning for objective 5.10 (counseling by clinicians) are from the Primary Care Provider Surveys (PCPS) and refer to the proportion of providers who routinely provided counseling to 81–100 percent of their female clients of childbearing age. The sample for the study was drawn from the membership rolls of provider organizations for pediatricians, family physicians, obstetricians/gynecologists, nurse practitioners, and internists. Response rates varied from 50–80 percent across provider groups. The Prevention in Primary Care Study (PPCS) was conducted in 1997–98 to update data from the PCPS. The design and items included in the 1997–98 study were similar to the PCPS, but a slightly different sampling frame was used and some items included in the 1992 surveys were not included in the PPCS. The professionals were sampled from listings of all licensed, active practitioners in the United States whose practices were at least 50 percent primary care. Because of low response rates from the other provider groups, updates are available only for nurse practitioners.

Data Comparability

Baseline and the 1995 data for “all females” for objectives 5.4 (adolescent postponement of sexual intercourse), 5.5 (adolescent abstinence), and 5.6 (contraception use) are from the NSFG. Baseline and the 1995 data for “all males” for objectives 5.4, 5.5, and 5.6 are from the National Survey of Adolescent Males (NSAM). Additional tracking data from the Youth Risk Behavior Survey (YRBS) are also displayed for these objectives, but are not directly comparable to the baselines or targets. The YRBS surveys adolescents in schools and reports data by grade rather than age. The NSFG and

the NSAM survey include all adolescents regardless of their school enrollment status. Data from the 1992 National Health Interview Survey (NHIS) suggest that sexual intercourse is more common and condom use is less common among out-of-school youth 14–19 years of age, than among in-school youth in the same age group. However, estimates for in-school youth were very close to those for the total youth population (10).

The baseline for objective 5.8 (human sexuality discussion) came from a one-time study by the Planned Parenthood Foundation that provided data on persons 13–18 years of age who had discussed sexuality with their parents. The 1994 updates came from the NHIS, a population-based survey that provided data on persons 10–17 years of age; 1995 updates came from the NSFG, which provided data on females 18–19 years old.

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Table 5. Family planning objective status

Objective		Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	Target 2000
5.1	Adolescent pregnancy											
	Pregnancies (per 1,000) ¹											
	Female 10–14 years	1990	^a 3.5	...	3.4	3.4	3.3	3.3	3.0	---	---	...
	Female 15–17 years	1990	^a 80.3	...	79.8	77.3	76.8	75.5	71.7	---	---	50
	Live births (per 1,000)											
	Female 10–14 years	1990	^a 1.4	...	1.4	1.4	1.4	1.4	1.3	1.2	^P 1.2	...
	Female 15–17 years	1990	^a 37.5	...	38.7	37.8	37.8	37.6	36.0	33.8	^P 32.6	...
	Abortions (per 1,000)											
	Female 10–14 years	1990	^a 1.5	...	1.4	1.5	1.4	1.3	1.2	---	---	...
	Female 15–17 years	1990	^a 26.5	...	24.3	23.1	22.5	21.4	19.9	---	---	...
	Fetal losses (per 1,000)											
	Female 10–14 years	1990	^a 0.5	...	0.5	0.5	0.5	0.6	0.5	---	---	...
	Female 15–17 years	1990	^a 16.2	...	16.8	16.4	16.5	16.5	15.9	---	---	...
	a. Pregnancies, black adolescents (per 1,000) ¹											
	Female 15–19 years	1990	^a 215	...	215	211	205	195	178	---	---	120
	Female 15–17 years	1990	^a 161	...	160	156	153	146	133	---	---	...
	Live births (per 1,000)											
	Female 15–19 years	1990	^a 113	...	116	112	109	105	96	91	^P 90	...
	Female 15–17 years	1990	^a 82	...	84	81	80	76	70	65	^P 62	...
	Abortions (per 1,000)											
	Female 15–19 years ²	1990	^a 80	...	77	76	75	70	63	---	---	...
	Female 15–17 years	1990	^a 55	...	53	52	51	48	44	---	---	...
	Fetal losses (per 1,000)											
	Female 15–19 years ²	1990	^a 22	...	22	22	21	21	19	---	---	...
	Female 15–17 years	1990	^a 23	...	23	23	22	21	19	---	---	...
	b. Pregnancies, Hispanic adolescents (per 1,000) ¹											
	Female 15–19 years	1990	^a 156	...	165	168	166	167	163	---	---	105
	Live births (per 1,000)											
	Female 15–19 years ³	1990	^a 100	...	107	107	107	108	107	102	^P 99	...
	Abortions (per 1,000)											
	Female 15–19 years	1990	^a 39	...	40	43	42	42	39	---	---	...
	Fetal losses (per 1,000)											
	Female 15–19 years	1990	^a 17	...	18	18	18	18	18	---	---	...
5.2	Unintended pregnancy (female 15–44 years).	1988	56.0%	---	---	---	---	---	49.0%	---	---	30%
	a. Black female (15–44 years)	1988	78.0%	---	---	---	---	---	³ 72.0%	---	---	40%
	b. Hispanic female (15–44 years)	1988	54.9%	---	---	---	---	---	48.0%	---	---	30%
5.3	Infertility											
	Married couples with wives 15–44 years	1988	7.9%	---	---	---	---	---	7.1%	---	---	6.5%
	a. Black couples with wives 15–44 years	1988	12.1%	---	---	---	---	---	³ 10.5%	---	---	9%
	b. Hispanic couples with wives 15–44 years	1988	12.4%	---	---	---	---	---	7.0%	---	---	9%
5.4*	Adolescents engaging in sexual intercourse											
	Adolescents 15 years											
	All females	1988	27%	---	---	---	---	---	22%	---	---	15%

Table 5. Family planning objective status —Con.

	<i>Objective</i>	<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
	In-school females . . . . .	...	---	35%	36%	---	37%	---	38%	---	44%	...
	All males	1988	33%	---	---	---	---	---	27%	---	---	15%
	In-school males . . . . .	...	---	48%	44%	---	45%	---	42%	---	42%	...
a.	All black males	1988	69%	---	---	---	---	---	60%	---	---	15%
	In-school non-Hispanic black males . . . . .	...	---	---	79%	---	82%	---	77%	---	---	...
	Adolescents 17 years											
	All females	1988	50%	---	---	---	---	---	51%	---	---	40%
	In-school females . . . . .	...	---	62%	66%	---	66%	---	67%	---	62%	...
	All males	1988	66%	---	---	---	---	---	---	---	---	40%
	In-school males . . . . .	...	---	73%	68%	---	68%	---	65%	---	60%	...
b.	All black males	1988	90%	---	---	---	---	---	---	---	---	40%
	In-school non-Hispanic black males . . . . .	...	---	---	90%	---	92%	---	88%	---	---	...
c.	All black females	1988	66%	---	---	---	---	---	³ 48%	---	---	40%
	In-school non-Hispanic black females . . . . .	...	---	---	84%	---	80%	---	75%	---	---	...
5.5*	Adolescent abstinence from sexual intercourse for previous 3 months											
	All sexually active females 15-17 years	1988	23.6%	---	---	---	---	---	27%	---	---	40%
	In-school sexually active females 15-17 years . . . . .	...	---	24%	25%	---	25%	---	23%	---	23%	...
	All sexually active males 15-17 years	1988	33%	---	---	---	---	---	---	---	---	40%
	In-school sexually active males 15-17 years . . . . .	...	---	30%	36%	---	33%	---	34%	---	32%	...
5.6	Contraception use by sexually active adolescents											
	Female											
	First intercourse (15-19 years)	1988	63%	---	---	---	---	---	77%	---	---	90%
	Recent intercourse (15-19 years)	1988	78%	---	---	---	---	---	84%	---	---	90%
	Recent intercourse (In school, 15-17 years) . . . . .	...	---	78%	81%	---	83%	---	83%	---	85%	...
	Oral contraceptive and the condom at most recent intercourse (15-19 years)	1988	2%	---	---	---	---	---	8%	---	---	90%
	Male											
	Contraception use at most recent intercourse (15-19 years)	1990	78%	...	---	---	---	---	---	---	---	90%
	Contraception use at most recent intercourse (In school, 15-17 years) . . . . .	...	---	---	83%	---	84%	---	85%	---	81%	...
	Birth control pills and condoms at most recent intercourse (In school, 15-17 years)	1990	^a 2.0%	...	3.3%	---	2.9%	---	3.6%	---	4.8%	90%
	Condom and pill use at last intercourse (17-19 years)	1988	15%	---	---	---	---	---	---	---	---	90%
	Condom and pill use at last intercourse (In school, 17 years and over) . . . . .	...	---	14%	---	---	---	---	---	---	5%	...
5.7	Failure of contraceptive method for females 15-44 years	1988	14%	---	---	---	---	---	---	---	---	7%
a.	Black female 15-44 years	1988	17.6%	---	---	---	---	---	---	---	---	8%
b.	Hispanic female 15-44 years	1988	16.4%	---	---	---	---	---	---	---	---	8%
5.8	People 13-18 years who have discussed sexuality with parents	1986	66%	---	---	---	---	⁴ 73%	⁵ 80%	---	---	85%
	People 10-17 years who have discussed human sexuality with parents, church, or school . . . . .	...	---	---	---	---	---	⁶ 89%	⁷ 98%	---	---	...
5.9	Family planning counseling	1984	60%	---	---	---	---	---	---	---	---	90%

Table 5. Family planning objective status —Con.

Objective		Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	Target 2000
5.10*	Age-appropriate preconception counseling by clinicians . . . . .	...	---	---	---	---	---	---	---	---	---	60%
	Percent of clinicians routinely providing service to 81–100% of patients											
	Inquiry about family planning (female, childbearing age)											
	Pediatricians	1992	18%	...	...	...	---	---	---	---	8,9_---	60%
	Nurse practitioners	1992	53%	...	...	...	---	---	---	---	8,9_42%	60%
	Obstetricians/gynecologists	1992	48%	...	...	...	---	---	---	---	8,9_---	60%
	Internists	1992	24%	...	...	...	---	---	---	---	8,9_---	60%
	Family physicians	1992	28%	...	...	...	---	---	---	---	8,9_---	60%
	Counseling about family planning											
	Pediatricians	1992	36%	...	...	...	---	---	---	---	8,9_---	60%
	Nurse practitioners	1992	53%	...	...	...	---	---	---	---	8,9_40%	60%
	Obstetricians/gynecologists	1992	65%	...	...	...	---	---	---	---	8,9_---	60%
	Internists	1992	26%	...	...	...	---	---	---	---	8,9_---	60%
	Family physicians	1992	36%	...	...	...	---	---	---	---	8,9_---	60%
5.11*	Clinic services for HIV and other sexually transmitted diseases . . . . .	...	---	---	---	---	---	---	---	---	---	50%
	Family planning clinics	1989	40%	---	---	---	---	---	---	---	---	---
	Title X funded family planning clinics											
	STD testing (excluding HIV) . . . . .	...	---	---	---	---	---	95%	---	---	---	...
	STD counseling (excluding HIV) . . . . .	...	---	---	---	---	---	98%	---	---	---	...
	STD treatment (excluding HIV) . . . . .	...	---	---	---	---	---	93%	---	---	---	...
	Gonorrhea											
	Client testing ¹⁰ . . . . .	...	---	97%	---	---	---	---	---	---	---	...
	Client treatment . . . . .	...	---	82%	---	---	---	---	---	---	---	...
	Partner notification ¹¹ . . . . .	...	---	23%	---	---	---	---	---	---	---	...
	Partner testing . . . . .	...	---	60%	---	---	---	---	---	---	---	...
	Partner treatment . . . . .	...	---	62%	---	---	---	---	---	---	---	...
	Syphilis											
	Client testing ¹⁰ . . . . .	...	---	86%	---	---	---	---	---	---	---	...
	Client treatment . . . . .	...	---	48%	---	---	---	---	---	---	---	...
	Partner notification ¹¹ . . . . .	...	---	29%	---	---	---	---	---	---	---	...
	Partner testing . . . . .	...	---	57%	---	---	---	---	---	---	---	...
	Partner treatment . . . . .	...	---	40%	---	---	---	---	---	---	---	...
	Chlamydia											
	Client testing ¹⁰ . . . . .	...	---	66%	---	---	---	---	---	---	---	...
	Client treatment . . . . .	...	---	73%	---	---	---	---	---	---	---	...
	Partner notification ¹¹ . . . . .	...	---	15%	---	---	---	---	---	---	---	...
	Partner testing . . . . .	...	---	29%	---	---	---	---	---	---	---	...
	Partner treatment . . . . .	...	---	50%	---	---	---	---	---	---	---	...
	HIV											
	Client pretest counseling . . . . .	...	---	66%	---	---	---	82%	---	---	---	...
	Client testing . . . . .	...	---	60%	---	---	---	74%	---	---	---	...

Table 5. Family planning objective status —Con.

<i>Objective</i>		<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
5.12	Contraception use											
	Female 15–44 years	1982	88.2% ¹ 90.1%	---	---	---	---	---	92.5%	---	---	95%
	a. Black female 15–44 years.	1982	78.9% ² 84.7%	---	---	---	---	---	89.9%	---	---	95%
	b. Female 15–44 years under 100% poverty	1982	79.6% ² 80.2%	---	---	---	---	---	92.1%	---	---	95%
	c. Female 15–19 years under 200% poverty	1982	67.4% ² 74.9%	---	---	---	---	---	84.8%	---	---	95%

--- Data not available.

. . . Category not applicable.

^aBaseline has been revised.

^pPreliminary data.

¹Pregnancy rates are calculated from the number of births, fetal losses, and abortions.

²Excludes data from States lacking an Hispanic-origin item on their birth or death certificate.

³Non-Hispanic black female.

⁴Data represent the proportion of people aged 10–17 who had discussed human sexuality with parents. Proportions for school and church were 76% and 32%, respectively.

⁵1995 data are for females 18–19 years who have ever discussed birth control methods, how pregnancy occurs, or STD's with a parent, or have had a sex education class on birth control methods, STD's, safe sex, or abstinence.

⁶Data represent the proportion of people 10–17 years who had discussed human sexuality with parents or in church or school.

⁷1995 data are for females 18–19 years who have ever discussed birth control methods, how pregnancy occurs, or STD's with a parent.

⁸1997–98 data.

⁹Response rate for this group was too low to produce reliable estimates.

¹⁰Includes testing at initial visit, at annual visit, or if symptomatic.

¹¹By family planning clinic staff via telephone or mail.

¹²1988 data.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

<i>Objective number</i>	<i>Data source</i>
5.1, 5.1a,b	Abortion Provider Survey, Alan Guttmacher Institute; National Vital Statistics System, CDC, NCHS; National Survey of Family Growth, CDC, NCHS.
5.2, 5.2a,b	National Survey of Family Growth, CDC, NCHS.
5.3, 5.3a,b	National Survey of Family Growth, CDC, NCHS.
5.4*	Baseline and update for all females and all black females: National Survey of Family Growth, CDC, NCHS. Baseline and update for all males and all black males: National Survey of Adolescent Males, NIH, NICHD. 1990–97 data for in-school females and males: Youth Risk Behavior Survey, CDC, NCCDPHP.
5.5*	Baseline and update for all females: National Survey of Family Growth, CDC, NCHS. Baseline for all males: National Survey of Adolescent Males, NIH, NICHD. 1990–97 data for in-school females and males: Youth Risk Behavior Survey, CDC, NCCDPHP.
5.6	All females: National Survey of Family Growth, CDC, NCHS; All males: National Survey of Adolescent Males, NIH, NICHD; 1990–97 data for in-school females and males: Youth Risk Behavior Survey, CDC, NCCDPHP.
5.7, 5.7a,b	National Survey of Family Growth, CDC, NCHS.
5.8	Baseline: Planned Parenthood Federation of America, Inc., 1986. 1994 Update: National Health Interview Survey, CDC, NCHS. 1995 Update: National Survey of Family Growth, CDC, NCHS.
5.9	Baseline: Mech EB. Unpublished. Orientation of Pregnancy Counselors toward Adoption. 1984.
5.10*	Baseline: Primary Care Provider Surveys, OPHS, ODPHP. Update: Prevention in Primary Care Study, American College of Preventive Medicine.
5.11*	1989 baseline: State Family Planning Directors. 1990 data: National Questionnaire on Provision of STD and HIV Services by Family Planning Clinics, PHS, OPA. 1994 data: The Urban Institute. Family Planning Clinics: Current Status and Recent Changes in Services, Clients, Staffing, and Income Sources. March 1994.
5.12, 5.12a–c	Forrest JD and Sing S. The Sexual and Reproduction Behavior of American Women, 1982–88. Family Planning Perspectives 22(5):206–14. 1990. 1995 updates: National Survey of Family Growth, CDC, NCHS.

*Duplicate objective. See full text of objective following this table.

Family Planning Objectives

5.1: Reduce pregnancies among females aged 15–17 to no more than 50 per 1,000 adolescents.

NOTE: For black and Hispanic adolescent females, baseline data are unavailable for those aged 15–17. The targets for these two populations are based on data for females 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 females aged 15–19 to no more than 120 per 1,000.

5.1b: Reduce pregnancies among Hispanic adolescent females 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 females that are unintended.

5.2b: Reduce to no more than 30 percent the proportion of all pregnancies among Hispanic females 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 couples 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

5.4a*: Reduce the proportion of black males aged 15 years who have engaged in sexual intercourse to no more than 15 percent.

Duplicate objectives: 18.3a and 19.9a

5.4b*: Reduce the proportion of black males aged 17 years who have engaged in sexual intercourse to no more than 40 percent.

Duplicate objectives: 18.3b and 19.9b

5.4c*: Reduce the proportion of black females aged 17 years who have engaged in sexual intercourse to no more than 40 percent.

Duplicate objectives: 18.3c and 19.9c

5.5*: Increase to at least 40 percent the proportion of ever sexually active adolescents aged 17 and younger who have not had sexual intercourse during the previous 3 months.

Duplicate objectives: 18.15 and 19.16

5.6: Increase to at least 90 percent the proportion of sexually active, unmarried people aged 15–24 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 7 percent in the proportion of women experiencing pregnancy despite use of a contraceptive method.

5.7a: Increase the effectiveness with which family planning methods are used, as measured by a decrease to no more than 8 percent in the proportion of black females experiencing pregnancy in the last year despite use of a contraceptive method.

5.7b: Increase the effectiveness with which family planning methods are used, as measured by a decrease to no more than 8 percent in the proportion of Hispanic females experiencing pregnancy in the last year 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 correct anatomical names, sexual abuse, and values surrounding sexuality, with their parents and/or have received information through another

parentally endorsed source, such as youth, school, or religious programs.

5.9: Increase to at least 90 percent the proportion of family planning counselors who offer accurate information about all options, including prenatal care and delivery, infant care, foster care, or adoption and pregnancy termination to their patients with unintended pregnancies.

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 provide on site primary prevention and provide or refer for secondary prevention services for HIV infection and bacterial sexually transmitted diseases (gonorrhea, syphilis, and Chlamydia) to high-risk individuals and their sex or needle-sharing partners.

Duplicate objectives: 18.13 and 19.11

5.12: Increase to at least 95 percent the proportion of all females aged 15–44 at risk of unintended pregnancy who use contraception.

5.12a: Increase to at least 95 percent the proportion of black females aged 15–44 at risk of unintended pregnancy who use contraception.

5.12b: Increase to at least 95 percent the proportion of females aged 15–44 with income less than 100 percent of poverty at risk of unintended pregnancy who use contraception.

5.12c: Increase to at least 95 percent the proportion of females aged 15–19 years under 200 percent of poverty at risk of unintended pregnancy who use contraception.

*Duplicate objective.

Priority Area 6 Mental Health and Mental Disorders

Background

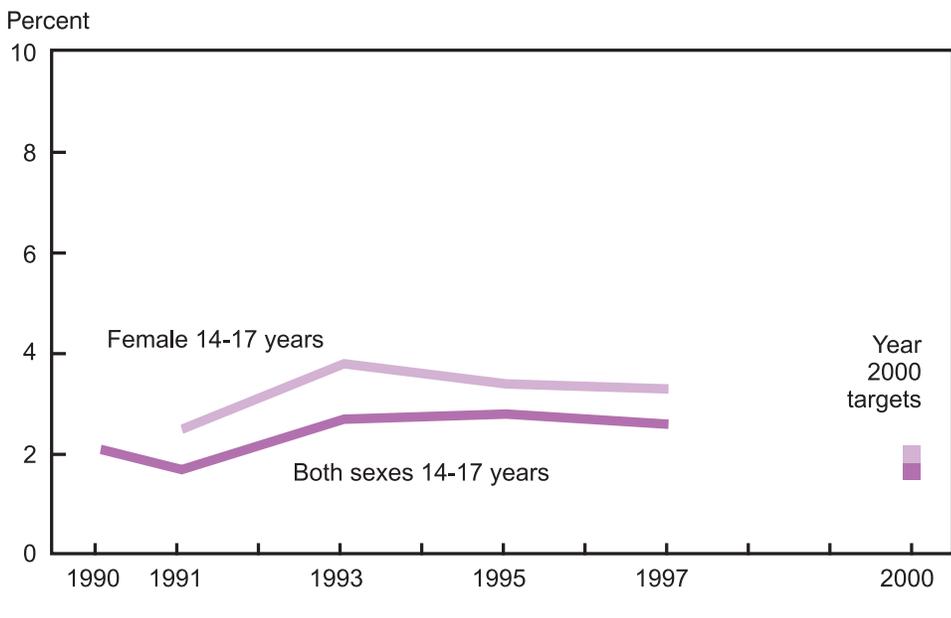
Mental health refers to an individual's ability to negotiate the daily challenges and social interactions of life without experiencing undue emotional or behavioral incapacity. Mental health and mental disorders can be affected by numerous conditions ranging from biologic and genetic vulnerabilities to acute or chronic physical dysfunction to environmental conditions and stresses. Addressing the range of these contingencies requires a balance of minimizing risk factors and maximizing protective factors and combining prevention with treatment (1). This balance will become increasingly important with the growth of managed care and increased efforts to contain costs (2).

In 1992, nearly 40 million Americans between the ages of 15 and 54 experienced some type of mental disorder; about 8 million of these concurrently experienced some type of substance abuse disorder (3). Lifetime estimates of the prevalence of mental illness are even higher (3), making the prevalence of mental illness comparable to that of many physical illnesses (4). Approximately 2 million Americans experience schizophrenia in their lifetime; roughly 40 percent of hospitalized psychiatric patients are diagnosed with some type of schizophrenia (5). Of those diagnosed with schizophrenia, 10–15 percent commit suicide (5).

Suicide remains one of the most serious consequences of mental illness, but other social and economic costs highlight the need for aggressive prevention and treatment efforts. In 1990, mental illnesses cost the United States approximately \$150 billion. Treatment costs an estimated \$67 billion (approximately \$24 billion came from public funds); lost productivity or premature death costs an additional \$75 billion. Additional costs related to criminal justice involvement with the mentally ill and property destruction cost an additional \$6 billion (6).

In 1990, more than 5 million people were admitted to mental health facilities

Figure 7. Proportion of adolescents 14–17 years with injurious suicide attempts in the past year: United States, selected years, 1990–97, and year 2000 targets for objective 6.2



	1990	1991	1993	1995	1997	Year 2000 target
Both sexes 14–17 years	2.1%	1.7%	2.7%	2.8%	2.6%	1.8%
Female 14–17 years	---	2.5%	3.8%	3.4%	3.3%	2.0%

--- Data not available.

SOURCE: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Youth Risk Behavior Survey.

for treatment; about 62 percent were treated on an outpatient basis in hospitals, mental health clinics, and other facilities (6). Roughly 48 percent of those admitted for inpatient treatment and 35 percent of those admitted as outpatients have their treatment paid for by public insurance (7). Despite the volume of persons who received treatment, only 40 percent of those who experience mental illness receive treatment (5) and only one-quarter of these receive care from the mental health sector (3).

Prevention of mental illness and its consequences is a complex undertaking, but it has recently received additional impetus through advances in research and focus from the professional community. The Institute of Medicine's report (8) calls for universal, selective, and indicated prevention efforts. The 15 objectives in this priority area support efforts to address these initiatives.

Data Summary

Highlights

The 1996 data show a suicide rate (6.1) of 10.8 per 100,000 population; this is a 7.7 percent decline from the 1987 baseline level. The preliminary rate for 1997 was 10.3 per 100,000, which is a decline of 11.9 percent from the baseline. Adolescent suicide rates have fluctuated over the past 5 years, but were 4.9 percent lower in 1996 than in 1987. Injurious suicide attempts by adolescents (6.2), while still higher than the baseline, have dropped slightly from 1993 and 1995 levels (see figure 7).

Both the proportion of people using community support services for severe mental disorders (6.6) and the proportion of people seeking help for emotional problems (6.8) have increased from baseline levels. However, the proportion of people not taking steps to control stress (6.9) has also increased.

In the context of these data on service utilization among persons with

problems related to mental health, it is interesting to note that all 50 States are served by two national mental health clearinghouses (6.12) that have a mission to increase public awareness and access to mental health services.

Summary of Progress

Three objectives (6.5, 6.6, and 6.12) have met year 2000 targets; preliminary 1997 data for objective 6.1 also surpass the year 2000 target. Three other objectives (6.4, 6.8, and 6.11) show progress toward the year 2000 targets. Six objectives (6.2, 6.7, 6.9, 6.10, 6.14, and 6.15) have moved away from the year 2000 targets. Progress for objective 6.13 was mixed. Progress determinations for objectives 6.13 and 6.14 were based on limited data from nurse practitioners (see [Data Issues](#)). There were no data to update objective 6.3.

Data Issues

Definitions

Operational definitions and data collection specifications for all year 2000 objectives in priority area 6 have been published in the National Center for Health Statistics *Statistical Notes* series (9). Data issues are discussed and references are cited for expanded discussions of the data systems that provide data for the national objectives. Where appropriate, the text of the questionnaire items used to measure the objectives is also provided. See appendix [table VIII](#) for further information.

Objective 6.1 (suicide) is monitored using data from the National Vital Statistics System (NVSS). The data are compiled from death certificates submitted by the States. Differentiating suicide deaths from accidental deaths relies heavily on judgment by the medical legal officer (for example, coroner or medical examiner). A key element of this determination is the establishment of intent by the deceased. This determination may be based on information about prior suicide attempts, a statement or note by the deceased indicating their intent to commit suicide, or other clinical information (for example, serious mental illness) (10).

Objective 6.2 (adolescent suicide attempts) is monitored with data from the Youth Risk Behavior Survey (YRBS), a school-based survey. Suicide

attempts are self-reported and are limited to those that required medical attention in the last 12 months. Data from the 1992 National Health Interview Survey (NHIS) youth supplement suggest that other types of violent behavior (weapons-carrying and fighting) are higher among youth (14–19 years of age) not in school than among those in school; the estimates for fighting and weapons-carrying for in-school youth were very close to estimates for the total population. The NHIS youth supplement did not include questions on suicide attempts. The exclusion of adolescents not in school in the data used to monitor objective 6.2 (suicide attempts) may underestimate the actual number of youth suicide attempts (11). Reliance on self-report of suicide attempts that resulted in hospitalization without validation from medical sources may also affect the accuracy of estimates. However, a recent study by CDC indicates that estimates among in-school youth are highly reliable (12).

The wording and baseline data for objective 6.10 (suicide prevention in jails) were established using States as the organizational level for monitoring and implementing suicide prevention protocols in jails. However, jails are usually under the jurisdiction of counties or municipalities. State level data on jails are limited; the alternative data track the objective using jails as the unit of analysis. Data from the National Census of Jails, conducted by the Bureau of Justice Statistics, are only available for 1993 but later updates are expected. Additional data are from the American Correctional Association's (ACA) list of jails, which are ACA-accredited; their accreditation requires that suicide prevention policies and training be implemented in the jail. However, not all jails seek ACA accreditation; this selection bias suggests that these data may not be nationally representative.

Data Source Descriptions

Data for objective 6.11 (worksite stress management programs) are from the National Survey of Worksite Health Promotion Activities, which were telephone surveys of nongovernment worksites. Some of the businesses surveyed had multiple worksites with different health promotion activities. Additionally, both active (for example, classes) and passive (for example, brochures) methods were counted as

worksite health promotion activities.

Baseline data for objectives 6.13 (clinical review of childhood mental functions) and 6.14 (clinical review of adult mental functions) are from the Primary Care Providers Surveys (PCPS). The samples for the surveys were drawn from the membership rolls of provider organizations for family physicians, nurse practitioners, internists, obstetricians/gynecologists, and pediatricians (6.14). Response rates ranged from 50–80 percent. The data on assessment and screening represent the proportion of providers who routinely queried 81–100 percent of their patients about a particular type of mental function. Data on treatment and referral refer to the proportion of providers who provided or referred patients who needed the services. The Prevention in Primary Care Study (PPCS) was conducted in 1997–98 to update data from the PCPS. The design and items included in the 1997–98 study were similar to the PCPS, but a slightly different sampling frame was used and some items included in the 1992 surveys were not included in the PPCS. The professionals were sampled from listings of all licensed, active practitioners in the United States whose practices were at least 50 percent primary care. Because of low response rates from the other provider groups, updates are available only for nurse practitioners.

Comparability of Data Sources

Baselines for objectives 6.4 (adult mental disorders), 6.7 (treatment for depression), and 6.15 (prevalence of depression) came from the National Institute for Mental Health (NIMH) Epidemiological Catchment Area (ECA) studies conducted in five metropolitan areas during the early 1980's. This household survey used the Diagnostic Interview Schedule (DIS) and the Diagnostic and Statistical Manual of Mental Disorders (DSM-III) criteria to estimate 1-month prevalences, which were used to set the baseline and target. The updates for these objectives come from the National Comorbidity Survey (NCS), which is a national survey that collects prevalence data using the Composite International Diagnostic Interview (CIDI) and DSM-III-R criteria. To monitor the objectives, the ECA data were reanalyzed to produce 1-year prevalence estimates and the NCS data were recoded to reflect DSM-III categories.

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Table 6. Mental health and mental disorders objective status

Objective		Baseline										Target
		year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	2000
6.1*	Suicide (age adjusted per 100,000)	1987	11.7	11.5	11.4	11.1	11.3	11.2	11.2	10.8	^P 10.3	10.5
	a. Adolescents 15-19 years (per 100,000)	1987	10.2	11.1	11.0	10.8	10.9	11.1	10.5	9.7	^P 9.5	8.2
	b. Male 20-34 years (per 100,000)	1987	25.2	25.1	25.1	24.5	25.5	26.5	26.3	24.2	^P 22.7	21.4
	c. White male 65 years and over (per 100,000)	1987	46.7	44.4	42.7	41.0	40.9	38.9	38.7	37.8	^P 35.5	39.2
	d. American Indian/Alaska Native male (age adjusted per 100,000)	1987	20.1	21.0	19.2	17.9	18.7	23.8	20.1	20.0	---	17.0
6.2*	Suicide attempts among adolescents 14-17 years	1990	2.1%	...	1.7%	---	2.7%	---	2.8%	---	2.6%	1.8%
	a. Female 14-17 years	1991	2.5%	...	...	---	3.8%	---	3.4%	---	3.3%	2.0%
6.3	Mental disorders											
	Children and adolescents 18 years and under	1988	20%	---	---	---	---	---	---	---	---	17%
6.4	Mental disorders among adults 18-54 years (1-month prevalence)	1981-85	12.6%	---	---	---	---	---	---	---	---	10.7%
	Mental disorders among adults 18-54 years (1-year prevalence) . . . . .	...	---	¹ 20.4%	---	² 16.0%	---	---	---	---	---	...
6.5	Adverse health effects from stress for people 18 years and over	1984	44.2%	40.6%	---	---	39.2%	---	33.9%	---	---	35%
	a. People 18 years and over with disabilities	1984	53.5%	54.2%	---	---	54.9%	---	49.1%	---	---	40%
6.6	Use of community support among people 18 years and over with severe mental disorders	1986	15%	---	---	---	---	³ 34.6%	---	---	---	30%
6.7	Treatment for depression among people 18-54 years (6-month services)	1981-85	31%	---	---	---	---	---	---	---	---	54%
	Treatment for depression among people 18-54 years (1-year services) . . . . .	...	---	¹ 34.7%	---	² 34.2%	---	---	---	---	---	...
6.8	People 18 years and over seeking help with emotional/personal problems	1985	11.1%	12.5%	---	---	14.3%	---	⁴ 18.9%	---	---	20%
	a. People 18 years and over with disabilities	1985	14.7%	17.0%	---	---	19.8%	---	⁴ 26.6%	---	---	30%
6.9	People 18 years and over not taking steps to control stress	1985	24%	28%	34%	35%	---	35%	---	---	---	5%
6.10*	Suicide prevention in jails											
	Number of States meeting NCIA suicide prevention standards	1992	^a 2	...	...	...	---	---	2	1	---	50
	Proportion of jails with suicide policies . . . . .	...	---	---	---	---	79.5%	---	---	---	---	...
	Proportion of jails with ACA Accreditation . . . . .	...	---	1%	1%	1%	2%	2%	2%	---	---	...
6.11	Worksite stress management programs	1985	26.6%	---	---	37.0%	---	---	---	---	---	40%
6.12	Mutual help network											
	Number of States with mutual help clearinghouses	1995	8	...	...	...	...	...	...	---	---	50
	Number of Federal clearinghouses	1995	⁵ 2	...	...	...	...	...	...	---	---	...
6.13	Clinician review of patients' mental functioning . . . . .	...	---	---	---	---	---	---	---	---	---	60%
	Percent of clinicians routinely providing service to 81-100% of patients											
	Inquiry about cognitive functioning											
	Nurse practitioners	1992	35%	...	...	...	---	---	---	---	⁶ 19%	60%
	Obstetricians/gynecologists	1992	9%	...	...	...	---	---	---	---	6.7	60%
	Internists	1992	18%	...	...	...	---	---	---	---	6.7	60%
	Family physicians	1992	7%	...	...	...	---	---	---	---	6.7	60%
	Inquiry about emotional/behavioral functioning											
	Nurse practitioners	1992	40%	...	...	...	---	---	---	---	⁶ 26%	60%
	Obstetricians/gynecologists	1992	12%	...	...	...	---	---	---	---	6.7	60%
	Internists	1992	25%	...	...	...	---	---	---	---	6.7	60%
	Family physicians	1992	13%	...	...	...	---	---	---	---	6.7	60%

Table 6. Mental health and mental disorders objective status—Con.

Objective	Baseline	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	Target
	year										2000
Treatment/referral for cognitive problems											
Nurse practitioners	1992	20%	...	...	...	---	---	---	---	⁶ 24%	60%
Obstetricians/gynecologists	1992	20%	...	...	...	---	---	---	---	^{6,7} ---	60%
Internists	1992	27%	...	...	...	---	---	---	---	^{6,7} ---	60%
Family physicians	1992	21%	...	...	...	---	---	---	---	^{6,7} ---	60%
Treatment/referral for emotional/behavioral problems											
Nurse practitioners	1992	23%	...	...	...	---	---	---	---	⁶ 33%	60%
Obstetricians/gynecologists	1992	23%	...	...	...	---	---	---	---	^{6,7} ---	60%
Internists	1992	35%	...	...	...	---	---	---	---	^{6,7} ---	60%
Family physicians	1992	27%	...	...	...	---	---	---	---	^{6,7} ---	60%
6.14 Clinician review of children's mental functioning	...	---	---	---	---	---	---	---	---	---	75%
Percent of clinicians routinely providing service to 81–100% of patients											
Inquiry about cognitive functioning											
Pediatricians	1992	62%	...	...	...	---	---	---	---	^{6,7} ---	75%
Inquiry about emotional/behavioral functioning											
Pediatricians	1992	47%	...	...	...	---	---	---	---	^{6,7} ---	75%
Treatment/referral for cognitive problems											
Pediatricians	1992	51%	...	...	...	---	---	---	---	^{6,7} ---	75%
Treatment/referral for emotional/behavioral problems											
Pediatricians	1992	45%	...	...	...	---	---	---	---	^{6,7} ---	75%
Inquiry about parent-child relationship											
Pediatricians	1992	55%	...	...	...	---	---	---	---	^{6,7} ---	75%
Nurse practitioners	1992	55%	...	...	...	---	---	---	---	⁶ 51%	75%
Family physicians	1992	36%	...	...	...	---	---	---	---	^{6,7} ---	75%
Treatment/referral for parent-child interaction problems											
Pediatricians	1992	34%	...	...	...	---	---	---	---	^{6,7} ---	75%
Nurse practitioners	1992	24%	...	...	...	---	---	---	---	---	75%
Family physicians	1992	29%	...	...	...	---	---	---	---	^{6,7} ---	75%
6.15 Prevalence of depression in people 18–54 years (1-month prevalence)	1981–85	5.1%	---	---	---	---	---	---	---	---	4.3%
Prevalence of depression in people 18–54 years (1-year prevalence)	...	---	¹ 10.9%	---	² 11.1%	---	---	---	---	---	...
a. Female 18–54 years (1-month prevalence)	1981–85	6.6%	---	---	---	---	---	---	---	---	5.5%
Female 18–54 years (1-year prevalence)	...	---	¹ 14.2%	---	² 13.1%	---	---	---	---	---	...

--- Data not available.

... Category not applicable.

^aBaseline has been revised.

^pPreliminary data.

¹1981–85 data. Data are for noninstitutionalized, nonrural, white, black, or Hispanic people 18–54 years.

²1990–92 data. Data are for noninstitutionalized, nonrural, white, black, or Hispanic people 18–54 years.

³Estimate represents the proportion of people with mental disorders (excluding substance disorders only) in the past year which interfered with their ability to work or find work and who sought help from community mental health services.

⁴Data represent the proportion of people who sought help from a family member, therapist, or minister/rabbi. Individual values were: family members, 15.6% (21.0% for people with disabilities), therapist, 6.8% (11.8% for people with disabilities), and minister/rabbi, 4.4% (6.9% for people with disabilities).

⁵Clearinghouses provide coverage for all 50 States, establishing the required network.

⁶1997–98 data.

⁷Response rate for this group was too low to produce reliable estimates.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

<i>Objective number</i>	<i>Data source</i>
6.1*, 6.1a–d	National Vital Statistics System, CDC, NCHS.
6.2*	Youth Risk Behavior Survey, CDC, NCCDPHP.
6.2a	Youth Risk Behavior Survey, CDC, NCCDPHP.
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6.4	Baseline: Epidemiologic Catchment Area Study, NIH, NIMH. 1990 and 1992 data: National Comorbidity Survey, University of Michigan.
6.5, 6.5a	National Health Interview Survey, CDC, NCHS.
6.6	Baseline: National Institute of Mental Health Community Support Program Client Followup Study, SAMHSA. 1990 and 1992 data: National Health Interview Survey, CDC, NCHS.
6.7	Baseline: Epidemiologic Catchment Area Study, NIH, NIMH. Updates: National Comorbidity Survey, University of Michigan.
6.8, 6.8a	National Health Interview Survey, CDC, NCHS.
6.9	Prevention Index, Rodale Press, Inc.
6.10*	Baseline and updates (States): National Study of Jails, National Center on Institutions and Alternatives. Baseline and update (ACA accreditation): American Correctional Association. Baseline (suicide policies): National Census of Jails, DOJ, BJS.
6.11	National Survey of Worksite Health Promotion Activities, OPHS, ODPHP.
6.12	SAMHSA.
6.13	Baseline: Primary Care Provider Surveys, OPHS, ODPHP. Update: Prevention in Primary Care Study, American College of Preventive Medicine.
6.14	Baseline: Primary Care Provider Surveys, OPHS, ODPHP. Update: Prevention in Primary Care Study, American College of Preventive Medicine.
6.15	Baseline: Epidemiologic Catchment Area Study, NIH, NIMH. 1990 and 1992 data: National Comorbidity Survey, University of Michigan.

*Duplicate objective. See full text of objective following this table.

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 to no more than 17.0 per 100,000.

Duplicate objective: 7.2d

6.2*: Reduce to 1.8 percent the incidence of injurious suicide attempts among adolescents aged 14–17.

Duplicate objective: 7.8

NOTE: Data are limited to those suicide attempts that result in hospitalization and are based on self-reports.

6.2a*: Reduce to 2.0 percent the incidence of injurious suicide attempts among female adolescents aged 14–17.

Duplicate objective: 7.8a

6.3: Reduce to less than 17 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 report 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 report 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 54 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 a network to facilitate access to mutual self-help activities, resources, and information by people and their family members who are experiencing emotional distress resulting from mental or physical illness.

6.13: Increase to at least 60 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.

6.15: Reduce the prevalence of depressive (affective) disorders among adults living in the community to less than 4.3 percent.

6.15a: Reduce the prevalence of depressive (affective) disorders among women living in the community to less than 5.5 percent.

*Duplicate objective.

Priority Area 7 Violent and Abusive Behavior

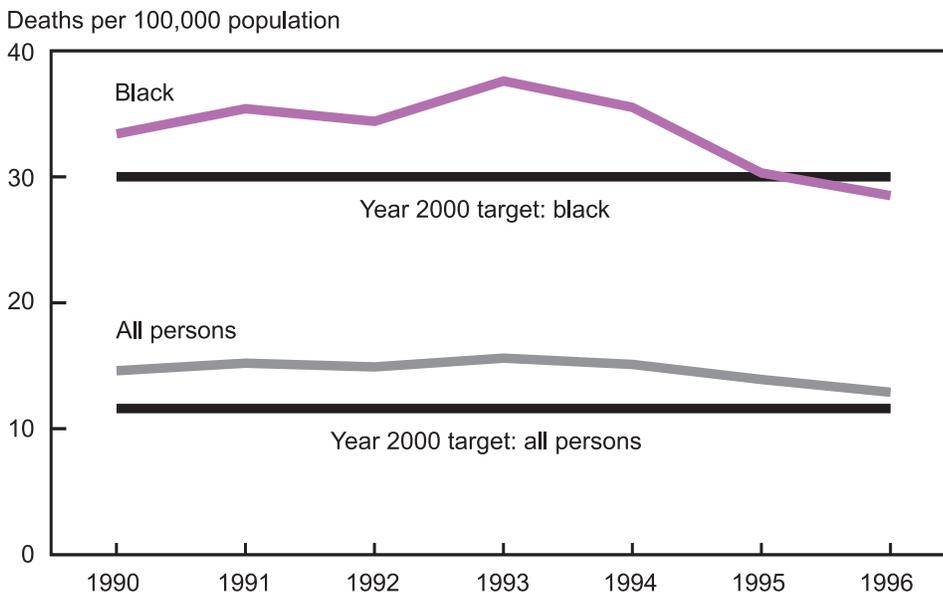
Background

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 1996 (1) and victims of violence have exceeded 2 million persons annually (2). Violence produces extensive physical costs and emotional consequences for society (3). The widespread nature of these consequences may indicate that interpersonal violence has become a common part of social interaction in many domestic settings (4). In 1994, over 500,000 women were seen in hospital emergency rooms for violence-related injuries; over one-third of these injuries were inflicted by current or former husbands or boyfriends (5). One innovative approach to coping with partner abuse has been to recruit assistance from public advertising firms to increase the awareness of domestic violence (6).

Violence in the domestic setting also affects children in that environment; it may also become a mode of behavior they adopt and pass on to future generations (7). Abuse and maltreatment of children has increased (8). Children who have been maltreated are more likely to be involved in delinquent behavior and violent behavior during adolescence (9). Adolescent homicides increased during the late 1980's but have declined in recent years (10); there have also been slight increases in reported violent victimizations among adolescents in school and dramatic increases in the perceived level of gang activity during the same time period (11). There have been corresponding increases in juvenile arrests for violent behavior (12).

Firearms play a major role in both interpersonal and self-directed violence, especially among younger victims (13). While firearm deaths have declined since 1993 (see [figure 8](#)), handguns remain the primary means for the majority of this violence. Handguns are used in about 75 percent of all firearm crimes and firearm suicides (14,15). While laws limiting access to firearms

Figure 8. Age-adjusted death rates for firearm-related causes: United States, 1990–96, and year 2000 targets for objective 7.3



	1990	1991	1992	1993	1994	1995	1996	Year 2000 target
All persons	14.6	15.2	14.9	15.6	15.1	13.9	12.9	11.6
Black	33.4	35.4	34.4	37.6	35.5	30.3	28.5	30.0

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

and mandatory sentences for felony firearm use appear to reduce and/or prevent both self-directed and interpersonal violent injuries (16,17), a combined effort by law enforcement and public health services will be necessary to effectively address the problem of violence.

Data Summary

Highlights

The 1996 homicide rate of 8.3 per 100,000 population (7.1) reached its lowest level since 1987 and is 23.1 percent below the decade high of 10.8 in 1991. The homicide rate for black males also declined, but remains above the baseline. In 1996, suicides (7.2) and firearm-related deaths (7.3) dropped 7.7 and 11.6 percent, respectively, below their 1987 and 1990 baseline levels. Preliminary data for 1997 indicate further declines; suicide dropped to 10.3 per 100,000, a decline of 11.9 percent from 1987. Firearm deaths dropped to 11.9 per 100,000, a

decline of 18.5 percent since 1990. Child abuse and neglect (7.4), however, increased by more than 85 percent from the baseline despite a 45-percent increase in the number of States that have child death review systems (7.13).

Summary of Progress

Of the 19 objectives in this priority area, 6 (7.1, 7.3, 7.5, 7.7, 7.9, and 7.19) progressed toward the year 2000 targets. Preliminary data for 7.2 (suicide) and the updates for 7.10 (weapon carrying), 7.13 (States with child death review systems), and the baseline established for 7.16 (conflict resolution in schools) met their respective year 2000 targets. The data for five objectives (7.4, 7.6, 7.8, 7.15, and 7.18) indicate movement away from the year 2000 target. There were no updates beyond the baselines for objectives 7.11 (firearm storage) and 7.16 (conflict resolution). Three objectives (7.12, 7.14, and 7.17) remain without baselines.

Data Issues

Definitions

Objective **7.1** (homicide) is monitored using data from the National Vital Statistics System (NVSS) and excludes homicides attributed to legal intervention. It should be noted that the number of States reporting Hispanic origin data in their vital statistics has varied from year to year (see [appendix](#)). The data on spousal homicide (**7.1b**) come from the Federal Bureau of Investigation; the 1993 and 1994 data are for spouses age 15 years and over and are not directly comparable to previous data.

Objective **7.2** (suicide deaths) is monitored using data from the NVSS. The data are compiled from death certificates submitted by the States. Differentiating suicide deaths from accidental deaths relies heavily on judgment by the medical legal officer (for example, coroner or medical examiner). A key element of this determination is the establishment of intent by the deceased. This determination may be based on information about prior suicide attempts, a statement or note by the deceased indicating their intent to commit suicide, or other clinical information (for example, serious mental illness) (18).

The baseline and target for objective **7.5** (partner abuse) were established using the National Institute of Mental Health's survey of family violence, which measured incidents of violence among couples. This survey will not be repeated, so the objective is monitored using data from the Bureau of Justice Statistics National Crime Victimization Survey that is tracking violence between intimates (for example, spouses, ex-spouses, or boyfriends). The data used to track the objective report incidents per 1,000 women, which reflects the intent of the objective.

Data for objectives **7.6** (assault injuries) and **7.7** (rape and attempted rape) come from the National Crime Victimization Survey, which provides self-reported victimizations. The numbers of offenses reported in this survey generally exceed those reported to police and other law enforcement agencies. However, because of their personal nature, some offenses such as rape are underreported in the crime survey (19). The data for objective **7.6** include injuries from completed rapes,

attempted and completed robberies with injury, and completed aggravated and simple assaults with injury. In 1992, this survey was redesigned; the revised questions elicit higher rates for rape, other sex offenses, and crimes committed by relatives and acquaintances. The baseline for objective **7.7** has been revised using the 1992 data to reflect this measurement change.

Data for objectives **7.8** (adolescent suicide attempts), **7.9** (physical fighting among adolescents), and **7.10** (weapon carrying) are measured using the school-based Youth Risk Behavior Survey (YRBS) and rely on student self-report. Self-reported suicide attempts are limited to those that occurred in the last 12 months and required medical attention. Data from the 1992 National Health Interview Survey (NHIS) youth supplement indicate higher levels of weapon carrying and fighting among youth (14–19 years of age) not in school than among youth the same age in school, although the estimates for in-school youth were very close to the estimates for the total population (20). The NHIS supplement did not include questions on suicide attempts. Because YRBS data are used for ongoing monitoring of objective **7.8**, the exclusion of adolescents not in school may underestimate youth suicide attempts. The reliance on self-report without external validation of weapon carrying, suicide attempts, and fighting may affect the validity of these estimates, although a recent study by the Centers for Disease Control and Prevention indicated that the results are highly reliable (21).

Objective **7.11** (inappropriate firearm storage) is measured using data from the NHIS. The numerator is the number of people who have a firearm in or around the house that is stored loaded or unlocked. The denominator is the number of people who report having a firearm in or around the house. Data on the proportion of the total population with unlocked or loaded guns are also footnoted in the summary table.

The update for objective **7.15** (shelter availability for battered women) comes from the same source (National Coalition Against Domestic Violence) as the baseline, but were collected differently and are not directly comparable.

The wording and baseline data for objective **7.18** (suicide prevention in jails) were established with States as the organizational level for monitoring and implementing suicide prevention protocols in jails. Jails are usually under the jurisdiction of counties or municipalities. State-level data on jails are limited; the alternative data track the objective using jails as the unit of analysis. Data from the National Census of Jails, conducted by the Bureau of Justice Statistics, were only available for 1993 but subsequent updates are expected. Additional data are from the American Correctional Association's (ACA) list of jails that are ACA-accredited; their accreditation requires that suicide prevention policies and training be implemented in the jail. However, not all jails seek ACA accreditation; this selection bias suggests that these data may not be nationally representative.

Data Availability

Data are not currently available for objectives **7.12** (emergency room protocols), **7.14** (followup on abused children), and **7.17** (comprehensive violence prevention programs). No update is available for **7.11** (inappropriate firearm storage).

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Table 7. Violent and abusive behavior objective status

Objective	Baseline	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	Target
	year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	2000
7.1 Homicide (age adjusted per 100,000)	1987	8.5	10.1	10.8	10.3	10.6	10.1	9.2	8.3	---	7.2
a. Children 3 years and under (per 100,000)	1987	3.9	4.4	4.9	4.5	4.9	4.6	4.5	4.5	---	3.1
b. Spouses 15–34 years (per 100,000)	1987	1.7	11.5	21.1	21.1	21.1	21.0	---	---	---	1.4
c. Black male 15–34 years (per 100,000)	1987	91.1	130.5	140.8	134.2	140.5	133.8	114.6	105.7	---	72.4
d. Hispanic male 15–34 years (per 100,000) ³	1987	41.3	53.2	55.7	56.8	52.4	52.2	49.7	39.2	---	33.0
e. Black female 15–34 years (per 100,000)	1987	20.2	22.1	24.1	22.7	23.7	21.0	18.5	16.1	---	16.0
f. American Indian/Alaska Native (age adjusted per 100,000)	1987	11.2	10.7	12.2	10.3	10.7	11.8	11.5	9.9	---	9.0
7.2* Suicide (age adjusted per 100,000)	1987	11.7	11.5	11.4	11.1	11.3	11.2	11.2	10.8	^P 10.3	10.5
a. Adolescents 15–19 years (per 100,000)	1987	10.2	11.1	11.0	10.8	10.9	11.1	10.5	9.7	^P 9.5	8.2
b. Male 20–34 years (per 100,000)	1987	25.2	25.1	25.1	24.5	25.5	26.5	26.3	24.2	^P 22.7	21.4
c. White male 65 years and over (per 100,000)	1987	46.7	44.4	42.7	41.0	40.9	38.9	38.7	37.8	^P 35.5	39.2
d. American Indian/Alaska Native male (age adjusted per 100,000)	1987	20.1	21.0	19.2	17.9	18.7	23.8	20.1	20.0	---	17.0
7.3 Firearm related deaths (age adjusted per 100,000)	1990	14.6	...	15.2	14.9	15.6	15.1	13.9	12.9	^P 11.9	11.6
a. Black	1990	33.4	...	35.4	34.4	37.6	35.5	30.3	28.5	^P 24.9	30.0
7.4 Child abuse and neglect (per 1,000)	1986	22.6	---	---	---	41.9	---	---	---	---	Less than 22.6
Incidence of types of maltreatment											
a. Physical abuse	1986	4.9	---	---	---	49.1	---	---	---	---	Less than 4.9
b. Sexual abuse	1986	2.1	---	---	---	44.4	---	---	---	---	Less than 2.1
c. Emotional abuse	1986	3.0	---	---	---	47.9	---	---	---	---	Less than 3.0
d. Neglect	1986	14.6	---	---	---	^{4,5} 28.6	---	---	---	---	Less than 14.6
7.5 Partner abuse (per 1,000 couples)	1985	30.0	---	---	---	---	---	---	---	---	27.0
Assaults by intimates (per 1,000 females 12 years and over) ⁶ . . . . .	...	---	---	---	8.8	9.8	9.1	8.6	7.5	---	...
7.6 Assault injuries (per 1,000 people 12 years and over)⁶	1986	9.7	10.3	11.0	9.3	12.3	12.7	11.7	10.5	---	8.7
7.7 Rape and attempted rape (per 100,000)⁶											
Female 12 years and over	1992	290	...	...	...	270	270	---	230	---	108
a. Female 12–34 years	1992	607	...	...	...	477	527	---	---	---	225
Sexual assaults (per 100,000 females 12 years and over)	1992	170	...	...	...	140	100	---	---	---	...
7.8* Suicide attempts among adolescents 14–17 years	1990	2.1%	...	1.7%	---	2.7%	---	2.8%	---	2.6%	1.8%
a. Female 14–17 years	1991	2.5%	...	...	---	3.8%	---	3.4%	---	3.3%	2.0%
7.9 Physical fighting among adolescents 14–17 years (incidents per 100 students per month)	1991	137	...	...	---	137	---	128	---	115	110
a. Non-Hispanic black male 14–17 years	1991	207	...	...	---	203	---	181	---	175	160
7.10 Weapon-carrying by adolescents 14–17 years (incidents per 100 students per month)	1991	107	...	...	---	92	---	81	---	74	86
a. Non-Hispanic black adolescent 14–17 years	1991	134	...	...	---	117	---	85	---	84	105
7.11 Proportion of people 18 years and over with firearms in the home that are stored either loaded or unlocked	1994	⁷ 20%	...	...	...	...	...	---	---	---	16%

Table 7. Violent and abusive behavior objective status—Con.

	<i>Objective</i>	<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
7.12	Emergency room protocols for victims of violence . . . . .	...	---	---	---	---	---	---	---	---	---	90%
7.13	Number of States with child death review systems	1991	33	...	...	32	---	40	---	⁸ 48	---	45
7.14	Number of States that followup abused children . . . . .	...	---	---	---	---	---	---	---	---	---	30
7.15	Battered women turned away from shelters	1987	40%	---	---	---	---	---	---	66%	---	10%
7.16	Conflict resolution in a required course											
	Proportion of middle/junior and senior high schools	1994	58.3%	...	...	...	...	...	---	---	---	50%
7.17	Local comprehensive violence prevention programs . . . . .	...	---	---	---	---	---	---	---	---	---	80%
7.18*	Suicide prevention in jails											
	Number of States meeting NCIA suicide prevention standards	1992	^a 2	...	...	...	---	---	2	1	---	50
	Proportion of jails with suicide policies . . . . .	...	---	---	---	---	79.5%	---	---	---	---	...
	Proportion of jails with ACA accreditation . . . . .	...	---	1%	1%	1%	2%	2%	2%	---	---	...
7.19*	Number of States with firearm storage laws	1989	^a 1	1	5	8	11	13	15	15	---	50

--- Data not available.

... Category not applicable.

^aBaseline has been revised.

^pPreliminary data.

¹1989 data.

²Includes married men and women aged 15 and older. Data include deaths from legal intervention (E970–E978) in addition to E960–E969 and are not comparable to other data for this objective.

³Excludes data from States lacking Hispanic-origin item on their death certificates or for which Hispanic-origin data were not of sufficient quality. See appendix.

⁴Rates were computed using the Endangerment Standard.

⁵Rate includes both physically and emotionally neglected children.

⁶The victimization survey was redesigned in 1992. The revised questions elicit higher rates for rape, other sex offenses, and crimes committed by relatives and acquaintances.

⁷In 1994, 37.4% reported having a firearm in or around the home and 7.2% reported having a firearm that was stored either loaded or unlocked.

⁸Number includes State teams in 38 States and the District of Columbia, and 9 additional States where county/local teams serve the majority of the population at risk.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

<i>Objective number</i>	<i>Data source</i>
7.1, 7.1a-f	National Vital Statistics System, CDC, NCHS.
7.2*, 7.2a-d	National Vital Statistics System, CDC, NCHS.
7.3	National Vital Statistics System, CDC, NCHS.
7.4, 7.4a-d	National Incidence of Child Abuse and Neglect Survey, Administration for Children and Families, NCCAN.
7.5	Baseline: National Family Violence Survey, NIH, NIMH. 1992-96 data: National Crime Victimization Survey, DOJ, BJS.
7.6	National Crime Victimization Survey, DOJ, BJS.
7.7, 7.7a	National Crime Victimization Survey, DOJ, BJS.
7.8*	Youth Risk Behavior Survey, CDC, NCCDPHP.
7.8a	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.
7.13	Baseline: Annual 50 State Survey, National Committee for Prevention of Child Abuse. Update: National Incidence of Child Abuse and Neglect Survey, Administration for Children and Families, NCCAN.
7.15	Domestic Violence Statistical Survey, National Coalition Against Domestic Violence.
7.16	School Health Policies and Programs Study, CDC, NCCDPHP.
7.18*	Baseline and updates (States): National Study of Jails, National Center on Institutions and Alternatives. Baseline and update (ACA accreditation): American Correctional Association. Baseline (suicide policies): National Census of Jails, DOJ, BJS.
7.19*	Center to Prevent Handgun Violence.

*Duplicate objective. See full text of objective following this table.

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 33.0 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 to no more than 9.0 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 to no more than 17.0 per 100,000.

Duplicate objective: 6.1d

7.3: Reduce firearm-related deaths to no more than 11.6 per 100,000 people from major causes.

7.3a: Reduce firearm-related deaths among blacks to no more than 30.0 per 100,000 people from major causes.

7.4: Reverse to less than 22.6 per 1,000 children the rising incidence of maltreatment of children younger than age 18.

7.4a: Reverse to less than 4.9 per 1,000 children the rising incidence of maltreatment of children younger than age 18.

7.4b: Reverse to less than 2.1 per 1,000 children the rising incidence of sexual abuse of children younger than age 18.

7.4c: Reverse to less than 3.0 per 1,000 children the rising incidence of emotional abuse of children younger than age 18.

7.4d: Reverse to less than 14.6 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 8.7 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 to 1.8 percent the incidence of injurious suicide attempts among adolescents aged 14–17.

Duplicate objective: 6.2

NOTE: Data are limited to those suicide attempts that result in hospitalization and are based on self-reports.

7.8a*: Reduce to 2.0 percent the incidence of injurious suicide attempts among female adolescents aged 14–17.

Duplicate objective: 6.2a

7.9: Reduce to 110 per 100 the incidents of physical fighting among adolescents aged 14–17.

7.9a: Reduce to 160 per 100 the incidents of physical fighting among black males aged 14–17.

7.10: Reduce to 86 per 100 the incidents of weapon-carrying by adolescents aged 14–17.

7.10a: Reduce to 105 per 100 the incidents of weapon-carrying by blacks 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 comprehensive 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

7.19*: Enact in 50 States and the District of Columbia laws requiring that firearms be properly stored to minimize access and the likelihood of discharge by minors.

Duplicate objective: 9.25

NOTE: There are some variations across States in the age which defines minors. Additionally, in some States violation of the law is a misdemeanor; in others it is a felony. Penalties for violation also vary.

*Duplicate objective.

Priority Area 8 Educational and Community-Based Programs

Background

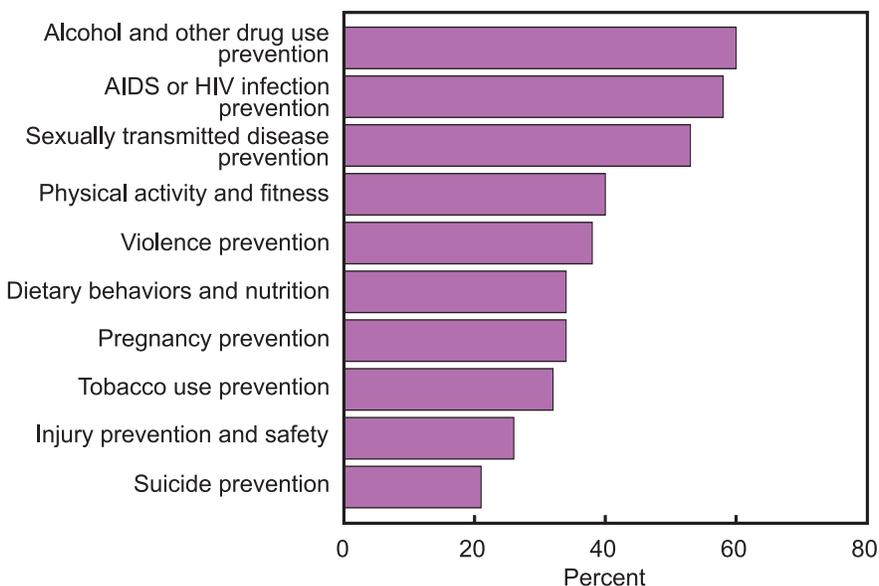
A supportive social environment may be one of the key factors in successfully influencing positive behaviors and changing negative behaviors that contribute to many of today's leading health threats. Consequently, leadership, collaboration, and initiatives at the community level are fundamental to progress. Educational and community-based interventions are designed to reach groups of people outside of traditional health care settings. Many of these intervention programs are located in specially targeted sites in the community; these programs are designed for people who come together in diverse settings, such as students within a school, employees at a worksite, or members of civic or religious groups that meet regularly. Other programs are best planned as community-wide health promotion initiatives to reach large numbers of people with highly visible and more easily implemented interventions. While some community-based programs may address a single risk factor or prominent health problem, many programs are taking a more comprehensive, holistic approach to health and healthy communities. Community-based programs are increasingly recognizing the importance of addressing the social and physical environment in which positive behaviors are reinforced.

Data Summary

Highlights

The average number of years of healthy life for the total population (8.1) increased in 1996 for the third consecutive year. The increase in years of healthy life in 1996 was primarily due to large increases for blacks and Hispanics. Between 1990 and 1994, years of healthy life declined. Except for 1993 when life expectancy declined, these decreases reflected a downturn in health-related quality of life (based on self-reports of health status and activity

Figure 9. Proportion of college students 18–24 years who received information from their institution on selected health topics: United States, 1995 (supplementary data for objective 8.5)



	1995
Alcohol and other drug use prevention	59%
AIDS or HIV infection prevention	58%
Sexually transmitted disease prevention	53%
Physical activity and fitness	40%
Violence prevention	38%
Dietary behaviors and nutrition	34%
Pregnancy prevention	34%
Tobacco use prevention	32%
Injury prevention and safety	26%
Suicide prevention	21%

SOURCE: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, National College Health Risk Behavior Survey.

limitation). The increases in 1994–96 were primarily due to increases in life expectancy.

There have been considerable improvements in opportunities offering access to preschool children (including disabled children) through organizations such as Head Start and Healthy Start (8.3), although the percent of low-income children entering kindergarten or first grade actually receiving Head Start services has declined slightly since 1992. There have also been improvements in the number of worksites offering health promotion activities (8.6) and in the proportion of hospitals offering patient education programs (8.12). New information from the National College Health Risk Behavior Survey (CHRBS) show that college students are also receiving information on health topics (8.5) (for

example, alcohol and drug use, HIV prevention, and STD prevention) (see figure 9).

Summary of Progress

Of the 14 Educational and Community-Based Programs objectives, 3 are progressing toward the year 2000 targets (objectives 8.6, 8.12, and 8.14), while 2 are unchanged from the baseline (8.1 and 8.2). Results for one objective (8.3) regressed from its 1990 baseline. Two objectives (8.4 and 8.5) have no new data beyond the baseline. Proxy data are available for one objective (8.10). For three objectives (8.7, 8.9, and 8.13) the baseline data exceed the year 2000 targets. New baseline data for objective 8.8 and 8.11 are now available.

Data Issues

Years of Healthy Life

The concept of increasing the span of healthy life is one of the three *Healthy People 2000* goals and a specific measure has been developed to track this objective in three priority areas (8.1, 17.1, and 21.1). See the [appendix](#) for a discussion of years of healthy life.

Definitions

Objective 8.4 does not include a definition of comprehensive school health education. However, the Centers for Disease Control and Prevention uses an operational definition that includes eight elements (1). Data for the variables from the 1994 School Health Policies and Programs Study (SHPPS) used to measure these elements are shown in [table 8](#). Schools must have addressed all elements of the operational definition to meet the criteria for comprehensive school health education. In 1994, only 2.3 percent of schools included all eight elements.

Objective 8.7 asks for the proportion of hourly workers who participated regularly in employer-sponsored health promotion activities. The 1994 baseline indicates the number of people who participated in employer-sponsored health promotion programs in the past year in the following occupational categories:

- Precision production, craft, and repair occupations
- Operators, fabricators, and laborers
- Transportation and material moving occupations
- Handlers, equipment cleaners, helpers, and laborers

Family discussions of health issues (8.9) are defined as discussions in the past month among family members 10 years and over about the following topics: nutrition, exercise, safety, tobacco use, sexual behavior/sexually transmitted diseases, or illegal drugs. In 1994, 83 percent of people had discussed at least one of these topics with family members in the month prior to interview. This exceeds the year 2000 target of 75 percent.

New baseline data for objective 8.11 represent the proportion of local health departments who indicated they provided programs or interventions in

the past year that were adapted to meet the special language and cultural needs of any racial/ethnic minority population served. Local health departments included are those in which a racial or ethnic minority group constitutes more than 10 percent of the population. Data shown are the proportion of local health departments providing culturally and linguistically appropriate programs by *Healthy People 2000* priority area.

Data Source Descriptions

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 (NCES) (2). The data for objective 8.2 include those who received high school diplomas as well as those who received alternative credentials, such as a General Education Development (GED) certificate. Data for 1992 and 1993 are for 19–20-year-olds. Beginning with data for 1994, figures for high school completion are available only for people 18–24 years of age.

Data for objective 8.6 (worksite health promotion programs) are from the National Survey of Worksite Health Promotion Activities, which were telephone surveys of nongovernment worksites. Some of the businesses surveyed had multiple worksites with different health promotion activities. Additionally, both active (for example, classes) and passive (for example, brochures) methods were counted as worksite health promotion activities.

Proxy Measures and Data Availability

Proxy data for 1992–93 from the National Association of City and County Health Officials are shown for objective 8.10. These data show the percent of the 43 reporting States in which at least 90 percent of local health departments reported providing services that addressed three or more *Healthy People 2000* priority areas. The data represent the local health departments' report of whether a program or service existed. The survey did not determine whether the program or service was a health promotion effort that involved citizen participation, included community assessment, or had measurable objectives. Information on the

proportion of the State population reached by the services or programs was not available.

The Media Health Partnerships Survey was developed by CDC to measure partnerships between network television affiliates and community health organizations (objective 8.13). The survey, conducted in September 1995–January 1996, determined that all television network affiliates in the top 20 media markets devote a substantial effort to health promotion and disease prevention through partnerships with community groups, organizations, and/or agencies. Based on these findings, objective 8.13 has been achieved and the survey will not be repeated.

Objective 8.14, which focuses on the proportion of people served by local health departments, is being monitored by the proportion of health departments carrying out the core functions of public health—assessment, assurance, and policy development.

References

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Table 8. Educational and community-based programs objective status

<i>Objective</i>		<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
8.1*	Years of healthy life	1990	64.0	...	63.9	63.7	63.5	63.8	63.9	64.0	---	65
	a. Black	1990	56.0	...	56.0	55.6	55.2	55.6	56.0	56.5	---	60
	b. Hispanic ¹	1990	64.8	...	63.6	² 64.0	63.2	64.2	64.0	64.7	---	65
	c. People 65 years and over ³	1990	11.9	...	11.8	11.9	11.9	12.1	12.0	12.2	---	14
8.2	Completion of high school (18-24 years)	1992	^a 86%	...	...	...	86%	86%	85%	86%	---	90%
	a. Hispanic	1992	^a 62%	...	...	...	64%	62%	63%	---	---	90%
	b. Black	1992	^a 82%	...	...	...	82%	83%	84%	---	---	90%
8.3	Preschool child development programs											
	Eligible children 4 years afforded opportunity to enroll in Head Start	1990	47%	...	55%	---	---	---	---	---	40%	100%
	Low-income children receiving 1 year of Head Start services prior to entering kindergarten or first grade	...	---	---	---	58%	57%	58%	54%	49%	---	...
	Disabled children 3-5 years enrolled in preschool	...	---	---	56%	---	56%	---	63%	---	---	...
8.4	Schools with comprehensive school health education											
	All eight criteria met	1994	2.3%	...	...	...	...	...	---	---	---	75%
	A documented, sequential program	1994	^a 48%	...	...	...	...	...	---	---	---	...
	At least one health education course	1994	^a 77%	...	...	...	...	...	---	---	---	...
	Instruction in six key behavioral areas	1994	^a 47%	...	...	...	...	...	---	---	---	...
	Focus on skill development	1994	^a 39%	...	...	...	...	...	---	---	---	...
	Health education teachers adequately trained	1994	53%	...	...	...	...	...	---	---	---	...
	Designated coordinator for health education	1994	38%	...	...	...	...	...	---	---	---	...
	Involvement of parents, health professionals, and other concerned community members	1994	^a 31%	...	...	...	...	...	---	---	---	...
	Evaluation of health education program during the past 2 years	1994	^a 67%	...	...	...	...	...	---	---	---	...
8.5	Health promotion in post-secondary institutions											
	Higher education institutions offering health promotion activities	1989-90	20%	...	---	---	---	---	---	---	---	50%
	College students 18-24 years who report receiving information from their college or university on:											
	Tobacco use prevention	...	---	---	---	---	---	---	32%	---	---	...
	Alcohol and other drug use prevention	...	---	---	---	---	---	---	59%	---	---	...
	Violence prevention	...	---	---	---	---	---	---	38%	---	---	...
	Injury prevention and safety	...	---	---	---	---	---	---	26%	---	---	...
	Suicide prevention	...	---	---	---	---	---	---	21%	---	---	...
	Pregnancy prevention	...	---	---	---	---	---	---	34%	---	---	...
	Sexually transmitted disease prevention	...	---	---	---	---	---	---	53%	---	---	...
	AIDS or HIV infection prevention	...	---	---	---	---	---	---	58%	---	---	...
	Dietary behaviors and nutrition	...	---	---	---	---	---	---	34%	---	---	...
	Physical activity and fitness	...	---	---	---	---	---	---	40%	---	---	...
8.6	Worksite health promotion activities											
	Worksites with 50 or more employees (using 1985 analysis)	1985	65%	---	---	81%	---	---	---	---	---	85%
	Worksites with 50 or more employees (using 1992 analysis)	...	---	---	---	92%	---	---	---	---	---	...
	Medium and large companies having a wellness program	1987	63%	---	---	---	---	---	---	---	---	85%

Table 8. Educational and community-based programs objective status—Con.

<i>Objective</i>		<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
8.7	Hourly workers 18 years and over participating in health promotion activities	1994	21%	...	...	...	...	...	---	---	---	20%
8.8	Health promotion programs for older adults											
	People 65 years and over participating in at least one health promotion program through a facility serving older adults	1995	12%	...	...	...	...	...	...	---	---	90%
8.9	Family discussion of health issues—children 10 years and over	1994	83%	...	...	...	...	...	---	---	---	75%
	Nutrition	...	---	---	---	---	---	67%	---	---	---	...
	Physical activity	...	---	---	---	---	---	66%	---	---	---	...
	Sexual behavior	...	---	---	---	---	---	39%	---	---	---	...
	Tobacco	...	---	---	---	---	---	47%	---	---	---	...
	Alcohol	...	---	---	---	---	---	38%	---	---	---	...
	Illegal drugs	...	---	---	---	---	---	33%	---	---	---	...
	Safety	...	---	---	---	---	---	50%	---	---	---	...
	Among 9th–12th grade students engaging in family discussion of HIV/AIDS	1989	54%	53%	61%	---	66%	---	63%	63%	---	75%
8.10	Number of States with community health programs addressing at least three <i>Healthy People 2000</i> objectives that reach 40% of State population	...	---	---	---	---	---	---	---	---	---	50
	Proportion of States with 90 percent of local health departments providing services that address three or more <i>Healthy People 2000</i> priority areas	...	---	---	---	---	481%	---	---	---	---	...
8.11	Counties with programs for racial/ethnic minority groups	...	---	---	---	---	---	---	---	---	---	50%
	Percent of local health departments providing culturally and linguistically appropriate services											
	Health promotion											
	Physical activity and fitness	1996–97	21%	...	...	...	...	...	...	...	...	50%
	Nutrition	1996–97	44%	...	...	...	...	...	...	...	...	50%
	Tobacco	1996–97	24%	...	...	...	...	...	...	...	...	50%
	Alcohol and other drugs	1996–97	26%	...	...	...	...	...	...	...	...	50%
	Family planning	1996–97	42%	...	...	...	...	...	...	...	...	50%
	Mental health and mental disorders	1996–97	18%	...	...	...	...	...	...	...	...	50%
	Violent and abusive behavior	1996–97	25%	...	...	...	...	...	...	...	...	50%
	Education and community-based programs	1996–97	33%	...	...	...	...	...	...	...	...	50%
	Health protection											
	Unintentional injuries	1996–97	19%	...	...	...	...	...	...	...	...	50%
	Occupational safety and health	1996–97	13%	...	...	...	...	...	...	...	...	50%
	Environmental health	1996–97	22%	...	...	...	...	...	...	...	...	50%
	Food and drug safety	1996–97	18%	...	...	...	...	...	...	...	...	50%
	Oral health	1996–97	25%	...	...	...	...	...	...	...	...	50%
	Preventive services											
	Maternal and infant health	1996–97	47%	...	...	...	...	...	...	...	...	50%
	Heart disease and stroke	1996–97	28%	...	...	...	...	...	...	...	...	50%
	Cancer	1996–97	30%	...	...	...	...	...	...	...	...	50%
	Diabetes and other chronic disabling conditions	1996–97	26%	...	...	...	...	...	...	...	...	50%

Table 8. Educational and community-based programs objective status—Con.

<i>Objective</i>	<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
HIV infection	1996-97	45%	...	...	...	...	...	...	...	...	50%
Sexually transmitted diseases	1996-97	41%	...	...	...	...	...	...	...	...	50%
Immunization and infectious diseases	1996-97	48%	...	...	...	...	...	...	...	...	50%
Clinical preventive services	1996-97	35%	...	...	...	...	...	...	...	...	50%
Surveillance and data systems	1996-97	14%	...	...	...	...	...	...	...	...	50%
8.12 Hospital-based patient education and community health promotion											
Patient education programs											
Registered hospitals	1987	68%	86%	---	---	---	---	---	---	---	90%
Health maintenance organizations . . . . .	...	---	---	---	---	---	---	---	---	---	90%
Health education classes . . . . .	...	---	⁵ 75%	---	84%	---	---	---	---	---	...
Nutrition counseling . . . . .	...	---	⁵ 85%	---	87%	---	---	---	---	---	...
Smoking cessation classes . . . . .	...	---	---	---	67%	---	---	---	---	---	...
Community health promotion programs											
Community hospitals	1987	60%	77%	---	---	---	---	---	---	---	90%
8.13 Television partnerships with community organizations for health promotion											
1995-96	1995-96	100%	...	...	...	...	...	...	...	---	75%
8.14 Effective public health systems											
Local health departments reporting:											
Health assessment											
Behavioral risk assessment	1990	33%	...	---	---	---	---	---	---	---	90%
Morbidity data	1990	49%	...	---	---	---	---	---	---	---	90%
Reportable disease	1990	87%	...	---	---	---	---	---	---	---	90%
Vital records and statistics	1990	64%	...	---	---	---	---	---	---	---	90%
Surveillance—chronic disease	1990	55%	...	---	---	---	---	---	---	---	90%
Surveillance—communicable disease	1990	92%	...	---	---	---	---	---	---	---	90%
Policy development functions and services											
Health code development and enforcement	1990	59%	...	---	---	---	---	---	---	---	90%
Health planning	1990	57%	...	---	---	---	---	---	---	---	90%
Health assurance											
Health education	1990	74%	...	---	---	⁴ 84%	---	---	---	---	90%
Child health	1990	84%	...	---	---	---	---	---	---	---	90%
Immunizations	1990	92%	...	---	---	⁴ 96%	---	---	---	---	90%
Prenatal care	1990	59%	...	---	---	⁴ 64%	---	---	---	---	90%
Primary care	1990	22%	...	---	---	⁴ 30%	---	---	---	---	90%

--- Data not available.

... Category not applicable.

^aBaseline has been revised.

¹Estimate based on preliminary data. Excludes mortality data from States lacking a Hispanic-origin item on their death certificate or for which Hispanic-origin data were not of sufficient quality. See appendix.

²Estimate derived from 1991-93 health status data and 1992 mortality data.

³Years of healthy life remaining at age 65.

⁴1992-93 data. Data are from 43 States and represent local health department's report of whether a program or service existed.

⁵1988 data.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

<i>Objective number</i>	<i>Data source</i>
8.1*, 8.1a–c	National Vital Statistics System, CDC, NCHS. National Health Interview Survey, CDC, NCHS.
8.2, 8.2a–b	National Center for Education Statistics, National Education Goals Panel.
8.3	Head Start data: Head Start Bureau: Administration on Children, Youth, and Families. Data on disabled children: National Center for Education Statistics, National Education Goals Panel.
8.4	School Health Policies and Programs Study, CDC, NCCDPHP.
8.5	Baseline: Health Promotion on Campus Survey and Directory, American College Health Association. Data for college students: National College Health Risk Behavior Survey, CDC, NCCDPHP.
8.6	Baseline and updates for worksites with 50 or more employees: National Survey of Worksite Health Promotion Activities, OPHS, ODPHP. Baseline for medium and large companies: Health Research Institute Biennial Survey, Health Research Institute.
8.7	National Health Interview Survey, CDC, NCHS.
8.8	National Health Interview Survey, CDC, NCHS.
8.9	1989 baseline: Secondary School Student Health Risk Survey, CDC, NCCDPHP. 1990–97 data: Youth Risk Behavior Survey, CDC, NCCDPHP. 1994 data: National Health Interview Survey, CDC, NCHS.
8.10	National Profile of Local Health Departments, National Association of City and County Health Officials.
8.11	National Profile of Local Health Departments, National Association of City and County Health Officials.
8.12	Annual Survey of Hospitals, AHA. HMO Industry Profile, Group Health Association of America, Inc.
8.13	Media Health Partnerships Survey, CDC, NCCDPHP.
8.14	National Profile of Local Health Departments, National Association of City and County Health Officials.

*Duplicate objective. See full text of objective following this table.

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.

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.

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

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

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 comprehensive 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.

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

Unintentional injuries are the fifth leading cause of death in the United States, accounting for more than 90,000 deaths in 1997 (1). They are a major cause of disabilities and hospitalization; in 1994, 4.5 million people were hospitalized and nearly 35 million visited emergency rooms because of injuries (2). They have a significant impact on health care costs; in 1994 alone, medical expenses attributable to unintentional injuries were estimated at nearly \$80 billion; when costs for losses of income and productivity are included, the estimate climbs to \$224 billion (3).

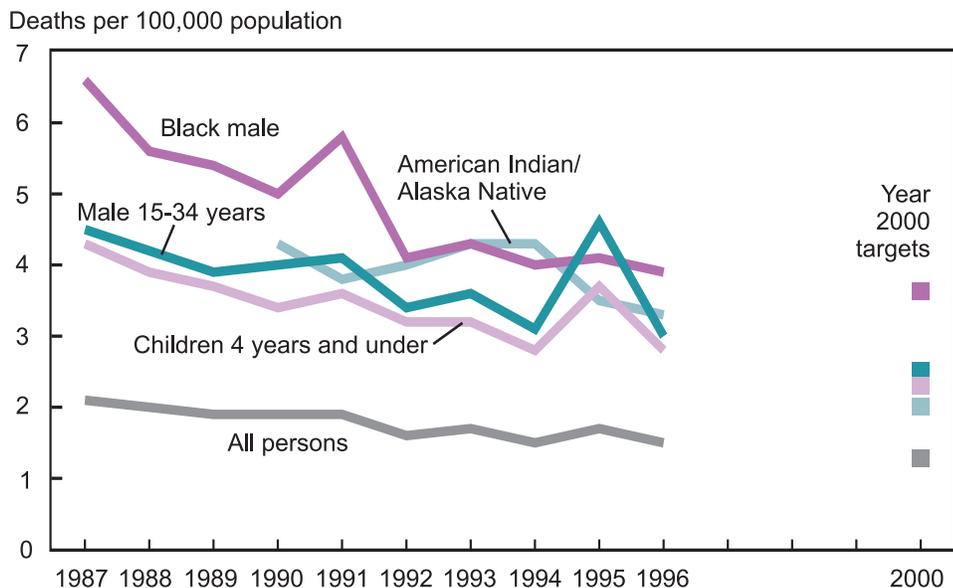
Motor vehicle injuries remain the most costly and fatal of unintentional injuries. The National Safety Council estimated that 1994 motor vehicle crashes cost the United States \$169 billion in lost wages, medical expenses, and administrative costs (3). However, efforts to reduce motor vehicle-related injuries show promise. The National Highway Traffic Safety Administration (NHTSA) estimates that if all occupants in passenger vehicles had used their safety belts, nearly one-half of the 41,000 motor vehicle deaths in 1996 could have been prevented (4). The increase in States with seat belt laws (objective 9.14) may help to reduce motor vehicle deaths.

Teens are overrepresented among motor vehicle deaths. While constituting 10 percent of the total population, 15 percent of motor vehicle deaths are teenagers (5). Implementation of graduated licensing programs may help reduce the number of teenage motor vehicle deaths (6).

Motorcyclists are also disproportionately represented among motor vehicle deaths; per mile traveled, 16 motorcyclists are killed for each automobile occupant (5). Motorcycle helmet use is associated with less severe injuries and lower health care costs (7). In 1995 alone, 791 lives would have been saved if all motorcyclists wore helmets (8). While States requiring helmet use increased during the early 1990's, the number declined in 1997.

Alcohol use has long been recognized as contributing to motor

Figure 10. Death rates from drowning: United States, 1987–96, and year 2000 targets for objective 9.5



	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Year 2000 target
All persons	2.1	2.0	1.9	1.9	1.9	1.6	1.7	1.5	1.7	1.5	1.3
Children 4 years and under	4.3	3.9	3.7	3.4	3.6	3.2	3.2	2.8	3.7	2.8	2.3
Male 15–34 years	4.5	4.2	3.9	4.0	4.1	3.4	3.6	3.1	4.6	3.0	2.5
Black male	6.6	5.6	5.4	5.0	5.8	4.1	4.3	4.0	4.1	3.9	3.6
American Indian/Alaska Native . . . . .	...	...	...	4.3	3.8	4.0	4.3	4.3	3.5	3.3	2.0

... Not applicable.

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

vehicle deaths and injuries. The rate of alcohol-related motor vehicle deaths (objective 9.23) has declined between 1987 and 1996. In part, this may be attributed to improvements in the engineering and safety of motor vehicles. However, NHTSA has also highlighted the impact of the passage and enforcement of laws limiting drinking to ages 21 and over (9).

While eclipsed by the magnitude and pervasiveness of motor vehicle deaths, poisoning-related injury and death have a serious impact on children. In 1995, 80 children ages 14 and under died from poisons; one-half were under age 4 (1). In 1996, 1.1 million poisonings among children age 5 and younger were reported to poison control centers (10). Each year \$7.6 billion is spent on poisoning-related injury and

death for children ages 14 and under; two-thirds of this is spent on children ages 5 and under (11).

Although less visible, fall-related injuries and deaths among older Americans are increasing; this is in part attributable to the aging of the population. Falls and fall-related injuries are the second leading cause of injury deaths among people 65–84 years of age and the leading cause for people 85 and older (1). The costs associated with fall-related injuries are extensive, but many of these injuries are preventable through exercise, diet, building redesign, and other interventions (12). In 1994, direct costs for fall injuries were an estimated \$20.2 billion for persons age 65 and over (13).

Data Summary

Highlights

Motor vehicle crash deaths (9.3) have remained at the same level since 1993, remaining about 29 percent below baseline level. Alcohol-related motor vehicle deaths (9.23) have also remained stable since 1993 and are 33.7 percent below baseline level. Forty-nine States have enacted laws requiring seat-belt use (9.14) and reported usage (9.12) also increased slightly to 69 percent. Fire (9.6) and drowning (9.5) deaths (see figure 10) are also substantially below baseline levels.

Summary of Progress

Fifteen objectives (9.1–9.3, 9.5, 9.6, 9.8–9.10, 9.12–9.14, 9.16, and 9.23–9.25) showed progress toward the year 2000 targets. Targets were achieved for objectives 9.2, 9.6, 9.8, 9.9, 9.10, and the baseline for 9.18 met the target; preliminary 1997 data for objective 9.1 have also met the year 2000 target. Part of the progress for objective 9.8 (nonfatal poisoning) may be an artifact of changes in the methodology (see Data Issues). Two objectives (9.7 and 9.17) show movement away from the target. However, objective 9.17 (smoke detectors) does show progress in the proportion of people with at least one detector in place in their residence (a 35 percent increase from 1985) and in the proportion of people with a detector on each floor of their residence (a 32 percent increase from 1993). After fluctuating for several years, the rate of fall-related deaths (9.4) has returned to baseline level; the update for 9.15 (handgun design) shows no change from the baseline.

No updates were available for four objectives (9.18, 9.19, 9.22, and 9.26). Only data from the nurse practitioners were available for objective 9.21; these data suggest mixed progress (see Data Issues). Baselines are not available for objectives 9.11 and 9.20.

Data Issues

Definitions

Objective 9.2 (nonfatal unintentional injuries) is tracked with data from the National Hospital Discharge Survey (NHDS) maintained

by the National Center for Health Statistics (NCHS). The ICD–9 codes designated for this objective include both unintentional and intentional injuries (see appendix). The two types of injuries cannot be distinguished at the national level because, currently, only 22 States mandate the use of E–codes (external causes) on hospital discharge forms. NCHS is working with States to increase the use of E–codes.

Data for objective 9.6 (residential fire deaths) include all fire-related deaths. While 90 percent occur in the home, a small proportion occur elsewhere. The 1990 baseline data for fire-related deaths for Puerto Ricans (9.6g) have been revised. The original baseline published in the *Midcourse Review and 1995 Revisions* (4) included data for 45 States and the District of Columbia. It did not include data for New York City where about 40 percent of the U.S. Puerto Rican population resides. The revised baseline, which includes data for 47 States (including New York) and the District of Columbia, is considerably lower than originally published and, in fact, has met the year 2000 target for this subobjective. The number of States reporting Hispanic origin data on their birth and death certificates has varied from year to year; see appendix for more information.

Objective 9.7 (hip fractures among older adults) is also monitored with data from the NHDS. These rates are based on extremely small numbers and must be interpreted cautiously. Data on race are not reported by many hospitals due to omission of a race field on hospital discharge reporting forms. More hospitals have automated their discharge systems in recent years and are using these forms (UB-82 and UB-92). A comparison of NHDS data with those who reported being hospitalized in the National Health Interview Survey (NHIS) (NHIS data were adjusted to exclude hospitalizations of 1 day or less) indicated that underreporting for whites was roughly 22 percent in 1991; the difference for blacks was negligible (14).

Objectives 9.14 (safety belt and motorcycle helmet laws), 9.15 (handgun design laws), 9.22 (trauma linking systems), 9.24 (bicycle helmet laws), 9.25 (handgun storage laws), and 9.26 (graduated driver licensing) all relate to

State laws or programs that vary across States in populations targeted, penalties, and liability.

The baseline and target for objective 9.17 (smoke detectors) are based on estimates of the proportion of homes with smoke detectors; this is somewhat different from the intent of the objective, which focuses on smoke detectors on each habitable floor. Updates on the proportion of homes with smoke detectors are from the NHIS, a different source than that used for the baseline. However, data from the 1993 NHIS were analyzed to obtain an estimate of the proportion of people living in apartments or condominiums who report having one or more smoke detectors and the proportion of people living in townhouses or single family homes who report having two or more smoke detectors; this value was 66 percent. Findings from a survey conducted by the Consumer Product Safety Commission indicate that 52 percent of households had at least one functional smoke detector on each floor (15). The 1994 updates are from the NHIS. The estimate for smoke detectors on each floor was calculated using a question with slightly different wording from the question on the 1993 NHIS. However, the increase in the proportion of people with smoke detectors on each floor is consistent with the increase in the proportion of homes with smoke detectors. Updates from the NHIS will be used to monitor this objective in the last report of the decade.

Data Source Description

Data for objective 9.3 (motor vehicle crash deaths) and the subobjectives (except d and g) are crude rates from the Department of Transportation's Fatality Analysis Reporting System (formerly the Fatal Accident Reporting System) (FARS). See the appendix for a discussion of crude and age-adjusted rates and the chapter on Priority Area 4 for a description of FARS. The rates for 9.3d (American Indian/Alaska Native) and 9.3g (Mexican-American) are age-adjusted data from the National Vital Statistics System.

Baseline data for objective 9.21 (injury prevention counseling) are from the Primary Care Provider Surveys (PCPS). The sample for the survey was drawn from the membership rolls of professional associations of internists,

family physicians, nurse practitioners, pediatricians, and obstetricians/gynecologists. Response rates from these groups varied from 50–80 percent. The data on inquiry about seat-belt use and falls in the home represent the proportion of practitioners who routinely queried 81–100 percent of their patients about these risks. The data on counseling about these issues represent the proportion of providers who routinely provided these services to their patients who needed the services. The basis for counseling may be independent of the inquiry made by the clinicians.

The Prevention in Primary Care Study (PPCS) was conducted in 1997–98 to update data from the PCPS. The design and items included in the 1997–98 study were similar to the PCPS, but a slightly different sampling frame was used and some items included in the 1992 surveys were not included in the PPCS. The professionals were sampled from listings of all licensed, active practitioners in the United States whose practices were at least 50 percent primary care. Because of low response rates from the other provider groups, updates are available only for nurse practitioners.

Alcohol-related motor vehicle crashes (9.23) are tracked using data from 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.

Data Comparability

Data for 9.8 (nonfatal poisonings) are from the National Electronic Injury Surveillance System (NEISS), which is maintained by the Consumer Product Safety Commission (CPSC). This system does not utilize ICD–9 or other conventional injury coding mechanisms. Injuries reported in the system are limited to those related to products regulated by CPSC in a given year. Therefore, variation in the numbers and types of products affect the number of injuries reported in the system. The baseline and estimates were again revised in 1997 to accommodate a new sampling design.

In 1992, data collection for objectives 9.12 (motor vehicle occupant protection systems) and 9.13 (helmet use by motorcyclists and bicyclists) was expanded from 19 metropolitan areas to

all 50 States. The data collection methods (direct observation) are unchanged.

Proxy Measures

Tracking data for 9.16 (fire suppression systems) are from the U.S. Fire Administration’s National Fire Incident Reporting System (NFIRS) and indicate the proportion of fires in residential properties that have automatic suppression systems. Data on localities for this objective are not available.

The additional data for objective 9.19 (protective sports equipment) are from the NHIS and represent the proportions of children playing baseball, softball, football, or soccer who use headgear or mouthguards; there will be additional data from the NHIS to track this objective later in the decade.

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Table 9. Unintentional injuries objective status

	<i>Objective</i>	<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
9.1	Unintentional injury deaths (age adjusted per 100,000)	1987	34.7	32.5	31.0	29.4	30.3	30.3	30.5	30.4	P28.9	29.3
	a. American Indian/Alaska Native	1987	66.0	59.0	58.3	57.3	58.1	58.3	56.7	57.6	---	53.0
	b. Black male	1987	^a 68.0	62.4	61.0	56.7	59.8	58.5	57.6	55.7	P51.3	51.9
	c. White male	1987	^a 49.8	46.4	43.9	41.9	42.7	42.7	43.0	42.4	P40.4	42.9
	d. Mexican American male ¹	1990	^a 53.1	...	47.2	46.5	48.6	46.1	44.6	45.4	---	43.0
9.2	Unintentional injury hospitalizations (per 100,000)²	1988	^a 832	780	764	714	699	654	635	612	---	754
	a. Black male	1991	1,007	...	...	969	893	847	911	730	---	856
9.3	Motor vehicle crash deaths											
	Per 100 million vehicle miles traveled (VMT)	1987	2.4	2.1	1.9	1.8	1.7	1.7	1.7	1.7	---	1.5
	Per 100,000 population	1987	19.2	17.9	16.4	15.4	15.6	15.6	15.9	15.8	---	14.2
	a. Children 14 years and under (per 100,000)	1987	6.2	5.3	5.0	4.8	4.8	5.0	4.8	4.6	---	4.4
	b. People 15-24 years (per 100,000)	1987	36.9	33.3	31.4	28.0	28.6	29.1	29.6	28.8	---	26.8
	c. People 70 years and over (per 100,000)	1987	22.6	23.9	22.3	21.9	22.9	23.3	23.3	23.1	---	20
	d. American Indian/Alaska Native (age adjusted per 100,000)	1987	37.7	33.2	33.4	32.0	32.3	31.4	33.1	34.0	---	32.0
	e. Motorcyclist (per 100 million VMT)	1987	40.9	33.8	30.6	25.1	24.8	22.8	---	---	---	25.6
	(per 100,000)	1987	1.7	1.3	1.1	0.9	0.9	0.9	0.9	0.8	---	0.9
	f. Pedestrians (per 100,000)	1987	2.8	2.6	2.3	2.2	2.2	2.1	2.1	2.0	---	2.0
	g. Mexican American (age adjusted per 100,000) ¹	1990	20.9	...	18.9	17.5	18.1	18.7	17.7	18.0	---	18.0
9.4	Fall-related deaths (age adjusted per 100,000)	1987	2.7	2.7	2.6	2.5	2.5	2.5	2.6	2.7	---	2.3
	a. People 65-84 years (per 100,000)	1987	18.1	17.8	18.0	17.6	17.8	18.3	18.5	19.9	---	14.4
	b. People 85 years and over (per 100,000)	1987	133.0	143.1	147.5	147.3	149.5	147.0	152.0	159.6	---	105.0
	c. Black male 30-69 years (per 100,000)	1987	8.1	6.8	6.2	5.3	5.5	5.4	4.8	5.3	---	5.6
	d. American Indian/Alaska Native (age adjusted per 100,000)	1990	3.2	...	3.1	3.1	4.3	3.2	3.8	2.9	---	2.8
9.5	Drowning deaths (age adjusted per 100,000)	1987	2.1	1.9	1.9	1.6	1.7	1.5	1.7	1.5	---	1.3
	a. Children 4 years and under (per 100,000)	1987	^a 4.3	3.4	3.6	3.2	3.2	2.8	3.7	2.8	---	2.3
	b. Male 15-34 years (per 100,000)	1987	4.5	4.0	4.1	3.4	3.6	3.1	4.6	3.0	---	2.5
	c. Black male (age adjusted per 100,000)	1987	6.6	5.0	5.8	4.1	4.3	4.0	4.1	3.9	---	3.6
	d. American Indian/Alaska Native (age adjusted per 100,000)	1990	4.3	...	3.8	4.0	4.3	4.3	3.5	3.3	---	2.0
9.6	Residential fire deaths											
	Fire-related deaths (age adjusted per 100,000) ³	1987	^a 1.7	1.5	1.5	1.4	1.3	1.4	1.2	1.2	---	1.2
	a. Children 4 years and under (per 100,000)	1987	^a 4.5	3.5	3.8	3.4	3.6	3.5	2.6	2.4	---	3.3
	b. People 65 years and over (per 100,000)	1987	^a 4.9	4.1	3.9	3.7	3.7	3.5	3.6	3.8	---	3.3
	c. Black male (age adjusted per 100,000)	1987	^a 6.4	5.2	5.1	4.9	4.6	4.5	4.2	3.9	---	4.3
	d. Black female (age adjusted per 100,000)	1987	^a 3.3	2.7	2.6	2.3	2.6	2.4	2.4	2.1	---	2.6
	e. Residential fire deaths caused by smoking	1987	26%	17%	17%	---	16%	---	---	---	---	8%
	f. American Indian/Alaska Native (age adjusted per 100,000)	1990	2.1	...	2.3	2.5	2.5	3.1	3.1	1.9	---	1.4
	g. Puerto Rican (age adjusted per 100,000) ¹	1990	^a 1.8	...	1.4	1.4	1.0	1.1	1.3	1.6	---	2.0
9.7	Hip fractures among adults 65 years and over (per 100,000)	1988	714	776	814	757	841	815	818	934	---	607
	a. White female 85 years and over	1988	2,721	3,075	3,091	2,368	3,035	2,815	2,604	2,804	---	2,177
9.8	Nonfatal poisoning (per 100,000)	1986	^a 104	68	64	61	52	43	43	41	41	88
	a. Children 4 years and under (per 100,000)	1986	^a 664	705	638	626	597	518	499	470	460	520
9.9	Nonfatal head injuries (per 100,000)	1988	118	110	104	92	90	84	87	79	---	106

Table 9. Unintentional injuries objective status—Con.

Objective		Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	Target 2000
9.10	Nonfatal spinal cord injuries (per 100,000)	1988	5.3	4.4	6.4	3.6	4.7	3.9	4.6	4.8	---	5.0
	a. Male	1988	9.6	6.9	9.8	4.8	6.7	7.1	6.9	6.5	---	7.1
9.11	Incidence of secondary conditions associated with traumatic spinal cord injuries	...	---	---	---	---	---	---	---	---	---	20% reduction
9.12	Motor vehicle occupant protection systems	1988	42%	49%	59%	62%	66%	67%	68%	68%	69%	85%
	a. Children 4 years and under	1988	48%	50%	55%	---	60%	60%	---	61%	---	70%
9.13	Helmet use by motorcyclists and bicyclists											
	Motorcyclists	1988	60%	60%	62%	---	---	63%	---	64%	---	80%
	Bicyclists	1988	8%	---	18%	---	---	---	---	---	---	50%
9.14	Safety belt and helmet use laws											
	Number of States with safety belt laws ⁴	1989	33	36	41	44	45	48	49	49	49	50
	Number of States with motorcycle helmet use laws ⁵	1989	22	23	24	24	25	25	25	25	22	50
9.15	Number of States with handgun design to protect children	1989	0	0	---	---	---	---	---	---	---	50
9.16	Fire suppression sprinkler installation codes (number of localities)	1989	700	---	---	---	---	---	---	---	---	2,000
	Proportion of residential fires with suppression equipment	...	---	⁶ 2.4	2.5	2.7	2.6	---	---	---	---	...
9.17	Smoke detectors											
	In inhabited residential dwellings	1985	81%	82%	---	---	80%	---	---	---	---	100%
	At least one on each habitable floor	...	---	---	---	---	52%	---	---	---	---	100%
	Proportion of people with at least one detector	...	---	⁷ 68.5%	---	---	87.6%	92.7%	---	---	---	...
	At least one on each floor	...	---	---	---	---	66%	86.8%	---	---	---	...
9.18	Injury prevention instruction in required course											
	Proportion of middle/junior and senior high schools	1994	66.2%	...	...	...	...	...	---	---	---	50%
9.19*	Protective equipment in sporting and recreation events	...	---	---	---	---	---	---	---	---	---	100%
	National Collegiate Athletic Association											
	Football	1988	Required	---	---	---	---	---	---	---	---	...
	Hockey	1988	Required	---	---	---	---	---	---	---	---	...
	Lacrosse	1988	Required	---	---	---	---	---	---	---	---	...
	High school football	1988	Required	---	---	---	---	---	---	---	---	...
	Amateur boxing	1988	Required	---	---	---	---	---	---	---	---	...
	Amateur ice hockey	1988	Required	---	---	---	---	---	---	---	---	...
	Use of protective headgear and mouth guards among children who play sports											
	Baseball/softball											
	Headgear	...	---	---	35%	---	---	---	---	---	---	...
	Mouth guard	...	---	---	7%	---	---	---	---	---	---	...
	Football											
	Headgear	...	---	---	72%	---	---	---	---	---	---	...
	Mouth guard	...	---	---	72%	---	---	---	---	---	---	...
	Soccer											
	Headgear	...	---	---	4%	---	---	---	---	---	---	...
	Mouth guard	...	---	---	7%	---	---	---	---	---	---	...

Table 9. Unintentional injuries objective status—Con.

	<i>Objective</i>	<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
9.20	Number of States with design standards for roadway safety . . . . .	...	---	---	---	---	---	---	---	---	---	50
9.21	Injury prevention counseling by primary care providers . . . . .	...	---	---	---	---	---	---	---	---	---	50%
	Percent of clinicians routinely providing service to 81–100% of patients											
	Inquiry about seat belt/child seat use											
	Pediatricians	1992	45%	...	...	...	---	---	---	---	^{8,9} ---	50%
	Nurse practitioners	1992	29%	...	...	...	---	---	---	---	^{8,10} 39%	50%
	Obstetricians/gynecologists	1992	6%	...	...	...	---	---	---	---	^{8,9} ---	50%
	Internists	1992	11%	...	...	...	---	---	---	---	^{8,9} ---	50%
	Family physicians	1992	16%	...	...	...	---	---	---	---	^{8,9} ---	50%
	Inquiry about hazards for falls in the home (65 years and over)											
	Nurse practitioners	1992	15%	...	...	...	---	---	---	---	⁸ 14%	50%
	Internists	1992	10%	...	...	...	---	---	---	---	^{8,9} ---	50%
	Family physicians	1992	7%	...	...	...	---	---	---	---	^{8,9} ---	50%
	Advice about seat belt/child seat use											
	Pediatricians	1992	58%	...	...	...	---	---	---	---	^{8,9} ---	50%
	Nurse practitioners	1992	32%	...	...	...	---	---	---	---	^{8,11} 30%	50%
	Obstetricians/gynecologists	1992	18%	...	...	...	---	---	---	---	^{8,9} ---	50%
	Internists	1992	15%	...	...	...	---	---	---	---	^{8,9} ---	50%
	Family physicians	1992	29%	...	...	...	---	---	---	---	^{8,9} ---	50%
	Advice about prevention of falls in the home (65 years and over)											
	Nurse practitioners	1992	17%	...	...	...	---	---	---	---	⁸ 18%	50%
	Internists	1992	17%	...	...	...	---	---	---	---	^{8,9} ---	50%
	Family physicians	1992	15%	...	...	...	---	---	---	---	^{8,9} ---	50%
9.22	Number of States with linked emergency medical services and trauma systems	1993	7	...	...	...	...	---	---	---	---	20
9.23*	Alcohol-related motor vehicle deaths (per 100,000)	1987	9.8	8.9	7.9	6.9	6.8	6.4	6.6	6.5	---	5.5
	a. American Indian/Alaska Native male	1987	40.4	34.3	32.2	31.4	26.8	28.0	---	---	---	35.0
	b. People 15–24 years	1987	21.5	18.5	17.2	14.1	13.8	13.1	12.9	12.9	---	12.5
9.24	Number of States with bicycle helmet laws	1994	9	...	...	...	...	...	13	14	---	50
9.25*	Number of States with firearm storage laws	1989	^a 1	1	5	8	11	13	15	15	---	50
9.26	Number of States with graduated licensing systems	1993	16	...	...	...	...	---	---	---	---	35

--- Data not available.

... Category not applicable.

^aBaseline has been revised.

^pPreliminary data.

¹Excludes data from States lacking Hispanic-origin item on their death certificates or for which Hispanic-origin data were not of sufficient quality. See appendix.

²Data include intentional and unintentional injuries and injuries where the intent was not known.

³Includes all deaths due to fires and flames regardless of location.

⁴The District of Columbia, Puerto Rico, and other U.S. possessions also have a safety belt law.

⁵The District of Columbia and Puerto Rico also have a motorcycle helmet law.

⁶1989 data.

⁷1985 data.

⁸1997–98 data.

⁹Response rate for this group was too low to produce reliable estimates.

¹⁰Data represent the proportion of nurse practitioners who inquired about child safety seat use only. Seventeen percent of the nurse practitioners inquired about seat belt use.

¹¹Data represent the proportion of nurse practitioners who provided advice about child safety seat use only. Data on advice on seat-belt use were not available.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

<i>Objective number</i>	<i>Data source</i>
9.1, 9.1a–d	National Vital Statistics System, CDC, NCHS.
9.2	National Hospital Discharge Survey, CDC, NCHS.
9.3, 9.3a–c,e,f	Fatality Analysis Reporting System, DOT, NHTSA.
9.3d,g	National Vital Statistics System, CDC, NCHS.
9.4, 9.4a–d	National Vital Statistics System, CDC, NCHS.
9.5, 9.5a–d	National Vital Statistics System, CDC, NCHS.
9.6, 9.6a–d,f,g	National Vital Statistics System, CDC, NCHS.
9.6e	National Fire Incident Reporting System, FEMA, U.S. Fire Administration.
9.7, 9.7a	National Hospital Discharge Survey, CDC, NCHS.
9.8, 9.8a	National Electronic Injury Surveillance System, CPSC, Directorate for Epidemiology.
9.9	National Hospital Discharge Survey, CDC, NCHS.
9.10, 9.10a	National Hospital Discharge Survey, CDC, NCHS.
9.12	Baseline and 1989–91 updates: 19 Cities Survey, DOT, NHTSA. 1992–97 updates: Population Weighted State Surveys, DOT, NHTSA.
9.12a	Baseline: 19 Cities Survey, DOT, NHTSA. 1992–93 updates: Population Weighted State Surveys, DOT, NHTSA. 1994–96 updates: National Occupant Protection Use Survey, DOT, NHTSA.
9.13	Baseline: 19 Cities Survey, DOT, NHTSA. Updates: National Occupant Protection Use Survey, DOT, NHTSA.
9.14	DOT, NHTSA.
9.15	Telephone Survey on Handgun Laws, CDC, NCIPC.
9.16	Baseline (localities): Fire Suppression Sprinkler Codes, FEMA, U.S. Fire Administration. 1990–93 data: National Fire Incident Reporting System, FEMA, U.S. Fire Administration.
9.17	Baseline and 1990–93 updates: Prevention Index, Rodale Press for inhabited residential dwellings. 1993 data: Smoke Detector Operability Survey, Consumer Product Safety Commission for inhabited residential dwellings on each habitable floor. Proportion of people with smoke detectors: National Health Interview Survey, CDC, NCHS. Proportion of people with one on each floor: National Health Interview Survey, CDC, NCHS.
9.18	School Health Policies and Programs Study, CDC, NCCDPHP.
9.19*	1988 baseline: CDC, NCPS; NIH, NIDR. 1991 data: National Health Interview Survey, CDC, NCHS.
9.21	Baseline: Primary Care Provider Surveys, OPHS, ODPHP. Update: Prevention in Primary Care Study, American College of Preventive Medicine.
9.22	CDC, NCIPC.
9.23*, 9.23b	Fatality Analysis Reporting System, DOT, NHTSA.
9.23a	Fatality Analysis Reporting System, DOT, NHTSA; National Vital Statistics System, CDC, NCHS.
9.24	National SAFEKIDS Campaign.
9.25*	Center to Prevent Handgun Violence.
9.26	DOT, NHTSA.

*Duplicate objective. See full text of objective following this table.

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 53.0 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.

9.1d: Reduce deaths among Mexican–American males caused by unintentional injuries to no more than 43.0 per 100,000.

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

9.2a: Reduce nonfatal unintentional injuries among black males so that hospitalizations for this condition are no more than 856 per 100,000 people.

9.3: Reduce deaths caused by motor vehicle crashes to no more than 1.5 per 100 million vehicle miles traveled and 14.2 per 100,000 people.

9.3a: Reduce deaths among children aged 14 and younger caused by motor vehicle crashes to no more than 4.4 per 100,000.

9.3b: Reduce deaths among youth aged 15–24 caused by motor vehicle crashes to no more than 26.8 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 32 per 100,000.

9.3e: Reduce deaths among motorcyclists caused by motor vehicle crashes to no more than 25.6 per 100 million vehicle miles traveled and 0.9 per 100,000.

9.3f: Reduce deaths among pedestrians caused by motor vehicle crashes to no more than 2.0 per 100,000.

9.3g: Reduce deaths among Mexican-Americans caused by motor vehicle crashes to no more than 18 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.

9.4d: Reduce deaths among American Indians and Alaska Natives from falls and fall-related injuries to no more than 2.8 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.

9.5d: Reduce drowning deaths among American Indians and Alaska Natives to no more than 2.0 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 8 percent.

9.6f: Reduce residential fire deaths among American Indians and Alaska Natives to no more than 1.4 per 100,000.

9.6g: Reduce residential fire deaths among Puerto Ricans to no more than 2.0 per 100,000.

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 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 by 20 percent the incidence of secondary conditions (i.e., pressure sores) associated with traumatic spinal cord injuries.

NOTE: Secondary conditions are defined as conditions causally related to a disabling condition (i.e., occurring as a result of the primary disabling condition) and can be either a pathology, an impairment, a functional limitation, or a disability.

9.12: Increase use of safety belts and child safety seats to at least 85 percent of motor vehicle occupants.

9.12a: Increase use of child restraint systems among children aged 4 and younger involved in potentially fatal crashes to 70 percent.

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 comprehensive 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 50 the number of States that have design standards for markings, signing, 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 20 States the capability to link emergency medical services, trauma systems, and hospital data.

9.23*: Reduce deaths caused by alcohol-related motor vehicle crashes to no more than 5.5 per 100,000 people.

Duplicate objective: 4.1

9.23a*: Reduce deaths among American Indian and Alaska Native men caused by alcohol-related motor vehicle crashes to no more than 35.0 per 100,000.

Duplicate objective: 4.1a

9.23b*: Reduce deaths among people aged 15–24 caused by alcohol-related motor vehicle crashes to no more than 12.5 per 100,000.

Duplicate objective: 4.1b

9.24: Extend to 50 States laws requiring helmets for bicycle riders.

9.25*: Enact in 50 States and the District of Columbia laws requiring that firearms be properly stored to minimize access and the likelihood of discharge by minors.

Duplicate objective: 7.19

NOTE: There are some variations across States in the age which defines minors. Additionally, in some States violation of the law is a misdemeanor; in others it is a felony. Penalties for violation also vary.

9.26: Increase to 35 the number of States having a graduated driver licensing system for novice drivers and riders under the age of 18.

*Duplicate objective.

Priority Area 10 Occupational Safety and Health

Background

Work-related injuries and illnesses continue to place an enormous burden on U.S. workers and the economy (1). In 1992, the U.S. economic burden for work-related injuries and illnesses was an estimated \$171 billion (2). While the human and financial costs of occupational injuries are extensive, efforts to reduce these injuries are often successful and cost-effective (3,4).

The size, characteristics, and functions of the workforce are changing dramatically, as are the challenges to occupational safety and health (2). The expanding use of information technology and the concomitant rise in reporting injuries, such as carpal tunnel syndrome (5), are one example of this change.

Another emerging concern is workplace violence. The Department of Justice estimates that annually 1 million people are victims of violent crime while working or on duty. Forty-six percent of these victimizations occur in restaurants, stores, or other commercial establishments (6). Nearly three-quarters of these violent events are simple or aggravated assaults (7). The estimated annual cost in lost wages is over \$55 million (6).

Data Summary

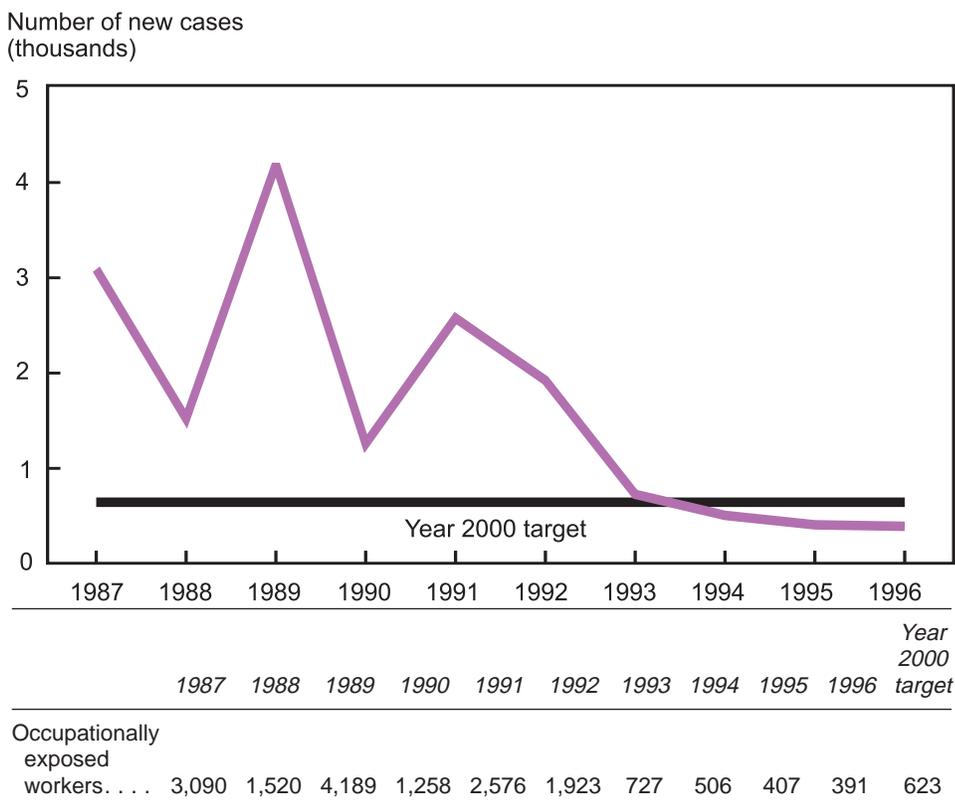
Highlights

Work-related injury deaths (10.1) have declined from the 1983–87 average of 6.0 per 100,000 workers to a rate of 4.8 in 1997 (6,218 deaths); work-related injuries (10.2) also decreased slightly from the 1983–87 average of 7.7 per 100 to 6.9 in 1996 (8,9).

The leading cause of work-related deaths remains motor vehicle accidents. While the overall number of work-related injury deaths in 1996 is about the same as 1995, there was an increase in work-related highway crashes; 22 percent of all work-related injury fatalities were highway crashes.

Homicide remained the second leading cause of work-related injury deaths in 1997, accounting for 856

Figure 11. Number of new cases of hepatitis B infections among occupationally exposed workers: United States, 1987–96, and year 2000 target for objective 10.5



SOURCES: Centers for Disease Control and Prevention, Epidemiology Program Office, National Notifiable Disease Surveillance System; Centers for Disease Control and Prevention, National Center for Infectious Diseases, Sentinel Counties Surveillance of Acute Viral Hepatitis, Viral Hepatitis Surveillance System.

deaths (14 percent of all work-related deaths). Nearly 40 percent of the homicides occurred during a robbery, 7 percent were committed by coworkers or former coworkers, and about 5 percent were committed by relatives or acquaintances. Falls accounted for 11 percent of workplace deaths and exposure to harmful substances or conditions in the workplace (for example, electric shock, poisons) accounted for 9 percent (8).

Three objectives have met the year 2000 targets. Objectives 10.11 and 10.14 have been addressed by Federal statute or Federal programs. New cases of hepatitis B among exposed workers (10.5) have dropped 87 percent since 1987 (see figure 11). The reduction in hepatitis B cases may, in part, be attributable to the 81 percent increase in hepatitis B immunizations among occupationally exposed workers (10.9) between 1987 and 1994.

Summary of Progress

Data for 10 (10.1, 10.2, 10.6, 10.9, 10.10, 10.13, 10.15, and 10.17–10.19) of the 20 objectives in this priority area indicate movement toward the year 2000 targets. Progress for objective 10.15 is based on limited data from nurse practitioners only (see Data Issues). Additionally, three objectives (10.5, 10.11, and 10.14) have met their year 2000 targets. The data for five objectives (10.3, 10.4, 10.7, 10.8, and 10.20) indicate movement away from the targets. The 1996 data for 10.16 (workplace homicides) show a rate the same as the baseline level. It should be noted that all updates for objective 10.16 are from a different source than the baseline. Data were not available to update objective 10.12.

Data Issues

Definitions

Objective **10.20** seeks to reduce the number of States with preemptive clean indoor air laws. Preemptive laws prevent local jurisdictions from enacting more stringent restrictions than the State law or restrictions that vary from the State law (10).

Data Source Descriptions

Since 1992, the data for objective **10.1** (work-related injury deaths) have come from the Census for Fatal Occupational Injuries (CFOI), Bureau of Labor Statistics (BLS). Prior to 1992, the data came from the Annual Survey on Occupational Injuries and Illnesses (ASOII). ASOII relied on a single data source to capture occupational fatalities: a survey of employer logs of occupational deaths in approximately 50,000 workplaces. The survey undercounted occupational fatalities by as much as 60 percent (11). The CFOI uses a minimum of two data sources to identify occupational deaths. The primary sources are death certificates; State workers' compensation reports; coroner, medical examiner, or autopsy reports; and Occupational Safety and Health Administration (OSHA) reports. The rates for 1993 were rounded to whole numbers by BLS. National Traumatic Occupational Fatalities Surveillance System (NTOF) data (reported by the National Institute for Occupational Safety and Health (NIOSH)) can also be used to monitor this objective, but NTOF uses only death certificates and may underestimate some categories of work-related injury deaths. CFOI and NTOF are also used to track objective **10.16** on workplace homicides.

The subobjective on adolescent work injuries (**10.2f**) is tracked with data from the National Electronic Injury Surveillance System (NEISS) under an interagency agreement between NIOSH and the Consumer Product Safety Commission (CPSC) and does not utilize ICD-9 codes or other conventional injury reporting mechanisms. The data are collected in hospital emergency rooms and are limited to injuries attributable to a specific list of regulated products and devices. Hence, the data collected are subject to annual variations in what is specified in product safety or regulatory

codes. The baseline for adolescent worker injuries is an extrapolation of data from the last 6 months of calendar year 1992 and is limited to workers ages 15 through 17. The update is from fiscal year 1996. The main objective and the other subobjectives for **10.2** are tracked using data from ASOII.

The data used to report on the status of objective **10.7** (occupational noise exposure) come from the U.S. Air Force Hearing Conservation database. The data report exposures for civilian and military employees in a wide range of industrial and service occupations. NIOSH is currently developing the Sentinel Event Notification System for Occupational Risk (SENSOR) and the Occupational Hearing and Conservation database that will provide additional data to track this objective. While monitoring systems to track the objective are still under development, NIOSH has issued guidelines and sponsored workshops designed to address this important occupational health issue.

The data for objective **10.8** (occupational lead exposure) are from State registries that report adult blood lead levels. These State data are compiled by NIOSH in the Adult Blood Lead Epidemiology Survey (ABLES). The number of reporting States has increased since the baseline was established; this increase has affected the number of cases reported; in FY98, 27 states were reporting.

Objective **10.11** (State exposure standards for occupational lung disease) was achieved because Federal standards applicable in all 50 States were established for airborne asbestos fibers, cotton dust, coal mine dust, and silica dust. The parallel objective **10.17** (pneumoconiosis deaths) is tracked with the number of deaths as reported in the National Vital Statistics System (NVSS).

The 1985 and 1992 data for objectives **10.12** (worksite safety and health programs), **10.13** (worksite back injury prevention), and **10.18** (worksite smoking policies) are from the National Surveys of Worksite Health Promotion Activities, which were telephone surveys of nongovernment worksites. Worksites were sampled instead of companies, because different worksites within the same company could have different sets of health promotion activities. Both active (for example, classes) and passive (for example, brochures) methods were counted as worksite health promotion

activities. The 1995 update was measured by the Centers for Disease Control and Prevention (CDC)-sponsored Worksite Benchmark Survey, which used a methodology very similar to the 1992 survey, but did not include passive methods of health promotion (12,13).

Baseline data for objective **10.15** (screening for occupational health exposure) are from the Primary Care Provider Surveys (PCPS). The PCPS sample was drawn from the membership rolls of professional organizations for pediatricians, nurse practitioners, family physicians, obstetricians/gynecologists, and internists. Response rates varied from 50–80 percent across these groups. The data on inquiry about work-related risks represent the proportion of providers who routinely queried 81–100 percent of their patients about these risks. The data on counseling refer to the proportion of providers who routinely provided these services to patients who needed the services. The Prevention in Primary Care Study (PPCS) was conducted in 1997–98 to update data from the PCPS. The design and items included in the 1997–98 study were similar to the PCPS, but a slightly different sampling frame was used and some items included in the 1992 surveys were not included in the PPCS. The professionals were sampled from listings of all licensed, active practitioners in the United States whose practices were at least 50 percent primary care. Because of low response rates from the other provider groups, updates are available only for nurse practitioners.

Comparability of Data Sources

The baseline for objective **10.9** (hepatitis immunizations) was collected by OSHA's Regulatory Impact Analysis; the updates are from CDC's National Center for Infectious Diseases. The baseline for objective **10.10** (State occupational health and safety plans) came from the Public Health Foundation's unintentional injuries survey; the update is from NIOSH. For both objectives, the data may not be comparable and statements about trends must be made with caution.

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Table 10. Occupational safety and health objective status

Objective		Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	Target 2000
10.1	Work-related injury deaths (per 100,000 full-time workers)	1983–87	6.0	4.3	4.3	5.0	5.0	5.0	4.9	4.8	4.8	4.0
	a. Mine workers	1983–87	30.3	¹ 17.3	15.6	27.0	26.0	27.0	25.0	26.8	25.0	21
	b. Construction workers	1983–87	25.0	20.6	16.6	14.0	14.0	15.0	14.6	13.9	14.1	17
	c. Transportation workers	1983–87	15.2	10.0	8.1	13.0	13.0	13.0	13.1	13.1	13.2	10
	d. Farm workers	1983–87	14.0	23.8	---	24.0	26.0	24.0	22.5	22.8	23.9	9.5
10.2	Nonfatal work-related injuries (per 100 full-time workers)	1983–87	7.7	8.3	7.9	8.3	7.9	7.7	7.5	6.9	---	6
	a. Construction workers	1983–87	14.9	14.1	12.8	12.9	12.0	11.5	10.4	9.7	---	10
	b. Nursing and personal care workers	1983–87	12.7	15.4	15.0	18.2	16.9	16.5	17.8	16.2	---	9
	c. Farm workers	1983–87	12.4	12.3	11.1	11.5	10.9	9.0	9.9	8.9	---	8
	d. Transportation workers	1983–87	8.3	9.4	9.1	8.8	9.1	9.3	8.7	8.4	---	6
	e. Mine workers	1983–87	8.3	8.1	7.1	7.0	6.5	6.0	6.0	5.3	---	6
	f. Adolescent workers (15–17 years)	1992	² 5.8	...	...	...	---	---	---	³ 4.8	---	3.8
10.3	Cumulative trauma disorders (per 100,000 full-time workers)	1987	100	241	297	368	383	411	378	335	---	60
	a. Manufacturing industry workers	1987	355	867	1,046	1,241	1,267	1,362	---	1,104	---	150
	b. Meat product workers	1987	3,920	8,245	8,802	8,475	8,532	8,750	---	6,116	---	2,000
10.4	Occupational skin disorders (per 100,000 full-time workers)	1983–87	64	79	77	82	76	81	79	69	---	55
10.5*	Hepatitis B infections among occupationally exposed workers (number of cases)	1987	3,090	1,258	2,576	1,923	727	506	407	391	---	623
10.6	Worksite occupant protection system mandates	1992	82.4%	...	...	...	---	---	85%	---	---	95%
10.7	Occupational noise exposure⁴ (average noise levels exceeding 85 db)	1989	16%	20.5%	23.8%	21.5%	19.9%	---	---	---	---	15%
10.8	Occupational lead exposure (blood concentration greater than 25 µg/dL)	1988	⁵ 4,804	⁶ 4,531	---	⁷ 8,886	⁸ 11,240	⁹ 12,137	¹⁰ 12,664	¹⁰ 12,672	¹¹ 12,716	0
10.9*	Hepatitis B immunizations among occupationally exposed workers¹²	1989	37%	---	---	50%	---	67%	---	---	---	90%
10.10	Number of States with occupational health and safety plans	1989	10	---	---	23	---	---	---	---	---	50
10.11	Number of States with occupational lung disease exposure standards¹³ . . . . .	...	50	50	50	50	50	50	50	50	50	50
10.12	Worksite health and safety programs	1992	63.8%	...	...	...	---	---	---	---	---	70%
10.13	Worksite back injury prevention and rehabilitation programs	1985	28.6%	---	---	32.5%	---	---	---	---	---	50%
	Back injury classes, workshops, or lectures . . . . .	...	---	---	---	24%	---	---	26%	---	---	...
10.14	Number of States with programs for small business safety and health	1991	26	...	...	---	50	50	50	50	50	50
10.15	Clinician assessment of occupational health exposures . . . . .	...	---	---	---	---	---	---	---	---	---	75%
	Percent of clinicians routinely providing service to 81–100% of patients											
	Inquiry about work-related health risks (16 years and over)											
	Pediatricians	1992	7%	...	...	...	---	---	---	---	14,15_	75%
	Nurse practitioners	1992	14%	...	...	...	---	---	---	---	¹⁴ 14%	75%
	Obstetricians/gynecologists	1992	6%	...	...	...	---	---	---	---	14,15_	75%
	Internists	1992	14%	...	...	...	---	---	---	---	14,15_	75%
	Family physicians	1992	7%	...	...	...	---	---	---	---	14,15_	75%
	Counseling about work-related health risks											
	Pediatricians	1992	8%	...	...	...	---	---	---	---	14,15_	75%
	Nurse practitioners	1992	10%	...	...	...	---	---	---	---	¹⁴ 12%	75%

Table 10. Occupational safety and health objective status—Con.

	Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	Target 2000
	Obstetricians/gynecologists	1992	10%	...	...	...	---	---	---	---	14,15_---	75%
	Internists	1992	9%	...	...	...	---	---	---	---	14,15_---	75%
	Family physicians	1992	8%	...	...	...	---	---	---	---	14,15_---	75%
10.16	Work-related homicides (per 100,000 full-time workers)	1980-89	0.7	---	---	0.9	0.8	0.9	0.8	0.7	---	0.5
10.17	Occupational lung disease deaths (age adjusted per 1,000,000)¹⁶	1990	9.6	...	---	---	---	---	---	---	---	7.7
	Number of pneumoconiosis deaths among people 15 years and over ¹⁷ . . . . .	...	---	3,644	3,486	3,230	3,237	3,127	3,151	3,115	---	...
10.18*	Worksites with smoking policies											
	Policy that bans smoking or limits it to separately ventilated areas											
	50 or more employees	1985	27%	---	---	59%	---	---	---	---	---	100%
	Any smoking policy											
	Medium and large companies	1987	54%	---	85%	---	---	---	---	---	---	100%
	50 or more employees . . . . .	...	---	---	---	86%	---	---	87%	---	---	100%
10.19*	Number of States with comprehensive laws for clean indoor air¹⁸											
	Private workplaces	1995	^a 1	...	...	...	...	...	...	1	1	51
	Public workplaces	1995	^a 9	...	...	...	...	...	...	9	12	51
	Restaurants	1995	2	...	...	...	...	...	...	3	3	51
	Public transportation	1995	^a 17	...	...	...	...	...	...	17	17	51
	Hospitals	1995	^a 8	...	...	...	...	...	...	8	8	51
	Day care centers	1995	21	...	...	...	...	...	...	21	21	51
	Grocery stores	1995	^a 4	...	...	...	...	...	...	4	4	51
10.20*	Preemptive clean indoor air laws											
	States with laws	1995	17	...	...	...	...	...	...	19	18	0

--- Data not available.
 ... Category not applicable.

^aBaseline has been revised.

¹1989 data.

²Data are for adolescents 15-17 years who sought medical treatment in an emergency room and are reported by fiscal year.

³Data are for the fiscal year 1996.

⁴Data represent a cross-section of civilian and military employees.

⁵Data are from 7 States.

⁶Data are from 13 States.

⁷Data are from 18 States.

⁸Data are from 20 States.

⁹Data are from 23 States.

¹⁰Data are from 25 States.

¹¹Data are from 27 States.

¹²Health care workers only.

¹³Pursuant to the enactment of the Federal Coal Mine Health and Safety Act of 1969 (PL91-173, amended by PL95-164) and the Occupational Safety and Health Act of 1970 (PL91-596), Federal standards have been established for occupational exposure to airborne asbestos fibers, cotton dust, coal mine dust, and silica dust. These exposure limits apply in all 50 States and U.S. territories.

¹⁴1997-98 data.

¹⁵Response rate for this group was too low to produce reliable estimates.

¹⁶ICD-9 codes: 500-502, 504.

¹⁷ICD-9 codes: 500-505.

¹⁸Includes the District of Columbia.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

<i>Objective number</i>	<i>Data source</i>
10.1, 10.1a–d	Baseline and 1990–91 updates: Annual Survey of Occupational Injuries and Illnesses, DOL, BLS. 1992–96 updates: Census of Fatal Occupational Injuries, DOL, BLS.
10.2, 10.2a–e	Annual Survey of Occupational Injuries and Illnesses, DOL, BLS.
10.2f	National Electronic Injury Surveillance System, CPSC.
10.3, 10.3a–b	Annual Survey of Occupational Injuries and Illnesses, DOL, BLS.
10.4	Annual Survey of Occupational Injuries and Illnesses, DOL, BLS.
10.5*	National Notifiable Disease Surveillance System, CDC, EPO. Sentinel Counties Surveillance of Acute Viral Hepatitis, Viral Hepatitis Surveillance Program, CDC, NCID.
10.6	Baseline: National Survey of Worksite Health Promotion Activities, OPHS, ODPHP. Updates: Business Responds to AIDS Benchmark Survey, CDC, NCHSTP.
10.7	U.S. Air Force Hearing Conservation Database, DoD.
10.8	Adult Elevated Blood Lead Level Registries, CDC, NIOSH.
10.9*	Baseline: Regulatory Impact Analysis of OSHA Final Rule on Occupational Exposure to Bloodborne Pathogens, DOL, OSHA, ORA. Updates: CDC, NCID.
10.10	Baseline: Association of State and Territorial Health Officials Reporting System: Unintentional Injuries Survey, PHF. Updates: DOL, OSHA.
10.11	CDC, NIOSH.
10.12	National Survey of Worksite Health Promotion Activities, OPHS, ODPHP.
10.13	Baseline and 1992 updates: National Survey of Worksite Health Promotion Activities, OPHS, ODPHP. 1995 data: Business Responds to AIDS Benchmark Survey, CDC, NCHSTP.
10.14	CDC, NIOSH.
10.15	Baseline: Primary Care Provider Surveys, OPHS, ODPHP. Update: Prevention in Primary Care Study, American College of Preventive Medicine.
10.16	Baseline: National Traumatic Occupational Fatalities, CDC, NIOSH. Updates: Census of Fatal Occupational Injuries, DOL, BLS.
10.17	National Vital Statistics System, CDC, NCHS.
10.18*	Baseline, 1991, and 1992 updates for worksites with 50 or more employees: National Survey of Worksite Health Promotion Activities, OPHS, 1995 data: Business Responds to AIDS Benchmark Survey, CDC, NCHSTP. For medium and large companies: Nationwide Survey on Smoking in the Workplace, CDC, OSH; Bureau of National Affairs; American Society for Personnel Administration.
10.19*	Office of Smoking and Health Legislative Tracking System, CDC, NCCDPHP.
10.20*	Office of Smoking and Health Legislative Tracking System, CDC, NCCDPHP.

*Duplicate objective. See full text of objective following this table.

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.

10.2f: Reduce work-related injuries among adolescent workers resulting in medical treatment, lost time from work, or restricted-work activity to no more than 3.8 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 623 cases.

Duplicate objective: 20.3e

10.6: Increase to at least 95 percent the proportion of worksites with 50 or more employees that mandate employee use of occupant protection systems, such as seat belts, 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 which 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.

10.16: Reduce deaths from work-related homicides to no more than 0.5 per 100,000 full-time workers.

10.17: Reduce the overall age-adjusted mortality rate for four major preventable occupational lung diseases (byssinosis, asbestosis, coal workers' pneumoconiosis, and silicosis) to 7.7 per 100,000.

10.18*: Increase to 100 percent the proportion of worksites with a formal smoking policy that prohibits or severely restricts smoking at the workplace.

Duplicate objective: 3.11

10.19*: Enact in 50 States and the District of Columbia comprehensive laws on clean indoor air that prohibit smoking or limit it to separately ventilated areas in the workplace and enclosed public places.

Duplicate objective: 3.12

10.20*: Reduce to zero the number of States that have clean indoor air laws preempting stronger clean indoor air laws on the local level.

Duplicate objective: 3.25

*Duplicate objective.

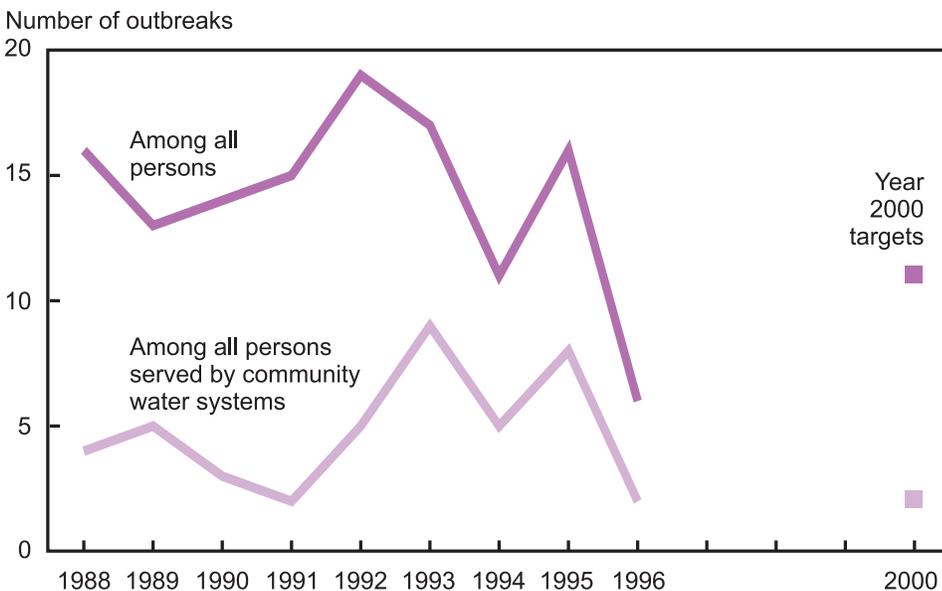
Priority Area 11 Environmental Health

Background

Environmental factors play a fundamental role in health and disease. One of the first public health interventions to control disease (cholera) succeeded through control of a contaminated public water supply (1). Ironically, this historical problem of waterborne disease has been resurrected as a very modern challenge in terms of research in disease etiology and cost-effective health management. Water quality in urban and contiguous areas has been impacted by both modern agricultural practices and development, placing increased stress on water treatment facilities. It not only continues to affect large numbers of people in modern urban settings, but the methods for preventing waterborne disease are coming under increased scrutiny as possible health threats themselves (2). Under the provisions of the reauthorization of the Safe Drinking Water Act, the Environmental Protection Agency (EPA) will provide Internet access to information on water standard violations beginning in 1999.

Continued emphasis on sanitation, vector control, and pollution prevention are needed to deal with the complex interaction of both chemical and biological threats to health. Also needed is a greater understanding of the scientific relationship of toxic exposure on human health (3). The monitoring of public exposure to increasing numbers of toxins and research into the relationship of toxic exposure to disease are important, but are confounded due to the complexities of measuring the level of toxins in the environment, the relative exposure of the population, and individual characteristics that mitigate the effects of exposure (4). While data suggest real differences in the concentrations of population—race and ethnic subgroups within more polluted areas—individual factors such as exposure and life style complicate evaluation of the health effects of the pollutants (5). Increased public access and utilization of data on toxic emissions authorized under the Emergency Planning and Community

Figure 12. Number of waterborne disease outbreaks: United States, 1988–96, and year 2000 targets for objective 11.3



	1988	1989	1990	1991	1992	1993	1994	1995	1996	Year 2000 target
All persons	16	13	14	15	19	17	11	16	6	11
Persons served by community water systems	4	5	3	2	5	9	5	8	2	2

SOURCE: Centers for Disease Control and Prevention, National Center for Environmental Health, Waterborne Surveillance System.

Right to Know Act of 1986 may increase public awareness of the problem of exposure to toxins, but careful interpretation of the data is required for effective health planning.

Research may clarify current ambiguity about exposure thresholds. Dioxin continues to be the focus of research (6), and lead has been shown to have toxic effects at even lower exposure levels than originally believed (7,8).

Research will aid priority-setting among environmental and public health interventions. In addition to assessing and redressing the effects of pollution, research-based initiatives in manufacturing should reduce the introduction of waste and pollution from energy production and utilization into the environment (9). While research continues to offer new technologies to advance recycling, both legislation and marketing have lagged somewhat, creating challenges to recycling efforts (10).

The 17 objectives in this priority area cover a broad range of exposure media, including air, water, and soil. They also address a variety of pollutants, such as radon, toxic chemicals, and lead.

Data Summary

Highlights

The number of waterborne outbreaks (11.3) reported in 1996 was 6 (see figure 12); this met the year 2000 target of 11. However, data for this objective is based on voluntary reporting and does not indicate the number of people affected by an outbreak (see Data Issues). The proportion of rivers, lakes, and estuaries that met designated uses (11.10) in 1996 was lower than 1994 levels.

The proportion of people who know what radon is and who reported testing their homes for radon (11.6) dropped slightly between 1992 and 1993, but remains nearly double that reported in

1990. Only a fraction of these homes exceed the level identified as dangerous by the EPA (four picocuries), but it should be noted that the National Academy of Sciences reports that 10–14 percent of lung cancer deaths are attributable to indoor radon (11). It is also important to note that smokers and former smokers are less likely to test for radon, hence increasing their risk for lung cancer (12). Providing greater awareness of radon and its dangers through Government-sponsored education and testing programs (13) may further reduce the risk from radon. Data for objective **11.13** (radon disclosure) show that the number of States requiring disclosure of radon test results at the time of home sales has doubled between 1993 and 1995. While debate on the etiology of radon-related cancer continues, recent research on occupational exposure supports the contention that radon remains a health risk and supports the importance of the *Healthy People 2000* objectives that focus on this environmental issue (14). The proportion of people living in counties that did not exceed ambient air standards in the past 12 months (**11.5**) increased substantially. Part of this improvement may be attributable to the cooler summer and lower ozone production. However, the measure used in *Healthy People* is more likely to reflect annual changes than that used to define nonattainment areas in air quality regulations.

Summary of Progress

Of the 17 environmental health objectives, 2 (**11.3** and **11.8**) met the year 2000 target and 11 showed progress toward the year 2000 targets (**11.1**, **11.4–11.7**, **11.11–11.13**, **11.15–11.17**). Progress for objective **11.14** is difficult to evaluate (see Data Issues). The data for objective **11.2** indicated movement away from the target. Progress for **11.10** was mixed. Although showing slight fluctuations over the years of tracking, 1995 data showed no change since baseline for objective **11.9**.

Data Issues

Definitions

Data for objective **11.1** (asthma hospitalizations) come from the National Hospital Discharge Survey (NHDS)

maintained by the National Center for Health Statistics (NCHS). Data for the survey are obtained from approximately 480 hospitals throughout the United States. Data on race (required for objective **11.1a** asthma hospitalizations for blacks and nonwhites) are not reported by many hospitals due to omission of a race field on hospital discharge reporting forms. More hospitals have automated their discharge systems in recent years and are using these forms (UB-82 and UB-92). A comparison of NHDS data with those who reported being hospitalized in the National Health Interview Survey (NHIS) (NHIS data were adjusted to exclude hospitalizations of 1 day or less) indicated that underreporting for whites was roughly 22 percent in 1991; the difference in reporting for blacks was negligible (15).

The baseline data for **11.2** (mental retardation) were revised to be comparable with data from the Metropolitan Atlanta Developmental Disabilities Surveillance Program, which uses school counts of children classified as mentally retarded.

Data for **11.3** are from the Center for Disease Control and Prevention's (CDC) Waterborne Surveillance System, which compiles data from the States; reporting is voluntary. Variations in the level of reporting can produce large fluctuations in the number of outbreaks reported from year to year. An outbreak can be defined when as few as two people are affected by waterborne disease or poisoning; however, the numbers of people affected by the one outbreak in 1994 (the year the target was met) were as high as 400,000 people. Epidemiological evidence is used to link the cause of the outbreak to water.

The updates for **11.4** are from the National Health and Nutrition Examination Survey (NHANES) III, phase I (1988–91). The children tested in NHANES III were 1–5 years of age compared with 6 months–5 years of age from the 1984 baseline projected from NHANES II (1976–80) data. Additionally, the special population was identified using the Bureau of Census Poverty Income Ratio rather than a discrete family income level.

Data for **11.5** (air quality) are affected by a range of meteorological factors (for example, temperature and wind) and may vary considerably on an annual basis. The data are also limited

by the fact that not all counties have monitoring stations. Individual exposure within counties varies greatly and health effects from poor air quality are mitigated by a wide range of individual factors (for example, personal sensitivity to pollutants, other health conditions, and use of health services). Additionally, health effects from some pollutants may occur at levels lower than those specified in the National Ambient Air Quality Standards (NAAQS).

Data for **11.7** (toxic agent release) are from the Toxic Release Inventory maintained by EPA. The inventory estimates of prior year releases are provided to EPA by industry that periodically revises these estimates. These revisions are permitted under the Community Right to Know Act of 1986; however, they complicate monitoring of this objective.

Data for **11.8** are estimates of per capita waste production and per capita recycling. While pounds of waste produced have increased and pounds recycled have decreased, earlier projections suggested that the former would be higher and the latter lower than current levels. Both have met the 2000 targets.

Although drinking water quality has improved, data for **11.9** (safe drinking water) have remained relatively unchanged for the past 5 years because of an increase in the number of maximum contaminant level (MCL) standards used to define safe drinking water. For the past several years, compliance has also been based on reporting and treatment standards, as well as contaminants. Additionally, the proportions reported for this objective reflect the proportion of community water systems, rather than the proportion of the population (which is stated in the objective). The proportion of the population served by community water systems has increased over the years; currently they serve nearly 98 percent of the population.

Data for objective **11.15** (hazardous waste recycling) include both permanent (year-round) and temporary (1 day) recycling programs.

For objective **11.17** (children's exposure to tobacco smoke at home), the definition of regular exposure is defined as the occurrence of tobacco smoking anywhere in the home on 4 or more days each week.

Proxy Data

Updates for **11.6** (radon testing) come from the NHIS and represent the proportion of survey respondents who reported that they knew what radon was and had tested their home for radon; the objective calls for the proportion of homes that had been tested. The data for children in 1991, 1993, and 1994 represent the proportion of children 6 years of age and under in homes where the respondent reported testing for radon. The data on smokers for 1991, 1993, and 1994 were limited to those who reported smoking at home 3 or more days a week.

Data for **11.11** (lead paint testing) are also provided by the NHIS and represent the proportion of people who reported testing their homes (if built before 1950) for lead paint, rather than the proportion of homes built before 1950 tested for lead-based paint as called for in the objective.

Data Availability

There will be no further updates for tracking disclosure of lead paint (objective **11.13**) beyond 1991. Federal regulations promulgated in 1996 require disclosure of the presence of lead paint in all pre-1978 houses in all 50 States during sales or leasing.

The Agency for Toxic Substances and Disease Registry (ATSDR) reported that, in 1995, EPA had followed 90 percent of their recommendations at National Priorities List (NPL) sites with health concerns or hazards where ATSDR had made recommendations (objective **11.14**). This level of compliance, however, will vary from year to year because the number of NPL sites continues to vary and there may be a lag between the time that sites are listed; ATSDR makes recommendations and EPA acts on those recommendations.

The data for objective **11.16** (sentinel environmental diseases) include data reported by States in surveys conducted by the Committee of State and Territorial Epidemiologists (CSTE) and Public Health Foundation (PHF). Other sentinel diseases will be tracked as data become available. Additionally, CDC is working with other Government and nongovernment organizations to develop guidelines to improve State capacity to conduct environmental surveillance.

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Table 11. Environmental health objective status

Objective		Baseline										Target
		year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	2000
11.1	Asthma hospitalizations (per 100,000)	1987	188	192	196	183	183	174	194	179	---	160
	a. Black and other nonwhite	1987	334	340	349	380	290	353	368	360	---	265
	b. Children 14 years and under	1987	284	308	339	344	280	295	369	338	---	225
	c. Female 25 years and over	1988	229	235	235	216	198	202	219	201	---	183
11.2*	Serious mental retardation (per 1,000)											
	Children 10 years with IQ less than 50	1985-88	^a 3.1	---	---	¹ 3.6	---	---	---	---	---	2.0
11.3	Waterborne diseases (number of outbreaks)	1988	16	14	15	19	17	11	16	6	---	11
	a. People served by community water systems	1988	4	3	2	5	9	5	8	2	---	2
11.4	Blood lead levels among children (6 months to 5 years)											
	Levels exceeding 15 µg/dL	1984	3 million	---	---	---	---	² 393,000	---	---	---	300,000
	Levels exceeding 25 µg/dL	1984	234,000	---	---	---	---	² 59,000	---	---	---	0
	a. Inner-city low-income black children											
	Levels exceeding 15 µg/dL	1984	234,900	---	---	---	---	² 93,000	---	---	---	75,000
	Levels exceeding 25 µg/dL	1984	36,700	---	---	---	---	² 18,000	---	---	---	0
11.5	Proportion of people in counties that have not exceeded standards for air pollutants											
	Total population (any of the following pollutants)	1988	49.7%	69.4%	65.3%	78.4%	76.5%	75.1%	67.9%	81.3%	---	85%
	Ozone	1988	53.6%	74.2%	72.0%	82.1%	79.5%	79.9%	71.6%	83.3%	---	...
	Carbon monoxide	1988	87.8%	91.1%	92.0%	94.3%	95.4%	93.9%	95.2%	94.9%	---	...
	Nitrogen dioxide	1988	96.6%	96.5%	96.5%	100%	100%	100%	100%	100%	---	...
	Sulfur dioxide	1988	99.3%	99.4%	98.0%	100%	99.4%	100%	100%	99.9%	---	...
	Particulates	1988	89.4%	92.3%	91.4%	89.6%	97.5%	94.8%	90.2%	97.1%	---	...
	Lead	1988	99.3%	97.8%	94.1%	98.1%	97.8%	98.3%	98.1%	98.3%	---	...
11.6	Proportion of homes with radon testing	1989	Less than 5%	³ 5.6%	³ 8.7%	---	³ 11.4%	³ 11.0%	---	---	---	40%
	a. Homes with smokers and former smokers ⁴	1990	5.2%	...	6.9%	---	10.3%	8.8%	---	---	---	50%
	b. Homes with children	1990	⁵ 6.8%	...	⁶ 10.7%	---	⁶ 13.8%	⁶ 13.1%	---	---	---	50%
11.7	Toxic agent releases											
	DHHS list of carcinogens (billion pounds)	1988	^a 0.35	0.28	0.23	0.21	0.19	0.18	0.17	---	---	0.12
	ATSDR list of the most toxic chemicals (billion pounds)											
	275 substances	1988	^a 2.15	1.75	2.04	1.39	1.64	1.04	1.02	---	---	1.08
11.8	Solid waste (average pounds per person per day)	1988	4.0	4.3	---	4.5	4.4	4.5	4.4	4.3	---	4.3
	After recovery (recycling and composites)	1988	3.5	3.6	---	3.6	3.4	3.4	3.3	3.2	---	3.2
11.9	People receiving safe drinking water											
	Proportion of community water systems meeting standards	1988	^a 73%	73%	72%	72%	68%	66%	73%	---	---	85%
	Number of Maximum Contaminant Level Standards in force	...	---	36	57	81	81	81	81	---	---	...
11.10	Waters supporting beneficial uses											
	Rivers supporting:											
	Consumable fish	1992	89%	...	...	...	---	95%	---	85%	---	94%
	Recreational activities	1992	71%	...	...	...	---	77%	---	79%	---	85%
	Lakes supporting:											
	Consumable fish	1992	64%	...	...	...	---	82%	---	63%	---	82%
	Recreational activities	1992	77%	...	...	...	---	81%	---	75%	---	88%

Table 11. Environmental health objective status—Con.

<i>Objective</i>		<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
	Estuaries supporting:											
	Consumable fish	1992	94%	...	...	...	---	92%	---	76%	---	97%
	Recreational activities	1992	83%	...	...	...	---	85%	---	84%	---	91%
11.11	Homes built before 1950 tested for lead-based paint	1990	Less than 5%	...	---	---	9%	---	---	---	---	50%
11.12	Number of States with construction standards to minimize radon concentrations	1989	1	3	---	---	7 ³	---	---	---	---	35
11.13	Number of States requiring disclosure of lead and radon concentrations											
	Lead-based paint and radon	1989	1	1	3	---	---	---	---	---	---	30
	Lead-based paint	1989	2	2	5	---	---	---	---	8 ⁵⁰	---	30
	Radon	1989	1	3	5	---	13	---	9 ²⁶	---	---	30
11.14	Significant health risks from hazardous waste sites											
	Number of sites on National Priority List	1990	^a 1,079	...	---	1,199	---	---	1,232	1,210	---	...
	Percent of sites identified with public health hazards/concerns where ATSDR recommendations were implemented . . . . .	...	---	---	---	---	---	---	10 ⁹⁰ %	---	---	100%
11.15	Recyclable materials and household hazardous waste programs											
	Population served by curbside recycling	1991	26%	...	...	30%	39%	42%	46%	---	---	50%
	Permanent and temporary household hazardous waste recycling programs ¹¹	1991	802	...	...	867	1,223	---	---	---	---	1,529
	Permanent programs	1991	96	...	...	---	---	---	---	---	---	215
	Temporary programs	1991	706	...	...	---	---	---	---	---	---	1,314
	States with at least one program . . . . .	...	---	1 ²⁸	50	50	50	50	50	50	---	...
11.16	Number of States that track sentinel environmental diseases											
	Plans established and monitored	1990	0	...	---	---	---	---	---	---	---	35
	Federal funds for surveillance . . . . .	...	---	---	---	8	10	19	27	31	---	...
	State data collection for specific diseases											
	Childhood lead poisoning . . . . .	...	---	---	---	---	---	---	---	---	51	...
	Adult nonoccupational lead poisoning . . . . .	...	---	---	---	---	---	---	---	---	28	...
	Mercury poisoning . . . . .	...	---	---	---	---	9	---	---	---	15	...
	Arsenic poisoning . . . . .	...	---	---	---	---	8	---	---	---	11	...
	Cadmium poisoning . . . . .	...	---	---	---	---	7	---	---	---	11	...
	Methemoglobinemia . . . . .	...	---	---	---	---	---	---	---	---	9	...
	Acute chemical poisoning . . . . .	...	---	---	---	---	6	---	---	---	8	...
	Carbon monoxide poisoning . . . . .	...	---	---	---	---	4	---	---	---	7	...
	Heatstroke . . . . .	...	---	---	---	---	---	---	---	---	4	...
	Hypothermia . . . . .	...	---	---	---	---	---	---	---	---	4	...
11.17*	Children's exposure to smoke at home	1986	39%	---	32%	---	27%	27%	---	---	---	20%

--- Data not available.
 ... Category not applicable.
^aBaseline has been revised.
¹1991–92 data.
²Children 1–5 years.
³The proportion of people who reported that they knew what radon was and had tested their homes for radon.
⁴The proportion of people who reported that they smoked in their homes 4 or more days a week, knew what radon was, and had tested their homes for radon.

⁵The proportion of people who reported that they had children 16 years or under, knew what radon was, and had tested their homes for radon.

⁶The proportion of people who reported that they had children 6 years or under, knew what radon was, and had tested their homes for radon.

⁷EPA developed model standards for control of radon in buildings in 1993.

⁸In 1996, EPA promulgated regulation requiring disclosure of lead-based paint in all pre-1987 housing during sales or leasing.

⁹Includes 25 States and one territory.

¹⁰90% represents 253 sites.

¹¹Permanent programs are fixed locations where hazardous waste can be recycled year round; temporary programs are short term sites where hazardous waste can be recycled. There has been a steady increase in permanent programs (from 27 in 1988 to 96 in 1991), whereas number of temporary programs has declined.

¹²1987 data.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

<i>Objective number</i>	<i>Data source</i>
11.1, 11.1a-c	National Hospital Discharge Survey, CDC, NCHS.
11.2*	Baseline: Metropolitan Atlanta Developmental Disabilities Study, CDC, NCEH. Update: Metropolitan Atlanta Developmental Disabilities Surveillance Program, CDC, NCEH.
11.3, 11.3a	Waterborne Surveillance System, CDC, NCEH.
11.4, 11.4a	National Health and Nutrition Examination Survey, CDC, NCHS.
11.5	National Air Quality and Emissions Trends Report, EPA, AIRS, OAR.
11.6	Baseline: EPA, OAR, Office of Radiation Programs.
11.6a,b	National Health Interview Survey, CDC, NCHS.
11.7	Toxic Chemical Release Inventory, EPA, OPPTS.
11.8	Characterization of Municipal Solid Waste in the United States, EPA, OSWER.
11.9	EPA Federal Reporting Data Base; EPA, Office of Water, Office of Ground Water and Drinking Water.
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, Environmental Law Institute.
11.14	National Priorities List, EPA, OSWER; Hazardous Substance Release and Health Effects Database, CDC, ATSDR.
11.15	Biocycle Journal of Waste Recycling; Wastewatch Center.
11.16	For funding data: CDC, NCEH. For State data collection: PHF; Council for State and Territorial Epidemiologists.
11.17*	Baseline: Adult Use of Tobacco Survey, CDC, NCCDPHP. Update: National Health Interview Survey, CDC, NCHS.

*Duplicate objective. See full text of objective following this table.

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.

11.1c: Reduce asthma morbidity among women, as measured by a reduction in asthma hospitalizations to no more than 183 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: Includes only outbreaks from water intended for drinking. 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 2 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 300,000 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.

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 decreasing the release of hazardous substances from industrial facilities:

65 percent decrease in the substances on the Department of Health and Human Services list of carcinogens.

50 percent reduction in the substances on the Agency for Toxic Substances and Disease Registry (ATSDR) priority 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 4.3 pounds before recovery and 3.2 pounds after recovery.

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: Compliance with the Safe Drinking Water Act includes monitoring and reporting as well as providing water that meets the 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 an increase in the proportion of assessed rivers, lakes, and estuaries that support beneficial uses, such as consumable fishing and recreational activities.

	2000 target (percent)
Waters supporting beneficial use	
Rivers supporting:	
Consumable fish	94
Recreational activities	85
Lakes supporting:	
Consumable fish	82
Recreational activities	88
Estuaries supporting:	
Consumable fish	97
Recreational activities	91

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 curbside recycling programs that serve at least 50 percent of the U.S. population and continue to increase household hazardous waste collection programs.

Recyclable materials and household hazardous waste programs	2000 target (percent)
Percentage of population served by curbside recycling programs	50
Permanent and temporary household hazardous waste collection events	2000 target (number of events)
Permanent	215
Temporary	1,314
Total	1,529

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).

11.17*: 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.

Duplicate objective: 3.8

*Duplicate objective.

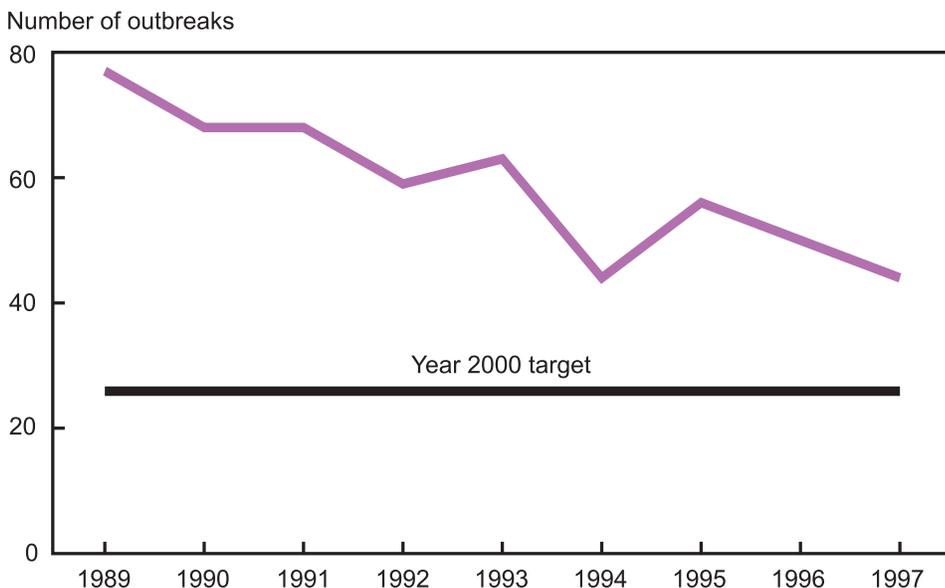
Priority Area 12 Food and Drug Safety

Background

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 many effective food and drug safety procedures, this country still experiences outbreaks of foodborne diseases and incidents of therapeutic drug-related illness and death. In the United States, an annual average of 15,475 foodborne illness cases and 14 foodborne illness-related deaths were reported to the Centers for Disease Control and Prevention (CDC) for years 1988–92 (1). Other estimates indicate that between 6.5 million and 33 million illnesses and 9,000 deaths each year are associated with microorganisms in food (2). 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* O157: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 food contamination.

Adverse drug reactions are estimated to play a role in more than 100,000 deaths nationwide each year (3). New drugs, which are being introduced at an increasing rate, are becoming more powerful and more complex. 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.

Figure 13. Outbreaks of infections due to *Salmonella enteritidis*: United States, 1989–97, and year 2000 target for objective 12.2



	1989	1990	1991	1992	1993	1994	1995	1996	1997	Year 2000 target
All persons	77	68	68	59	63	44	56	50	44	25

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

Data Summary

Highlights

Reported outbreaks of infections due to *Salmonella enteritidis* fell from 77 outbreaks in 1989 to 44 outbreaks in 1997 (objective 12.2, see figure 13). The incidence of infection per 100,000 caused by *Salmonella* species was 14 in 1997, for *Campylobacter jejuni*, 25, for *Escherichia coli*, 2, and for *Listeria monocytogenes*, 0.5, indicating that the targets have been met for all components of objective 12.1. The 1998 data indicate that the percentage of people who wash their cutting boards with soap has increased (a component of objective 12.3). The reporting of adverse events that are serious (12.7) has declined slightly from 69 percent in 1993 to 67 percent in 1998. In 1998, the percent of nurse practitioners who routinely maintain a current medication list for 81–100 percent of patients 65 years and over and who report reviewing medications when prescribing for this proportion of patients has

increased to 71 percent and 68 percent, respectively (12.6).

Summary of Progress

Two of the eight food and drug safety objectives have met their targets: 12.1 and 12.5. Five objectives (12.2–12.4, 12.6, and 12.8) show progress toward their respective targets, and one objective is moving away from the target (12.7). Progress for objective 12.6, primary care providers who review medications for older patients, is based on the reports of nurse practitioners only.

Data Issues

Definitions

The definition of a serious adverse event (objective 12.7) includes events that are life threatening and require intervention to prevent permanent damage as well as death, hospitalization, disability, and congenital anomaly (4).

For objective **12.8**, receipt of useful information for new prescriptions, a prescriber is anyone who is authorized to prescribe, including physicians, nurse practitioners, and physician assistants depending on the State law. Dispensers are persons authorized to dispense prescription medications and include physicians and pharmacists (4).

Data Source Descriptions

Various surveillance systems of the CDC, including the *Salmonella* Surveillance System, the *Campylobacter* Surveillance System, and the Bacterial Meningitis Surveillance System, were used to monitor progress for objectives **12.1** and **12.2** for data through 1994. The *Salmonella* Surveillance System is a passive laboratory-based system that uses reports from 49 States, the FDA, and the U.S. Department of Agriculture (USDA). 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. When reporting is incomplete, the incidence of salmonellosis is substantially underreported.

The incidence of foodborne *Listeria monocytogenes*-induced infections was measured until 1994 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.

The *Campylobacter* Surveillance System is 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.

In 1996–97, objectives **12.1** and **12.2** were tracked using data from the Emerging Infections Programs (EIP) implemented by the CDC. The Foodborne Diseases Active Surveillance

Network (FoodNet) is the primary foodborne diseases component of these programs. FoodNet was initiated in 1995 as a collaborative effort among CDC, USDA, FDA, and five State health departments (5); this network collects population-based surveillance data on culture-confirmed cases of foodborne illnesses among 16.1 million residents (6 percent of the U.S. population) in five EIP sites. Two new sites were added in 1997, and an eighth site was added in 1998. Annual incidence rates are calculated using reported cases as the numerator and census estimates for individual catchment areas as the denominator (6). Additional information about FoodNet, which includes the 1997 summary report, is available on the Internet at <http://www.cdc.gov/ncidod/dbmd/foodnet/foodnet.htm>.

MedWatch, which is used to track objective **12.7**, is FDA's Medical Products Reporting Program. It is an outreach program for health professionals to educate them on the importance of reporting adverse events, which will allow the FDA to discover more quickly adverse reactions and interactions by increasing reporting (4).

The baseline data on maintenance of a current medication list and medication review for older patients by primary care providers for objective **12.6** are from the Primary Care Provider Surveys (PCPS), drawn from a random stratified sample of members of the American College of Physicians from four geographic regions. Provider groups sampled included internists, pediatricians, nurse practitioners, obstetricians/gynecologists, and family physicians. In 1992, response rates varied from 50–80 percent across these groups. The data represent the proportion of providers who routinely delivered these services to 81–100 percent of their clients 65 years and over.

The Prevention in Primary Care Study (PPCS) was conducted in 1997–98 to update data from the PCPS. The design and items included in the 1997–98 study were similar to the PCPS, but a slightly different sampling frame was used and some items included in the 1992 surveys were not included in the PPCS. The professionals were sampled from listings of all licensed, active practitioners in the United States whose practices were at least 50 percent primary care. Because

of low response rates from the other provider groups, updates are available only for nurse practitioners.

Comparability of Data Sources

Baseline data for refrigeration and cutting-board practices (**12.3**) were obtained from the 1988 Health and Diet Survey, FDA/USDA (HDS). Updates are from the Food Safety Survey, FDA (FSS). The FSS is based on 20- to 30-minute telephone interviews with consumers to determine food safety knowledge, concern level, food handling practices, perception of risk, and consumption of potentially hazardous foods. In 1993, 1,620 people were surveyed and in 1998, 2,001 people were surveyed. The HDS is a broader survey with few food safety questions.

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Table 12. Food and drug safety objective status

Objective		Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	Target 2000
12.1	Foodborne infections (cases per 100,000)											
	<i>Salmonella species</i>	1987	18	16	16	14	15	15	---	15	14	16
	<i>Campylobacter jejuni</i>	1987	50	---	---	---	---	---	---	24	25	25
	<i>Escherichia coli</i> O157:H7.	1987	8	---	---	---	---	---	---	3	2	4
	<i>Listeria monocytogenes</i>	1987	0.7	0.77	0.61	0.45	0.44	0.42	---	0.5	0.5	0.5
12.2	<i>Salmonella enteritidis</i> outbreaks	1989	77	68	68	59	63	44	56	50	44	25
12.3	Refrigeration and cutting board practices											
	For refrigeration of perishable foods.	1988	70%	---	---	---	¹ 72%	---	---	---	---	75%
	For washing cutting boards with soap	1988	66%	---	---	---	¹ 65%	---	---	---	² 71%	75%
	For washing utensils with soap	1988	55%	---	---	---	---	---	---	---	---	75%
12.4	Use of FDA Food Code (proportion of States and U.S. Territories)											
	States reviewing food protection standards . . . . .	...	---	---	---	---	---	80%	---	82%	---	...
	States adopting food protection standards.	1994	^a 2%	...	...	...	...	...	---	8%	³ 16%	70%
12.5	Linked pharmacy systems⁴											
	Computer utilization by pharmacies	1993	95%	...	...	...	...	---	98%	---	---	75%
12.6	Providers reviewing medication for older patients											
	Percent of clinicians routinely providing service to 81–100% of patients 65 years and over. . . . .	...	---	---	---	---	---	---	---	---	---	75%
	Maintenance of current medication list											
	Nurse practitioners	1992	63%	...	...	...	---	---	---	---	² 71%	75%
	Obstetricians/gynecologists	1992	64%	...	...	...	---	---	---	---	^{2,5} ---	75%
	Internists	1992	84%	...	...	...	---	---	---	---	^{2,5} ---	75%
	Family physicians	1992	70%	...	...	...	---	---	---	---	^{2,5} ---	75%
	Review of medications when prescribing											
	Nurse practitioners	1992	55%	...	...	...	---	---	---	---	² 68%	75%
	Obstetricians/gynecologists	1992	60%	...	...	...	---	---	---	---	^{2,5} ---	75%
	Internists	1992	77%	...	...	...	---	---	---	---	^{2,5} ---	75%
	Family physicians	1992	63%	...	...	...	---	---	---	---	^{2,5} ---	75%
12.7	Adverse event drug reports											
	Proportion voluntarily sent to FDA regarded as serious	1993	69%	...	...	...	...	72%	70%	68%	^{2,6} 67%	75%
12.8	Receipt of verbal and written information for new prescriptions . . . . .	...	---	---	---	---	---	---	---	---	---	75%
	Written information											
	From prescribers	1992	14%	...	...	...	---	15%	---	---	---	75%
	From dispensers	1992	^a 32%	...	...	...	---	59%	---	---	---	75%

--- Data not available.

... Category not applicable.

^aBaseline has been revised.

¹1992–93 data.

²1997–98 data.

³Percent of States with at least one agency adopting Food Code standards.

⁴A linked system is one with individual computer capability or one that is part of a larger more integrated system such as a chain store computer system.

⁵Response rate for this group was too low to produce reliable estimates.

⁶Cumulative total as of June 30, 1998.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

<i>Objective number</i>	<i>Data source</i>
12.1	Salmonella Surveillance System, CDC, NCID. Campylobacter Surveillance System, CDC, NCID. Bacterial Meningitis Surveillance System, CDC, NCID. 1996 and 1997 updates: Foodborne Disease Active Surveillance Network (FoodNet), CDC, USDA, FDA.
12.2	Salmonella Surveillance System, CDC, NCID.
12.3	Baselines: Health and Diet Survey, USDA/FDA. Updates: Food Safety Survey, FDA.
12.4	Baseline and 1996 data: Listing of Confirmed Code Adoptions by Local, State, and National Jurisdictions, FDA, CFSAN. 1997 update: Listing of Reported Adoptions by Local, State, and National Jurisdictions, FDA, CFSAN.
12.5	Baseline: National Association of Retail Druggists. Update: American Society for Automated Pharmacies.
12.6	Baseline: Primary Care Provider Surveys, OPHS, ODPHP. Update: Prevention in Primary Care Study, American College of Preventive Medicine.
12.7	FDA, MedWatch.
12.8	FDA.

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)
<i>Salmonella</i> species	16
<i>Campylobacter</i>	25
<i>Escherichia coli</i> O157:H7	4
<i>Listeria monocytogenes</i>	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 *Food Code 1993* for institutional food operations and to at least 70 percent the proportion that have adopted the new uniform food protection code 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.

12.7: Increase to at least 75 percent the proportion of the total number of adverse event reports voluntarily sent directly to FDA that are regarded as serious.

12.8: Increase to at least 75 percent the proportion of people who receive useful information verbally and in writing for new prescriptions from prescribers or dispensers.

Priority Area 13 Oral Health

Background

Oral diseases are among the most common health problems in the United States. Among school-aged children, 45 percent have caries in their permanent teeth (1). Among adults, 94 percent show evidence of past or current tooth decay (2). An average of 21.5 tooth surfaces have been affected by decay among all dentate adults (2). Periodontal diseases are also a chronic problem. Over 90 percent of people 13 years and over show some evidence of periodontal problems (loss of attachment) (3). Moderate periodontal disease is evident in approximately 25 percent of people (3). Expenditures for dental care were \$39 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).

Data Summary

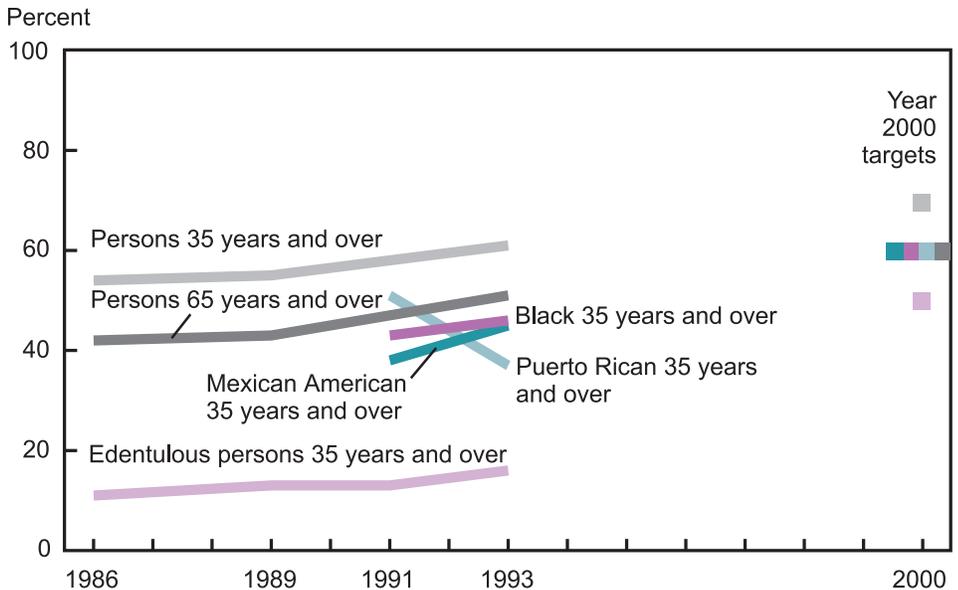
Highlights

Oral cancer mortality rates (13.7) continued to decrease in 1996 for the total population 45–74 years and among black men and women of the same age group. The rates for all groups, except all males 45–74 years, have met the year 2000 targets. This decline in oral cancer mortality (13.14) may, in part, be related to increased use of the oral health care system (see figure 14).

Summary of Progress

Data to assess trends toward the year 2000 targets are available for 13 of the 17 objectives in the oral health priority area. The year 2000 target for objective 13.7 has been met. Progress toward targets is shown for eight objectives (13.1, 13.4, 13.6, 13.8, 13.9, 13.14, 13.15, and 13.17). Data show trends that are moving away from the target for three objectives (13.3, 13.5, and 13.12). Trends are mixed for objective 13.2. Data beyond baseline are

Figure 14. Proportion of people 35 years and over using the oral health care system each year: United States, 1986, 1989, 1991, 1993, and year 2000 targets for objective 13.14



	1986	1989	1991	1993	Year 2000 target
Persons 35 years and over	54%	55%	58%	61%	70%
Edentulous persons 35 years and over . . .	11%	13%	13%	16%	50%
Persons 65 years and over	42%	43%	47%	51%	60%
Black 35 years and over . . . . .	...	...	43%	46%	60%
Mexican Americans 35 years and over . . .	...	...	38%	45%	60%
Puerto Ricans 35 years and over . . . . .	...	...	51%	37%	60%

... Not applicable.

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

not available for four objectives in this priority area (13.10, 13.11, 13.13, and 13.16).

Data Issues

Definition

Operational definitions and data collection specifications for all year 2000 objectives in priority area 13 have been published in the National Center for Health Statistics *Statistical Notes* series (6). Data issues are discussed and references are cited for expanded discussions of the data systems that provide data for the national objectives. When appropriate, the text of questionnaire items used to measure the objectives is also provided. See the

appendix for further information.

Objective 13.11 addresses feeding practices that prevent baby bottle tooth decay. The measure used to establish a baseline for this objective for the total population, caregivers with less than a high school education (13.11a), blacks (13.11c), and Hispanics (13.11d) is for children 6–23 months old. The preventive feeding practices are either that the child no longer uses a bottle, never used a bottle, or if the child still uses a bottle, that no bottle was given at bedtime (excluding bottles with plain water) during the past 2 weeks.

Comparability of Data Sources

Baseline data for 1986–87 from the National Survey of Dental Caries in U.S. school children for objectives 13.1,

13.2, and **13.8** and 1988–94 updates from the National Health and Nutrition Examination Survey (NHANES III) are not strictly comparable because of different sampling designs. The 1986–87 survey sampled only children attending schools while the NHANES III sampled all noninstitutionalized children.

Changes in the National Health Interview Survey (NHIS) questions on oral health between 1989 and 1991 affect comparability of information on the proportion of 5-year-old children and adults 35 years of age and over who visited a dentist in the past 12 months (**13.12** and **13.14**, respectively). In 1986 and 1989, the question on dental visits in the past 12 months followed an introductory statement and questions about dental visits and problems in the past 2 weeks (7,8). The introduction and question on visits in the past 2 weeks were not included in the 1991 and 1993 surveys. These may have differentially affected recall about visits in the past 12 months. A second difference is that the proportion of people who had visited a dentist in the past 12 months was based on a question about the interval since the last dental visit in the 1986 and 1989 surveys. In 1991 and 1993, this measure was obtained from a question about the number of visits to a dentist in the past year. Finally, in 1986 and 1989 oral health data for adults were obtained from a knowledgeable respondent who provided information for all people in the household. In 1991 and 1993, an adult sampled from each family provided information only for himself or herself and not others in the household. A knowledgeable adult provided information for children in all survey years.

The National Household Survey on Drug Abuse is used to measure objective **13.17** regarding smokeless tobacco use among adolescents. An improved questionnaire and editing procedures were introduced with the 1994 survey and affect comparability with previous years, especially for tobacco use among adolescents. (See text for priority area 3 for more information.)

Proxy Measures

Nationally representative data on topical or systemic fluoride use among people not receiving optimally fluoridated public water are not readily obtainable (**13.10**). 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 this reason, a proxy measure—the proportion of all U.S. residents who use fluoride—is used as the revised baseline and will be used to monitor progress toward achieving this objective. The original baseline showing use of fluoride products among people without fluoridated water was approximated from the 1989 NHIS data and information on water fluoridation patterns in the United States.

The additional data for objective **13.16** (protective sports equipment) are from the NHIS and represent the proportions of children playing baseball, softball, football, or soccer who use headgear or mouthguards; there will be additional data from the NHIS to track this objective later in the decade.

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Table 13. Oral health objective status

<i>Objective</i>		<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
13.1	Dental caries											
	Children 6–8 years	1986–87	54%	---	---	---	---	¹ 52%	---	---	---	35%
	Adolescents 15 years	1986–87	78%	---	---	---	---	¹ 61%	---	---	---	60%
	a. Children 6–8 years whose parents have less than high school education	1986–87	70%	---	---	---	---	¹ 66%	---	---	---	45%
	b. American Indian/Alaska Native children 6–8 years											
	Primary or permanent teeth	---	---	88%	---	---	---	---	---	---	---	45%
	Primary teeth	1983–84	92%	---	---	---	---	---	---	---	---	---
	Permanent teeth	1983–84	52%	---	---	---	---	---	---	---	---	---
	c. Black children 6–8 years	1986–87	56%	---	---	---	---	¹ 50%	---	---	---	40%
	d. American Indian/Alaska Native adolescents 15 years	1983–84	93%	---	90%	---	---	---	---	---	---	70%
13.2	Untreated dental caries											
	Children 6–8 years	1986–87	28%	---	---	---	---	¹ 29%	---	---	---	20%
	a. Children whose parents have less than a high school education	1986–87	43%	---	---	---	---	¹ 44%	---	---	---	30%
	b. American Indian/Alaska Native children	1983–84	64%	---	72%	---	---	---	---	---	---	35%
	c. Black children	1986–87	^a 38%	---	---	---	---	¹ 36%	---	---	---	25%
	d. Hispanic children	1982–84	^{a,2} 45%	---	---	---	---	^{1,2} 48%	---	---	---	25%
	Adolescents 15 years	1986–87	24%	---	---	---	---	¹ 20%	---	---	---	15%
	e. Adolescents whose parents have less than a high school education	1986–87	41%	---	---	---	---	---	---	---	---	25%
	f. American Indian/Alaska Native adolescents	1983–84	84%	---	61%	---	---	---	---	---	---	40%
	g. Black adolescents	1986–87	38%	---	---	---	---	¹ 29%	---	---	---	20%
	h. Hispanic adolescents	1982–84	^{a,2} 45%	---	---	---	---	^{1,2} 36%	---	---	---	25%
13.3	No tooth loss											
	People 35–44 years	1985–86	31%	---	---	---	---	¹ 31%	---	---	---	45%
13.4	Complete tooth loss											
	People 65 years and over	1986	36%	32%	32%	---	33%	---	---	---	---	20%
	a. Low-income people											
	Annual family income less than \$15,000	1986	46%	45%	45%	---	42%	---	---	---	---	25%
	Annual family income below poverty level	---	---	---	---	---	48%	---	---	---	---	---
	b. American Indian/Alaska Native	1991	42%	---	---	---	³ ---	---	---	---	---	20%
13.5	Gingivitis											
	People 35–44 years	1985–86	41%	---	---	---	---	¹ 48%	---	---	---	30%
	a. Low-income people (annual family income less than \$12,500)	1985–86	50%	---	---	---	---	¹ 66%	---	---	---	35%
	b. American Indian/Alaska Native	1983–84	95%	---	96%	---	---	---	---	---	---	50%
	c. Hispanic	---	---	---	---	---	---	---	---	---	---	50%
	Mexican American	1982–84	74%	---	---	---	---	¹ 64%	---	---	---	---
	Cuban	1982–84	79%	---	---	---	---	---	---	---	---	---
	Puerto Rican	1982–84	82%	---	---	---	---	---	---	---	---	---
13.6	Periodontal diseases											
	People 35–44 years	1985–86	25%	---	---	---	---	¹ 22%	---	---	---	15%
13.7*	Oral cancer deaths (per 100,000)											
	Male 45–74 years	1987	13.6	13.4	12.7	12.2	12.1	11.1	11.0	10.7	^P 10.3	10.5
	Female 45–74 years	1987	4.8	4.6	4.6	4.3	4.2	4.0	3.9	3.5	^P 3.5	4.1

Table 13. Oral health objective status —Con.

Objective		Baseline										Target
		year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	2000
13.8	a. Black male 45–74 years	1990	29.4	...	26.9	27.3	26.2	25.2	23.4	22.6	^P 20.6	26.0
	b. Black female 45–74 years	1990	6.9	...	6.9	6.0	5.8	5.7	6.4	5.0	^P 5.2	6.9
Protective sealants												
	Children 8 years	1986–87	11%	---	---	---	---	¹ 23%	---	---	---	50%
	Adolescents 14 years	1986–87	8%	---	---	---	---	¹ 24%	---	---	---	50%
	a. Black 8 years	1986–87	^a 4%	---	---	---	---	¹ 11%	---	---	---	50%
	b. Black 14 years	1986–87	^a 3%	---	---	---	---	¹ 5%	---	---	---	50%
	c. Hispanic 8 years	1986–87	^a 9%	---	---	---	---	^{1,2} 7%	---	---	---	50%
	d. Hispanic 14 years	1986–87	^a 6%	---	---	---	---	^{1,2} 7%	---	---	---	50%
13.9	Water fluoridation											
	People served by community water systems	1989	61%	---	---	62%	---	---	---	---	---	75%
13.10	Topical and systemic fluorides											
	People in nonfluoridated areas who use fluoride	1989	50%	---	---	---	---	---	---	---	---	85%
	Proportion of people (national) using:											
	Toothpaste containing fluoride . . . . .	...	---	⁴ 94%	---	---	---	---	---	---	---	...
	Fluoride mouthrinse											
	Children and adolescents 6–17 years . . . . .	...	---	⁵ 22.0%	---	---	---	---	---	---	---	...
	People 18 years and over . . . . .	...	---	⁵ 7.7%	---	---	---	---	---	---	---	...
	Fluoride supplements											
	Children and adolescents 2–16 years . . . . .	...	---	⁵ 10.3%	---	---	---	---	---	---	---	...
13.11*	Baby bottle tooth decay											
	Parents and caregivers who use preventive feeding practices	1991	55%	...	...	---	---	---	---	---	---	75%
	a. Parents and caregivers with less than high school education	1991	36%	...	...	---	---	---	---	---	---	65%
	b. American Indian/Alaska Native parents and caregivers	1985–89	74%	---	---	---	---	---	---	---	---	65%
	c. Black parents and caregivers	1991	48%	...	...	---	---	---	---	---	---	65%
	d. Hispanic parents and caregivers	1991	39%	...	...	---	---	---	---	---	---	65%
13.12	Oral health screening, referral, and followup											
	Children 5 years who visited the dentist in the past year	1986	66%	⁵ 60%	63%	---	---	---	---	---	---	90%
	a. Black 5 years	1991	51%	...	...	---	---	---	---	---	---	90%
	b. Hispanic 5 years	1991	51%	...	...	---	---	---	---	---	---	90%
13.13	Oral health care at institutional facilities											
	Nursing facilities	1990	Required	---	---	---	---	---	---	---	---	...
	Federal prisons . . . . .	...	---	---	---	---	---	---	---	---	---	...
	Non-Federal prisons . . . . .	...	---	---	---	---	---	---	---	---	---	...
	Juvenile homes . . . . .	...	---	---	---	---	---	---	---	---	---	...
	Detention facilities . . . . .	...	---	---	---	---	---	---	---	---	---	...
13.14	Regular dental visits											
	People 35 years and over	1986	54%	⁵ 55%	58%	---	61%	---	---	---	---	70%
	a. Edentulous people 35 years and over	1986	11%	⁵ 13%	13%	---	16%	---	---	---	---	50%
	b. People 65 years and over	1986	42%	⁵ 43%	47%	---	51%	---	---	---	---	60%
	c. Black 35 years and over	1991	43%	...	...	---	46%	---	---	---	---	60%
	d. Mexican American 35 years and over	1991	38%	...	...	---	45%	---	---	---	---	60%
	e. Puerto Rican 35 years and over	1991	51%	...	...	---	37%	---	---	---	---	60%

Table 13. Oral health objective status —Con.

<i>Objective</i>	<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
13.15 Oral health care for infants with cleft lip and/or palate											
Number of States with systems for recording and referring infants with cleft lip and/or palates											
Systems to identify and refer	1989	11	---	---	---	23	---	---	---	---	40
Systems to identify infants	1989	25	---	---	---	34	---	---	---	---	40
Systems to refer for care	1989	20	---	---	---	31	---	---	---	---	40
Systems to identify, refer, and followup for care	1993	^a 16	...	...	...	...	---	---	---	---	40
13.16* Protective equipment in sporting and recreation events	...	---	---	---	---	---	---	---	---	---	100%
National Collegiate Athletic Association											
Football	1988	Required	---	---	---	---	---	---	---	---	...
Hockey	1988	Required	---	---	---	---	---	---	---	---	...
Lacrosse	1988	Required	---	---	---	---	---	---	---	---	...
High school football	1988	Required	---	---	---	---	---	---	---	---	...
Amateur boxing	1988	Required	---	---	---	---	---	---	---	---	...
Amateur ice hockey	1988	Required	---	---	---	---	---	---	---	---	...
Use of protective headgear and mouth guards among children who play sports											
Baseball/softball											
Headgear . . . . .	...	---	---	35%	---	---	---	---	---	---	...
Mouth guard . . . . .	...	---	---	7%	---	---	---	---	---	---	...
Football											
Headgear . . . . .	...	---	---	72%	---	---	---	---	---	---	...
Mouth guard . . . . .	...	---	---	72%	---	---	---	---	---	---	...
Soccer											
Headgear . . . . .	...	---	---	4%	---	---	---	---	---	---	...
Mouth guard . . . . .	...	---	---	7%	---	---	---	---	---	---	...
13.17* Smokeless tobacco use											
Male 12-17 years	1988	6.6%	---	5.3%	4.8%	3.9%	5.1%	4.9%	---	---	4%
Male 18-24 years	1987	8.9%	---	9.9%	8.2%	7.8%	6.9%	---	---	---	4%
a. American Indian/Alaska Native 18-24 years	1986-87	18-64%	---	³ ---	³ ---	³ ---	³ ---	---	---	---	10%

--- Data not available.

... Category not applicable.

^aBaseline has been revised.

^pPreliminary data.

¹1988-94 data.

²Data are for Mexican Americans.

³Data are unreliable. Relative standard error is greater than 30%.

⁴1986 data.

⁵1989 data.

NOTE: Data include revisions and, therefore, may differ from those previously published in these reports and other publications.

<i>Objective number</i>	<i>Data source</i>
13.1, 13.1c	Baseline: National Survey of Dental Caries in U.S. School Children, 1986–87, NIH, NIDR. Update: National Health and Nutrition Examination Survey, CDC, NCHS.
13.1a	Baseline: North Carolina Oral Health School Survey, North Carolina Division of Dental Health, University of North Carolina School of Public Health. Update: National Health and Nutrition Examination Survey, CDC, NCHS.
13.1b,d	Baseline: Survey of Oral Health, IHS. Update: Oral Health Status and Treatment Needs Survey of American Indians/Alaska Natives, IHS.
13.2, 13.2c,g	Baseline: National Survey of Dental Caries in U.S. School Children, 1986–87, NIH, NIDR. Update: National Health and Nutrition Examination Survey, CDC, NCHS.
13.2a,e	Baseline: North Carolina Oral Health School Survey, North Carolina Division of Dental Health, University of North Carolina School of Public Health. Update: National Health and Nutrition Examination Survey, CDC, NCHS.
13.2b,f	Baseline: Survey of Oral Health, IHS. Update: Oral Health Status and Treatment Needs Survey of American Indians/Alaska Natives, IHS.
13.2d,h	Baseline: Hispanic Health and Nutrition Examination Survey, CDC, NCHS. Update: National Health and Nutrition Examination Survey, CDC, NCHS.
13.3	Baseline: National Survey of Oral Health in U.S. Employed Adults and Seniors, 1985–86, NIH, NIDR. Update: National Health and Nutrition Examination Survey, CDC, NCHS.
13.4, 13.4a	National Health Interview Survey, CDC, NCHS.
13.4b	Baseline: Oral Health Status and Treatment Needs Survey of American Indians/Alaska Natives, IHS. Update: National Health Interview Survey, CDC, NCHS.
13.5, 13.5a	Baseline: National Survey of Oral Health in U.S. Employed Adults and Seniors, 1985–86, NIH, NIDR. Update: National Health and Nutrition Examination Survey, CDC, NCHS.
13.5b	Baseline: Survey of Oral Health, IHS. Update: Oral Health Status and Treatment Needs Survey of American Indians/Alaska Natives, IHS.
13.5c	Baseline: Hispanic Health and Nutrition Examination Survey, CDC, NCHS. Update: National Health and Nutrition Examination Survey, CDC, NCHS.
13.6	Baseline: National Survey of Oral Health in U.S. Employed Adults and Seniors, 1985–86, NIH, NIDR. Update: National Health and Nutrition Examination Survey, CDC, NCHS.
13.7*, 13.7a,b	National Vital Statistics System, CDC, NCHS.
13.8	Baseline: National Survey of Dental Caries in U.S. School Children, 1986–87, NIH, NIDR. Update: National Health and Nutrition Examination Survey, CDC, NCHS.
13.9	Annual Fluoridation Census, CDC, NCPS.
13.10	National Health Interview Survey, CDC, NCHS.
13.11*, 13.11a,c,d	National Health Interview Survey, CDC, NCHS.
13.11b	1990 Baby Bottle Tooth Decay 5-Year Evaluation Report, IHS.
13.12	National Health Interview Survey, CDC, NCHS.
13.13	Baseline: HCFA.
13.14	National Health Interview Survey, CDC, NCHS.
13.15	State Public Health Dentists Survey, Illinois State Health Department.
13.16*	1988 baseline: CDC, NCPS; NIH, NIDR. 1991 data: National Health Interview Survey, CDC, NCHS.
13.17*	For males 18–24 years, National Health Interview Survey, CDC, NCHS. For males 12–17 years, National Household Survey on Drug Abuse, SAMHSA, OAS.
13.17a	Baseline: National Medical Expenditure Survey of American Indians/Alaska Natives, PHS, NCHSR. Updates: National Health Interview Survey, CDC, NCHS.

*Duplicate objective. See full text of objective following this table.

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 a 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 aged 6–8 (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.

13.2b: Reduce untreated dental caries so that the proportion of American Indian and Alaska Native children aged 6–8 with untreated caries (in permanent or primary

teeth) is no more than 35 percent.

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

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

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

13.2f: Reduce untreated dental caries so that the proportion of American Indian and Alaska Native adolescents aged 15 with untreated caries (in permanent or primary teeth) is no more than 40 percent.

13.2g: Reduce untreated dental caries so that the proportion of black adolescents aged 15 with untreated caries (in permanent or primary teeth) is no more than 20 percent.

13.2h: Reduce untreated dental caries so that the proportion of Hispanic adolescents aged 15 with untreated caries (in permanent or primary teeth) is no more than 25 percent.

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.

13.4b: Reduce to no more than

20 percent the proportion of American Indians and Alaska Natives 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.

Duplicate objectives: 3.17 and 16.17

13.7a*: Reduce deaths due to cancer of the oral cavity and pharynx to no more than 26.0 per 100,000 among black males aged 45–74.

Duplicate objectives: 3.17a and 16.17a

13.7b*: Reduce deaths due to cancer of the oral cavity and pharynx to no more than 6.9 per 100,000 among black females aged 45–74.

Duplicate objectives: 3.17b and 16.17b

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 the majority of first and second molars, respectively, are erupted.

13.8a: Increase to at least 50 percent the proportion of black children aged 8 who have received protective sealants on the occlusal (chewing) surfaces of permanent molar teeth.

13.8b: Increase to at least 50 percent the proportion of black children aged 14 who have received protective sealants on the occlusal (chewing) surfaces of permanent molar teeth.

13.8c: Increase to at least 50 percent the proportion of Hispanic children aged 8 who have received protective sealants on the occlusal (chewing) surfaces of permanent molar teeth.

13.8d: Increase to at least 50 percent the proportion of Hispanic children aged 14 who have received protective sealants on the occlusal (chewing) surfaces of permanent molar teeth.

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 1 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

13.11c*: Increase to at least 65 percent the proportion of black parents and caregivers who use feeding practices that prevent baby bottle tooth decay.

Duplicate objective: 2.12c

13.11d*: Increase to at least 65 percent the proportion of Hispanic parents and caregivers who use feeding practices that prevent baby bottle tooth decay.

Duplicate objective: 2.12d

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.

13.12a: Increase to at least 90 percent the proportion of all black children aged 5 who have received an oral health screening, referral, and followup for necessary diagnostic, preventive, and treatment services.

13.12b: Increase to at least 90 percent the proportion of Hispanic children aged 5 who have received an oral health screening, referral, and followup for necessary diagnostic, preventive, and treatment services.

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, 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.

13.14c: Increase to at least 60 percent the proportion of blacks aged 35 and older using the oral health care system during each year.

13.14d: Increase to at least 60 percent the proportion of Mexican-Americans aged 35 and older using the oral health care system during each year.

13.14e: Increase to at least 60 percent the proportion of Puerto Ricans aged 35 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.

Identification and referral of infants with clefts	2000 target (number of States)
States with system to identify clefts	40
States with system to refer for care	40
States with system to follow-up	40
States with system to identify and refer	40

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

13.17*: 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.

Duplicate objective: 3.9

13.17a*: Reduce smokeless tobacco use by American Indian and Alaska Native youth to a prevalence of no more than 10 percent.

Duplicate objective: 3.9a

*Duplicate objective.

Priority Area 14 Maternal and Infant Health

Background

Improving the health of mothers and infants is a national priority. Nearly 30,000 infants died before their first birthday in 1996 (1). Although the infant mortality rate in the United States continues to decline and has reached an all-time low, the decline has been more rapid among the white population than for the black population. The mortality rate for black infants remains more than twice the rate for white infants. In the past decade some important measures of increased risk of infant morbidity and mortality, such as incidence of low/very low birthweight, and of preterm births have actually increased (1). Despite the importance of early prenatal care in protecting against low birthweight and infant mortality, nearly one of every five pregnant women does not receive care in the first trimester of pregnancy (1). Further reductions in infant mortality and morbidity will require a focus on strategies to modify the behaviors and lifestyles that affect birth outcomes.

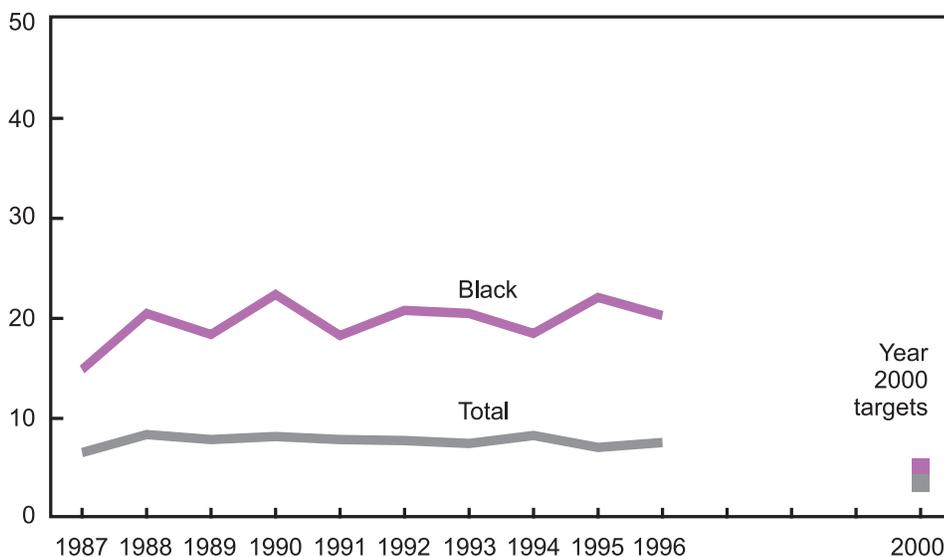
Data Summary

Highlights

Infant mortality (objective 14.1) continued to decline substantially in 1996. The decline in infant mortality was due to decreases in both neonatal mortality (14.1d) and postneonatal mortality (14.1g). In the past several years there have been improvements in some of the important infant health risk factors such as breastfeeding (14.9), receipt of early prenatal care (14.11), smoking during pregnancy (14.10), and screening for fetal abnormalities (14.13). The 1997 figure for breastfeeding in the early postpartum period (14.9) exceeded the record rate reported in 1984 and 1995. Maternal mortality (14.3) increased in 1996 after declining in 1995, and remains substantially above the 1987 baseline level (see figure 15). Fetal mortality (14.2) declined slightly in 1996 after remaining level for 1994–95. The rate of hospitalizations for severe complications of pregnancy (14.7) has dropped dramatically

Figure 15. Maternal mortality rates: United States, 1987–96, and year 2000 targets for objective 14.3

Deaths per 100,000 live births



	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Year 2000 target
Total	6.6	8.4	7.9	8.2	7.9	7.8	7.5	8.3	7.1	7.6	3.3
Black	14.9	20.5	18.4	22.4	18.3	20.8	20.5	18.5	22.1	20.3	5.0

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

surpassing the year 2000 target in 1995. However, the decline for black women (14.7a) has been more modest. Total cesarean section (C-section) (14.8), primary C-section (14.8a), and repeat C-section (14.8b) births increased in 1996. In recent years all three rates had been decreasing. The rate for repeat C-sections, which was below the year 2000 target in 1995, is now slightly above the target. The national year 2000 target for C-sections has already been reached in a number of States (2).

There has also been a steep rise in the rate of fetal alcohol syndrome (14.4), especially among the black population (14.4a), an increase in spina bifida and other neural tube diseases (14.17), and a gradual rise in the percent of low and very low birthweight (14.5) and preteen births.

Summary of Progress

Of the 17 Maternal and Infant Health objectives for the total population, 8 are moving toward the year 2000 targets (objectives 14.1, 14.2, 14.6, 14.8, 14.9, 14.11, 14.13, and 14.15) and 5 are moving away from the

targets (14.3, 14.4, 14.5, 14.12, and 14.17). The year 2000 target for severe complications of pregnancy (14.7) has been met and some newborn screening tests (14.15) have also met the target. Progress for objective 14.10 showed mixed results. Two objectives (14.14 and 14.16) have no baseline data.

Data Issues

Definitions

Operational definitions and data collection specifications for all year 2000 objectives in priority area 14 have been published in the National Center for Health Statistics *Statistical Notes* series (3). Data issues are discussed and references are cited for expanded discussions of the systems that provide data for the national objectives. When appropriate, the text of questionnaire items used to measure the objectives is also provided. See the appendix for further information.

In 1989 the National Center for Health Statistics (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 births comprise the denominator of infant mortality (including neonatal and postneonatal), maternal mortality, and fetal death rates, these rates are also affected. These changes are described in greater detail in other NCHS publications (4,5). 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. For characteristics of birth such as percent low birthweight (14.5) and percent receiving early care (14.11), the racial disparities tend to be larger when data are tabulated by race of mother rather than race of child.

The special target populations for racial subgroups in this priority area are being monitored with the “new” data by race of mother. Data prior to 1989 were recomputed by race of mother to allow comparable trend comparisons.

Studies indicate that infant mortality for minorities other than blacks from the mortality files have been seriously underestimated (6). Therefore, infant mortality (objective 14.1) for American Indians and Alaska Natives (AI/AN) and for Puerto Ricans is being monitored with data from the Linked Infant Birth and Infant Death Files, which categorizes deaths by the race of mother as reported on the birth certificate. The data from the linked files lag somewhat behind the regular vital statistics files. The most recent year of linked file data is 1996. Beginning in 1995, data are based on a period file using weighted data and are not strictly comparable with the unweighted cohort linked file data used for previous years (3). The 1995 weighted infant mortality rates are between less than 1 percent and 5 percent higher than unweighted rates for 1995 (1).

Data Source Descriptions

Data for objective 14.7 (severe complications of pregnancy) come from the National Hospital Discharge Survey (NHDS) maintained by NCHS. Data for the survey are obtained from approximately 480 hospitals throughout the United States. Data on race are not reported by many hospitals due to omission of a race field on hospital discharge reporting forms. More hospitals have automated their discharge systems in recent years and are using these forms (UB-82 and UB-92). A comparison of NHDS data with those who reported being hospitalized in the National Health Interview Survey (NHIS) (NHIS data were adjusted to exclude hospitalizations of 1 day or less) indicated that underreporting for whites was roughly 22 percent in 1991; the difference in reporting for blacks was negligible (7).

Data for 14.9 and 14.9a–c are from the Ross Mothers’ Survey (RMS) conducted by Abbot Laboratories. The RMS is an ongoing survey that is periodically mailed to a probability sample of new mothers selected from a list of names that represents approximately 80 percent of all national births.

Mothers are asked to recall the type of milk their baby was fed in the hospital and in each subsequent month up to the month of the survey. Mothers are considered to be breastfeeding if they used either human milk exclusively or human milk in combination with a supplemental bottled formula or cow’s milk.

In 1988–96, the questionnaires were mailed to mothers at the time their babies were 6 months old. In 1997 the methodology changed and questionnaires were mailed to a larger sample of mothers with babies 1–12 months of age. Therefore, although the overall sample is now approximately double the pre-1997 size, the number in the sample for each month (including 6 months) is considerably smaller than that of previous years. This change affects the stability of the 6-month figures now used to monitor this objective. Also beginning with data year 1997, the RMS no longer collects information on family income. Information on education of mother from the survey is available to measure socioeconomic status.

Breastfeeding among AI/AN mothers (14.9d) is tracked by the Pediatric Nutrition Surveillance System (PedNSS). The number of participating States and Indian tribes has varied from year to year. The fluctuations in State and tribal participation could affect the comparability of these data.

Data for objective 14.12 (preconception counseling by clinicians) are from the Primary Care Provider Surveys (PCPS). The sample was drawn from the membership rolls of professional organizations for pediatricians, nurse practitioners, family physicians, obstetricians/gynecologists, and internists. Response rates varied from 50–80 percent across these groups. The data on inquiry (from PCPS) about preconception counseling represent the proportion of providers who routinely asked 81–100 percent of their patients about family planning. The data on counseling refer to the proportion of providers who routinely counseled 81–100 percent of their patients who needed the services.

The Prevention in Primary Care Study (PPCS) was conducted in 1997–98 to update data from the PCPS. The design and items included in the 1997–98 study were similar to the PCPS, but a slightly different sampling frame was used and some items included in the 1992 surveys were not included in the PPCS. The professionals were sampled from listings of all licensed, active practitioners in the United States whose practices were at least 50 percent primary care. Because of low response rates from the other provider groups, updates are available only for nurse practitioners.

Comparability of Data Sources

Data on fetal alcohol syndrome (FAS) (objective 14.4) and spina bifida and other neural tube defects (14.17) are by year of birth. Cases received after the end of data year are assigned to year of the birth. Therefore, data for previous years include revisions and may differ from those previously published.

The increasing trends for FAS and spina bifida should be interpreted with caution. These data are obtained from the Birth Defects Monitoring Program (BDMP) from hospitals participating in the Commission on Professional and Hospital Activities (CPHA). The number of participating hospitals has declined substantially in recent years, resulting in a decrease in the proportion of U.S.

births covered by the BDMP. In 1981, 24 percent of all births (19 percent of black births) were covered compared with only 5 percent (and only 2 percent of black births) in 1993. As a result, the relatively small number of births in the BDMP may not be representative of all U.S. births. The increasing trend in FAS may also be a function of improved identification and reporting, rather than an actual increase in incidence of the condition. There was not a sufficient number of CPHA hospitals in 1994 to compute a reliable rate for either objective **14.4** or **14.17**. CDC is currently working with States to improve the surveillance of birth defects and hopes to have new tracking systems available in the near future.

The decreasing number of births in the BDMP has also made tracking FAS for AI/AN problematic (**14.4a**). In 1993 the BDMP contained only about 500 births (or 1 percent of AI/AN births) to AI/AN mothers compared with 13 percent in 1981. As a result, FAS data beyond 1990 for AI/AN are considered unreliable and are not shown in the table.

The data on substance use during pregnancy (**14.10**) come from multiple sources. The 1985 baseline data on smoking are from the NHIS and the 1988 baseline data on alcohol, cocaine, and marijuana come from the National Maternal and Infant Health Survey. The 1992 and 1994–96 updates on tobacco are from the information listed on the certificate of live birth and the 1993 updates on all substances are from the National Pregnancy and Health Survey. Although the estimates from these sources are relatively consistent, differences in methodology among the data systems suggest that changes over time should be interpreted with caution.

Proxy Data

Objective **14.13** calls for the percent of women enrolled in prenatal care who are offered screening and counseling on prenatal detection of fetal abnormalities. The data used to track the objective are the number of pregnant women (per 100 live births) who were screened for alpha-fetoprotein levels for the purpose of detecting babies with fetal Down's syndrome (8).

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Table 14. Maternal and infant health objective status

<i>Objective</i>		<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
14.1	Infant mortality (under 1 year per 1,000 live births)	1987	10.1	9.2	8.9	8.5	8.4	8.0	7.6	7.3	^P 7.1	7
	a. Black	1987	18.8	18.0	17.6	16.8	16.5	15.8	15.1	14.7	^P 13.7	11
	b. American Indian/Alaska Native	1984	13.4	13.1	11.3	---	---	---	9.0	10.0	---	8.5
	c. Puerto Rican ¹	1984	12.9	9.9	9.7	---	---	---	8.9	8.6	---	8
	d. Neonatal mortality (under 28 days per 1,000 live births)	1987	6.5	5.7	5.6	5.4	5.3	5.1	4.9	4.8	^P 4.7	4.5
	e. Neonatal mortality among black infants	1987	12.3	11.6	11.2	10.8	10.7	10.2	9.8	9.6	^P 9.0	7
	f. Neonatal mortality among Puerto Rican infants ¹	1984	8.6	6.9	6.1	---	---	---	6.1	5.6	---	5.2
	g. Postneonatal mortality (28 days–11 months per 1,000 live births)	1987	3.6	3.4	3.4	3.1	3.1	2.9	2.7	2.5	^P 2.4	2.5
	h. Postneonatal mortality among black infants	1987	6.4	6.4	6.3	6.0	5.8	5.6	5.3	5.1	^P 4.7	4
	i. Postneonatal mortality among American Indian/Alaska Native infants	1984	7.0	7.0	5.8	---	---	---	5.1	5.3	---	4
	j. Postneonatal mortality among Puerto Rican infants ¹	1984	4.3	3.0	3.5	---	---	---	2.8	3.0	---	2.8
14.2	Fetal deaths (20 weeks or more gestation per 1,000 live births plus fetal deaths)	1987	7.6	7.5	7.3	7.4	7.1	7.0	7.0	6.9	---	5
	a. Black	1987	13.1	13.3	12.8	13.3	12.8	12.5	12.7	12.5	---	7.5
14.3	Maternal mortality (per 100,000 live births)	1987	6.6	8.2	7.9	7.8	7.5	8.3	7.1	7.6	^P 7.5	3.3
	a. Black	1987	14.9	22.4	18.3	20.8	20.5	18.5	22.1	20.3	^P 18.3	5
14.4	Fetal alcohol syndrome (per 1,000 live births)	1987	0.22	0.40	0.37	0.52	0.67	---	---	---	---	0.12
	a. American Indian/Alaska Native	1987	4.0	5.2	---	---	---	---	---	---	---	2.0
	b. Black	1987	0.8	1.4	1.9	2.3	5.4	---	---	---	---	0.4
14.5	Low birthweight (less than 2,500 grams)	1987	6.9%	7.0%	7.1%	7.1%	7.2%	7.3%	7.3%	7.4%	^P 7.5%	5%
	Very low birthweight (less than 1,500 grams)	1987	1.2%	1.3%	1.3%	1.3%	1.3%	1.3%	1.4%	1.4%	^P 1.4%	1%
	a. Low birthweight among black infants	1987	13.0%	13.3%	13.6%	13.3%	13.3%	13.2%	13.1%	13.0%	^P 13.0%	9%
	b. Very low birthweight among black infants	1987	2.8%	2.9%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	^P 3.0%	2%
	c. Low birthweight among Puerto Rican infants ¹	1990	9.0%	...	9.4%	9.2%	9.2%	9.1%	9.4%	9.3%	---	6%
	d. Very low birthweight among Puerto Rican infants ¹	1990	1.6%	...	1.7%	1.7%	1.7%	1.6%	1.8%	1.7%	---	1%
14.6	Recommended weight gain during pregnancy	1980	^{2,a} 68%	³ 75%	---	---	---	---	---	---	---	85%
14.7	Severe complications of pregnancy (per 100 deliveries)	1987	22	18	18	17	15	15	14	14	---	15
	a. Black	1991	28	...	...	26	24	25	24	23	---	16
14.8	Cesarean delivery (per 100 deliveries)	1987	24.4	23.5	23.5	23.6	22.8	22.0	20.8	21.8	---	15
	a. Primary (first time) cesarean delivery	1987	17.4	16.8	17.1	16.8	16.3	15.8	15.5	15.7	---	12
	b. Repeat cesarean deliveries (females with previous cesarean delivery)	1987	91.2	79.6	75.8	74.9	74.6	70.3	64.5	66.4	---	65
14.9*	Breastfeeding											
	During early postpartum period ⁴	1988	54%	52%	53%	54%	56%	57%	60%	59%	62%	75%
	a. Low-income mothers	1988	^a 34%	35%	33%	35%	38%	40%	42%	42%	---	75%
	b. Black mothers	1988	25%	23%	26%	28%	31%	33%	37%	37%	41%	75%
	c. Hispanic mothers	1988	51%	48%	52%	52%	56%	58%	61%	61%	64%	75%
	d. American Indian/Alaska Native mothers	1988	47%	47%	46%	53%	51%	44%	52%	54%	56%	75%
	At age 6 months	1988	^a 20%	18%	18%	19%	19%	20%	22%	22%	26%	50%
	a. Low-income mothers	1988	9%	8%	8%	9%	10%	10%	11%	12%	---	50%
	b. Black mothers	1988	^a 7%	6%	7%	8%	9%	10%	11%	11%	15%	50%
	c. Hispanic mothers	1988	^a 14%	13%	15%	16%	16%	18%	20%	20%	25%	50%

Table 14. Maternal and infant health objective status—Con.

Objective		Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	Target 2000
14.10	d. American Indian/Alaska Native mothers	1988	28%	27%	22%	24%	28%	24%	24%	24%	25%	50%
	Abstinence from alcohol, tobacco, and drug use during pregnancy											
	Tobacco	1985	75%	79%	80%	83%	80%	85%	86%	86%	---	90%
	Alcohol	1988	79%	---	---	---	81%	---	---	---	---	95%
	Cocaine	1988	99%	---	---	---	99%	---	---	---	---	100%
	Marijuana	1988	98%	---	---	---	97%	---	---	---	---	100%
14.11	Prenatal care in the first trimester (percent of live births)	1987	76.0%	75.8%	76.2%	77.7%	78.9%	80.2%	81.3%	81.9%	^P 82.5%	90%
	a. Black	1987	60.8%	60.6%	61.9%	63.9%	66.0%	68.3%	70.4%	71.4%	^P 72.3%	90%
	b. American Indian/Alaska Native	1987	57.6%	57.9%	59.9%	62.1%	63.4%	65.2%	66.7%	67.7%	---	90%
	c. Hispanic ¹	1987	61.0%	60.2%	61.0%	64.2%	66.6%	68.9%	70.8%	72.2%	^P 73.7%	90%
14.12*	Age-appropriate preconception counseling by clinicians . . . . .	...	---	---	---	---	---	---	---	---	---	60%
	Percent of clinicians routinely providing service to 81-100% of patients											
	Inquiry about family planning (female, childbearing age)											
	Pediatricians	1992	18%	...	...	...	---	---	---	---	5.6. . .	60%
	Nurse practitioners	1992	53%	...	...	...	---	---	---	---	⁵ 42%	60%
	Obstetricians/gynecologists	1992	48%	...	...	...	---	---	---	---	5.6. . .	60%
	Internists	1992	24%	...	...	...	---	---	---	---	5.6. . .	60%
	Family physicians	1992	28%	...	...	...	---	---	---	---	5.6. . .	60%
	Counseling about family planning											
	Pediatricians	1992	36%	...	...	...	---	---	---	---	5.6. . .	60%
	Nurse practitioners	1992	53%	...	...	...	---	---	---	---	⁵ 40%	60%
	Obstetricians/gynecologists	1992	65%	...	...	...	---	---	---	---	5.6. . .	60%
	Internists	1992	26%	...	...	...	---	---	---	---	5.6. . .	60%
	Family physicians	1992	36%	...	...	...	---	---	---	---	5.6. . .	60%
14.13	Screening for fetal abnormalities (percent of live births)	1988	29%	---	---	51%	---	---	---	---	---	90%
14.14	Pregnant women and infants receiving risk-appropriate care . . . . .	...	---	---	---	---	---	---	---	---	---	90%
14.15	Newborn screening and treatment											
	Screened by State-sponsored programs for genetic disorders and other conditions . . . . .	...	---	---	---	---	---	---	---	---	---	95%
	Testing positive for disease and receiving appropriate treatment . . . . .	...	---	---	---	---	---	---	---	---	---	90%
	Sickle cell anemia screening	1987	⁷ 33%	⁸ 89%	---	---	---	---	---	---	---	90%
	Black infants	1987	⁷ 57%	⁹ 77%	---	---	---	---	---	---	---	95%
	Galactosemia screening (38 States)	1987	70%	97%	---	---	---	---	---	---	---	95%
	Newborns diagnosed positive for sickle cell anemia receiving treatment . . . . .	...	---	95%	---	---	---	---	---	---	---	90%
	Newborns diagnosed positive for galactosemia receiving treatment . . . . .	...	---	100%	---	---	---	---	---	---	---	95%

Table 14. Maternal and infant health objective status—Con.

<i>Objective</i>	<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
14.16 Babies receiving primary care .....	...	---	---	---	---	---	---	---	---	---	90%
14.17 Spina bifida and other neural tube defects (per 10,000 live births)	1990	6	...	7	6	7	---	---	---	---	3

--- Data not available.

... Category not applicable.

^aBaseline has been revised.

^pPreliminary data.

¹Excludes data from States lacking an Hispanic-origin item on their birth or death certificate or for which Hispanic-origin data were not of sufficient quality. See appendix.

²1980 data for married females who had a full-term live birth and prenatal care.

³1988 data.

⁴Breastfed in hospital.

⁵1997–98 data.

⁶Response rate for this group was too low to produce reliable estimates.

⁷Based on 20 States reporting.

⁸Based on 43 States reporting.

⁹Based on 9 States reporting.

NOTE: Data may include revisions and, therefore, may differ from data previously published in these reports and other publications.

<i>Objective number</i>	<i>Data source</i>
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	Birth Defects Monitoring Program, CDC, NCEH.
14.5, 14.5a–d	National Vital Statistics System, CDC, NCHS.
14.6	Baseline: National Natality Survey, CDC, NCHS. Update: National Maternal and Infant Health Survey, CDC, NCHS.
14.7	National Hospital Discharge Survey, CDC, NCHS.
14.8, 14.8a,b	National Hospital Discharge Survey, CDC, NCHS.
14.9*, 14.9a–c	Ross Laboratories Mother Survey.
14.9d	Pediatric Nutrition Surveillance System, CDC, NCCDPHP.
14.10	Baseline: National Maternal and Infant Health Survey, CDC, NCHS. 1992 and 1994–96 updates: National Vital Statistics System, CDC, NCHS. 1993 updates: National Pregnancy and Health Survey, NIH, NIDA.
14.11, 14.11a–c	National Vital Statistics System, CDC, NCHS.
14.12*	Baseline: Primary Care Provider Surveys, OPHS, ODPHP. Update: Prevention in Primary Care Study, American College of Preventive Medicine.
14.13	College of American Pathologists, Foundation for Blood Research.
14.15	Council of Regional Networks for Genetic Services.
14.17	Birth Defects Monitoring Program, CDC, NCEH.

*Duplicate objective. See full text of objective following this table.

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.

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 birthweight to an incidence of no more than 5 percent of live births and very low birthweight to no more than 1 percent of live births.

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

14.5a: Reduce low birthweight among blacks to an incidence of no more than 9 percent of live births.

14.5b: Reduce very low birthweight among blacks to no more than 2 percent of live births.

14.5c: Reduce low birthweight among Puerto Ricans to an incidence of no more than 6 percent of live births.

14.5d: Reduce very low birthweight among Puerto Ricans to no more than 1 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 is measured using hospitalizations due to pregnancy-related complications.

14.7a: Reduce severe complications of pregnancy among blacks to no more than 16 per 100 deliveries.

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, increase abstinence from alcohol by pregnant women to at least 90 percent and increase abstinence from cocaine and marijuana to 100 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: 5.10

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.

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

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.

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.

14.17: Reduce the incidence of spina bifida and other neural tube defects to 3 per 10,000 live births.

*Duplicate objective.

Priority Area 15 Heart Disease and Stroke

Background

Between 1979 and 1995, the death rate for cardiovascular disease has continued to decline dramatically: 31 percent for all cardiovascular disease, 37 percent for coronary heart disease, and 36 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, cigarette smoking, obesity, and physical inactivity. High blood pressure is one of the most important modifiable risk factors for cardiovascular disease (3).

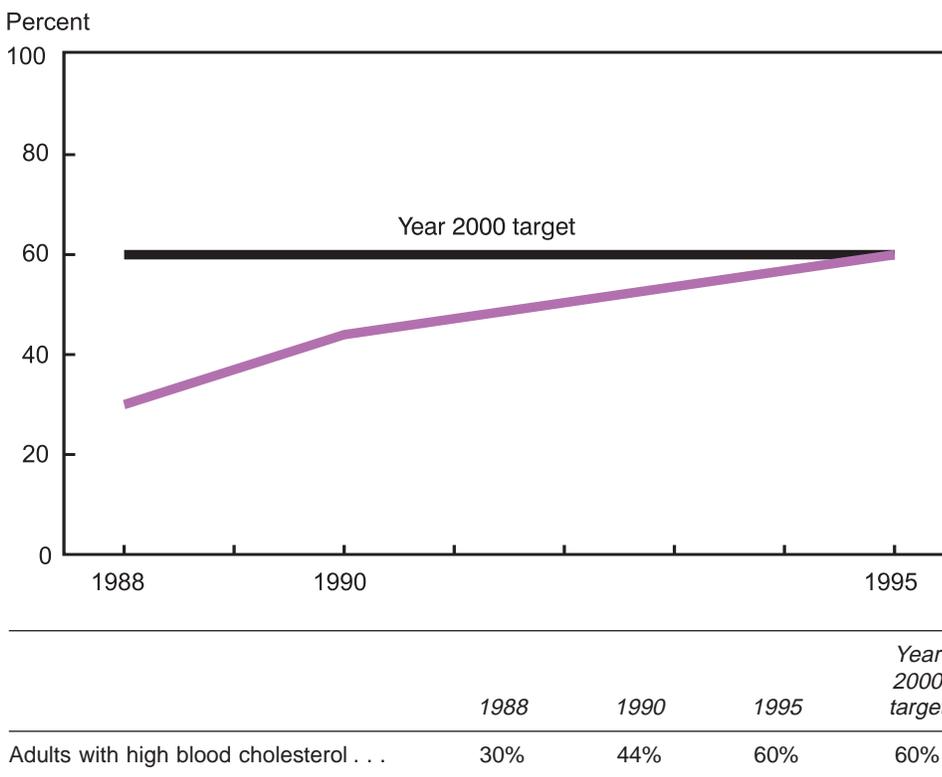
According to the National Health and Nutrition Examination Survey (NHANES), the average blood pressure levels have dropped and the prevalence of high blood pressure has declined from 30 percent of adults (1976–80) to 23 percent (1988–94) over the past decade (4). In addition, the mean serum cholesterol level fell from 213 mg/dL in 1976–80 to 203 mg/dL in 1988–94 and the percentage of the population with high blood cholesterol fell from 27 percent to below the year 2000 target at 19 percent.

Data Summary

Highlights

A number of objectives in the heart disease and stroke priority area have shown progress. Mortality due to coronary heart disease (15.1) and stroke (15.2) declined from the 1987 baseline through 1996 in the population as a whole. However, mortality for both causes of death among black people is higher and the decline in mortality over this period was not as substantial as that of the total population. The proportion of people who know their blood pressure values (15.13) has increased. The mean serum cholesterol level has decreased (15.6) and there has been an increase in the proportion of the

Figure 16. Proportion of people 18 years and over with high blood cholesterol who are aware of their condition and are taking action to reduce their blood cholesterol: United States, 1988, 1990, 1995, and year 2000 target for objective 15.8



SOURCE: 1988 and 1990 data: Food and Drug Administration, Health and Diet Survey. 1995 data: National Institutes of Health, Cholesterol Awareness Survey.

population who have their cholesterol measured (15.14). The objectives for high blood cholesterol prevalence (15.7) and awareness of a high blood cholesterol condition (15.8) (see figure 16) have met the year 2000 targets. However, the rate of end-stage renal disease (15.3) and the proportion of overweight people (15.10) have increased, moving away from the year 2000 targets.

Summary of Progress

Of the 17 objectives in the heart disease and stroke priority area, 2 objectives (15.7 and 15.8) have met the targets, and data for 12 objectives show improvements toward meeting the year 2000 targets (15.1, 15.2, 15.4, 15.6, 15.9, and 15.11–15.17). Three objectives are moving away from the year 2000 targets (15.3, 15.5, and 15.10).

Data Issues

Definitions

Coronary heart disease deaths (15.1) are defined by ICD–9 codes 402, 410–414, 429.2. These are different from the codes used to define the category “Diseases of heart” which often appears in published tables (see appendix text and table III).

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 or equal to 140 mm Hg systolic and/or 90 mm Hg diastolic and/or taking antihypertensive medication. The estimates used to track this objective define control as using antihypertensive medication only and do not include other nonpharmacologic treatments such as weight loss, low sodium diets, and restriction of alcohol.

High blood cholesterol (15.7) is defined as serum cholesterol levels of 240 mg/dL or higher (5).

Overweight (**15.10**) for adults is defined as a body mass index (BMI) at or above the sex-specific 85th percentile of the 1976–80 NHANES II reference population 20–29 years of age. For adolescents, overweight is the sex- and age-specific 85th percentile from NHANES II (see Note with the text of objective **15.10**). BMI cutoff points for adults are 27.8 kilograms per meter squared for males and 27.3 kilograms per meter squared for females. Current international research indicates that a lower BMI of 25 kilograms per meter squared may be more clinically relevant to increased risk of cardiovascular disease (6,7).

Beginning in 1992 the definition of current smoker (**15.12**) was modified to specifically include persons who smoked only “some days.” Prior to 1992, a current smoker was defined by the questions “Have you ever smoked 100 cigarettes in your lifetime?” and “Do you smoke now?” In 1992, data were collected and analyzed for one-half the respondents using these smoking questions and for the other one-half of respondents using a revised smoking question: “Do you smoke everyday, some days, or not at all?” The 1992 estimate combines data collected using both sets of questions. Updates after 1992 are based completely on the revised definition, which is considered a more complete estimate of smoking prevalence. The effect of the new definition is a small increase in the number of smokers.

Objective **15.15** seeks to increase the proportion of primary care providers who provide appropriate therapy for high blood cholesterol. This objective is being tracked by the median blood cholesterol level at initiation of diet and drug therapy. In 1990, 54 percent of physicians reported that they initiate diet therapy and 60 percent initiate drug therapy at these median levels.

Comparability of Data Sources

Objective **15.5**, to increase the proportion of people with hypertension who are taking action to control their blood pressure, is measured by self-reported data from the National Health Interview Survey (NHIS). In this survey, people with high blood pressure are defined as those who report that they have been told they have high blood pressure on two or more occasions by a doctor or health professional. These data are limited to the proportion of people

with hypertension who are aware of their condition. For the 1985 baseline, NHIS respondents reporting high blood pressure were asked if they were told to take blood pressure medication, diet to lose weight, cut down on salt, or exercise. In 1991 and 1993, the only actions asked about to reduce high blood pressure were taking medication or following doctor’s advice to diet.

Overweight (**15.10**) is being tracked with two data sources. The primary data source is NHANES, which provided baseline data for most of the overweight objectives and the 1988–94 updates; these data are derived from measured height and weight. The second data source is NHIS. This survey provides interim estimates shown in an earlier publication (8), updates for Hispanic females and American Indians/Alaska Natives, and all data for people with disabilities. NHIS estimates are based on self-reported heights and weights and are not comparable with the actual measured data from NHANES; prevalence estimates of overweight from self-reported height and weight are lower. Trends from the NHIS self-report measures, like those from NHANES, show a steady increase in prevalence of overweight; this increase is, however, different in magnitude from that observed in the data derived from measured height and weight.

Objective **15.11** (light-to-moderate physical activity) is being tracked with the NHIS. The list of activities asked by the NHIS has not been identical from year to year. The 1985 and 1990 surveys did not ask about some activities for people 65 years and over; thus, the data shown are for people 18–64 years of age. The 1991 and 1995 surveys asked about some different activities than the previous surveys, but people of all age groups were asked the same questions. Because of these differences, 1985 and 1990 data are not comparable to 1991 and 1995 data. (See text for Priority Area 1 for more information.)

Objective **15.13** addresses blood pressure screening and whether people know if their blood pressure is normal or high. Baseline data and 1990 updates 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 were given the diastolic and systolic values of the measure. The 1991 and 1993–94 updates are the proportion of people 18 years

and over who had their blood pressure checked and can state whether their blood pressure was high, low, borderline, or normal.

The 1985 and 1992 data for objective **15.16** are from the National Survey of Worksite Health Promotion Activities, which were telephone surveys of nongovernment worksites. Worksites were sampled, because different worksites within the same company could have different sets of health promotion activities. Both active (for example, classes) and passive (for example, brochures) methods were counted as worksite health promotion activities. The 1995 update comes from the Centers for Disease Control and Prevention-sponsored Worksite Benchmark Survey, which used a methodology very similar to the 1992 survey, but did not include passive methods of health promotion (9,10).

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Table 15. Heart disease and stroke objective status

	Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	Target 2000
15.1*	Coronary heart disease deaths (age adjusted per 100,000)	1987	135	122	118	114	114	110	108	105	---	100
	a. Black	1987	168	158	156	151	154	147	147	140	---	115
15.2*	Stroke deaths (age adjusted per 100,000)	1987	30.4	27.7	26.8	26.2	26.5	26.5	26.7	26.4	^P 25.9	20.0
	a. Black	1987	52.5	48.4	46.8	45.0	45.0	45.4	45.0	44.2	^P 42.0	27.0
15.3	End-stage renal disease (per 100,000)	1987	14.4	18.4	20.5	22.3	22.7	25.8	27.5	27.6	---	13.0
	a. Black	1987	34.0	43.0	48.6	52.7	53.6	61.1	65.1	65.1	---	30.0
15.4*	Controlled high blood pressure											
	People with high blood pressure (18–74 years)	1976–80	11%	---	¹ 29%	---	---	---	---	---	---	50%
	a. Male with high blood pressure (18–74 years)	1976–80	6%	---	¹ 22%	---	---	---	---	---	---	40%
	b. Mexican American with high blood pressure (18–74 years)	1988–91	14%	...	...	---	---	---	---	---	---	50%
	c. Female 70 years and over with high blood pressure	1988–91	19%	...	...	---	---	---	---	---	---	50%
15.5	Taking action to control blood pressure											
	People with high blood pressure 18 years and over ²	1985	79%	80%	71%	---	72%	71%	---	---	---	90%
	a. White hypertensive male 18–34 years ²	1985	51%	54%	34%	---	38%	30%	---	---	---	80%
	b. Black hypertensive male 18–34 years ²	1985	63%	56%	40%	---	64%	50%	---	---	---	80%
15.6*	Mean serum cholesterol level (mg/dL)											
	People 20–74 years	1976–80	213	---	---	---	---	³ 203	---	---	---	200
	Male 20–74 years	1976–80	211	---	---	---	---	³ 202	---	---	---	200
	Female 20–74 years	1976–80	215	---	---	---	---	³ 204	---	---	---	200
15.7*	High blood cholesterol prevalence											
	People 20–74 years	1976–80	27%	---	---	---	---	³ 19%	---	---	---	20%
	Male 20–74 years	1976–80	25%	---	---	---	---	³ 18%	---	---	---	20%
	Female 20–74 years	1976–80	29%	---	---	---	---	³ 20%	---	---	---	20%
15.8	Awareness of high blood cholesterol condition											
	People 18 years and over with high blood cholesterol	1988	30%	44%	---	---	---	---	60%	---	---	60%
15.9*	Dietary fat intake among people 2 years and over⁴											
	National Health and Nutrition Examination Survey											
	Average percent of calories from total fat	1976–80	⁵ 36%	---	---	---	---	³ 34%	---	---	---	30%
	Average percent of calories from saturated fat	1976–80	⁵ 13%	---	---	---	---	³ 12%	---	---	---	10%
	Percent who met goal for fat	1988–94	^a 27%	...	...	...	...	...	---	---	---	50%
	Percent who met goal for saturated fat	1988–94	^a 29%	...	...	...	...	...	---	---	---	50%
	Continuing Survey of Food Intakes by Individuals											
	Average percent of calories from total fat	1989–91	34%	...	...	---	---	33%	33%	33%	---	30%
	Average percent of calories from saturated fat	1989–91	12%	...	...	---	---	11%	11%	11%	---	10%
	Percent who met goal for fat	1989–91	22%	...	...	---	---	32%	33%	34%	---	50%
	Percent who met goal for saturated fat	1989–91	21%	...	...	---	---	34%	35%	36%	---	50%
15.10*	Overweight prevalence											
	(Based on measured height and weight unless otherwise indicated)											
	People 20–74 years	1976–80	26%	---	---	---	---	^{3,6} 35%	---	---	---	20%
	Male	1976–80	24%	---	---	---	---	^{3,6} 34%	---	---	---	20%

Table 15. Heart disease and stroke objective status—Con.

<i>Objective</i>	<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
Female	1976–80	27%	---	---	---	---	^{3,6} 37%	---	---	---	20%
Adolescents 12–19 years	1976–80	15%	---	---	---	---	³ 24%	---	---	---	15%
a. Low-income female 20–74 years	1976–80	37%	---	¹ 47%	---	---	---	---	---	---	25%
b. Black female 20–74 years	1976–80	44%	---	---	---	---	^{3,6} 52%	---	---	---	30%
c. Hispanic female 20–74 years	...	---	---	---	---	---	---	---	---	---	25%
Hispanic female 20 years and over (self-reported)	...	---	33%	32%	32%	33%	32%	35%	---	---	...
Mexican American female 20–74 years	1982–84	39%	---	---	---	---	^{3,6} 50%	---	---	---	...
Cuban female 20–74 years	1982–84	34%	---	---	---	---	---	---	---	---	...
Puerto Rican female 20–74 years	1982–84	37%	---	---	---	---	---	---	---	---	...
d. American Indian/Alaska Native 20 years and over	1984–88	²⁹ –75%	---	⁷ 40%	⁷ 36%	⁷ 48%	⁷ 34%	⁷ 43%	---	---	30%
e. People with disabilities 20 years and over	1985	36%	---	38%	37%	38%	38%	40%	---	---	25%
f. Females with high blood pressure 20–74 years	1976–80	50%	---	---	---	---	---	---	---	---	41%
g. Males with high blood pressure 20–74 years	1976–80	39%	---	---	---	---	---	---	---	---	35%
h. Mexican American male 20–74 years	1982–84	30%	---	---	---	---	^{3,6} 37%	---	---	---	25%
15.11* Light to moderate physical activity											
People 6 years and over	...	---	---	---	---	---	---	---	---	---	30%
People 18–74 years											
5 or more times per week	1985	⁸ 22%	^{8,9} 23%	24%	---	---	---	23%	---	---	30%
7 or more times per week	1985	⁸ 16%	^{8,9} 16%	17%	---	---	---	16%	---	---	30%
a. Hispanic 18 years and over											
5 or more times per week	1991	20%	...	...	---	---	---	22%	---	---	25%
15.12* Cigarette smoking prevalence											
People 18 years and over	1987	29%	25%	26%	¹⁰ 27%	25%	26%	25%	---	---	15%
Male	1987	31%	28%	28%	¹⁰ 29%	28%	28%	27%	---	---	15%
Female	1987	27%	23%	23%	¹⁰ 25%	22%	23%	23%	---	---	15%
a. People with high school education or less 20 years and over	1987	34%	31%	31%	¹⁰ 32%	30%	31%	30%	---	---	20%
b. Blue-collar workers 18 years and over	1987	41%	36%	36%	¹⁰ 36%	34%	39%	36%	---	---	20%
c. Military personnel	1988	42%	---	---	¹⁰ 35%	---	---	32%	---	---	20%
d. Black 18 years and over	1987	33%	26%	29%	¹⁰ 28%	26%	27%	26%	---	---	18%
e. Hispanic 18 years and over	1987	24%	23%	20%	¹⁰ 21%	20%	20%	18%	---	---	15%
f. American Indian/Alaska Native 18 years and over	1979–87	¹¹ 42–70%	38%	31%	¹⁰ 40%	39%	40%	35%	---	---	20%
g. Southeast Asian male	1984–88	55%	¹² 35%	^{12,36} –41%	---	---	---	---	---	---	20%
h. Female of reproductive age (18–44 years)	1987	29%	26%	27%	¹⁰ 28%	26%	27%	26%	---	---	12%
i. Pregnant females	1985	25%	19%	20%	---	20%	---	18%	---	---	10%
j. Females who use oral contraceptives	1983	36%	¹³ 26%	---	---	---	---	24%	---	---	10%
15.13 Knowledge of blood pressure values											
People given blood pressure values	1985	61%	76%	---	---	---	---	---	---	---	90%
People who can state blood pressure is high, low, or normal	...	---	---	84%	---	85%	84%	---	---	---	...
a. Mexican American male 18 years and over	1991	69%	...	...	---	68%	68%	---	---	---	90%
15.14 Blood cholesterol checked in past 5 years											
People 18 years and over	1993	66%	...	...	...	...	---	---	---	---	75%

Table 15. Heart disease and stroke objective status—Con.

<i>Objective</i>	<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
Ever checked	1988	59%	65%	63%	---	71%	---	75%	---	---	...
Within past 2 years	1988	52%	---	50%	---	54%	---	---	---	---	...
Ever checked											
a. Black 18 years and over	1991	56%	...	...	---	68%	---	---	---	---	75%
b. Mexican American 18 years and over	1991	42%	...	...	---	55%	---	---	---	---	75%
c. American Indian/Alaska Native 18 years and over	1991	46%	...	...	---	60%	---	---	---	---	75%
Within past 2 years											
d. Mexican American 18 years and over	1991	33%	...	...	---	38%	---	---	---	---	75%
e. American Indian/Alaska Native 18 years and over	1991	38%	...	...	---	50%	---	---	---	---	75%
f. Asian/Pacific Islander 18 years and over	1991	45%	...	...	---	44%	---	---	---	---	75%
15.15 Primary care providers who provide appropriate therapy for high blood cholesterol . . . . .	...	---	---	---	---	---	---	---	---	---	75%
Median cholesterol level when diet therapy is initiated (mg/dL)	1986	240–259	200–219	---	---	---	---	200–219	---	---	...
Median cholesterol level when drug therapy is initiated (mg/dL)	1986	300–319	240–259	---	---	---	---	240–259	---	---	...
15.16 Worksite blood pressure/cholesterol education programs											
High blood pressure and/or cholesterol activity	1992	35.0%	...	...	...	---	---	---	---	---	50%
High blood pressure activity	1985	16.5%	---	---	¹⁴ 29%	---	---	---	---	---	...
Nutrition education activity	1985	16.8%	---	---	31%	---	---	---	---	---	...
Blood pressure screening . . . . .	...	---	---	---	32%	---	---	16%	---	---	...
15.17 Laboratory accuracy in cholesterol measurement	1985	53%	¹⁵ 84%	---	---	---	---	---	---	---	90%

--- Data not available.

... Category not applicable.

^aBaseline has been revised.

^pPreliminary data.

¹1988–91 data.

²For 1985 and 1990 actions include medication, dieting to lose weight, cutting down on salt, or exercising. Beginning in 1991, actions include taking medication or dieting to lose weight only.

³1988–94 data.

⁴Estimates are from 1-, 2-, or 3-day dietary data. See text for explanation.

⁵For people up to 74 years.

⁶People 20 years and over.

⁷Estimate derived from self-reported height and weight.

⁸Data are for people 18–64 years of age.

⁹Operational definition changed for subsequent tracking data.

¹⁰In 1992, the definition of “current” changed to include “some days” (intermittent smoking).

¹¹Estimates for different tribes.

¹²Vietnamese males only.

¹³1988 data.

¹⁴Includes classes, individual counseling, and resource materials.

¹⁵1987 data.

NOTE: Data may include revisions and, therefore, may differ from data previously published in these reports and other publications.

<i>Objective number</i>	<i>Data source</i>
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*, 15.4a–c	National Health and Nutrition Examination Survey, CDC, NCHS.
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 and 1990 data: Health and Diet Survey, FDA. 1995 update: Cholesterol Awareness Survey, NIH, NHLBI.
15.9*	1976–80 baselines and 1988–94 data: National Health and Nutrition Examination Survey, CDC, NCHS. 1989–91 baselines and 1994–96 updates: Continuing Survey of Food Intakes by Individuals, USDA.
15.10*, 15.10a,b,f,g	National Health and Nutrition Examination Survey, CDC, NCHS.
15.10c,h	Data for Hispanic: National Health Interview Survey, CDC, NCHS. Baseline for Mexican American, Cuban, Puerto Rican: Hispanic Health and Nutrition Examination Survey, CDC, NCHS. Updates for Mexican American: National Health and Nutrition Examination Survey, CDC, NCHS.
15.10d	Baseline: IHS, OPEL. Updates: National Health Interview Survey, CDC, NCHS.
15.10e	National Health Interview Survey, CDC, NCHS.
15.11*, 15.11a	National Health Interview Survey, CDC, NCHS.
15.12*, 15.12a,b,d,e,h	National Health Interview Survey, CDC, NCHS.
15.12c	Worldwide Survey of Substance Abuse and Health Behaviors Among Military Personnel, DoD, OASD.
15.12f	Baseline: CDC. Updates: National Health Interview Survey, CDC, NCHS.
15.12g	Baseline: Local surveys. 1990 update: Jenkins CH. Cancer risks and prevention practices among Vietnamese refugees. <i>Western J of Med</i> 153:34–9. 1990. 1991 update: Jenkins CNH, et al. Tobacco use in Vietnam: Prevalence, predictors, and the role of the transnational tobacco corporations. <i>JAMA</i> 227(21):1726–31. 1997; Jenkins CNH, et al. The effectiveness of a media-led intervention to reduce smoking among Vietnamese-American men. <i>AJPH</i> 87(6):1031–4. 1997.
15.12i	Baseline and 1991 update: National Health Interview Survey, CDC, NCHS. 1993 update: National Health and Pregnancy Survey, NIH, NIDA.
15.12j	1983 and 1988 data: Behavioral Risk Factor Surveillance System, CDC, NCCDPHP. 1995 update: National Survey of Family Growth, CDC, NCHS.
15.13	National Health Interview Survey, CDC, NCHS.
15.14	Baseline: Health and Diet Survey, FDA. 1991 and 1993 updates: National Health Interview Survey, CDC, NCHS. 1995 update: Cholesterol Awareness Survey, NIH, NHLBI.
15.15	Cholesterol Awareness Physicians Survey, NIH, NHLBI.
15.16	1985 and 1992 data: National Survey of Worksite Health Promotion Activities, OPHS, ODPHP. 1995 data: Business Responds to AIDS Benchmark Survey, CDC, NCHSTP.
15.17	Comprehensive Chemistry Survey of Laboratories Using Enzymatic Methods, College of American Pathologists.

*Duplicate objective. See full text of objective following this table.

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.

Duplicate objectives: 2.22 and 3.18

15.2a*: Reduce stroke deaths among blacks to no more than 27 per 100,000.

Duplicate objectives: 2.22a and 3.18a

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. Control of hypertension does not include nonpharmacologic treatment.

Duplicate objective: 2.26

15.4a*: Increase to at least 40 percent the proportion of men with high blood pressure whose blood pressure is under control.

Duplicate objective: 2.26a

15.4b*: Increase to at least

50 percent the proportion of Mexican-Americans with high blood pressure whose blood pressure is under control.

Duplicate objective: 2.26b

15.4c*: Increase to at least 50 percent the proportion of women 70 years and older with high blood pressure whose blood pressure is under control.

Duplicate objective: 2.26c

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: People with high blood pressure are defined in the National Health Interview Survey as those who are told on two or more occasions by a physician or other health professional that they had blood pressure equal to or greater than 140 mm Hg systolic and/or 90 mm Hg diastolic and/or taking hypertensive medication. 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.

Duplicate objective: 2.27

15.7*: Reduce the prevalence of blood cholesterol levels of 240 mg/dL or greater to no more than 20 percent among adults.

Duplicate objective: 2.25

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. Actions 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. In addition, increase to at least 50 percent the proportion of people aged 2 and older who meet the Dietary Guidelines’ average daily goal of no more than 30 percent of calories from fat, and increase to at least 50 percent the proportion of people aged 2 and older who meet the average daily goal of less than 10 percent of calories from saturated fat.

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.

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.

Duplicate objectives: 1.2g, 2.3g, and 17.12g

15.10h*: Reduce overweight to a prevalence of no more than 25 percent among Mexican-American men.

Duplicate objectives: 1.2h, 2.3h, and 17.12h

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 and is at least equivalent to sustained walking. 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

15.11a*: Increase to at least 25 percent the proportion of Hispanics aged 18 and older who engage regularly, preferably daily, in light to moderate physical activity for at least 30 minutes per day 5 or more times per week.

Duplicate objectives: 1.3a and 17.13a

15.12*: Reduce cigarette smoking to a prevalence of no more than 15 percent among people aged 18 and older.

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 18 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 18 and older.

Duplicate objectives: 3.4d and 16.6d

15.12e*: Reduce cigarette smoking to a prevalence of no more than 15 percent among Hispanics aged 18 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.

15.13a: Increase to at least 90 percent the proportion of Mexican-American men who have had their blood pressure measured within the preceding 2 years and can state whether their blood pressure was normal or high.

15.14: Increase to at least 75 percent the proportion of adults who have had their blood cholesterol checked within the preceding 5 years.

15.14a: Increase to at least 75 percent the proportion of blacks who have ever had their blood cholesterol checked.

15.14b: Increase to at least 75 percent the proportion of Mexican-Americans who have ever had their blood cholesterol checked.

15.14c: Increase to at least 75 percent the proportion of American Indians/Alaska Natives who have ever had their blood cholesterol checked.

15.14d: Increase to at least 75 percent the proportion of Mexican-Americans who have had their blood cholesterol checked within the preceding 2 years.

15.14e: Increase to at least 75 percent the proportion of American Indians/Alaska Natives who have had their blood cholesterol checked within the preceding 2 years.

15.14f: Increase to at least 75 percent the proportion of Asian/Pacific Islanders who have had their blood cholesterol checked within the preceding 2 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: Treatment recommendations at baseline 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. Current treatment recommendations are described in the Second Report of the Expert Panel on the Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults, released in 1993. 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.

Priority Area 16 Cancer

Background

Cancer is the second leading cause of death in the United States, accounting for nearly one out of every four deaths (1). It is estimated that 1,252,000 Americans were diagnosed with cancer in 1995 and approximately 547,000 died of cancer that year. These American Cancer Society estimates are based on an increase in the number of older Americans who are at higher risk for developing the disease; one-half of the cases occur in persons 67 years of age and over (2).

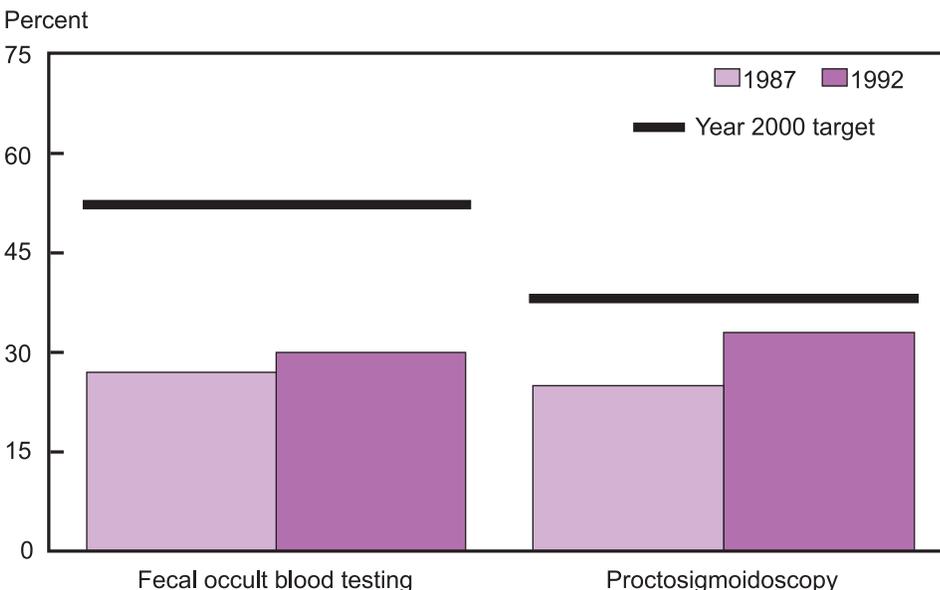
Although cancer remains a major health problem in the United States, there is evidence that the prospects of preventing and surviving cancer continue to improve. Specifically, perhaps as much as 50 percent or more of cancer incidence can be prevented through smoking cessation and changed dietary habits (3). The scientific evidence for smoking as a cause of cancer has been recognized for over 40 years. The evidence for diet has emerged over the past decade and has progressed to the extent that recommendations for prudent dietary changes, such as less fat and more fruits and vegetables, can now be made.

Data Summary

Highlights

Trends for most objectives related to cancer mortality (16.1–16.3, 16.5, and 16.17) improved for the total population in 1996. The rate for cervical cancer mortality (16.4) remained level in 1996. For all cancers (16.1) the mortality rate in 1996 met the year 2000 target. For lung cancer mortality, year 2000 objective 16.2 specifically targeted slowing the rise in the rate; until 1991 the trend for lung cancer mortality had been rising at a rate that would surpass the target. The rate actually declined in 1991 for the first time in at least 50 years and again in 1992. Lung cancer mortality remained level in 1993, then dropped again in 1994–96. The mortality rate for lung cancer has been below the 1987 target since 1995. In 1996 the age-adjusted death rate for

Figure 17. Proportion of people 50 years and over who have received fecal occult blood testing in the past 2 years and people 50 years and over who have ever received proctosigmoidoscopy: United States, 1987, 1992, and year 2000 targets for objective 16.13



	1987	1992	Year 2000 target
Received fecal occult blood testing in past 2 years	27%	30%	50%
Ever received proctosigmoidoscopy	25%	33%	40%

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

colorectal cancer (16.5) continued to decline and has met the year 2000 target. However, the rate of improvement in cancer mortality for the total population has not been observed for all population subgroups. Improvement was also observed in cancer risk factors such as smoking (16.6) and dietary fat intake (16.7). Data for 1994 indicate that substantial progress has been made in increasing the numbers of women receiving mammograms (16.11) and Pap tests (16.12). The proportions of people over 50 who have received fecal occult blood tests and proctosigmoidoscopy exams (16.13) also increased between 1987 and 1992 (see figure 17).

Summary of Progress

Total cancer mortality (16.1), lung cancer mortality (16.2), female breast cancer (16.3), and colorectal cancer mortality (16.5) have met the year 2000

targets. New baseline and tracking data for cytology laboratory quality (16.15) indicate that the year 2000 target has been met. Based on preliminary mortality data for 1997, objective 16.17 has also met its year 2000 target. Progress toward the year 2000 targets has been made for a majority (10 of the 17 objectives) (16.4, 16.6–16.8, 16.10–16.14, and 16.16). It should be noted that in many cases the actual improvement is small. There were no new data available to update progress for objective 16.9.

Data Issues

Age-Adjusted Death Rates

The death rates shown in objectives 16.1–16.5 are age adjusted to the 1940 U.S. population. (See appendix 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. However, the trends are very similar.

Definitions

Beginning in 1992, the definition of current smoker (**16.6**) was modified to specifically include persons who smoked only “some days.” Prior to 1992, a current smoker was defined by the questions “Have you ever smoked 100 cigarettes in your lifetime?” and “Do you smoke now?” In 1992, data were collected and analyzed for half the respondents using these smoking questions and for the other half of respondents using a revised smoking question: “Do you smoke everyday, some days, or not at all?” The 1992 estimate combines data collected using both sets of questions. Updates after 1992 are based completely on the revised definition, which is considered a more complete estimate of smoking prevalence. The effect of the new definition is a small increase in the number of smokers.

Estimates for objective **16.8** (fruit, vegetable, and grain intakes) exclude fruits and vegetables eaten as part of potato chips, condiments, fruit-flavored candies, jellies, and jams.

Two subobjectives in this chapter, **16.11b** (mammograms) and **16.12d** (Pap tests), target women with low income. Prior to 1993 these subobjectives were tracked with data for women with family incomes of less than \$10,000. Because of changes in the poverty level over time, beginning with data for 1993, these subobjectives are being tracked with data for women with family incomes below the Census poverty threshold (see appendix).

Data from the Health Care Financing Administration indicate that virtually all laboratories meet the standards set by the Clinical Laboratory Improvements Act (**16.15**). In 1993–96 only 8 of 3,200 laboratories were cited with deficiencies and terminated from medical payments until the deficiencies were corrected. Therefore, the year 2000 target of 100 for this objective is considered met.

Data Source Descriptions

Data for 1992 for objective **16.10** (tobacco, diet, and cancer screening and

counseling) are from the Primary Care Provider Surveys (PCPS). The data on formulation of a diet/nutrition plan represent the proportion of providers who routinely queried 81–100 percent of their patients about these risks. The data on strategies to quit smoking refer to the proportion of providers who routinely provided these services to patients who needed the services. The sample was drawn from the membership rolls of professional organizations for pediatricians, nurse practitioners, family physicians, obstetricians/gynecologists, and internists. Response rates varied from 50–80 percent across these groups. The data on counseling refer to the proportion of providers who routinely provided these services to patients who needed the services.

The Prevention in Primary Care Study (PPCS) was conducted in 1997–98 to update data from the PCPS. The design and items included in the 1997–98 study were similar to the PCPS, but a slightly different sampling frame was used and some items included in the 1992 surveys were not included in the PPCS. The professionals were sampled from listings of all licensed, active practitioners in the United States whose practices were at least 50 percent primary care. Because of low response rates from the other provider groups, updates are available only for nurse practitioners.

Comparability of Data Sources

For objective **16.16**, 1990 baseline and 1992 update data represent the proportion of mammography facilities that were certified by the American College of Radiology. The 1995–97 updates measure how well the 4,200 facilities performing mammograms met the Mammogram Quality Standards Act (MQSA) quality standards. “No noncompliances” means the facility was in full compliance with MQSA. Level 1 findings are the most serious and facilities with level 1 findings receive a warning letter from the Food and Drug Administration (FDA) and must respond to it. Although level 2 and level 3 findings are considered less serious, they also must be corrected. Information on the types of violations included in these levels has been published by FDA (4).

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2. American Cancer Society, Cancer facts and figures, 1994. American Cancer Society, Inc. Atlanta, GA. 1994.

3. National Cancer Institute, Division of Cancer Prevention and Control. Fiscal Year 1994 Annual Report. Rockville, Maryland. 1994.

4. Food and Drug Administration/Center for Devices and Radiological Health. Mammography Matters, vol 2, issue 3. Columbia, Maryland. 1995.

Table 16. Cancer objective status

Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	Target 2000
16.1* Cancer deaths (age adjusted per 100,000)	1987	134	135	135	133	133	132	130	128	P125	130
a. Black	1990	182	...	179	178	177	174	172	168	P162	175
16.2* Slow the rise in lung cancer deaths (age adjusted per 100,000)	1987	38.5	39.9	39.6	39.3	39.3	38.7	38.3	37.8	---	42
a. Female	1990	25.6	...	25.8	26.3	26.5	26.6	26.9	26.8	---	27
b. Black male	1990	86.1	...	83.1	81.2	80.7	77.6	75.7	73.4	---	91
16.3 Female breast cancer deaths (age adjusted per 100,000)	1987	23.0	23.1	22.7	21.9	21.5	21.3	21.0	20.2	P19.4	20.6
a. Black female	1990	27.5	...	27.7	27.0	27.1	26.9	27.5	26.5	P26.5	25
16.4 Cervical cancer deaths (age adjusted per 100,000)	1987	2.8	2.8	2.7	2.7	2.6	2.7	2.5	2.5	---	1.3
a. Black female	1990	5.9	...	5.7	6.1	5.7	5.0	5.2	4.7	---	3
b. Hispanic female ¹	1977-83	3.6	3.3	3.0	3.4	3.1	3.5	3.1	3.1	---	2
16.5* Colorectal cancer deaths (age adjusted per 100,000)	1987	14.7	13.8	13.5	13.2	13.1	13.0	12.8	12.3	---	13.2
a. Black	1990	18.1	...	17.5	17.3	17.6	17.3	17.4	16.9	---	16.5
16.6* Cigarette smoking prevalence											
People 18 years and over	1987	29%	25%	26%	² 27%	25%	26%	25%	---	---	15%
Male	1987	31%	28%	28%	² 29%	28%	28%	27%	---	---	15%
Female	1987	27%	23%	23%	² 25%	22%	23%	23%	---	---	15%
a. People with high school education or less 20 years and over	1987	34%	31%	31%	² 32%	30%	31%	30%	---	---	20%
b. Blue-collar workers 18 years and over	1987	41%	36%	36%	² 36%	34%	39%	36%	---	---	20%
c. Military personnel	1988	42%	---	---	² 35%	---	---	32%	---	---	20%
d. Black 18 years and over	1987	33%	26%	29%	² 28%	26%	27%	26%	---	---	18%
e. Hispanic 18 years and over	1987	24%	23%	20%	² 21%	20%	20%	18%	---	---	15%
f. American Indian/Alaska Native 18 years and over	1979-87	³ 42-70%	38%	31%	² 40%	39%	40%	35%	---	---	20%
g. Southeast Asian male	1984-88	55%	⁴ 35%	⁴ 36-41%	---	---	---	---	---	---	20%
h. Females of reproductive age (18-44 years)	1987	29%	26%	27%	² 28%	26%	27%	26%	---	---	12%
i. Pregnant females	1985	25%	19%	20%	---	20%	---	18%	---	---	10%
j. Females who use oral contraceptives	1983	36%	⁵ 26%	---	---	---	---	24%	---	---	10%
16.7* Dietary fat intake among people 2 years and over ⁶											
National Health and Nutrition Examination Survey											
Average percent of calories from total fat	1976-80	⁷ 36%	---	---	---	---	⁸ 34%	---	---	---	30%
Average percent of calories from saturated fat	1976-80	⁷ 13%	---	---	---	---	⁸ 12%	---	---	---	10%
Percent who met goal for fat	1988-94	^a 27%	...	...	...	...	...	---	---	---	50%
Percent who met goal for saturated fat	1988-94	^a 29%	...	...	...	...	...	---	---	---	50%
Continuing Survey of Food Intakes by Individuals											
Average percent of calories from total fat	1989-91	34%	...	...	---	---	33%	33%	33%	---	30%
Average percent of calories from saturated fat	1989-91	12%	...	...	---	---	11%	11%	11%	---	10%
Percent who met goal for fat	1989-91	22%	...	...	---	---	32%	33%	34%	---	50%
Percent who met goal for saturated fat	1989-91	21%	...	...	---	---	34%	35%	36%	---	50%
16.8* Average daily intake of vegetables, fruits, and grain products among people 2 years and over ⁶											
Average number of servings											
Vegetables and fruits	1989-91	4.1	...	...	---	---	4.6	4.7	4.7	---	5.0
Grain products	1989-91	5.8	...	...	---	---	6.7	6.8	6.9	---	6.0
Proportion who met Dietary Guidelines goal											

Table 16. Cancer objective status—Con.

	Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	Target 2000
	Vegetables and fruits	1989–91	29%	...	...	---	---	36%	37%	35%	---	50%
	Grain products	1989–91	40%	...	...	---	---	50%	53%	52%	---	50%
16.9	Actions to limit sun exposure											
	Among people 18 years and over those very likely to—											
	Limit sun exposure	1992	^a 32%	...	...	---	---	---	---	---	---	60%
	Use sun screen	1992	^a 29%	...	...	---	---	---	---	---	---	60%
	Wear protective clothing	1992	28%	...	...	---	---	---	---	---	---	60%
	Avoid artificial ultraviolet light . . . . .	...	---	---	---	---	---	---	---	---	---	60%
16.10	Tobacco, diet, and cancer screening and counseling by clinicians											
	Smoking patients	1986	⁹ 52% ^{9,10} 96%	---	---	---	---	---	---	---	---	75%
	Digital rectal . . . . .	...	---	¹⁰ 49%	---	---	---	---	---	---	---	75%
	Blood stool . . . . .	...	---	¹⁰ 56%	---	---	---	---	---	---	---	75%
	Proctoscopic exam . . . . .	...	---	¹⁰ 23%	---	---	---	---	---	---	---	75%
	Breast physical . . . . .	...	---	¹⁰ 78%	---	---	---	---	---	---	---	75%
	Mammogram . . . . .	...	---	¹⁰ 37%	---	---	---	---	---	---	---	75%
	Pap test . . . . .	...	---	¹⁰ 55%	---	---	---	---	---	---	---	75%
	Percent of clinicians routinely providing service to 81–100% of patients											
	Formulation of diet/nutrition plan											
	Pediatricians . . . . .	...	---	---	---	31%	---	---	---	---	^{11,12} ---	75%
	Nurse practitioners . . . . .	...	---	---	---	31%	---	---	---	---	¹¹ 31%	75%
	Obstetricians/gynecologists . . . . .	...	---	---	---	19%	---	---	---	---	^{11,12} ---	75%
	Internists . . . . .	...	---	---	---	33%	---	---	---	---	^{11,12} ---	75%
	Family physicians . . . . .	...	---	---	---	24%	---	---	---	---	^{11,12} ---	75%
	Discussion of strategies to quit smoking											
	Pediatricians . . . . .	...	---	---	---	19%	---	---	---	---	^{11,12} ---	75%
	Nurse practitioners . . . . .	...	---	---	---	20%	---	---	---	---	¹¹ 39%	75%
	Obstetricians/gynecologists . . . . .	...	---	---	---	28%	---	---	---	---	^{11,12} ---	75%
	Internists . . . . .	...	---	---	---	50%	---	---	---	---	^{11,12} ---	75%
	Family physicians . . . . .	...	---	---	---	43%	---	---	---	---	^{11,12} ---	75%
16.11	Breast examination and mammogram											
	Female 50 years and over (preceding 1–2 years)	1987	25%	49%	---	51%	55%	56%	---	---	---	60%
	a. Hispanic female 50 years and over	1987	18%	42%	---	47%	47%	50%	---	---	---	60%
	b. Low-income female 50 years and over (annual family income less than \$11,000) ¹³	1987	15%	32%	---	32%	39%	38%	---	---	---	60%
	c. Female 50 years and over with less than high school education	1987	16%	35%	---	35%	42%	42%	---	---	---	60%
	d. Female 70 years and over	1987	18%	39%	---	39%	44%	45%	---	---	---	60%
	e. Black female 50 years and over	1987	19%	43%	---	48%	54%	56%	---	---	---	60%
16.12	Pap test¹⁴											
	Ever received	1987	88%	---	---	93%	95%	94%	---	---	---	95%
	a. Hispanic female 18 years and over	1987	75%	---	---	88%	88%	91%	---	---	---	95%
	b. Female 70 years and over	1987	76%	---	---	86%	91%	90%	---	---	---	95%

Table 16. Cancer objective status—Con.

<i>Objective</i>	<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
c. Female 18 years and over with less than high school education	1987	79%	---	---	87%	91%	91%	---	---	---	95%
d. Low-income female 18 years and over (annual family income less than \$10,000) ¹³	1987	80%	---	---	89%	89%	91%	---	---	---	95%
Received within preceding 3 years	1987	75%	---	---	74%	78%	77%	---	---	---	85%
a. Hispanic female 18 years and over	1987	66%	---	---	74%	77%	74%	---	---	---	80%
b. Female 70 years and over	1987	44%	---	---	46%	54%	53%	---	---	---	70%
c. Female 18 years and over with less than high school education	1987	58%	---	---	58%	64%	62%	---	---	---	75%
d. Low-income female 18 years and over (annual family income less than \$10,000)	1987	64%	---	---	65%	71%	72%	---	---	---	80%
16.13 Fecal occult blood test and proctosigmoidoscopy (50 years and over)											
Received fecal occult blood testing within preceding 2 years	1987	27%	---	---	30%	---	---	---	---	---	50%
Ever received proctosigmoidoscopy	1987	25%	---	---	33%	---	---	---	---	---	40%
People 65 years and over with routine checkup in past 2 years who had a fecal occult blood test . . . . .	...	---	---	36%	---	---	---	---	---	---	...
16.14 Oral, skin, and digital rectal examinations											
People 50 years and over (during past year) . . . . .	...	---	---	---	---	---	---	---	---	---	40%
Oral . . . . .	...	---	---	---	9%	---	---	---	---	---	...
Skin . . . . .	...	---	---	---	17%	---	---	---	---	---	...
Digital rectal	1987	27%	---	---	38%	---	---	---	---	---	...
16.15 Pap test quality											
Monitoring cytology laboratory	1988-92	¹⁵ 100%	...	...	...	---	---	---	^{16,17} 100%	---	100%
16.16 Monitoring and certifying mammography facilities											
Certified by FDA	1990	18-21%	...	---	64%	---	---	---	---	---	100%
Mammogram Quality Standards Act compliance											
No noncompliances . . . . .	...	---	---	---	---	---	---	31.9%	48.2%	56.4%	...
Level 3 findings . . . . .	...	---	---	---	---	---	---	47.1%	38.6%	28.6%	...
Level 2 findings . . . . .	...	---	---	---	---	---	---	18.8%	11.9%	13.9%	...
Level 1 findings . . . . .	...	---	---	---	---	---	---	2.2%	1.4%	1.1%	...
16.17* Oral cancer deaths (per 100,000)											
Male 45-74 years	1987	13.6	13.4	12.7	12.2	12.1	11.1	11.0	10.7	P10.3	10.5
Female 45-74 years	1987	4.8	4.6	4.6	4.3	4.2	4.0	3.9	3.5	P3.5	4.1
a. Black male 45-74 years	1990	29.4	...	26.9	27.3	26.2	25.2	23.4	22.6	P20.6	26.0
b. Black female 45-74 years	1990	6.9	...	6.9	6.0	5.8	5.7	6.4	5.0	P5.2	6.9

--- Data not available. ... Category not applicable. ^aBaseline has been revised.

^PPreliminary data.

¹Updates exclude data from States lacking an Hispanic-origin item on their death certificate or for which Hispanic-origin data were not of sufficient quality.

²In 1992, the definition of "current" changed to include "some days" (intermittent smoking).

³Estimates for different tribes.

⁴Vietnamese males only.

⁵1988 data.

⁶Estimates are from 1-, 2-, or 3-day dietary data. See text for explanation.

⁷For people up to 74 years.

⁸1988–94 data.

⁹Data reflect tobacco screening and counseling only.

¹⁰1989 data.

¹¹1997–98 data.

¹²Response rate for this group was too low to produce reliable estimates.

¹³Beginning with 1993, data are for women with family incomes below the Census poverty threshold.

¹⁴Includes women without a uterine cervix.

¹⁵15 of 3,200 laboratories closed or limited in cytology testing.

¹⁶1993–96 data.

¹⁷8 of 3,200 laboratories terminated from medical payments until differences corrected.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

<i>Objective number</i>	<i>Data source</i>
16.1*, 16.1a	National Vital Statistics System, CDC, NCHS.
16.2*, 16.2a,b	National Vital Statistics System, CDC, NCHS.
16.3, 16.3a	National Vital Statistics System, CDC, NCHS.
16.4, 16.4a	National Vital Statistics System, CDC, NCHS.
16.4b	Baseline: Surveillance, Epidemiology, and End Results, NIH, NCI. Updates: National Vital Statistics System, CDC, NCHS.
16.5*, 16.5a	National Vital Statistics System, CDC, NCHS.
16.6*, 16.6a,b,d,e,h	National Health Interview Survey, CDC, NCHS.
16.6c	Worldwide Survey of Substance Abuse and Health Behaviors Among Military Personnel, DoD, OASD.
16.6f	Baseline: CDC. Updates: National Health Interview Survey, CDC, NCHS.
16.6g	Baseline: Local surveys. 1990 update: Jenkins CH. Cancer risks and prevention practices among Vietnamese refugees. <i>Western J of Med</i> 153:34–9. 1990. 1991 update: Jenkins CNH, et al. Tobacco use in Vietnam: Prevalence, predictors, and the role of the transnational tobacco corporation. <i>JAMA</i> 227(21):1726–31. 1997; Jenkins CNH, et al. The effectiveness of a media-led intervention to reduce smoking among Vietnamese-American men. <i>AJPH</i> 87(6):1031–4. 1997.
16.6i	Baseline and 1991 update: National Health Interview Survey, CDC, NCHS. 1993 update: National Health and Pregnancy Survey, NIH, NIDA. 1995 update: National Survey of Family Growth, CDC, NCHS.
16.6j	1983 baseline and 1985 update: Behavioral Risk Factor Surveillance System, CDC, NCCDPHP. 1995 update: National Survey of Family Growth, CDC, NCHS.
16.7*	1976–80 and 1988–94 data: National Health and Nutrition Examination Survey, CDC, NCHS. 1989–91 baselines and 1994–96 updates: 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	1986 baseline: Physician Practice Study, University of Chicago. 1989 updates: Survey of Physician's Attitudes and Practices in Early Cancer Detection, NIH, NCI. 1992 data: Primary Care Provider Surveys, OPHS, ODPHP. 1997–98 data: Prevention in Primary Care Study, American College of Preventive Medicine.
16.11, 16.11a	National Health Interview Survey, CDC, NCHS.
16.12, 16.12a	National Health Interview Survey, CDC, NCHS.
16.13	National Health Interview Survey, CDC, NCHS.
16.14	National Health Interview Survey, CDC, NCHS.
16.15	Clinical Laboratory Improvements Act, HCFA.
16.16	Baseline and 1992 update: American College of Radiology; 1995–97 data: Mammography Quality Assurance Program, FDA.
16.17*, 16.17	National Vital Statistics System, CDC, NCHS.

*Duplicate objective. See full text of objective following this table.

Cancer Objectives

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

Duplicate objective: 2.2

16.1a*: Reverse the rise in cancer deaths among blacks to achieve a rate of no more than 175 per 100,000 people.

Duplicate objective: 2.2a

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

Duplicate objective: 3.2

16.2a*: Slow the rise in lung cancer deaths among females to no more than 27 per 100,000.

Duplicate objective: 3.2a

16.2b*: Slow the rise in lung cancer deaths among black males to no more than 91 per 100,000.

Duplicate objective: 3.2b

16.3: Reduce breast cancer deaths to no more than 20.6 per 100,000 women.

16.3a: Reduce breast cancer deaths among black females to no more than 25 per 100,000 women.

16.4: Reduce deaths from cancer of the uterine cervix to no more than 1.3 per 100,000 women.

16.4a: Reduce deaths from cancer of the uterine cervix among black females to no more than 3 per 100,000 women.

16.4b: Reduce deaths from cancer of the uterine cervix among Hispanic females to no more than 2 per 100,000 women.

16.5*: Reduce colorectal cancer deaths to no more than 13.2 per 100,000 people.

Duplicate objective: 2.23

16.5a*: Reduce colorectal cancer deaths among blacks to no more than 16.5 per 100,000 people.

Duplicate objective: 2.23a

16.6*: Reduce cigarette smoking to a prevalence of no more than 15 percent among people aged 18 and older.

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 18 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 18 and older.

Duplicate objectives: 3.4d and 15.12d

16.6e*: Reduce cigarette smoking to a prevalence of no more than 15 percent among Hispanics aged 18 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. In addition, increase to at least 50 percent the proportion of people aged 2 and older who meet the Dietary Guidelines' average daily goal of no more than 30 percent of calories from fat, and increase to at least 50 percent the proportion of people aged 2 and older who meet the average daily goal of less than 10 percent of calories from saturated fat.

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. In addition, increase to at least 50 percent the proportion of people aged 2 and older who meet the Dietary Guidelines' average daily goal of 5 or more servings of vegetables/fruits, and increase to at least 50 percent the proportion who meet the goal of 6 or more servings of grain products.

Duplicate objective: 2.6

NOTE: The definition of vegetables, fruits, and grain products and serving size designations are derived from the Food Guide Pyramid. Vegetable, fruit, and grain ingredients from mixtures are included in the total, and fractions of servings are counted.

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, which includes providing information on the potential benefit or harm attributed to the

various screening modalities and discussion of risk factors associated with breast, prostate, cervical, colorectal, and lung cancers.

16.11: Increase to at least 60 percent those women aged 50 and older who have received a clinical breast examination and a mammogram within the preceding 1 to 2 years.

16.11a: Increase to at least 60 percent Hispanic women aged 50 and older who have received a clinical breast examination and a mammogram within the preceding 2 years.

16.11b: Increase to at least 60 percent low-income women aged 50 and older who have received a clinical breast examination and a mammogram within the preceding 2 years.

16.11c: Increase to at least 60 percent women aged 50 and older with less than high school education who have received a clinical breast examination and a mammogram within the preceding 2 years.

16.11d: Increase to at least 60 percent women aged 70 and older who have received a clinical breast examination and a mammogram within the preceding 2 years.

16.11e: Increase to at least 60 percent black women aged 50 and older who have received a clinical breast examination and a mammogram within the preceding 2 years.

16.12: Increase to at least 95 percent the proportion of women aged 18 and older 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 who have ever received a Pap test, and to at least 80 percent those who received a Pap test within the preceding 3 years.

16.12b: Increase to at least 95 percent the proportion of women aged 70 and older who have ever received a Pap test, and to at least 70 percent those who received a

Pap test within the preceding 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 who have ever received a Pap test, and to at least 75 percent those who received a Pap test within the preceding 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 who have ever received a Pap test, and to at least 80 percent those who received a Pap test within the preceding 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 inspecting and certifying 100 percent of mammography facilities according to the requirements of the Mammography Quality Standards Act.

16.17*: 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.

Duplicate objectives: 3.17 and 13.7

16.17a*: Reduce deaths due to cancer of the oral cavity and pharynx to no more than 26.0 per 100,000 among black males aged 45–74.

Duplicate objectives: 3.17a and 13.7a

16.17b*: Reduce deaths due to cancer of the oral cavity and pharynx to no more than 6.9 per

100,000 among black females aged 45–74.

Duplicate objectives: 3.17b and 13.7b

*Duplicate objective.

Priority Area 17 Diabetes and Chronic Disabling Conditions

Background

As the population of the United States grows older, the problems posed by chronic and disabling conditions increasingly demand the Nation's attention. Quality, not merely quantity, of life has become a major issue. Chronic and disabling conditions that significantly affect quality of life include diabetes, arthritis, deformities or orthopedic impairments, hearing and visual impairments, and mental retardation.

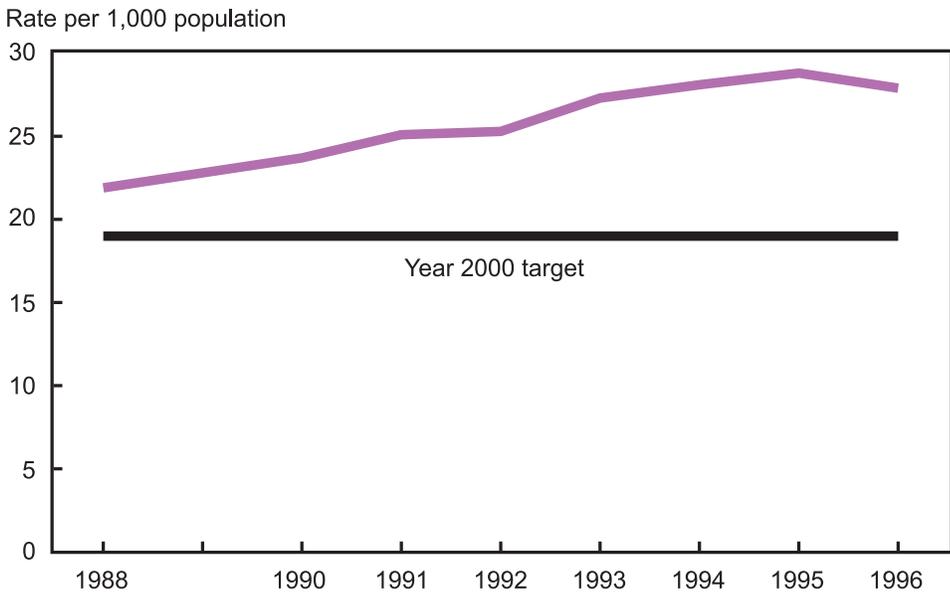
Disability, defined by a limitation of the ability to perform major activities caused by chronic health conditions and impairments, affects an increasing number of Americans (10 percent in 1996) (1). Nearly 40 million people have functional limitations that interfere with their daily activities, and about 12 million have limitations that prevent them from working, attending school, or maintaining a household. The underlying conditions most often responsible for these limitations are arthritis, heart disease, back conditions, lower extremity impairments, and intervertebral disc disorders (2). For those under 18 years of age, the most frequent causes of activity limitation are asthma, mental retardation, mental illness, and hearing and speech impairments.

Data Summary

Highlights

Several measures of chronic disability that had been increasing have declined in recent years. These include people limited in major activity due to chronic conditions (17.2), people limited in activity due to asthma (17.4), people with significant hearing impairment (17.6), and people with significant visual impairment (17.7). Rates for people with activity limitation due to chronic back conditions (17.5) (see figure 18) continued the upward trend away from the year 2000 target in 1996. Data for 1993–95 indicate a sharp increase in

Figure 18. Rates of activity limitation due to chronic back conditions: United States, 1986–96 and year 2000 target for objective 17.5



	1986–88	1988–90	1989–91	1990–92	1991–93	1992–94	1993–95	1994–96	Year 2000 target
All persons . . .	21.9	23.7	25.1	25.3	27.3	28.1	28.8	27.9	19

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

diabetes incidence (17.11). The prevalence of diabetes (17.11) and diabetes-related mortality (17.9) have also generally been increasing, especially for blacks and American Indians and Alaska Natives. Data on prevalence of peptic ulcer (17.21) indicate that, after increasing in 1992, the rate has been steadily declining. The recent increase in years of healthy life (17.1) is discussed in the text for Priority Area 8.

Summary of Progress

Data are available to assess progress for 20 of the 23 objectives in this priority area. Five objectives (17.6, 17.7, 17.13, 17.22, and 17.23) are moving toward the year 2000 targets. Ten (17.2–17.5, 17.8–17.12, and 17.21) are moving away from the targets. Progress for 17.14 is being measured with the data for the subobjectives and the trends are mixed; progress for 17.17 is also mixed. Earlier detection of significant hearing impairments (17.16) and years of healthy life (17.1) showed no change. For the remaining objectives one has no baseline (17.20) and two have no data

beyond the baseline to assess progress (17.15 and 17.18). Progress for 17.22 is described in the text for Priority Area 22, which discusses the duplicate objective (22.4).

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 (ADA) that prohibits all employers from discriminating against a “qualified disabled individual because of the disability in regard to job application procedures, hiring, advancement. . .” (3). Assuming full compliance with the ADA, this objective has been achieved via legislation.

Data Issues

Years of Healthy Life

The concept of increasing the span of healthy life is one of the three *Healthy People 2000* goals and a specific measure has been developed to track an objective in three priority areas

(8.1, 17.1, and 21.1). See the [appendix](#) for a discussion of years of healthy life.

Definitions

Subobjective **17.2a** (limitation in major activity due to chronic conditions) targets people with low income. Originally this subobjective was tracked with data for people with annual family incomes of less than \$10,000. Because of changes in the poverty level over time, data are also shown for people with family incomes below Census poverty threshold (see [appendix](#)).

The 1984–85 baseline figures for objective **17.3** were derived by combining estimates for the noninstitutionalized population from the 1984 National Health Interview Survey (NHIS) Supplement on Aging (SOA) with data for those in nursing homes from the 1985 National Nursing Home Survey (NNHS). The 1984 SOA asked about seven specific personal care activities, also referred to as activities of daily living (ADL's) for persons 65 years and over. Because of the way the questions were asked on the NNHS, only five ADL's were used for tracking this objective. The numerator included respondents to the SOA who said they had “any difficulty” performing at least two ADL's combined with patients for whom administrators reported to the NNHS as “receiving assistance” with at least 2 ADL's. The denominator for the baseline was the civilian, noninstitutionalized population 65 years and over plus the nursing home population 65 years and over. The update for this objective is derived from combined data from the 1994 NHIS Second Supplement on Aging (SOA II) and data from the 1995 NNHS using the same questions as were used for the baseline. However, because of the way data were collected in the SOA II, the 1994–95 update is for persons 70 years and over. The 1984–85 data were also computed for ages 70 years and over to provide a comparison with the 1994–95 update.

The 1990 baseline data for diabetes-related deaths for Puerto Ricans (**17.9d**) have been revised. The original baseline published in the *Midcourse Review and 1995 Revisions* (4) included data for 45 States and the District of Columbia. It did not include data for New York where more than one-half of the U.S. Puerto Rican population resides. The revised baseline, which includes data for 47 States and the

District of Columbia (including New York), is considerably lower than originally published and, in fact, has met the year 2000 target for this subobjective. The number of States reporting Hispanic origin data on their birth and death certificates has varied from year to year; see [appendix](#) for more information.

Overweight (objective **17.12**) for adults is defined as a body mass index (BMI) at or above the sex-specific 85th percentile of the 1976–80 National Health and Nutrition Examination Survey (NHANES II) reference population 20–29 years of age. For adolescents, overweight is the sex- and age-specific 85th percentile from NHANES II (see [Note](#) with the text of objective **17.12**). BMI cutoff points for adults are 27.8 kilograms per meter squared for males, and 27.3 kilograms per meter squared for females. Current international research appears to indicate that a lower BMI of 25 kilograms per meter squared may be more clinically relevant to increased risk of cardiovascular disease (5.6).

Data Source Description

Diabetes-related mortality data (**17.9**) are derived from the multiple-cause-of-death files. Data include all mentions of diabetes on the death certificate, whether as an underlying or contributing cause of death. Diabetes is approximately three times as likely to be listed as a contributing cause of death than as the underlying cause.

Data on lower extremity amputation for objective **17.10–17.10c** come from the National Hospital Discharge Survey (NHDS) maintained by the National Center for Health Statistics (NCHS). Data for the survey are obtained from approximately 480 hospitals throughout the United States. Data on race are not reported by many hospitals due to omission of a race field on hospital discharge reporting forms. Automation of the hospital discharge systems has led to an increase in the use of these forms (UB-82 and UB-92) in recent years. A comparison of NHDS data with those who reported being hospitalized in the NHIS (NHIS data were adjusted to exclude hospitalizations of 1 day or less) indicated that underreporting for whites is roughly 22 percent in 1991; the difference in reporting for blacks was negligible (7).

American Indian and Alaska Native data for 1996 for objective **17.11a** are from the Indian Health Service (IHS) Patient Comprehensive Care file. The file excludes data from 25 (representing 11 percent of the population served by IHS) of the 166 IHS service units because data were incomplete.

Baseline data for objectives **17.15** and **17.17** (clinical assessment of childhood development and cognitive assessment of older adults) are from the Primary Care Provider Surveys (PCPS). The data on testing/evaluation-inquiry represent the proportion of providers who routinely queried 81–100 percent of their patients about specific functioning. The data on treatment/referral refer to the proportion of providers who routinely provided these services to patients who needed the services. The sample was drawn from the membership rolls of professional organizations for pediatricians, nurse practitioners, family physicians, obstetricians/gynecologists, and internists. Response rates varied from 50–80 percent across these groups. The Prevention in Primary Care Study (PPCS) was conducted in 1997–98 to update data from the PCPS. The design and items included in the 1997–98 study were similar to the PCPS, but a slightly different sampling frame was used and some items included in the 1992 surveys were not included in the PPCS. The professionals were sampled from listings of all licensed, active practitioners in the United States whose practices were at least 50 percent primary care. Because of low response rates from the other provider groups, updates are available only for nurse practitioners.

Comparability of Data Sources

The baseline data for **17.8** (mental retardation) were revised to be comparable with data from the Metropolitan Atlanta Developmental Disabilities Surveillance Program, which uses school counts of children classified as mentally retarded.

Overweight (**17.12**) is being tracked with two data sources. The primary data source is the NHANES, which provided baseline data for most of the overweight objectives and the 1988–94 updates; these data are derived from measured height and weight. The second data source is the NHIS. This survey provides interim estimates shown in an earlier publication (8), updates for Hispanic females and American Indians/Alaska Natives, and all data for

people with disabilities. NHIS estimates are based on self-reported heights and weights and are not comparable with the actual measured data from NHANES; prevalence estimates of overweight from self-reported height and weight are lower. Trends from the NHIS self-report measures, like those from NHANES, show a steady increase in prevalence of overweight; this increase is, however, different in magnitude from that observed in the data derived from measured height and weight.

Objective 17.13 (light-to-moderate physical activity) is being tracked with the NHIS. The list of activities asked by the NHIS has not been identical from year to year. The 1985 and 1990 surveys did not ask about some activities for people 65 years and over; thus, the data shown are for people 18–64 years of age. The 1991 and 1995 surveys asked about some activities different from the previous surveys, but people of all age groups were asked the same questions. Because of these differences, 1985 and 1990 data are not comparable to 1991 and 1995 data. (See text for Priority Area 1 for more information.)

8. National Center for Health Statistics. Healthy people 2000 review, 1992. Hyattsville, Maryland: Public Health Service. 1993.

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7. Kozak LJ. Underreporting of race in the National Hospital Discharge Survey. Centers for Disease Control and Prevention, National Center for Health Statistics. July. 1995.

Table 17. Diabetes and chronic disabling conditions objective status

Objective	Baseline	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	Target
	year	Baseline									2000
17.1* Years of healthy life	1990	64.0	...	63.9	63.7	63.5	63.8	63.9	64.2	---	65
a. Black	1990	56.0	...	56.0	55.6	55.2	55.6	56.0	56.5	---	60
b. Hispanic ¹	1990	64.8	...	63.6	² 64.0	63.2	64.2	64.0	64.7	---	65
c. People 65 years and over ³	1990	11.9	...	11.8	11.9	11.9	12.1	12.0	12.2	---	14
17.2 Limitation in major activity due to chronic conditions	1988	9.4%	9.3%	9.6%	10.3%	10.6%	10.3%	10.1%	10.0%	---	8%
a. Low-income people (annual family income less than \$10,000)	1988	18.9%	19.2%	19.6%	20.2%	20.9%	21.1%	21.4%	22.7%	---	15%
Below poverty level . . . . .	...	---	14.6%	15.5%	16.2%	16.5%	16.8%	17.1%	17.5%	---	...
b. American Indian/Alaska Native	1983–85	13.4%	⁴ 12.3%	⁵ 12.0%	⁶ 12.6%	⁷ 12.4%	⁸ 13.3%	⁹ 13.5%	¹⁰ 14.9%	---	11%
c. Black	1988	11.2%	10.7%	11.0%	12.2%	12.6%	12.5%	12.2%	12.5%	---	9%
d. Puerto Rican	1989–91	11.7%	...	...	⁶ 12.0%	⁷ 12.7%	⁸ 13.4%	⁹ 13.4%	¹⁰ 13.0%	---	10%
17.3* People with difficulty performing self-care activities (per 1,000)											
People 65 years and over	1984–85	111	---	---	---	---	---	---	---	---	90
People 70 years and over	1984–85	^a 141	---	---	---	---	---	¹¹ 163	---	---	90
a. People 85 years and over	1984–85	371	---	---	---	---	---	¹¹ 471	---	---	325
b. Black 65 years and over	1984–85	^a 132	---	---	---	---	---	---	---	---	98
Black 70 years and over	1984–85	^a 166	---	---	---	---	---	¹¹ 218	---	---	98
17.4 People with asthma with activity limitation	1986–88	19.4%	⁴ 20.4%	⁵ 21.8%	⁶ 21.8%	⁷ 22.5%	⁸ 22.0%	⁹ 20.7%	¹⁰ 19.6%	---	10%
a. Black	1989–91	30.5%	...	...	⁶ 30.3%	⁷ 32.1%	⁸ 31.5%	⁹ 29.1%	¹⁰ 27.0%	---	19%
b. Puerto Rican ¹² . . . . .	...	---	---	---	---	---	---	---	---	---	22%
17.5 Activity limitation due to chronic back conditions (per 1,000)	1986–88	21.9	⁴ 23.7	⁵ 25.1	⁶ 25.3	⁷ 27.3	⁸ 28.1	⁹ 28.8	¹⁰ 27.9	---	19
17.6 Significant hearing impairment (per 1,000)	1986–88	88.9	⁴ 89.5	⁵ 89.7	⁶ 93.5	⁷ 93.6	⁸ 91.9	⁹ 89.0	¹⁰ 85.1	---	82
a. People 45 years and over	1986–88	203	⁴ 206.2	⁵ 205.2	⁶ 215.7	⁷ 213.2	⁸ 207.4	⁹ 200.4	¹⁰ 195.9	---	180
17.7 Significant visual impairment (per 1,000)	1986–88	34.5	⁴ 32.5	⁵ 31.7	⁶ 32.8	⁷ 34.8	⁸ 35.1	⁹ 34.0	¹⁰ 31.3	---	30
a. People 65 years and over	1986–88	87.7	⁴ 81.8	⁵ 78.0	⁶ 79.8	⁷ 87.4	⁸ 88.3	⁹ 84.6	¹⁰ 84.2	---	70
17.8* Serious mental retardation (per 1,000)											
Children 10 years with IQ less than 50	1985–87	^a 3.1	---	---	---	¹³ 3.6	---	---	---	---	2
17.9 Diabetes-related deaths (age adjusted per 100,000)	1986	38	38	38	38	40	40	40	41	---	34
a. Black	1986	67	71	71	71	74	73	76	76	---	58
b. American Indian/Alaska Native	1986	46	53	51	57	60	58	63	63	---	41
c. Mexican American ¹⁴	1990	^a 55.7	...	50.3	51.1	56.6	55.6	56.7	60.1	---	50
d. Puerto Rican ¹⁴	1990	^a 40.7	...	47.2	48.7	48.5	57.8	63.2	58.5	---	42
17.10 Diabetes-related complications											
People with diabetes											
End-stage renal disease (ESRD) (per 1,000)	1987	1.5	2.5	2.5	2.7	2.4	3.3	3.4	4.1	---	1.4
Blindness (age-adjusted per 1,000)	1987	2.2	2.5	2.4	2.3	2.1	2.2	---	---	---	1.4
Lower extremity amputation (per 1,000)	1987	8.2	8.6	6.2	7.8	7.3	8.6	9.4	11.1	---	4.9
Perinatal mortality (among infants of females with established diabetes)	1988	5%	---	---	---	---	---	---	---	---	2%
Major congenital malformations	1988	8%	---	---	---	---	---	---	---	---	4%

Table 17. Diabetes and chronic disabling conditions objective status—Con.

	Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	Target 2000
	ESRD due to diabetes (per 1,000)											
	a. Black with diabetes	1983-86	2.2	¹⁵ 3.1	---	---	¹⁶ 5.7	¹⁷ 5.0	¹⁸ 5.2	¹⁹ 5.5	---	2.0
	b. American Indian/Alaska Native in Indian Health Service areas with diabetes ²⁰	1983-86	2.1	4.2	4.4	5.4	---	---	---	---	---	1.9
	Lower extremity amputations due to diabetes (per 1,000)											
	c. Black with diabetes	1987	^a 9.0	8.0	11.1	8.6	8.6	9.1	10.2	10.1	---	6.1
17.11*	Diabetes incidence and prevalence											
	Total population (per 1,000)											
	Incidence of diabetes	1986-88	2.9	⁴ 2.6	⁵ 2.5	⁶ 2.4	⁷ 2.8	⁸ 3.1	⁹ 3.4	¹⁰ 3.1	---	2.5
	Prevalence of diabetes	1986-88	28	⁴ 26	⁵ 27	⁶ 28	⁷ 30	⁸ 30	⁹ 31	¹⁰ 31	---	25
	Prevalence of diabetes (per 1,000)											
	a. American Indian/Alaska Native 15 years and over in Indian Health Service areas	1987	69	---	---	---	---	---	---	²⁰ 90	---	62
	b. Puerto Rican (ages 20-74)	1982-84	55	---	---	---	---	---	---	---	---	49
	c. Mexican American (ages 20-74)	1982-84	54	---	---	---	---	²¹ 66	---	---	---	49
	d. Cuban American (ages 20-74)	1982-84	36	---	---	---	---	---	---	---	---	32
	e. Black (all ages)	1986-88	36	⁴ 36	⁵ 36	⁶ 36	⁷ 38	⁸ 40	⁹ 42	¹⁰ 44	---	32
17.12*	Overweight prevalence											
	(Based on measured height and weight unless otherwise indicated)											
	People 20-74 years	1976-80	26%	---	---	---	---	^{20,21} 35%	---	---	---	20%
	Male	1976-80	24%	---	---	---	---	^{20,21} 34%	---	---	---	20%
	Female	1976-80	27%	---	---	---	---	^{20,21} 37%	---	---	---	20%
	Adolescents 12-19 years	1976-80	15%	---	---	---	---	^{20,21} 24%	---	---	---	15%
	a. Low-income female 20-74 years	1976-80	37%	---	²² 47%	---	---	---	---	---	---	25%
	b. Black female 20-74 years	1976-80	44%	---	---	---	---	^{20,21} 52%	---	---	---	30%
	c. Hispanic female 20-74 years	---	---	---	---	---	---	---	---	---	---	25%
	Hispanic female 20 years and over (self-reported) ²³	---	---	33%	32%	32%	33%	32%	35%	---	---	---
	Mexican American female 20-74 years	1982-84	39%	---	---	---	---	^{20,21} 50%	---	---	---	---
	Cuban female 20-74 years	1982-84	34%	---	---	---	---	---	---	---	---	---
	Puerto Rican female 20-74 years	1982-84	37%	---	---	---	---	---	---	---	---	---
	d. American Indian/Alaska Native 20 years and over	1984-88	29-75%	---	²³ 40%	²³ 36%	²³ 48%	²³ 34%	²³ 43%	---	---	30%
	e. People with disabilities 20 years and over (self-reported) ²³	1985	36%	---	38%	37%	38%	38%	40%	---	---	25%
	f. Female with high blood pressure 20-74 years	1976-80	50%	---	---	---	---	---	---	---	---	41%
	g. Male with high blood pressure 20-74 years	1976-80	39%	---	---	---	---	---	---	---	---	35%
	h. Mexican American male 20-74 years	1982-84	30%	---	---	---	---	^{20,21} 37%	---	---	---	25%

Table 17. Diabetes and chronic disabling conditions objective status—Con.

		Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	Target 2000
17.13*	Light-to-moderate physical activity											
	People 6 years and over . . . . .	...	---	---	---	---	---	---	---	---	---	30%
	People 18–74 years											
	5 or more times per week	1985	²⁴ 22%	^{24,25} 23%	24%	---	---	---	23%	---	---	30%
	7 or more times per week	1985	²⁴ 16%	^{24,25} 16%	17%	---	---	---	16%	---	---	30%
	a. Hispanic 18 years and over											
	5 or more times per week	1991	20%	...	...	---	---	---	22%	---	---	25%
17.14	Patient education for people with chronic and disabling conditions . . . . .	...	---	---	---	---	---	---	---	---	---	40%
	a. People with diabetes (classes)	1983–84	32%	²⁶ 33%	39%	---	43%	---	---	---	---	75%
	People with diabetes (counseling)	1983–84	68%	---	---	---	---	---	---	---	---	...
	b. People with asthma (classes)	1991	9%	...	...	---	10%	---	---	---	---	50%
	c. Black with diabetes (classes)	1991	34%	...	...	---	50%	---	---	---	---	75%
	d. Hispanic with diabetes (classes)	1991	27%	...	...	---	26%	---	---	---	---	75%
17.15	Clinician assessment of childhood development . . . . .	...	---	---	---	---	---	---	---	---	---	80%
	Percent of clinicians routinely providing service to 81–100% of patients (children)											
	Visual acuity testing (3 years and over)											
	Pediatricians	1992	55%	...	...	...	---	---	---	---	---	80%
	Nurse practitioners	1992	49%	...	...	...	---	---	---	---	---	80%
	Family physicians	1992	30%	...	...	...	---	---	---	---	---	80%
	Hearing testing (3 years and over)											
	Pediatricians	1992	47%	...	...	...	---	---	---	---	---	80%
	Nurse practitioners	1992	46%	...	...	...	---	---	---	---	---	80%
	Family physicians	1992	19%	...	...	...	---	---	---	---	---	80%
	Evaluation of speech											
	Pediatricians	1992	65%	...	...	...	---	---	---	---	^{27,28} ...	80%
	Nurse practitioners	1992	51%	...	...	...	---	---	---	---	²⁷ 49%	80%
	Family physicians	1992	39%	...	...	...	---	---	---	---	^{27,28} ...	80%
	Evaluation of motor development											
	Pediatricians	1992	72%	...	...	...	---	---	---	---	^{27,28} ...	80%
	Nurse practitioners	1992	56%	...	...	...	---	---	---	---	²⁷ 53%	80%
	Family physicians	1992	45%	...	...	...	---	---	---	---	^{27,28} ...	80%
	Treatment/referral for vision problems											
	Pediatricians	1992	67%	...	...	...	---	---	---	---	---	80%
	Nurse practitioners	1992	35%	...	...	...	---	---	---	---	---	80%
	Family physicians	1992	56%	...	...	...	---	---	---	---	---	80%
	Treatment/referral for hearing problems											
	Pediatricians	1992	66%	...	...	...	---	---	---	---	---	80%
	Nurse practitioners	1992	35%	...	...	...	---	---	---	---	---	80%
	Family physicians	1992	55%	...	...	...	---	---	---	---	---	80%
	Treatment/referral for speech problems											
	Pediatricians	1992	62%	...	...	...	---	---	---	---	---	80%

Table 17. Diabetes and chronic disabling conditions objective status—Con.

<i>Objective</i>		<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
	Nurse practitioners	1992	34%	...	...	...	---	---	---	---	---	80%
	Family physicians	1992	48%	...	...	...	---	---	---	---	---	80%
	Treatment/referral for motor problems											
	Pediatricians	1992	55%	...	...	...	---	---	---	---	---	80%
	Nurse practitioners	1992	33%	...	...	...	---	---	---	---	---	80%
	Family physicians	1992	49%	...	...	...	---	---	---	---	---	80%
17.16	Early detection of significant hearing impairment in children (average age in months)²⁹	1988	24-30	---	27	---	---	---	---	---	---	12
	a. Black	1991	36	...	...	---	---	---	---	---	---	12
17.17	Clinician assessment of cognitive and other functioning in older adults											
	Percent of clinicians routinely providing service to 81-100% of patients (adults aged 65 years and over)											
	Visual acuity testing											
	Nurse practitioners	1992	24%	...	...	...	---	---	---	---	²⁷ 19%	60%
	Obstetricians/gynecologists	1992	3%	...	...	...	---	---	---	---	^{27,28} ---	60%
	Internists	1992	15%	...	...	...	---	---	---	---	^{27,28} ---	60%
	Family physicians	1992	12%	...	...	...	---	---	---	---	^{27,28} ---	60%
	Hearing acuity testing											
	Nurse practitioners	1992	16%	...	...	...	---	---	---	---	²⁷ 13%	60%
	Obstetricians/gynecologists	1992	2%	...	...	...	---	---	---	---	^{27,28} ---	60%
	Internists	1992	9%	...	...	...	---	---	---	---	^{27,28} ---	60%
	Family physicians	1992	7%	...	...	...	---	---	---	---	^{27,28} ---	60%
	Evaluation of physical mobility											
	Nurse practitioners	1992	41%	...	...	...	---	---	---	---	²⁷ 35%	60%
	Obstetricians/gynecologists	1992	18%	...	...	...	---	---	---	---	^{27,28} ---	60%
	Internists	1992	42%	...	...	...	---	---	---	---	^{27,28} ---	60%
	Family physicians	1992	26%	...	...	...	---	---	---	---	^{27,28} ---	60%
	Evaluation for dementia											
	Nurse practitioners	1992	28%	...	...	...	---	---	---	---	²⁷ 22%	60%
	Obstetricians/gynecologists	1992	9%	...	...	...	---	---	---	---	^{27,28} ---	60%
	Internists	1992	23%	...	...	...	---	---	---	---	^{27,28} ---	60%
	Family physicians	1992	13%	...	...	...	---	---	---	---	^{27,28} ---	60%
	Inquiry about urinary incontinence											
	Nurse practitioners	1992	33%	...	...	...	---	---	---	---	²⁷ 24%	60%
	Obstetricians/gynecologists . . . . .	...	---	---	---	---	---	---	---	---	^{27,28} ---	60%
	Internists	1992	30%	...	...	...	---	---	---	---	^{27,28} ---	60%
	Family physicians	1992	15%	...	...	...	---	---	---	---	^{27,28} ---	60%
	Treatment/referral for vision problems											
	Nurse practitioners	1992	33%	...	...	...	---	---	---	---	---	60%
	Obstetricians/gynecologists	1992	35%	...	...	...	---	---	---	---	---	60%
	Internists	1992	63%	...	...	...	---	---	---	---	---	60%
	Family physicians	1992	54%	...	...	...	---	---	---	---	---	60%

Table 17. Diabetes and chronic disabling conditions objective status—Con.

Objective	Baseline	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	Target
	year										2000
Treatment/referral for hearing problems											
Nurse practitioners	1992	30%	...	...	...	---	---	---	---	---	60%
Obstetricians/gynecologists	1992	34%	...	...	...	---	---	---	---	---	60%
Internists	1992	52%	...	...	...	---	---	---	---	---	60%
Family physicians	1992	46%	...	...	...	---	---	---	---	---	60%
Prescription of mobility aids/modification of living environment to improve mobility											
Nurse practitioners	1992	18%	...	...	...	---	---	---	---	²⁷ 25%	60%
Obstetricians/gynecologists	1992	15%	...	...	...	---	---	---	---	^{27,28} ---	60%
Internists	1992	31%	...	...	...	---	---	---	---	^{27,28} ---	60%
Family physicians	1992	25%	...	...	...	---	---	---	---	^{27,28} ---	60%
Investigation of/referral for treatable causes of dementia											
Nurse practitioners	1992	31%	...	...	...	---	---	---	---	²⁷ 28%	60%
Obstetricians/gynecologists	1992	27%	...	...	...	---	---	---	---	^{27,28} ---	60%
Internists	1992	54%	...	...	...	---	---	---	---	^{27,28} ---	60%
Family physicians	1992	40%	...	...	...	---	---	---	---	^{27,28} ---	60%
Treatment/referral for urinary incontinence											
Nurse practitioners	1992	31%	...	...	...	---	---	---	---	²⁷ 28%	60%
Obstetricians/gynecologists	1992	56%	...	...	...	---	---	---	---	^{27,28} ---	60%
Internists	1992	37%	...	...	...	---	---	---	---	^{27,28} ---	60%
Family physicians	1992	31%	...	...	...	---	---	---	---	^{27,28} ---	60%
17.18 Perimenopausal females counseled about estrogen replacement therapy											
Female 40–60 years	1994	80%	...	...	...	...	...	---	---	---	90%
Female 40–49 years	1994	76%	...	...	...	...	...	---	---	---	90%
Female 50–60 years	1994	83%	...	...	...	...	...	---	---	---	90%
17.19 Worksites with policies for hiring people with disabilities³⁰											
Worksites with a voluntary policy	1986	37%	100%	100%	100%	100%	100%	100%	100%	100%	75%
17.20 Service systems for children with or at risk of chronic and disabling conditions (number of States)	...	---	---	---	---	---	---	---	---	---	50
17.21 Prevalence of peptic ulcer (per 1,000)											
People 18 years and over	1991	19.9	...	...	23.7	24.4	23.0	22.0	21.2	---	18
17.22* Identify gaps in health data	1990	None identified	---	---	---	---	31_	32_	33_	33_	...
Establish mechanisms to meet needs ³⁴	1990	None established	---	---	---	---	31_	32_	33_	33_	...

Table 17. Diabetes and chronic disabling conditions objective status—Con.

<i>Objective</i>	<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
17.23 People with diabetes who had a dilated eye exam in the past year											
People 18 years and over	1989	49%	---	²² 52%	---	---	---	---	---	---	70%

--- Data not available.

. . . Category not applicable.

^aBaseline has been revised.

¹Estimate based on preliminary data. Excludes mortality data from States lacking an Hispanic-origin item on their death certificate or for which Hispanic-origin data were not of sufficient quality. See appendix.

²Estimate derived from 1991-93 health status data and 1992 mortality data.

³Years of healthy life remaining at age 65.

⁴1988-90 data.

⁵1989-91 data.

⁶1990-92 data.

⁷1991-93 data.

⁸1992-94 data.

⁹1993-95 data.

¹⁰1994-96 data.

¹¹1994-95 data.

¹²Data are unreliable. Relative standard error is greater than 30%.

¹³1991-93 data.

¹⁴Excludes data from States lacking an Hispanic-origin item on their death certificates or for which Hispanic-origin data were not of sufficient quality. See appendix.

¹⁵1986-89 data.

¹⁶1990-93 data.

¹⁷1991-94 data.

¹⁸1992-95 data.

¹⁹1993-96 data.

²⁰Data are for people 20 years and over.

²¹1988-94 data.

²²1988-91 data.

²³Estimate derived from self-reported height and weight.

²⁴Data are for people 18-64 years.

²⁵Operational definition changed for subsequent tracking data.

²⁶1989 data.

²⁷1997-98 data.

²⁸Response rate for this group was too low to produce reliable estimates.

²⁹Among hearing-impaired children 4-6 years.

³⁰Assuming full compliance, achieved through passage of the Americans with Disabilities Act of 1990.

³¹The National Committee on Vital and Health Statistics established a Subcommittee on State and Community Health Statistics. The Subcommittee's charge (in part) is to work with Federal and State agencies and appropriate private agencies to review and identify gaps in current health statistics.

³²The Healthy People 2000 Midcourse Review added 111 additional subobjectives for major population groups at highest risk for disease, injury, and disability.

³³As part of the planning process for 2010, data gaps are being identified and mechanisms to address these gaps are being considered.

³⁴See text for Priority Area 22 for a discussion of this objective (duplicate objective 22.4).

NOTE: Data may include revisions and, therefore, may differ from data previously published.

<i>Objective number</i>	<i>Data source</i>
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,b	National Health Interview Survey, CDC, NCHS.

<i>Objective number</i>	<i>Data source</i>
17.4	National Nursing Home 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*	Baseline: Metropolitan Atlanta Developmental Disabilities Study, CDC, NCEH. Update: Metropolitan Atlanta Developmental Disabilities Surveillance Program, CDC, NCEH.
17.9, 17.9a,b	National Vital Statistics System, CDC, NCHS.
17.10	For blindness: Massachusetts Blind Registry, Massachusetts Commission on the Blind. For perinatal mortality and congenital malfunctions: Clinical series and selected State data. For ESRD: End stage renal disease medicare reimbursement data, HCFA, Bureau of Data Management and Strategy. For amputation: Denominator: National Health Interview Survey, CDC, NCHS; Numerator: National Hospital Discharge Survey, CDC, NCHS.
17.10a	End-stage renal disease Medicare reimbursement data, HCFA, Bureau of Data Management and Strategy.
17.10b	IHS, OPEL.
17.10c	Denominator: National Health Interview Survey, CDC, NCHS. Numerator: National Hospital Discharge Survey, CDC, NCHS.
17.11*, 17.11e	National Health Interview Survey, CDC, NCHS.
17.11a	Ambulatory Utilization Data, IHS.
17.11b-d	Baseline: Hispanic Health and Nutrition Examination Survey, CDC, NCHS. Update for Mexican American: National Health and Nutrition Examination Survey, CDC, NCHS.
17.12*, 17.12a,b,f,g	National Health and Nutrition Examination Survey, CDC, NCHS.
17.12c,h	Data for Hispanic: National Health Interview Survey, CDC, NCHS. Baseline for Mexican American, Cuban, Puerto Rican: Hispanic Health and Nutrition Examination Survey, CDC, NCHS. Update for Mexican American: National Health and Nutrition Examination Survey, CDC, NCHS.
17.12d	Baseline: IHS, OPEL. Updates: National Health Interview Survey, CDC, NCHS.
17.12e	National Health Interview Survey, CDC, NCHS.
17.13*, 17.13a	National Health Interview Survey, CDC, NCHS.
17.14a	1983-84 baseline: Halpern M. The impact of diabetes education in Michigan. Diabetes 38(2):151A, 1989. 1991 baseline and updates: National Health Interview Survey, CDC, NCHS.
17.14b	National Health Interview Survey, CDC, NCHS.
17.15	Baseline: Primary Care Provider Surveys, OPHS, ODPHP. Update: Prevention in Primary Care Study, American College of Preventive Medicine.
17.16	1988 baseline: Annual Survey of Hearing Impaired Children and Youth, Commission on Education of the Deaf. 1991 baseline and updates: National Health Interview Survey, CDC, NCHS.
17.17	Baseline: Primary Care Provider Surveys, OPHS, ODPHP. Update: Prevention in Primary Care Study, American College of Preventive Medicine.
17.18	National Health Interview Survey, CDC, NCHS.
17.19	Baseline: Survey of Persons with Disability, International Center for the Disabled. Updates: Americans with Disabilities Act of 1990.
17.21	National Health Interview Survey, CDC, NCHS.
17.22*	Subcommittee on State and Community Health Statistics, NCVHS; CDC, NCHS; OPHS, ODPHP.
17.23	Baseline: National Health Interview Survey, CDC, NCHS. Update: National Health and Nutrition Examination Survey, CDC, NCHS.

*Duplicate objective. See full text of objective following this table.

Diabetes and Chronic Disabling Conditions Objectives

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

NOTE: Years of healthy life (also referred to as quality-adjusted life years) is a summary measure of health that combines mortality (quantity of life) and morbidity and disability (quality of life) into a single measure.

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 60 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-gender 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.

17.2d: Reduce to no more than 10 percent the proportion of Puerto Ricans 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: 1.13 and age-related objective for people aged 65 and older

17.3a*: Reduce to no more than 325 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: 1.13a

17.3b*: Reduce to no more than 98 per 1,000 people the proportion of blacks aged 65 and older who have difficulty in performing two or more personal care activities, thereby preserving independence.

Duplicate objective: 1.13b

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.

17.4a: Reduce to no more than 19 percent the proportion of blacks with asthma who experience activity limitation.

17.4b: Reduce to no more than 22 percent the proportion of Puerto Ricans with asthma who experience activity limitation.

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 newsprint 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 among 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.

NOTE: Diabetes-related deaths refer to deaths from diabetes as an underlying or contributing cause.

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.

17.9c: Reduce diabetes-related deaths among Mexican-Americans to no more than 50 per 100,000.

17.9d: Reduce diabetes-related deaths among Puerto Ricans to no more than 42 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 ¹	2 percent
Major congenital malformation	4 percent

¹Among 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.

Duplicate objective: 2.24

17.11a*: Reduce diabetes among American Indians and Alaska Natives to a prevalence of no more than 62 per 1,000.

Duplicate objective: 2.24a

17.11b*: Reduce diabetes among Puerto Ricans to a prevalence of no more than 49 per 1,000.

Duplicate objective: 2.24b

17.11c*: Reduce diabetes among Mexican-Americans to a prevalence of no more than 49 per 1,000.

Duplicate objective: 2.24c

17.11d*: Reduce diabetes among Cuban Americans to a prevalence of no more than 32 per 1,000.

Duplicate objective: 2.24d

17.11e*: Reduce diabetes among blacks to a prevalence of no more than 32 per 1,000.

Duplicate objective: 2.24e

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 modified age- and sex-specific 85th percentile values of the 1976–80 National Health and Nutrition Examination Survey (NHANES II). 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.

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.

Duplicate objectives: 1.2g, 2.3g, and 15.10g

17.12h*: Reduce overweight to a prevalence of no more than 35 percent among Mexican-American men.

Duplicate objectives: 1.2h, 2.3h, and 15.10h

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

17.13a*: Increase to at least 25 percent the proportion of Hispanics aged 18 and older who engage regularly, preferably daily, in light to moderate physical activity for at least 30 minutes per day 5 or more times per week.

Duplicate objectives: 1.3a and 15.11a

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.

17.14c: Increase to at least 75 percent the proportion of blacks 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.

17.14d: Increase to at least 75 percent the proportion of Hispanics 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.

17.15: 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.

17.16a: Reduce the average age at which black 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 policy or program for the hiring of people with disabilities.

NOTE: Mandated by the Americans with Disabilities Act.

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.

17.21: Reduce the prevalence of peptic ulcer disease to no more than 18 per 1,000 people aged 18 and older by preventing its recurrence.

17.22*: 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.

Duplicate objective: 22.4

17.23: Increase to 70 percent the proportion of people with diabetes who have an annual dilated eye exam.

*Duplicate objective.

Priority Area 18 HIV Infection

Background

The human immunodeficiency virus infection/acquired immunodeficiency syndrome (HIV/AIDS) epidemic is a relatively recent public health phenomenon in the United States and globally. There are at least four distinct HIV/AIDS epidemics of public health significance: among men who have sex with men; injecting drug users; perinatal infection among infants of untreated or undetected HIV positive women; and heterosexual persons, principally in minority communities and facilitated by high rates of other sexually transmitted diseases (which can increase both susceptibility to and transmissibility of HIV infection) and high-risk sexual practices (mainly unprotected sex) associated with certain addictive substances such as crack cocaine (1,2).

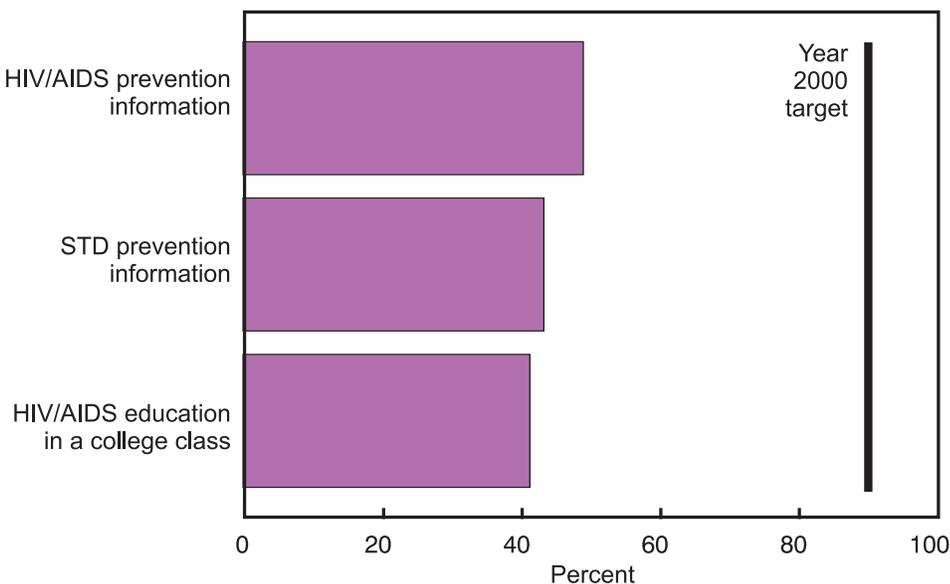
Over 600,000 people have been diagnosed with acquired immunodeficiency syndrome (AIDS) in the United States since the disease was first recognized (2). No treatment is available to cure AIDS, although retro-viral therapies now available extend survival among those who are infected with the human immunodeficiency virus (HIV). With current knowledge, the HIV epidemic can only be controlled through primary preventive strategies, particularly through modifying personal behavioral risk factors. The objectives in the HIV priority area address sexual abstinence among adolescents, condom use among sexually active adolescents and unmarried adults, treatment for injecting drug users, use of uncontaminated injecting equipment among drug users who are not in treatment, HIV testing and counseling, workplace policies and employee education programs, and improving the safety of the country's blood supply.

Data Summary

Highlights

The estimated number of AIDS cases per 100,000 population by year of diagnosis (objective 18.1) decreased between 1995 and 1996 for the total

Figure 19. Proportion of students who received HIV/AIDS and other STD information, education, or counseling on their college or university campuses: United States, 1995, and year 2000 target for objective 18.11



	1995	Year 2000 target
HIV/AIDS prevention information	49.1%	90%
STD prevention information	43.4%	90%
HIV/AIDS education in a college class	41.4%	90%

SOURCE: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, National College Health Risk Behavior Survey.

population. AIDS incidence rates for blacks, females, and Hispanics show increases in 1996 (see [Data Issues](#)). The number of cases diagnosed in 1996 among men who have sex with men and among injecting drug users also decreased compared with the number of cases in 1995 (see [Data Issues](#)). These decreases can be explained to a certain extent by the effect of the expanded 1993 AIDS surveillance case definition (3) and by changes to the measure used to track objective 18.1 starting with 1996 data (see [Data Issues](#)). The incidence rate of AIDS opportunistic infections, a measure that takes into account changes in the AIDS case definition, shows a 6.5-percent decrease between 1995 and 1996 (3). The latest estimates of HIV infection (18.2) indicate that 650,000 to 900,000 Americans are infected with HIV, a rate of 310–420 per 100,000 population (4). The prevalence of HIV infection among women delivering live-born infants

(18.2c) was 160 per 100,000 in 1994; there has been no overall change in this rate from the 1989 baseline. Condom use by their partner at last sexual intercourse has increased among sexually active unmarried females between 1988 and 1995 from 19 percent to 25 percent (18.4). The estimated risk of transfusion-transmitted HIV infection (18.7) has dropped to 1 per 450,000–660,000 units of donated blood. In early 1992, Red Cross blood centers began screening blood with third-generation double antigen enzyme immunosorbent assays based on recombinant antigens for HIV-1 and HIV-2. This new sensitive test decreased the window period between becoming HIV-infectious and having detectable antibodies. There has been a significant drop in the percent of HIV tests for which people returned for counseling (18.8), from 83 percent in 1995 to 61 percent in 1996, a decline of 27 percent. Almost half of college

students receive HIV and STD education on their college or university campus (18.11) (see figure 19).

Summary of Progress

Data to assess progress are available for 13 of the 17 objectives in this priority area. Two objectives have met or exceeded the year 2000 targets. Objective 18.7, to lower the risk of transfusion-transmitted HIV infection, has exceeded its target. Objective 18.14, to extend to all workplaces regulations to protect workers from exposure to bloodborne infections, was met with promulgation of the Occupational Safety and Health Administration's bloodborne pathogens standard in December 1991 (5). Data show progress toward the year 2000 targets for an additional seven objectives (18.1, 18.2, 18.4–18.6, 18.13, and 18.15). Objective 18.1, which targets a slowing of the rise in the rate of AIDS cases, shows the number of AIDS cases diagnosed in 1996 per 100,000 population continues to decline. The 1992 data for objective 18.2 indicate that the prevalence of HIV infection has slowed considerably. Data from the 1995 National Survey of Family Growth (NSFG) update the 1988 baseline for objective 18.4, showing an increase in the proportion of sexually active females whose partners used condoms at last sexual intercourse. The 1997 Youth Risk Behavior Survey (YRBS) also shows progress from data reported in 1995. Objective 18.8, to increase the percent of HIV-infected people who know their serostatus, as measured by the percent of HIV-positive tests for which people returned for counseling, is moving away from the year 2000 target. Objectives 18.9 and 18.12 show trends that are moving away from the target. Supplementary data for objective 18.10 indicate that this objective could be moving away from the year 2000 target as well. The trend is mixed for objective 18.3. Data beyond baseline are not available for assessing the status of objectives 18.10, 18.11, and 18.16. Baseline data are not yet available for objective 18.17.

Data Issues

Definitions

In January 1993 a new AIDS case definition was implemented for the HIV/AIDS Surveillance System (6). The

expanded 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. These changes resulted in cases being diagnosed earlier in the course of the disease and effected a temporary increase in the number of cases reported after January 1, 1993. The expanded definition increased the number of cases diagnosed in 1992 and 1993 because it applied to cases diagnosed in earlier years if they were reported after the new definition was implemented in 1993. The decline in 1994 and 1995 represents the continued but waning effect of the change in AIDS reporting criteria. In 1995, the Centers for Disease Control and Prevention (CDC) began to publish estimates of the incidence of cases of AIDS opportunistic illnesses (including HIV dementia and wasting syndrome) by year of diagnosis. This will improve comparability for trend purposes.

The National Household Survey on Drug Abuse (NHSDA) provides updates to monitor objective 18.5 on the proportion of injecting drug users in the past year who were enrolled in any drug abuse treatment program in the past year (7). For 1991 through 1993, persons defined as injecting drug users in the past year were those who used any drug with a needle for nonmedical reasons. For 1994, persons defined as injecting drug users in the past year were those who used a needle to inject cocaine, heroin, a stimulant, or an anabolic steroid in the past year. For 1995, persons defined as injecting drug users in the past year were those who used a needle to inject cocaine, heroin, or a stimulant in the past year. Enumeration of injecting drug users is difficult because of the illegality of the behavior. Therefore, the number of injecting drug users may be underestimated using this data source. In addition, the NHSDA will miss an unknown proportion of injecting drug users who are homeless, institutionalized, or difficult to locate. The NHSDA data are not comparable to the baseline measure, which was estimated from various sources.

Recent data on the proportion of injecting drug users not in treatment who use uncontaminated injecting equipment (objective 18.6) are available from the Cooperative Agreement for AIDS Community-Based Outreach and Intervention Research Program from the National Institute on Drug Abuse (NIDA). Baseline data were from a similar research project, the National AIDS Demonstration Research Program, also from NIDA. Data from both data sources are from selected cities and are not nationally representative. The measure to monitor this objective is the proportion of current injecting drug users who did not share needles during the last 30 days. Injecting drug users are newly recruited study participants who report injecting drugs during the past 30 days and whose drug-using behavior is confirmed by observation of track marks or positive urine tests.

Data Source Descriptions

Data for objective 18.1 on the number of AIDS cases by year of diagnosis are available from the Centers for Disease Control and Prevention's HIV/AIDS Surveillance System and are adjusted for both delayed and incomplete reporting (3). Data on AIDS cases are more often published by year of report than by year of diagnosis. Approximately 20 percent of AIDS cases are reported more than a year after diagnosis. The estimated number of AIDS cases by year of diagnosis changes as new data become available because AIDS cases diagnosed in previous years continue to be reported and because the adjustment factor for delays in reporting changes as new data become available. The adjustment factor for underreporting is based on the assumption that 90 percent of all AIDS cases are eventually reported (8).

Healthy People 2000 data from this surveillance system cover the 50 States and the District of Columbia only. The data usually published by the AIDS Surveillance System also include United States dependencies, possessions, and nations in free association with the United States.

The baseline data on counseling to prevent HIV and other STD's for objective 18.9 are from the Primary Care Provider Surveys (PCPS). The sample was drawn from the membership rolls of professional organizations for pediatricians, nurse practitioners, family physicians, obstetricians/gynecologists,

and internists. Response rates varied from 50–80 percent across these groups. The data on counseling refer to the proportion of providers who routinely delivered these services to 81–100 percent of their patients who needed the services.

The Prevention in Primary Care Study (PPCS) was conducted in 1997–98 to update data from the PCPS. The design and items included in the 1997–98 study were similar to the PCPS, but a slightly different sampling frame was used and some items included in the 1992 surveys were not included in the PPCS. The professionals were sampled from listings of all licensed, active practitioners in the United States whose practices were at least 50 percent primary care. Because of low response rates from the other provider groups, updates are available only for nurse practitioners.

Data for objective **18.16** are from the CDC-sponsored Worksite Benchmark Survey, which was a telephone survey of nongovernment worksites. Worksites were sampled because different worksites within the same company could have different sets of health promotion activities. Active methods (for example, classes) were counted as worksite health promotion activities; passive methods (for example, brochures) were not included (9,10).

Data Comparability

Beginning with data for 1996, the incidence of AIDS cases (**18.1**) is computed for the age group 13 years and over. For previous years, the age group 18 years and over was used. In addition, the methodology for determining AIDS incidence has changed. Because of the impact of new combination therapies, researchers can no longer reliably predict the number of people who will be diagnosed with AIDS opportunistic infections each year. There is no longer a way to determine the length of time it takes an infected individual on treatment to develop an opportunistic infection because treatment has slowed the progression of disease for many individuals and the duration of the effects of these drugs are not certain. Moreover, after 1996, AIDS incidence will no longer provide an indication of trends in HIV transmission. Therefore, estimates of AIDS incidence from 1986 to 1996 are presented to assess the direction of the epidemic before the impact of new combination therapies.

Also beginning with 1996 data, the number of AIDS cases for men who have sex with men (MSM's) excludes those who were also injecting drug users (IDU's) and the number of cases of IDU's excludes those who also were MSM's. In 1996, the number of AIDS cases among those who were both IDU's and MSM's was 2,680.

Baseline and 1995 data for "all females" for objective **18.3** (adolescent postponement of sexual intercourse), for females 15–44 years and 15–19 years for objective **18.4** (condom use at last sexual intercourse), and for "all females" for objective **18.15** (adolescent abstinence) are from the NSFG. Baseline and 1995 data for "all males" for these objectives are from the National Survey of Adolescent Males (NSAM). Biennial tracking data from the Youth Risk Behavior Survey (YRBS) are also displayed for these objectives, but are not directly comparable to the baselines or the targets. The YRBS is a school-based survey and thus does not include teenagers who are not in school and who are potentially at higher risk of these behaviors (11). YRBS data, shown by age in this report, are published by grade only in other publications. (See text for Priority Area 5 for more information.)

The update for objective **18.7** comes from Lackritz et al., who obtained data from the American Red Cross on donations collected between January 1992 through December 1993 (12). The more sensitive screening enzyme immunosorbent assay antibody test introduced in 1992 is one possible reason for the estimated risk decreasing remarkably between 1990 and 1992–93.

Proxy Measures

Objective **18.8** targets an increase in the proportion of HIV-infected people who know their serostatus. This objective is being measured by the percent of positive HIV tests for which tested people returned for counseling. Some people who were tested and returned for counseling may have had more than one test during the year.

Data Availability

No national data are routinely available that directly measure HIV seroprevalence among the general population (objective **18.2**). 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 (3) as well as serostatus data from the Survey on Childbearing Women and from the National Health and Nutrition Examination Survey III (4,13). Nationally representative estimates of HIV seroprevalence among high-risk groups are not available. Information on the proportion infected among men who have sex with men and injecting drug users 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 (14). 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 STD clinics. For injecting 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.

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Table 18. HIV infection objective status

<i>Objective</i>		<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
18.1	Slow the rise in incidence of AIDS cases (per 100,000 population 18 years and over)	1989	17.0	20.9	25.2	33.1	32.8	29.8	28.6	¹ 27.8	---	43
	a. Men who have sex with men (number of cases)	1989	27,000	28,574	34,005	42,706	39,326	34,146	30,696	^{1,2} 23,420	---	48,000
	b. Black (non-Hispanic)	1989	44.4	59.0	73.0	100.8	107.8	102.9	100.5	¹ 110.9	---	136
	c. Hispanic	1989	34.9	33.1	39.9	51.5	53.7	49.4	47.1	¹ 48.4	---	76
	d. Female	1989	3.5	5.3	6.9	9.9	11.1	10.9	11.2	¹ 11.6	---	13
	e. Injecting drug users (number of cases)	1989	10,300	12,466	15,696	21,899	23,399	20,734	19,100	^{1,3} 15,583	---	25,000
18.2	Slow the rise in prevalence of HIV infection (per 100,000 population 13 years and over)	1989	400	400	---	³ 10–420	---	---	---	---	---	400
	a. Men who have sex with men (15 years and over) ⁴	1989	^a 15,000–61,800	17,400–60,900	---	⁵ 3,900–47,400	---	---	---	---	---	20,000
	b. Injecting drug users (15 years and over) ⁶	1989	^a 0–48,200	0–49,300	---	⁵ 600–52,900	---	---	---	---	---	40,000
	c. Females giving birth to live-born infants (15–44 years) . . .	1989	160	160	170	170	160	160	---	---	---	100
18.3*	Adolescents engaging in sexual intercourse											
	Adolescents 15 years											
	All females	1988	27%	---	---	---	---	---	22%	---	---	15%
	In-school females . . . . .	...	---	35%	36%	---	37%	---	38%	---	44%	...
	All males	1988	33%	---	---	---	---	---	27%	---	---	15%
	In-school males . . . . .	...	---	48%	44%	---	45%	---	42%	---	42%	...
	a. All black males	1988	69%	---	---	---	---	---	60%	---	---	15%
	In-school non-Hispanic black males . . . . .	...	---	---	79%	---	82%	---	77%	---	---	...
	Adolescents 17 years											
	All females	1988	50%	---	---	---	---	---	51%	---	---	40%
	In-school females . . . . .	...	---	62%	66%	---	66%	---	67%	---	62%	...
	All males	1988	66%	---	---	---	---	---	---	---	---	40%
	In-school males . . . . .	...	---	73%	68%	---	68%	---	65%	---	60%	...
	b. All black males	1988	90%	---	---	---	---	---	---	---	---	40%
	In-school non-Hispanic black males . . . . .	...	---	---	90%	---	92%	---	88%	---	---	...
	c. All black females 15–17 years	1988	66%	---	---	---	---	---	⁷ 48%	---	---	40%
	In-school non-Hispanic black females . . . . .	...	---	---	84%	---	80%	---	75%	---	---	...
18.4*	Condom use at last sexual intercourse											
	Sexually active unmarried females 15–44 years (by their partners)	1988	19%	---	---	---	---	---	25%	---	---	50%
	a. Sexually active females 15–19 years (by their partners) . .	1988	26%	---	---	---	---	---	37%	---	---	60%
	Sexually active females 15–19 years in grades 9–12 (by their partners) . . . . .	...	---	40%	38%	---	46%	---	49%	---	51%	...
	b. Sexually active males 15–19 years	1988	57%	---	---	---	---	---	---	---	---	75%
	Sexually active males 15–19 years in grades 9–12 . . . . .	...	---	49%	54%	---	59%	---	61%	---	63%	...
	c. Injecting drug users	1992	⁸ 34%	...	...	...	---	---	---	---	---	75%
	d. Black female 15–44 years (by their partners)	1988	12.4%	---	---	---	---	---	⁷ 25%	---	---	75%
18.5	Injecting drug users enrolled in treatment	1989	11%	---	28.7%	29.8%	45.9%	47.8%	34.1%	---	---	50%
18.6	Injecting drug users not in treatment who did not share needles (in previous 30 days)	1991	30.8%	...	...	---	⁹ 57.7%	---	¹⁰ 60.6%	¹¹ 60.0%	---	75%

Table 18. HIV infection objective status —Con.

	<i>Objective</i>	<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
18.7	Risk of transfusion-transmitted HIV infection (per units of blood)	1989	1 per 40,000– 150,000	1 per 211,000	---	---	¹²¹ per 450,000– 660,000	---	---	---	---	1 per 250,000
18.8	HIV-infected people who know their serostatus Percent of positive HIV tests for which people returned for counseling	1990	72.5%	...	---	---	---	---	83%	61%	---	80%
18.9*	Clinician counseling to prevent HIV and other sexually transmitted diseases	1987	¹³ 10%	---	---	---	---	---	---	---	---	75%
	Percent of clinicians routinely providing service to 81–100% of patients											
	a. Providers practicing in high incidence areas . . . . .	...	---	---	---	---	---	---	---	---	---	90%
	b. Family physicians	1992	27%	...	...	...	---	---	---	---	---	^{14,15} 75%
	c. Internists	1992	30%	...	...	...	---	---	---	---	---	^{14,15} 75%
	d. Nurse practitioners	1992	50%	...	...	...	---	---	---	---	---	¹⁴ 45% 75%
	e. Obstetricians/gynecologists	1992	46%	...	...	...	---	---	---	---	---	^{14,15} 75%
	f. Pediatricians	1992	46%	...	...	...	---	---	---	---	---	^{14,15} 75%
	g. Mental health care providers . . . . .	...	---	---	---	---	---	---	---	---	---	75%
18.10*	HIV and other STD education curricula Schools offering at least one STD class	1988	95%	---	---	---	---	---	---	---	---	95%
	Proportion of middle and senior high schools:											
	With HIV prevention in required courses . . . . .	...	---	---	---	---	---	86%	---	---	---	...
	With STD prevention required courses . . . . .	...	---	---	---	---	---	84%	---	---	---	...
18.11*	HIV and STD education for students at colleges and universities Students 18 years and over given:											
	AIDS or HIV infection prevention information	1995	49.1%	...	...	...	...	...	...	---	---	90%
	STD prevention information	1995	43.4%	...	...	...	...	...	...	---	---	90%
	Students 18 years and over taught about AIDS or HIV in a college class	1995	41.4%	...	...	...	...	...	...	---	---	90%
18.12	Outreach HIV programs for drug users (cities with populations greater than 100,000)	1991	35%	...	...	32%	---	---	---	---	---	90%
18.13*	Clinic services for HIV and other sexually transmitted disease . . . . .	...	---	---	---	---	---	---	---	---	---	50%
	Family planning clinics	1989	40%	---	---	---	---	---	---	---	---	...
	Title X funded family planning clinics											
	STD testing (excluding HIV) . . . . .	...	---	---	---	---	---	95%	---	---	---	...
	STD counseling (excluding HIV) . . . . .	...	---	---	---	---	---	98%	---	---	---	...
	STD treatment (excluding HIV) . . . . .	...	---	---	---	---	---	93%	---	---	---	...
	Gonorrhea											
	Client testing ¹⁶ . . . . .	...	---	97%	---	---	---	---	---	---	---	...
	Client treatment . . . . .	...	---	82%	---	---	---	---	---	---	---	...
	Partner notification ¹⁷ . . . . .	...	---	23%	---	---	---	---	---	---	---	...
	Partner testing . . . . .	...	---	60%	---	---	---	---	---	---	---	...
	Partner treatment . . . . .	...	---	62%	---	---	---	---	---	---	---	...

Table 18. HIV infection objective status —Con.

<i>Objective</i>	<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
Syphilis											
Client testing ¹⁶ . . . . .	...	---	86%	---	---	---	---	---	---	---	...
Client treatment . . . . .	...	---	48%	---	---	---	---	---	---	---	...
Partner notification ¹⁷ . . . . .	...	---	29%	---	---	---	---	---	---	---	...
Partner testing . . . . .	...	---	57%	---	---	---	---	---	---	---	...
Partner treatment . . . . .	...	---	40%	---	---	---	---	---	---	---	...
Chlamydia											
Client testing ¹⁶ . . . . .	...	---	66%	---	---	---	---	---	---	---	...
Client treatment . . . . .	...	---	73%	---	---	---	---	---	---	---	...
Partner notification ¹⁷ . . . . .	...	---	15%	---	---	---	---	---	---	---	...
Partner testing . . . . .	...	---	29%	---	---	---	---	---	---	---	...
Partner treatment . . . . .	...	---	50%	---	---	---	---	---	---	---	...
HIV											
Client pretest counseling . . . . .	...	---	66%	---	---	---	82%	---	---	---	...
Client testing . . . . .	...	---	60%	---	---	---	74%	---	---	---	...
18.14 Regulations to protect workers from occupational exposure to bloodborne infections, including HIV											
Proportion of work places	1992	100%	...	...	...	100%	100%	100%	100%	100%	100%
18.15* Adolescent abstinence from sexual intercourse for previous 3 months											
All sexually active females 15–17 years	1988	23.6%	---	---	---	---	---	27%	---	---	40%
In-school sexually active females 15–17 years . . . . .	...	---	24%	25%	---	25%	---	23%	---	23%	...
All sexually active males 15–17 years	1988	33%	---	---	---	---	---	---	---	---	40%
In-school sexually active males 15–17 years . . . . .	...	---	30%	36%	---	33%	---	34%	---	32%	...
18.16 Comprehensive HIV/AIDS workplace programs											
Proportion of businesses with policies, management training, and employee education:											
Small businesses (15–49 employees)	1995	2%	...	...	...	...	...	...	---	---	10%
Medium businesses (50–749 employees). . . . .	...	---	---	---	---	---	---	7%	---	---	...
Large businesses (750 or more employees).	1995	25%	...	...	...	...	...	...	---	---	50%
Proportion of businesses with policies:											
Small businesses (15–49 employees) . . . . .	...	---	---	---	---	---	---	18%	---	---	...
Medium businesses (50–749 employees). . . . .	...	---	---	---	---	---	---	42%	---	---	...
Large businesses (750 or more employees). . . . .	...	---	---	---	---	---	---	79%	---	---	...
Proportion of businesses with management training:											
Small businesses (15–49 employees) . . . . .	...	---	---	---	---	---	---	18%	---	---	...
Medium businesses (50–749 employees). . . . .	...	---	---	---	---	---	---	41%	---	---	...
Large businesses (750 or more employees). . . . .	...	---	---	---	---	---	---	77%	---	---	...
Proportion of businesses with employee education:											
Small businesses (15–49 employees) . . . . .	...	---	---	---	---	---	---	6%	---	---	...
Medium businesses (50–749 employees). . . . .	...	---	---	---	---	---	---	16%	---	---	...
Large businesses (750 or more employees). . . . .	...	---	---	---	---	---	---	32%	---	---	...
Federal government departments and agencies	1995	80%	...	...	...	...	...	...	---	---	100%

Table 18. HIV infection objective status —Con.

<i>Objective</i>	<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
18.17 Linkages between substance abuse treatment programs and primary care clinics											
Federally funded primary care clinics	---	---	---	---	---	---	---	---	---	40%
Federally funded substance abuse treatment programs	---	---	---	---	---	---	---	---	---	40%

--- Data not available.
 ... Category not applicable.
^aBaseline has been revised.
¹Beginning with 1996, data are for people 13 years and over and methodology is changed. See text for Priority Area 18.
²Beginning with 1996 data, excludes men who are also injecting drug users. See text for Priority Area 18.
³Beginning with 1996 data, excludes men who also had sex with men. See text for Priority Area 18.
⁴Range of clinic-specific HIV prevalence rates among men who have sex with men attending sexually transmitted disease clinics participating in CDC's National Serosurveillance Program.
⁵1991-92 data.
⁶Range of clinic-specific HIV prevalence rates among injecting drug users attending sexually transmitted disease clinics participating in CDC's National Serosurveillance Program.
⁷Data are for non-Hispanic black females.
⁸Data are for male and female injecting drug users (married and unmarried) who report having vaginal sex within the last 6 months and reported using a condom "always" or "sometimes."
⁹Data are for January 1992 through April 1993.
¹⁰Data are for May 1993 through December 1995.
¹¹Data are for January 1992 through July 1996.
¹²1992-93 data.
¹³Data are for new patients only.
¹⁴1997-98 data.
¹⁵Response rate for this group was too low to produce reliable estimates.
¹⁶Includes testing at initial visit, at annual visit, or if symptomatic.
¹⁷By family planning clinic staff via telephone or mail.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

<i>Objective number</i>	<i>Data source</i>
18.1, 18.1a-e	HIV/AIDS Surveillance System, CDC, NCHSTP.
18.2, 18.2a-c	Baseline and 1990 update: CDC, NCHSTP. 1992 update for total population: Karon JM, et al. Prevalence of HIV infection in the United States, 1984 to 1992. JAMA 276(2):126-31. 1996.
18.3*	Baseline and updates for all females and all black females: National Survey of Family Growth, CDC, NCHS. Baseline and updates for all males and all black males: National Survey of Adolescent Males, NIH, NICHD. 1990-97 data for in-school females and males: Youth Risk Behavior Survey, CDC, NCCDPHP.
18.4*, 18.4d	National Survey of Family Growth, CDC, NCHS.
18.4a	Baseline: National Survey of Family Growth, CDC, NCHS. 1990-97 data for in-school females and males: Youth Risk Behavior Survey, CDC, NCCDPHP.
18.4b	Baseline: National Survey of Adolescent Males, NIH, NICHD. 1990-97 data: Youth Risk Behavior Survey, CDC, NCCDPHP.
18.4c	National AIDS Demonstration Research Program, NIH, NIDA.
18.5	Baseline: NIH, NIDA. Updates: National Household Survey on Drug Abuse, SAMHSA, OAS.
18.6	Baseline: National AIDS Demonstration Research Program, NIH, NIDA. Updates: Cooperative Agreement for AIDS Community-based Outreach/Intervention Research Program, NIH, NIDA.
18.7	Baseline: American Association of Blood Banks. 1990 update: Comprehensive Blood Donations Data Set, CDC, NCHSTP.

<i>Objective number</i>	<i>Data source</i>
18.8	1992–93 update: Lackritz EM, et al. Estimated risk of transmission of the human immunodeficiency virus by screened blood in the United States. NEJM 333(26):1721–5. 1995. HIV Counseling and Testing Data Sites System, CDC, NCHSTP.
18.9*	1987 baseline: Sexual history-taking and counseling practices of primary care physicians, Lewis CE and Freeman HE. Western Journal of Medicine 147: 165–7. 1987. 1992 baseline: Primary Care Provider Surveys, OPHS, ODPHP. Update: Prevention in Primary Care Study, American College of Preventive Medicine.
18.10*	1988 baseline: AIDS education: Public school programs require more student information and teacher training. GAO, 1990. 1994 data: School Health Policies and Programs Study, CDC, NCCDPHP.
18.11	National College Health Risk Behavior Survey, CDC, NCCDPHP.
18.12	CDC, NCPS.
18.13*	1989 baseline: State Family Planning Directors. 1990 data: National Questionnaire on Provision of STD and HIV Services by Family Planning Clinics, OPA.
18.14	1994 data: The Urban Institute. Family planning clinics: Current status and recent changes in services, clients, staffing and income sources. March 1994.
18.15*	Occupational exposure to bloodborne pathogens; final rule (29 CFR 1910, 1030). Federal Register 56:64004–182. December 6, 1991. Baseline and update for all females: National Survey of Family Growth, CDC, NCHS. Baseline for all males: National Survey of Adolescent Males, NIH, NICHD.
18.16	1990–97 data for in-school males and females: Youth Risk Behavior Survey, CDC, NCCDPHP. Businesses: Business Responds to AIDS Benchmark Survey, CDC, NCHSTP. Federal government: CDC.

*Duplicate objective. See full text of objective following this table.

HIV Infection Objectives

18.1: Confine annual incidence of diagnosed AIDS cases to no more than 43 per 100,000 population.

NOTE: Cases are by year of diagnosis and are corrected for delays in reporting and underreporting.

18.1a: Confine annual incidence of diagnosed AIDS cases among men who have sex with men to no more than 48,000 cases.

18.1b: Confine annual incidence of diagnosed AIDS cases among blacks to no more than 136 per 100,000 population.

18.1c: Confine annual incidence of diagnosed AIDS cases among Hispanics to no more than 76 per 100,000 population.

18.1d: Confine annual incidence of diagnosed AIDS cases among women to no more than 13 per 100,000 population.

18.1e: Confine annual incidence of diagnosed AIDS cases among injecting drug users to no more than 25,000.

18.2: Confine the prevalence of HIV infection to no more than 400 per 100,000 people.

18.2a: Confine the prevalence of HIV infection among men who have sex with men to no more than 20,000 per 100,000.

18.2b: Confine the prevalence of HIV infection among injecting drug users to no more than 40,000 per 100,000.

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

18.3a*: Reduce the proportion of black males aged 15 years who have engaged in sexual intercourse to no more than 15 percent.

Duplicate objectives: 5.4a and 19.9a

18.3b*: Reduce the proportion of black males aged 17 years who have engaged in sexual intercourse to no more than 40 percent.

Duplicate objectives: 5.4b and 19.9b

18.3c*: Reduce the proportion of black females aged 17 years who have engaged in sexual intercourse to no more than 40 percent.

Duplicate objectives: 5.4c and 19.9c

18.4*: Increase to at least 50 percent the proportion of sexually active, unmarried people who used a condom at last sexual intercourse.

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 75 percent the proportion of injecting drug users who used a condom at last sexual intercourse.

Duplicate objective: 19.10c

18.4d*: Increase to at least 75 percent the proportion of black women aged 15–44 whose partners used a condom at last sexual intercourse.

Duplicate objective: 19.10d

18.5: Increase to at least 50 percent the estimated proportion of all injecting drug users who are in drug abuse treatment programs.

18.6: Increase to at least 75 percent the estimated proportion of active injecting drug users who use only new or properly decontaminated syringes, needles, and other 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 know their serostatus.

18.9*: Increase to at least 75 percent the proportion of primary care and mental health care providers who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

NOTE: Primary care providers include physicians, nurses, nurse practitioners, and physician assistants. Mental health care providers include psychiatrists, psychologists, social workers, psychiatric nurses, and mental health counselors. 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 appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 19.14a

18.9b*: Increase to at least 75 percent the proportion of family physicians who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 19.14b

18.9c*: Increase to at least 75 percent the proportion of internists who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 19.14c

18.9d*: Increase to at least 75 percent the proportion of nurse practitioners who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 19.14d

18.9e*: Increase to at least 75 percent the proportion of obstetricians/gynecologists who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 19.14e

18.9f*: Increase to at least 75 percent the proportion of pediatricians who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 19.14f

18.9g*: Increase to at least 75 percent the proportion of mental health care providers who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 19.14g

18.10*: Increase to at least 95 percent the proportion of schools that have appropriate HIV and other STD education curricula for students in 4th–12th grade, preferably as part of comprehensive school health education, based upon scientific information that includes the way HIV and other STDs are prevented and transmitted.

Duplicate objective: 19.12

18.11*: Increase to at least 90 percent the proportion of students who received HIV and other STD information, education, or counseling on their college or university campus.

Duplicate objective: 19.17

18.12: Increase to at least 90 percent the proportion of cities with populations over 100,000 that have outreach programs to contact drug users (particularly injecting drug users) 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 provide on site primary prevention and provide or refer for secondary

prevention services for HIV infection and bacterial sexually transmitted diseases (gonorrhea, syphilis, and chlamydia) to high-risk individuals and their sex or needle-sharing partners.

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.

18.15*: Increase to at least 40 percent the proportion of ever sexually active adolescents aged 17 and younger who have not had sexual intercourse for the previous 3 months.

Duplicate objectives: 5.5 and 19.16

18.16: Increase to at least 50 percent the proportion of large businesses and to 10 percent the proportion of small businesses that implemented a comprehensive HIV/AIDS workplace program. Increase to 100 percent the proportion of Federal Government departments and agencies that implemented a comprehensive HIV/AIDS workplace program.

NOTE: An HIV/AIDS workplace program consists of (1) an HIV/AIDS written policy, (2) managerial training about the policy and its application, and (3) HIV/AIDS employee education.

18.17: Increase to at least 40 percent the number of federally funded primary care clinics that have formal established linkages with substance abuse treatment programs and increase to at least 40 percent the number of federally funded substance abuse treatment programs that have formal established linkages with primary care clinics.

*Duplicate objective.

Priority Area 19 Sexually Transmitted Diseases

Background

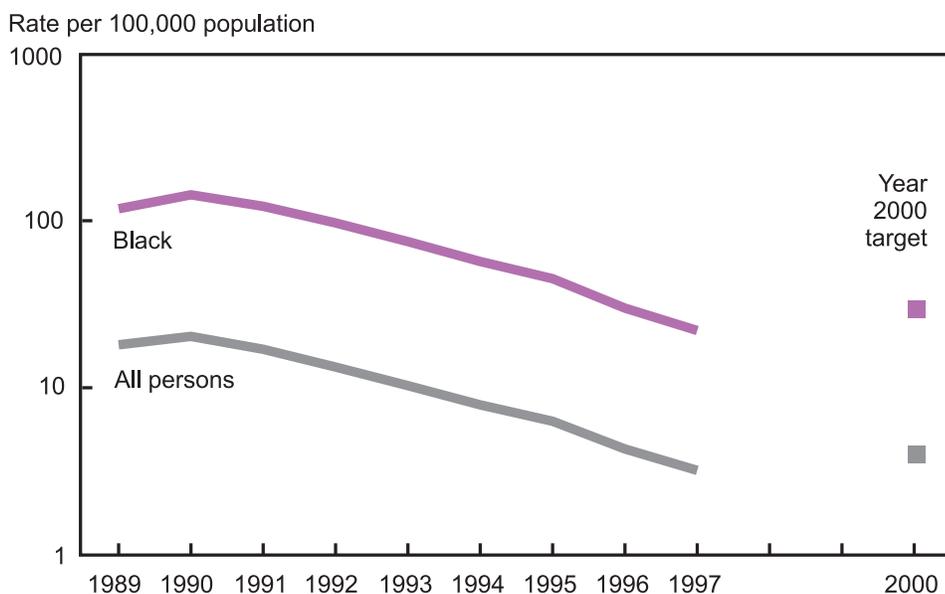
Sexually transmitted diseases (STD's) are the most commonly reported diseases in the United States, and affect all population groups. More than 12 million Americans are infected with STD's each year. Adolescents and young adults are at greatest risk of acquiring an STD. Each year approximately 3 million teenagers acquire an STD and many will develop long-term complications as a result (1). By age 21, approximately one of every five young people has received treatment for an STD (2). Women and children suffer a disproportionate amount of the sexually transmitted disease burden, with pelvic inflammatory disease, infertility, ectopic pregnancy, blindness, cancer associated with human papillomavirus, fetal and infant deaths, and congenital defects among the most serious complications. Ethnic and racial minorities, particularly black and Hispanic people, shoulder a disproportionate share of the sexually transmitted disease burden as well, experiencing higher rates of disease and disability than the population as a whole. Many sexually transmitted diseases such as syphilis, gonococcal infections, and chlamydia, facilitate transmission of human immunodeficiency virus (HIV) infection (1).

Data Summary

Highlights

Progress continues to be made toward achieving the sexually transmitted disease objectives. The incidence of primary and secondary syphilis in 1997 is the lowest ever recorded (see figure 20) and represents an 84-percent reduction from the peak incidence in 1990, with an 81-percent reduction among blacks (Objective 19.3). Congenital syphilis rates continue to decline even further below the *Healthy People 2000* targets, from 32.3 in 1996 to 24.6 cases per 100,000 live births in 1997 (19.4). Repeat gonorrhea infection rates met their *Healthy People*

Figure 20. Primary and secondary syphilis rates: United States, 1989–97, and year 2000 targets for objective 19.3



	1989	1990	1991	1992	1993	1994	1995	1996	1997	Year 2000 target
All persons	18.1	20.3	17.0	13.3	10.3	7.9	6.3	4.3	3.2	4
Black	118	143	122	97	75	57	45	30	22	30

SOURCE: Centers for Disease Control and Prevention, National Center for HIV, STD, and TB Prevention, Sexually Transmitted Disease Surveillance System.

2000 target in 1997, including rates reported among blacks (19.8). Gonorrhea incidence (19.1), chlamydia prevalence among females 15–24 years (19.2), and the number of sexually transmitted hepatitis B infections are making progress toward achieving *Healthy People 2000* targets. The pelvic inflammatory disease (PID) rate (19.6) continues to improve as indicated by a lower number of initial visits to physicians, 261,000 in 1997 (34-percent decrease from the number reported in 1988). Blacks and adolescents are also making considerable progress in reducing hospitalization rates for PID, with both groups having rates that are 51 percent lower than those reported at baseline. The 1996 rate of 164 hospitalizations per 100,000 females 15–44 years with PID is slightly higher than that reported in 1995, but overall is 47 percent lower than the 1988 rate. Condom use at last sexual intercourse among sexually active teenagers (19.10) is increasing, and the percent of adolescents 15 years of age having sexual intercourse (19.9) is declining.

Summary of Progress

Data to assess trends are available for 13 of 17 objectives in this priority area. Progress has been made toward reaching targets for six objectives (19.1, 19.2, 19.6, 19.10, 19.11, and 19.16), and objectives 19.3, 19.4, 19.7, and 19.8 have met or exceeded the year 2000 targets. The trend is mixed for objectives 19.5 and 19.9. Data subsequent to baseline measures are unavailable for four objectives (19.12, 19.13, 19.15, and 19.17). However, supplemental data for objective 19.12 indicate a trend that could be moving in the wrong direction. Data were obtained for objective 19.14 (clinician counseling to prevent HIV or other sexually transmitted diseases) for nurse practitioners only and indicated that the objective is moving away from its target.

Data Issues

Definitions

In January 1988, the Centers for Disease Control and Prevention issued

new guidelines for classifying and reporting cases of congenital syphilis (19.4). The new surveillance case definition is more useful for public health surveillance; the previous definition involved physical examination, laboratory and radiographic results, and followup serological data (3). Followup information was often difficult to obtain and led to delayed and incomplete reporting. In addition, the clinical criteria excluded stillbirths to mothers with untreated syphilis. 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). The number of cases increased dramatically during 1989–91, partly as a result of the new case definition. The case definition was fully implemented in all States on January 1, 1992; trends after this point more accurately reflect changes in the true incidence of congenital syphilis.

Data Source Descriptions

Data for objective 19.6 come from the National Hospital Discharge Survey (NHDS) maintained by the National Center for Health Statistics. Data for the survey are obtained from approximately 480 hospitals throughout the United States. Data on race are not reported by many hospitals due to omission of a race field on hospital discharge reporting forms (UB-82 and UB-92). Automation of the hospital discharge systems has led to an increase in the use of these forms in recent years. A comparison of NHDS data with those who reported being hospitalized in the National Health Interview Survey (NHIS) (NHIS data were adjusted to exclude hospitalizations of 1 day or less) indicated that underreporting for whites is roughly 22 percent in 1991; the difference in reporting for blacks was negligible (5).

The baseline data on counseling to prevent HIV and other STD's for objective 19.14 are from the Primary Care Provider Surveys (PCPS). The sample was drawn from the membership rolls of professional organizations for pediatricians, nurse practitioners, family physicians, obstetricians/gynecologists, and internists. Response rates varied from 50–80 percent across these groups. The data on counseling refer to the proportion of providers who routinely delivered these services to

81–100 percent of their patients who needed the services.

The Prevention in Primary Care Study (PPCS) was conducted in 1997–98 to update data from the PCPS. The design and items included in the 1997–98 study were similar to the PCPS, but a slightly different sampling frame was used and some items included in the 1992 surveys were not included in the PPCS. The professionals were sampled from listings of all licensed, active practitioners in the United States whose practices were at least 50 percent primary care. Because of low response rates from the other provider groups, updates are available only for nurse practitioners.

Comparability of Data Sources

Estimates of chlamydia prevalence among females 15–24 years (19.2) are obtained from the Sexually Transmitted Disease Surveillance System. Surveillance of chlamydial infections is incomplete in many areas of the United States; however, surveillance is improving and, in 1994, chlamydia became a nationally notifiable condition (3). Baseline and update data differ in data collection methodology, which has improved, and in the number of regions from which rates are derived, which has increased.

Baseline and 1995 data for “all females” for objective 19.9 (adolescent postponement of sexual intercourse), for “females 15–44 years” and for “sexually active females 15–19 years” for objective 19.10 (condom use at last sexual intercourse), and for “all females” for objective 19.16 (adolescent abstinence) are from the National Survey of Family Growth (NSFG). Baseline and 1995 data for “all males” for these objectives are from the National Survey of Adolescent Males (NSAM). Biennial tracking data from the Youth Risk Behavior Survey (YRBS) are also displayed for these objectives, but are not directly comparable to the baselines or the targets. The YRBS is a school-based survey and thus does not include teenagers who are not in school and who are potentially at higher risk of these behaviors (6). YRBS data, shown by age in this report, are published by grade only in other publications. (See text for Priority Area 5 for more information.)

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6. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance—United States, 1997. *MMWR* 47:(SS-3). 1998.

Table 19. Sexually transmitted diseases objective status

<i>Objective</i>		<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
19.1	Gonorrhea (per 100,000)	1989	300	278	247	197	172	163	149	123	123	100
	a. Black (non-Hispanic)	1989	1,990	1,941	1,714	1,408	1,175	1,163	1,046	827	812	650
	b. Adolescents 15-19 years	1989	1,123	1,114	1,031	869	728	734	671	572	532	375
	c. Female 15-44 years	1989	501	495	417	364	309	316	300	261	260	175
19.2	Chlamydia prevalence among females 15-24 years											
	Female 15-19 years	1988	12.2%	---	---	---	---	---	6.7%	5.4%	---	5%
	Female 20-24 years	1988	8.5%	---	---	---	---	---	4.2%	3.4%	---	5%
19.3	Primary and secondary syphilis (per 100,000)	1989	18.1	20.3	17.0	13.3	10.3	7.9	6.3	4.3	3.2	4
	a. Black	1989	118	143	122	97	75	57	45	30	22	30
19.4	Congenital syphilis (per 100,000 live births)	1990	91.0	...	107.3	94.7	80.7	55.6	47.4	32.3	24.6	40
	a. Black	1992	^a 417.8	...	...	...	357.3	230.6	173.2	134.7	99.3	175
	b. Hispanic	1992	^a 134.6	...	...	...	103.8	78.6	55.2	40.8	32.0	50
19.5	Annual number of first time consultations¹											
	Genital herpes	1988	163,000	² 172,000	235,000	139,000	172,000	142,000	160,000	208,000	176,000	138,500
	Genital warts	1988	290,000	² 275,000	282,000	218,000	167,000	238,000	253,000	191,000	145,000	246,500
19.6	Pelvic inflammatory disease											
	Hospitalizations per 100,000 females 15-44 years	1988	311	261	233	212	196	177	162	164	---	100
	Initial visits to physicians (number of visits) ¹	1988	430,800	357,522	376,540	334,793	386,860	312,000	245,000	285,000	261,000	290,000
	Hospitalizations per 100,000 females											
	a. Black 15-44 years	1988	655	567	523	539	399	378	296	318	---	150
	b. Adolescents 15-19 years	1988	342	279	239	205	159	184	141	168	---	110
19.7*	Sexually transmitted hepatitis B (number of cases)	1987	47,593	47,881	58,393	52,882	35,849	35,077	³ 29,446	---	---	30,500
19.8	Repeat gonorrhea infection	1987	20%	---	---	16.7%	16.1%	13.8%	14.9%	15.8%	14.4%	15%
	a. Black	1992	21.3%	...	...	...	19.9%	15.6%	16.8%	17.7%	16.2%	17%
19.9*	Adolescents engaging in sexual intercourse											
	Adolescents 15 years											
	All females	1988	27%	---	---	---	---	---	22%	---	---	15%
	In-school females . . . . .	...	---	35%	36%	---	37%	---	38%	---	44%	...
	All males	1988	33%	---	---	---	---	---	27%	---	---	15%
	In-school males . . . . .	...	---	48%	44%	---	45%	---	42%	---	42%	...
	a. All black males	1988	69%	---	---	---	---	---	60%	---	---	15%
	In-school non-Hispanic black males . . . . .	...	---	---	79%	---	82%	---	77%	---	---	...
	Adolescents 17 years											
	All females	1988	50%	---	---	---	---	---	51%	---	---	40%
	In-school females . . . . .	...	---	62%	66%	---	66%	---	67%	---	62%	...
	All males	1988	66%	---	---	---	---	---	---	---	---	40%
	In-school males . . . . .	...	---	73%	68%	---	68%	---	65%	---	60%	...
	b. All black males	1988	90%	---	---	---	---	---	---	---	---	40%
	In-school non-Hispanic black males . . . . .	...	---	---	90%	---	92%	---	88%	---	---	...
	c. All black females 15-17 years	1988	66%	---	---	---	---	---	⁴ 48%	---	---	40%
	In-school non-Hispanic black females . . . . .	...	---	---	84%	---	80%	---	75%	---	---	...

Table 19. Sexually transmitted diseases objective status—Con.

Objective	Baseline	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	Target
	year										2000
19.10* Condom use at last sexual intercourse											
Sexually active unmarried females 15–44 years (by their partners)	1988	19%	---	---	---	---	---	25%	---	---	50%
a. Sexually active females 15–19 years (by their partners)	1988	26%	---	---	---	---	---	37%	---	---	60%
Sexually active females 15–19 years in grades 9–12 (by their partners) . . . . .	...	---	40%	38%	---	46%	---	49%	---	51%	...
b. Sexually active males 15–19 years	1988	57%	---	---	---	---	---	---	---	---	75%
Sexually active males 15–19 years in grades 9–12 . . . . .	...	---	49%	54%	---	59%	---	61%	---	63%	...
c. Injecting drug users	1992	⁵ 34%	...	...	...	---	---	---	---	---	75%
d. Black females 15–44 years (by their partners)	1988	12.4%	---	---	---	---	---	⁴ 25%	---	---	75%
19.11* Clinic services for HIV and other sexually transmitted diseases . . . . .	...	---	---	---	---	---	---	---	---	---	50%
Family planning clinics	1989	40%	---	---	---	---	---	---	---	---	...
Title X funded family planning clinics											
STD testing (excluding HIV) . . . . .	...	---	---	---	---	---	95%	---	---	---	...
STD counseling (excluding HIV) . . . . .	...	---	---	---	---	---	98%	---	---	---	...
STD treatment (excluding HIV) . . . . .	...	---	---	---	---	---	93%	---	---	---	...
Gonorrhea											
Client testing ⁶ . . . . .	...	---	97%	---	---	---	---	---	---	---	...
Client treatment . . . . .	...	---	82%	---	---	---	---	---	---	---	...
Partner notification ⁷ . . . . .	...	---	23%	---	---	---	---	---	---	---	...
Partner testing . . . . .	...	---	60%	---	---	---	---	---	---	---	...
Partner treatment . . . . .	...	---	62%	---	---	---	---	---	---	---	...
Syphilis											
Client testing ⁶ . . . . .	...	---	86%	---	---	---	---	---	---	---	...
Client treatment . . . . .	...	---	48%	---	---	---	---	---	---	---	...
Partner notification ⁷ . . . . .	...	---	29%	---	---	---	---	---	---	---	...
Partner testing . . . . .	...	---	57%	---	---	---	---	---	---	---	...
Partner treatment . . . . .	...	---	40%	---	---	---	---	---	---	---	...
Chlamydia											
Client testing ⁶ . . . . .	...	---	66%	---	---	---	---	---	---	---	...
Client treatment . . . . .	...	---	73%	---	---	---	---	---	---	---	...
Partner notification ⁷ . . . . .	...	---	15%	---	---	---	---	---	---	---	...
Partner testing . . . . .	...	---	29%	---	---	---	---	---	---	---	...
Partner treatment . . . . .	...	---	50%	---	---	---	---	---	---	---	...
HIV											
Client pretest counseling . . . . .	...	---	66%	---	---	---	82%	---	---	---	...
Client testing . . . . .	...	---	60%	---	---	---	74%	---	---	---	...
19.12* HIV and other STD education curricula											
Schools offering at least one STD class	1988	95%	---	---	---	---	---	---	---	---	95%
Proportion of middle and senior high schools:											
With HIV prevention in required courses . . . . .	...	---	---	---	---	---	86%	---	---	---	...
With STD prevention in required courses . . . . .	...	---	---	---	---	---	84%	---	---	---	...

Table 19. Sexually transmitted diseases objective status—Con.

	Objective	Baseline										Target
		year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	2000
19.13	Correct management of sexually transmitted disease cases by primary care providers	1988	70%	---	---	---	---	---	---	---	---	90%
19.14*	Clinician counseling to prevent HIV and other sexually transmitted diseases	1987	⁸ 10%	---	---	---	---	---	---	---	---	75%
	Percent of clinicians routinely providing service to 81–100% of patients											
a.	Providers practicing in high incidence areas	...	---	---	---	---	---	---	---	---	---	90%
b.	Family physicians	1992	27%	...	...	...	---	---	---	9,10_	---	75%
c.	Internists	1992	30%	...	...	...	---	---	---	9,10_	---	75%
d.	Nurse practitioners	1992	50%	...	...	...	---	---	---	---	⁹ 45%	75%
e.	Obstetricians/gynecologists	1992	46%	...	...	...	---	---	---	---	9,10_	75%
f.	Pediatricians	1992	46%	...	...	...	---	---	---	---	9,10_	75%
g.	Mental health care providers	...	---	---	---	---	---	---	---	---	---	75%
19.15	Partner notification of exposure to sexually transmitted diseases											
	Patients with bacterial sexually transmitted diseases	1988	20%	---	---	---	---	---	---	---	---	50%
19.16*	Adolescent abstinence from sexual intercourse for previous 3 months											
	All sexually active females 15–17 years	1988	23.6%	---	---	---	---	---	27%	---	---	40%
	In-school sexually active females 15–17 years	...	---	24%	25%	---	25%	---	23%	---	23%	...
	All sexually active males 15–17 years	1988	33%	---	---	---	---	---	---	---	---	40%
	In-school sexually active males 15–17 years	...	---	30%	36%	---	33%	---	34%	---	32%	...
19.17*	HIV and STD education for students at colleges and universities											
	Students 18 years and over given:											
	AIDS or HIV infection prevention information	1995	49.1%	...	...	...	...	...	...	---	---	90%
	STD prevention information	1995	43.4%	...	...	...	...	...	...	---	---	90%
	Students 18 years and over taught about AIDS or HIV in a college class	1995	41.4%	...	...	...	...	...	...	---	---	90%

--- Data not available.

... Category not applicable.

^aBaseline has been revised.

¹As measured by first-time visits to physicians' offices.

²1989 data.

³Data are provisional.

⁴Data are for non-Hispanic black females.

⁵Data are for male and female injecting drug users (married and unmarried) who report having vaginal sex within the last 6 months and reported using a condom "always" or "sometimes."

⁶Includes testing at initial visit, at annual visit, or if symptomatic.

⁷By family planning clinic staff via telephone or mail.

⁸Data are for new patients.

⁹1997–98 data.

¹⁰Response rate for this group was too low to produce reliable estimates.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

<i>Objective number</i>	<i>Data source</i>
19.1, 19a–c	Sexually Transmitted Disease Surveillance System, CDC, NCHSTP.
19.2	Sexually Transmitted Disease Surveillance System, CDC, NCHSTP.
19.3, 19.3a	Sexually Transmitted Disease Surveillance System, CDC, NCHSTP.
19.4	Sexually Transmitted Disease Surveillance System, CDC, NCHSTP.
19.5	National Disease and Therapeutic Index, IMS America, Ltd.
19.6, 19.6a–b	For hospitalizations, National Hospital Discharge Survey, CDC, NCHS. For number of visits, National Disease and Therapeutic Index, IMS America, Ltd.
19.7*	Viral Hepatitis Surveillance System, CDC, NCID.
19.8	Gonococcal Isolate Surveillance Project, CDC, NCHSTP.
19.9*	Baseline and update for all females and all black females: National Survey of Family Growth, CDC, NCHS. Baseline and update for all males and all black males: National Survey of Adolescent Males, NIH, NICHD. 1990–97 data for in-school females and males: Youth Risk Behavior Survey, CDC, NCCDPHP.
19.10*, 19.1	National Survey of Family Growth, CDC, NCHS.
19.10a	Baseline: National Survey of Family Growth, CDC, NCHS. 1990–97 data: Youth Risk Behavior Survey, CDC, NCCDPHP.
19.10b	Baseline: National Survey of Adolescent Males, NIH, NICHD. 1990–97 data for in-school males and females: Youth Risk Behavior Survey, CDC, NCCDPHP.
19.10c	National AIDS Demonstration Research Program, NIH, NIDA.
19.11*	Baseline: State Family Planning Directors. 1990 data: National Questionnaire on Provision of STD and HIV Services by Family Planning Clinics, OPA. 1994 data: The Urban Institute. Family planning clinics: Current status and recent changes in services, clients, staffing, and income sources. March 1994.
19.12*	1988 baseline: AIDS education: Public school programs require more student information and teacher training, GAO, 1990. 1994 data: School Health Policies and Programs Study, CDC, NCCDPHP.
19.13	National Disease and Therapeutic Index, IMS America, Ltd.
19.14*	1987 baseline: Sexual history-taking and counseling practices of primary care physicians, Lewis CE and Freeman HE. <i>Western Journal of Medicine</i> , 147: 165–7. 1987. 1992 baseline: Primary Care Provider Surveys, OPHS, ODPHP. Update: Prevention in Primary Care Study, American College of Preventive Medicine.
19.15	Sexually Transmitted Disease Surveillance System, CDC, NCHSTP.
19.16*	Baseline and update for all females: National Survey of Family Growth, CDC, NCHS. Baseline for all males: National Survey of Adolescent Males, NIH, NICHD. 1990–97 data for in-school males and females: Youth Risk Behavior Survey, CDC, NCCDPHP.
19.17*	National College Health Risk Behavior Survey, CDC, NCCDPHP.

*Duplicate objective. See full text of objective following this table.

Sexually Transmitted Diseases Objectives

19.1: Reduce gonorrhea to an incidence of no more than 100 cases per 100,000 people.

19.1a: Reduce gonorrhea among blacks to an incidence of no more than 650 cases per 100,000.

19.1b: Reduce gonorrhea among adolescents aged 15–19 to an incidence of no more than 375 cases per 100,000.

19.1c: Reduce gonorrhea among women aged 15–44 to an incidence of no more than 175 cases per 100,000.

19.2: Reduce the prevalence of Chlamydia trachomatis infections among young women (under the age of 25 years) to no more than 5 percent.

NOTE: As measured by a decrease in the prevalence of chlamydia infection among family planning clients

19.3: Reduce primary and secondary syphilis to an incidence of no more than 4 cases per 100,000 people.

19.3a: Reduce primary and secondary syphilis among blacks to an incidence of no more than 30 cases per 100,000.

19.4: Reduce congenital syphilis to an incidence of no more than 40 cases per 100,000 live births.

19.4a: Reduce congenital syphilis among blacks to an incidence of no more than 175 cases per 100,000 live births.

19.4b: Reduce congenital syphilis among Hispanics 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 138,500 and 246,500, 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 100 per 100,000 women aged 15–44 and a reduction in the number of initial

visits to physicians for pelvic inflammatory disease to no more than 290,000.

19.6a: Reduce the incidence of pelvic inflammatory disease among blacks, as measured by a reduction in hospitalizations for pelvic inflammatory disease, to no more than 150 per 100,000 women aged 15–44.

19.6b: Reduce the incidence of pelvic inflammatory disease among adolescents, as measured by a reduction in hospitalizations for pelvic inflammatory disease, to no more than 110 per 100,000 females aged 15–19.

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.

19.8a: Reduce the rate of repeat gonorrhea infection among blacks to no more than 17 percent within the previous year.

NOTE: Proportion of male gonorrhea patients with one or more gonorrhea infections within the previous 12 months.

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

19.9a*: Reduce the proportion of black males aged 15 years who have engaged in sexual intercourse to no more than 15 percent.

Duplicate objectives: 5.4a and 18.3a

19.9b*: Reduce the proportion of black males aged 17 years who have engaged in sexual intercourse to no more than 40 percent.

Duplicate objectives: 5.4b and 18.3b

19.9c*: Reduce the proportion of black females aged 17 years who have engaged in sexual intercourse to no more than 40 percent.

Duplicate objectives: 5.4c and 18.3c

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 users who used a condom at last sexual intercourse.

Duplicate objective: 18.4c

19.10d*: Increase to at least 75 percent the proportion of black women aged 15–44 whose partner used a condom at last sexual intercourse.

Duplicate objective: 18.4d

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 provide on site primary prevention and provide or refer for secondary prevention services for HIV infection and bacterial sexually transmitted diseases (gonorrhea, syphilis, and Chlamydia) to high-risk individuals and their sex or needle-sharing partners.

Duplicate objectives: 5.11 and 18.13

19.12*: Increase to at least 95 percent the proportion of schools that have appropriate HIV and other STD education curricula for students in 4th–12th grade, preferably as part of comprehensive school health education, based upon scientific information that

includes the way HIV and other STDs are prevented and transmitted. Duplicate objective: 18.10

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 appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

NOTE: Primary care providers include physicians, nurses, nurse practitioners, and physician assistants. Mental health care providers include psychiatrists, psychologists, social workers, psychiatric nurses, and mental health counselors. 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 appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 18.9a

19.14b*: Increase to at least 75 percent the proportion of family physicians who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 18.9b

19.14c*: Increase to at least 75 percent the proportion of internists who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 18.9c

19.14d*: Increase to at least 75 percent the proportion of nurse practitioners who provide

appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 18.9d

19.14e*: Increase to at least 75 percent the proportion of obstetricians/gynecologists who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 18.9e

19.14f*: Increase to at least 75 percent the proportion of pediatricians who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 18.9f

19.14g*: Increase to at least 75 percent the proportion of mental health care providers who provide appropriate counseling on the prevention of HIV and other sexually transmitted diseases.

Duplicate objective: 18.9g

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 for the purpose of education, counseling, and referral to health care services.

19.16*: Increase to at least 40 percent the proportion of ever sexually active adolescents aged 17 and younger who have not had sexual intercourse for the previous 3 months.

Duplicate objective: 5.5 and 18.15

19.17*: Increase to at least 90 percent the proportion of students who received HIV and other STD information, education, or counseling on their college or university campus.

Duplicate objective: 18.11

*Duplicate objective.

Priority Area 20 Immunization and Infectious Diseases

Background

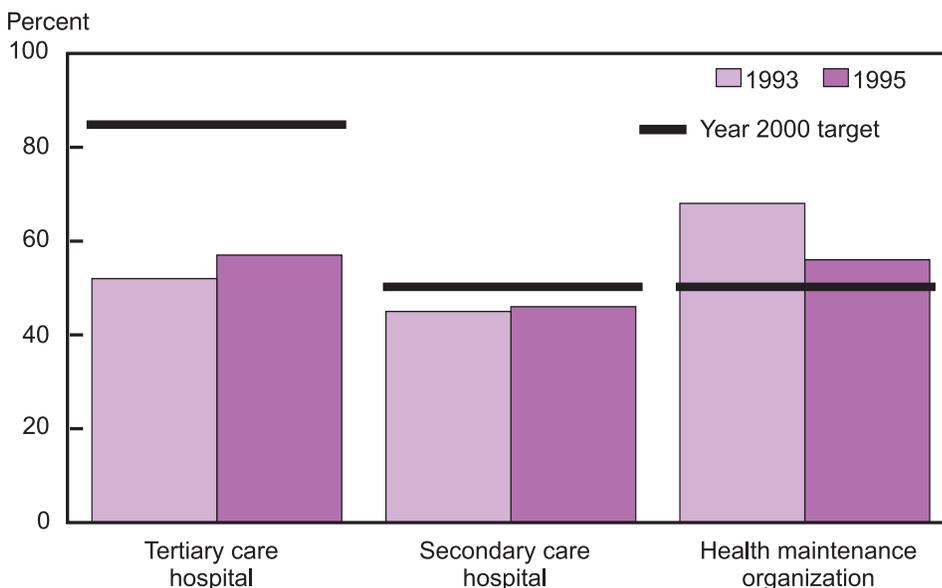
The reduction in incidence of infectious diseases is a significant public health achievement of this century. Despite the progress that has been made, infectious diseases remain an important cause of illness and death in the United States. Each of the causative agents of infectious diseases, even those that are currently rare, poses a potential threat of recurrence or development of resistance to current treatment. For example, susceptibility to active tuberculosis among persons infected with the human immunodeficiency virus (HIV) has contributed to an increase in the number of tuberculosis cases after a steady decline since the 1950's (1). The development and widespread use of vaccines has been instrumental in reducing the incidence of many infectious diseases, particularly childhood diseases. Approximately 80 percent of childhood vaccine doses are recommended for administration before the second birthday; however, under-vaccination in this age group has been a continuing problem (2). Protecting children against vaccine-preventable diseases has become a national priority.

Data Summary

Highlights

Vaccination levels among children are the highest ever recorded in the United States (objective 20.11). The proportion of children 19–35 months fully vaccinated against hepatitis B virus increased 24 percent in the past 2 years, from 68 percent in 1995 to 84 percent in 1997. The proportion of children who have received a complete set of vaccinations comprising four doses of diphtheria-tetanus-pertussis vaccine, three doses of polio vaccine, and one dose of measles-containing (MCV) vaccine increased from 76 percent in 1995 to 78 percent in 1997. Polio and measles-containing vaccination levels have also increased. Influenza and pneumococcal vaccination levels among people 65 years and over (20.11a–b)

Figure 21. Proportion of hospital and health maintenance organization laboratories that possess technologies for rapid viral diagnosis of influenza: United States, 1993, 1995, 1997, and year 2000 targets for objective 20.19



	1993	1995	1997	Year 2000 target
Tertiary care hospital laboratories	52%	57%	58%	85%
Secondary care hospital laboratories	45%	46%	46%	50%
Health maintenance organization laboratories . . .	68%	56%	68%	50%

SOURCE: Centers for Disease Control and Prevention, National Center for Infectious Diseases, Viral and Rickettsial Disease Division, Survey of Laboratories Using Rapid Viral Diagnosis of Influenza.

also continued to increase from the 1989 rates among the total population, blacks, and among Hispanics in 1997. However, racial/ethnic disparities in vaccination levels still persist among Hispanics and non-Hispanic blacks (3).

The incidence of almost all vaccine-preventable diseases (20.1) continued to be low during 1997, with no cases of polio due to wild virus, fewer than 10 cases each of tetanus or diphtheria among persons 25 years of age and under, and only 5 cases of reported congenital rubella syndrome. The number of rubella cases in 1997 (181) dropped 24 percent from the number of cases reported in 1996 (238). An interruption of indigenous measles transmission likely occurred in the fall of 1993, although importation of the virus resulted in moderate measles outbreaks in 1994 primarily among groups that refuse vaccination; in 1996

the number of measles cases increased 64 percent from that reported in 1995. There were 138 cases reported in 1997, a 73 percent drop. Pertussis incidence, which had declined by 15 percent in 1994 from the 20-year high reported in 1993, increased to an even higher level in 1996, with 7,796 cases. Data for 1997 (6,564) show a 16 percent drop.

Incidence of tuberculosis declined in 1996 to the lowest rate since the 1988 baseline (20.4). The 1997 rates for blacks, Hispanics, and American Indians and Alaska Natives declined from the 1994 rates and are below the 1988 baselines; rates for Asians and Pacific Islanders are over five times as high as rates for the total population, but have decreased modestly in the past 2 years to a rate of 40.6 cases per 100,000 population.

The number of restricted activity days due to ear infections per 100

children 4 years and under (20.9) has dropped to 103.4, a rate below the *Healthy People 2000* target of 105.0 restricted activity days per 100 children.

The incidence of hepatitis B has continued to decline and the number of cases among high-risk groups have also declined (20.3).

It is also important to note that the proportion of health maintenance organizations with laboratories capable of diagnosing viral influenza (20.19) has met the year 2000 target (see figure 21).

Summary of Progress

Data are available to assess progress for 17 of the 19 objectives in the Immunization and Infectious Diseases priority area. Objectives 20.7 and 20.9 have met or exceeded the year 2000 targets. For seven objectives (20.2–20.4, 20.13, 20.14, 20.16, and 20.19), there is progress toward achieving the targets. Progress made by objective 20.14 is based on nurse practitioner data only. Trends for two objectives (20.12 and 20.18) indicate movement away from the target. Mixed results are shown for six objectives (20.1, 20.5, 20.6, 20.10, 20.11, and 20.15). Data are not yet available to provide measures after baseline for two objectives (20.8 and 20.17).

Data Issues

Definitions

Operational definitions and data collection specifications for all year 2000 objectives in priority area 20 have been published in the National Center for Health Statistics *Statistical Notes* series (4). Data issues are discussed and references are cited for expanded discussions of the data systems that provide data for the national objectives. When appropriate, the text of questionnaire items used to measure the objectives is also provided. See the appendix and appendix table VIII for further information.

Epidemic-related pneumonia and influenza deaths are defined as those that are above the normal yearly fluctuations of mortality from these diseases. 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 (5). Epidemic-related deaths are defined as those that exceed the predicted number during epidemic periods based on the model.

Data Source Descriptions

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* (6). 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.

The baseline data on provision of immunizations by physicians for objective 20.14 are from the Primary Care Provider Surveys (PCPS). The sample was drawn from the membership rolls of professional organizations for pediatricians, nurse practitioners, family physicians, obstetricians/gynecologists, and internists. The data show the proportion of providers who provided the service to 81–100 percent of their patients. The Prevention in Primary Care Study (PPCS) was conducted in 1997–98 to update data from the PCPS. The design and items included in the 1997–98 study were similar to the PCPS, but a slightly different sampling frame was used and some items included in the 1992 surveys were not included in the PPCS. The professionals were sampled from listings of all licensed, active practitioners in the United States whose practices were at least 50 percent primary care. Because of low response rates from the other provider groups, updates are available only for nurse practitioners.

Comparability of Data Sources

Data sources on immunization coverage have changed over the years. The baseline data (20.11) were obtained from the 1985 United States Immunization Survey (USIS) and show the range of antigen-specific vaccination levels at the time of the interview among children 24–35 months of age. From 1991 to 1994, the source of the immunization data was the National Health Interview Survey (NHIS) and the age included in the data set was expanded to children 19–35 months of age. In 1992, the NHIS questions on childhood immunizations were modified; therefore, the 1991 data are not directly comparable to data for subsequent years. The 1992 data are now considered the baseline data for estimates from the NHIS. The 1994 NHIS data have been provider-verified and adjusted; providers were contacted and asked to provide vaccination information for each child in the sample.

One of the limitations of the NHIS is that it provides only national estimates. In contrast, the National Immunization Survey (NIS) provides comparable national, State, and local vaccination coverage estimates. Therefore, since 1995, vaccination coverage data have been obtained from the NIS. The NIS, first fielded in 1994, is an ongoing survey that provides the first population-based State and urban area-specific estimates of vaccination coverage by a standard methodology for the United States for children 19–35 months of age.

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Table 20. Immunization and infectious diseases objective status

	<i>Objective</i>	<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
20.1	Vaccine-preventable diseases (number of cases)											
	Diphtheria among people 25 years and under . .	1988	1	2	2	3	0	2	0	0	3	0
	Tetanus among people 25 years and under . . .	1988	3	6	4	7	4	5	5	3	9	0
	Polio (wild-type virus)	1988	0	0	0	0	0	0	0	0	0	0
	Measles	1988	^a 3,396	26,527	9,411	2,237	312	963	309	508	138	0
	Rubella	1988	225	1,125	1,401	160	192	227	128	238	181	0
	Congenital Rubella Syndrome	1988	6	11	47	11	5	7	6	4	5	0
	Mumps	1988	4,866	5,292	4,264	2,572	1,692	1,537	906	751	683	500
	Pertussis	1988	3,450	4,570	2,719	4,083	6,586	4,617	5,137	7,796	6,564	1,000
20.2	Epidemic-related pneumonia and influenza deaths among people 65 years and over (per 100,000)	1979–87	¹ 19.9	² 22.6	³ 18.6	⁴ 20.0	⁵ 15.7	⁶ 21.0	⁷ 19.2	⁸ 17.3	---	15.9
20.3*	Viral hepatitis cases (per 100,000)											
	Hepatitis B	1987	63.5	50.6	42.6	37.7	30.9	28.7	25.0	23.9	---	40.0
	Hepatitis A	1987	33.0	37.9	29.0	27.2	28.2	30.9	36.4	31.1	---	16.1
	Hepatitis C	1987	18.3	13.1	8.3	5.6	4.4	4.1	2.7	2.9	---	13.7
	Hepatitis B (number of cases)											
	a. Injecting drug users	1987	44,348	17,615	12,666	10,576	15,136	14,180	10,216	9,199	---	7,932
	b. Heterosexually active people	1987	33,995	33,971	43,795	46,152	26,289	25,375	19,831	25,659	---	22,663
	c. Men who have sex with men	1987	13,598	13,840	14,598	6,730	9,560	9,702	9,615	11,135	---	4,568
	d. Children of Asians/Pacific Islanders	1987	10,817	8,807	7,514	6,730	5,576	5,224	4,207	4,440	---	1,500
	e. Occupationally exposed workers	1987	3,090	1,258	2,576	1,923	727	506	407	391	---	623
	f. Infants (chronic infections)	1987	6,012	3,003	2,235	2,464	2,464	1,682	1,682	1,682	---	1,111
	g. Alaska Native (number of new carriers) . . .	1987	15	15	15	15	1	0	0	0	---	1
	Hepatitis B (cases per 100,000)											
	h. Black	1992	52.8	...	...	...	57.0	52.3	45.3	41.5	---	40
	Hepatitis A (cases per 100,000)											
	i. Hispanic	1992	53.8	...	...	...	50.6	61.9	44.9	62.9	---	^a 26.9
	j. American Indian/Alaska Native	1992	256.0	...	...	...	192.7	363.7	240.7	142.3	---	128
	Hepatitis C (cases per 100,000)											
	k. Hispanic	1992	17.2	...	...	...	11.1	6.7	3.9	7.7	---	^a 13.7
20.4	Tuberculosis cases (per 100,000)	1988	9.1	10.3	10.4	10.5	9.8	9.4	8.7	8.0	7.4	3.5
	a. Asian/Pacific Islander	1988	36.3	41.6	41.8	46.6	44.5	45.3	45.9	41.6	40.6	15.0
	b. Black	1988	28.3	33.0	31.9	31.7	29.1	26.8	23.9	22.3	20.5	10.0
	c. Hispanic	1988	18.3	21.4	22.8	22.4	20.6	19.5	18.0	16.0	14.4	5.0
	d. American Indian/Alaska Native	1988	18.1	18.9	16.3	16.3	14.6	17.4	16.5	14.5	13.4	5.0

Table 20. Immunization and infectious diseases objective status—Con.

	<i>Objective</i>	<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
20.5	Surgical wound and nosocomial infections											
	Device-associated nosocomial infection rates in ICU patients (per 1,000 device-days)											
	Bloodstream Infections											
	Medical/coronary ICU's	1986-90	6.9	...	---	6.5	5.9	5.4	5.7	5.7	---	6.2
	Surgical/medical-surgical ICU's	1986-90	5.3	...	---	5.8	4.9	4.6	4.3	4.9	---	4.8
	Pediatric ICU's.	1986-90	11.4	...	---	7.9	8.3	8.0	7.8	7.5	---	10.3
	Urinary Tract Infections											
	Medical/coronary ICU's	1986-90	10.7	...	---	10.1	8.5	7.9	7.3	6.9	---	9.6
	Surgical/medical-surgical ICU's	1986-90	7.6	...	---	6.3	5.9	5.8	4.9	5.1	---	6.8
	Pediatric ICU's.	1986-90	5.8	...	---	5.4	5.1	5.2	5.9	4.9	---	5.2
	Pneumonia											
	Medical/coronary ICU's	1986-90	12.8	...	---	9.0	9.5	8.6	10.1	9.2	---	11.5
	Surgical/medical-surgical ICU's	1986-90	17.6	...	---	15.1	14.1	13.6	12.9	12.7	---	15.8
	Pediatric ICU's.	1986-90	4.7	...	---	6.7	5.8	5.7	5.5	5.3	---	4.2
	Surgical wound infection rates (per 100 operations)											
	Low-risk patients	1986-90	1.1	...	---	1.2	1.2	1.1	1.2	1.0	---	1.0
	Medium-low-risk patients	1986-90	3.2	...	---	3.2	3.2	3.1	3.4	3.2	---	2.9
	Medium-high-risk patients	1986-90	6.3	...	---	6.4	5.8	6.1	5.9	5.8	---	5.7
	High-risk patients.	1986-90	14.4	...	---	12.1	11.0	11.0	10.1	10.3	---	13.0
20.6	Illness among international travelers (number of cases)											
	Typhoid fever	1987	280	386	351	299	308	309	258	---	---	140
	Hepatitis A	1987	4,475	3,962	3,814	3,814	4,581	6,602	7,815	6,331	---	1,119
	Malaria	1987	932	⁹ 1,102	1,021	910	1,275	1,007	1,162	955	---	750
20.7	Bacterial meningitis cases (per 100,000)	1986	6.5	---	---	---	---	---	1.9	2.3	---	4.7
	a. Alaska Native	1987	33	---	17	---	---	---	---	0.7	---	8
20.8	Infectious diarrhea among children in child care centers											
	Children 0-5 years	1991	32%	...	...	---	---	---	---	---	---	24%
	Children 0-3 years	1991	38%	...	...	---	---	---	---	---	---	28%
20.9	Ear infections among children 4 years and under (restricted activity days per 100 children)	1987	135.4	125.0	155.7	155.2	196.3	137.0	134.4	103.4	---	105.0
20.10	Pneumonia-related restricted activity days (per 100 people)											
	People 65 years and over.	1987	19.1	46.2	78.5	63.5	45.1	71.3	58.8	80.7	---	15.1
	Children 4 years and under.	1987	29.4	51.3	¹⁰ ---	¹⁰ ---	¹⁰ ---	39.5	¹⁰ ---	¹⁰ ---	---	24.0
20.11	Immunization (percent immunized)											
	Basic immunization series among children											
	Children 2 years and under.	1985	^{11,12} 54-64%	---	---	---	---	---	---	---	---	90%

Table 20. Immunization and infectious diseases objective status—Con.

Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	Target 2000
Children 19–35 months											
Diphtheria-tetanus-pertussis (3 or more doses) . . . . .	...	---	---	69%	83%	88%	90%	95%	95%	95%	...
Polio (3 or more doses) . . . . .	...	---	---	53%	72%	79%	79%	88%	91%	91%	...
Measles-containing . . . . .	...	---	---	82%	83%	84%	90%	90%	91%	91%	...
Haemophilus influenzae B (3 or more doses) . . . . .	...	---	---	58%	28%	55%	75%	92%	92%	93%	...
Hepatitis B (3 or more doses) . . . . .	...	---	---	---	---	16%	34%	68%	82%	84%	...
4DTP/3polio/IMMR . . . . .	...	---	---	---	55%	67%	68%	76%	78%	78%	...
Children in licensed child care facilities ^{11,12} . .	1987–88	¹³ 94–95%	¹⁴ 94–96%	¹⁵ 94–96%	¹⁶ 94–96%	¹⁷ 95–98%	¹⁸ 97–98%	¹⁹ 98–99%	²⁰ 95%	---	95%
Children in kindergarten through post-secondary education institutions ^{11,12} . .	1987–88	¹³ 97–98%	¹⁴ 97–98%	¹⁵ 96–98%	¹⁶ 96–98%	¹⁷ 92–94%	¹⁸ 93–94%	¹⁹ 94–95%	²⁰ 98–99%	---	95%
Hepatitis B immunizations											
Infants of antigen-positive mothers	1991	40%	...	...	71%	71%	78%	78%	79%	---	90%
Occupationally exposed workers ²¹	1989	37%	---	---	50%	---	67%	---	---	---	90%
Injecting drug users in drug treatment programs											
Men who have sex with men	1992–93	3%	...	...	...	...	---	---	---	²² 9%	50%
Pneumococcal immunizations											
Institutionalized chronically ill people or older people	1995	²³ 22%	...	...	...	...	...	...	---	---	80%
Noninstitutionalized people 65 years and over	1989	^a 15%	---	21%	---	28%	30%	34%	---	---	60%
a. Black 65 years and over	1989	^a 6%	---	---	---	14%	15%	23%	---	---	60%
b. Hispanic 65 years and over	1989	^a 11%	---	---	---	12%	14%	23%	---	---	60%
Influenza immunizations											
Institutionalized chronically ill people or older people	1995	²⁴ 61%	...	...	...	...	...	...	---	---	80%
Noninstitutionalized people 65 years and over	1989	^a 33%	---	42%	---	52%	55%	58%	---	---	60%
a. Black 65 years and over	1989	^a 20%	---	27%	---	33%	39%	40%	---	---	60%
b. Hispanic 65 years and over	1989	^a 28%	---	---	---	47%	38%	50%	---	---	60%
20.12 Postexposure rabies treatments (number) . .	1987	18,000	---	18,800	24,700	25,000–43,000	22,000–43,000	---	16,000–39,000	---	9,000
20.13 Immunization laws (number of States)	1989	10–49	---	---	34–50	---	---	²⁵ 42–50	---	²⁶ 44–50	50
20.14 Provision of immunizations by clinicians . . . . .	...	---	---	---	---	---	---	---	---	---	90%
Percent of clinicians routinely providing service to 81–100% of patients											
Children:											
DTP vaccination											
Pediatricians	1992	86%	...	...	...	---	---	---	---	^{27,28} ...	90%
Nurse practitioners	1992	76%	...	...	...	---	---	---	---	²⁷ 78%	90%
Family physicians	1992	89%	...	...	...	---	---	---	---	^{27,28} ...	90%
Oral polio vaccination											
Pediatricians	1992	87%	...	...	...	---	---	---	---	^{27,28} ...	90%
Nurse practitioners	1992	76%	...	...	...	---	---	---	---	²⁷ 79%	90%

Table 20. Immunization and infectious diseases objective status—Con.

<i>Objective</i>	<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
Family physicians	1992	89%	...	...	...	---	---	---	---	27,28_---	90%
Tetanus-diphtheria booster (under 18 years)											
Pediatricians	1992	79%	...	...	...	---	---	---	---	27,28_---	90%
Nurse practitioners	1992	71%	...	...	...	---	---	---	---	27,72%	90%
Family physicians	1992	70%	...	...	...	---	---	---	---	27,28_---	90%
Hib vaccination											
Pediatricians	1992	85%	...	...	...	---	---	---	---	27,28_---	90%
Nurse practitioners	1992	68%	...	...	...	---	---	---	---	27,74%	90%
Family physicians	1992	74%	...	...	...	---	---	---	---	27,28_---	90%
Tetanus-diphtheria booster (18 years and over)											
Nurse practitioners	1992	38%	...	...	...	---	---	---	---	27,40%	90%
Obstetricians/gynecologists	1992	4%	...	...	...	---	---	---	---	27,28_---	90%
Internists	1992	29%	...	...	...	---	---	---	---	27,28_---	90%
Family physicians	1992	28%	...	...	...	---	---	---	---	27,28_---	90%
Influenza vaccination (65 years and over)											
Nurse practitioners	1992	42%	...	...	...	---	---	---	---	27,47%	90%
Obstetricians/gynecologists	1992	6%	...	...	...	---	---	---	---	27,28_---	90%
Internists	1992	49%	...	...	...	---	---	---	---	27,28_---	90%
Family physicians	1992	31%	...	...	...	---	---	---	---	27,28_---	90%
Pneumococcal vaccination (65 years and over)											
Nurse practitioners	1992	33%	...	...	...	---	---	---	---	27,43%	90%
Obstetricians/gynecologists	1992	5%	...	...	...	---	---	---	---	27,28_---	90%
Internists	1992	40%	...	...	...	---	---	---	---	27,28_---	90%
Family physicians	1992	25%	...	...	...	---	---	---	---	27,28_---	90%
20.15 Financial barriers to immunization											
Employment-based insurance plans that provide coverage for immunizations											
Conventional insurance plans	1989	45%	47%	---	53%	---	---	---	---	---	100%
Preferred provider organization plans	1989	62%	65%	---	65%	---	---	---	---	---	100%
Health maintenance organization plans	1989	98%	98%	---	95%	---	---	---	---	---	100%
20.16 Public health department provision of immunizations											
Pneumococcal vaccine	1990	37%	...	---	---	26,48%	---	---	---	---	90%
Influenza vaccine	1990	60%	...	---	---	26,91%	---	---	---	---	90%
Tetanus/diphtheria vaccine	1990	70%	...	---	---	---	---	---	---	---	90%
Tetanus . . . . .	...	---	---	---	---	26,85%	---	---	---	---	90%
Diphtheria . . . . .	...	---	---	---	---	26,77%	---	---	---	---	90%
Hepatitis B vaccine	1992–93	77%	...	...	...	...	---	---	---	---	90%
20.17 Local health department programs that identify tuberculosis cases	1992–93	80%	...	...	...	...	---	---	---	---	90%
20.18 Preventive therapy for tuberculosis (percent of infected people completing therapy)	1987	66.3%	63.0%	64.9%	66.3%	65.3%	---	---	---	---	85%

Table 20. Immunization and infectious diseases objective status—Con.

<i>Objective</i>	<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
20.19 Laboratory capability for influenza diagnosis											
Tertiary care hospital laboratories	1993	52%	...	...	...	...	---	57%	---	58%	85%
Secondary care hospital laboratories	1993	45%	...	...	...	...	---	46%	---	46%	50%
Health maintenance organization laboratories . .	1993	^a 68%	...	...	...	...	---	56%	---	68%	50%

--- Data not available.

... Category not applicable.

^aBaseline and/or target have been revised.

¹1979–80 influenza season through 1986–87 influenza season.

²1987–88 influenza season through 1989–90 influenza season.

³1988–89 influenza season through 1990–91 influenza season.

⁴1989–90 influenza season through 1991–92 influenza season.

⁵1990–91 influenza season through 1992–93 influenza season.

⁶1991–92 influenza season through 1993–94 influenza season.

⁷1992–93 influenza season through 1994–95 influenza season.

⁸1993–94 influenza season through 1995–96 influenza season.

⁹1989 data.

¹⁰Data are unreliable. Numerator has a relative standard error of more than 30%.

¹¹Range of antigen-specific immunization levels.

¹²Three or more doses for DTP and polio.

¹³1987–88 school year.

¹⁴1989–90 school year.

¹⁵1990–91 school year.

¹⁶1991–92 school year.

¹⁷1992–93 school year.

¹⁸1993–94 school year.

¹⁹1994–95 school year.

²⁰1995–96 school year.

²¹Health care workers only.

²²1994–98 data.

²³43% of nursing home residents surveyed had unknown pneumococcal vaccination status and were counted as unvaccinated.

²⁴21% of nursing home residents surveyed had unknown influenza vaccination status and were counted as unvaccinated.

²⁵1994–95 data.

²⁶1996–97 data.

²⁷1997–98 data.

²⁸Response rate for this group was too low to produce reliable estimates.

NOTE: Data include revisions and, therefore, may differ from those previously published in these reports and other publications.

<i>Objective number</i>	<i>Data source</i>
20.1	National Notifiable Disease Surveillance System, CDC, EPO.
20.2	CDC, NCID.
	National Vital Statistics System, CDC, NCHS.
20.3*, 20.3a–c,i–k	National Notifiable Disease Surveillance System, CDC, EPO. Sentinel Counties Surveillance of Acute Viral Hepatitis, Viral Hepatitis Surveillance Program, CDC, NCID.
20.3d	CDC, NCID.
20.3e	National Notifiable Disease Surveillance System, CDC, EPO. Sentinel Counties Surveillance of Acute Viral Hepatitis, Viral Hepatitis Surveillance Program, CDC, NCID.
20.3f	National Notifiable Disease Surveillance System, CDC, EPO.

<i>Objective number</i>	<i>Data source</i>
	Margolis, HS. Estimates and reported cases of hepatitis B infection and its sequelae in Alaskan Natives. <i>Lancet</i> (1987) 2:1134–6.
20.3g	Alaskan Registry, IHS.
20.3h	National Notifiable Disease Surveillance System, CDC, EPO.
20.4, 20.4a–d	Tuberculosis Morbidity Data, CDC, NCHSTP.
20.5	National Nosocomial Infection Surveillance System, CDC, NCID.
20.6	Malaria Surveillance System, CDC, NCID. Typhoid Surveillance System, CDC, NCID. National Notifiable Disease Surveillance System, CDC, EPO. Sentinel Counties Surveillance of Acute Viral Hepatitis, Viral Hepatitis Surveillance Program, CDC, NCID.
20.7	Bacterial Meningitis Surveillance System, CDC, NCID.
20.7a	Arctic Investigations Laboratory, 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	Basic immunization series among children: Baseline for children 2 years and under: United States Immunization Survey, CDC, NCHSTP. Children 19–35 months: 1991–1994 data: National Health Interview Survey, CDC, NCHS. 1995–96 data: National Immunization Survey, CDC, NIP. Immunizations among children in licensed child care facilities and in schools: State Immunization Survey, CDC, NCHSTP. Hepatitis B immunizations among infants of antigen-positive women: Perinatal Hepatitis B Prevention Program, CDC, NIP. Hepatitis B immunizations among occupationally exposed workers: Baseline: Regulatory Impact Analysis of OSHA Final Rule on Occupational Exposure to Bloodborne Pathogens, DOL, OSHA, ORA. Updates: CDC, NCID. Hepatitis B immunizations among men who have sex with men: Baseline: Young Men’s Survey, San Francisco Department of Public Health. <i>MMWR</i> Vol. 45 No.10: March 15, 1996. Update: Young Men’s Survey, CDC, NCHSTP. Pneumococcal and influenza immunizations among noninstitutionalized people: National Health Interview Survey, CDC, NCHS. Pneumococcal and influenza immunizations among institutionalized people: National Nursing Home Survey, CDC, NCHS.
20.11a, b	National Health Interview Survey, CDC, NCHS.
20.12	Rabies Vaccine and Immune Globulin Manufacturers Sales Data, CDC, NCID.
20.13	Survey of Immunization Laws, CDC, NIP.
20.14	Baseline: Primary Care Provider Surveys, OPHS, ODPHP. Update: Prevention in Primary Care Study, American College of Preventive Medicine.
20.15	Health Insurance Association of America Employer Survey, Health Insurance Association of America.
20.16	Baseline: Immunization Grant Program Profiles, CDC, NCPS. Update: National Profile of Local Health Departments, National Association of County and City Health Officials.
20.17	National Profile of Local Health Departments, National Association of County and City Health Officials.
20.18	Tuberculosis Program Management Report Data on Completion of Preventive Therapy, CDC, NCHSTP.
20.19	Survey of Laboratories Using Rapid Viral Diagnosis of Influenza, CDC, NCID.

*Duplicate objective. See full text of objective following this table.

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 15.9 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, they will be measured using a 3-year average.

20.3*: Reduce viral hepatitis as follows:

Hepatitis B: 40 per 100,000 people
 Hepatitis A: 16.1 per 100,000 people
 Hepatitis C: 13.7 cases per 100,000 people

20.3a: Reduce hepatitis B among injecting drug users to no more than 7,932 cases.

20.3b*: Reduce hepatitis B among heterosexually active people to no more than 22,663 cases.

Duplicate objective: 19.7

20.3c*: Reduce hepatitis B among men who have sex with men to no more than 4,568 cases.

Duplicate objective: 19.7

20.3d: Reduce hepatitis B among children of Asian and Pacific Islanders to no more than 1,500 cases.

20.3e*: Reduce hepatitis B among occupationally exposed workers to no more than 623 cases.

Duplicate objective: 10.5

20.3f: Reduce hepatitis B among infants to no more than 1,111 chronic infections.

20.3g: Reduce hepatitis B among Alaska Natives to no more than 1 new chronic infection.

20.3h: Reduce hepatitis B among blacks to no more than 40 cases per 100,000 people.

20.3i: Reduce hepatitis A among Hispanics to no more than 26.9 cases per 100,000 people.

20.3j: Reduce hepatitis A among American Indians and Alaska Natives to no more than 128 cases per 100,000 people.

20.3k: Reduce hepatitis C among Hispanics to no more than 13.7 cases per 100,000 people.

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 people.

20.4b: Reduce tuberculosis among blacks to an incidence of no more than 10 cases per 100,000 people.

20.4c: Reduce tuberculosis among Hispanics to an incidence of no more than 5 cases per 100,000 people.

20.4d: Reduce tuberculosis among American Indians and Alaska Natives to an incidence of no more than 5 cases per 100,000 people.

20.5: Reduce by at least 10 percent the incidence of surgical wound infections and nosocomial infections in intensive care patients.

20.6: Reduce selected illness among international travelers, as follows:

Typhoid fever: 140 cases
 Hepatitis A: 1,119 cases
 Malaria: 750 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:

15.1 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.

Hepatitis B immunization among high-risk populations, including infants of hepatitis B surface antigen-positive mothers to at least 90 percent; occupationally exposed workers to at least 90 percent; injecting drug users in drug treatment programs to at least 50 percent; and men who have sex with men to at least 50 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.

Duplicate objective for occupationally exposed workers: 10.9

20.11a: Increase pneumococcal pneumonia and influenza immunization among blacks aged 65 years and older to 60 percent.

20.11b: Increase pneumococcal pneumonia and influenza immunization among Hispanics aged 65 years and older to 60 percent.

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.

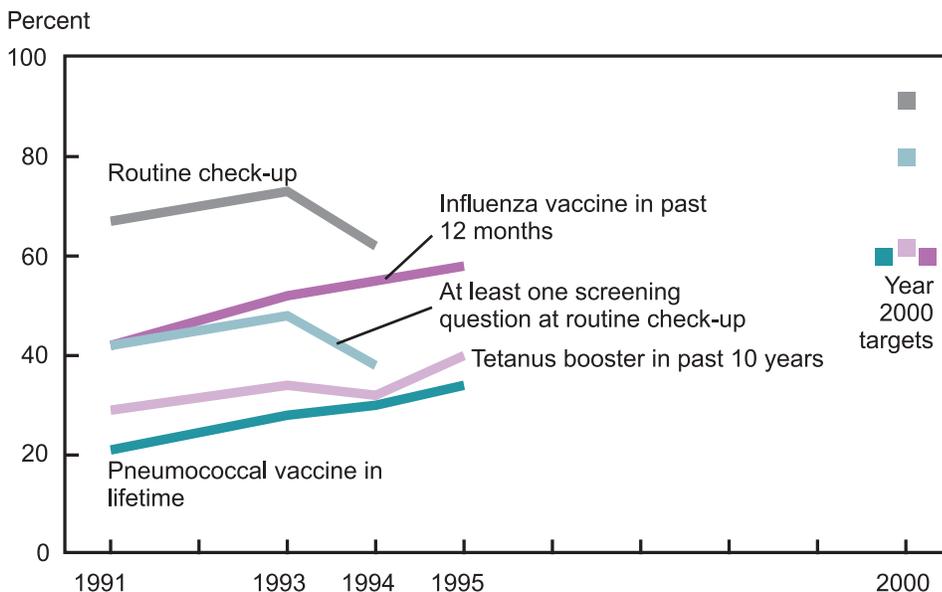
Priority Area 21 Clinical Preventive Services

Background

Priority area 21 was designed to directly address the third goal of *Healthy People 2000*, "Achieve access to preventive services for all Americans." The priority area provides a crosscutting assessment of access for all populations by looking at measures of the provision and receipt of a basic set of recommended clinical preventive services (CPS) across clinical settings. (This priority area was originally linked with Priority Area 8, also crosscutting in terms of a delivery site.) In Priority Area 21, access is conceptualized, in part, by the proportion of the total population that has a specific source of ongoing primary care. Access is also expressed in terms of the extent of the financial barriers to receiving services or for reimbursement for CPS provided. People who have financial barriers to receiving the recommended CPS are measured by proxy as the proportion of people without health insurance. Other measures of access include whether people receiving services from a primary care provider are offered the recommended CPS, the proportion of providers who offer the recommended CPS to their patients, and the proportion of people eligible for services through publicly funded programs who are offered the recommended CPS in the latter clinical setting. Measurement of access to care is further enhanced by data to determine whether local health departments are assessing and filling the gaps in the provision of CPS in their jurisdictions, and data on the success of actions designed to assure that the health professions workforce more accurately reflects the cultural makeup of the American public served.

Clinical preventive services are those disease prevention and health promotion services such as 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. Preventive Services Task Force, a panel of prevention experts convened by the U.S. Public Health Service, first reviewed the full range of scientific

Figure 22. Proportion of people 65 years and over who have received selected clinical preventive screening and immunization services as recommended by the U.S. Preventive Services Task Force: United States, 1991, 1993–95, and year 2000 targets for objective 21.2



	1991	1993	1994	1995	Year 2000 target
Routine check-up	67%	73%	62%	74%	91%
Asked at least one screening question at routine check-up	42%	48%	38%	---	80%
Tetanus booster in past 10 years	29%	34%	32%	40%	62%
Pneumococcal vaccine in lifetime	21%	28%	30%	34%	60%
Influenza vaccine in past 12 months	42%	52%	55%	58%	60%

--- Data not available.

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

literature on clinical preventive services and developed scientifically sound recommendations for specific services based on age, sex, and other risk factors in 1989 (1). These recommendations were updated in 1996 (2). At the 1997 National Coordinating Committee on Clinical Preventive Services, it was noted that the delivery of preventive services by clinicians would increase now that insurance companies allow reimbursement for these services.

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 receipt of these services.

Data Summary

Highlights

The average number of years of healthy life for the total population (21.1) increased in 1996 for the third consecutive year. The increase in years of healthy life in 1996 was primarily due to large increases for blacks and Hispanics. Prior to 1994, years of healthy life had been declining since the

1990 baseline. Except for 1993 when life expectancy declined, these decreases reflected a downturn in health-related quality of life (based on self-reports of health status and activity limitation). The increases in 1994–96 were primarily due to increases in life expectancy.

The proportion of the adult population with a specific source of primary care has increased from 80 percent in 1991 to 85 percent in 1995 (21.3). Hispanic and black adults as well as other subgroups of the population are less likely to have a specific source of primary care. Improvements have occurred among Hispanics while blacks have shown no change from 1994. The proportion of adults under 65 years without health care coverage increased from 15.7 percent in 1989 to almost 18 percent in 1994 (21.4). The proportion of people without health care coverage is used as a proxy measure of financial barriers to receiving recommended clinical preventive services.

Data on the proportion of adults who received recommended clinical preventive services in 1995 show improvements for many specific services compared with 1991 and 1992 baseline data (see figure 22). For example, the proportion of adults who received a tetanus booster in the last 10 years improved from 52 percent in 1991 to 59 percent in 1995. Pneumococcal and influenza vaccinations among older adults improved to an even greater extent. More women received Pap tests in the previous 3 years and mammograms in the previous 2 years in 1994 compared with 1992.

Summary of Progress

Data are available for six of the eight Clinical Preventive Services objectives to assess trends toward meeting the year 2000 targets. For two objectives (21.3 and 21.8), data show progress toward achieving the year 2000 targets. Trends are moving away from targets for objective 21.4. Objective 21.1 shows no change from its 1990 baseline. Although most services are making progress toward the 2000 targets, trends are mixed for objectives 21.2. Objective 21.6 also shows mixed progress, with the assessment of progress being based on nurse practitioner data only. Data beyond baseline are not available for two objectives (21.5 and 21.7).

Data Issues

Years of Healthy Life

The concept of increasing years of healthy life is one of the three *Healthy People 2000* goals and a specific measure has been developed to track an objective in three priority areas (8.1, 17.1, and 21.1). See the appendix for a discussion of years of healthy life.

Definitions

Operational definitions and data collection specifications for all year 2000 objectives in priority area 21 have been published in the National Center for Health Statistics *Statistical Notes* series (3). Data issues are discussed and references are cited for expanded discussions of the data systems that provide data for the national objectives. When appropriate, the text of questionnaire items used to measure the objectives is also provided. See the appendix and appendix table VIII for further information.

Data to determine the level of receipt of clinical preventive services among adults (objective 21.2) are obtained through periodic supplements to the National Health Interview Survey (NHIS). The supplements provide limited information on counseling, and recommendations for high-risk groups are not addressed. Respondents were asked if they had been asked about at least one behavior that indicates the need for counseling at their last routine checkup. If the response was positive, this was used as an indication that the person had received at least one recommended counseling service.

Data Source Descriptions

Baseline data for objective 21.6 (provision of recommended services) are from the Primary Care Provider Surveys (PCPS). The sample was drawn from the membership rolls of professional organizations for pediatricians, nurse practitioners, family physicians, obstetricians/gynecologists, and internists. Response rates varied from 50–80 percent across these groups. The data on provision of recommended services represent the proportion of providers who report that they routinely provided 81–100 percent of eligible patients with the recommended services. The Prevention in Primary Care Study (PPCS) was conducted in 1997–98 to

update data from the PCPS. The design and items included in the 1997–98 study were similar to the PCPS, but a slightly different sampling frame was used and some items included in the 1992 surveys were not included in the PPCS. The professionals were sampled from listings of all licensed, active practitioners in the United States whose practices were at least 50 percent primary care. Because of low response rates from the other provider groups, updates are available only for nurse practitioners.

Comparability of Data Sources

Data on the proportion of people who have a specific source of ongoing primary care are obtained from the NHIS (objective 21.3). In 1991 and 1992, information on source of primary care was received from one adult randomly selected from among household members. Beginning in 1993, a knowledgeable adult respondent provided information for all members of the household.

Data on the proportion of people under 65 years of age who do not have health care coverage are from the NHIS (21.4). The 1989 baseline data and tracking data from 1992 through 1994 are not directly comparable because of questionnaire changes. Also, beginning with 1995 data, persons receiving public assistance other than Medicaid are considered to have health care coverage. Prior to 1995 they were considered to not have health care coverage. In 1996, 0.4 percent of the population under 65 years were covered by public assistance other than Medicaid.

Proxy Measures

The proportion of the U.S. population under 65 years of age (age-adjusted to the 1970 U.S. civilian noninstitutionalized population) that does not have health care coverage (private insurance, Medicare, Medicaid, or a military plan) is used to measure progress for objective 21.4, financial barriers to receiving recommended clinical preventive services. This is only a partial measure. Many health insurance plans do not provide full coverage for preventive health care, however, overall coverage for preventive care services is improving. In 1997, 89 percent of employer-sponsored health insurance plans covered periodic physical examinations, 88 percent covered well baby care, and 92 percent

covered periodic gynecological examinations (4).

Beginning with 1996 data, persons receiving public assistance other than Medicaid are considered to have health care coverage. Prior to 1996 they were considered to not have health care coverage. In 1996 the age-adjusted percent of the population under 65 years of age covered by Medicaid was 11.3 percent, and 0.4 percent were covered by other public assistance (5).

References

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Table 21. Clinical preventive services objective status

<i>Objective</i>		<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
21.1*	Years of healthy life	1990	64.0	...	63.9	63.7	63.5	63.8	63.9	64.2	---	65
	a. Black	1990	56.0	...	56.0	55.6	55.2	55.6	56.0	56.5	---	60
	b. Hispanic ¹	1990	64.8	...	63.6	² 64.0	63.2	64.2	64.0	64.7	---	65
	c. People 65 years and over ³	1990	11.9	...	11.8	11.9	11.9	12.1	12.0	12.2	---	14
21.2	Receipt of recommended services											
	Children 19-35 months											
	Basic immunization series	...	---	---	---	---	---	---	---	---	---	90%
	DTP (3 or more doses)	1992	83%	...	...	...	88%	90%	95%	95%	---	...
	Polio (3 or more doses)	1992	72%	...	...	...	79%	79%	88%	91%	---	...
	Measles/mumps/rubella (1 dose)	1992	83%	...	...	...	84%	90%	90%	91%	---	...
	Haemophilus influenzae B (3 or more doses)	1992	28%	...	...	...	55%	75%	92%	92%	---	...
	Hepatitis B (3 or more doses)	1993	16%	...	...	...	...	34%	68%	82%	---	...
	4DTP/3Polio/1MMR	1992	55%	...	...	...	67%	68%	76%	78%	---	...
	People 18 years and older											
	Routine checkup ⁴	1991	74%	...	...	---	78%	70%	81%	---	---	91%
	People 65 years and over	1991	67%	...	...	---	73%	62%	74%	---	---	...
	Cholesterol checked in last 5 years	1993	60%	...	...	...	...	---	---	---	---	75%
	Cholesterol ever checked	1991	63%	...	...	---	71%	---	---	---	---	...
	People with low income ⁵	1991	46%	...	...	---	55%	---	---	---	---	...
	Black	1991	56%	...	...	---	72%	---	---	---	---	...
	Hispanic	1991	51%	...	...	---	62%	---	---	---	---	...
	American Indian/Alaska Native	1991	46%	...	...	---	60%	---	---	---	---	...
	Cholesterol checked in last 2 years	1991	50%	...	...	---	54%	---	---	---	---	...
	People with low income ⁵	1991	37%	...	...	---	41%	---	---	---	---	...
	Hispanic	1991	42%	...	...	---	47%	---	---	---	---	...
	Asian/Pacific Islander	1991	45%	...	...	---	44%	---	---	---	---	...
	American Indian/Alaska Native	1991	38%	...	...	---	49%	---	---	---	---	...
	Tetanus booster in last 10 years	1991	52%	...	...	---	57%	56%	59%	---	---	62%
	People 65 years and over	1991	29%	...	...	---	34%	32%	40%	---	---	...
	Hispanic	1991	45%	...	...	---	48%	51%	51%	---	---	...
	Asian/Pacific Islander	1991	40%	...	...	---	45%	43%	40%	---	---	...
	People with disabilities	1991	47%	...	...	---	51%	52%	56%	---	---	...
	Pneumococcal vaccine in lifetime (people 65 years and over)	1991	21%	...	...	---	28%	30%	34%	---	---	60%
	People with low income ⁵	1991	17%	...	...	---	18%	19%	25%	---	---	...
	Black	1991	14%	...	...	---	14%	15%	23%	---	---	...
	Hispanic	1991	12%	...	...	---	13%	14%	23%	---	---	...
	Asian/Pacific Islander	1991	15%	...	...	---	21%	14%	22%	---	---	...
	Influenza vaccine in last 12 months (people 65 years and over)	1991	42%	...	...	---	52%	55%	58%	---	---	60%
	People with low income ⁵	1991	36%	...	...	---	41%	44%	46%	---	---	...
	Black	1991	27%	...	...	---	33%	39%	40%	---	---	...
	Hispanic	1991	34%	...	...	---	47%	38%	50%	---	---	...
	Asian/Pacific Islander	1991	29%	...	...	---	54%	43%	51%	---	---	...

Table 21. Clinical preventive services objective status—Con.

<i>Objective</i>	<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
Pap test in last 3 years (female 18 years and over)	1992	74%	...	...	...	78%	77%	---	---	---	85%
Female 65 years and over	1992	51%	...	...	...	58%	57%	---	---	---	...
Asian/Pacific Islander	1992	62%	...	...	...	69%	66%	---	---	---	...
American Indian/Alaska Native	1992	64%	...	...	...	78%	73%	---	---	---	...
Females with disabilities	1992	65%	...	...	...	69%	69%	---	---	---	...
Breast exam and mammogram in past 2 years (female 50 years and over)	1992	51%	...	...	...	55%	56%	---	---	---	60%
Female 65 years and over	1992	43%	...	...	...	49%	49%	---	---	---	...
Females with low income ⁵	1992	30%	...	...	...	39%	38%	---	---	---	...
Asian/Pacific Islander	1992	38%	...	...	...	53%	46%	---	---	---	...
American Indian/Alaska Native	1992	31%	...	...	...	38%	53%	---	---	---	...
Females with disabilities	1992	44%	...	...	...	51%	50%	---	---	---	...
Asked at least one screening question at routine checkup ⁶	1991	56%	...	...	---	63%	56%	---	---	---	80%
People 65 years and over	1991	42%	...	...	---	48%	38%	---	---	---	...
Asian/Pacific Islander	1991	51%	...	...	---	60%	48%	---	---	---	...
21.3 Access to primary care (percent with source of care)											
Total population (18 years and over)	1991	80%	...	...	78%	83%	84%	85%	---	---	95%
a. Hispanic	1991	63%	...	...	64%	71%	71%	74%	---	---	95%
Mexican American	1991	57%	...	...	62%	69%	69%	72%	---	---	95%
b. Black	1991	78%	...	...	75%	79%	82%	82%	---	---	95%
c. Low-income people (family income below poverty level)	1991	71%	...	...	71%	72%	73%	76%	---	---	95%
d. American Indian/Alaska Native	1991	70%	...	...	85%	82%	81%	84%	---	---	95%
e. Asian/Pacific Islander	1991	70%	...	...	71%	74%	78%	81%	---	---	95%
21.4 Financial barriers to receipt of clinical preventive services											
Proportion of people under 65 years without health care coverage ⁷ (age adjusted)	1989	^a 15.7%	---	---	17.2%	17.3%	17.8%	15.6%	16.1%	---	0%
a. American Indian/Alaska Native	1989	^a 36.1%	---	---	---	34.2%	39.0%	33.9%	33.9%	---	0%
b. Hispanic	1989	^a 31.3%	---	---	34.0%	34.2%	32.9%	30.8%	31.6%	---	0%
Mexican American	1989	^a 38.1%	---	---	37.8%	39.5%	37.2%	35.4%	36.7%	---	0%
Puerto Rican	1989	^a 21.4%	---	---	18.3%	21.0%	17.4%	17.8%	14.4%	---	0%
Cuban	1989	^a 20.7%	---	---	20.1%	16.9%	27.4%	21.6%	17.6%	---	0%
c. Black	1989	22.0%	---	---	22.3%	23.2%	21.5%	17.9%	19.0%	---	0%
21.5 Clinical preventive services from publicly funded programs (proportion of eligible people)											
Federal programs											
Screening	1991–92	10–100%	...	...	...	---	---	---	---	---	90%
Counseling	1991–92	40–100%	...	...	...	---	---	---	---	---	90%
Immunizations	1991–92	10–100%	...	...	...	---	---	---	---	---	90%
21.6 Provision of recommended services by primary care providers . . . . .	...	---	---	---	---	---	---	---	---	---	50%

Table 21. Clinical preventive services objective status—Con.

<i>Objective</i>	<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
Percent of clinicians routinely providing service to 81–100% of patients											
Preventive services for children:											
Hemoglobin/hematocrit											
Pediatricians	1992	78%	...	...	...	---	---	---	---	---	...
Nurse practitioners	1992	77%	...	...	...	---	---	---	---	---	...
Family physicians	1992	52%	...	...	...	---	---	---	---	---	...
Eye exam (for strabismus and amblyopia)											
Pediatricians	1992	64%	...	...	...	---	---	---	---	8,9_	---
Nurse practitioners	1992	67%	...	...	...	---	---	---	---	851%	---
Family physicians	1992	53%	...	...	...	---	---	---	---	8,9_	---
Blood pressure											
Pediatricians	1992	78%	...	...	...	---	---	---	---	8,9_	---
Nurse practitioners	1992	71%	...	...	...	---	---	---	---	865%	---
Family physicians	1992	42%	...	...	...	---	---	---	---	8,9_	---
Height and weight											
Pediatricians	1992	96%	...	...	...	---	---	---	---	8,9_	---
Nurse practitioners	1992	88%	...	...	...	---	---	---	---	885%	---
Family physicians	1992	89%	...	...	...	---	---	---	---	8,9_	---
DTP vaccination											
Pediatricians	1992	86%	...	...	...	---	---	---	---	8,9_	---
Nurse practitioners	1992	76%	...	...	...	---	---	---	---	878%	---
Family physicians	1992	89%	...	...	...	---	---	---	---	8,9_	---
Oral polio vaccination											
Pediatricians	1992	87%	...	...	...	---	---	---	---	8,9_	---
Nurse practitioners	1992	76%	...	...	...	---	---	---	---	879%	---
Family physicians	1992	89%	...	...	...	---	---	---	---	8,9_	---
Tetanus-diphtheria booster											
Pediatricians	1992	79%	...	...	...	---	---	---	---	8,9_	---
Nurse practitioners	1992	71%	...	...	...	---	---	---	---	872%	---
Family physicians	1992	70%	...	...	...	---	---	---	---	8,9_	---
Hib vaccination											
Pediatricians	1992	85%	...	...	...	---	---	---	---	8,9_	---
Nurse practitioners	1992	68%	...	...	...	---	---	---	---	874%	---
Family physicians	1992	74%	...	...	...	---	---	---	---	8,9_	---
Preventive services for adults:											
Tetanus-diphtheria booster (18 years and over)											
Nurse practitioners	1992	38%	...	...	...	---	---	---	---	840%	---
Obstetricians/gynecologists	1992	4%	...	...	...	---	---	---	---	8,9_	---
Internists	1992	29%	...	...	...	---	---	---	---	8,9_	---
Family physicians	1992	28%	...	...	...	---	---	---	---	8,9_	---
Influenza vaccination (65 years and over)											
Nurse practitioners	1992	42%	...	...	...	---	---	---	---	847%	---
Obstetricians/gynecologists	1992	6%	...	...	...	---	---	---	---	8,9_	---

Table 21. Clinical preventive services objective status—Con.

<i>Objective</i>	<i>Baseline year</i>	<i>Baseline</i>	<i>1990</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>Target 2000</i>
Internists	1992	49%	...	...	...	---	---	---	---	8,9_	---
Family physicians	1992	31%	...	...	...	---	---	---	---	8,9_	---
Pneumococcal vaccination (65 years and over)											
Nurse practitioners	1992	33%	...	...	...	---	---	---	---	8,43%	---
Obstetricians/gynecologists	1992	5%	...	...	...	---	---	---	---	8,9_	---
Internists	1992	40%	...	...	...	---	---	---	---	8,9_	---
Family physicians	1992	25%	...	...	...	---	---	---	---	8,9_	---
Blood pressure											
Nurse practitioners	1992	82%	...	...	...	---	---	---	---	8,90%	---
Obstetricians/gynecologists	1992	88%	...	...	...	---	---	---	---	8,9_	---
Internists	1992	92%	...	...	...	---	---	---	---	8,9_	---
Family physicians	1992	89%	...	...	...	---	---	---	---	8,9_	---
Cholesterol level											
Nurse practitioners	1992	45%	...	...	...	---	---	---	---	8,55%	---
Obstetricians/gynecologists	1992	36%	...	...	...	---	---	---	---	8,9_	---
Internists	1992	80%	...	...	...	---	---	---	---	8,9_	---
Family physicians	1992	61%	...	...	...	---	---	---	---	8,9_	---
Breast exam (by clinician)											
Nurse practitioners	1992	78%	...	...	...	---	---	---	---	8,67%	---
Obstetricians/gynecologists	1992	92%	...	...	...	---	---	---	---	8,9_	---
Internists	1992	76%	...	...	...	---	---	---	---	8,9_	---
Family physicians	1992	62%	...	...	...	---	---	---	---	8,9_	---
Pap smear											
Nurse practitioners	1992	77%	...	...	...	---	---	---	---	8,65%	---
Obstetricians/gynecologists	1992	92%	...	...	...	---	---	---	---	8,9_	---
Internists	1992	67%	...	...	...	---	---	---	---	8,9_	---
Family physicians	1992	62%	...	...	...	---	---	---	---	8,9_	---
Mammogram											
Nurse practitioners	1992	63%	...	...	...	---	---	---	---	8,9_	---
Patients 40–49 years . . . . .	...	---	---	---	---	---	---	---	---	8,58%	---
Patients 50 years and over . . . . .	...	---	---	---	---	---	---	---	---	8,60%	---
Obstetricians/gynecologists	1992	85%	...	...	...	---	---	---	---	8,9_	---
Internists	1992	67%	...	...	...	---	---	---	---	8,9_	---
Family physicians	1992	53%	...	...	...	---	---	---	---	8,9_	---
21.7 Local health department assurance of access to essential clinical preventive services											
Proportion of people served . . . . .	...	---	---	---	---	---	---	---	---	---	90%
Proportion of local health departments that:											
Assess the extent to which screening, immunization, and counseling services are provided to the local population	1992–93	76%	...	...	...	...	---	---	---	---	---
Collect data to document the number of providers of clinical preventive services in their jurisdiction	1992–93	45%	...	...	...	...	---	---	---	---	---

Table 21. Clinical preventive services objective status—Con.

	Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	Target 2000
	Evaluate to determine whether a gap exists between available clinical preventive services and the need for those services	1992-93	57%	...	...	...	...	---	---	---	---	...
	(Of those that assess gaps) Provide clinical preventive services to fill gaps	1992-93	83%	...	...	...	...	---	---	---	---	...
21.8	Racial/ethnic minority representation in the health professions											
	Degrees awarded:											
	Black	1985-86	5.0%	---	¹⁰ 5.7%	¹¹ 5.7%	¹² 5.9%	¹³ 5.9%	¹⁴ 6.0%	¹⁵ 6.6%	---	8.0%
	Hispanic	1985-86	3.0%	---	¹⁰ 4.3%	¹¹ 4.8%	¹² 4.8%	¹³ 4.3%	¹⁴ 4.1%	¹⁵ 3.8%	---	6.4%
	American Indian/Alaska Native	1985-86	0.3%	---	¹⁰ 0.4%	¹¹ 0.5%	¹² 0.4%	¹³ 0.4%	¹⁴ 0.4%	¹⁵ 0.5%	---	0.6%
	a. Enrolled in schools of nursing:											
	Black	¹¹ 1991-92	9.1%	...	...	...	¹² 8.6%	¹³ 8.7%	¹⁴ 9.0%	¹⁵ 9.4%	---	10.0%
	Hispanic	¹¹ 1991-92	3.1%	...	...	...	¹² 3.0%	¹³ 3.0%	¹⁴ 3.2%	¹⁵ 3.5%	---	4.0%
	Asian/Pacific Islander	¹¹ 1991-92	2.9%	...	...	...	¹² 3.2%	¹³ 3.3%	¹⁴ 3.6%	¹⁵ 4.0%	---	5.0%
	American Indian/Alaska Native	¹¹ 1991-92	0.7%	...	...	...	¹² 0.6%	¹³ 0.7%	¹⁴ 0.7%	¹⁵ 0.7%	---	1.0%

--- Data not available.

... Category not applicable.

^aBaseline has been revised.

¹Estimate based on preliminary data. Excludes mortality data from States lacking an Hispanic-origin item on their death certificate or for which Hispanic-origin data were not of sufficient quality. See appendix.

²Estimate derived from 1991-93 health status data and 1992 mortality data.

³Years of healthy life remaining at age 65.

⁴In the last 3 years for people 18-64 and in the last year for people 65 years and over.

⁵Data are for persons with family incomes below the Census poverty threshold.

⁶For people 18-64 years, a screening question on at least one of the following: diet, physical activity, tobacco use, alcohol use, drug use, sexually transmitted diseases, contraceptive use at a routine checkup in the last 3 years. For people 65 years and over, a screening question on at least one of: diet, physical activity, tobacco use, alcohol use at a routine checkup in the past year.

⁷Beginning with 1996 data, persons receiving public assistance other than Medicaid are considered to have health care coverage. Prior to 1996 they were considered to not have health care coverage.

⁸1997-98 data.

⁹Response rate for this group was too low to produce reliable estimates.

¹⁰Academic year 1990-91.

¹¹Academic year 1991-92.

¹²Academic year 1992-93.

¹³Academic year 1993-94.

¹⁴Academic year 1994-95.

¹⁵Academic year 1995-96.

NOTE: Data include revisions and, therefore, may differ from those previously published in these reports and other publications.

<i>Objective number</i>	<i>Data source</i>
21.1*, 21.1a–c	National Vital Statistics System, CDC, NCHS; National Health Interview Survey, CDC, NCHS.
21.2	Excluding basic immunization series among children: National Health Interview Survey, CDC, NCHS. Basic immunization series among children: Baseline for children 2 years and under: United States Immunization Survey, CDC, NCHSTP. Children 19–35 months: 1991–1994 data: National Health Interview Survey, CDC, NCHS. 1995 data: National Immunization Survey, CDC, NIP.
21.3, 21.3a–e	National Health Interview Survey, CDC, NCHS.
21.4, 21.4a–c	National Health Interview Survey, CDC, NCHS.
21.5	For Community/Migrant Health Centers: Bureau of Primary Health Care Survey, HRSA, OPEL. For other publicly funded programs: Survey of Federal Programs, HRSA, OPEL.
21.6	Baseline: Primary Care Providers Survey, OPHS, ODPHP. Update: Prevention in Primary Care Study, American College of Preventive Medicine.
21.7	National Profile of Local Health Departments, National Association of County and City Health Officials.
21.8	Minorities and Women in the Health Fields, HRSA, BHPR.
21.8a	National League for Nursing, Nursing Data Source.

*Duplicate objective. See full text of objective following this table.

Clinical Preventive Services Objectives

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

NOTE: Years of healthy life (also referred to as quality-adjusted life years) is a summary measure of health that combines mortality (quantity of life) and morbidity and disability (quality of life) into a single measure.

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 the proportion of people who have received selected clinical preventive 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.

Receipt of selected clinical preventive and counseling services	2000 target (percent)
---	-----------------------

Basic Immunization Series	90
---------------------------	----

Routine check-up	91
------------------	----

Cholesterol checked in last 5 years	75
-------------------------------------	----

Cholesterol ever checked	75
--------------------------	----

Cholesterol checked in last 2 years	75
-------------------------------------	----

Tetanus booster in last 10 years	62
----------------------------------	----

Pneumococcal vaccine in lifetime (aged 65 and over)	60
---	----

Influenza vaccine in last year (aged 65 and over)	60
---	----

Pap test in last 3 years	85
--------------------------	----

Breast exam and mammogram in past 2 years	60
---	----

Counseling services	80
---------------------	----

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 and the proportion of Mexican-Americans who have a specific source of ongoing primary care for coordination of their preventive and episodic health care.

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.

21.3d: Increase to at least 95 percent the proportion of American Indians and Alaska Natives who have a specific source of ongoing primary care for coordination of their preventive and episodic health care.

21.3e: Increase to at least 95 percent the proportion of Asians and Pacific Islanders 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.

21.4a: Decrease to 0 percent the proportion of American Indians and Alaska Natives under 65 years without health care coverage.

21.4b: Decrease to 0 percent the proportion of Hispanics under 65 years, and Mexican-Americans, Puerto Ricans, and Cubans under 65

years without health care coverage.

21.4c: Decrease to 0 percent the proportion of blacks under 65 years without health care coverage.

21.5: Ensure 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:

Degrees awarded to—	2000 target (percent)
Blacks	8.0
Hispanics	6.4
American Indians and Alaska Natives	0.6

21.8a: Increase the proportion of individuals from underrepresented racial and ethnic minority groups enrolled in U.S. schools of nursing.

Proportion enrolled in fall academic year	2000 target (percent)
Blacks	10
Hispanics	4
Asians and Pacific Islanders	5
American Indians and Alaska Natives	1

*Duplicate objective.

Priority Area 22 Surveillance and Data Systems

Background

The ability to assess health status, health disparities, or service needs or to evaluate the implementation and effectiveness of preventive interventions and community health programs requires information. Public health surveillance is the systematic collection, analysis, and use of health information. This activity is essential to understanding the health status of a population and to planning effective prevention programs and interventions. The Institute of Medicine identifies surveillance as one of the core functions of public health (1). It is critical in health agencies at all jurisdictional levels: Federal, State, and local. 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.

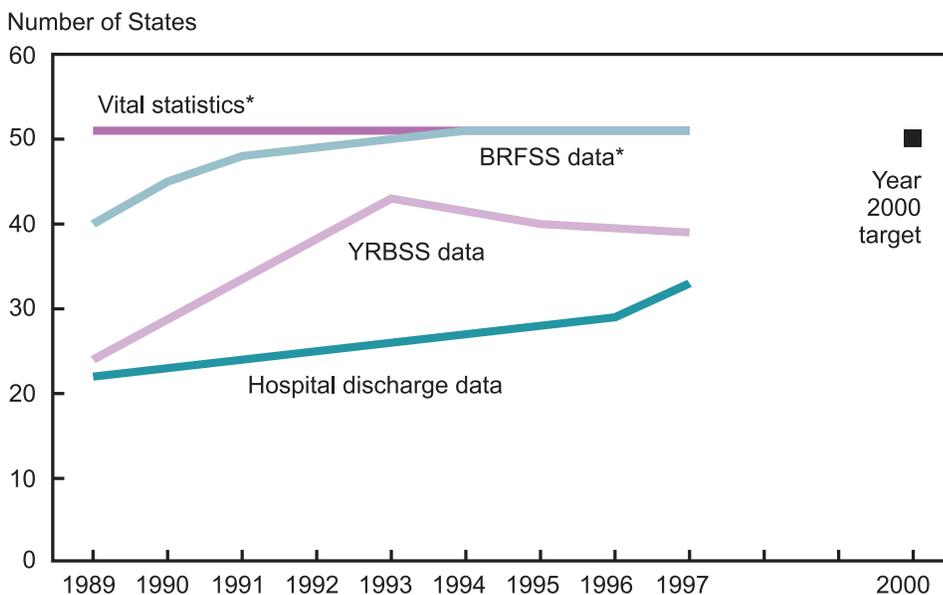
We must also be able to measure the health status of special populations. Morbidity, mortality, health behaviors, and access to and use of health services vary markedly by age, race, sex, and socioeconomic status. There are 319 *Healthy People 2000* subobjectives that are targeted toward racial and ethnic minorities, elderly people, people with chronic disabilities, people with less than a high school education, people with low incomes, and others.

Some important health issues could not be addressed in the year 2000 objectives because of the unavailability of national data to accurately characterize the problems. The lack of data at the State and local levels is of even greater concern. Thus, several objectives in Priority Area 22 are directed toward enhancing data systems in States and communities. Similarly, there are objectives that address the identification of and response to data gaps related to minorities and other special populations.

Data Summary and Issues

The first part of objective 22.1, development of Health Status Indicators (HSI's), has been achieved. The

Figure 23. Number of States that publish data from major databases: 1989–97, and year 2000 target for objective 22.5



	1989	1990	1991	1992	1993	1994	1995	1996	1997	Year 2000 target
Vital statistics*	51	51	51	51	51	51	51	51	51	50
BRFSS data*	40	45	48	49	50	51	51	51	51	50
Hospital discharge data	22	---	---	---	---	---	---	29	33	50
YRBSS data	---	24	27	---	41	---	41	---	39	50

*Includes the District of Columbia.

BRFSS is the Behavioral Risk Factor Surveillance System.

YRBSS is the Youth Risk Behavior Surveillance System.

--- Data not available.

SOURCES: Centers for Disease Control and Prevention. Vital Statistics: National Center for Health Statistics. Behavioral Risk Factor Surveillance System data: National Center for Chronic Disease Prevention and Health Promotion. Hospital discharge data: National Center for Health Statistics. Youth Risk Behavior Surveillance System data: National Center for Chronic Disease Prevention and Health Promotion.

consensus set of 18 indicators was published in July 1991 (2). National data for the HSI's were first published in October 1992 (3). National trends in the HSI data are shown in appendix table V. Appendix table VI presents the indicators for the major race/ethnic groups for the most recent data year. A detailed discussion of HSI differentials by race and Hispanic origin was published in September 1995 (4). The achievement of the second part of this objective, to establish use of the HSI's in at least 40 States, is being measured by tracking their use by State and local health departments. All States, including the District of Columbia, are monitoring some of the Health Status Indicators. At least nine States have published the HSI data for county, region, or health department district (an update of

Statistics and Surveillance number 8) (5). The 1997 State and Local Capacity Survey developed and administered by the Public Health Foundation (6) found that 41 of 42 responding States provided information about some HSI's to local health departments. Thirty-nine of 46 responding States have produced a report that includes over half the HSI's and 31 of these States indicated that the reports included information specific to areas within the State (such as counties, regions, and health districts). HSI data by State can be accessed via FTP (file transfer protocol) on the Internet at <http://www.cdc.gov/nchswww/datawh/ftpserv/hstatus/hstatus.htm>. See the appendix for further discussion of the Health Status Indicators and additional sources of monitoring data.

Objective **22.2** is close to being achieved with 97 percent of objectives with ongoing data sources. There are seven objectives for which there are no baseline data and no plans to collect monitoring data (**7.12, 7.14, 7.17, 14.14, 14.16, 17.20, and 18.17**). New baselines were obtained for objectives **8.8** and **8.11** in 1998, and data are still expected before the year 2000 for objectives **9.11** and **9.20**. In 1997, 32 of the 44 States and the District of Columbia with *Healthy People 2000* plans had included surveillance and data systems objectives in their plans.

Objective **22.3** has three parts: developing, disseminating, and incorporating into Public Health Service data collection systems the procedures for collecting comparable data for each of the year 2000 national health objectives among Federal, State, and local agencies. The baseline shows the percent of objectives that are tracked with vital statistics data, which are comparable at all levels of measurement. Comparable procedures for monitoring population-based nutrition objectives among Federal surveys were included for 1992. Objectives measured by systems that have comparable data at the Federal, State, or local levels such as those monitored with the Youth Risk Behavior Survey (YRBS), the National Notifiable Disease Surveillance System, the Fatality Analysis Reporting System (formerly the Fatal Accident Reporting System), and several other national systems that depend on State data were included for 1994. Objectives monitored with the National Health Interview Survey were also counted in 1994 if the State Behavioral Risk Factor Surveillance System (BRFSS) included questions that were similar in wording and conceptual approach (some objectives, for example, physical activity and current smoking, are being monitored by the BRFSS but not with methods comparable with national methods).

The denominator for the proportion of objectives with comparable data is the total number of objectives, which underrepresents Federal-State-local objective measurement comparability. Some objectives are out of scope for the purposes of tracking objective **22.3**, including most Services and Protection objectives, which do not involve traditional data collection comparability issues, although they may involve what is considered appropriate protocol.

These objectives include patient education and counseling, employer- and community-based prevention programs, development and implementation of quality standards, conformance with national guidelines, and enactment of national or State laws. Therefore, the 1994 estimate of 21 percent is an underestimate of the actual proportion of all objectives with comparable data collection procedures.

Developing and disseminating comparable data collection procedures involves systematically documenting the methods that are currently being used and accepted (as well as changes in measurement methods over time). For each priority area, reports are being compiled that describe how each objective is being measured at the Federal level and the relevant data issues involved. These reports are being published in the *Healthy People 2000 Statistical Notes* series. Six of these *Statistical Notes* have been published to date (see appendix [table VIII](#)).

Objective **22.4** (duplicated as objective **17.22** during the midcourse review) addresses the development and implementation of a national process to identify significant gaps in the Nation's disease prevention and health promotion data. Progress is being made, although it is difficult to quantify. There are two parts to this objective: the identification of data gaps in broad areas of public health where insufficient data exist to develop objectives, and the identification of data gaps connected with special populations. In 1993, first steps to identify significant gaps in broad areas of the Nation's disease prevention and health promotion data were taken. The National Committee on Vital and Health Statistics Subcommittee on State and Community Health Statistics recommended the development of a coordinated Federal, State, and community health statistics system that should include the following data sets in order to carry out the functions of assessment and policy development: vital statistics, in-patient hospitalization utilization, ambulatory care, long-term care, incidence and prevalence of disease and disability, health care resources, health care costs and expenditures, demographic profiles of populations served, access to basic health care and preventive services, health risk behaviors and attitudes, and environmental health risks. The *Healthy People 2010* objective-development

process contains guidance for expanding population-based objectives to include data on race/ethnic groups and other pertinent subpopulations (see the *Healthy People 2010* section in the introduction).

The process of the *Healthy People 2000* midcourse review (7) has brought the Nation closer to achieving the latter part of objective **22.4**. During the midcourse review, considerable attention was given to population groups that are at highest risk for premature death, disease, or disability, and 120 new subobjectives were proposed by the lead PHS agencies; 111 new subobjectives were eventually added (see the section on the midcourse review in the appendix). Data gaps still exist for many population groups that might be at higher health risk than the general population, and additional steps are being taken to identify these gaps through the current process of establishing objectives for 2010.

Progress toward objective **22.5**, the number of States that periodically analyze and publish data needed to measure progress toward the national health objectives, is currently being assessed by the number of States that publish data from major databases including vital statistics, the BRFSS, hospital discharge systems, and the YRBSS (see [figure 23](#)). A national database (the Health Care Cost and Utilization Project) has been developed to build comparable hospital discharge data sets among States; in 1997, 33 States collected hospital discharge data (8). The number of States with at least one racial/ethnic group that comprises at least 10 percent of their population that publish vital statistics data for each of these groups is also being tracked. There are 27 States whose populations include at least 10 percent racial/ethnic minorities. At least 22 of those States were publishing data for their major racial/ethnic groups in 1996.

Data to measure objective **22.6** (to expand in all States systems for the transfer of year 2000 data among Federal, State, and local agencies) are available for three data systems. The National Electronic Telecommunications System for Surveillance (NETSS) is operating in all States and the District of Columbia. In 1995, the Public Health Laboratory Information System (PHLIS) became available in all States and the District of Columbia as well. DATA2000, containing tracking data for

all the national *Healthy People 2000* objectives, became available in April 1995 to State and local health department personnel through the CDC WONDER system, a system actively used by all State health departments. In 1996, DATA2000 became available to all Internet users through CDC WONDER (see appendix).

The National Center for Health Statistics Internet homepage contains links to State data for a number of *Healthy People 2000* objectives (<http://www.cdc.gov/nchswww>). In 1997, mortality data by State for the years 1992–95 were made available in the Data Warehouse section (<http://www.cdc.gov/nchswww/datawh/datawh.htm>); race/ethnicity data are provided for 19 causes of death targeted in *Healthy People 2000* and for HIV mortality. *Healthy People 2000* data for natality objectives by State for the years 1993–96 were made available in the fall of 1998. The National Center for Chronic Disease Prevention and Health Promotion has made 1995 and 1996 State data available on the Internet from the BRFSS (<http://www2.cdc.gov/nccdphp/brfss/index.asp>). Much of these data relate to *Healthy People 2000* objectives.

Achieving the timely release of national surveillance and survey data to measure progress toward the national health objectives (22.7) is measured by percent of objectives with data released within 1 year and between 1 and 2 years of data collection. The actual measurement of this objective involves counting the objectives that have updates for a particular year. For this year's *Healthy People 2000 Review*, data collected in 1997 or later are counted as being released within 1 year. Data for 1996 are counted as being released between 1 and 2 years of data collection.

Because all objectives are included in the denominator, the data monitoring objective 22.7 represent an underestimate of the “true” percent of objectives with timely data. Some objectives are not applicable because of achievement through legislation, leading to an underestimate of timeliness. However, the measurement of progress for this objective is more affected by the periodicity of data collection. Some objectives are tracked with data available annually, such as data from the National Vital Statistics System for

objectives targeting mortality rates and the National Notifiable Disease Surveillance System for vaccine-preventable diseases (objective 20.1). Other objectives are tracked with biennial data, such as data from the YRBS for objectives targeting adolescents. Other objectives are monitored with data from periodic surveys such as the National Health and Nutrition Examination Surveys for measures of overweight and prevalence of high blood cholesterol. For these surveys, data are counted as timely for years close to the years of data collection only, even though the data may have been released soon after collection.

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Table 22. Surveillance and data systems objective status

Objective	Baseline year	Baseline	1990	1991	1992	1993	1994	1995	1996	1997	Target 2000
	22.1 Health status indicators										
Develop (indicators selected)	1991	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Establish use (number of States)											
Monitoring some indicators . . . . .	...	---	---	---	48	151	151	151	151	151	40
Providing HSI data to local health departments . . . . .	...	---	---	---	36	---	---	---	---	39	40
22.2 National data sources	1990	² 77%	...	---	---	93%	93%	³ 96%	97%	^{4,5} 97%	100%
a. State level data for at least two-thirds of State objectives (number of States) ^{1,6}	1995	42	...	...	...	...	...	...	---	45	50
22.3 Comparable data collection procedures											
Federal, State, and local agencies	1990	12%	...	---	14%	---	21%	---	---	---	100%
Publication of operational definitions and sources for national data . . . . .	...	---	---	---	---	---	---	---	---	⁷ 29%	...
22.4* Identify gaps in health data	1990	None identified	---	---	---	---	8_	9_	10_	10_	...
Establish mechanisms to meet needs	1990	None established	---	---	---	---	8_	9_	10_	10_	...
22.5 Periodic analysis and publication of data (number of States)	1989	20	---	---	---	---	---	---	---	---	50
Vital statistics ¹ . . . . .	...	---	¹¹ 51	51	51	51	51	51	51	51	50
Behavioral Risk Factor Surveillance System data ¹ . . . . .	...	---	¹¹ 40	---	49	50	51	51	51	51	50
Hospital discharge data ¹² . . . . .	...	---	¹¹ 22	---	---	---	---	---	29	⁵ 33	50
Youth Risk Behavior Survey data . . . . .	...	---	24	27	---	41	...	41	...	139	50
a. Analysis for racial and ethnic groups (number of States) ^{1,13}	1992	¹⁴ 19	...	...	...	¹⁴ 23	---	---	22	---	25
22.6 Number of States with data transfer systems	1989	30	---	---	---	---	---	---	---	---	50
National Electronic Telecommunications System for Surveillance (NETSS) ¹ . . . . .	...	---	---	---	51	51	51	51	51	51	50
Public Health Laboratory Information System (PHLIS) . . . . .	...	---	---	---	37	144	151	151	151	151	50
DATA2000 on CDC WONDER/PC ¹ . . . . .	...	---	---	---	---	---	---	51	51	51	50
22.7 Timely release of national data (percent of objectives)											
Data released within 1 year of collection	1994	65%	...	...	...	---	¹⁵ 67%	¹⁶ 46%	¹⁷ 49%	⁵ 23%	100%
Data released between 1–2 years of collection	1994	24%	...	...	...	---	¹⁵ 24%	¹⁶ 16%	¹⁷ 18%	⁵ 31%	...

--- Data not available.

... Category not applicable.

¹Includes the District of Columbia.

²Total number of objectives is 300.

³Number of objectives changes from 300 to 319 during the midcourse review.

⁴9 of 319 objectives have no baseline; there are no plans for data collection for 7 of these objectives.

⁵1998 data.

⁶States that have adopted *Healthy People 2000* plans.

⁷6 of 21 Statistical Notes have been published. See appendix table VIII.

⁸The National Committee on Vital and Health Statistics established a Subcommittee on State and Community Health Statistics to work with Federal and State agencies and appropriate private agencies to review and identify gaps in current health statistics.

⁹The *Healthy People 2000 Midcourse Review* added 111 additional subobjectives for major population groups at highest risk for disease, injury, and disability.

¹⁰As part of the planning process for 2010, data gaps are being identified and mechanisms to address these gaps are being considered.

¹¹1989 data.

¹²States that collect hospital discharge data. The number of States with legislative mandates to collect hospital discharge data was 39 in 1993–95, 38 in 1998.

¹³Twenty-seven States have at least one racial/ethnic group comprising at least 10 percent of their population; data show number of States that published vital statistics data for these racial/ethnic groups.

¹⁴Number of all States that published vital statistics data for racial/ethnic groups; racial/ethnic groups may comprise less than 10 percent of State population.

¹⁵1995 data.

¹⁶1996 data.

¹⁷1997 data.

NOTE: Data include revisions and, therefore, may differ from data previously published in these reports and other publications.

<i>Objective number</i>	<i>Data source</i>
22.1	CDC, NCHS.
22.2, 22.2a	Baseline: National data: OPHS, ODPHP. State data: Public Health Foundation. Updates: CDC, NCHS; OPHS, ODPHP.
22.3	CDC, NCHS.
22.4*	Subcommittee on State and Community Health Statistics, NCVHS. CDC, NCHS; OPHS, ODPHP.
22.5	1990 data: PHF. 1989 baselines and updates: Vital statistics: CDC, NCHS. Behavioral Risk Factor Surveillance System: CDC, NCCDPHP. Hospital discharge data: National Association of Health Data Organizations. Youth Risk Behavior Surveillance System: CDC, NCCDPHP.
22.5a	CDC, NCHS.
22.6	1989 baseline: PHF. 1992-97 data: NETSS: CDC, EPO. PHLIS: CDC, NCID. CDC WONDER: CDC, EPO; CDC, NCHS.
22.7	CDC, NCHS.

*Duplicate objective. See full text of objectives following this table.

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 State year 2000 plans in all 50 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.

Duplicate objective: 17.22

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 4 years. Objectives include, at a minimum, one from each objectives category: health status, risk reduction, and services and protection.

22.5a: Implement in 25 States periodic analysis and publication of data needed to measure State progress toward the national or

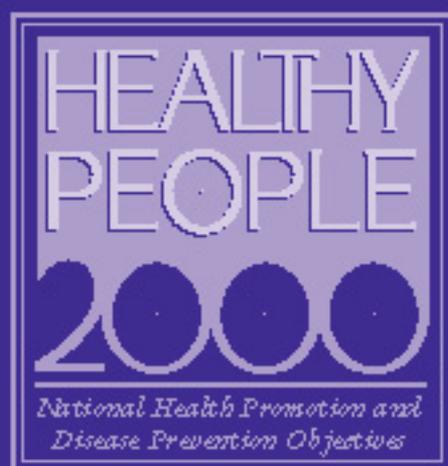
State-specific health objectives for each racial or ethnic group that makes up at least 10 percent of the State population.

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.



Appendix

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Appendix

Midcourse Modifications

The midcourse review of *Healthy People 2000* was a 2-year process, announced in the fall of 1993 and culminating in the publication of the *Healthy People 2000 Midcourse Review and 1995 Revisions* (1), in the fall of 1995. During 1993–94, PHS workgroups met to consider new data, new information, and new science that had become available since the release of *Healthy People 2000* in 1990. In the resulting draft of the proposed midcourse revisions (2), announced in the *Federal Register* on October 3, 1994, for public review and comment, there were no changes to the three goals of *Healthy People 2000* nor to the organization of the 22 priority areas. The changes that were proposed included:

- New objectives that reflect scientific developments, new policy initiatives, or new information that has become available
- New duplicates of existing objectives, shared across priority areas in recognition of the interrelationships among health issues
- Revisions to language in existing objectives to make them more understandable, to encompass current issues, and to reflect changes in data reporting systems
- New special population targets to focus on groups that are at highest risk of premature death, disease, or disability
- Revisions to year 2000 targets to make them more challenging

More than 550 public comments were received on the proposed midcourse revisions. These public comments were used by the PHS agencies to complete the revised Summary List of Objectives that includes the new objectives, modifications to existing objectives, new special population subobjectives, and the target revisions (1). All midcourse modifications were coordinated and edited by the DHHS Office of Disease Prevention and Health Promotion.

As a result of the review process, 19 new objectives were added to the original 300 unduplicated main objectives, bringing the total number of objectives to 319. Additional data that showed increased health risk or disparity

between the total population and people in age, sex, racial, or ethnic minority groups resulted in the addition of 111 new special population subobjectives (bringing the total number of subobjectives to 319). Including the midcourse changes, *Healthy People 2000* now contains a total of 638 objectives and subobjectives; because some priority areas share identical objectives, the number of objectives and subobjectives including duplicates is 805.

There were 58 target revisions (29 objectives and 29 subobjectives), in almost all cases to make the target more challenging. Text changes were made to 75 existing objectives, in some cases considerably modifying the objective. All midcourse review modifications are detailed in *Healthy People 2000 Statistical Notes* Number 13 (3).

The midcourse modifications established baselines for all *Healthy People 2000* objectives for which data were available. Most of these baselines are the same as those established in the original *Healthy People 2000* report (4); others reflect revisions to the original baselines or are newly created. This *Review* tracks progress for all the objectives contained in the *Midcourse Review and 1995 Revisions* report using the midcourse review baselines and the most recent data available. About 50 baselines have been revised from those published in the midcourse review report; these changes are denoted by a footnote “a” in each priority area summary table.

Special Population Subobjectives

Special population subobjectives address disparities and differing trends in health measures for subpopulation groups as compared with the total U.S. population. The guidelines for drafting the subobjectives suggested the identification of a data source to track progress before a subobjective for a minority or special population could be set. A lack of data sources prevented the establishment of subobjectives for some population groups even when disparities were suspected.

Many subpopulations are small and geographically clustered and cannot be adequately measured through national surveys using standard sampling techniques. Developing techniques to

assess the health of minorities and other special subpopulations is a significant challenge during this decade. However, the addition of the special population subobjectives during the midcourse review indicates that some improvements in data availability have been made.

Geographic Coverage

Data used to track the *Healthy People 2000* objectives are, where available, for the 50 States and the District of Columbia. In cases where complete U.S. data are not available, subnational data (if they exist) are used as a proxy. For all objectives, data for U.S. territories are excluded.

Age Adjustment

Most of the baselines and monitoring data for the population-based *Healthy People 2000* mortality objectives are derived from the National Vital Statistics System (NVSS) and are age adjusted to the 1940 population (see appendix [table III](#)). Exceptions are objectives [4.1](#), [9.3](#) (except [9.3d](#)), [10.1](#), and [10.16](#). Data for [4.1](#) and [9.3](#) (except [9.3d](#)) are crude rates from the National Highway and Traffic Safety Administration’s Fatality Analysis Reporting System (formerly the 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 and Census of Fatal Occupational Injuries. Baseline data for [10.16](#), a new objective, are crude rates from the National Traumatic Occupational Fatality Surveillance System, CDC. Update data are crude rates from the Census of Fatal Occupational Injuries.

Data Source Comparability

For some objectives the baseline data source differs from the source used to monitor progress. Comparability between different data sources or even within the same data source for different years is not assured. Comparability can be compromised by changes in survey questions, survey systems, survey methodology, operational definitions, and analytic techniques. Some of the most important comparability issues related to specific objectives are discussed in the Data Issues section of

the priority area chapters. Other issues related to tracking the objectives are addressed in *Healthy People 2000 Statistical Notes* Number 4, Issues Related to Monitoring the Year 2000 Objectives (5). The data source for each *Healthy People 2000* objective is shown at the end of the summary data table in each priority area chapter.

Cause-of-Death Terminology and Codes

Twenty-six objectives (excluding duplicates) in *Healthy People 2000* are tracked using mortality data. 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 National Center for Health Statistics (NCHS) publications; in some cases, the *International Classification of Diseases, Ninth Revision (ICD-9)* codes are different as well (6) (see appendix [table III](#)).

For five objectives, the terminology and the codes are different from those used for similar cause-of-death categories in NCHS publications. One example, objective **7.1**, concerns reduction of homicides. Progress toward this objective is measured using ICD-9 codes E960-E969. NCHS generally uses “Homicide and legal intervention” (ICD-9 codes E960-E978), which includes “legal intervention,” or “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 structure in both uses. The remaining six 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-9 categories and those defined by NCHS rubrics are relatively small, if not trivial.

Hispanic Vital Statistics

There are nine subobjectives targeting mortality reduction for Hispanic populations (**4.2c**, **4.3b**, **7.1d**,

9.1d, **9.3g**, **9.6g**, **16.4b**, **17.9c**, and **17.9d**). For objective **7.1d**, the only subobjective with pre-1990 data, the 1987-89 baseline and tracking data are based on deaths to residents of selected States that had data that were at least 90 percent complete on a place-of-occurrence basis and considered to be sufficiently comparable. Beginning with data for 1990 for all Hispanic subobjectives, the criterion was changed to include States with data that were at least 80 percent complete. The number of States in the mortality reporting area increased from 18 States and the District of Columbia in 1987 to 49 States and the District of Columbia in 1993.

Hispanic origin data for prenatal care in the first trimester (**14.11c**) are based on States that reported Hispanic parentage on the birth certificate. The number of States in the natality reporting area increased from 23 States and the District of Columbia in 1987 to all 50 States and the District of Columbia in 1993. The reporting area for infant mortality data from the national linked file of live births and infant deaths for Puerto Ricans (**14.1c**, **f**, and **j**) increased from 23 States and the District of Columbia in 1984 to 49 States and the District of Columbia in 1991. Since 1991, only Oklahoma does not report Hispanic origin for deaths.

A listing of the States included in the reporting areas for each year and more information can be found in another publication (7).

Mortality Data by Race

The racial groups—white, black, American Indian or Alaska Native, and Asian or Pacific Islander—include persons of Hispanic and non-Hispanic origin. Conversely, persons of Hispanic origin may be of any race. Consistency of race and Hispanic origin identification between the death certificate (source of data for the numerator of death rates) and self-reported population data from the Census Bureau (source of denominators for death rates) or birth certificates (denominators for infant mortality rates) is high for individual white and black persons. However, persons self-identified as American Indian or Alaska Native, Asian or Pacific Islander, or Hispanic in Census data or birth certificates are sometimes misclassified on the death certificate. Death rates for subobjectives targeting these groups may be

underestimated by 22-30 percent for American Indians or Alaska Natives, by about 12 percent for Asians or Pacific Islanders, and 7 percent for Hispanics (8).

Racial/ethnic classification for infant deaths is substantially improved by using the linked birth and infant death file, which uses the race of the mother as self-reported on the birth certificate instead of the race of child as reported on the death certificate. The infant mortality rates for Puerto Ricans and American Indians or Alaska Natives shown in objectives **14.1b**, **c**, **f**, **i**, and **j** use data from the linked file.

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**, **21.1**). The *Healthy People 2000* years of healthy life (HP2000-YHL) measure, which will be used to monitor progress until the year 2000, combines mortality data from the National Vital Statistics System with self-reported health status data from the National Health Interview Survey. The methodology for the HP2000-YHL measure, developed by NCHS and outside consultants, is published in *Healthy People 2000 Statistical Notes* Number 7, Years of Healthy Life (9).

Census Poverty Threshold

Data for subobjectives targeting family income below the poverty level are based on definitions originally developed by the Social Security Administration. They include a set of money income thresholds that vary by family size and composition. Families or individuals with income below the appropriate thresholds are classified as below the poverty level. These thresholds are updated annually by the U.S. Bureau of the Census. The weighted-average poverty threshold for a family of four was \$14,335 in 1992, \$14,764 in 1993, \$15,141 in 1994, \$15,569 in 1995, and \$16,036 in 1996 (10).

Age-Related Objectives

Embraced as broad national goals in 1990 for improving the health of Americans at the five major life stages

(11), *Healthy People 2000* also includes targets for reducing deaths among people under age 65, and for reducing the proportion of people 70 years and over who have difficulty performing two or more activities of daily living.

Healthy People 2000 contains four age-related objectives, listed below. Appendix [table VII](#) shows the latest data for these objectives. They are also included in the special chart section in the beginning of this volume.

- Reduce the death rate for children by 15 percent to no more than 28 per 100,000 children age 1–14 years, and for infants by approximately 30 percent to no more than 7 per 1,000 live births.
- Reduce the death rate for adolescents and young adults by 15 percent to no more than 85 per 100,000 people age 15–24 years.
- Reduce the death rate for adults by 20 percent to no more than 340 per 100,000 people age 25–64 years.
- Reduce to no more than 90 per 1,000 people the proportion of all people age 70 years and over who have difficulty in performing two or more personal care activities (a reduction of about 19 percent), thereby preserving independence.

Health Status Indicators and Priority Data Needs

In July 1991 the Centers for Disease Control and Prevention (CDC) released a set of 18 health status indicators (HSI) (12) and encouraged their use by Federal, State, and local health agencies. The indicators were developed by a group called Committee 22.1 in response to objective **22.1** of *Healthy People 2000* (4) through a consensus process(13). Recent trend data and data by race and Hispanic origin for the 18 HSI's are shown in appendix [tables V](#) and [VI](#). The HSI definitions are discussed in detail in *Statistical Notes* Number 3, "Health Status Indicators: Definitions and National Data" (14).

The *International Classification of Diseases, Ninth Revision* (6) (ICD–9) code definitions recommended for most of the mortality indicators are taken from established NCHS cause-of-death tabulations. In some cases, these definitions differ from those used to track similar objectives in *Healthy People 2000*. There are three HSI's similar to *Healthy People 2000* objectives that use different ICD–9

codes. These HSI's are: homicides (objective **7.1**), lung cancer deaths (objectives **3.2** and **16.2**), and heart disease deaths (objectives **1.1**, **3.1**, and **15.1**). Please refer to appendix [tables III](#), [V](#), and [VI](#) for exact codes.

Prior to data for 1996, the rate of the reported incidence of AIDS is measured by date of diagnosis for the HSI and for objective **18.1**. However, the HSI rate was adjusted for delays in reporting only, while the objective **18.1** rate was adjusted for underreporting as well as delays in reporting. Beginning with 1996 data, the methodology for computing AIDS incidence has changed for objective **18.1**. The new methodology for objective **18.1** will also be used for the AIDS HSI; therefore, beginning with 1996 the data for objective **18.1** and the AIDS HSI will be comparable. See text for Priority Area 18 for more details.

The data source for the HSI and for objective **10.1** for work-related injury deaths is the Census of Fatal Occupational Injuries, Bureau of Labor Statistics, Department of Labor. However, the HSI rate is for the total population 16 years of age and over and the denominator is obtained from the Bureau of the Census. For objective **10.1**, the rate is for full-time workers 16 years of age and over and the denominator is provided by the Bureau of Labor Statistics.

Two HSI measures use the same methodology but are the converse of their associated *Healthy People 2000* objectives. All HSI's were defined so that the higher rate or percent would be an indicator of poorer health status. The HSI for prenatal care is measured by the proportion of mothers delivering live infants who did *not* receive care during the first trimester of pregnancy, while objective **14.11** is to increase the proportion of all pregnant women who received prenatal care in the first trimester of pregnancy. Similarly, the HSI for air quality is measured by the proportion of people living in counties exceeding U.S. Environmental Protection Agency (EPA) standards for air quality during the previous year, while objective **11.5** is measured by the proportion of people who live in counties that have *not* exceeded any EPA standard for air quality in the past year.

As part of their mandate to identify a set of indicators of community health status that would be relevant to public

health practice, Committee 22.1 also identified a set of 16 Priority Data Needs (PDN's) as indicators that would be important for evaluating the health of a population; however, data for these indicators were not necessarily available for all levels of government. In response to the Committee's recommendation that existing data collection systems be modified to accommodate the PDN's, a survey instrument for measuring the PDN's at the local level has been developed. Detailed information on the PDN's and their definitions are discussed in detail in *Statistical Notes* Number 15 (15).

Additional Sources of Monitoring Data and Information

Relevant Internet sites include the following:

- The *Healthy People 2000* home page (<http://odphp.osophs.dhhs.gov/pubs/hp2000>): Contains connections to many activities related to *Healthy People 2000* including lead agency contacts for the priority areas, progress review reports, the *Healthy People 2000* consortium, and more.
- The National Health Information Center (NHIC) home page (<http://nhic-nt.Health.org>): Serves as a health information referral service that enables health professionals and consumers who have health questions to contact organizations that are best able to provide answers. Many documents related to *Healthy People 2000* can be located at this site. NHIC was established in 1979 by the Office of Disease Prevention and Health Promotion (ODPHP), Office of Public Health and Science, Office of the Secretary, U.S. Department of Health and Human Services.
- The National Center for Health Statistics home page (<http://www.cdc.gov/nchswww>): Provides statistical information on vital events as well as information on health status, lifestyle and exposure to unhealthy influences, the onset and diagnosis of illness and disability, and the use of health care. NCHS publications, including the full text of several recent *Healthy People 2000 Reviews* are located at <http://www.cdc.gov/nchswww/products/pubs/pubd/hp2k/hp2k.htm>. They are

presented in Acrobat (tm). PDF file format and may be viewed or downloaded directly from this site. Data for recent years are available for the HSI's and the PDN's in files that can be downloaded through the CDC FTP-server at <http://www.cdc.gov/nchswww/datawh/datawh.htm>.

■ Information on the development of the *Healthy People 2010* objectives can be found at

<http://www.health.gov/healthypeople>.

■ A valuable resource for public health professionals wishing to measure and track data comparable to the national *Healthy People 2000* objectives is presented as a series of publications entitled *Healthy People 2000 Statistical Notes*. This series contains information on the Health Status Indicators, monitoring issues, operational definitions, and other issues related to tracking the *Healthy People 2000* objectives. For a list of these publications, see appendix [table VIII](#). The full text of *Healthy People 2000 Statistical Notes* numbers 6 through the present can be found on the Internet at <http://www.cdc.gov/nchswww/products/pubs/pubd/hp2k/hp2k.htm>.

The National Center for Health Statistics also presents an annual course entitled "Measuring the Healthy People 2000 Objectives" through the Applied Statistics Training Institute (ASTI). This course, presented free of charge to health professionals and others working in areas of public health in Government agencies and private organizations, addresses specific measurement issues related to monitoring progress toward selected *Healthy People 2000* objectives and Health Status Indicators. A number of objectives that present unusual problems or require the use of complex algorithms are discussed (for example, years of healthy life; vigorous physical activity; overweight prevalence; and air quality). Data comparability, the *International Classification of Diseases* (ICD) codes for mortality data, computation of age-adjusted death rates, and a demonstration of using statistical data on the Internet are also included. For more information on ASTI, contact the National Center for Health Statistics, (301) 436-7063.

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Table I. Priority area lead agencies

<i>Priority area</i>	<i>Lead agency</i>
1 Physical activity and fitness	President's Council on Physical Fitness and Sports
2 Nutrition	National Institutes of Health Food and Drug Administration
3 Tobacco	Centers for Disease Control and Prevention
4 Substance abuse: alcohol and other drugs	Substance Abuse and Mental Health Services Administration
5 Family planning	Office of Population Affairs
6 Mental health and mental disorders	Substance Abuse and Mental Health Services Administration and the National Institutes of Health
7 Violent and abusive behavior	Centers for Disease Control and Prevention
8 Educational and community-based programs	Centers for Disease Control and Prevention Health Resources and Services Administration
9 Unintentional injuries	Centers for Disease Control and Prevention
10 Occupational safety and health	Centers for Disease Control and Prevention
11 Environmental health	National Institutes of Health Centers for Disease Control and Prevention
12 Food and drug safety	Food and Drug Administration
13 Oral health	National Institutes of Health Centers for Disease Control and Prevention
14 Maternal and infant health	Health Resources and Services Administration
15 Heart disease and stroke	National Institutes of Health
16 Cancer	National Institutes of Health
17 Diabetes and chronic disabling conditions	National Institutes of Health Centers for Disease Control and Prevention
18 HIV infection	Centers for Disease Control and Prevention
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 II. *Healthy People 2000* data source acronyms

<i>Acronyms</i>	<i>Agency/Organization</i>
ACS	American Cancer Society
AHA	American Hospital Association
AIRS	Aerometric Information Retrieval System
ALA	American Lung Association
ATSDR	Agency for Toxic Substances and Disease Registry
BHPr	Bureau of Health Professions
BJS	Bureau of Justice Statistics
BLS	Bureau of Labor Statistics
CDC	Centers for Disease Control and Prevention
CFSAN	Center for Food Safety and Applied Nutrition
CPSC	Consumer Product Safety Commission
CSAT	Center for Substance Abuse Treatment
DoD	Department of Defense
DOJ	Department of Justice
DOL	Department of Labor
DOT	Department of Transportation
EPA	Environmental Protection Agency

Table II. Healthy People 2000 data source acronyms

<i>Acronyms</i>	<i>Agency/Organization</i>
EPO.....	Epidemiology Program Office
FARS.....	Fatality Analysis Reporting System
FDA.....	Food and Drug Administration
FEMA.....	Federal Emergency Management Administration
GAO.....	Government Accounting Office
HCFA.....	Health Care Financing Administration
HRSA.....	Health Resources and Services Administration
IHS.....	Indian Health Service
IRMO.....	Information Resources Management Office
NCCAN.....	National Center for Child Abuse and Neglect
NCCDPHP.....	National Center for Chronic Disease Prevention and Health Promotion
NCEH.....	National Center for Environmental Health
NCHS.....	National Center for Health Statistics
NCHSR.....	National Center for Health Services Research
NCHSTP.....	National Center for HIV, STD, and TB Prevention
NCI.....	National Cancer Institute
NCID.....	National Center for Infectious Disease
NCIPC.....	National Center for Injury Prevention and Control
NCPS.....	National Center for Prevention Services
NCVHS.....	National Committee on Vital and Health Statistics
NHLBI.....	National Heart, Lung, and Blood Institute
NHTSA.....	National Highway Traffic Safety Administration
NIAAA.....	National Institute on Alcoholism and Alcohol Abuse
NICHD.....	National Institute for Child Health and Human Development
NIDA.....	National Institute on Drug Abuse
NIDR.....	National Institute of Dental Research
NIH.....	National Institutes of Health
NIMH.....	National Institute for Mental Health
NIOSH.....	National Institute for Occupational Safety and Health
NIP.....	National Immunization Program
NSBA.....	National School Boards Association
OAR.....	Office of Air and Radiation
OAS.....	Office of the Assistant Secretary
OASD.....	Office of the Assistant Secretary of Defense
OASH.....	Office of the Assistant Secretary of Health
ODPHP.....	Office of Disease Prevention and Health Promotion
OPA.....	Office of Population Affairs
OPEL.....	Office of Planning, Evaluation, and Legislation
OPHS.....	Office of Public Health and Science
OPPTS.....	Office of Pollution, Prevention, and Toxic Substances
ORA.....	Office of Research and Analysis
OSH.....	Office of the Secretary of Health
OSHA.....	Occupational Safety and Health Administration
OSWER.....	Office of Solid Waste Enforcement and Remediation
PHF.....	Public Health Foundation
PHS.....	Public Health Service
SAMHSA.....	Substance Abuse and Mental Health Services Administration
USDA.....	United States Department of Agriculture

Table III. Mortality objective cause-of-death categories

<i>Objective number</i>	<i>Healthy People 2000</i>		<i>Mortality tabulation lists</i>	
	<i>Cause of death¹</i>	<i>ICD-9 identifying codes</i>	<i>Cause of death</i>	<i>ICD-9 identifying codes</i>
1.1	Coronary heart disease	402, 410-414, 429.2	Diseases of heart	390-398, 402, 404-429
2.1	See 1.1			
2.2	Cancer (all sites)	140-208	Malignant neoplasms, including neoplasm of hematopoietic tissues	(Same as HP2000)
2.22	Stroke	430-438	Cerebrovascular diseases	(Same as HP2000)
2.23	Colorectal cancer	153.0-154.3, 154.8, 159.0	Malignant neoplasms of colon, rectum, rectosigmoid junction, and anus	153, 154
3.1	See 1.1			
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)
3.17	Cancer of the oral cavity and pharynx	140-149	Malignant neoplasms of lip, oral cavity, and pharynx	(Same as HP2000)
3.18	See 2.22			
4.1	Alcohol-related motor vehicle crashes	E810-E819 ²	No comparable category	...
4.2	Cirrhosis	571	Chronic liver disease and cirrhosis	(Same as HP2000)
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)
7.1	Homicides	E960-E969	Homicide and legal intervention	E960-E978
7.2	See 6.1			
7.3	Firearm-related deaths	E922.0-E922.3, E922.8-E922.9, E955.0-E955.4, E965.0-E965.4, E970, E985.0-E985.4	Injury by firearms	(Same as HP2000)
9.1	Unintentional injuries	E800-E949	Accidents and adverse effects	(Same as HP2000)
9.3, 9.3a-c, e-f	Motor vehicle crashes	E810-E819	Motor vehicle traffic accidents	(Same as HP2000)
9.3d, g	Motor vehicle crashes	E810-E825	Motor vehicle accidents	(Same as HP2000)
9.4	Falls and fall-related injuries	E880-E888	Accidental falls	(Same as HP2000)
9.5	Drowning	E830, E832, E910	Accidental drowning and submersion	E910
9.6	Residential fires	E890-E899	Accidents caused by fire and flames	(Same as HP2000)
9.23	See 4.1			
10.1	Work-related injuries ³	E800-E999	No comparable category	...
10.16	Work-related homicides	E960-E969	No comparable category	...
10.17	Occupational lung diseases ³	500-502, 504	No comparable category	...
13.7	See 3.17			
14.3	Maternal mortality	630-676	Complications of pregnancy, childbirth, and the puerperium or maternal mortality	(Same as HP2000)
15.1	See 1.1			

Table III. Mortality objective cause-of-death categories—Con.

Objective number	Healthy People 2000		Mortality tabulation lists	
	Cause of death ¹	ICD–9 identifying codes	Cause of death	ICD–9 identifying codes
15.2	See 2.22			
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	See 2.23			
16.17	See 3.17			
17.9	Diabetes-related deaths ³	250	Diabetes mellitus	(Same as HP2000)
20.2	Epidemic-related pneumonia and influenza deaths for ages 65 and over	480–487	No comparable category	...

... Category not applicable.

¹Unless otherwise specified, *Healthy People 2000* uses underlying cause-of-death data.

²Includes only those deaths assigned to E810–E819 that were alcohol related; see Priority Area 4, Substance Abuse: Alcohol and Other Drugs.

³*Healthy People 2000* uses multiple-cause-of-death data.

Table IV. Morbidity codes used for objectives tracked by the National Hospital Discharge Survey

Objective number	Subject	ICD–9–CM diagnosis codes	Comment
9.2	All nonfatal injuries	800–959	Because of limited reporting of external causes (E-codes) in hospital discharge systems, the data include injuries that are unintentional, intentional, and where the intent is unknown
9.7	Hip fractures	820	
9.9	Nonfatal head injuries	800–801, 803–804, 850–854, 870–873, 925	
9.10	Nonfatal spinal cord injuries	806, 952	
11.1	Asthma	493	
14.7	Severe complications of pregnancy	630–634, 636–677	First listed code cannot be V27 (which would indicate a delivery)
14.8	Cesarean births—total	V27	Procedure code 74, excluding 74.3 and 74.91
14.8a	Cesarean births—primary	V27 first listed and 654.2 not listed	Procedure code 74, excluding 74.3 and 74.91
14.8b	Cesarean births—repeat	V27 first listed and 654.2 (any listed)	Procedure code 74, excluding 74.3 and 74.91
17.10	Lower extremity amputation among people with diabetes	250 (any listed) and 895–897 are not listed	Procedure codes 84.11–84.12
19.16	Pelvic inflammatory disease	098.10, 098.16, 098.17, 098.30, 098.36–098.37, 098.39, 098.86 (any listed), 614.0–614.5, 614.7–614.9, 615.0, 615.1, 615.9	

NOTE: First listed diagnoses are used for all objectives, unless otherwise stated. Because of the hierarchical nature of ICD–9–CM coding, three-digit codes (such as 493) include all the more detailed four- and five-digit codes with the same first three digits (for example, 493 includes 493.0–493.9).

Table V. Health Status Indicators: United States, 1994–96

<i>Health status indicators</i>		1994	1995	1996
1	Race/ethnicity-specific infant mortality as measured by the rate (per 1,000 live births) of deaths among infants under 1 year of age	8.0	7.6	7.3
	White	6.6	6.3	6.1
	Black	15.8	15.1	14.7
	American Indian/Alaska Native ¹	---	9.0	10.0
	Chinese ¹	---	3.8	3.2
	Japanese ¹	---	*5.3	*4.2
	Filipino ¹	---	5.6	5.8
	Hawaiian and part-Hawaiian ¹	---	*	*
	Other Asian or Pacific Islander ¹	---	5.5	5.7
	Hispanic origin ^{1,2}	---	6.3	6.1
2	Total deaths per 100,000 population (ICD–9 nos. 0–E999)³	508.4	503.9	491.6
3	Motor vehicle crash deaths per 100,000 population (ICD–9 nos. E810–E825)³	16.1	16.3	16.2
4	Work-related injury deaths per 100,000 population⁴	3.3	3.0	3.1
5	Suicides per 100,000 population (ICD–9 nos. E950–E959)³	11.2	11.2	10.8
6	Homicides per 100,000 population (ICD–9 nos. E960–E978)³	10.1	9.4	8.5
7	Lung cancer deaths per 100,000 population (ICD–9 no. 162)³	38.7	38.3	37.9
8	Female breast cancer deaths per 100,000 females (ICD–9 no. 174)³	21.3	21.0	20.2
9	Cardiovascular disease deaths per 100,000 population (ICD–9 nos. 390–448)³	176.8	174.9	170.7
	Heart disease deaths per 100,000 population (ICD–9 nos. 390–398, 402, 404–429) ³	140.0	138.3	134.5
	Stroke deaths per 100,000 population (ICD–9 nos. 430–438) ³	26.5	26.7	26.4
10	Reported incidence (per 100,000 population) of acquired immunodeficiency syndrome	⁵ 29.8	⁵ 28.6	⁶ 27.8
11	Reported incidence (per 100,000 population) of measles	0.4	0.1	0.2
12	Reported incidence (per 100,000 population) of tuberculosis	9.4	8.7	8.0
13	Reported incidence (per 100,000 population) of primary and secondary syphilis	8.1	6.3	4.3
14	Prevalence of low birthweight as measured by the percentage of live born infants weighing under 2,500 grams at birth	7.3	7.3	7.4
15	Births to adolescents (10–17 years) as a percentage of total live births	5.3	5.3	5.1
16	Prenatal care as measured by the percentage of mothers delivering live infants who did not receive care during the first trimester of pregnancy	19.8	18.7	18.1
17	Childhood poverty, as measured by the proportion of children under 15 years of age living in families at or below the poverty level			
	Under 18 years	21.8	20.8	20.5
	Under 15 years	22.5	21.5	21.1
	5–17 years ⁷	20.1	19.0	18.9
18	Proportion of persons living in counties exceeding U.S. Environmental Protection Agency standards for air quality during the previous year⁸	24.9	32.9	18.7

--- Data not available.

*Infant mortality rates for groups with fewer than 10,000 births are considered unreliable. Infant mortality rates for groups with less than 7,500 births are considered highly unreliable and are not shown.

¹Rates based on a period linked birth and infant death file using weighted data. See text for Priority Area 14.

²Includes mothers of all races.

³Age adjusted to the 1940 U.S. standard population.

⁴Data are for people 16 years and over.

⁵By date of diagnosis. Adjusted for delays in reporting; not adjusted for underreporting.

⁶Beginning with 1996, data are for people 13 years and over and methodology is changed. See text for Priority Area 18.

⁷Related children in families.

⁸Data are based on 1990 county population estimates.

<i>Indicator</i>	<i>Data source</i>
1–3,5–9,14–16	National Vital Statistics System, CDC, NCHS.
4	Census of Fatal Occupational Injuries, DOL, BLS.
10	HIV/AIDS Surveillance System, CDC, NCHSTP.
11	National Notifiable Disease Surveillance System, CDC, EPO.
12	Tuberculosis Morbidity Data, CDC, NCHSTP.
13	Sexually Transmitted Disease Surveillance System, CDC, NCHSTP.
17	Current Population Survey, U.S. Bureau of the Census.
18	National Air Quality and Emission Trends Report, EPA, OAR.

Table VI. Health Status Indicators by race and Hispanic origin: United States, 1996

Health status indicators	Race					
	Total	White	Black	American Indian/ Alaska Native	Asian/ Pacific Islander	Hispanic origin ¹
1 Race/ethnicity-specific infant mortality as measured by the rate (per 1,000 live births) of deaths among infants under 1 year of age	7.3	6.1	14.7	² 10.0	² 5.2	² 6.1
2 Total deaths per 100,000 population (ICD-9 nos. 0-E999)³	491.6	466.8	738.3	456.7	277.4	365.9
3 Motor vehicle crash deaths per 100,000 population (ICD-9 nos. E810-E825)³	16.2	16.3	16.7	34.0	9.4	16.1
4 Work-related injury deaths per 100,000 population⁴	3.1	3.0	2.6	2.3	2.3	3.3
5 Suicides per 100,000 population (ICD-9 nos. E950-E959)³	10.8	11.6	6.6	13.0	6.0	6.7
6 Homicides per 100,000 population (ICD-9 nos. E960-E978)³	8.5	4.9	30.6	10.1	4.6	12.4
7 Lung cancer deaths per 100,000 population (ICD-9 no. 162)³	37.9	37.6	46.1	23.8	16.9	14.3
8 Female breast cancer deaths per 100,000 females (ICD-9 no. 174)³	20.2	19.8	26.5	12.7	8.9	12.8
9 Cardiovascular disease deaths per 100,000 population (ICD-9 nos. 390-448)³	170.7	163.6	251.0	128.1	101.4	114.5
Heart disease deaths per 100,000 population (ICD-9 nos. 390-398, 402, 404-429) ³	134.5	129.8	191.5	100.8	71.7	88.6
Stroke deaths per 100,000 population (ICD-9 nos. 430-438) ³	26.4	24.5	44.2	21.1	23.9	19.5
10 Reported incidence (per 100,000 population) of acquired immunodeficiency syndrome⁵	27.8	⁶ 13.4	⁶ 110.9	13.4	7.6	48.4
11 Reported incidence (per 100,000 population) of measles	0.2	---	---	---	---	---
12 Reported incidence (per 100,000 population) of tuberculosis	8.0	⁶ 2.8	⁶ 22.3	14.5	41.6	16.0
13 Reported incidence (per 100,000 population) of primary and secondary syphilis	4.3	⁶ 0.6	⁶ 30.2	2.1	0.6	1.9
14 Prevalence of low birthweight as measured by the percentage of live born infants weighing under 2,500 grams at birth	7.4	6.3	13.0	6.5	7.1	6.3
15 Births to adolescents (10-17 years) as a percentage of total live births	5.1	4.2	10.3	8.7	2.1	7.3
16 Prenatal care as measured by the percentage of mothers delivering live infants who did not receive care during the first trimester of pregnancy	18.1	16.0	28.6	32.3	18.8	27.8
17 Childhood poverty, as measured by the proportion of children under 15 years of age living in families at or below the poverty level						
Under 18 years	20.5	16.3	39.9	---	---	40.3
Under 15 years	21.1	16.7	40.8	---	---	41.0
5-17 years ⁷	18.9	---	---	---	---	---
18 Proportion of persons living in counties exceeding U.S. Environmental Protection Agency standards for air quality during the previous year⁸	18.7	18.1	19.2	16.8	35.6	43.7

--- Data not available.

¹Hispanic origin can be of any race.

²Rates based on a period linked birth and infant death file using weighted data. See text for Priority Area 14.

³Age adjusted to the 1940 standard population.

⁴Data are for people 16 years and over.

⁵Beginning with 1996, data are for people 13 years and over and methodology is changed. See text for Priority Area 18.

⁶Data are for the non-Hispanic population.

⁷Related children in families.

⁸Data are based on 1990 county population estimates.

Objective number	Data source
1-3,5-9,14-16	National Vital Statistics System, CDC, NCHS.
4	Census of Fatal Occupational Injuries, DOL, BLS.
10	HIV/AIDS Surveillance System, CDC, NCHSTP.
11	National Notifiable Disease Surveillance System, CDC, EPO.
12	Tuberculosis Morbidity Data, CDC, NCHSTP.
13	Sexually Transmitted Disease Surveillance System, CDC, NCHSTP.
17	Current Population Survey, U.S. Bureau of the Census.
18	National Air Quality and Emission Trends Report, EPA, OAR.

Table VII. Age-related objectives: United States, 1987–97

<i>Objectives</i>	<i>Baseline 1987</i>	<i>1991</i>	<i>1992</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>1996</i>	<i>1997¹</i>	<i>2000 Target</i>
Infant mortality (per 1,000 live births)	10.1	8.9	8.5	8.4	8.0	7.6	7.3	7.1	7
Children 1–14 years (total deaths per 100,000) . .	33.7	30.7	28.8	29.8	28.5	27.8	26.5	25.0	28
Adolescents and young adults 15–24 years (total deaths per 100,000)	97.8	100.1	95.6	98.5	98.0	95.3	89.6	84.6	85
Adults 25–64 years (total deaths per 100,000) . .	426.9	400.7	394.7	400.1	398.6	397.3	382.0	366.1	340
People 70 years and over (difficulty in performing two or more personal care activities per 1,000)	² 141	---	---	---	---	³ 163	---	---	90

--- Data not available.

¹Preliminary data.

²1984–85 data.

³1994–95 data.

Data Sources: National Vital Statistics System, CDC, NCHS.

For people 70 years and over: National Health Interview Survey, CDC, NCHS; National Nursing Home Survey, CDC, NCHS.

Table VIII. Published issues of *Healthy People 2000* Statistical Notes

<i>Number</i>	<i>Title</i>	<i>Date of Issue</i>
1	Health Status Indicators for the Year 2000	Fall 1991
2	Infant Mortality	Winter 1991
3	Health Status Indicators: Definitions and National Data	Spring 1992
4	Issues Related to Monitoring the Year 2000 Objectives	Summer 1993
5	Revisions to Healthy People 2000 Baselines	July 1993
6	Direct Standardization (Age-Adjusted Death Rates)	March 1995
7	Years of Healthy Life	April 1995
8	Evaluating Public Health Data Systems: A Practical Approach	June 1995
9	Monitoring Air Quality in Healthy People 2000	September 1995
10	Health Status Indicators: Differentials by Race and Hispanic Origin	September 1995
11	Operational Definitions for Year 2000 Objectives: Priority Area 20, Immunization and Infectious Diseases	February 1997
12	Operational Definitions for Year 2000 Objectives: Priority Area 13, Oral Health	May 1997
13	Healthy People 2000 Midcourse Revisions: A Compendium	August 1997
14	Operational Definitions for Year 2000 Objectives: Priority Area 14, Maternal and Infant Health	December 1997
15	Priority Data Needs: Sources of National, State, and Local-level Data and Data Collection Systems	December 1997
16	Operational Definitions for Year 2000 Objectives: Priority Area 6, Mental Health and Mental Disorders	February 1998
17	Operational Definitions for Year 2000 Objectives: Priority Area 21, Clinical Preventive Services	December 1998
18	Operational Definitions for Year 2000 Objectives: Priority Area 1, Physical Activity and Fitness	December 1998

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