Reproductive Health

HEALTHY PEOPLE

2010

Healthy People 2010—Reproductive Health was created through grant support to the State Family Planning Administrators (SFPA) Project from the Office of Population Affairs, Department of Health and Human Services (HHS). The SFPA grant is managed by Center for Health Training in Seattle, Washington. This document is intended as a companion piece to “Healthy People 2010” and compiles the objectives related to reproductive health. It is intended to assist Title X grantees, family planning and other reproductive health professionals, as they plan for the future healthcare needs of the nation.

The State Family Planning Administrators (SFPA) is a national group for state-level administrators of family planning programs. SFPA members are representatives of state and territorial health departments and the District of Columbia. The majority of SFPA administer Title X funds, which are appropriated by Congress and distributed through the Office of Population Affairs, HHS.

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October 2001

HEALTHY PEOPLE 2010

Reproductive Health

family
PLANNING

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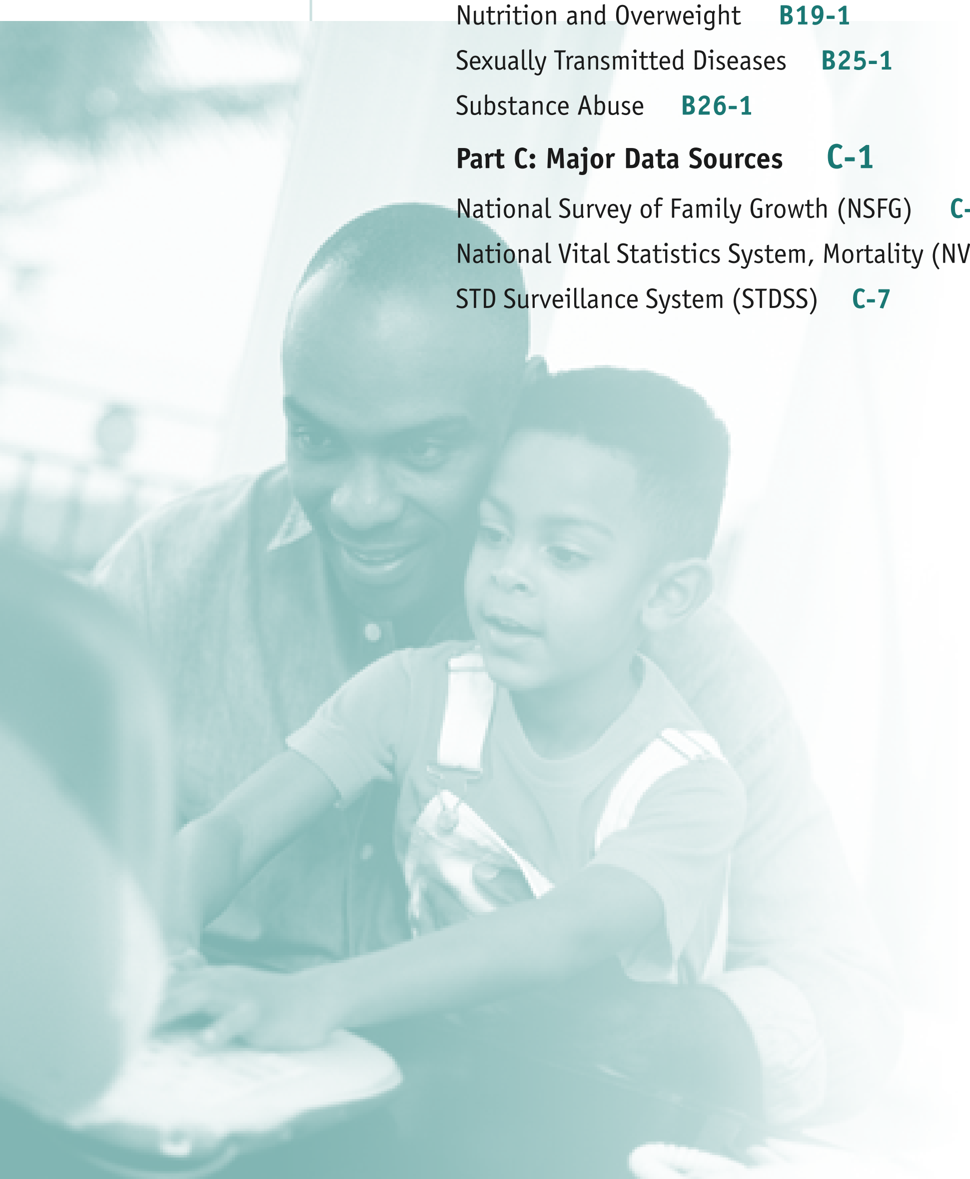

Introduction

In order to understand the content and intent of *Healthy People 2010—Reproductive Health*, one must begin with knowledge of the comprehensive, nationwide health promotion and disease prevention agenda, Healthy People 2010. It is designed to serve as a roadmap for improving the health of all people in the United States during the first decade of the 21st century. Healthy People 2010 is committed to a single, overarching purpose: promoting health and preventing illness, disability, and premature death.

The Healthy People 2010 Initiative

Healthy People 2010 builds on initiatives pursued over the past two decades. In 1979, *Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention* provided national goals for reducing premature deaths and preserving independence for older adults. In 1980, another report, *Promoting Health/Preventing Disease: Objectives for the Nation*, set forth 226 targeted health objectives for the Nation to achieve over the next 10 years.

Healthy People 2010 is grounded in science, built through public consensus, and designed to measure progress.

Healthy People 2000: National Health Promotion and Disease Prevention Objectives, released in 1990, identified health improvement goals and objectives to be reached by the year 2000. The Healthy People 2010 initiative continues in this tradition as an instrument to improve health for the first decade of the 21st century.

The Development of Healthy People 2010 Goals and Objectives

A diverse range of individuals and organizations have offered ideas and expertise in developing Healthy People 2010:

- The Healthy People Consortium—an alliance of more than 350 national organizations and 250 state public health, mental health, substance abuse, and environmental agencies—conducted three national meetings on the development of Healthy People 2010.
- Many individuals and organizations gave testimony about health priorities at five Healthy People 2010 regional meetings held in late 1998.
- More than 11,000 comments on draft materials were received by mail or via the Internet from individuals in every state, the District of Columbia, and Puerto Rico.

The final Healthy People 2010 objectives were developed by teams of experts from a variety of federal agencies and was coordinated by the Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services.

Healthy People 2010—Reproductive Health

This document, *Healthy People 2010—Reproductive Health*, is an effort to compile into one single document all the objectives that directly address reproductive health. The topic of reproductive health is covered in 12 of the 28 focus areas in Healthy People 2010. The cornerstone for this document is the family planning focus area. The Office of Population Affairs, U.S. Department of Health and Human Services (HHS) is the lead agency in addressing the 13 family planning objectives and is responsible for providing support for the lead agencies of the other 11 focus areas. Family planning service providers throughout the country routinely work with women on a broad number of issues including cancer, HIV, STDs, hepatitis, prenatal care, substance abuse, violence, and nutrition. Therefore, the 12 focus areas encompassed in this reproductive health document are an inclusive listing of measures that concern reproductive health.

In Context:
Reproductive Health and Healthy People 2010

Federal Support for Family Planning Began in 1960s

In the 1960s the U.S. Federal Government began very limited funding of family planning services as an effort to address maternal and infant morbidity and mortality. Initial federal efforts for family planning were focused in the Maternal and Child Health (MCH) program and the Office on Economic Opportunity's (OEO) War on Poverty program. The OEO program viewed access to fertility control as a factor to help disadvantaged women and their families out of poverty.

In 1970, the MCH and OEO programs were serving approximately 25 percent of medically indigent citizens needing subsidized family planning services.[1] In 1970, Congress recognized that unwanted childbearing, especially among the poor, was a major problem in the United States. Congress then passed Title X of the Public Health Service Act (the Family Planning Services and Population Research Act of 1970) to specifically provide for expansion of existing services, and research and development of new services. It also passed Title IV-A of the Social Services Administration (later, Title IV-A became Title XX of the Social Service Block Grant).

Title X: Groundbreaking Legislation

The Title X legislation and regulations provided for comprehensive family planning and reproductive health services, provision of information regarding family planning, the expansion of reproductive research, and the training of manpower to carry out the purposes of the program. This marked the first instance in US history where family planning research and services became the primary purpose of any federal law.

This single piece of legislation led to services for millions of low-income individuals through low (or no) cost accessible clinic sites. Title X legislation and rules surpassed the previous federal family planning efforts already in place with its broader, inclusive mandates to:

- Base funding on the specific needs of local communities
- Assure that all services be comprehensive and voluntary
- Provide for (1) training of personnel needed to implement the act, (2) population research, and (3) readily available information on family planning and population growth
- Extend services to people regardless of race, color, creed, handicapping condition, national origin, age, sex, number of pregnancies, or marital status
- Provide a broad range of acceptable, effective, and medically approved family planning methods, including natural family planning
- Conduct program evaluation

Armed with these mandates, the Title X program rapidly became the cornerstone of the modern system of family planning services in the U.S. It eventually established service sites in three-quarters of all of the U.S. counties and in every state. Service sites ranged from stand alone clinic sites to rooms in youth serving agencies, churches and public health facilities.

Title X: Unique Features, High Standards

- **Based on the intent of the legislation, the Title X program defined the minimum clinical and educational services to be provided.**

  In 1972 the Title X family planning program and the American College of Obstetricians and Gynecologists drafted comprehensive guidelines. These guidelines were widely accepted and made it possible for a woman to continue care in almost any clinic, nationwide, and get consistent lab tests, counseling, client education, and physical exam services. Every community with a clinic site had some increased level of community education provided. Subsequent revisions of Title X regulations and clinical guidelines have been adopted for a variety of other federal, state, and locally funded family planning services. For example, in states where Title X services are closely coordinated with Medicaid, Maternal and Child Health and the Social Service Block Grant reimbursement or grant funding, many of those programs include the core requirements of the Title X clinical guidelines in their agreements. In the late 70s, the Community and Migrant Health Program issued a national publication on reproductive health standards which mirrored the Title X requirements for clinical and educational services.

- **The Title X program set a precedent by encouraging and funding diverse provider agencies with a diversity of clinic sites in order to flexibly serve the populations in need.**

  Among agencies funded are state, county, and city health departments; Planned Parenthood affiliates; Indian nations; statewide, regional, and local family planning councils; and other non-profit community organizations. These agencies, in turn, established a nationwide system of accessible clinic sites, both urban and rural. In 1999, Title X providers operated nearly 4,600 clinic sites located in every state in the U.S. and in more than 75 percent of counties.

- **The Title X program developed its own unique training system by establishing and funding family planning training centers in each of the ten federal regions of the US.**

  The regional training centers provided specialty training and continuing education for the critical mass of administrative, clerical, counseling, and clinical staff and, in the process, helped promote the federal initiatives and guidelines.

  Among the specialty private non-profit agencies that also provided training were the State Family Planning Administrators (SFPA), the National Family Planning and Reproductive Health Association (NFPRHA), the Family Planning Councils of America (FPCA) and Planned Parenthood Federation of America (PPFA). These organizations conducted regional and national training events for administrative and clinical staff, created educational materials utilized in the family planning field and provided guidance on emerging issues and initiatives (for example, services to males, abstinence, cost analysis, and parental involvement). SFPA focused on issues of significance to state and territorial grantees and unique methods to address these issues within local and state government systems.

  In addition, Title X provided dedicated training funds to train midlevel specialists in OB/GYN services. These clinicians were, at first, trained as family planning specialists, but it soon became apparent that the training had to be broader to accommodate the wide variety of needs of their clients. This training helped develop the role of the Women's Health Care Nurse Practitioner (WHCNP). By the mid 1990s, the Title X program had invested more than $20 million in funding the education of WHCNPs who were providing more than 10 million client visits per year.[2] This Title X initiative had a substantial impact on the ability to improve access for low-income and minority individuals by expansion into under-served urban and rural areas.

- **The national family planning program assured that cost would not be a barrier to services for the low-income client.**

  Title X began as a free service to all who wanted such services and in the 1970s, it initiated sliding fee schedule policies that would assure that clients were served regardless of ability to pay.

- **The national family planning program had a positive impact on elimination of racial and ethnic disparities in health care.**

  Of the reported 4.4 million family planning users seen in Title X clinics in 1999, 22 percent were African American women or men and 4 percent were from Asian/Pacific Islanders or Native American population groups. Seventeen percent of family planning users identified themselves as Hispanic/Latino.[3] In 1997, the Title X program served over 60 percent of all women who obtained publicly subsidized family planning services and a larger proportion of the racial and ethnic minorities. Based on data from the National Survey of Family Growth (1982 and 1995), publicly subsidized family planning services has all but eliminated the (income and) racial disparities in contraceptive use that initially led to greater government involvement in family planning.[4]

- **The national family planning program is accessible to young people.**

  During the past thirty years, the Title X program has provided education and information to teens and access to a broad range of reproductive health services. Education and counseling of youth on family involvement is an integral part of counseling in family planning projects. In fact, Title X supported clinics are more likely than others to offer special programs for teenagers, including initiatives that are aimed at encouraging adolescents to postpone sexual activity and improving parent-child communication.[5]

  Efforts continue to reduce adolescent pregnancy rates through abstinence programs and through the provision of clinical services. It is estimated that approximately 40 percent of young women see their first medical provider in a family planning clinic.[6] Three-quarters of the decline in the teenage pregnancy rate between 1985 and 1995 was due to increasingly effective contraceptive use among sexually active adolescents (with the remaining one-quarter due to increased abstinence).[7]

- **Title X set a high standard for evaluation of services and maintenance of quality.**

  The Title X program established standards for evaluation of services, training of providers, maintenance of professionally recognized quality of care and for extension of funding resources. This ranged from maintaining federal regional presence in each of the ten regional offices of the U.S. Public Health Service to establishing public/private partnerships with other social and health organizations and programs. A variety of organizations, including the Food and Drug Administration, the Alan Guttmacher Institute, the American Public Health Association, the National Center for Health Statistics, the Centers for Disease Control and Prevention, and the Institutes of Medicine, have supported research that provides quality, efficiency and safety in the Title X program.

Healthy People 2010—Reproductive Health **is an effort to compile into one single document all the objectives that directly address reproductive health.**

There has been a high level of accountability and evaluation due, in great part, to the visibility of the family planning program. While maintaining high standards of care and providing a comprehensive range of contraceptive services, the family planning program has been cost-efficient. For every U.S. dollar spent to provide family planning services, an average of $3 is saved in Medicaid costs for pregnancy-related care and newborn care.[8]

Clients Served in Title X Family Planning Projects

In 1999, over 4.4 million clients were served through Title X funds. The majority were women with approximately 71 percent of all Title X clients over the age of 20. The largest proportion of family planning users (30 percent) are clients in the 20-24 year old group. Nearly two-thirds (65 percent) of clients had incomes at or below the poverty level, and another 18 percent had family incomes of 101 to150 percent of poverty. These users chose a wide range of contraceptive methods.[9]

The Family Planning Program and Related Health Services

Numerous studies have shown that family planning is important to both maternal and infant health. Currently, the Title X family planning program, with its 4,600 clinic sites, serve two-thirds of all females receiving subsidized family planning services.[10] Thus, a significant number of the Healthy People 2010 objectives for “promoting health and preventing illness, disability and premature death” will be addressed through the clinical and educational services provided by publicly subsidized family planning programs.

When seeking contraception at local family planning clinics, clients also receive many other reproductive and preventive health care services. For example, in 1999 the Title X program provided nearly 3 million Pap smears and 2.8 million breast exams. In addition, there were nearly 4.8 million tests for sexually transmitted diseases (excluding HIV) and an additional 366,000 HIV tests provided to both male and female users of services in Title X clinics.[11] Thousands of publicly-funded family planning clinics receive federal funding through CDC to screen women at risk for chlamydia. Blood pressure screening and breast exams/self breast exam education are required services in Title X subsidized clinics. It is reported that more than 14 percent of women of reproductive age who receive Pap smears and testing and treatment for gynecological infections receive these services in family planning clinics. The percentage of these women obtaining HIV tests from clinics is even higher, 25 percent, and over 33 percent receive their other STD services at clinics.[12]

Family Planning Chracterized as “Great Public Health Achievement”

The Centers for Disease Control (CDC) characterizes family planning as one of the “Ten Great Public Health Achievements” of the 20th century because of its opportunity for prevention and the impact on morbidity and mortality. Mentioned specifically by name, the Title X program, led the nation in establishing widespread cervical cancer screening which has led to a 20 to 60 percent reduction in cervical cancer death rates.[13] The Pap smear quality assurance guidelines, developed by the Office of Family Planning (OPA), set a national standard and were widely utilized nationally by other out-patient services clinics. Another example mentioned is screening for chlamydia,[14] the leading cause of preventable infertility, which is a major effort in Title X programs and has lowered the prevalence of chlamydia in Title X clinic clients.

How Healthy People 2010—Reproductive Health will Improve Nation's Health

As stated before, the national family planning program directly addresses 12 of the 28 focus areas in Healthy People 2010 where health improvement opportunities lie for the next decade. The 12 family planning-related focus areas contain 72 objectives. Many of the additional 16 focus areas and objectives are indirectly influenced by the comprehensive range of services provided in family planning clinics and educational programs (for example, disability, heart disease and stroke, medical product safety, mental health, and tobacco use). All of the objectives are aimed at achieving improved health of all American citizens, with special emphasis on erasing disparities in health for the most disadvantaged.

A robust subsidized family planning program will remain the cornerstone for reaching the desired level of reproductive health for the nation. The Title X program, with its well established systems, tradition of excellence, and bold approaches to reproductive health care, is critical to the domestic family planning effort.

Conclusion

One of the most compelling and encouraging lessons learned from the Healthy People 2000 initiative is that we as a Nation can make dramatic progress in improving the Nation's health in a relatively short period of time. For example, during the last decade we have achieved a substantial decrease in unintended pregnancy. The proportion of women receiving mammograms and Pap tests has increased. For both mammograms and Pap tests, the disparity in use rates for most of the population subgroups and those for all women either has been reduced or eliminated. In addition, fewer teenagers are becoming pregnant.

But we still have a long way to go. Violence and abusive behavior continue to ravage homes and communities across the country. HIV/AIDS remains a serious health problem, now disproportionately affecting women and communities of color.

This companion document to Healthy People 2010 builds on progress achieved since the first objectives for the nation in 1980 and is promulgated to clearly articulate the reproductive health needs that must be addressed to achieve a high-quality level of reproductive health for all Americans.

CDC characterizes family planning as one of the "Ten Great Public Health Achievements" of the 20th century.

Healthy People 2010—Reproductive Health together with Healthy People 2010 will be guiding instruments for addressing our nation's health issues, reversing unfavorable trends, and expanding past achievements in health.

1. Legislative History P.L. 91-572. Family Planning Services and Population Research Act of 1970.
2. Report of The Department of Obstetrics and Gynecology of the University of Texas Southwestern Medical Center, 1998.
3. 1999 Family Planning Annual Report (FPAR).
4. Alan Guttmacher Institute, Fulfilling the Promise; Public Policy and US Family Planning Clinics, AGI, 2000.
5. Ibid.
6. Ibid.
7. Ibid.
8. Alan Guttmacher Institute, Title X and the U.S. Family Planning Effort, 1997.
9. 1999 Family Planning Annual Report (FPAR).
10. Ibid.
11. 1999 Family Planning Annual Report (FPAR).
12. Alan Guttmacher Institute, Title X and the U.S. Family Planning Effort, 1997.
13. Alan Guttmacher Institute, Fulfilling the Promise: Public Policy and US Family Planning Clinics, AGI, 2000.
14. CDC. *Morbidity and Mortality Weekly Report* 47:1078, 1999.

Reader's Guide

This publication has been excerpted from *Healthy People 2010* Volumes I and II, along with their companion volume, *Tracking Healthy People 2010*. The focus of this publication is reproductive health. All sections of Healthy People 2010 related to reproductive health, as determined by the Office of Population Affairs, U.S. Department of Health and Human Services (HHS), have been collected here.

This volume is based on the November 2000 edition of *Healthy People 2010*, which supersedes the January 2000 conference edition. Readers should review the objectives for editorial differences and the addition of new data. While most objectives are unchanged from the conference edition, some have been reworded. Updates to baselines and population group data tables may have resulted in revisions to the targets. In addition, a few developmental objectives are now measurable. Data included in this edition are as of June 1, 2000.

Healthy People 2010 will be updated on the Internet. Data for objectives are expected to be updated on an ongoing basis on the Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS) Web site at http://www.cdc.gov/nchs/hphome.htm. Significant updates to the document will be posted on the Healthy People Web site at http://www.health.gov/healthypeople.

This publication generally follows the format of *Healthy People 2010* and is in three sections:

- Healthy People 2010— Understanding and Improving Health
- Healthy People 2010—Objectives for Improving Reproductive Health
- Tracking Healthy People 2010—Reproductive Health

Healthy People 2010—Understanding and Improving Health

The first section provides background on Healthy People 2010 and the Healthy People initiative. It details the two primary goals of Healthy People 2010, and it provides information on health objectives and on the 12 focus areas related to reproductive health. It also touches on the determinants of health and on health status in the United States. It lists 10 Leading Health Indicators and provides the text of the Leading Health Indicator on Responsible Sexual Behavior.

Healthy People 2010—Objectives for Improving Reproductive Health

The second section provides detailed information on the 12 focus areas in Healthy People 2010 that are related to reproductive health. The text describing the focus area Family Planning is printed here in its entirety, and all relevant sections from the other 11 focus areas are included.

As in the main volume, the focus area chapters are presented in alphabetical order. Each chapter contains the following information:

Lead Agency

Each focus area is managed by a designated lead agency or co-lead agencies of the HHS. These lead agencies have expertise in and responsibility for their respective focus areas. They are responsible for undertaking activities to move the Nation toward achieving the year 2010 goals and for reporting progress on the focus area objectives over the decade.

Contents

This brief list details the specific organization of each chapter.

Goal Statement

Each chapter contains a concise goal statement. This statement frames the overall purpose of the focus area.

Overview

The Overview provides the context and background for the objectives and identifies opportunities for prevention or interventions. It addresses the nature of the issues; key trends or developments in the focus area; related costs and other pertinent information; relevant disparities among population groups (including race, ethnicity, gender, age, socioeconomic status, disability status, sexual orientation, and geographic location); and the implications of such factors for prevention, other improvements, and research.

Interim Progress Toward Year 2000 Objectives

Healthy People 2010 builds on the experience of the preceding decade. This section—included in chapters where it is applicable—provides a brief description of progress to date on year 2000 objectives that pertain to the focus area. A final report on the year 2000 objectives, *Healthy People 2000 Review,* will be published by NCHS, CDC.

Reproductive Health–Related Objectives

This section begins with a restatement of the focus area goal and a list of short titles for all objectives in the focus area that are related to reproductive health. Each objective is then described, beginning with an action verb and subject (for example, reduce the breast cancer death rate). Objectives are numbered for reference purposes (for example, 3-3, 3-4, etc.). Some objectives have multiple measures and are labeled sequentially with letters (for example, 3-11a, 3-11b, etc.). Numbering of objectives does not imply priority or importance.

Types of Objectives

There are two types of objectives—measurable and developmental.

Measurable objectives provide direction for action. For measurable objectives, the current status is expressed with a national baseline. A baseline represents the starting point for moving the Nation toward the desired end. The baselines use valid, reliable data derived from currently established, nationally representative data systems. Each measurable objective also includes a target, target setting method, and a data source. (For more information about guidelines used to develop targets, target-setting methods, and general data issues, the reader should consult Tracking Healthy People 2010: Reproductive Health in this publication.) Explanatory text follows objectives as needed.

Developmental objectives provide a vision for a desired outcome or health status. Current national surveillance systems do not provide data on these subjects. The purpose of developmental objectives is to identify areas of emerging importance and to drive the development of data systems to measure them. A potential data source is given for each developmental objective.

Population Group Data Table

Because eliminating health disparities is a goal of Healthy People 2010, a standard data table is used to display the baseline status of population groups for population-based objectives for which data are available. Generally, an objective is considered to be population based when its data source counts people.

This table consists of a set of population variables that are to be considered a minimum breakout set for data collection. The minimum set includes race and ethnicity, gender, and measures of socioeconomic status. Within each category in the table, groups are alphabetized or shown by some gradient or level of achievement (such as educational or income levels). Depending on the parameters of the objective, some tables show more detailed or additional breakouts of population groups. In addition, some tables include population groups for which data are provided for informational purposes. In such cases, these population groups will not be tracked.

For more information about data issues involving population groups, please consult Tracking Healthy People 2010: Reproductive Health in this publication.

Data Source/Potential Data Source

Data source is defined as the instrument that collects the measure indicated. Measurable objectives cite the data source for the baseline. For HHS data sets, surveys, and reports, the citation includes the name of the data set, the HHS agency, and the institute or center that serves as the source—for example, National Vital Statistics System (NVSS), CDC, NCHS. For non-HHS or non-Federal data sets, surveys, and reports, the citation includes the name of the data set, cabinet-level agency, and bureau/agency/organization—for example, National Crime Victimization Survey (NCVS), U.S. Department of Justice, Bureau of Justice Statistics.

Terminology

Terms are set up as dictionary definitions in alphabetical order. These definitions enable the reader to understand the concepts used in the chapter.

References

The references cited throughout both the overview text and the objectives are listed at the end of each chapter.

Tracking Healthy People 2010—Reproductive Health

Tracking Healthy People 2010: Reproductive Health is organized into three sections, which cover general data issues, operational definitions for each of the 72 Healthy People 2010 objectives related to reproductive health, and the three major health data sources that are responsible for tracking five or more Healthy People 2010 objectives on reproductive health.

For more information on measuring the objectives, technical notes, or operational definitions, consult the complete volume, *Tracking Healthy People 2010.* It is available on the CDC Web site at http://www.cdc.gov/nchs/hphome.htm.

For Further Information

For more information about Healthy People 2010, visit the Healthy People Web site at http://www.health.gov/healthypeople or call 1-800-367-4725. To obtain copies of Healthy People 2010 documents in print, visit the U.S. Government Printing Office Web site at http://www.bookstore.gpo.gov/. For information about a Healthy People 2010 CD-ROM, visit the Healthy People 2010 Web site at http://www.health.gov/healthypeople.

SECTION I

Healthy People 2010—Understanding and Improving Health

A Systematic Approach to Health Improvement

Healthy People 2010 is about improving health—the health of each individual, the health of communities, and the health of the Nation. However, the Healthy People 2010 goals and objectives cannot by themselves improve the health status of the Nation. Instead, they need to be recognized as part of a larger, systematic approach to health improvement.

This systematic approach to health improvement is composed of four key elements: goals, objectives, determinants of health, and health status.

Healthy People 2010 Goals*

Goal 1: Increase Quality and Years of Healthy Life

The first goal of Healthy People 2010 is to help individuals of all ages increase life expectancy *and* improve their quality of life.

Life Expectancy

Life expectancy is the average number of years people born in a given year are expected to live based on a set of age-specific death rates. At the beginning of the 20th century, life expectancy at birth was 47.3 years. Today it is nearly 77 years.

Despite improvements in life expectancy over the past 100 years, differences in life expectancy between populations suggest a substantial need and opportunity for improvement. At least 18 countries with populations of 1 million or more have life expectancies greater than the United States for both men and women. Within the United States, there are substantial differences in life expectancy among different population groups. For example, people from households with an annual income of at least $25,000 live an average of 3 to 7 years longer, depending on gender and race, than do people from households with annual incomes of less than $10,000.

Quality of Life

Quality of life reflects a general sense of happiness and satisfaction with our lives and environment. *Health-related quality of life* reflects a personal sense of physical and mental health and the ability to react to factors in the physical and social environments. Health-related quality of life is more subjective than life expectancy and therefore can be more difficult to measure. Some tools have been developed to measure health-related quality of life:

Global assessments, in which a person rates his or her health as “poor,” “fair,” “good,” “very good,” or “excellent,” can be reliable indicators of one’s perceived health. In 1996, 90 percent of people in the United States reported their health as good, very good, or excellent.

Healthy days is a measure that estimates the number of days of poor or impaired physical and mental health in the past 30 days. In 1998, adults averaged 5.5 days during the past month when their physical or mental health was not good—including 1.8 days when they were not able to do their usual activities.

Years of healthy life is a combined measure developed for the Healthy People initiative. The difference between life expectancy and years of healthy life reflects the average amount of time spent in less than optimal health because of chronic or acute limitations. Years of healthy life increased in 1996 to 64.2 years, a level that was only slightly above the 64.0 years at the beginning of the decade. During the same period, life expectancy increased a full year.

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*The reader is encouraged to peruse the complete text *Healthy People 2010 Volume I* for references and tables related to these goals.

As with life expectancy, various population groups can show dramatic differences in quality of life. For example, adults in rural areas are 36 percent more likely to report their health status as fair or poor than are adults in urban areas.

Achieving a Longer and Healthier Life—The Healthy People Perspective

Healthy People 2010 seeks to increase life expectancy and quality of life over the next 10 years by helping individuals gain the knowledge, motivation, and opportunities they need to make informed decisions about their health. At the same time, it encourages local and State leaders to develop communitywide and statewide efforts that promote healthy behaviors, create healthy environments, and increase access to high-quality health care.

Goal 2: Eliminate Health Disparities

The second goal of Healthy People 2010 is to eliminate health disparities among segments of the population, including differences that occur by gender, race or ethnicity, education or income, disability, geographic location, or sexual orientation.

This section highlights health disparities among various demographic groups in the United States.

Gender

Whereas some differences in health between men and women are the result of biological differences, others are more complicated and require greater attention and scientific exploration. Overall, men have a life expectancy that is 6 years less than that of women and have higher death rates for each of the 10 leading causes of death. Nonetheless, women have shown increased death rates over the past decade in areas where men have experienced improvements, such as lung cancer. Women also are at greater risk for Alzheimer's disease than men and are twice as likely as men to be affected by major depression.

Race and Ethnicity

Current information about the biologic and genetic characteristics of African Americans, Hispanics, American Indians, Alaska Natives, Asians, Native Hawaiians, and Pacific Islanders does not explain the health disparities experienced by these groups compared with the white, non-Hispanic population in the United States. These disparities are believed to be the result of the complex interaction among genetic variations, environmental factors, and specific health behaviors.

Even though the Nation's infant mortality rate is down, the infant death rate among African Americans is still more than double that of whites. The death rate for all cancers is 30 percent higher for African Americans than for whites; for prostate cancer, it is more than double that for whites. African American women have a higher death rate from breast cancer despite having a mammography screening rate that is nearly the same as the rate for white women. The death rate from HIV/AIDS for African Americans is more than seven times that for whites.

There are differences between Hispanics living in the United States and non-Hispanic whites, and between Hispanic populations. For example, whereas the rate of low birth weight infants is lower for the total Hispanic population compared with that of whites, Puerto Ricans have a low birth weight rate that is 50 percent higher than the rate for whites.

American Indians and Alaska Natives have an infant death rate almost double that for whites.

Asians and Pacific Islanders, on average, have indicators of being one of the healthiest population groups in the United States. However, there is great diversity within this population group, and health disparities for some segments are quite marked. For example, women of Vietnamese origin suffer from cervical cancer at nearly five times the rate for white women.

Income and Education

Inequalities in income and education underlie many health disparities in the United States. In general, population groups that suffer the worst health status also are those that have the highest poverty rates and the least education. Disparities in income and education levels are associated with differences in the occurrence of illness and death, including heart disease, diabetes, obesity, elevated blood lead level, and low birth weight. Recent health gains for the U.S. population as a whole appear to reflect achievements among the higher socioeconomic groups; lower socioeconomic groups continue to lag behind.

For women, the amount of education achieved is a key determinant of the welfare and survival of their children. Higher levels of education also may increase the likelihood of obtaining or understanding the health-related information needed to develop health-promoting behaviors and beliefs in prevention.

Disability

People with disabilities are identified as persons having an activity limitation, who use assistance, or who perceive themselves as having a disability. People with disabilities tend to report more anxiety, pain, sleeplessness, and days of depression and fewer days of vitality than do people without activity limitations. People with disabilities also have other disparities, including lower rates of physical activity and higher rates of obesity. Many people with disabilities lack access to health services and medical care.

Geographic Location

Twenty-five percent of Americans live in rural areas, that is, places with fewer than 2,500 residents. Injury-related death rates are 40 percent higher in rural populations than in urban populations. Heart disease, cancer, and diabetes rates exceed those for urban areas. People living in rural areas are less likely to use preventive screening services, exercise regularly, or wear safety belts. In 1996, 20 percent of the rural population was uninsured compared with 16 percent of the urban population. Access to emergency services and the availability of specialty care are other issues for this population group.

Sexual Orientation

America's gay and lesbian population comprises a diverse community with disparate health concerns. Major health issues for gay men are HIV/AIDS and other sexually transmitted diseases, substance abuse, depression, and suicide. Gay male adolescents are two to three times more likely than their peers to attempt suicide. Some evidence suggests lesbians have higher rates of smoking, overweight, alcohol abuse, and stress than heterosexual women. The issues surrounding personal, family, and social acceptance of sexual orientation can place a significant burden on mental health and personal safety.

Achieving Equity—The Healthy People Perspective

Healthy People 2010 is firmly dedicated to the principle that—regardless of age, gender, race or ethnicity, income, education, geographic location, disability, and sexual orientation—every person in every community across the Nation deserves equal access to comprehensive, culturally competent, community-based health care systems that are committed to serving the needs of the individual and promoting community health.

Objectives

The Nation's progress in achieving the two goals of Healthy People 2010 will be monitored through 467 objectives in 28 focus areas. Many objectives focus on interventions designed to reduce or eliminate illness, disability, and premature death among individuals and communities. Others focus on broader issues, such as improving access to quality health care, strengthening public health services, and improving the availability and dissemination of health-related information. Each objective has a target for specific improvements to be achieved by the year 2010.

This publication includes only the 72 objectives determined by the Office of Population Affairs, U.S. Department of Health and Human Services, to be related to reproductive health. These objectives are part of the 12 focus areas highlighted in green in the column on the right.

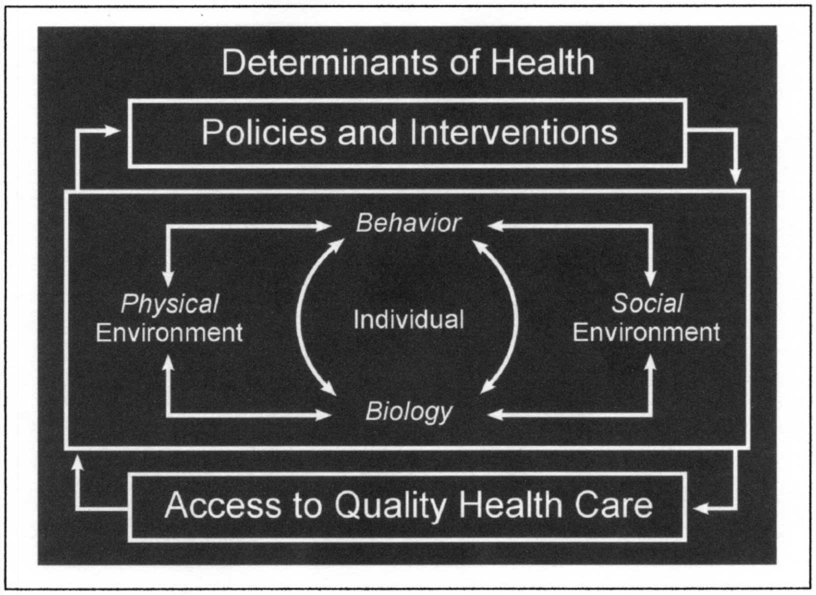
Healthy People 2010 Focus Areas

1. Access to Quality Health Services
2. Arthritis, Osteoporosis, and Chronic Back Conditions
3. Cancer
4. Chronic Kidney Disease
5. Diabetes
6. Disability and Secondary Conditions
7. Educational and Community-Based Programs
8. Environmental Health
9. Family Planning
10. Food Safety
11. Health Communication
12. Heart Disease and Stroke
13. HIV
14. Immunization and Infectious Diseases
15. Injury and Violence Prevention
16. Maternal, Infant, and Child Health
17. Medical Product Safety
18. Mental Health and Mental Disorders
19. Nutrition and Overweight
20. Occupational Safety and Health
21. Oral Health
22. Physical Activity and Fitness
23. Public Health Infrastructure
24. Respiratory Diseases
25. Sexually Transmitted Diseases
26. Substance Abuse
27. Tobacco Use
28. Vision and Hearing

Determinants of Health

Topics covered by the objectives in Healthy People 2010 reflect the array of critical influences that determine the health of individuals and communities. The determinants of health—individual biology and behavior, social and physical environments, policies and interventions, and access to quality health care—have a profound effect on the health of individuals, communities, and the Nation.

Individual *biology* and *behaviors* influence health through their interaction with each other and with the individual's *social* and *physical environments*. In addition, *policies and interventions* can improve health by targeting factors related to individuals and their environments, including *access to quality health care* (see figure below).



Biology refers to the individual's genetic makeup, family history, and the physical and mental health problems acquired during life.

Behaviors are individual responses or reactions to internal stimuli and external conditions. Behaviors can have a reciprocal relationship to biology; in other words, each can react to the other.

Social environment includes interactions with family, friends, coworkers, and others in the community. It also encompasses social institutions, such as law enforcement, places of worship, and schools, along with other components such as housing and the presence or absence of violence in the community.

Physical environment can be thought of as that which can be seen, touched, heard, smelled, and tasted. However, the physical environment also contains less tangible elements, such as radiation and ozone.

Policies and interventions can have a powerful and positive effect on the health of individuals and the community.

Access to quality health care is also a determinant of the health of individuals and communities.

An evaluation of these determinants of health is an important part of developing any strategy to improve health. Developing and implementing policies and preventive interventions that effectively address these determinants can reduce the burden of illness, enhance quality of life, and increase longevity.

Health Status

The health status of the United States is a description of the health of the total population, using information representative of most people living in this country. Health status can be measured by birth and death rates, life expectancy, morbidity from specific diseases, and many other factors. The leading causes of death are used frequently to describe the health status of the Nation. At the beginning of the 2000s, chronic diseases such as heart disease and cancer top the list. However, the leading causes of death are different for various population groups. For example, HIV/AIDS is the 14th leading cause of death for the total population but the leading cause of death for African American men aged 25 to 44 years.

The leading causes of death in the United States generally result from a variety of factors. Understanding and monitoring behaviors, environmental factors, and community health systems may prove more useful to monitoring the Nation's *true* health, and in driving health improvement activities, than the death rates that reflect the cumulative impact of these factors.

Leading Health Indicators

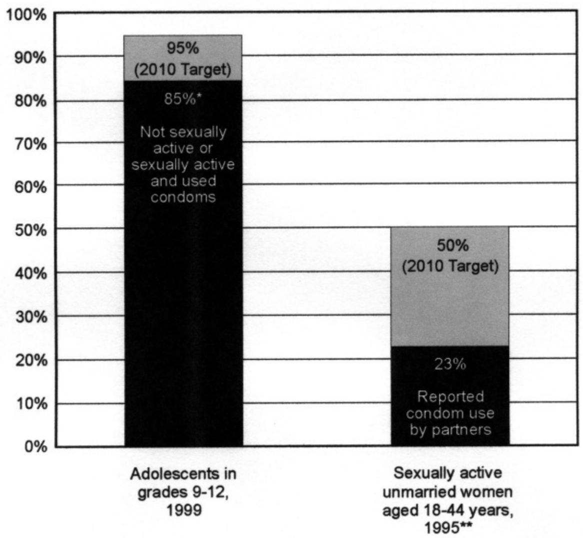
The Leading Health Indicators reflect the major public health concerns in the United States. They illuminate individual behaviors, physical and social environmental factors, and important health system issues that greatly affect the health of individuals and communities. Underlying each of the indicators is the significant influence of income and education.

The Leading Health Indicators are intended to increase understanding of the importance of health promotion and disease prevention and to encourage wide participation in improving health in the next decade. Developing strategies and action plans to address one or more of these indicators can have a profound effect on eliminating health disparities and creating healthy people in healthy communities.

Since this publication focuses on reproductive health, only the text of the Leading Health Indicator **Responsible Sexual Behavior** is included here in its entirety.

Leading Health Indicators

- Physical activity
- Overweight and obesity
- Tobacco use
- Substance abuse
- Responsible sexual behavior
- Mental health
- Injury and violence
- Environmental quality
- Immunization
- Access to health care



Responsible sexual behavior, United States, 1995 and 1999

* This 85 percent includes 50 percent of students in grades 9-12 who were not ever sexually active, 14 percent who were not sexually active in the past 3 months, and 21 percent who were sexually active but used a condom at the last intercourse.

** Data on males aged 15-49 years will be collected in 2003.

Sources: Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance System. 1999. Centers for Disease Control and Prevention, National Center for Health Statistics. National Survey of Family Growth. 1995.

The objectives selected to measure progress among adolescents and adults for this Leading Health Indicator are presented below. These are only indicators and do not represent all the responsible sexual behavior objectives in Healthy People 2010.

25-11. **Increase the proportion of adolescents who abstain from sexual intercourse or use condoms if currently sexually active.**

13-6a. **Increase the proportion of sexually active persons who use condoms.**

Responsible Sexual Behavior

Unintended pregnancies and sexually transmitted diseases (STDs), including infection with the human immunodeficiency virus that causes AIDS, can result from unprotected sexual behaviors. Abstinence is the only method of complete protection. Condoms, if used correctly and consistently, can help prevent both unintended pregnancy and STDs. In 1999, 85 percent of adolescents abstained from sexual intercourse or used condoms if they were sexually active. In 1995, 23 percent of sexually active women reported that their partners used condoms. See chart on p. I-8.

Trends in Sexual Behavior

In the past 6 years there has been both an increase in abstinence among all youth and an increase in condom use among those young people who are sexually active. Research has shown clearly that the most effective school-based programs are comprehensive ones that include a focus on abstinence *and* condom use. Condom use in sexually active adults has remained steady at about 25 percent.

Unintended Pregnancies

Half of all pregnancies in the United States are unintended; that is, at the time of conception the pregnancy was not planned or not wanted. Unintended pregnancy rates in the United States have been declining. The rates remain highest among teenagers, women aged 40 years or older, and low-income African American women. Approximately 1 million teenage girls each year in the United States have unintended pregnancies. Nearly half of all unintended pregnancies end in abortion.

The cost to U.S. taxpayers for adolescent pregnancy is estimated at between $7 billion and $15 billion a year.

Sexually Transmitted Diseases

Sexually transmitted diseases are common in the United States, with an estimated 15 million new cases of STDs reported each year. Almost 4 million of the new cases of STDs each year occur in adolescents. Women generally suffer more serious STD complications than men, including pelvic inflammatory disease, ectopic pregnancy, infertility, chronic pelvic pain, and cervical cancer from the human papilloma virus. African Americans and Hispanics have higher rates of STDs than whites.

The total cost of the most common STDs and their complications is conservatively estimated at $17 billion annually.

HIV/AIDS

Nearly 700,000 cases of AIDS have been reported in the United States since the HIV/AIDS epidemic began in the 1980s. The latest estimates indicate that 800,000 to 900,000 people in the United States currently are infected with HIV. The lifetime cost of health care associated with HIV infection, in light of recent advances in HIV diagnostics and therapies, is $155,000 or more per person.

About one-half of all new HIV infections in the United States are among people under age 25 years, and the majority are infected through sexual behavior. HIV infection is the leading cause of death for African American men aged 25 to 44 years. Compelling worldwide evidence indicates that the presence of other STDs increases the likelihood of both transmitting and acquiring HIV infection.

For more information on Healthy People 2010 objectives or on responsible sexual behavior, visit http://www.health.gov/healthypeople/ or call 1-800-367-4725.

Healthy People 2010—Objectives for Improving Reproductive Health

Access to Quality Health Services

1

Co-Lead Agencies: Agency for Healthcare Research and Quality
Health Resources and Services Administration

Contents

Goal

Improve access to comprehensive, high-quality health care services.

Overview

Access to quality care is important to eliminate health disparities and increase the quality and years of healthy life for all persons in the United States. The public health system is important because it educates people about prevention and addresses the need to eliminate disparities by easing access to preventive services for people less able to use existing health services. It ensures the availability of primary care through direct funding of clinics and providers or by providing public insurance.

Issues

Access to high-quality health care across each of the components in the continuum of care must be improved to realize the full potential of prevention. It is increasingly important that health care communication and services be provided in a culturally and linguistically sensitive manner. Adequate access to health care and related services can increase appropriate patient use of the health care system and, ultimately, improve health outcomes.

Clinical preventive care. Improving access to appropriate preventive care requires addressing many barriers, including those that involve the patient, provider, and system of care.[1, 2] Patient barriers include lack of knowledge, skepticism about the effectiveness of prevention, lack of a usual source of primary care, and lack of money to pay for preventive care.

Health provider barriers include limited time, lack of training in prevention, lack of perceived effectiveness of selected preventive services, and practice environments that fail to facilitate prevention. Although consensus is growing regarding the value of a range of preventive services, providers identify lack of time and reimbursement as specific barriers to more consistent delivery of counseling about behavioral risk factors.[3] Computerized or manual tracking systems, patient and clinician reminders, guidelines, and patient information materials can help providers improve delivery of necessary preventive care.[4]

System barriers can include lack of resources, lack of coverage or inadequate reimbursement for services, and lack of systems to track the quality of care.[2] Systems interventions that can increase delivery of health care include providing feedback on performance to providers, offering incentives for improved performance, and developing and implementing systems to identify and provide outreach to patients in need of services.[1]

Measuring and reporting how well preventive care is provided under different systems are essential first steps in motivating those systems that are not performing well to develop the information, tools, and incentives to improve care.[5] Appropriate data systems are needed to allow providers and administrators to identify those services and populations most in need of better delivery. To be effective, preventive care also must be linked to systems to ensure appropriate followup services or counseling for patients identified through risk assessment or screening.

Primary care. Improving primary care across the Nation depends in part on ensuring that people have a usual source of care. This is because of the beneficial attributes of primary care. These benefits include the provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community.[6]

Trends

A significant measure of the access problem is the proportion of people who have health insurance. Following declines in the proportion of people with health insurance during the 1980s, the proportion has remained essentially level, at about 85 percent from 1989 to 1997 for persons under age 65 years.[7] Approximately 44.3 million persons lacked health insurance in 1998[8], continuing an increase in the number of uninsured persons. At the same time, the proportion of adults with a usual source of care—an important predictor of access to needed services—fell from 83 percent to 78 percent between 1987 and 1992 before rising to 85 percent in 1998.[9] In addition, having health insurance does not guarantee that health care will be accessible or affordable. Significant numbers of privately insured persons lack a usual source of care or report delays or difficulties in accessing needed care due to affordability or insurance problems.[10]

Disparities

Limitations in access to care extend beyond basic causes, such as a shortage of health care providers or a lack of facilities. Individuals also may lack a usual source of care or may face other barriers to receiving services, such as financial barriers (having no health insurance or being underinsured), structural barriers (no facilities or health care professionals nearby), and personal barriers (sexual orientation, cultural differences, language differences, not knowing what to do, or environmental challenges for people with disabilities). Patients with disabilities may face additional barriers arising from facilities that are not physically accessible or from the attitudes of clinicians. Hispanics, young adults, and uninsured persons are least likely to have a usual source of care.[7] Hispanic persons and those with less than 12 years of education are least likely to have a usual primary care provider.[11] Certain people, such as those who are disabled, elderly, chronically ill, or HIV-infected, require access to health care providers who have the knowledge and skills to address their special needs.[12]

Opportunities

Increasing recognition of the critical role of preventive services across the continuum of care has led to the development of tools and projects designed to help providers and patients shift to a prevention-oriented health care system. HEDIS reports on the delivery of many clinical preventive services provided by participating health maintenance organizations (HMOs). The 1999 reporting set for HEDIS contained several measures of clinical preventive services, including childhood immunizations, adolescent immunizations, smoking cessation advice, influenza vaccinations for older adults, breast cancer screening, cervical cancer screening, and prenatal care in the first trimester.

Under development is the CDC Guide to Community Preventive Services, due to be released in 2001.[13] The guide will assess the effectiveness of preventive services and interventions in community settings and at the clinical systems level. It will cover 15 topics in three areas: changing risk behaviors, reducing specific diseases and injuries, and addressing environmental challenges.

Into the next decade, Healthy People will continue to promote communitywide efforts to provide clinical preventive services, using local leadership such as health departments and community institutions to increase the accessibility of these services. Healthy People also will work to strengthen the capacity of States and localities to collect health data and conduct community health assessments for small geographic areas.

REPRODUCTIVE HEALTH–RELATED OBJECTIVES

Access to Quality Health Services

Goal:

Improve access to comprehensive, high-quality health care services.

Number Objective Short Title

Clinical Preventive Care

1-2. Health insurance coverage for clinical preventive services

1-3. Counseling about health behaviors

Primary Care

1-7. Core competencies in health provider training

HEALTHY PEOPLE 2010 OBJECTIVES

Clinical Preventive Care

1-2. (Developmental) Increase the proportion of insured persons with coverage for clinical preventive services.

Potential data source: Medical Expenditure Panel Survey (MEPS), AHRQ.

Insurance coverage for clinical preventive services improved substantially during the 1990s, but significant variations remain in the services covered, depending on the plan and type of insurance. In 1988, among employers who offer health insurance, only 26 percent of their employees were covered for adult physical examinations, 35 percent for well-child care (including immunizations), and 43 percent for preventive screening tests.[14] In contrast, a 1997 national survey of over 3,000 employers found that 88 percent of employer-sponsored plans covered well-baby care, 89 percent covered adult physical examinations, 92 percent covered gynecologic examinations, and 89 and 91 percent covered Pap tests and mammograms, respectively. Coverage was highest in HMO plans and lowest in indemnity insurance plans.[15]

Including effective clinical preventive services among the services routinely covered by insurance is an effective way to emphasize the importance of clinical preventive services as an integral part of health care.[16] The Balanced Budget Act of 1997 (Public Law 105-33) added colorectal cancer screening among other new preventive benefits under the Medicare program and expanded Medicare coverage of mammography and cervical cancer screening. Although health insurance coverage by itself is not sufficient to eliminate existing gaps in the delivery of preventive services, it is an important factor influencing who gets recommended services.[17,18] Selected clinical preventive services have a positive influence on personal health, and many are cost-effective in comparison with the treatment of disease.[19,20] Insurance coverage is especially problematic for counseling services, in part, because of the difficulty in proving the benefits of some counseling interventions. For example, only 22 percent of employer-sponsored plans cover medications or counseling for smoking cessation.[15] The effectiveness of smoking cessation counseling, however, is supported by strong evidence, with more intensive interventions having the greatest impact and most favorable cost-effectiveness ratios.[21]

1-3. Increase the proportion of persons appropriately counseled about health behaviors.

Target setting method: Better than the best.

Data sources: National Survey on Family Growth (NSFG), CDC, NCHS; National Health Interview Survey (NHIS), CDC, NCHS.

Target and baseline:

Objective	Increase in Counseling on Health Behaviors Among Persons at Risk With a Physician Visit in the Past Year	1995 Baseline	2010 Target
		Percent	
1-3a.	Physical activity or exercise (adults aged 18 years and older)	Developmental	
1-3b.	Diet and nutrition (adults aged 18 years and older)	Developmental	
1-3c.	Smoking cessation (adult smokers aged 18 years and older)	Developmental	
1-3d.	Reduced alcohol consumption (adults aged 18 years and older with excessive alcohol consumption)	Developmental	
1-3e.	Childhood injury prevention: vehicle restraints and bicycle helmets (children aged 17 years and under)	Developmental	
1-3f.	Unintended pregnancy (females aged 15 to 44 years)	19	50
1-3g.	Prevention of sexually transmitted diseases (males aged 15 to 49 years; females aged 15 to 44 years)	Developmental	
1-3h.	Management of menopause (females aged 46 to 56 years)	Developmental	

Females Aged 15 to 44 Years With a Physician Visit in the Past Year, 1995	1-3f. Counseled About Unintended Pregnancy
	Percent
TOTAL	19
Race and ethnicity	
American Indian or Alaska Native	DSU
Asian or Pacific Islander	DSU
Asian	DNC
Native Hawaiian and other Pacific Islander	DNC
Black or African American	24
White	19
Hispanic or Latino	20
Not Hispanic or Latino	DNA
Black or African American	24
White	19
Education level (females aged 22 to 44 years)	
Less than high school	15
High school graduate	20
At least some college	19
Sexual orientation	DNC
Select populations	
Age groups	
15 to 24 years	22
25 to 34 years	23
35 to 44 years	10

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.

Substantial gaps remain in the delivery of appropriate screening and counseling services related to health behaviors. Unhealthy diets, smoking, physical inactivity, and alcohol use account for a majority of preventable deaths in the United States.[22] Data indicate that risk assessment and counseling interventions are delivered less frequently than other preventive interventions (for example, cancer screenings).[7] In addition, the attention physicians give to specific health-risk behaviors appears to be influenced by the socioeconomic status of their patients.[23] Although time is an important constraint in the health care setting, evidence demonstrates that brief clinician counseling is effective in getting patients to stop smoking and reduce problem drinking.[19,24] In addition, brief counseling interventions aimed at high-risk individuals can increase condom use and prevent the spread of sexually transmitted diseases.[25]

Clinician counseling should be tailored to the individual risk factors, needs, preferences, and abilities of each patient.[19] For some preventive interventions, such as hormone therapy in postmenopausal women, the optimal strategy depends on how individual women value potential benefits and risks. Counseling of perimenopausal and postmenopausal women should encourage shared decisionmaking based on individual risk factors and patient preferences.[19]

Primary Care

1-7. (Developmental) Increase the proportion of schools of medicine, schools of nursing, and other health professional training schools whose basic curriculum for health care providers includes the core competencies in health promotion and disease prevention.

Potential data source: Adaptation of the Prevention Self-Assessment Analysis, Association of Teachers of Preventive Medicine (ATPM).

Significant changes in the health care system and in the expectations of consumers are influencing the education of health care providers in the United States. For example, many medical schools are assessing the content of their predoctoral and postgraduate curricula.[26] Medical educators and medical schools are recognizing that physicians will need to be prepared to provide population-based preventive health care as well as high-quality medical care to their patients.[27] This challenge exists for other health professionals, including nurses, nurse practitioners, physician assistants, and allied health personnel. This link between medicine and public health is essential to provide the highest quality health care possible to the U.S. population.

A core set of competencies for medical students in health promotion and disease prevention was developed by a task force established by the Association of Teachers of Preventive Medicine (ATPM) and the U.S. Department of Health and Human Services' Health Resources and Services Administration. The competencies, derived from the ATPM *Inventory of Knowledge and Skills Relating to Health Promotion and Disease Prevention*,[28] cover four categories: clinical prevention, quantitative skills, health services organization and delivery, and community dimensions of medical practice. Together, they address a wide spectrum of topics. This set of competencies will provide medical educators with measurable education outcomes in prevention education. The core competencies will be evaluated for potential adaptability to health provider education curricula in schools of nursing and health professional schools. The core competencies also will be reviewed for potential expansion to cover emerging issues and competencies in evaluating and responding to environmental health concerns and natural and man-made disasters. Because health care providers will have to address new health issues, policies, technologies, and practice guidelines over their careers, continuing education programs also need to be updated periodically.

Terminology

Access: According to the Institute of Medicine, "The timely use of personal health services to achieve the best possible health outcomes."[29] This definition includes both the use and effectiveness of health services. The concept of access also encompasses physical accessibility of facilities.

Activities of daily living (ADL): Personal care activities, such as bathing, dressing, eating, and getting around (with special equipment, if needed) inside the home.

Ambulatory care: Health care that does not require the patient to stay in a hospital or other facility, such as care provided on an outpatient basis.

Ambulatory-care-sensitive conditions: Conditions resulting in hospitalization that could potentially have been prevented if the person had improved access to high-quality primary care services outside the hospital setting.

Asymptomatic: Without symptoms. This term may apply either to healthy persons or to persons with preclinical (prior to clinical diagnosis) disease in whom symptoms are not yet apparent.

Clinical care: The provision of health care services to individual patients by trained health care professionals.

Clinical preventive services (CPS): Common screening tests, immunizations, risk assessment, counseling about health risk behaviors, and other preventive services routinely delivered in the clinical setting for the primary prevention of disease or for the early detection of disease in persons with no symptoms of illness.

Continuum of care: The array of health services and care settings that address health promotion, disease prevention, and the diagnosis, treatment, management, and rehabilitation of disease, injury, and disability. Included are primary care and specialized clinical services provided in community and primary care settings, hospitals, trauma centers, and rehabilitation and long-term care facilities.

Core competencies: A defined set of skills and knowledge considered necessary in the educational curricula for training health care providers. Examples of core competencies include skills in prevention education; skills in using sources of health data to identify what clinical preventive services should be delivered to the individual patient based on that person's age, gender, and risk factor status; an understanding of the U.S. public health system (local and State health departments) and its role in monitoring and maintaining the health of the community; and skills to evaluate and translate medical and scientific research reports into clinical practice.

Health insurance: Any type of third party payment, reimbursement, or financial coverage for an agreed-upon set of health care services. Includes private insurance obtained through employment or purchased directly by the consumer, or health insurance provided through publicly funded programs, including Medicare, Medicaid, CHAMPUS/CHAMPVA, or other public hospital or physician programs.

Health intervention: Any measure taken to improve or promote health or to prevent, diagnose, treat, or manage disease, injury, or disability.

Health outcomes: The results or consequences of a process of care. Health outcomes may include satisfaction with care as well as the use of health care resources. Included are clinical outcomes, such as changes in health status and changes in the length and quality of life as a result of detecting or treating disease.

Long-term care (LTC): A broad range of health and social services delivered in institutions, in the community, and at home. Long-term care services include institutional services, such as those delivered in nursing homes, rehabilitation hospitals, subacute care facilities, hospice facilities, and assisted living facilities; services delivered in the home, such as home health and personal care, hospice, homemaker, and meals; and community-based services, such as adult day care, social services, congregate meals, transportation and escort services, legal protective services, and counseling for clients as well as their caregivers.[30]

Managed care: According to the Institute of Medicine, "a set of techniques used by or on behalf of purchasers of health care benefits to manage health care costs by influencing patient care decisionmaking through case-by-case assessments of the appropriateness of care prior to its provision."[31]

Patient barriers: Any mental, physical, or psychosocial condition that prevents an individual from accessing needed health care. Examples include attitudes or biases, mental disorders or illnesses, behavioral disorders, physical limitations, cultural or linguistic factors, sexual orientation, and financial constraints.

Persons with long-term care needs: Persons who need the help of other persons to perform activities of daily living (personal care activities) and instrumental activities of daily living (routine needs).

Primary care: According to the Institute of Medicine, "The provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community."[6]

Primary care provider: A physician who specializes in general and family practice, general internal medicine, or general pediatrics, or a nonphysician health care provider, such as a nurse practitioner, physician assistant, or certified nurse midwife.

Primary prevention: Health care services, medical tests, counseling, and health education and other actions designed to prevent the onset of a targeted condition. Routine immunization of healthy individuals is an example of primary prevention.[19]

Provider barriers: Any mental, physical, psychosocial, or environmental condition that prevents or discourages health care providers from offering preventive services. Examples of provider barriers include a poor practice environment, lack of knowledge, and lack of efficacy studies.

Quality: According to the Institute of Medicine, "The degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge."[29] Simply stated, it is doing the right thing, for the right patient, at the right time, with the right outcome.

Secondary prevention: Measures such as health care services designed to identify or treat individuals who have a disease or risk factors for a disease but who are not yet experiencing symptoms of the disease. Pap tests and high blood pressure screening are examples of secondary prevention.[19]

System barriers: Conditions within a health care system that prevent people from accessing needed services or prevent health care providers from delivering those services. System barriers include physical, cultural, linguistic, and financial barriers as well as the availability of health care facilities or providers with special skills, such as eye, ear, nose, and throat specialists.

Tertiary prevention: Preventive health care measures or services that are part of the treatment and management of persons with clinical illnesses. Examples of tertiary prevention include cholesterol reduction in patients with coronary heart disease and insulin therapy to prevent complications of diabetes.[19]

Usual source of care: A particular doctor's office, clinic, health center, or other health care facility to which an individual usually would go to obtain health care services. Having a usual source of care is associated with improved access to preventive services and followup care.

Vulnerable and at-risk populations: High-risk groups of people who have multiple health and social needs. Examples include pregnant women, people with human immunodeficiency virus infection, substance abusers, migrant farm workers, homeless people, poor people, infants and children, elderly people, people with disabilities, people with mental illness or mental health problems or disorders, and people from certain ethnic or racial groups who do not have the same access to quality health care services as other populations.

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Cancer

3

Co-Lead Agencies: **Centers for Disease Control and Prevention**
National Institutes of Health

Contents

Goal

Reduce the number of new cancer cases as well as the illness, disability, and death caused by cancer.

Overview

Cancer is the second leading cause of death in the United States. During 2000, an estimated 1,220,100 persons in the United States were expected to be diagnosed with cancer; 552,200 persons were expected to die from cancer.[1] These estimates did not include most skin cancers, and new cases of skin cancer are estimated to exceed 1 million per year. One-half of new cases of cancer occur in people aged 65 years and over.[2]

About 491,400 persons who get cancer in a given year, or 4 in 10 patients, are expected to be alive 5 years after diagnosis. When adjusted for normal life expectancy (accounting for factors such as dying of heart disease, injuries, and diseases of old age), a relative 5-year survival rate of 60 percent is seen for all cancers.[1] This rate means that the chance of a person recently diagnosed with cancer being alive in 5 years is 60 percent of the chance of someone not diagnosed with cancer. Five-year relative survival rates commonly are used to monitor progress in the early detection and treatment of cancer and include persons who are living 5 years after diagnosis, whether in remission, disease free, or under treatment.

Issues and Trends

Cancer death rates for all sites combined decreased an average of 0.6 percent per year from 1990 to 1996.[3] Death rates for female breast cancer and colorectal cancer decreased significantly during the 1990–96 period.[3] The lung and bronchus, prostate, female breast cancer, and colon and rectum were the most common cancer sites for all racial and ethnic populations in the United States and together accounted for approximately 54 percent of all newly diagnosed cancers.[1]

In addition to the human toll of cancer, the financial costs of cancer are substantial.[4] The overall annual costs for cancer are estimated at $107 billion. Treatment for lung, breast, and prostate cancers alone accounts for more than half of the direct medical costs of $37 billion annually.

Disparities

Cancer death rates vary by gender, race, and ethnicity.[3] Female death rates peaked in 1991 at 142.2 per 100,000. After the peak year, female deaths decreased on average by 0.4 percent per year through 1996. There was a significant decrease in breast cancer death for females.[3] Lung cancer death rates have continued to increase among females. Since 1987, more females have died from lung cancer than breast cancer.

African Americans are about 34 percent more likely to die of cancer than are whites and more than two times more likely to die of cancer than are Asian or Pacific Islanders, American Indians, and Hispanics.[1] African American women are more likely to die of breast and colon cancers than are women of any other racial and ethnic group, and they have approximately the same lung cancer death rates as white women. Hispanics have higher rates of cervical cancer.

Differences among the races represent both a challenge to understand the reasons and an opportunity to reduce illness and death and to improve survival rates.

The Hispanic cancer experience also differs from that of the non-Hispanic white population, with Hispanics having higher rates of cervical cancer. New cases of female breast cancer are increasing among Hispanics, who are diagnosed at later stages and have lower survival rates than whites.

The recent decrease in deaths from breast cancer in white females is attributed to greater use of breast cancer screening in regular medical care. However, deaths due to breast cancer in African American females continue to increase, in part, because breast cancer is diagnosed at later stages in African American females.[1]

Possible disparities regarding the health status of lesbian women and possible barriers to access to health services by lesbians have been identified by the Institute of Medicine as a research priority.[5]

Opportunities

Evidence suggests that several types of cancer can be prevented and that the prospects for surviving cancer continue to improve. The ability to reduce cancer death rates depends, in part, on the existence and application of various types of resources. First, the means to provide culturally and linguistically appropriate information on prevention, early detection, and treatment to the public and to health care professionals are essential. Second, mechanisms or systems must exist for providing people with access to state-of-the-art preventive services and treatment. Where suitable, participation in clinical trials also should be encouraged. Third, a mechanism for maintaining continued research progress and for fostering new research is essential. Genetic information that can be used to improve disease prevention strategies is emerging for many cancers and may provide the foundation for improved effectiveness in clinical and preventive medicine services.

Scientific data from randomized trials of cancer screening together with expert opinions indicate that adherence to screening recommendations for cancers of the breast, cervix, and colon/rectum reduces deaths from these cancers.

To reduce breast cancer deaths in the United States, a high percentage of females aged 40 years and older need to comply with screening recommendations. A reduction in breast cancer deaths could be expected to occur after a delay of roughly 7 years.[6] To reduce cervical cancer deaths, a high percentage of females in the United States who are aged 18 years and older need to comply with screening recommendations. Evidence from randomized preventive trials is unavailable, but expert opinion suggests that a beneficial impact on cervical cancer death rates would be expected to occur after a delay of a few years.

Interim Progress Toward Year 2000 Objectives

Data showed some improvement in the proportion of women receiving mammograms and Pap tests. In addition, for both mammograms and Pap tests, the disparity in use rates for most of the population subgroups and those for all women either has been reduced or eliminated.

Note: Data are from the Centers for Disease Control and Prevention, National Center for Health Statistics, *Healthy People 2000 Review, 1998–99*.

REPRODUCTIVE HEALTH–RELATED OBJECTIVES

Cancer

Goal:

Reduce the number of new cancer cases as well as the illness, disability, and death caused by cancer.

Number	Objective Short Title
3-3.	Breast cancer deaths
3-4.	Cervical cancer deaths
3-10.	Provider counseling about cancer prevention
3-11.	Pap tests
3-13.	Mammograms

HEALTHY PEOPLE 2010 OBJECTIVES

3-3. Reduce the breast cancer death rate.

Target: 22.3 deaths per 100,000 females.

Baseline: 27.9 breast cancer deaths per 100,000 females occurred in 1998 (age adjusted to the year 2000 standard population).

Target setting method: 20 percent improvement.

Data source: National Vital Statistics System (NVSS), CDC, NCHS.

Note: The table below may continue to the following page.

Females, 1998	Breast Cancer Deaths
	Rate per 100,000
TOTAL	27.9
Race and ethnicity	
American Indian or Alaska Native	14.2
Asian or Pacific Islander	13.1
Asian	DNC
Native Hawaiian and other Pacific Islander	DNC

Females, 1998	Breast Cancer Deaths Rate per 100,000
Black or African American	35.7
White	27.3
Hispanic or Latino	16.8
Not Hispanic or Latino	28.5
Black or African American	36.7
White	27.9
Education level (aged 25 to 64 years)	
Less than high school	20.0
High school graduate	28.4
At least some college	22.0

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.
Note: Age adjusted to the year 2000 standard population.

Note: The table above may have continued from the previous page.

Breast cancer is the most common cancer among women in the United States. An estimated 184,200 new cases were expected to be diagnosed in 2000. About 40,800 U.S. women were expected to die from breast cancer in 2000, accounting for about 15.2 percent of cancer deaths among women.[1] Death from breast cancer can be reduced substantially if the tumor is discovered at an early stage. Mammography is the most effective method for detecting these early malignancies. Clinical trials have demonstrated that mammography screening can reduce breast cancer deaths by 20 to 39 percent in women aged 50 to 74 years and about 17 percent in women aged 40 to 49 years.[7] Breast cancer deaths can be reduced through increased adherence with recommendations for regular mammography screening.

Many breast cancer risk factors, such as age, family history of breast cancer, reproductive history, mammographic densities, previous breast disease, and race and ethnicity, are not subject to intervention.[8, 9] However, being overweight is a well-established breast cancer risk for postmenopausal women that can be addressed.[8] Avoiding weight gain is one method by which older women may reduce their risk of developing breast cancer.

3-4. Reduce the death rate from cancer of the uterine cervix.

Target: 2.0 deaths per 100,000 females.

Baseline: 3.0 cervical cancer deaths per 100,000 females occurred in 1998 (age adjusted to the year 2000 standard population).

Target setting method: Better than the best.

Data source: National Vital Statistics System (NVSS), CDC, NCHS.

Females, 1998	Cervical Cancer Deaths Rate per 100,000
TOTAL	3.0
Race and ethnicity	
American Indian or Alaska Native	2.5
Asian or Pacific Islander	3.3
Asian	DNC
Native Hawaiian and other Pacific Islander	DNC
Black or African American	6.0
White	2.7
Hispanic or Latino	3.3
Not Hispanic or Latino	3.0
Black or African American	6.2
White	2.6
Education level (aged 25 to 64 years)	
Less than high school	7.2
High school graduate	4.8
At least some college	2.1

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.
Note: Age adjusted to the year 2000 standard population.

Cervical cancer is the 10th most common cancer among females in the United States, with an estimated 12,800 new cases in 2000. The number of new cases of cervical cancer is higher among females from racial and ethnic groups than among white females. An estimated 4,600 U.S. females were expected to die from cervical cancer in 2000.[1] Cervical cancer accounts for about 1.7 percent of cancer deaths among females. Infections of the cervix with certain types of sexually transmitted human papilloma virus increase risk of cervical cancer and may be responsible for most cervical cancer in the United States.[10]

Considerable evidence suggests that screening can reduce the number of deaths from cervical cancer. Invasive cervical cancer is preceded in a large proportion of cases by precancerous changes in cervical tissue that can be identified with a Pap test. If cervical cancer is detected early, the likelihood of survival is almost 100 percent with appropriate treatment and followup; that is, almost all cervical cancer deaths could be avoided if all females complied with screening and followup recommendations.[11] Risk is substantially decreased among former smokers in comparison to continuing smokers.[12]

3-10. Increase the proportion of physicians and dentists who counsel their at-risk patients about tobacco use cessation, physical activity, and cancer screening.

Target and baseline:

Objective	Increase in Counseling About Tobacco Use Cessation, Physical Activity, and Cancer Screening	1988 Baseline (unless noted)	2010 Target
		Percent	
3-10a.	Internists who counsel about smoking cessation	50	85
3-10b	Family physicians who counsel about smoking cesstion	43	85
3-10c.	Dentists who counsel about smoking cessation	59 (1997)	85
3-10d.	Primary care providers who counsel about blood stool tests	56	85
3-10e.	Primary care providers who counsel about proctoscopic examinations	23	85
3-10f.	Primary care providers who counsel about mammograms	37	85
3-10g.	Primary care providers who counsel about Pap tests	55	85
3-10h.	Primary care providers who counsel about physical activity	22 (1995)	85

Target setting method: Better than the best.

Data sources: Survey of Physicians' Attitudes and Practices in Early Cancer Detection, NIH, NCI; National Ambulatory Medical Care Survey (NAMCS), CDC, NCHS; Survey of Current Issues in Dentistry, American Dental Association.

Smoking cessation,[12, 13] adoption of healthy diets,[14] increased physical activity,[15, 16] and increased cancer screening[6, 17, 18, 19, 20, 21, 22, 23, 24] can all contribute to reduced numbers of cancer deaths. Experts recommend that providers screen patients for breast, cervical, and colorectal cancers and counsel patients to prevent or reduce tobacco use, promote physical activity, and promote a healthy diet.[25] Provider counseling should be conducted in a linguistically and culturally appropriate manner.

3-11. Increase the proportion of women who receive a Pap test.

Target and baseline:

Objective	Increase in Pap Testing	1998 Baseline*	2010 Target
		Percent	
3-11a.	Women aged 18 years and older who have ever received a Pap test	92	97
3-11b.	Women aged 18 years and older who received a Pap test within the preceding 3 years	79	90

*Age adjusted to the year 2000 standard population. Includes women without a uterine cervix.

Target setting method: Better than the best.

Data source: National Health Interview Survey (NHIS), CDC, NCHS.

Note: The table below may continue to the following page.

Women Aged 18 Years and Older, 1998 (unless noted)	Pap Test 3.11a Ever	 3.11b. In Preceding 3 Years
	Percent	
TOTAL	92	79
Race and ethnicity		
American Indian or Alaska Native	88	72
Asian or Pacific Islander	78	67
Asian	78	67
Native Hawaiian and other Pacific Islander	80	66
Black or African American	94	83
White	93	79
Hispanic or Latino	85	74
Not Hispanic or Latino	93	80
Black or African American	94	83
White	94	80

Women Aged 18 Years and Older, 1998 (unless noted)	Pap Test 3.11a Ever	Pap Test 3.11b. In Preceding 3 Years
	Percent	
Education level (aged 25 and older)		
Less than high school	89	69
High school graduate	95	78
At least some college	97	83
Family income level		
Poor	88	69
Near poor	92	73
Middle/high income	94	83
Geographic location		
Urban	92	80
Rural	93	78
Disability status		
With activity limitations	95 (1994)	74 (1994)
Without activity limitations	94 (1994)	78 (1994)

Note: Age adjusted to the year 2000 standard population. Includes women without a uterine cervix.

Note: The table above may have continued from the previous page.

3-13. Increase the proportion of women aged 40 years and older who have received a mammogram within the preceding 2 years.

Target: 70 percent.

Baseline: 67 percent of women aged 40 years and older received a mammogram within the preceding 2 years in 1998 (age adjusted to the year 2000 standard population).

Target setting method: Better than the best.

Data source: National Health Interview Survey (NHIS), CDC, NCHS.

Women Aged 40 Years and Older, 1998 (unless noted)	Mammogram Percent
TOTAL	67
Race and ethnicity	
American Indian or Alaska Native	45
Asian or Pacific Islander	61
Asian	61
Native Hawaiian and other Pacific Islander	DSU
Black or African American	66
White	67
Hispanic or Latino	61
Not Hispanic or Latino	68
Black or African American	66
White	68
Education level	
Less than high school	53
High school graduate	66
At least some college	73
Family income level	
Poor	50
Near poor	54
Middle/high income	73
Geographic location	
Urban	68
Rural	65
Disability status	
With activity limitations	55 (1994)
Without activity limitations	61 (1994)

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.
Note: Age adjusted to the year 2000 standard population.

Terminology

Cancer: A term for diseases in which abnormal cells divide without control. Cancer cells can invade nearby tissue and can spread through the bloodstream and lymphatic system to other parts of the body.

Cancer screening: Checking for changes in tissue, cells, or fluids that may indicate the possibility of cancer when there are no symptoms.

Carcinoma: Cancer that begins in the epithelial tissue that lines or covers an organ.

Clinical trials: Research studies that evaluate the effectiveness of new treatment or disease prevention methods on patients.

Digital rectal exam (DRE): A test in which the health care provider inserts a lubricated, gloved finger into the rectum to feel for abnormal areas.

Invasive cervical cancer: Cancer that has spread from the surface of the cervix to tissue deeper in the cervix or to other parts of the body.

Malignant: Cancerous.

Mammogram: An x ray of the breast.

Pap (Papanicolaou) test: Microscopic examination of cells collected from the cervix. The Pap test is used to detect cancer, changes in the cervix that may lead to cancer, and noncancerous conditions, such as infection or inflammation.

Risk factor: Something that increases a person's chance of developing a disease.

Stage: The size and extent of a cancer, including whether the disease has spread from the original site into surrounding tissue and other parts of the body.

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Educational and Community-Based Programs

7

Co-Lead Agencies: **Centers for Disease Control and Prevention**
Health Resources and Services Administration

Contents

Goal

Increase the quality, availability, and effectiveness of educational and community-based programs designed to prevent disease and improve health and quality of life.

Overview

Educational and community-based programs have played an integral role in the attainment of Healthy People 2000 objectives and will continue to contribute to the improvement of health outcomes in the United States by the year 2010. These programs, developed to reach people outside traditional health care settings, are fundamental for health promotion and quality of life.

Issues and Trends

People working together can improve individual health and create healthier communities. Although more research is needed in community health improvement, clearly, the health of communities not only depends on the health of individuals, but also on whether the physical and social aspects of communities enable people to live healthy lives.[1] Health and quality of life rely on many community systems and factors, not simply on a well-functioning health and medical care system. Making changes within existing systems, such as the school system, can effectively and efficiently improve the health of a large segment of the community.

Communities experiencing the most success in addressing health and quality-of-life issues have involved many components of their community: public health, health care, business, local governments, schools, civic organizations, voluntary health organizations, faith organizations, park and recreation departments, and other interested groups and private citizens. Communities that are eager to improve the health of specific at-risk groups have found that they are more likely to be successful if they work collaboratively within their community and if the social and physical environments also are conducive to supporting healthy changes.

Because many health problems relate to more than one behavioral risk factor, as well as to social and environmental factors, communities with effective programs also work to improve health by addressing the multiple determinants of a health problem. Among the more effective community health promotion programs are those that implement comprehensive intervention plans with multiple intervention strategies, such as educational, policy, and environmental, within various settings, such as the community, health care facilities, schools (including colleges and universities), and worksites.[1, 2, 3, 4]

Educational strategies may include efforts to increase health awareness, communication, and skill building. Policy strategies are those laws, regulations, formal and informal rules, and understandings adopted on a collective basis to guide individual and collective behavior.[5, 6, 7, 8]

These educational and policy strategies are effective when used in as many settings as appropriate.[3] Settings—schools, worksites, health care facilities, and the community—serve as channels to reach desired audiences as well as apply strategies in as wide a population as possible. These settings also provide major social structures for intervening at the policy level to facilitate healthful choices.[9]

The school setting. The importance of including health instruction in education curricula has been recognized since the early 1900s.[10] In 1997, the Institute of Medicine advised that students should receive the health-related education and services necessary for them to derive maximum benefit from their education and enable them to become healthy, productive adults.[11]

The school setting, ranging from preschool to university, is an important avenue to reach the entire population and specifically to educate children and youth. Schools have more influence on the lives of youth than any other social institution except the family, and provide a setting in which friendship networks develop, socialization occurs, and norms that govern behavior are developed and reinforced.

More than 12 million students currently are enrolled in the Nation's 3,600 colleges and universities.[12] Thus, colleges and universities are important settings for reducing health-risk behaviors among many young adults. Health clinics at the postsecondary level can help empower students to take responsibility for their own health through education, prevention, early detection, and treatment. In addition, colleges and universities can play an important role in eliminating racial and ethnic disparities and other inequalities in health outcomes by influencing how people think about these issues and providing a place where opinions and behaviors contributing to these factors can be addressed.

The health care setting. The health care setting is critical to the delivery of health education and health promotion. In health care facilities providers often see their patients at a teachable moment. Individualized education and counseling by health care providers at such moments in these settings have been shown to have positive and clinically significant effects on behavior in persons with chronic and acute conditions.[9] Providers must be cognizant of these opportunities and prepared to provide appropriate patient education. Institutions that employ providers also must be cognizant and allow sufficient time and training for patient education and counseling to occur.

The community setting. While health promotion in schools, health care centers, and worksites provides targeted interventions for specific population groups, community-based programs can reach the entire population. Broad public concern and support are vital to the functioning of a healthy community and to ensure the conditions in which people can be healthy.[13] Included in the community setting are public facilities; local government and agencies; and social service, faith, and civic organizations that provide channels to reach people where they live, work, and play. These groups and organizations also can be strong advocates for educational, policy, and environmental changes throughout the community. Places of worship may be a particularly important setting for health promotion initiatives, and they may effectively reach some undeserved populations. Valuable and effective health benefits of community-based approaches have been demonstrated by community interventions that have served a variety of ethnic and socioeconomic population groups.[6, 14, 15] Community-based approaches in conjunction with targeted approaches in schools, health care, and worksites increase the likelihood for success to improve personal and community health.

A community health promotion program should include:

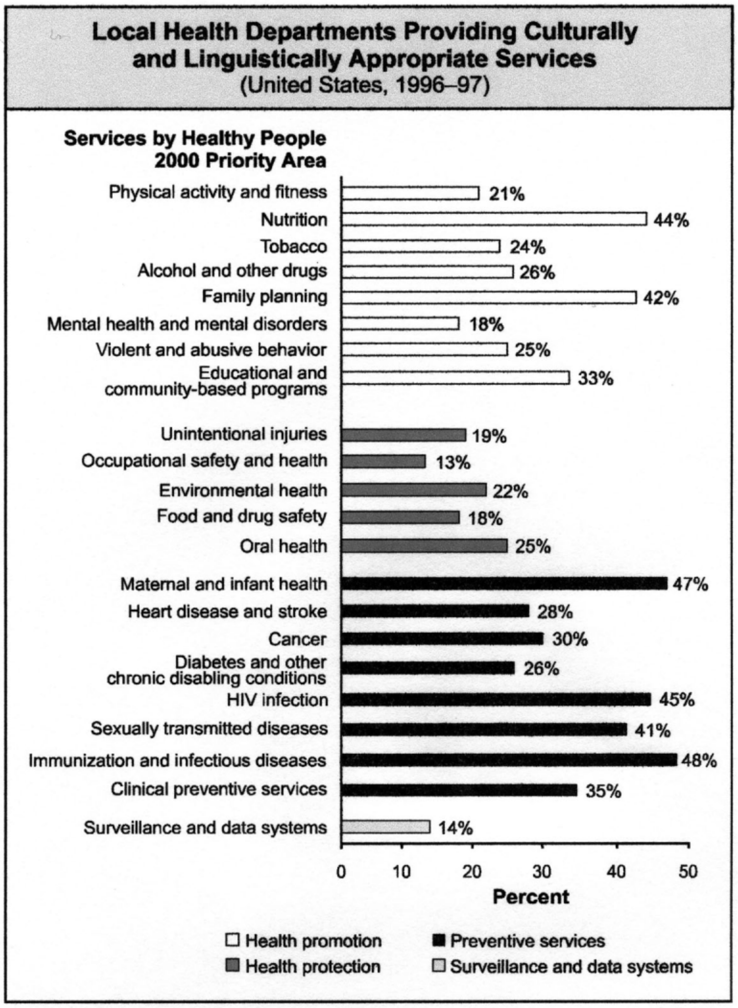
- Community participation with representation from at least three of the following community sectors: government, education, business, faith organizations, health care, media, voluntary agencies, and the public.
- Community assessment to determine community health problems, resources, and perceptions and priorities for action.
- Measurable objectives that address at least one of the following: health outcomes, risk factors, public awareness, or services and protection.
- Monitoring and evaluation processes to determine whether the objectives are reached.
- Comprehensive, multifaceted, culturally relevant interventions that have multiple targets for change—individuals (for example, racial and ethnic, age, and socioeconomic

groups), organizations (for example, worksites, schools, faith communities), and environments (for example, local policies and regulations)—and multiple approaches to change, including education, community organization, and regulatory and environmental reforms.

Schools are natural settings for reaching children and youth whereas worksites can reach the majority of adults. Efforts to reach older adults necessarily must involve the community at large.

Disparities

The U.S. population is composed of many diverse groups. Evidence indicates a persistent disparity in the health status of racially and culturally diverse populations as compared with the overall health status of the U.S. population. Over the next decade, the composition of the Nation will become more racially and ethnically diverse, thereby increasing the need for effective prevention programs tailored to specific community needs. Poverty, lack of adequate access to quality health services, lack of culturally and linguistically competent health services, and lack of preventive health care also are underlying factors that must be addressed. Given these disparities, the need for appropriate interventions is clear.



Local Health Departments Providing Culturally and Linguistically Appropriate Services
(United States, 1996–97)

Source: National Association of County and City Health Officials, National Profile of Local Health Departments, 1996–97.

Effective prevention programs in diverse communities must be tailored to community needs and take into consideration factors concerning individuals, such as disability status, sexual orientation, and gender appropriateness. For example, women often are the health care decision makers and caregivers in their families and in their communities. When provided with enabling services and health promotion and prevention information, they can make better health choices and better navigate the health care system to get the information and services they and their families need.

Opportunities

Health promotion programs need to be sensitive to the diverse cultural norms and beliefs of the people for whom the programs are intended. This is a continuing challenge as the Nation's population becomes increasingly diverse. To ensure that interventions are culturally appropriate, linguistically competent, and appropriate for the needs of racial, ethnic, gender, sexual orientation, disability status, and age groups within the community, members of the populations served and their gatekeepers must be involved in the community assessment and planning process.

Community assessment helps to identify the cultural traditions and beliefs of the community and the education, literacy level, and language preferences necessary for the development of appropriate materials and programs. In addition, a community assessment can help identify levels of social capital and community capacity. Such assessments help identify the skills, resources, and abilities needed to manage health improvement programs in communities.[3, 16]

Educational and community-based programs must be supported by accurate, appropriate, and accessible information derived from a science base. Increasing evidence supports the efficacy and effectiveness of health education and health promotion in schools, worksites, health care facilities, and community-based programming.[7] Gaps in research include the dissemination and diffusion of effective programs, new technologies, policies, relationships between settings, and approaches to disadvantaged and special populations.[9]

Communities need to be involved as partners in conducting research ensuring that the content of the prevention efforts developed are tailored to meet the needs of the communities and populations being served. Communities also need to be involved as equal partners in research, to enhance the appropriateness and sustainability of science-based interventions and prevention programs and ensure that the lessons of research are transferred back to the community.

Interim Progress Toward Year 2000 Objectives

New information from the National College Health Risk Behavior Survey shows that college students are receiving information on health topics such as human immunodeficiency virus (HIV) and sexually transmitted disease prevention.

REPRODUCTIVE HEALTH–RELATED OBJECTIVES

Educational and Community-Based Programs

Goal:

Increase the quality, availability, and effectiveness of educational and community-based programs designed to prevent disease and improve health and quality of life.

Number	Objective Short Title
School Setting	
7-2.	School health education
7-3.	Health-risk behavior information for college and university students
Health Care Setting	
7-9.	Health care organization sponsorship of community health promotion activities
Community Setting and Select Populations	
7-11.	Culturally appropriate community health promotion programs

HEALTHY PEOPLE 2010 OBJECTIVES

School Setting

7-2. Increase the proportion of middle, junior high, and senior high schools that provide comprehensive school health education to prevent health problems in the following areas: unintentional injury; violence; suicide; tobacco use and addiction; alcohol and other drug use; unintended pregnancy, HIV/AIDS, and STD infection; unhealthy dietary patterns; inadequate physical activity; and environmental health.

Target and baseline:

Objective	Schools Providing School Health Education in Priority Areas	1994 Baseline	2010 Target
		Percent	
7-2a.	All components	28	70
	Individual components to prevent health problems in the following areas		
7-2f.	Alcohol and other drug use	90	95
7-2g.	Unintended pregnancy, HIV/AIDS, and STD infection	65	90

Target setting method: 150 percent improvement for 7-2a; percentage improve varies for individual components 7-2f and 7-2g.

Data source: School Health Policies and Programs Study (SHPPS), CDC, NCCDPHP.

7-3. Increase the proportion of college and university students who receive information from their institution on each of the six priority health-risk behavior areas.

Target: 25 percent.

Baseline: 6 percent of undergraduate students received information from their college or university on all six topics in 1995: injuries (intentional and unintentional), tobacco use, alcohol and illicit drug use, sexual behaviors that cause unintended pregnancies and sexually transmitted diseases, dietary patterns that cause disease, and inadequate physical activity.

Target setting method: Better than the best.

Data source: National College Health Risk Behavior Survey, CDC, NCCDPHP.

Note: The table below may continue to the following page.

Undergraduates, 1995	Received Information on Six Priority Health-Risk Behavior Areas Percent
TOTAL	6
Race and ethnicity	
American Indian or Alaska Native	DSU
Asian or Pacific Islander	DSU
Asian	DSU
Native Hawaiian and other Pacific Islander	DSU
Black or African American	8
White	6
Hispanic or Latino	5
Not Hispanic or Latino	DNA
Black or African American	8
White	6
Gender	
Female	6
Male	6
Family income level	
Poor	DNC
Near poor	DNC
Middle/high income	DNC

Undergraduates, 1995	Received Information on Six Priority Health-Risk Behavior Areas Percent
Disability status	
Persons with disabilities	DNC
Persons without disabilities	DNC
Sexual orientation	DNC

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.

Note: The table above may have continued from the previous page.

The School Health Education Study[17] conducted during the 1960s identified 10 conceptual areas that have traditionally served as the basis of health education curricula. Subsequently, six categories of behaviors have been identified as responsible for more than 70 percent of illness, disability, and death among adolescents and young adults. These categories, which should be the primary focus of school health education, are injuries (unintentional and intentional); tobacco use; alcohol and illicit drug use; sexual behaviors that cause unintended pregnancies and sexually transmitted diseases; dietary patterns that cause disease; and inadequate physical activity.[18] In addition to the 6 behavior categories, environmental health (recognized influence on personal and community health), mental and emotional health, personal health, and consumer health are among the 10 conceptual areas being added to track the influence of these factors over the next 10 years.

The overall goal of the National Health Education Standards[19] for youth is to achieve health literacy—the capacity to obtain, interpret, and understand basic health information and services and the competence to use such information and services to enhance health. Research has shown that for health education curricula to affect priority health-risk behaviors among adolescents, effective strategies, considerable instructional time, and well-prepared teachers are required. To attain this objective, States and school districts need to support effective health education with appropriate policies, teacher training, effective curricula, and regular progress assessment. In addition, the support of families, peers, and the community at large is critical to long-term behavior change among adolescents.

Health education and health promotion activities also can be conducted in postsecondary settings and reach the Nation's future leaders, teachers, corporate executives, health professionals, and public health personnel. Personal involvement in a health promotion program can educate future leaders about the importance of health and engender a commitment to prevention.

In 1995, 49 percent of undergraduate students reported receiving informationon alcohol and other drug use, and 55 percent on unintended pregnancy, HIV/AIDS, and STD infection.[20]

Health Care Setting

7-9. (Developmental) Increase the proportion of hospitals and managed care organizations that provide community disease prevention and health promotion activities that address the priority health needs identified by their community.

Potential data source: Annual Survey, American Hospital Association.

The concept of increased consumer protection in the health care industry, particularly in the form of a Consumers' Bill of Rights and Responsibilities, is gaining support. These protections include consumers' rights to accurate, easily understood information related to choice of a health plan, its benefits, availability of specialty care, and confidentiality of medical records. However, the right to comprehensive patient and family education is missing from this list. Two distinctive characteristics of health care settings underscore their importance to promote patient and family education: improved health is a primary objective; and health care providers generally are considered credible sources of information.[9] The interaction between these two factors helps create an environment conducive to effective patient and family education programs and activities. The positive and clinically significant effects of patient education and counseling of persons with chronic and acute conditions are well-documented; however, the amount and types of health promotion and disease prevention activities offered by managed care organizations (MCOs) to their participating employers vary widely.[21]

Community health promotion services provided by hospitals and MCOs are growing. This growth is illustrated by the expansion of Federal and State managed care reform legislation directed at the creation of a core set of prevention activities across MCOs.[21] Despite the different motivations and strategic objectives of public health and managed care organizations, they share a mutual interest to improve the health of communities and specific populations within communities. Collaboration between managed care plans and public health agencies is a logical consequence of the health promotion objectives shared by these organizations.[22] Additionally, a number of Federal public health agencies are developing collaborative relationships with the managed care community on issues of clinical preventive services and prevention surveillance and research.[23]

7-11. Increase the proportion of local health departments that have estabLished culturally appropriate and linguistically competent community health promotion and disease prevention programs.

Target and baseline:

Objective	Increase in Local Health Departments That are Culturally Appropriate and Linguistically Competent Community Health Promotion and Disease Prevention Programs	1996-97 Baseline	2010 Target
		Percent	
7-11a.	Access to quality health services	Developmental	
	Clinical preventive services	35	*
7-11c.	Cancer	30	50

7-11g.	Educational and community-based programs	33	50
7-11i.	Family planning	42	50
7-11l.	Health communication	Developmental	
7-11n.	HIV	45	50
7-11o.	Immunizations and infectious diseases	48	50
7-11p.	Injury and violence prevention	Developmental	
	Violent and abusive behavior	25	*
7-11q.	Maternal, infant (and child) health	47	50
7-11y.	Sexually transmitted diseases	41	50
7-11z.	Substance abuse (alcohol and other drugs)	26	50

*These are Healthy People 2000 priority areas that are not applicable to Healthy People 2010.

Target setting method: Percentage improvement varies by program.

Data source: National Profile of Local Health Departments, National Association of County and City Officials (NACCO).

Over the next decade, the Nation's population will become even more diverse. Mainstream health education activities often fail to reach select populations.[24] This may contribute to select and disadvantaged communities lagging behind the overall U.S. population on virtually all health status indicators. In 1991, an estimated 78,643 excess deaths occurred among African Americans and an additional 4,485 among Hispanics or Latinos.[25] Approximately 75 percent of these excess deaths occurred in seven categories, all of which had contributing factors that can be controlled or prevented: cancer, cardiovascular disease, cirrhosis, diabetes, HIV or AIDS, homicide, and unintentional injuries. Special efforts are needed to develop and disseminate culturally and linguistically appropriate health information to overcome the cultural differences and meet the special language needs of these population groups.

Terminology

Community: A specific group of people, often living in a defined geographical area, who share a common culture, values, and norms and who are arranged in a social structure according to relationships the community has developed over a period of time.[26]

Community-based program: A planned, coordinated, ongoing effort operated by a community that characteristically includes multiple interventions intended to improve the health status of members of the community.

Community capacity: The characteristics of communities that affect their ability to identify, mobilize, and address social and public health problems.[27,28]

Culturally appropriate: Refers to an unbiased attitude and organizational policy that values cultural diversity in the population served. Reflects an understanding of diverse attitudes, beliefs, behaviors, practices, and communication patterns that could be attributed to race, ethnicity, religion, socioeconomic status, historical and social context, physical or mental ability, age, gender, sexual orientation, or generational and acculturation status. Includes an awareness that cultural differences may affect health and the effectiveness of health care delivery. Knowledge of disease prevalence in specific cultural populations, whether defined by race, ethnicity, socioeconomic status, physical or mental ability, gender, sexual orientation, age, disability, or habits.

Excess deaths: The statistically significant difference between the number of deaths expected and the number that actually occurred.

Health: A state of physical, mental, and social well-being and not merely the absence of disease and infirmity.

Health care organizations: Included are hospitals, managed care organizations, home health organizations, long-term care facilities, and community-based health care providers.

Health education: Any planned combination of learning experiences designed to predispose, enable, and reinforce voluntary behavior conducive to health in individuals, groups, or communities.[29]

Health literacy: The capacity to obtain, interpret, and understand basic health information and services and the competence to use such information and services to enhance health.[30]

Health promotion: Any planned combination of educational, political, regulatory, and organizational supports for actions and conditions of living conducive to the health of individuals, groups, or communities.[29]

Health promotion activity: Broadly defined to include any activity that is part of a planned health promotion program, such as implementing a policy to create a smoke-free workplace, developing walking trails in communities, or teaching the skills needed to prepare healthy meals and snacks.

Healthy community: A community that is continuously creating and improving those physical and social environments and expanding those community resources that enable people to mutually support each other in performing all the functions of life and in developing to their maximum potential.[31]

Healthy public policy: Characterized by an explicit concern for health and equity in all areas of policy and by an accountability for health impact. The main aim of healthy public policy is to create a supportive environment to enable people to lead healthy lives by making healthy choices possible and easier for citizens. It makes social and physical environments health enhancing.[26]

Linguistically competent: Refers to skills for communicating effectively in the native language or dialect of the targeted population, taking into account general educational levels, literacy, and language preferences.

Managed care organizations (MCOs): Refers to systems that integrate the financing and delivery of health care services to covered individuals by means of arrangements with selected providers to furnish health care services to members. Managed care includes health maintenance organizations, preferred provider organizations, and point-of-service plans.

Patient and family education: Refers to a planned learning experience using a combination of methods, such as teaching, counseling, skill building, and behavior modification, to promote patient self-management and patient and family empowerment regarding their health.

Postsecondary institutions: Includes 2- and 4-year community colleges, private colleges, and universities.

Quality of life: An expression that, in general, connotes an overall sense of well-being when applied to an individual and a pleasant and supportive environment when applied to a community. On the individual level, health-related quality of life (HRQOL) has a strong relationship to a person's health perceptions and ability to function. On the community level, HRQOL can be viewed as including all aspects of community life that have a direct and quantifiable influence on the physical and mental health of its members.[32]

School health education: Any combination of learning experiences organized in the school setting to predispose, enable, and reinforce behavior conducive to health or to prepare school-aged children to be able to cope with the challenges to their health in the years ahead.[29]

Settings (worksites, schools, health care sites, and the community): Major social structures that provide channels and mechanisms of influence for reaching defined populations and for intervening at the policy level to facilitate healthful choices and address quality of life issues. Conceptually, the overall community, worksites, schools, and health care sites are contained under the broad umbrella of "community." Health promotion and health education may occur within these individual settings or across settings in a comprehensive, communitywide approach.[9]

Social capital: The process and conditions among people and organizations that lead to accomplishing a goal of mutual social benefit, usually characterized by four interrelated constructs: trust, cooperation, civic engagement, and reciprocity.[29]

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Family Planning

9

Lead Agency: **Office of Population Affairs**

Contents

Goal

Improve pregnancy planning and spacing and prevent unintended pregnancy.

Overview

In an era when technology should enable couples to have considerable control over their fertility, half of all pregnancies in the United States are unintended.[1] Although between 1987 and 1994 the proportion of pregnancies that were unintended declined in the United States from 57 to 49 percent,[2] other industrialized nations report fewer unintended pregnancies,[3] suggesting that the number of unintended pregnancies can be reduced further. Family planning remains a keystone in attaining a national goal aimed at achieving planned, wanted pregnancies and preventing unintended pregnancies. Family planning services provide opportunities for individuals to receive medical advice and assistance in controlling if and when they get pregnant and for health providers to offer health education and related medical care.

The family planning objectives for Healthy People 2010 echo the recommendations contained in the 1995 Institute of Medicine report *The Best Intentions: Unintended Pregnancy and the Well-Being of Children and Families*.[4] The foremost recommendation of the report calls for the Nation to adopt a social norm in which all pregnancies are intended—that is, clearly and consciously desired at the time of conception. Emphasizing personal choice and intent, this norm speaks to planning for pregnancy, as well as to avoiding unintended pregnancy.

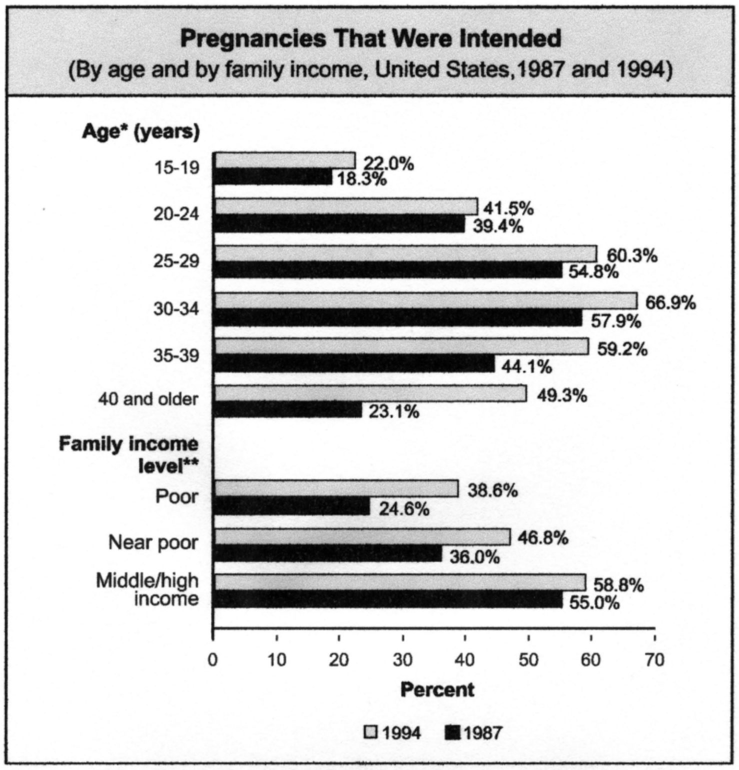
Unintended pregnancy rates in the United States show a decline, probably as a result of higher contraceptive use and use of more effective contraceptive methods.[2] Despite this improvement, unintended pregnancy remains a common problem, and further progress is needed.

Issues and Trends

One important determinant of pregnancy and birth rates is contraceptive use. The proportion of all females aged 15 to 44 years who currently are practicing contraception (including females who have been sterilized for contraceptive reasons and husbands or partners who have had vasectomies) rose from about 56 percent in 1982 to 60 percent in 1988 and 64 percent in 1995.[5] However, 5.2 percent of all females aged 15 to 44 years had intercourse in the past 3 months and did not use contraceptives.[5]

No one method of contraception is likely to be consistently and continuously suitable for each woman, man, or couple. Total abstinence is the only fool-proof method of contraception. Sterilization, the most common method of contraception in the United States, has near-perfect effectiveness and differs from other methods because it is usually permanent.[5]

Used by an estimated 10 million females, combination oral contraceptives are the most popular method of reversible contraception in the United States. Other hormonal contraceptives, such as injectables and implants, and intrauterine devices (IUDs) have the appeal of providing effective contraception without the need for daily compliance. For barrier methods, such as the condom and diaphragm, the average effectiveness is more variable. Used correctly and consistently, condoms can prevent both pregnancy and disease. Other barrier methods include the diaphragm, cervical cap, and female condom, which may reduce the risk but do not prevent sexually transmitted diseases (STDs) that primarily affect the cervix. Spermicides used alone (foams, creams, and jellies), coitus interruptus (withdrawal), and periodic abstinence (calendar rhythm) are other options; however, their effectiveness in actual use is lower than that for other methods.



Pregnancies That Were Intended
(By age and by family income, United States, 1987 and 1994)

Sources: *Henshaw, S.K. Unintended pregnancy in the United States. *Family Planning Perspectives* 30(1):24-29, 46, 1998. **Brown, S.S., and Eisenberg, L. *The Best Intentions: Unintended Pregnancy and the Well-Being of Children and Families.* Washington, DC: National Academy Press, 1995.

Contraceptive method choices are far from ideal. Even with all financial and knowledge barriers removed, effective and consistent contraceptive use is difficult. Contraceptive research and development efforts must be expanded to bring new methods to the market, methods that combine high contraceptive efficacy and ease of use with protection against STDs and human immunodeficiency virus (HIV). Increased attention also must be given to bringing new methods to the United States, including male methods of contraception, spermicide, and microbicide alternatives. Improving the range of contraceptive choices increases the likelihood that individuals and couples will be able to find a contraceptive method that suits them. Greater choice enhances individuals' control over their fertility and reduces the risk of unintended pregnancy.

Reducing unintended pregnancies is possible and necessary. Unintended pregnancy in the United States is serious and costly and occurs frequently. Socially, the costs can be measured in unintended births, reduced educational attainment and employment opportunity, greater welfare dependency, and increased potential for child abuse and neglect. Economically, health care costs are increased. An unintended pregnancy, once it occurs, is expensive no matter what the outcome. Medically, unintended pregnancies are serious in terms of the lost opportunity to prepare for an optimal pregnancy, the increased likelihood of infant and maternal illness, and the likelihood of abortion.[4] The consequences of unintended pregnancy are not confined to those occurring in teenagers or unmarried couples. In fact, unintended pregnancy can carry serious consequences at all ages and life stages.[4]

With an unintended pregnancy, the mother is less likely to seek prenatal care in the first trimester and more likely not to obtain prenatal care at all.[6, 7] She is less likely to breastfeed[8] and more likely to expose the fetus to harmful substances, such as tobacco or alcohol.[4] The child of such a pregnancy is at greater risk of low birth weight, dying in its first year, being

abused, and not receiving sufficient resources for healthy development.[9] A disproportionate share of the women bearing children whose conception was unintended are unmarried or at either end of the reproductive age span—factors that, in themselves, carry increased medical and social burdens for children and their parents. Pregnancy begun without some degree of planning often prevents individual women and men from participating in preconception risk identification and management.

For teenagers, the problems associated with unintended pregnancy are compounded, and the consequences are well documented. Teenaged mothers are less likely to get or stay married, less likely to complete high school or college, and more likely to require public assistance and to live in poverty than their peers who are not mothers. Infants born to teenaged mothers, especially mothers under age 15 years, are more likely to suffer from low birth weight, neonatal death, and sudden infant death syndrome. The infants may be at greater risk of child abuse, neglect, and behavioral and educational problems at later stages.[10] Nearly 1 million teenage pregnancies occur each year in the United States.[11] Clearly, the solution to the problem needs to be found.

Unintended pregnancy is expensive, and contraceptives save health care resources by preventing unintended pregnancy.[12] The pregnancy care cost for one woman who does not intend to be pregnant, yet is sexually active and uses no contraception, is estimated at about $3,200 annually in a managed care setting.[12, 13] Estimates of the overall cost to U.S. taxpayers for teenage childbearing range between $7 billion and $15 billion a year, mainly attributed to higher public assistance costs, foregone tax revenues resulting from changes in productivity of the teen parents, increased child welfare, and higher criminal justice costs.[14] Unintended births to teenagers, which account for about 40 percent of teenaged pregnancies, cost more than $1.3 billion in direct health expenditures each year.[15]

Induced abortion is another consequence of unintended pregnancy. Although the numbers of abortions in this country have been declining over the past 15 years,[16] approximately one abortion occurs for every three live births annually in the United States, a ratio two to four times higher than in many other Western democracies. Just as unintended pregnancy occurs across the spectrum of age and socioeconomic status, women of all reproductive ages, married or unmarried, and in all income categories obtain abortions.

Abortion results when women have unintended pregnancies, and adequate access to family planning services reduces the number of unintended pregnancies. Each year, publicly subsidized family planning services prevent an estimated 1.3 million unintended pregnancies.[17] For every $1 spent on publicly funded contraceptive services, $3 is saved in Medicaid bills for pregnancy-related health care and medical care for newborns.[17]

Disparities

Unintended pregnancies occur among females of all socioeconomic levels and all marital status and age groups, but females under age 20 years and poor and African American women are especially likely to become pregnant unintentionally.[4] More than 4 in 10 pregnancies to white and Hispanic females are unintended; 7 in 10 pregnancies to African American females are unintended. Unintended pregnancies during contraceptive use are most common among African American and Hispanic females. Poverty is strongly related to greater difficulty in using reversible contraceptive methods successfully, with these females also the least likely to have the resources necessary to access family planning services and the most likely to be affected negatively by an unintended pregnancy. For this reason, publicly subsidized family planning services are important. Yet, half of all females who are at risk for an unintended pregnancy and need publicly subsidized family planning services are not getting them.[18] Clearly, while these programs have contributed substantially to preventing unintended pregnancy, the need for services continues to outstrip resources available.

Difficulty in obtaining and paying for care is, of course, exacerbated for poor and low-income people. Several Federal programs support family planning services, with most targeting poor or low-income females. The Medicaid program is the largest, but reimbursement for family planning services is typically not available to adolescents, women without children, women who are married, and working poor women whose income may just exceed the eligibility level.

An estimated 6.6 million females receive services from subsidized family planning providers annually, slightly less than one-half of those considered to be in need of subsidized family planning services (those at risk of unintended pregnancy and with a family income less than 250 percent of the poverty level).[19] Family planning programs consisting of some 3,000 agencies with over 7,000 clinic locations provide nearly 40 percent of family planning services in the United States. Health departments represent nearly half of these locations, along with hospitals, community health centers, and other public and nonprofit organizations. Nearly two-thirds of all females served (4.2 million) obtained care at 1 of 4,200 clinics receiving funds from the Federal Title X Family Planning Program.[19]

Opportunities

A 1995 survey of the Nation's family planning agencies estimated that almost 70 percent of agencies have at least one special program of outreach education or service to meet the needs of teenagers. Fewer have special programs for hard-to-serve populations, such as homeless persons, persons with disabilities, or substance abusers.[20] Furthermore, whether those agencies target their services or simply provide care to those who happened to seek it is not known.[21] The need for family planning services among all these groups is undeniably great. In the case of substance abuse, the link between illegal drug use and infection with HIV has meant more Federal and State funding for programs designed to reach these groups. Thus, substance abusers may be more likely to be targeted by family planning agencies than other hard-to-reach populations. Some programs focus specifically on HIV prevention, whereas others offer comprehensive family planning services and related education and counseling.[21]

Language and cultural differences are significant barriers to serving non-English-speaking population groups. Providers report that they often have difficulty finding staff with appropriate language skills who also have adequate family planning skills and experience. Furthermore, simply speaking the language of the client is not sufficient; the provider also must be able to relate on a cultural level.[21] Persons of various ethnic backgrounds often are uncomfortable talking to strangers about intimate topics, such as sex and birth control, let alone undergoing a pelvic or breast exam. Some racial and ethnic groups tend to visit a doctor only when they are sick and not to seek preventive services, including family planning. Reaching such populations can be difficult.

Providing outreach, education, and clinical services to hard-to-reach populations is expensive. Frequently, these groups have more health problems than less disadvantaged family planning clients, and these health problems are not necessarily confined to family planning. One study estimated that the cost of providing services to homeless women is twice that of other women, with homeless women at such high risk of gynecological problems that they must undergo a complete exam and diagnostic workup at every visit.[21] Disabled individuals often require extra staff, equipment, and time (especially if they are

clients with developmental disabilities) to ensure contraceptive compliance and to deal with side-effect issues.[21] The extra time, effort, and expense required to reach hard-to-serve groups undoubtedly discourage some family planning agencies from implementing programs for these populations.[20] Clearly, there is a need to expand services to hard-to-reach populations and to find effective strategies to overcome barriers to services experienced by individuals in these populations.

Finally, public education and information about family planning need to be expanded. Public education efforts and the media could help persons to understand better the benefits of sexual abstinence. Numerous studies and polls indicate a disturbing degree of misinformation about contraceptive methods. The modest health risks of oral contraceptives frequently are exaggerated, whereas the more considerable benefits are underestimated. Knowledge about emergency contraception is not widespread, and the relative effectiveness of various contraceptive methods often is not well understood. Moreover, the risk of unintended pregnancy in the absence of contraceptive use is underestimated, and many population groups lack accurate information on STDs and reproductive health in general.[22] The media—print, broadcast, and video—must be encouraged to help in the task of conveying accurate and balanced information on contraception, highlighting the benefits as well as the risks of contraceptives.

Access to quality contraceptive services continues to be an important factor in promoting healthy pregnancies and preventing unintended pregnancies. Although people in the United States view contraception as basic to their lives and their health care, health insurance plans traditionally have not covered family planning services. Three-fourths of U.S. women of childbearing age rely on private insurance; the extent to which they are covered for contraception can differ dramatically depending on the type of insurance.[23] Traditional plans provide the least comprehensive coverage for family planning services, while health maintenance organizations (HMOs) and newer managed care plans provide more comprehensive contraceptive coverage. Increased access through insurance coverage for family planning is important because in the absence of comprehensive coverage, many women may opt for whatever method may be covered by their health plan rather than the method most appropriate for their individual needs and circumstances. Other women may opt not to use contraception if it is not covered under their insurance plan.

Interim Progress Toward Year 2000 Objectives

Of the 12 family planning Healthy People 2000 objectives, progress has been made for 9 objectives. Substantial decreases have occurred in unintended pregnancy. The use of contraceptives among females aged 15 to 44 years at risk for unintended pregnancy has increased. The pregnancy rate for females using a contraceptive method has declined. Increases in adolescents' abstinence from sexual intercourse have occurred, as well as in their use of contraceptives. Although short of the year 2000 targets, decreases in adolescent pregnancy have been reported. Data are not available to update objectives on family planning counseling and age-appropriate preconception care counseling.

Note: Unless otherwise noted, data are from the Centers for Disease Control and Prevention, National Center for Health Statistics, *Healthy People 2000 Review, 1998–99*.

REPRODUCTIVE HEALTH–RELATED OBJECTIVES

Family Planning

Goal:

Improve pregnancy planning and spacing and prevent unintended pregnancy.

Number	Objective Short Title
9-1.	Intended pregnancy
9-2.	Birth spacing
9-3.	Contraceptive use
9-4.	Contraceptive failure
9-5.	Emergency contraception
9-6.	Male involvement in pregnancy prevention
9-7.	Adolescent pregnancy
9-8.	Abstinence before age 15 years
9-9.	Abstinence among adolescents aged 15 to 17 years
9-10.	Pregnancy prevention and sexually transmitted disease (STD) protection
9-11.	Pregnancy prevention education
9-12.	Problems in becoming pregnant and maintaining a pregnancy
9-13.	Insurance coverage for contraceptive supplies and services

HEALTHY PEOPLE 2010 OBJECTIVES

9-1. Increase the proportion of pregnancies that are intended.

Target: 70 percent.

Baseline: 51 percent of all pregnancies among females aged 15 to 44 years were intended in 1995.

Target setting method: Better than the best.

Data sources: National Survey of Family Growth (NSFG), CDC, NCHS; National Vital Statistics System (NVSS), CDC, NCHS; Abortion Provider Survey, The Alan Guttmacher Institute; Abortion Surveillance Data, CDC, NCCDPHP.

Pregnancies Among Females Aged 15 to 44 Years, 1995	Intended Pregnancy Percent
TOTAL	51
Race and ethnicity	
American Indian or Alaska Native	DSU
Asian or Pacific Islander	DSU
Asian	DSU
Native Hawaiian and other Pacific Islander	DSU
Black or African American	28
White	57
Hispanic or Latino	51
Not Hispanic or Latino	51
Black or African American	DNA
White	DNA
Family income level	
Poor	39
Near poor	47
Middle/high income	59
Select Populations	
Age groups	
15 to 19 years	22
20 to 24 years	42
25 to 29 years	60
30 to 34 years	67
35 to 39 years	59
40 to 44 years	49
Marital status	
Currently married	69
Formerly married	38
Never married	22

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.

A significant decline in the rates of unintended pregnancy has occurred, indicating that progress toward a goal of increased intended pregnancy is possible. Between 1987 and 1994, the proportion of pregnancies that were unintended declined from 57 to 49 percent.[2] By comparison, the percentage of unintended pregnancy is much lower in some other countries—in 1994–95, it was 39 percent in Canada and 6 percent in the Netherlands.[3] Overall, females in the United States spend three-fourths of their reproductive years trying to avoid pregnancy.[17] Unintended pregnancy often is mistakenly perceived as predominantly an adolescent problem; however, unintended pregnancy is a problem among all reproductive age groups. In 1994, nearly one-half (48 percent) of females aged 15 to 44 years had at least one unintended pregnancy in their lifetime, more than one-fourth (28 percent) had one or more unplanned births, nearly one-third (30 percent) had one or more abortions, and 1 in 10 (11 percent) had both an unintended birth and an induced abortion.[2] A goal of 70 percent is ambitious and will require strategies to reduce the gaps among population groups.

9-2. Reduce the proportion of births occurring within 24 months of a previous birth.

Target: 6 percent.

Baseline: 11 percent of females aged 15 to 44 years gave birth within 24 months of a previous birth in 1995.

Target setting method: Better than the best.

Data source: National Survey of Family Growth (NSFG), CDC, NCHS.

Note: The table below may continue to the following page.

Females Aged 15 to 44 Years, 1995	New Birth Occurred Within 24 Months of Previous Birth
	Percent
TOTAL	11
Race and ethnicity	
American Indian or Alaska Native	DSU
Asian or Pacific Islander	DSU
Asian	DSU
Native Hawaiian and other Pacific Islander	DSU
Black or African American	14
White	10
Hispanic or Latino	14
Not Hispanic or Latino	10
Black or African American	14
White	10

Females Aged 15 to 44 Years, 1995	New Birth Occurred Within 24 Months of Previous Birth Percent
Family income level (aged 20 to 44 years)	
Poor	20
Near poor	11
Middle/high income	7
Disability status	
Persons with disabilities	DNC
Persons without disabilities	DNC
Select Populations	
Age groups	
15 to 19 years	9
20 to 24 years	14
25 to 29 years	10
30 to 34 years	11
35 to 39 years	10
40 to 44 years	DSU
Marital status	
Currently married	11
Formerly married	13
Never married	11

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.

Note: The table above may have continued from the previous page.

Encouraging females of all ages to space their pregnancies adequately can help lower their risk of adverse perinatal outcomes. To the extent that very closely spaced pregnancies are unplanned, unintended pregnancy may increase the risk of low birth weight.[4] A recent study indicates that females who wait 18 to 23 months after delivery before conceiving their next child lower their risk of adverse perinatal outcomes, including low birth weight, preterm birth, and small-for-size gestational age.[24] Health care providers can help all new mothers understand that they can become pregnant again soon after delivery and should assist them with contraceptive education and supplies.

For adolescents, bearing a child is associated with poor outcomes for young females and their children. Giving birth to a second child while still a teen further increases these risks. The prevention of second and subsequent births to very young females is of great interest to public health. Research has shown that such births are associated with physical and mental health problems for the mother and the child.[25] Yet, analysis indicates that in the 2 years following the first birth, teenaged mothers have a second birth at about the same rate as other mothers. In 1997, nearly one in every five births to teenaged mothers was a birth of second order or higher.[26]

9-3. Increase the proportion of females at risk of unintended pregnancy (and their partners) who use contraception.

Target: 100 percent.

Baseline: 93 percent of females aged 15 to 44 years at risk of unintended pregnancy used contraception in 1995.

Target setting method: Total coverage.

Data source: National Survey of Family Growth (NSFG), CDC, NCHS.

Note: The table below may continue to the following page.

Females Aged 15 to 44 Years at Risk of Unintended Pregnancy, 1995	Used Contraception Percent
TOTAL	93
Race and ethnicity	
American Indian or Alaska Native	DSU
Asian or Pacific Islander	DSU
Asian	DSU
Native Hawaiian and other Pacific Islander	DSU
Black or African American	90
White	93
Hispanic or Latino	91
Not Hispanic or Latino	93
Black or African American	90
White	93
Family income level	
Poor	92
Near poor	91
Middle/high income	93
Select Populations	
Age groups	
15 to 19 years	81
20 to 24 years	91
25 to 29 years	94

Females Aged 15 to 44 Years at Risk of Unintended Pregnancy, 1995	Used Contraception Percent
30 to 34 years	94
35 to 39 years	95
40 to 44 years	93
Marital status	
Currently married	95
Formerly married	92
Never married	88

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.

Note: The table above may have continued from the previous page.

The percentage of at-risk females using any form of contraception rose from 88 in 1982 to 93 in 1995.[27] Increasing the target to 100 percent by 2010 will be challenging and could reduce dramatically occurrences of unintended pregnancy. Poor or nonexistent contraceptive use is one of the main causes of unintended pregnancy, with unintended pregnancy occurring among two groups: females using no contraception and females whose contraceptives fail or are used improperly. In the United States, the small proportion of females who are at risk of unintended pregnancy and use no method of contraception account for over half of all unintended pregnancies. Reducing the proportion of sexually active persons using no birth control method and increasing the effectiveness (correct and consistent use) with which persons use contraceptive methods would do much to lower the unintended pregnancy rate.[28] Just reducing the proportion of females not using contraception by half could prevent as many as one-third of all unintended pregnancies and 500,000 abortions per year.[29]

9-4. Reduce the proportion of females experiencing pregnancy despite use of a reversible contraceptive method.

Target: 7 percent.

Baseline: 13 percent of females aged 15 to 44 years experienced pregnancy despite use of a reversible contraceptive method in 1995.

Target setting method: Better than the best (retain year 2000 target).

Data sources: National Survey of Family Growth (NSFG), CDC, NCHS; Abortion Patient Survey, The Alan Guttmacher Institute.

Females Aged 15 to 44 Years Using Reversible Contraception, 1995	Experienced Pregnancy Percent
TOTAL	13
Race and ethnicity	
American Indian or Alaska Native	DSU
Asian or Pacific Islander	DSU
Asian	DSU
Native Hawaiian and other Pacific Islander	DSU
Black or African American	DNC
White	DNC
Hispanic or Latino	15
Not Hispanic or Latino	DNA
Black or African American	20
White	11
Family income level	
Poor	DSU
Near poor	18
Middle/high income	10
Disability status	
Persons with disabilities	DNC
Persons without disabilities	DNC
Select Populations	
Marital/cohabiting status	
Married	9
Cohabiting	22
Unmarried, not cohabiting	14

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.

The public health benefits of improved contraceptive practices are potentially enormous. Whether fertile females who are sexually active and do not want to get pregnant experience an unintended pregnancy is a function of their choice—and their partners' choice—of contraceptive methods and how effectively they use them. The efficacy of reversible contraceptive methods depends on consistent and appropriate usage. Unintended pregnancies experienced by females using reversible methods are primarily a result of inconsistent and/or inappropriate use.[30] Ideally, an objective would focus on consistent and correct use of a particular method. The data, however, cannot address the role that method switching may play in unintended pregnancy.

9-5. (Developmental) Increase the proportion of health care providers who provide emergency contraception.

Potential data source: The Alan Guttmacher Institute.

The U.S. *Guide to Clinical Preventive Services*[16] identifies postcoital administration of emergency contraceptive pills (ECP) after unprotected intercourse as an effective means of reducing subsequent pregnancy. ECP is estimated to reduce the risk of subsequent pregnancy by 75 percent. Yet this method, which has the public health potential of significantly reducing unintended pregnancy, is not well known and not yet widely available to the public. Surveys indicate that knowledge and use of postcoital contraception remain low among patients and clinicians alike.[29] In 1995, less than 1 percent of females in the United States reported ever having used ECP.[31]

Several developments, however, have formalized recognition within the medical community of ECP as an effective means of preventing pregnancy, including the American College of Obstetricians and Gynecologists issuance of practice guidelines for emergency oral contraception. Barriers to the more frequent use of ECP include a lack of physician awareness of the method, a lack of public awareness of the method's availability, and a lack of access by patients to a physician who will prescribe the method.[32] Increased public awareness, including culturally and linguistically competent education about ECP as well as direct access to and insurance reimbursement for ECP, would contribute significantly toward attainment of this objective.

In February 1997, the Food and Drug Administration (FDA) announced that certain regimens of combined oral contraceptives are safe and effective for ECP when initiated within 72 hours after unprotected intercourse.[33] The FDA notice was intended to encourage manufacturers to make this additional contraceptive option available.[33] One product, an emergency contraceptive kit, has been approved by FDA and is being marketed. On July 28, 1999, FDA approved the first progestin-only emergency contraceptive.

9-6. (Developmental) Increase male involvement in pregnancy prevention and family planning efforts.

Potential data source: National Survey of Family Growth (NSFG), CDC, NCHS.

There is increasing recognition of the value of male involvement in pregnancy prevention and family planning. Several related developments in public health and welfare demonstrate that male involvement is key, including culturally and linguistically appropriate programs promoting condom use and addressing HIV and STD prevention, culturally and linguistically competent services targeting men as part of managed care marketing strategies, emphasis on male responsibility in welfare, child support enforcement, and pregnancy prevention efforts. Concern about the spread of HIV and other STDs and the recognition of condoms as the most effective way of preventing transmission during intercourse have accentuated the need to change the sexual behavior of males. The need for rapid treatment of male partners of females testing positive for bacterial STDs is a critical element in slowing not only STD spread but also that of HIV.

Yet, information about how males could and should participate in pregnancy prevention programs is lacking. For many years, reproductive policy in the United States concentrated almost entirely on females. The National Survey of Adolescent Males (NSAM), begun in 1988 by the Urban Institute and repeated again in 1995, collected the first national trend data on the reproductive behavior of male teens. An Urban Institute survey of publicly funded family planning clinics found that males make up more than 10 percent of the total clientele in only 13 percent of clinics. An average of 6 percent of clients are males. Males represent an even smaller share of clients who receive family planning services subsidized by the Title X program (2 percent in 1991) or by Medicaid (2 percent in 1990).[34] Even though males do not actually get pregnant, integrating them in prevention programs makes sense. Males must be included in any efforts to address unintended pregnancy.[35]

The next National Survey of Family Growth (NSFG) is being expanded to include males, providing an avenue for institutionalizing data collection about male fertility that will be reflected in the Healthy People 2010 objectives. Over the course of Healthy People 2010, male measures for family planning objectives will shift from NSAM to NSFG. NSFG will be able to collect information from males about sexual activity, contraceptive use, pregnancies to which they contribute, and the outcomes of these pregnancies, as well as male perceptions of their and their partners' views on the intendedness of pregnancies and births. NSFG will cover a broader range of male age groups than had been covered under the NSAM, which included only males aged 15 to 19 years.

9-7. Reduce pregnancies among adolescent females.

Target: 43 pregnancies per 1,000.

Baseline: 68 pregnancies per 1,000 females aged 15 to 17 years occurred in 1996.

Target setting method: Better than the best.

Data sources: Abortion Provider Survey, The Alan Guttmacher Institute; National Vital Statistics System (NVSS), CDC, NCHS; National Survey of Family Growth (NSFG), CDC, NCHS; Abortion Surveillance Data, CDC, NCCDPHP.

Note: The table below may continue to the following page.

Females Aged 15 to 17 Years, 1996	Pregnancy Rate per 1,000
TOTAL	68
Race and ethnicity	
American Indian or Alaska Native	DNC
Asian or Pacific Islander	DNC
Asian	DNC
Native Hawaiian and other Pacific Islander	DNC
Black or African American	124
White	58
Hispanic or Latino	105
Not Hispanic or Latino	62
Black or African American	128
White	44

Females Aged 15 to 17 Years, 1996	Pregnancy Rate per 1,000
Family income level	
Poor	DSU
Near poor	DSU
Middle/high income	DSU
Disability status	
Persons with disabilities	DNC
Persons without disabilities	DNC

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.

Note: The table above may have continued from the previous page.

The teenage pregnancy rate in the United States is much higher than in many other developed countries—twice as high as in England and Wales, France, and Canada and nine times as high as in the Netherlands or Japan.[10] Teenage pregnancy remains an intense national issue, within the context of public health and welfare reform, concerning the optimum potential of the Nation's youth and the growth and development of newborns. Most adolescent childbearing occurs outside marriage, a trend that has increased markedly during the past two decades. In 1997, 78 percent of births to adolescent females (under age 20 years) were out of wedlock, compared to 44 percent two decades earlier (1977).[26]

Females under age 15 years experience about 30,000 pregnancies each year.[36] Consensus is widespread that all pregnancies in this age group are inappropriate and that ideally the target number should be zero. Nearly two-thirds of pregnancies in this age group end in induced abortion or fetal loss. Because of the relatively small numbers of events (and small sample sizes for fetal losses) involved, the resulting rates are not as stable as for older females. Almost no discernible decline in pregnancy rates for this age group occurs on an annual basis. Therefore, baseline and target data for pregnancies among adolescents under age 15 years are not included in this objective.[36]

9-8. Increase the proportion of adolescents who have never engaged in sexual intercourse before age 15 years.

Target and baseline:

Objective	Increase in Adolescents Aged 15 to 19 Years Never Engaging in Sexual Intercourse Before Age 15 Years	1995 Baseline	2010 Target
		Percent	
9-8a.	Females	81	88
9-8b.	Males	79	88

Target setting method: Better than the best.

Data sources: Females—National Survey of Family Growth (NSFG), CDC, NCHS; Males—National Survey of Adolescent Males (NSAM), Urban Institute.

Adolescents Aged 15 to 17 Years, 1995	No Intercourse Before Age 15 Years 9-8a. Females	 9-8b. Males
	Percent	
TOTAL	81	79
Race and ethnicity		
American Indian or Alaska Native	DSU	DSU
Asian or Pacific Islander	DSU	DSU
Asian	DSU	DNC
Native Hawaiian and other Pacific Islander	DSU	DNC
Black or African American	70	50
White	83	84
Hispanic or Latino	76	73
Not Hispanic or Latino	81	79
Black or African American	69	51
White	83	86
Family income level		
Poor	DSU	DNC
Near poor	DSU	DNC
Middle/high income	DSU	DNC

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.

9-9. Increase the proportion of adolescents who have never engaged in sexual intercourse.

Target and baseline:

Objective	Increase in Adolescents Aged 15 to 17 Years Never Engaging in Sexual Intercourse	1995 Baseline	2010 Target
		Percent	
9-9a.	Females	62	75
9-9b.	Males	57	75

Target setting method: Better than the best.

Data sources: Females—National Survey of Family Growth (NSFG), CDC, NCHS; Males—National Survey of Adolescent Males (NSAM), Urban Institute.

Adolescents Aged 15 to 17 Years, 1995	Never Engaged in Sexual Intercourse	
	9-9a. Females	9-9b. Males
	Percent	
TOTAL	62	57
Race and ethnicity		
American Indian or Alaska Native	DSU	DSU
Asian or Pacific Islander	DSU	DSU
Asian	DSU	DNC
Native Hawaiian and other Pacific Islander	DSU	DNC
Black or African American	51	24
White	63	64
Hispanic or Latino	49	50
Not Hispanic or Latino	64	57
Black or African American	52	24
White	65	65
Family income level		
Poor	DSU	DNC
Near poor	DSU	DNC
Middle/high income	DSU	DNC

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.

Sexual experience, and particularly age at first intercourse, represents a critical indicator of the risk of pregnancy and STDs. Although all forms of intercourse (vaginal, oral, and anal) involve risk of disease transmission, this chapter focuses on avoiding unintended pregnancy and not on sexual behavior per se. Therefore, the relevant objectives reference heterosexual, vaginal intercourse only. Youth who begin having sex at younger ages are exposed to these risks over a longer period of time. Research has shown that youth who have early sexual experiences are more likely at later ages to have more sexual partners and more frequent intercourse.[37] Adolescents should be encouraged to delay sexual intercourse until they are physically, cognitively, and emotionally ready for mature sexual relationships and their consequences. They should receive education about intimacy; setting limits; resistance to social, media, peer, and partner pressure; the benefits of abstinence from intercourse; and prevention of pregnancy and STDs. Because many adolescents are or will be sexually active, they should receive support and assistance in developing the skills to evaluate their readiness for mature sexual relationships. Culturally and linguistically appropriate materials are needed that can capture the attention and affect the behaviors of these youth.

9-10. Increase the proportion of sexually active, unmarried adolescents aged 15 to 17 years who use contraception that both effectively prevents pregnancy and provides barrier protection against disease.

Target and baseline:

Objective	Increase in Contraceptive Use at First Intercourse by Sexually Active, Unmarried Adolescents Aged 15 to 17 Years	1995 Baseline	2010 Target
		Percent	
	Condom		
9-10a.	Females	67	75
9-10b.	Males	72	83
	Condom plus hormonal method		
9-10c.	Females	7	9
9-10d.	Males	8	11

Target setting method: Better than the best.

Data sources: Females—National Survey of Family Growth (NSFG), CDC, NCHS; Males—National Survey of Adolescent Males (NSAM), Urban Institute.

Note: The table below may continue to the following page.

	Used Condom at First Intercourse		Used Condom Plus Hormonal Method at First Intercourse	
Sexually Active, Unmarried Adolescents Aged 15 to 17 Years, 1995	**9-10a. Females**	**9-10b. Males**	**9-10c. Females**	**9-10d. Males**
	Percent			
TOTAL	62	72	7	8
Race and ethnicity				
American Indian or Alaska Native	DSU	DSU	DSU	DSU
Asian or Pacific Islander	DSU	DSU	DSU	DSU
Asian	DSU	DNC	DSU	DNC
Native Hawaiian and other Pacific Islander	DSU	DNC	DSU	DNC
Black or African American	60	60	9	12

Sexually Active, Unmarried Adolescents Aged 15 to 17 Years, 1995	Used Condom at First Intercourse		Used Condom Plus Hormonal Method at First Intercourse	
	9-10a. Females	9-10b. Males	9-10c. Females	9-10d. Males
	Percent			
White	72	77	6	8
Hispanic or Latino	52	64	DSU	7
Not Hispanic or Latino	71	70	7	7
Black or African American	60	61	9	11
White	75	79	6	8
Family income level				
Poor	DSU	DNC	DSU	DNC
Near poor	DSU	DNC	DSU	DNC
Middle/high income	DSU	DNC	DSU	DNC

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.

Note: The table above may have continued from the previous page.

Target and baseline:

Objective	Increase in Contraceptive Use at Last Intercourse by Sexually Active, Unmarried Adolescents Aged 15 to 17 Years	1995 Baseline	2010 Target
		Percent	
	Condom		
9-10e.	Females	39	49
9-10f.	Males	70	79
	Condom plus hormonal method		
9-10g.	Females	7	11
9-10h.	Males	16	20

Target setting method: Better than the best.

Data sources: Females—National Survey of Family Growth (NSFG), CDC, NCHS; Males—National Survey of Adolescent Males (NSAM), Urban Institute.

	Used Condom at Last Intercourse		Used Condom Plus Hormonal Method at Last Intercourse	
Sexually Active, Unmarried Adolescents Aged 15 to 17 Years, 1995	**9-10e. Females**	**9-10f. Males**	**9-10g. Females**	**9-10h. Males**
	Percent			
TOTAL	39	70	7	16
Race and ethnicity				
American Indian or Alaska Native	DSU	DSU	DSU	DSU
Asian or Pacific Islander	DSU	DSU	DSU	DSU
Asian	DSU	DSU	DSU	DSU
Native Hawaiian and other Pacific Islander	DSU	DSU	DSU	DSU
Black or African American	48	78	10	19
White	38	67	6	15
Hispanic or Latino	26	59	DSU	10
Not Hispanic or Latino	42	65	9	17
Black or African American	47	78	10	18
White	40	69	8	16
Family income level				
Poor	DSU	DNC	DSU	DNC
Near poor	DSU	DNC	DSU	DNC
Middle/high income	DSU	DNC	DSU	DNC

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.

There are two major health consequences of unprotected intercourse among youth—STDs, including HIV infection, and unintended pregnancy. Although abstinence is the most effective way for adolescents to avoid STDs and pregnancy and should be stressed as the certain way to prevent STDs and pregnancy, sexually active teens must be taught to use condoms properly, effectively, and consistently. Teenaged females and males who depend upon hormonal methods of contraception must be educated about the inability of these methods to prevent STDs. (See Focus Area 13. HIV and Focus Area 25. Sexually Transmitted Diseases.) Condom use must be promoted in conjunction with other contraceptive methods.[38]

Public health messages encourage individuals whose behavior places them at risk of exposure to STDs, HIV, and unintended pregnancy to use condoms, as well as effective pregnancy prevention methods, consistently and correctly.[39] Sexual intercourse in the teen years, especially first intercourse, often is unplanned and unprotected by contraception. Condom use at last intercourse has risen substantially and significantly among both male and female teenagers, suggesting more protection from STD transmission. Condom use at first intercourse also has risen—an important indicator of how well teenagers anticipate

and plan for protection at the initiation of sexual activity. Culturally and linguistically appropriate materials are needed that can capture the attention and affect the behaviors of these youth.

While condom use has risen among most teenagers, the use of oral contraceptives has dropped dramatically, suggesting greater vulnerability to unintended pregnancy if other hormonal methods or consistent use of condoms is not practiced. Among currently sexually active females, the use of oral contraceptives at last intercourse fell from 43 percent to 25 percent between 1988 and 1995. The reductions in the use of oral contraception are evident across African American, Hispanic, and white teenagers. Some of the reduction in oral contraceptive use is counteracted by the adoption of new hormonal methods of contraception, such as hormonal implants and injectables. In 1995, 7 percent of sexually active teenaged females overall used these methods at last intercourse. They were used most widely among sexually active African American teenaged females: 16 percent reported using either a hormonal implant or an injectable at last intercourse.[40]

9-11. Increase the proportion of young adults who have received formal instruction before turning age 18 years on reproductive health issues, including all of the following topics: birth control methods, safer sex to prevent HIV, prevention of sexually transmitted diseases, and abstinence.

Target: 90 percent.

Baseline: 64 percent of females aged 18 to 24 years reported having received formal instruction on all of these reproductive health issues before turning age 18 years in 1995. (Data on males will be available in the future.)

Target setting method: Better than the best.

Data source: National Survey of Family Growth (NSFG), CDC, NCHS.

Note: The table below may continue to the following page.

Females Aged 18 to 24 Years, 1995	Received Reproductive Health Instruction Prior to Age 18 Years		
	9-11. Aged 18 to 24 Years	Aged 18 to 19 Years*	Aged 20 to 24 Years*
		Percent	
TOTAL	64	80	57
Race and ethnicity			
American Indian or Alaska Native	DSU	DSU	DSU
Asian or Pacific Islander	DSU	DSU	DSU
Asian	DSU	DSU	DSU
Native Hawaiian and other Pacific Islander	DSU	DSU	DSU

Females Aged 18 to 24 Years, 1995	Received Reproductive Health Instruction Prior to Age 18 Years		
	9-11. Aged 18 to 24 Years	Aged 18 to 19 Years*	Aged 20 to 24 Years*
		Percent	
Black or African American	65	81	59
White	64	81	57
Hispanic or Latino	56	69	51
Not Hispanic or Latino	65	82	58
Black or African American	66	80	60
White	65	83	58
Family income level			
Poor	63	82	56
Near poor	58	76	52
Middle/high income	66	81	60
Sexual orientation	DNC	DNC	DNC

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.
*Data for females aged 18 to 19 years and 20 to 24 years are displayed to further characterize the issue.

Note: The table above may have continued from the previous page.

All adolescents need education that teaches the interpersonal skills they will need to withstand pressure to have sex until they are ready and that includes up-to-date information about methods to prevent pregnancy and STDs. More important, they need to receive this education before they start having sex. Ideally, such education would be developmentally appropriate, include special education students, be culturally and linguistically appropriate, be medically accurate, involve parents, and be linked into a broader context of avoiding risky health behaviors and promoting improved health. Education and knowledge, however, are not enough. Adolescents need strong reinforcement from parents, schools, the media, and other sources about the importance of making conscious, informed, responsible decisions regarding whether to have intercourse; the necessity of consistent, correct condom use to protect themselves and their partners against STDs and HIV; and the use of effective contraception to prevent unintended pregnancy. (See Focus Area 13. HIV and Focus Area 25. Sexually Transmitted Diseases.)

Becoming a sexually healthy adult is a key developmental task of adolescence. Adults can encourage adolescent sexual health by providing accurate information and education about sexuality, fostering responsible decisionmaking skills, offering support and guidance in exploring and affirming personal values, and modeling healthy sexual attitudes and behaviors. Discussions between parents and their children about sexuality and their family value system related to sexual behavior are crucial. Yet, many parents of adolescents aged 10 to 15 years in families today do not talk enough about such important topics as relationships and becoming sexually active.[41]

9-12. Reduce the proportion of married couples whose ability to conceive or maintain a pregnancy is impaired.

Target: 10 percent.

Baseline: 13 percent of married couples with wives aged 15 to 44 years had impaired ability to conceive or maintain a pregnancy in 1995.

Target setting method: 23 percent improvement.

Data source: National Survey of Family Growth (NSFG), CDC, NCHS.

Married Couples With Wives Aged 15 to 44 Years, 1995	Impaired Fecundity Percent
TOTAL	13
Race and ethnicity	
American Indian or Alaska Native	DSU
Asian or Pacific Islander	DSU
Asian	DSU
Native Hawaiian and other Pacific Islander	DSU
Black or African American	14
White	13
Hispanic or Latino	13
Not Hispanic or Latino	13
Black or African American	14
White	13
Family income level (aged 20 to 44 years)	
Poor	15
Near poor	13
Middle/high income	13
Select populations	
Parity status	
Parity 0	25
Parity 1 or more	10

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.

A woman is classified as having impaired fecundity if it is impossible for her (or her husband or cohabiting partner) to have a baby for any reason other than a sterilizing operation, it is difficult or dangerous to carry a baby to term, or she and her partner have not used contraception and have not had a pregnancy for 3 years or longer. Impaired fecundity includes problems carrying pregnancies to term in addition to problems conceiving, whereas infertility includes only problems conceiving. By 1995, there had been a small overall decline in infertility, which was more marked in Hispanic couples.

Although infertility itself does not represent a serious public health threat, it carries significant personal, societal, and economic consequences that call for data surveillance and action. Infertility due to STDs is a preventable condition. Diagnosis and treatment of infertility are very costly, time-consuming, and invasive, and they can place immense stress on marital and family relations. Furthermore, those costs are likely to rise. The trend to delay childbearing (fecundity becomes increasingly impaired with age), the availability of fewer infants for adoption, and the development of new drugs and treatment procedures will mean that more and more couples seek expensive infertility services.

9-13. (Developmental) Increase the proportion of health insurance policies that cover contraceptive supplies and services.

Potential data source: The Alan Guttmacher Institute.

In a 1995 report, the Institute of Medicine concluded that among the reasons for high rates of unintended pregnancy in the United States was lack of contraceptive coverage by private health insurance.[4] The report noted that many privately insured females who need contraceptive care must go out of plan and pay for it themselves, use over-the-counter methods that may be less effective, or not use any method at all. It recommended increasing the proportion of health insurance policies that cover contraceptive services and supplies.

The issue of private insurance coverage for reversible contraceptive methods affects most women and their families. Both newer managed care insurance plans and traditional fee-for-service insurance plans are more likely to pay for general gynecological services than they are to cover contraceptive services or supplies.[42] Many insurance plans do not cover reversible contraceptive methods. A 1993 survey conducted by the Alan Guttmacher Institute found that half of indemnity plans and 7 percent of health maintenance organizations (HMOs) do not cover nonpermanent contraception. The survey also found that plans that do cover contraceptive services and/or supplies are often inconsistent in which methods they cover and have a pronounced bias toward covering permanent surgical methods.[43]

Terminology

Contraception (birth control): The means of pregnancy prevention. Methods include permanent methods (vasectomy for men and tubal ligation for women) and temporary methods (for example, hormonal implant, injectable, birth control pill, emergency contraceptive pills, intrauterine device, diaphragm, female condom, male condom, spermicidal foam/cream/jelly, sponge, cervical cap, abstinence, natural family planning, calendar rhythm, and withdrawal).

Emergency contraceptive pills (ECPs): The use of prescribed doses of birth control pills to prevent pregnancy following unprotected vaginal intercourse. The pills must be taken within 72 hours of having unprotected sex.

Family planning: The process of establishing the preferred number and spacing of one's children, selecting the means to achieve the goals, and effectively using that means.

Federal Title X Family Planning Program: A program created in 1970 as Title X of the Public Health Service Act. The program provides grants for the provision of family planning information and services.

Impaired fecundity: A broad term used to describe problems with pregnancy loss as well as problems conceiving a pregnancy.

Infertility: Failure to conceive a pregnancy after 12 months of unprotected intercourse.

Intended pregnancy: A pregnancy that a woman states was wanted at the time of conception.

Mistimed conception: Those that were wanted by the woman at some time in the future but occurred sooner than they were wanted. For example, a woman became pregnant at age 18 years but actually wanted to have her first child at age 21 years.

Parity: The number of live births a woman has had.

Unintended pregnancy: A general term that includes pregnancies a woman reports as either mistimed or unwanted at the time of conception. If an unintended pregnancy occurs and is carried to term, the birth may be a wanted one, but the pregnancy would be classified as unintended.

Unwanted conception: Those that occurred when the woman did not want any pregnancy then or in the future. For example, a woman wanted only two children but became pregnant with her third.

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Health Communication

11

Lead Agency: Office of Disease Prevention and Health Promotion

Contents

Goal

Use communication strategically to improve health.

Overview

Health communication encompasses the study and use of communication strategies to inform and influence individual and community decisions that enhance health. It links the domains of communication and health and is increasingly recognized as a necessary element of efforts to improve personal and public health.[1, 2, 3] Health communication can contribute to all aspects of disease prevention and health promotion and is relevant in a number of contexts, including (1) health professional-patient relations, (2) individuals' exposure to, search for, and use of health information, (3) individuals' adherence to clinical recommendations and regimens, (4) the construction of public health messages and campaigns, (5) the dissemination of individual and population health risk information, that is, risk communication, (6) images of health in the mass media and the culture at large, (7) the education of consumers about how to gain access to the public health and health care systems, and (8) the development of telehealth applications.[3, 4, 5, 6, 7, 8, 9, 10, 11]

For individuals, effective health communication can help raise awareness of health risks and solutions, and provide the motivation and skills needed to reduce these risks.[1] Health communication also can increase demand for appropriate health services and decrease demand for inappropriate health services. It can make available information to assist in making complex choices, such as selecting health plans, care providers, and treatments.[1] For the community, health communication can be used to influence the public agenda, advocate for policies and programs, promote positive changes in the socioeconomic and physical environments, improve the delivery of public health and health care services, and encourage social norms that benefit health and quality of life.[2]

The practice of health communication has contributed to health promotion and disease prevention in several areas. One is the improvement of interpersonal and group interactions in clinical situations (for example, provider-patient, provider-provider, and among members of a health care team) through the training of health professionals and patients in effective communication skills.[3, 4] Collaborative relationships are enhanced when all parties are capable of good communication.

Increasingly, health improvement activities are taking advantage of digital technologies, such as CD-ROM and the World Wide Web (Web), that can target audiences, tailor messages, and engage people in interactive, ongoing exchanges about health.[4, 11, 12] An emerging area is health communication to support community-centered prevention.[13] Community-centered prevention shifts attention from the individual to group-level change and emphasizes the empowerment of individuals and communities to effect change on multiple levels.

A set of Leading Health Indicators, which focus on key health improvement activities and are described in *Healthy People 2010: Understanding and Improving Health*, all depend to some extent on effective health communication. The promotion of responsible sexual behavior will require a range of information, education, and advocacy efforts, as will the reduction of tobacco use, substance abuse, injuries, and violence. Effective counseling and patient education for behavior change require health care providers and patients to have good communication skills. Public information campaigns are used to promote higher rates of preventive screening (mammogram), higher rates of clinical preventive services (immunization), and greater rates of adoption of risk-reducing behaviors.

Attributes of Effective Health Communication

- **Accuracy**: The content is valid and without errors of fact, interpretation, or judgment.
- **Availability**: The content (whether targeted message or other information) is delivered or placed where the audience can access it. Placement varies according to audience, message complexity, and purpose, ranging from interpersonal and social networks to billboards and mass transit signs to prime-time TV or radio, to public kiosks (print or electronic), to the Internet.
- **Balance**: Where appropriate, the content presents the benefits and risks of potential actions or recognizes different and valid perspectives on the issue.
- **Consistency**: The content remains internally consistent over time and also is consistent with information from other sources (the latter is a problem when other widely available content is not accurate or reliable).
- **Cultural competence**: The design, implementation, and evaluation process that accounts for special issues for select population groups (for example, ethnic, racial, and linguistic) and also educational levels and disability.
- **Evidence base**: Relevant scientific evidence that has undergone comprehensive review and rigorous analysis to formulate practice guidelines, performance measures, review criteria, and technology assessments for telehealth applications.
- **Reach**: The content gets to or is available to the largest possible number of people in the target population.
- **Reliability**: The source of the content is credible, and the content itself is kept up to date.
- **Repetition**: The delivery of/access to the content is continued or repeated over time, both to reinforce the impact with a given audience and to reach generations.
- **Timeliness**: The content is provided or available when the audience is most receptive to, or in need of, the specific information.
- **Understandability**: The reading or language level and format (include multimedia) are appropriate for the specific audience.

Health communication alone, however, cannot change systemic problems related to health, such as poverty, environmental degradation, or lack of access to health care, but comprehensive health communication programs should include a systematic exploration of all the factors that contribute to health and the strategies that could be used to influence these factors. Well-designed health communication activities help individuals better understand their own and their communities' needs so that they can take appropriate actions to maximize health.

Issues and Trends

The environment for communicating about health has changed significantly. These changes include dramatic increases in the number of communication channels and the number of health issues vying for public attention as well as consumer demands for more and better quality health information. The expansion of communication channels and health issues on the public agenda increases competition for people's time and attention; at the same time, people have more opportunities to select information based on their personal interests and preferences. The trend toward commercialization of the Internet suggests that the marketing model of other mass media will be applied to emerging media, which has important consequences for the ability of noncommercial and public health-oriented health communications to stand out in a cluttered health information environment.

Communication occurs in a variety of contexts; through a variety of channels with a variety of messages; and for a variety of reasons. In such an environment, people do not pay attention to all communications they receive but selectively attend to and purposefully seek out information.[8] One of the main challenges in the design of effective health communication programs is to identify the optimal contexts, channels, content, and reasons that will motivate people to pay attention to and use health information.

A one-dimensional approach to health promotion, such as reliance on mass media campaigns or other single-component communication activities, has been shown to be insufficient to achieve program goals. Successful health promotion efforts increasingly rely on multidimensional interventions to reach diverse audiences about complex health concerns, and communication is integrated from the beginning with other components, such as community-based programs, policy changes, and improvements in services and the health delivery system.[10, 14]

Research indicates that effective health promotion and communication initiatives adopt an audience-centered perspective, which means that promotion and communication activities reflect audiences' preferred formats, channels, and contexts.[6] These considerations are particularly relevant for racial and ethnic populations, who may have different languages and sources of information. In these cases, public education campaigns must be conceptualized and developed by individuals with specific knowledge of the cultural characteristics, media habits, and language preferences of intended audiences. Direct translation of health information or health promotion materials should be avoided. Credible channels of communication need to be identified for each major group. Television and radio serving specific racial and ethnic populations can be effective means to deliver health messages when care is taken to account for the language, culture, and socioeconomic situations of intended audiences.

An audience-centered perspective also reflects the realities of people's everyday lives and their current practices, attitudes and beliefs, and lifestyles. Some specific audience characteristics that are relevant include gender, age, education and income levels, ethnicity, sexual orientation, cultural beliefs and values, primary language(s), and physical and mental functioning. Additional considerations include their experience with the health care system, attitudes toward different types of health problems, and willingness to use certain types of health services. Particular attention should be paid to the needs of underserved audience members.

Targeting specific segments of a population and tailoring messages for individual use are two methods to make health promotion activities relevant to audiences.[15] Examples include the targeted use of mass media messages for adolescent girls at increased risk of smoking[16] and a national telephone service for Spanish speakers to obtain AIDS information as well as counseling and referrals.[17]

Interventions that account for the cultural practices and needs of specific populations have shown some success. For example, a breastfeeding promotion program among Navajo women that was based on investigations of their cultural beliefs about infant feeding practices showed increased rates of breastfeeding.[18] Similarly, an intervention that used the novela, a popular form of Latino mass media, to reach young people and their parents sought to improve parent-youth communication in Hispanic families and to influence the adolescents' attitudes about alcohol.[19]

Advances in medical and consumer health informatics are changing the delivery of health information and services and are likely to have a growing impact on individual and community health.[3, 4, 11, 20] The convergence of media (computers, telephones, television, radio, video, print, and audio) and the emergence of the Internet create a nearly ubiquitous networked communication infrastructure. This infrastructure facilitates access to an increasing array of health information and health-related support services and extends the reach of health communication efforts. Delivery channels such as the Internet expand the choices available for health professionals to reach patients and consumers and for patients and consumers to interact with health professionals and with each other (for example, in online support groups).

Compared to traditional mass media, interactive media may have several advantages for health communication efforts. These advantages include (1) improved access to personalized health information, (2) access to health information, support, and services on demand, (3) enhanced ability to distribute materials widely and update content or functions rapidly, (4) just-in-time expert decision support, and (5) more choices for consumers.[4, 20] The health impact of interactivity, customization, and enhanced multimedia is just beginning to be explored, and already interactive health communication technologies are being used to exchange information, facilitate informed decisionmaking, promote healthy behaviors, enhance peer and emotional support, promote self-care, manage demand for health services, and support clinical care.

The trend of rapidly expanding opportunities in health communication intersects with recent demands for more rigorous evaluation of all aspects of the health care and public health delivery systems and for evidence-based practices.[21] Numerous studies of provider-patient communication support the connection among the quality of the provider-patient interaction, patient behavior, and health outcomes.[22] As the knowledge base about provider-patient interactions increases, a need becomes apparent for the development of practice guidelines to promote better provider-patient communication.

Disparities

Often people with the greatest health burdens have the least access to information, communication technologies, health care, and supporting social services. Even the most carefully designed health communication programs will have limited impact if underserved communities lack access to crucial health professionals, services, and communication channels that are part of a health improvement project.

Research indicates that even after targeted health communication interventions, low-education and low-income groups remain less knowledgeable and less likely to change behavior than higher education and income groups, which creates a knowledge gap and leaves some people chronically uninformed.[23] With communication technologies, the disparity in access to electronic information resources is commonly referred to as the "digital divide."[24]

Even with access to information and services, however, disparities may still exist because many people lack health literacy.[25] Health literacy is increasingly vital to help people navigate a complex health system and better manage their own health. Differences in the ability to read and understand materials related to personal health as well as navigate the health system appear to contribute to health disparities.

Opportunities

For health communication to contribute to the improvement of personal and community health during the first decade of the 21st century, stakeholders, including health professionals, researchers, public officials, and the lay public, must collaborate on a range of activities. These activities include (1) initiatives to build a robust health information system that provides equitable access, (2) development of high-quality, audience-appropriate information and support services for specific health problems and health-related decisions for all segments of the population, especially underserved persons, (3) training of health professionals in the science of communication and the use of communication technologies, (4) evaluation of interventions, and (5) promotion of a critical understanding and practice of effective health communication.

As patients and consumers become more knowledgeable about health information, services, and technologies, health professionals will need to meet the challenge of becoming better communicators and users of information technologies. Health professionals need a high level of interpersonal skills to interact with diverse populations and patients who may have different cultural, linguistic, educational, and socioeconomic backgrounds.

REPRODUCTIVE HEALTH–RELATED OBJECTIVES

Health Communication

Goal:

Use communication strategically to improve health.

Number	Objective Short Title
11-3.	Research and evaluation of communication programs
11-6.	Satisfaction with health care providers' communication skills

HEALTHY PEOPLE 2010 OBJECTIVES

11-3. (Developmental) Increase the proportion of health communication activities that include research and evaluation.

Potential data sources: Sponsored survey of *Federal Register* notices; Grantmakers in Health; National Health Council.

Effective health communication programs are built on sound research and evaluation. Meaningful research and evaluation are not afterthoughts but integral parts of initial program design. Research provides the ideas and tools to design and carry out formative process, and outcome evaluations to improve health communication efforts, certify the degree of change that has occurred, and identify programs or elements of programs that are not working.[1, 10] Research and evaluation systematically obtain information that can be used to refine the design, development, implementation, adoption, redesign, and overall quality of a communication intervention.[26, 27]

Programs funded by Federal, philanthropic, and not-for-profit organizations could be strengthened with requirements for a minimum set of evaluation activities and specific measurements. The level of research and evaluation required should reflect the costs, scope, and potential impact (in terms of benefit or harm) of the communication activity proposed. At a minimum, programs should be expected to conduct appropriate audience testing for need, cultural and linguistic competence, comprehension, and receptivity. Requirements and specifications for evaluation could be set for grant-funded communication programs and included in requests for funding proposals and grant program guidelines as well as for programs directly funded and implemented by public or private sector organizations by including research and evaluation activities in their work plans.

11-6. (Developmental) Increase the proportion of persons who report that their health care providers have satisfactory communication skills.

Potential data sources: National Committee for Quality Assurance; Behavioral Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP; National Health Interview Survey (NHIS), CDC, NCHS; industry surveys (FIND/SVP, Nielsen, Jupiter Communications).

Good provider-patient communication contributes to quality care and improved health status. Patients' assessment of their providers' communication skills is important for individuals with a usual source of care as well as for those without, who may have less frequent contact with the medical care system. Studies indicate that patients find communicating with their health care providers difficult[22, 28] and report that providers do not give them enough information, even though they highly value the information and want to know more.[29] Clear, candid, accurate, culturally and linguistically competent provider-patient communication is essential for the prevention, diagnosis, treatment, and management of health concerns.[22, 30]

Effective communication underpins prevention and screening efforts at the clinical level, when providers have the opportunity to engage in one-on-one counseling and supply information that is culturally and linguistically appropriate and delivered at the person's health literacy level. Diagnoses and treatments require doctors to negotiate a common understanding with patients about what is to be done. The quality of provider-patient communication can affect numerous outcomes, including patient adherence to recommendations and health status.[31] Appropriate information and communication with a provider not only can relieve patients' anxieties but also can help patients understand their choices, allow them to participate in informed decisionmaking, and better manage their own health concerns.

Terminology

Accuracy: Content that is valid and without errors of fact, interpretation, or judgment.

Advocacy: Communication directed at policymakers and decisionmakers to promote policies, regulations, and programs to bring about change.

Availability: Content (whether a targeted message or other information) that is delivered or placed where the audience can access it. Placement varies according to audience, message complexity, and purpose—from interpersonal and social networks to billboards, mass transit signs, prime-time TV, and radio and from public kiosks (print or electronic) to the Internet.

Balance: Where appropriate, content that fairly and accurately presents the benefits and risks of potential actions or recognizes different and valid perspectives on an issue.

Consistency: Content that remains internally consistent over time and also is consistent with information from other sources.

Consumer health informatics: Interactive health communication (see below) focusing on consumers.

Consumer health information: Information designed to help individuals understand their health and make health-related decisions for themselves and their families.

Cultural competence: The design, implementation, and evaluation process that accounts for special issues of select population groups (ethnic and racial, linguistic) as well as differing educational levels and physical abilities.

Decision support systems: Computer software programs designed to assist diagnostic and treatment decisions. Examples include drug alert notification systems, prompts to implement practice guidelines, and health risk appraisals.

Evidence base: Relevant scientific evidence that has undergone comprehensive review and rigorous analysis to formulate practice guidelines, performance measures, review criteria, and technology assessments[21] for telehealth applications.[4, 32]

Formative research: Assesses the nature of the problem, the needs of the target audience, and the implementation process to inform and improve program design. Formative research is conducted both prior to and during program development to adapt the program to audience needs. Common methods include literature reviews, reviews of existing programs, and surveys, interviews, and focus group discussions with members of the target audience.

Health communication: The art and technique of informing, influencing, and motivating individual, institutional, and public audiences about important health issues. The scope of health communication includes disease prevention, health promotion, health care policy, and the business of health care as well as enhancement of the quality of life and health of individuals within the community.[33]

Health education: Any planned combination of learning experiences designed to predispose, enable, and reinforce voluntary behavior conducive to health in individuals, groups, or communities.[34]

Health literacy: The degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions.[25] (See also *Literacy.*)

Health promotion: Any planned combination of educational, political, regulatory, and organizational supports for actions and conditions of living conducive to the health of individuals, groups, or communities.

Interactive health communication: The interaction of an individual with an electronic device or communication technology to access or transmit health information or to receive guidance on a health-related issue.[20]

Internet: A worldwide interconnection of computer networks operated by government, commercial, and academic organizations and private citizens.

Literacy: The ability to read, write, and speak in English and to compute and solve problems at levels of proficiency necessary to function on the job and in society, to achieve one's goals, and develop one's knowledge and potential.[35]

Medical informatics: A field of study concerned with the broad range of issues in the management and use of biomedical information, including medical computing and the study of the nature of medical information itself.[36]

Outcome evaluation (sometimes called impact evaluation): Examines the results of a communication intervention, including changes in awareness, attitudes, beliefs, actions, professional practices, policies, costs, and institutional or social systems.

Patient communication: Information for individuals with health conditions to help them maximize recovery, maintain therapeutic regimens, and understand alternative approaches. Patient communication includes educational resources, provider-patient communication, and, increasingly, peer-to-peer communication.

Process evaluation: Monitors the administrative, organizational, or other operational characteristics of an intervention. Process evaluation includes monitoring the dissemination of communication products to intended users (whether gatekeepers or audiences) and audience members' exposure to a message. For an interactive health communication application, process evaluation may include testing how the application functions.

Reach: Information that gets to or is available to the largest possible number of people in the target population.

Reliability: Content that is credible in terms of its source and is kept up to date.

Repetition: Delivery of and access to content continued or repeated over time, both to reinforce the impact with a given audience and to reach new generations.

Risk communication: Engaging communities in discussions about environmental and other health risks and about approaches to deal with them. Risk communication also includes individual counseling about genetic risks and consequent choices.

Social marketing: The application of marketing principles and techniques to program development, implementation, and evaluation to promote healthy behaviors or reduce risky ones.[37, 38]

Tailoring: Creating messages and materials to reach one specific person based on characteristics unique to that person, related to the outcome of interest, and derived from an assessment of that individual.[15]

Targeting: Creating messages and materials intended to reach a specific segment of a population, usually based on one or more demographic or other characteristics shared by its members.[15]

Telehealth: The application of telecommunication and computer technologies to the broad spectrum of public health, medicine, and health.

Telemedicine: The use of electronic information and communication technologies to provide clinical care across distance.[32]

Timeliness: Content that is provided or available when the audience is most receptive to, or in need of, the specific information.

Underserved: Individuals or groups who lack access to health services or information relative to the national average. The underserved population may include residents of rural, remote, or inner-city areas; members of certain racial and ethnic groups; socioeconomically disadvantaged persons; or people with disabilities.

Understandability: Reading or language level and format (including multimedia) appropriate for a specific audience.

World Wide Web (Web): An international virtual network composed of Internet host computers that can be accessed by graphical browsers.

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HIV

13

Co-Lead Agencies: Centers for Disease Control and Prevention
Health Resources and Services Administration

Contents

Goal

Prevent human immunodeficiency virus (HIV) infection and its related illness and death.

Overview

In 1981, a new infectious disease, AIDS, or acquired immunodeficiency syndrome, was identified in the United States.[1] Several years later, the causative agent of AIDS—human immunodeficiency virus (HIV)—was discovered. This discovery coincided with the growing recognition of AIDS in the United States as part of a global infectious disease pandemic.

HIV/AIDS has been reported in virtually every racial and ethnic population, every age group, and every socioeconomic group in every State and most large cities in the United States.[2] The AIDS epidemic is composed of diverse multiple subepidemics that vary by region and community. By the end of 1998, more than 680,000 cases of AIDS had been reported, and nearly 410,800 people had died from HIV disease or AIDS.[2]

Issues

Estimates of the number of people infected with HIV in the United States range from 800,000 to 900,000.[3] The HIV/AIDS subepidemics not only vary by region and community but also may vary by population, risk behavior, and geography. Disparities in the rate of infection among certain racial and ethnic groups, particularly African American and Hispanic populations, remain a challenge.

Since the early 1980s, surveillance studies have identified four distinct populations and issues that have affected the epidemic in these populations:

- Men who have sex with men, facilitated by frequent changes of sex partners in highly infected sexual networks and by high-risk sexual practices.
- Injection drug users, facilitated by the shared use of needles and syringes contaminated with HIV-infected blood.
- Heterosexual persons (principally in certain racial and ethnic populations), facilitated by (1) a high rate of HIV among drug-using populations that resulted in heterosexual transmission to some partners, (2) high rates of other sexually transmitted diseases (STDs) that can increase both susceptibility to and transmissibility of HIV infection, (3) high-risk sexual practices (mainly unprotected sex) associated with certain addictive substances, such as crack cocaine, and (4) sex in exchange for drugs.
- Perinatal transmission among infants, caused by undetected or untreated HIV infection in pregnant females (although the number of perinatally infected infants has declined dramatically since the mid-1990s to a point where elimination of perinatal transmission in the United States may be possible).

The proportion of different population groups affected by HIV/AIDS has changed over time. The response to the epidemic reflects these changes:

- Comparing the 1980s to the 1990s, the proportion of AIDS cases in white men who have sex with men declined, whereas the proportion in females and males in other racial and ethnic populations increased, particularly among African Americans and Hispanics (see Disparities section). AIDS cases also appeared to be increasing among injection drug users and their sexual partners.[4]

- Increases among women have occurred over time. By the mid-1980s, the majority of AIDS cases had been reported among males, with only 7 percent reported among females in 1983.[5] Reported AIDS cases in females have increased steadily since then and accounted for nearly 23 percent of the cases reported in 1998.[6]
- Monitoring and tracking of the current HIV/AIDS epidemic remains a challenge. Even though AIDS may occur much later than infection with HIV, only AIDS cases are currently reported by all State health departments. Because tracking HIV is more accurate for tracking the status of the epidemic and because States are making progress in reporting HIV infection, it is anticipated that key baseline data about HIV will be available by the early 2000s.[3]
- Although a test for HIV was developed and made widely available in the early to mid-1980s, the lack of available treatment until 1995, negative implications of treatment (including concerns about lack of confidentiality), and possible discrimination and stigmatization resulted in barriers to the reporting of HIV infection.

The lifetime costs of health care associated with HIV, in light of recent advances in diagnostics and therapeutics, have grown from $55,000 to $155,000 or more per person.[7] These costs mean that HIV prevention efforts may be even more cost-effective and even cost-saving to society. Prevention efforts include availability of culturally and linguistically appropriate HIV counseling and testing, partner counseling, and referral systems for individuals at high risk for HIV infection; needle and syringe exchange programs; and information, education, treatment and counseling for injection drug users.

The true extent of the epidemic remains difficult to assess for several reasons, including the following:

- Because of the long period of time from initial HIV infection to AIDS and because highly active antiretroviral therapy (HAART) has slowed the progression to AIDS, new cases of AIDS no longer provide accurate information about the current HIV epidemic in the United States.[3]
- Because of a lack of awareness of HIV serostatus as well as delays in accessing counseling, testing, and care services by individuals who may be infected or are at risk of infection, some populations do not perceive themselves to be at risk. As a result, some HIV-infected persons are not identified and provided care until late in the course of their infection.[8]

Trends

Significant changes in the epidemic have occurred over time. Some of these changes are reflected in the following:

- In 1998 women accounted for 20 percent of persons over age 13 years living with AIDS, compared with just under 14 percent in 1992.[2, 9]
- By the end of 1998, the number of African Americans living with AIDS, which increased from 33 percent of the AIDS population in 1992 to 40 percent in 1998, was almost identical to the number of whites living with AIDS.[2]
- Persons living in the South accounted for 34 percent of AIDS cases in 1992 and 39 percent in 1998. Persons living in the Northeast accounted for 28 percent in 1992 and 31 percent in 1998. The proportion living in the West declined from 24 percent to 21 percent.[2, 10]

- By December 1998, approximately 297,136 persons were reported to be living with AIDS, compared with 269,775 in 1997.[2, 11]

Principal health determinants. Increasing the number of people who know their HIV serostatus is an important component of a national program to slow or halt the transmission of HIV in the United States. Behaviors (sexual practices, substance abuse, and accessing prenatal care) and biomedical status (having other STDs) are major determinants of HIV transmission. Unprotected sexual contact, whether homosexual or heterosexual, with a person infected with HIV and sharing drug-injection equipment with an HIV-infected individual account for most HIV transmission in the United States.[12, 13]

For persons infected with HIV, behavioral determinants also play an important role in health maintenance. Although drugs are available specifically to prevent and treat a number of opportunistic infections, HIV-infected individuals also need to make lifestyle-related behavioral changes to avoid many of these infections.

Interventions. Interventions for combating HIV are behavioral as well as biomedical. Behavioral interventions to prevent HIV vary depending on the audience for whom the program is designed, who designed it, and funds available. Effective community-level prevention strategies in the United States have included social marketing interventions to increase condom use and messages about safer sex and needle-sharing that rely on popular opinion leaders and role model stories. Effective small and large group interventions have aimed at increasing safer sex practices for high-risk HIV-infected men and women and have tended to employ cognitive behavioral and skill-building methods.[14]

Several effective individual counseling or education interventions have focused on increasing condom use and other safer sex practices for HIV-infected persons. For example, at the individual level, client-centered HIV counseling and testing appear to be effective in preventing high-risk uninfected persons from becoming infected and in helping HIV-infected persons prevent transmission to uninfected partners. Intervention venues vary and include STD clinic waiting rooms, drug treatment centers, schools, family planning clinics, community agencies, street settings, and community settings where HIV-infected and high-risk uninfected persons congregate.[14]

While HIV testing in STD clinics is an important intervention, detection and treatment of other STDs are also an important biomedical component of an HIV prevention program that should include both behavioral and biomedical interventions. STD prevention programs must address STD concerns and their cofactor role in HIV transmission. Early STD detection and treatment are a biomedical tool for lowering the risk for sexual transmission of HIV infection. Behavioral interventions emphasize reducing the number of sex partners, knowing the serostatus of one's partner, using condoms consistently and correctly, and avoiding risky sexual behaviors.[12, 15, 16]

Disparities

In the United States, African Americans and Hispanics have been affected disproportionately by HIV and AIDS, compared to other racial and ethnic groups. Although 55 percent of the reported AIDS cases occurred among African Americans and Hispanics, these two population groups represent an estimated 13 percent and 12 percent, respectively, of the total U.S. population.[2]

In 1997, AIDS remained the leading cause of death for all African Americans aged 25 to 44 years—the second leading cause among African American females and the leading cause among African American males.[17] Among women with AIDS, African Americans and

Hispanics have been especially affected, accounting for nearly 77 percent of cumulative cases reported among women by 1998. Of the 109,311 AIDS cases in women reported through December 1998, 61,874 cases occurred in African American women and 21,937 occurred in Hispanic women.[2]

Among teenagers aged 13 to 19 years, 3,423 cumulative AIDS cases had been reported through December 1998.[2] In this age group, 31 percent occurred among whites, 48 percent among African Americans, and 20 percent among Hispanics. Overall, males accounted for 61 percent of the AIDS cases in this age group, and females accounted for 39 percent. Among African American teenagers with AIDS, 46 percent were male, and 54 percent were female. Among Hispanic teens, 67 percent of those with AIDS were male, and 33 percent were female. Among white teenagers with AIDS, 79 percent were male, and 21 percent were female.[2]

The disproportionate impact of HIV/AIDS on African Americans and Hispanics underscores the importance of implementing and sustaining effective prevention efforts for these racial and ethnic populations. HIV prevention efforts must take into account not only the multiracial and multicultural nature of society, but also other social and economic factors—such as poverty, underemployment, and poor access to the health care system. These factors affect health status and disproportionately affect African American, Hispanic, Alaska Native, and American Indian populations.

Opportunities

In the 21st century, strategies for reducing HIV transmission will continue to evolve and will require shifts from current efforts.[18] Future strategies should focus on:

- Continuing to address the disproportionate impact of HIV/AIDS among certain racial and ethnic groups.
- Enhancing prevention strategies for populations that are particularly high risk, such as injection drug users, homeless persons, runaway youth, mentally ill persons, and incarcerated persons. Some of these populations are also difficult to reach.
- Increasing the number of people who learn their HIV status in order to detect HIV infection when the potential for transmission is greatest and the need for prevention, care, and treatment, including HAART, is greatest.
- Reaching high-risk seronegative people to help them to stay uninfected.
- Improving access to HAART, thereby reducing deaths and HIV-associated illness and, possibly, infection of others.
- Increasing efforts and opportunities to provide counseling to prevent transmission and reinfection for all HIV-infected individuals who are receiving medical and supportive care.
- Detecting and treating ulcerative and inflammatory STDs, especially in groups at risk for HIV infection.
- Setting the discovery of a safe and effective HIV vaccine as a reachable goal, as a result of ongoing HIV vaccine testing. The development and testing of candidate microbicides may be important in enhancing prevention efforts until a vaccine is available.

Note: Data are from the Centers for Disease Control and Prevention, National Center for Health Statistics, *Healthy People 2000 Review, 1998–99*.

Interim Progress Toward Year 2000 Objectives

Data show progress toward the year 2000 targets for objectives to slow the rise in the rate of new AIDS cases, contain the rate of HIV infection, and increase the proportion of sexually active females whose partners used condoms at last sexual intercourse. The objective to increase the proportion of HIV-positive people who know their serostatus is moving away from its target.

Note: Data are from the Centers for Disease Control and Prevention, National Center for Health Statistics, *Healthy People 2000 Review*, 1998-99.

REPRODUCTIVE HEALTH–RELATED OBJECTIVES

HIV

Goal:

Prevent HIV infection and its related illness and death.

Number	Objective Short Title
13-1.	New AIDS cases
13-5.	New HIV cases
13-6.	Condom use
13-7.	Knowledge of serostatus
13-9.	HIV/AIDS, STD, and TB education in State prisons
13-10.	HIV counseling and testing in State prisons
13-12.	Screening for STDs and immunization for hepatitis B
13-14.	HIV-infection deaths
13-15.	Interval between HIV infection and AIDS diagnosis
13-17.	Perinatally acquired HIV infection

HEALTHY PEOPLE 2010 OBJECTIVES

13-1. Reduce AIDS among adolescents and adults.

Target: 1.0 new case per 100,000 persons.

Baseline: 19.5 cases of AIDS per 100,000 persons aged 13 years and older in 1998. Data are estimated; adjusted for delays in reporting.

Target setting method: Better than the best.

Data source: HIV/AIDS Surveillance System, CDC, NCHSTP.

Persons Aged 13 Years and Older, 1998	New AIDS Cases 13-1. Both Genders	Females*	Males*
	Rate per 100,000		
TOTAL	19.5	8.8	30.8
Race and ethnicity			
American Indian or Alaska Native	9.4	4.5	14.5
Asian or Pacific Islander	4.3	1.2	7.8
Asian	DNC	DNC	DNC
Native Hawaiian and other Pacific Islander	DNC	DNC	DNC
Black or African American	DNC	DNC	DNC
White	DNC	DNC	DNC
Hispanic or Latino	33.0	13.8	52.2
Not Hispanic or Latino	DNC	DNC	DNC
Black or African American	82.9	48.5	122.9
White	8.5	2.2	15.2
Family income level			
Poor	DNC	DNC	DNC
Near poor	DNC	DNC	DNC
Middle/high income	DNC	DNC	DNC
Sexual orientation	DNC	DNC	DNC

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.
*Data for females and males are displayed to further characterize the issue.

Historically, AIDS incidence data have served as the basis for assessing needs for prevention and treatment programs. However, because of the effect of potent antiretroviral therapies, AIDS incidence no longer can provide unbiased information on HIV incidence patterns; it is hoped that AIDS will not develop in the growing number of HIV-infected persons as they benefit from these new therapies. Persons reported with AIDS will increasingly represent persons who were diagnosed too late for them to benefit from treatments, persons who either did not seek or had no access to care, or persons who failed treatment. This objective will be modified to track HIV cases as additional States implement HIV surveillance programs as an extension of their current AIDS case surveillance systems.

13-5. (Developmental) Reduce the number of cases of HIV infection among adolescents and adults.

Potential data source: HIV/AIDS Surveillance System, CDC, NCHSTP.

Recent advances in HIV treatment have slowed the progression of HIV disease for infected persons on treatment and contributed to a decline in AIDS incidence. These advances in treatment have diminished the ability of AIDS surveillance data to represent trends in HIV incidence or to represent the impact of the epidemic on the health care system. Once HIV case surveillance is implemented nationwide by 2001, the Centers for Disease Control and Prevention (CDC) will be able to report baseline data and progress toward the objective of "reducing the annual incidence of HIV infection."

13-6. Increase the proportion of sexually active persons who use condoms.

Target and baseline:

Objective	Increase in Sexually Active Persons Using Condoms	1995 Baseline	2010 Target
		Percent	
13-6a.	Females aged 18 to 44 years	23	50
13-6b.	Males aged 18 to 49 years	Developmental	

Target setting method: Better than the best.

Data source: National Survey of Family Growth (NSFG), CDC, NCHS.

Note: The table below may continue to the following page.

Unmarried Females 18 to 44 years, 1995	13-6a. Reported Condom Use by Partners* Percent
TOTAL	23
Race and ethnicity	
American Indian or Alaska Native	DSU
Asian or Pacific Islander	DSU
Asian	DNC
Native Hawaiian and other Pacific Islander	DNC
Black or African American	22
White	23
Hispanic or Latino	17
Aged 18 to 19 years	16
Aged 20 to 24 years	18
Aged 25 to 29 years	19

Unmarried Females 18 to 44 years, 1995	13-6a. Reported Condom Use by Partners* Percent
Aged 30 to 34 years	22
Aged 35 to 44 years	9
Not Hispanic or Latino	24
Black or African American	22
Aged 18 to 19 years	31
Aged 20 to 24 years	35
Aged 25 to 29 years	23
Aged 30 to 34 years	17
Aged 35 to 44 years	12
White	24
Aged 18 to 19 years	39
Aged 20 to 24 years	29
Aged 25 to 29 years	24
Aged 30 to 34 years	14
Aged 35 to 44 years	18
Family income level	
Poor	16
Near poor	21
Middle/high income	27
Education level (aged 25 to 44 years)	
Less than high school	7
High school	15
At least some college	25
Geographic location	
Urban	24
Rural	18
Sexual Orientation	DNC

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.
*Data for both genders and for males currently are not collected.

Note: The table above may have continued from the previous page.

When used consistently and correctly, latex condoms are highly effective in preventing HIV transmission. Increased use of latex condoms is essential for slowing the spread of HIV infection. Carefully designed studies among heterosexual couples in which one partner is HIV positive and the other is not demonstrate that latex condoms provide a high level of protection against HIV.[8, 12]

Persons in some populations, especially sexually active young persons, may experience problems in obtaining access to condoms because of several factors, including cost, convenience, and embarrassment.[19, 20] The lack of readily accessible condoms may also be a significant barrier to consistent use. To eliminate this barrier, many local communities actively support programs that make condoms available to populations most vulnerable to HIV infection, including sexually active young persons.[19, 20] Research shows that providing access to condoms can increase their use among sexually active young persons.[19, 20] Research also clearly demonstrates that—despite fears to the contrary—young persons who participate in comprehensive HIV prevention programs that include approaches to ensure access to condoms are no more likely to initiate or increase sexual activity than other young persons.[19, 20]

In addition to access, the correct and consistent use of condoms is an issue for many young females, some of whom are having intercourse with older males. Young females often are limited by intimidation or threats of mistrust by their partners if they suggest condom use.[20] Knowledge of effective negotiating skills is another critical element of increased condom use.[20]

13-7. (Developmental) Increase the number of HIV-positive persons who know their serostatus.

Potential data source: HIV/AIDS Surveillance System, CDC, NCHSTP.

Advances in HIV prevention and treatment increase the importance of persons learning their HIV status.[8] Estimates are that approximately 250,000 persons in the United States are unaware they were infected with HIV in 1998.[21] HIV testing provides a critical avenue to reach persons at risk with prevention counseling and services as well as to link infected individuals with needed care and treatment services. Clearly, infected persons should be counseled about ways they can protect their own health and keep from infecting others. New treatments offer infected persons the promise of a longer, healthier life. For HIV-infected pregnant females, therapy is available to reduce the chance of transmitting HIV to their babies. Although the evidence still is not entirely clear, persons who are being treated successfully for HIV may be less likely to transmit the virus. Because the science is evolving, communicating the continuing need for infected persons, even those in treatment, to take steps to protect their partners is essential.[3]

13-9. (Developmental) Increase the number of State prison systems that provide comprehensive HIV/AIDS, sexually transmitted diseases, and tuberculosis (TB) education.

Potential data source: Survey of HIV, STD, and TB Prevention in Correctional Facilities, CDC/National Institute of Justice.

Incarceration provides an environment in which early interventions and risk-reduction behaviors can be taught and reinforced over time. It also represents an opportunity to provide the education, support, and continuity of care needed when incarcerated persons are released and return to their home communities.

13-10. (Developmental) Increase the proportion of inmates in State prison systems who receive voluntary HIV counseling and testing during incarceration.

Potential data source: Survey of HIV, STD, and TB Prevention in Correctional Facilities, CDC and National Institute of Justice.

Although not standardized, State prison systems can provide access to treatment and care for persons infected with HIV. Early access to care reduces both immediate and long-term health care costs for correctional institutions and the community. This objective focuses on State systems because, in accordance with the Federal Bureau of Prisons guidance, all Federal correctional facilities are required to provide HIV testing to all inmates at some time prior to discharge.[23] Continuing this practice is important. It is also important to provide HIV testing to inmates upon intake to allow for sufficient medical care and necessary followup. In addition, discharge planning and formal linkages with community-based HIV care should be offered to all HIV-positive inmates just prior to or upon release.

13-12. (Developmental) Increase the proportion of adults in publicly funded HIV counseling and testing sites who are screened for common bacterial sexually transmitted diseases (STDs) (chlamydia, gonorrhea, and syphilis) and are immunized against hepatitis B virus.

Potential data source: HIV Counseling and Testing Data System (CTS), CDC, NCHSTP.

Data indicate that the presence of other STDs substantially increases the risk of HIV transmission by making it easier both to get and to give HIV infection.[16, 24] Treating other STDs reduces the spread of HIV. STD rates in the United States are high, and STD clinical services are inadequate in the face of a changing HIV epidemic.[25]

STD vaccines can minimize the probability of infection. While vaccines for some STDs are in various stages of development, an effective vaccine for hepatitis B is widely available. Unfortunately, hepatitis B vaccine coverage remains low, especially in high-risk groups. The main reasons are a lack of awareness among health care providers, limited opportunity to reach high-risk youth in traditional health care settings, and limited financial support for widescale implementation of this intervention.[26] Many persons requesting HIV counseling and testing, although not HIV infected, are nonetheless at high risk for acquiring sexually transmitted infections.[27, 26] Offering hepatitis B vaccine at sites screening for common STDs would take advantage of reaching high-risk persons who otherwise may not have access to immunization services.

13-14. Reduce deaths from HIV infection.

Target: 0.7 deaths per 100,000 persons.

Baseline: 4.9 deaths from HIV infection per 100,000 persons in 1998 (age adjusted to the year 2000 population).

Target setting method: Better than the best.

Data source: National Vital Statistics System, CDC, NCHS.

Total Population, 1998	Deaths Due to HIV Infection 13-14. Both Genders	Females*	Males*
	Rate per 100,000		
TOTAL	4.9	2.3	7.7
Race and ethnicity			
American Indian or Alaska Native	2.3	DSU	4.0
Asian or Pacific Islander	0.8	DSU	1.4
Asian	DNC	DNC	DNC
Native Hawaiian and other Pacific Islander	DNC	DNC	DNC
Black or African American	22.1	12.2	34.0
White	2.7	0.8	4.6
Hispanic or Latino	6.7	2.8	10.7
Not Hispanic or Latino	4.7	2.2	7.3
Black or African American	22.8	12.6	35.1
White	2.1	0.5	3.8
Education level (aged 25 to 64 years)			
Less than high school	17.3	10.6	23.4
High school graduate	11.7	5.6	18.3
At least some college	4.3	1.1	7.5

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.
Note: Age adjusted to the year 2000 standard population.
*Data for females and males are displayed to further characterize the issue.

The impact of new combination drug therapies first was reported in 1997 when deaths attributable to HIV infection were down 44 percent from the first 6 months of 1996, compared with the first 6 months of 1997.[3, 4, 28, 29, 30] These surveillance data suggest that not only are new therapies delaying progression from AIDS to death, but, with early diagnosis and treatment, these therapies also are helping to delay the progression from HIV infection to an AIDS diagnosis for many persons.

13-15. (Developmental) Extend the interval of time between an initial diagnosis of HIV infection and AIDS diagnosis in order to increase years of life of an individual infected with HIV.

Potential data source: HIV/AIDS Surveillance System, CDC, NCHSTP.

This objective is meant to identify which populations are not benefiting from current treatment therapies and where to direct resources. HIV-infected persons should be identified at the earliest possible opportunity and referred to appropriate medical, social, and preventive services that may preserve their health, help them avoid opportunistic illnesses, reduce sexual and drug-use behaviors that may spread HIV, and generally extend the quality of their lives. For HIV-infected persons to benefit from treatment advances, HIV counseling and testing programs must facilitate an early diagnosis of HIV infection. All persons should have equal access to appropriate care and treatment services necessary for maintaining a healthy life.

13-17. (Developmental) Reduce new cases of perinatally acquired HIV infection.

Potential data source: HIV/AIDS Surveillance System, CDC, NCHSTP.

Perinatal transmission of HIV accounts for virtually all new HIV infections in children. Through 1993, an estimated 15,000 HIV-infected children were born to HIV-positive women in the United States. As of June 1998, 8,280 AIDS cases had been reported in children under age 13 years in the United States. Perinatally acquired AIDS cases have been reported from 48 States, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands.[2, 31]

The National Institutes of Health sponsored an AIDS clinical trial, ACTG-076, after demonstrating that the risk of perinatal HIV transmission could be reduced by as much as two-thirds with the use of zidovudine therapy. This therapy was given to HIV-positive pregnant females during pregnancy and childbirth and to their newborns for 6 weeks after birth.[32] Additional research confirmed that routine and universal counseling and voluntary testing, combined with zidovudine therapy, are highly effective in preventing HIV.[32] In addition, recently completed and ongoing research suggests that other antiretroviral agents also can reduce significantly maternal-infant HIV transmission. These additional therapeutic options should increase the opportunity to intervene to reduce perinatal HIV transmission. Substantial declines in perinatal AIDS cases have been reported. Estimated new cases of pediatric AIDS declined from 947 in 1992 to 225 in 1998.[2]

Even though these prevention efforts are proving to be effective in reducing perinatal HIV transmission, the continued number of new cases of perinatally acquired HIV infection among infants indicates an ongoing risk of perinatal transmission and underscores the need for strategies to ensure that HIV-infected females have access to and receive adequate prenatal care, timely HIV counseling, and voluntary testing; gain access to HIV-related care and services; receive chemoprophylaxis to reduce perinatal transmission; and avoid breastfeeding. In 1998, the Institute of Medicine (IOM) completed a study to assess the impact of current approaches for reducing perinatal HIV transmission. IOM recommended that the United States adopt a national policy of universal HIV testing, with patient notification, as a routine component of prenatal care.[33] The U.S. Public Health Service currently is revising its guidelines to assure voluntary screening of all pregnant women. This objective will remain developmental until all States extend their surveillance systems to include HIV.

Terminology

AIDS: Acquired immunodeficiency syndrome, the most severe phase of infection with the human immunodeficiency virus (HIV). Persons infected with HIV are said to have AIDS when they get certain opportunistic infections or when their CD4+ cell count drops below 200.

CD4+ cell (also known as T helper cell): A type of T cell found in the blood that is involved in protecting the body against infections. CD4+ cells normally orchestrate the immune response, signaling other cells in the immune system to perform their special disease-fighting functions.

CD4+ cell count: A measure of the number of CD4+ cells present in the blood. Because HIV infection kills CD4+ cells, CD4+ cell count is used to track the progress of HIV infection.

Cost-effective: Indicates that the cost of a particular intervention compares favorably to life-saving interventions associated with other diseases.

Cost-saving: Indicates that a particular intervention averts health care costs in excess of the cost of the intervention.

HAART (highly active antiretroviral therapy): Aggressive anti-HIV treatment usually including a combination of drugs called protease inhibitors and reverse transcriptase inhibitors whose purpose is to reduce viral load infection to undetectable levels.

HIV (human immunodeficiency virus): A virus that infects and takes over certain cells of the immune system that are important in fighting disease.

HIV antiretrovirals: Drugs, such as zidovudine (AZT) and saquinavir, designed to attack HIV and prevent it from multiplying.

Opportunistic infections: Infections that take advantage of the opportunity offered when a person's immune system has been weakened by HIV infection. At least 25 medical conditions, including bacterial, fungal, and viral infections and certain types of cancer, are associated with HIV infection.

Pandemic: An epidemic over a large area or country.

Prevalence: A proportion of persons in a population who are infected, at a specified point in time or over a specified period of time, with HIV.

Prophylactic: Something that guards against or prevents disease.

Prophylaxis: Measures designed to prevent the spread of disease and preserve health; protective or preventive treatment.

Protease: An enzyme that triggers the breakdown of proteins in the body. HIV's protease enzyme breaks apart long strands of viral protein into the separate proteins constituting the viral core and the enzymes it contains. HIV protease acts as new virus particles are budding off a cell membrane.

Protease inhibitor: A drug that binds to and blocks HIV protease from working, thus preventing the production of new functional viral particles.

Serostatus: The result of a blood test for the antibodies that the immune system creates to fight specific diseases.

Seronegative: Indicates that a person's blood lacks antibodies to a specific infectious agent, such as HIV.

Seropositive: Indicates that a person's blood contains antibodies to infections, such as HIV.

Subepidemic: The morbidity that occurs within a proportion of the population infected by the epidemic.

Universal infection control precautions: Guidelines and procedures to protect health care workers from exposure to infection from blood and other body fluids.

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Immunization and Infectious Diseases

14

Lead Agency: Centers for Disease Control and Prevention

Contents

Goal

Prevent disease, disability, and death from infectious diseases, including vaccine-preventable diseases.

Overview

Infectious diseases remain major causes of illness, disability, and death. Moreover, new infectious agents and diseases are being detected, and some diseases considered under control have reemerged in recent years. In addition, antimicrobial resistance is evolving rapidly in a variety of hospital- and community-acquired infections. These trends suggest that many challenges still exist in the prevention and control of infectious diseases.[1]

Issues

Between 1980 and 1992, the number of deaths from infectious diseases rose 58 percent in the United States.[1] Even when human immunodeficiency virus (HIV)-associated diagnoses are removed, deaths from infectious diseases still increased 22 percent during this period. Considered as a group, three infectious diseases—pneumonia, influenza, and HIV infection—constituted the fifth leading cause of death in the United States in 1997.

Infectious diseases also must be considered in a global context. Increases in international travel, importation of foods, inappropriate use of antibiotics on humans and animals, and environmental changes multiply the potential for worldwide epidemics of all types of infectious diseases. International cooperation and collaboration on disease surveillance, response, research, and training are essential to prevent or control these epidemics. Actions taken to improve health in one country affect the health of people worldwide.

Vaccines. Vaccines are biological substances that interact with the person's immune system to produce an immune response identical to that produced by the natural infection.

Vaccines protect more than the vaccinated individual. They also protect society. When vaccination levels in a community are high, the few who cannot be vaccinated—such as young children and persons with contraindications to vaccination—often are indirectly protected because of group immunity (in other words, they live among vaccinated persons who may offer protection from exposure to disease).

Trends

In 1996, a vaccine against hepatitis A virus (HAV) was licensed that has the potential to reduce the health burden of this disease. The vaccine is now recommended primarily for high-risk groups. To decrease HAV transmission, universal vaccination was recommended in 1999 for children who lived in States where the rate of new cases was greater than two times the national average.[2]

Disparities

The updated *Preventing Emerging Infectious Diseases: A Strategy for the 21st Century* focuses on certain emerging infectious disease issues and on particular groups of people at risk.[3] Historically, childhood vaccination rates have been lower in certain racial and ethnic populations, compared to the white population. Vaccination rates for preschool children in racial and ethnic groups with lower vaccination rates, however, have been increasing at a more rapid rate, significantly narrowing the gap.

Opportunities

A coordinated strategy is necessary to understand, detect, control, and prevent infectious diseases. Such a strategy will protect the gains achieved in life expectancy in the 20th century resulting from control and prevention of infectious diseases and ensure further improvements in the 21st century.

Priority issues include antimicrobial resistance, foodborne and waterborne diseases, vector-borne and zoonotic diseases, diseases transmitted through transfusion of blood or blood products, and vaccine development and use. Some of these diseases and pathogens were unknown 20 years ago. Others are reemergent problems once thought under control. At-risk populations include persons with impaired host defenses; pregnant women and newborns; travelers, immigrants, and refugees; older adults; or other persons identified by the Advisory Committee on Immunization Practices (ACIP).

The major strategies to protect people from vaccine preventable diseases (VPDs) are the following:[4]

- Improving the quality and quantity of vaccination delivery services.
- Minimizing financial burdens for needy persons.
- Increasing community participation, education, and partnership.
- Improving monitoring of disease and vaccination coverage.
- Developing new or improved vaccines and improving vaccine use.

In the United States, most VPDs occur among adults. Pneumococcal disease and influenza account for more than 30,000 deaths annually, most of which occur in elderly persons. Studies have consistently shown that focusing efforts to improve coverage on health care providers, as well as health care systems, is the most effective means of raising vaccine coverage in adults. For example, all health care providers should assess routinely the vaccination status of their patients. Likewise, health plans should develop mechanisms for assessing the vaccination status of their participants. Also, nursing home facilities and hospitals should ensure that policies exist to promote vaccination.

Interim Progress Toward Year 2000 Objectives

Substantial progress has been made in reducing hepatitis B virus (HBV) transmission. Data for viral hepatitis indicate that targets for hepatitis B and C were met in the early 1990's.

Note: Data are from Centers for Disease Control and Prevention, National Center for Health Statistics, *Healthy People 2000 Review, 1998-99*.

REPRODUCTIVE HEALTH–RELATED OBJECTIVES

Immunization and Infectious Diseases

Goal:

Prevent disease, disability, and death from infectious diseases, including vaccine-preventable diseases.

Number Objective Short Title

Diseases Preventable Through Universal Vaccination

14-3. Hepatitis B in adults and high-risk groups

Infectious Diseases and Emerging Antimicrobial Resistance

14-9. Hepatitis C

Vaccination Coverage and Strategies

14-28. Hepatitis B vaccination among high-risk groups

HEALTHY PEOPLE 2010 OBJECTIVES

Diseases Preventable Through Universal Vaccination

14-3. Reduce hepatitis B.

Target and baseline:

Objective	Reduction in Hepatitis B	1997 Baseline	2010 Target
		Rate per 100,000 Population	
	Adults		
14-3a.	19 to 24 years	24.0	2.4
14-3b.	25 to 39 years	20.2	5.1
14-3c.	40 years and older	15.0	3.8
	High-risk groups	Number of Cases	
14-3d.	Injection drug users	7,232	1,808
14-3e.	Heterosexually active persons	15,225	1,240
14-3f.	Men who have sex with men	7,232	1,808
14-3g.	Occupationally exposed workers	249	62

Target setting method: Better than the best for 14-3a, 14-3b, and 14-3c; 75 percent improvement for 14-3d, 14-3f, and 14-3g; 92 percent improvement for 14-3e.

Data sources: National Notifiable Disease Surveillance System (NNDSS), CDC, EPO; Sentinel Counties Study of Viral Hepatitis, CDC, NCID.

Select Age Groups, 1997	Hepatitis B Cases 14-3a. Aged 19 to 24 Years	 14.3b. Aged 25 to 39 Years	 14.3c. Aged 40 Years and Older
	Rate per 100,000		
TOTAL	24.0	20.2	15.0
Race and ethnicity			
American Indian or Alaska Native	16.0	20.1	10.9
Asian or Pacific Islander	42.2	30.4	33.2
Asian	DNC	DNC	DNC
Native Hawaiian and other Pacific Islander	DNC	DNC	DNC
Black or African American	48.3	32.5	27.6
White	10.4	10.2	7.4
Hispanic or Latino	16.9	16.0	18.1
Not Hispanic or Latino	25.2	20.7	14.8
Black or African American	50.6	34.1	28.4
White	10.3	10.2	7.1
Gender			
Female	24.1	15.4	9.4
Male	22.5	24.1	20.8
Family income level			
Poor	DNC	DNC	DNC
Near poor	DNC	DNC	DNC
Middle/high income	DNC	DNC	DNC

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.

To reduce HBV transmission in the United States by 2010, vaccination programs must be targeted to adolescents and adults in high-risk groups. The primary means of achieving high levels of vaccination coverage in groups with behavioral risk factors for HBV infection is to identify settings where these individuals can be vaccinated. Such sites include clinics that treat sexually transmitted diseases, correctional facilities (juvenile detention facilities, prisons, jails), drug treatment clinics, and community-based HIV prevention sites. The primary means of achieving high levels of vaccine coverage among household and sex

contacts of the estimated 1.25 million persons in the United States with chronic HBV infection are programs that offer followup for all hepatitis B surface antigen (HbsAg)-positive persons reported to State and local health departments.

Routine infant vaccination eventually will produce a highly immune population sufficient to eliminate HBV transmission in the United States. However, high rates of acute hepatitis B continue to occur, with an estimated 65,000 cases in 1996. Most cases occur in young adult risk groups, including persons with a history of multiple sex partners, men who have sex with men, injection drug users, incarcerated persons, and household and sex contacts of persons with HBV infection. Investigation of reported cases of acute hepatitis B indicates that as many as 70 percent of these individuals previously had been seen in settings such as drug treatment clinics, correctional facilities, or clinics for the treatment of STD, where they could have received vaccine.

Infectious Diseases and Emerging Antimicrobial Resistance

14-9. Reduce hepatitis C.

Target: 1 new case per 100,000 population.

Baseline: 2.4 new cases of hepatitis C per 100,000 population in selected counties were reported in 1996.

Target setting method: Better than the best.

Data source: Sentinel Counties Study of Viral Hepatitis, CDC, NCID.

Note: The table below may continue to the following page.

Total Population, 1996	New Hepatitis C Cases Rate per 100,000
TOTAL	2.4
Race and ethnicity	
American Indian or Alaska Native	DNC
Asian or Pacific Islander	DSU
Asian	DNC
Native Hawaiian and other Pacific Islander	DNC
Black or African American	DSU
White	3.0
Hispanic or Latino	DSU
Not Hispanic or Latino	DSU
Black or African American	DSU
White	DSU

Total Population, 1996	New Hepatitis C Cases Rate per 100,000
Gender	
Female	2.0
Male	2.8
Family income level	
Poor	DNC
Near poor	DNC
Middle/high income	DNC

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.
Note: Data represent rates based on estimates from selected counties.

Note: The table above may have continued from the previous page.

Hepatitis C virus (HCV) is the most common chronic bloodborne viral infection in the United States.[5] This virus is usually transmitted through large or repeated percutaneous exposures to blood—for example, through sharing of equipment between injection drug users. HCV infects persons of all ages, but most new cases are among young adults aged 20 to 39 years. The highest proportion of new cases is among whites, but the highest rates of new cases are among nonwhite racial and ethnic groups.

Vaccination Coverage and Strategies

14-28. Increase hepatitis B vaccine coverage among high-risk groups.

Target and baseline:

Objective	Increase in Hepatitis B Vaccine Coverage in High-Risk Groups	1995 Baseline	2010 Target
		Percent	
14-28a.	Long-term hemodialysis patients	35	90
14-28b.	Men who have sex with men	9	60
14-28c.	Occupationally exposed workers	71	98

Target setting method: 157 percent improvement for long-term hemodialysis patients; 567 percent improvement for men who have sex with men; 38 percent improvement for occupationally exposed workers.

Data sources: Young Men's Survey, CDC, NCHSTP; Annual Survey of Chronic Hemodialysis Centers, CDC, NCID, and HCFA; periodic vaccine coverage surveys, CDC, NCID.

Hepatitis B vaccination has been recommended for persons with risk factors for hepatitis B virus infection since the vaccine was first licensed in 1981. These risk groups include the following: hemodialysis patients, men who have sex with men, incarcerated persons, health care and public safety workers who have exposure to blood in the workplace, persons with a history of sexually transmitted diseases or multiple sex partners, injection drug users, and household and sex contacts of HBV-infected persons. While data currently are not collected for inmates in long-term correctional facilities, it is recommended that prison officials should consider undertaking screening and vaccination programs directed at inmates with histories of high-risk behaviors.

Terminology

Advisory Committee on Immunization Practices (ACIP): Federally chartered advisory committee with the goals of providing advice to the CDC Director on decreasing disease through the use of vaccines and other biological products and on improving the safety of their use.

Emerging infectious diseases: Diseases of infectious origin whose occurrence in humans has increased within the past two decades or threatens to increase in the near future. Recognition of an emerging disease occurs because the disease is present in the population for the first time, the disease has been detected for the first time, or links between an infectious agent and a chronic disease or syndrome have only recently been identified.

Multiple sex partners: More than one partner in the prior 6 months.

National Notifiable Disease Surveillance System (NNDSS): Tracking system that State health departments use to report cases of selected diseases to CDC. (See Reportable disease.)

Reemerging infectious diseases: Reappearance of a known infection after a decline in occurrence. Reemergence of old infectious agents can be the result of lapses in public health measures, changes in human behavior that increase person-to-person transmission of infectious agents, changes in food handling or eating habits, or changes in the way humans interact with their environment.

Reportable disease: A disease for which there are legal requirements for reporting and notification to public health authorities. In the United States, requirements for reporting diseases are mandated by State laws or regulations, and the list of reportable diseases in each State differs.

Vaccines: Biological substances used to stimulate the development of antibodies and thus confer active immunity against a specific disease or number of diseases.

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Injury and Violence Prevention

15

Lead Agency: Centers for Disease Control and Prevention

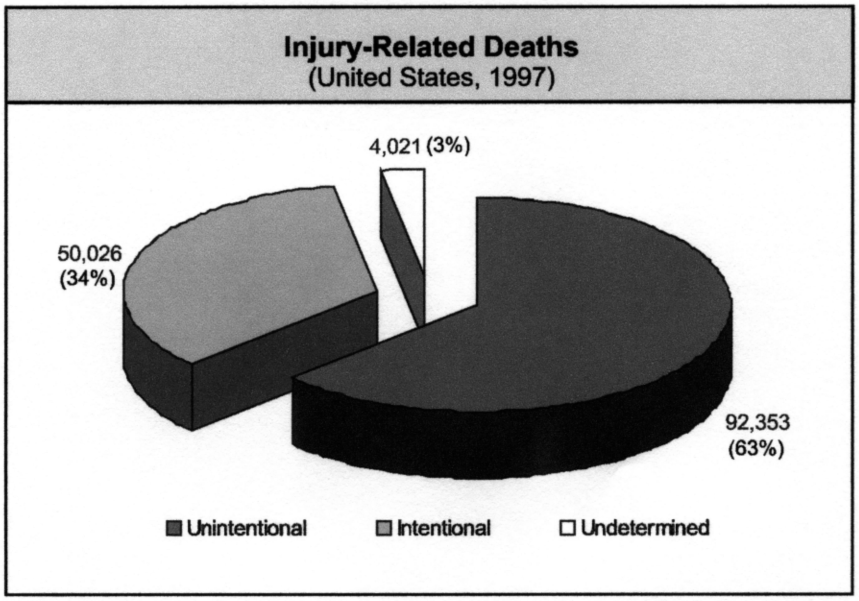
Contents

Goal

Reduce injuries, disabilities, and deaths due to unintentional injuries and violence.

Overview

The risk of injury is so great that most persons sustain a significant injury at some time during their lives.[1] Nevertheless, this widespread human damage too often is taken for granted, in the erroneous belief that injuries happen by chance and are the result of unpreventable "accidents." In fact, many injuries are not "accidents," or random, uncontrollable acts of fate; rather, most injuries are predictable and preventable.[2]



Source: CDC, NCHS. National Vital Statistics System (NVSS), 1997.

Issues and Trends

Violence and Abuse Prevention

Violence in the United States is pervasive and can change quality of life. Reports of children killing children in schools are shocking and cause parents to worry about the safety of their children at school. Reports of gang violence make persons fearful for their safety. Intimate partner violence and sexual assault threaten people in all walks of life.

Violence claims the lives of many of the Nation's young persons and threatens the health and well-being of many persons of all ages in the United States. On an average day in America, 53 persons die from homicide and a minimum of 18,000 persons survive interpersonal assaults, 84 persons complete suicide, and as many as 3,000 persons attempt suicide.[3]

Youth continue to be involved as both perpetrators and victims of violence. The elderly, females, and children continue to be targets of both physical and sexual assaults, which are frequently perpetrated by individuals they know. Examples of general issues that impede the public health response to progress in this area include the lack of comparable data sources, lack of standardized definitions and definitional issues, lack of resources to adequately establish consistent tracking systems, and lack of resources to fund promising prevention programs.

Disparities

Homicide victimization is especially high among African American and Hispanic youths. In 1995, African American males and females aged 15 to 24 years had homicide rates (74.4/100,000) that were more than twice the rate of their Hispanic counterparts (34.1/100,000) and nearly 14 times the rate of their white non-Hispanic counterparts (5.4/100,000).[4]

Opportunities

Poverty, discrimination, lack of education, and lack of employment opportunities are important risk factors for violence and must be addressed as part of any comprehensive solution to the epidemic of violence. Strategies for reducing violence should begin early in life, before violent beliefs and behavioral patterns can be adopted.

Many potentially effective culturally and linguistically competent intervention strategies for violence prevention exist, such as parent training, mentoring, home visitation, and education.[5] Evaluation of ongoing programs is a major component to help identify effective approaches for violence prevention. The public health approach to violence prevention is multidisciplinary, encouraging experts from scientific disciplines, organizations, and communities to work together to find solutions to violence in our Nation.

Interim Progress Toward Year 2000 Objectives

Violence prevention objectives showing progress were firearm-related deaths, partner abuse, rape and attempted rape, physical fighting among adolescents 14 to 17 years of age, and the number of States with firearm storage laws.

Note: Data are from Centers for Disease Control and Prevention, National Center for Health Statistics, *Healthy People 2000 Review, 1998-99*.

REPRODUCTIVE HEALTH–RELATED OBJECTIVES

Injury and Violence Prevention

Goal:

Reduce disabilities, injuries, and deaths due to unintentional injuries and violence.

Number	Objective Short Title
Violence and Abuse Prevention	
15-34.	Physical assault by intimate partners
15-35.	Rape or attempted rape
15-36.	Sexual assault other than rape

HEALTHY PEOPLE 2010 OBJECTIVES

Violence and Abuse Prevention

15-34. Reduce the rate of physical assault by current or former intimate partners.

Target: 3.3 physical assaults per 1,000 persons aged 12 years and older.

Baseline: 4.4 physical assaults per 1,000 persons aged 12 years and older by current or former intimate partners occurred in 1998.

Target setting method: Better than the best.

Data source: National Crime Victimization Survey (NCVS), U.S. Department of Justice, Bureau of Justice Statistics.

Note: The table below may continue to the following page.

Persons Aged 12 Years and Older, 1998	Physical Assault by Current and/or Former Intimate Partners Rate per 1,000
TOTAL	4.4
Race and ethnicity	
American Indian or Alaska Native	DSU

Persons Aged 12 Years and Older, 1998	Physical Assault by Current and/or Former Intimate Partners Rate per 1,000
Asian or Pacific Islander	DSU
Asian	DNC
Native Hawaiian and other Pacific Islander	DSU
Black or African American	5.1
White	4.3
Hispanic or Latino	3.4
Not Hispanic or Latino	4.4
Black or African American	DNA
White	DNA
Gender	
Female	7.2
Male	1.3
Education level	
Less than high school	DNA
High school graduate	DNA
At least some college	DNA
Sexual orientation	DNC

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.

Note: The table above may have continued from the previous page.

15-35. Reduce the annual rate of rape or attempted rape.

Target: 0.7 rapes or attempted rapes per 1,000 persons.

Baseline: 0.8 rapes or attempted rapes per 1,000 persons aged 12 years and older occured in 1998.

Target setting method: Better than the best.

Data source: National Crime Victimization Survey (NCVS), U.S. Department of Justice, Bureau of Justice Statistics.

Persons Aged 12 Years and Older, 1998	Rape or Attempted Rape Rate per 1,000
TOTAL	0.8
Race and ethnicity	
Other (Asian/Pacific Islander and American Indian/Alaska Native)	DNA
Native Hawaiian and other Pacific Islander	DNC
Black or African American	DSU
White	0.8
Hispanic or Latino	DSU
Not Hispanic or Latino	0.8
Black or African American	DSU
White	DSU
Gender	
Female	1.4
Male	DSU
Education level	
Less than high school	DNA
High school graduate	DNA
At least some college	DNA
Sexual orientation	DNC
Select populations	
Age groups	
Adolescents aged 12 to 15 years	DSU
Adolescents aged 16 to 19 years	DSU
Youn adults aged 20 to 24 years	3.4

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.
*New data for population groups will be added when available.

15-36. Reduce sexual assault other than rape.

Target: 0.4 sexual assaults other than rape per 1,000 persons aged 12 years and older.

Baseline: 0.6 sexual assaults other than rape per 1,000 persons aged 12 years and older occurred in 1998.

Target setting method: Better than the best.

Data sources: National Crime Victimization Survey (NCVS), U.S. Department of Justice, Bureau of Justice Statistics.

Persons Aged 12 Years and Older, 1998	Sexual Assault Other Than Rape Rate per 1,000
TOTAL	0.6
Race and ethnicity	
Other (Asian/Pacific Islander and American Indian/Alaska Native)	DSU
Native Hawaiian and other Pacific Islander	DSU
Black or African American	DSU
White	0.5
Hispanic or Latino	DSU
Not Hispanic or Latino	0.7
Black or African American	DNA
White	DNA
Gender	
Female	1.1
Male	DSU
Education level	
Less than high school	DNA
High school graduate	DNA
At least some college	DNA
Sexual orientation	DNC

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.

Both females and males experience family and intimate violence and sexual assault. Perpetrators can be the same or opposite sex. Male victimization of females is more common in intimate partner violence and sexual assault.

In 1995, almost 5,000 females in the United States were murdered. In those cases for which the Federal Bureau of Investigation has data on the relationship between the offender and the victim, 85 percent were killed by someone they knew. Nearly half of the females who knew the perpetrators were murdered by a husband, ex-husband, or boyfriend.[6] In 1994, more than 500,000 females were seen in hospital EDs for violence-related injuries, and 37 percent of those females were there for injuries inflicted by spouses, ex-spouses, or nonmarital partners.[7] Although most assault victims survive, they suffer physically and emotionally.

Estimates of abuse rates during pregnancy also are a concern. A 1996 literature review indicated that estimated proportions of women experiencing intimate partner violence (IPV) during pregnancy ranged between 0.9 percent and 20.1 percent. The proportion of pregnant women who had experienced IPV at any time in the past ranged between 9.7 percent and 29.7 percent.[8]

Males who are physically violent toward their partners are more likely to be sexually violent toward them and are more likely to use violence toward children.[9] The perpetration of IPV is most common in adults who, as children or adolescents, witnessed IPV or became the targets of violence from their caregivers.[9]

Survey data from 1994 indicate that 407,190 females aged 12 years and older were victims of rape, attempted rape, or sexual assault.[10] Other surveys indicate that the problem is underestimated.[11] For example, the National Women's Study, in conjunction with estimates based on the U.S. Census, suggests that 12.1 million females in the United States have been victims of forcible rape sometime in their lives. According to this study, 0.7 percent or approximately 683,000 of adult females experienced a forcible rape in the last year.[12]

Teen dating violence is a concern that may stem from childhood abuse or other experiences with violence. Battering in teen relationships is very different from IPV that occurs between adults. The issue of teen dating violence requires national attention and prevention efforts that need to continue focusing on adolescent violence within the larger context of family violence.

The nature of intimate partner violence and sexual violence makes such problems difficult to study. Consequently, much remains unknown about the factors that increase or decrease the likelihood that males will behave violently toward females, the factors that endanger or protect females from violence, and the physical and emotional consequences of such violence for females and their children.

Terminology

Attempted rape: Includes males and females, heterosexual and homosexual rape, and verbal threats of rape.

Homicide: Fatal injury intentionally caused to one human being by another.

Injury: Unintentional or intentional damage to the body resulting from acute exposure to thermal, mechanical, electrical, or chemical energy or from the absence of such essentials as heat or oxygen.

Intimate partner(s): Refers to spouses, ex-spouses, boyfriends, girlfriends, and former boyfriends and girlfriends (includes same-sex partners). Intimate partners may or may not be cohabitating and need not be engaging in sexual activities.

Intimate partner violence (IPV): Actual or threatened physical or sexual violence or psychological and emotional abuse by an intimate partner.

Premature death: Dying before life expectancy is reached.

Rape: Forced sexual intercourse, including both psychological coercion and physical force. Forced sexual intercourse means vaginal, anal, or oral penetration by the offender(s) and includes incidents of penetration by a foreign object. Also included are attempted rapes, male and female victims, and heterosexual and homosexual rape.

Risk factor: A characteristic that has been demonstrated statistically to be associated with a particular injury.

Sexual assault: A wide range of victimizations separate from rape and attempted rape. Included are attacks or attempted attacks of unwanted sexual contact between the victim and the offender that may or may not involve force; includes grabbing or fondling. Verbal threats also are included.

Unintentional injury: A type of injury that occurs without purposeful intent.

Violence: The intentional use of physical force or power, threatened or actual, against another person or against oneself or against a group of people, that results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopement, or deprivation.

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Maternal, Infant, and Child Health

16

Co-Lead Agencies: Centers for Disease Control and Prevention
Health Resources and Services Administration

Contents

Goal

Improve the health and well-being of women, infants, children, and families.

Overview

The health of mothers, infants, and children is of critical importance, both as a reflection of the current health status of a large segment of the U.S. population and as a predictor of the health of the next generation. This focus area addresses a range of indicators of maternal, infant, and child health—those primarily affecting pregnant and postpartum women (including indicators of maternal illness and death) and those that affect infants' health and survival (including infant mortality rates; birth outcomes; prevention of birth defects; access to preventive care; and fetal, perinatal, and other infant deaths).

Infant mortality is an important measure of a nation's health and a worldwide indicator of health status and social well-being. As of 1995, the U.S. infant mortality rates ranked 25th among industrialized nations.[1] In the past decade, critical measures of increased risk of infant death, such as new cases of low birth weight (LBW) and very low birth weight (VLBW), actually have increased in the United States. In addition, the disparity in infant mortality rates between whites and specific racial and ethnic groups (especially African Americans, American Indians or Alaska Natives, Native Hawaiians, and Puerto Ricans) persists. Although the overall infant mortality rate has reached record low levels, the rate for African Americans remains twice that of whites.[2]

Issues and Trends

In 1997, 28,045 infants died before their first birthday, for an overall rate of 7.2 deaths per 1,000 live births. This rate has declined steadily over the past 20 years; in 1975, the infant mortality rate was over 15 per 1,000 live births.[2] In 1997, two-thirds of all infant deaths took place during the first 28 days of life (the neonatal period). The overall neonatal mortality rate in 1997 was 4.8 per 1,000 live births.[2] The remaining one-third of infant deaths took place during the postneonatal period from an infant's 29th day of life until the first birthday. The U.S. postneonatal mortality rate in 1997 was 2.4 deaths per 1,000 live births.[2]

Four causes account for more than half of all infant deaths: birth defects, disorders relating to short gestation and unspecified LBW, sudden infant death syndrome (SIDS), and respiratory distress syndrome. The leading causes of neonatal death in 1997 were birth defects, disorders related to short gestation and LBW, respiratory distress syndrome, and maternal complications of pregnancy. After the first month of life, SIDS is the leading cause of infant death, accounting for about one-third of all deaths during this period. Maternal age also is a risk factor for infant death. Mortality rates are highest among infants born to young teenagers (aged 16 years and under) and to mothers aged 44 years and older.

Short gestation and LBW are among the leading causes of neonatal death, accounting for 20 percent of neonatal deaths. In 1998, a total of 11.6 percent of births were preterm, and 7.6 percent were LBW.[3] Included in these statistics were VLBW infants weighing less than 1,500 grams (3.3 pounds). The rate of VLBW births was 1.4 percent in 1998. The VLBW rate has increased slightly since 1990 among whites and other population groups including African Americans, Puerto Ricans, and American Indians.[1]

The use of alcohol, tobacco, and illegal substances during pregnancy is a major risk factor for LBW and other poor infant outcomes. Alcohol use is linked to fetal death, LBW, growth abnormalities, mental retardation, and fetal alcohol syndrome (FAS).[4] Overall rates of alcohol use during pregnancy have increased during the 1990s, and the proportion of pregnant women using alcohol at higher and more hazardous levels has increased substantially. Smoking during pregnancy is linked to LBW, preterm delivery, SIDS, and respiratory problems in newborns. In addition to the human cost of these conditions, the economic cost of services to substance-exposed infants is great: health expenditures related to FAS are estimated to be from $75 million to $9.7 billion each year.[4] Over $500 million a year has been spent on medical expenses for infants exposed to cocaine in utero.[5] Smoking-attributable costs of complicated births in 1995 were estimated at $1.4 billion (11 percent of costs for all complicated births, based on smoking prevalence during pregnancy of 19 percent) and $2.0 billion (15 percent for all complicated births, based on smoking prevalence during pregnancy of 27 percent).[6]

The objectives in this focus area cover the broad array of childhood conditions and genetic disorders. Examples of preventable birth defects are spina bifida and other neural tube defects (NTDs). The occurrence of these disorders could be reduced by more than half if women consumed adequate folic acid before and during pregnancy.[7]

In addition to infant deaths and health conditions, the effect of pregnancy and childbirth on women is an important indicator of women's health. In 1997, a total of 327 maternal deaths were reported by vital statistics.[8] While this number is small, maternal death remains significant because a high proportion of these deaths are preventable and because of the impact of women's premature death on families. The maternal mortality ratio among African American women consistently has been three to four times that of white women. Ectopic pregnancy is an important cause of pregnancy-related illness and disability in the United States and the leading cause of maternal death in the first trimester. The risk of ectopic pregnancy increases with age; women of all races aged 35 to 44 years are at more than three times the risk of ectopic pregnancy than are women aged 15 to 24 years.[9]

The rates of many of these indicators have shown improvement over the past decade. The rate of infant mortality declined more than 27 percent between 1987 and 1997. The rate of fetal mortality declined 8 percent between 1987 and 1995.[1] Other indicators show less progress. The LBW rate increased 10 percent between 1987 and 1998.[1] The rate of FAS has risen steeply, especially among African Americans.[10] In addition, the maternal mortality rate has not declined since 1982, nor has the disparity between African American and white women.[2, 11]

Despite these unfavorable trends, evidence is encouraging about increases in women's use of health practices that can help their own health and that of their infants. The percentage of pregnant women who start prenatal care early increased 9.2 percent between 1987 and 1998. The percentage of mothers who breastfeed their newborns also went up 18.5 percent between 1988 and 1998, with greater gains among African American and Hispanic women. Other maternal health practices have shown less improvement: in 1992–94, the proportion of women of childbearing age reporting consumption of the recommended level of folic acid (400 micrograms) was 21 percent.

Disparities

Many of these conditions and risk factors disproportionately affect certain racial and ethnic groups. The disparities between white and nonwhite groups in infant death, maternal death, and LBW are wide and, in many cases, are growing. Specifically:

- The 1997 infant mortality rate among African American infants was 2.3 times that of white infants. Although infant mortality rates have declined within both racial groups, the proportional discrepancy between African Americans and whites remains largely unchanged.[8]

- The rate of maternal mortality among African Americans is 20.3 per 100,000 live births, nearly four times the white rate of 5.1 per 100,000. African American women continue to be three to four times more likely than white women to die of pregnancy and its complications. The maternal death differential between African Americans and whites is highest for pregnancies that did not end in live birth (ectopic pregnancy, spontaneous and induced abortions, and gestational trophoblastic disease).[11]
- Rates of LBW for white women have risen from 5.7 percent of births in 1990 to 6.5 percent in 1998. Among African Americans, the LBW rate has declined slightly in the 1990s but remains twice as high as that of whites—13 percent in 1998. African Americans also are more likely to have other risk factors, such as young maternal age, high birth order (that is, having many live births), less education, and inadequate prenatal care. Puerto Ricans also are especially likely to have LBW infants.[3]
- American Indians or Alaska Natives and African Americans account for a disproportionate share of FAS deaths. In 1990, the rates of FAS among American Indians or Alaska Natives and African Americans were 5.2 and 1.4 per 1,000 live births, respectively, compared with 0.4 per 1,000 among the population as a whole.[10]

African American and Hispanic women also are less likely than whites to enter prenatal care early. For both African American and white women, the proportion entering prenatal care in the first trimester rises with maternal age until the late thirties, then begins to decline. For example, in 1998, 57 percent of African American women under age 18 years began care early, compared with 66 percent of white women of the same age. Among women aged 18 to 24 years, 68 percent of African Americans received care in their first trimester, compared to 76 percent of white women. Among women aged 25 to 39 years, 79 percent of African American women entered care early, compared with 89 percent of white women.[3]

Opportunities

Many of the risk factors mentioned can be mitigated or prevented with good preconception and prenatal care. First, preconception screening and counseling offer an opportunity to identify and mitigate maternal risk factors before pregnancy begins. Examples include daily folic acid consumption (a protective factor) and alcohol use (a risk factor). During preconceptional counseling, healthcare providers also can refer women for medical and psychosocial or support services for any risk factors identified. Counseling needs to be culturally appropriate and linguistically competent. Prenatal visits offer an opportunity to provide information about the adverse effects of substance use, including alcohol and tobacco during pregnancy, and serve as a vehicle for referrals to treatment services. The use of timely, high-quality prenatal care can help to prevent poor birth outcomes and improve maternal health by identifying women who are at particularly high risk and taking steps to mitigate risks, such as the risk of high blood pressure or other maternal complications. Interventions targeted at prevention and cessation of substance use during pregnancy may be helpful in further reducing the rate of preterm delivery and low birth weight.[12, 13, 14] Further promotion of folic acid intake can help to reduce the rate of neural tube defects.[15, 16]

REPRODUCTIVE HEALTH–RELATED OBJECTIVES

Maternal, Infant, and Child Health

Goal:

Improve the health and well-being of women, infants, children, and families.

Number	Objective Short Title
Fetal, Infant, Child, and Adolescent Deaths	
16-3.	Adolescent and young adult deaths
Maternal Deaths and Illnesses	
16-4.	Maternal deaths
16-5.	Maternal illness and complications due to pregnancy
Prenatal Care	
16-6.	Prenatal care
Developmental Disabilities and Neural Tube Defects	
16-16.	Optimum folic acid levels
Prenatal Substance Exposure	
16-17.	Prenatal substance exposure

HEALTHY PEOPLE 2010 OBJECTIVES

Fetal, Infant, Child, and Adolescent Deaths

16-3. Reduce deaths of adolescents and young adults.

Target and baseline:

Objective	Reduction in Deaths of Adolescents and Young Adults	1998 Baseline	2010 Target
		Rate per 100,000	
16-3a.	Adolescents aged 10 to 14 years	22.1	16.8
16-3b.	Adolescents aged 15 to 19 years	70.6	39.8
16-3c.	Young adults aged 20 to 24 years	95.3	49.0

Target setting method: Better than the best.

Data source: National Vital Statistics System (NVSS), CDC, NCHS.

Adolescents and Young Adults, 1998	16.3a. Deaths of Adolescents Aged 10 to 14 Years	16-3b. Deaths of Adolescents Aged 15 to 19 Years	16-3c. Deaths of Young Adults Aged 20 to 24 Years
		Rate per 100,000	
TOTAL	22.1	70.6	95.3
Race and ethnicity			
American Indian or Alaska Native	26.7	90.5	146.1
Asian or Pacific Islander	17.9	39.9	49.1
Asian	DNC	DNC	DNC
Native Hawaiian and other Pacific Islander	DNC	DNC	DNC
Black or African American	29.9	97.2	160.3
White	20.8	66.6	84.9
Hispanic or Latino	19.1	67.6	99.6
Not Hispanic or Latino	22.6	70.7	94.0
Black or African American	31.3	100.8	165.8
White	20.8	65.3	80.2
Gender			
Female	17.2	40.8	46.5
Male	26.9	98.7	142.3
Family income level			
Poor	DNC	DNC	DNC
Near poor	DNC	DNC	DNC
Middle/high income	DNC	DNC	DNC
Disability Status			
Persons with disabilities	DNC	DNC	DNC
Persons without disabilities	DNC	DNC	DNC

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.

The deaths of young adolescents, older adolescents, and young adults are more likely to be due to external causes than to congenital diseases. There were 4,261 deaths among adolescents aged 10 to 14 years in 1998, for a mortality rate of 22.1 per 100,000. The leading cause of death for adolescents in this age group was motor vehicle crashes at 5.4 deaths per 100,000 or 24.3 percent of the total mortality. Other unintentional injuries (such as falls, drownings, and poisonings) caused 3.5 deaths per 100,000 (15.9 percent); homicides caused 1.5 deaths per 100,000 (6.8 percent); suicides caused 1.6 deaths per 100,000 (7.4 percent); and AIDS caused 0.1 deaths per 100,000 (0.6 percent). Fifty-five percent of the total deaths in this age group, therefore, can be attributed to unnecessary (that is, preventable) causes. Other causes of death for this age group that are less amenable to prevention strategies given current scientific knowledge include malignant neoplasms, birth defects, diseases of the heart, and a combination of other causes.[8, 17]

There were 13,788 deaths in 1998 among adolescents aged 15 to 19 years, for a death rate of 70.6 per 100,000. The leading cause of death for adolescents in this age group was motor vehicle crashes at 28.4 deaths per 100,000 or 37.4 percent of total deaths. Other unintentional injuries (such as falls, drownings, and poisonings) caused 7.3 deaths per 100,000 (10.4 percent); homicides caused 11.8 deaths per 100,000 (16.8 percent); suicides caused 8.9 deaths per 100,000 (12.6 percent); and AIDS caused 0.1 deaths per 100,000 (0.2 percent). Consequently, a majority (77 percent) of the total deaths in this age group can be attributed to unnecessary (that is, preventable) causes. The remaining 23 percent of deaths among adolescents aged 15 to 19 years resulted mostly from malignant neoplasms, diseases of the heart, birth defects, and a combination of other causes.

Young adults aged 20 to 24 years had a death rate of 95.3 per 100,000 in 1998—a rate 331 percent higher than adolescents aged 10 to 14 years and 35 percent higher than adolescents aged 15 to 19 years. The leading cause of death for persons aged 20 to 24 years was motor vehicle crashes at 27.5 deaths per 100,000 or 28.9 percent of the total deaths. Other unintentional injuries (such as falls, drownings, and poisonings) caused 10.7 deaths per 100,000 (11.2 percent); homicides caused 18.1 deaths per 100,000 (19 percent); suicides caused 13.6 deaths per 100,000 (14.2 percent); and AIDS caused 1.0 deaths per 100,000 (1.4 percent). Consequently, a majority (74 percent) of the total deaths in this age group can be attributed to unnecessary (that is, preventable) causes. The remaining 26 percent of deaths among young adults aged 20 to 24 years resulted mostly from malignant neoplasms, diseases of the heart, birth defects, and a combination of other causes.

The data on deaths, however, do not adequately reflect consequences of sexual behaviors established as individuals in this age group become sexually mature. Illustratively, it is likely that most of the new HIV infections that are diagnosed each year occur among those between age 13 and 21 years. Further, about 3 million new and sexually transmitted disease infections (STDs) in addition to HIV occur among teenagers each year. In addition, about 1 million teenagers become pregnant each year. (See Focus Area 13. HIV and Focus Area 25. Sexually Transmitted Diseases.)

Maternal Deaths and Illnesses

16-4. Reduce maternal deaths.

Target: 3.3 maternal deaths per 100,000 live births.

Baseline: 7.1 maternal deaths per 100,000 live births occurred in 1998.

Target setting method: Better than the best.

Data source: National Vital Statistics System (NVSS), CDC, NCHS.

Live Births, 1998	Maternal Deaths Rate per 100,000
TOTAL	7.1
Mother's race and ethnicity	
American Indian or Alaska Native	DSU
Asian or Pacific Islander	DSU
Asian	DSU
Native Hawaiian and other Pacific Islander	DSU
Black or African American	17.1
White	5.1
Hispanic or Latino	5.7
Not Hispanic or Latino	7.5
Black or African American	17.4
White	4.9
Mother's education level	
Less than high school	DNA
High school graduate	DNA
At least some college	DNA
Mother's disability status	
Mothers with disabilities	DNC
Mothers without disabilities	DNC
Select populations	
Mother's age groups	
Under 20 years	DSU
20 to 24 years	5.0
25 to 29 years	6.7
30 to 34 years	7.5
35 years and older	14.5

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.

16-5. Reduce maternal illness and complications due to pregnancy.

Target and baseline:

Objective	Reduction in Maternal Illness and Complications	1998 Baseline	2010 Target
		Per 100 Deliveries	
16-5a.	Maternal complications during hospitalized labor and delivery	31.2	24
16-5b.	Ectopic pregnancies	Developmental	
16-5c.	Postpartum complications, including postpartum depression	Developmental	

Target setting method: Better than the best.

Data source: National Hospital Discharge Survey, CDC, NCHS.

Potential data source: National Hospital Discharge Survey (NHDS), CDC, NCHS.

Note: The table below may continue to the following page.

Deliveries, 1998	16-5a. Maternal Complications During Hospitalized Labor and Delivery Rate per 100 Deliveries
TOTAL	31.2
Race and ethnicity	
American Indian or Alaska Native	DSU
Asian or Pacific Islander	DSU
Asian	DNC
Native Hawaiian and other Pacific Islander	DNC
Black or African American	37.7
White	30.3
Hispanic or Latino	DSU
Not Hispanic or Latino	DSU
Black or African American	DSU
White	DSU

Deliveries, 1998	16-5a. Maternal Complications During Hospitalized Labor and Delivery Rate per 100 Deliveries
Family income level	
Poor	DNC
Nearly poor	DNC
Middle/high income	DNC
Select populations	
Mother's age group	
Under 15 years	DSU
15 to 19 years	34.4
20 to 24 years	30.4
25 to 29 years	29.7
30 to 34 years	31.1
35 years and older	32.7

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.

Note: The table above may have continued from the previous page.

In 1997, 327 maternal deaths were reported by vital statistics, the major causes of which were hemorrhage, ectopic pregnancy, pregnancy-induced hypertension, embolism, infection, and other complications of pregnancy and childbirth.[18] The overall maternal mortality rate has fluctuated between approximately 7 and 8 per 100,000 live births since 1982.[19] Moreover, the gap between African Americans and whites remains, with the maternal mortality rate among African Americans 3.6 times that of whites in 1997. The rates among African Americans have been at least three to four times higher than those of whites since 1940. The rate among African Americans also has not declined, fluctuating between about 18 and 22 per 100,000 live births.[19]

Pregnancy and delivery can lead to serious physical and mental health problems for women. In the past, maternal illness and complications were monitored through objectives relating to the ratio of antenatal hospitalizations for pregnancy complications to the total number of deliveries. This ratio has become a less useful measure, however, as rates of antenatal hospitalization in general have declined due to managed care and its emphasis on outpatient treatment.[20] Therefore, attention should be focused on the major causes of maternal illness and complications, particularly those most likely to be associated with maternal death, such as ectopic pregnancy. Pelvic inflammatory disease caused by chlamydia and gonorrhea is the leading cause of preventable tubal scarring that can result in ectopic pregnancy. (See Focus Area 25. Sexually Transmitted Diseases.) The outcomes of interest should include not only prenatal illness and complications and complications during labor and delivery but also postpartum complications. Postpartum depression, for example, is disabling for a new mother and can compromise her ability to care for her infant.

Prenatal Care

16-6. Increase the proportion of pregnant women who receive early and adequate prenatal care.

Target and baseline:

Objective	Increase in Maternal Prenatal Care	1998 Baseline	2010 Target
		Percent of Live Births	
16-6a.	Care beginning in first trimester of pregnancy	83	90
16-6b.	Early and adequate prenatal care	74	90

Target setting method: Better than the best.

Data source: National Vital Statistics System (NVSS), CDC, NCHS.

Note: The table below may continue to the following page.

Live Births, 1998	Maternal Prenatal Care: 16-6a. First Trimester	16-6b. Early and Adequate
	Percent	
TOTAL	83	74
Mother's race and ethnicity		
American Indian or Alaska Native	69	57
Asian or Pacific Islander	83	74
Asian	86	76
Native Hawaiian and other Pacific Islander	75	67
Black or African American	73	67
White	85	76
Hispanic or Latino	74	66
Not Hispanic or Latino	85	76
Black or African American	73	67
White	88	79

Live Births, 1998	Maternal Prenatal Care 16-6a. First Trimester	 16-6b. Early and Adequate
	Percent	
Mother's education level		
Less than high school	68	61
High school graduate	81	74
At least some college	91	82
Mother's disability status		
Mothers with disabilities	DNC	DNC
Mothers without disabilities	DNC	DNC
Select populations		
Mother's age groups		
Under 15 years	48	48
15 to 19 years	69	64
20 to 24 years	78	70
25 to 29 years	86	77
30 to 34 years	89	79
35 years and older	88	79

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.

Note: The table above may have continued from the previous page.

Prenatal care includes three major components: risk assessment, treatment for medical conditions or risk reduction, and education. Each component can contribute to reductions in perinatal illness, disability, and death by identifying and mitigating potential risks and helping women to address behavioral factors, such as smoking and alcohol use, that contribute to poor outcomes. Prenatal care is more likely to be effective if women begin receiving care early in pregnancy. Since 1990, the proportion of infants whose mothers entered prenatal care in the first trimester increased 8.8 percent, from 76 percent to 83 percent. Among African Americans, this proportion grew 19 percent and among Hispanics, 22 percent.[1] Thus, increases in early entry into prenatal care have been concentrated in those populations whose perinatal illness and disability rates and mortality rates are highest and who are most likely to have low incomes. These increases are likely due, in part, to increased access to Medicaid coverage for pregnancy-related services and improved outreach by Medicaid programs.[21] In addition, the likelihood of early entry into prenatal care rises with age. The risk of poor birth outcomes is greatest among the youngest mothers (aged 15 years and under). Clearly, therefore, continued work is needed to educate women, particularly young women, about the need to begin prenatal care early in pregnancy.

Prenatal care should begin early and continue throughout pregnancy, according to accepted standards of periodicity. For example, the American College of Obstetricians and Gynecologists recommends that women receive at least 13 prenatal visits during a full-term pregnancy.[22] Therefore, assessment of the adequacy of the care pregnant women receive must include monitoring not only the month of initiation of prenatal care but also the adequacy of the care they receive throughout pregnancy. The Adequacy of Prenatal Care Utilization Index (APNCU) measures two dimensions of care: the adequacy of initiation of care and the adequacy of the use of prenatal services once care has begun (by comparing actual use to the recommended number of visits based on the month of initiation of care and the length of the pregnancy).[23] These dimensions are combined to classify each woman's prenatal care history as inadequate, intermediate, adequate, or adequate-plus. The baseline rates presented above include all women who received either adequate or adequate-plus care.

Overall, nearly three-quarters of women receive adequate prenatal care. However, this proportion varies across racial and ethnic groups. Certain groups, such as American Indians or Alaska Natives and Samoans, are particularly likely to receive less-than-adequate prenatal care. The likelihood of receipt of adequate prenatal care rises with maternal age, with fewer than half of pregnant women aged 15 years and under receiving adequate care.[17] Prevention of unwanted pregnancy in adolescents and education of women about the need for early, continuous prenatal care are essential.

16-16. Increase the proportion of pregnancies begun with an optimum folic acid level.

Target and baseline:

Objective	Increase in Pregnancies Begun With Optimum Folic Acid Level	1991-94 Baseline	2010 Target
		Percent	
16-16a.	Consumption of at least 400 µg of folic acid each day from fortified food or dietary supplements by nonpregnant women aged 15 to 44 years	21	80
16-16b.	Median RBC folate level among nonpregnant women aged 15 to 44 years	160 ng/ml	220 ng/ml

Target setting method: Better than the best.

Data source: National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.

Nonpregnant Women Aged 15 to 44 Years, 1991-94	16-16a. Adequate Folic Acid Percent	16-16b. Median RBC Folate Level ng/ml
TOTAL	21	160
Race and ethnicity		
American Indian or Alaska Native	DSU	DSU
Asian or Pacific Islander	DSU	DSU
Asian	DNC	DNC
Native Hawaiian and other Pacific Islander	DNC	DNC
Black or African American	17	125
White	22	169
Hispanic or Latino	DSU	DSU
Mexican American	13	158
Not Hispanic or Latino	22	159
Black or African American	18	123
White	23	170
Education level		
Less than high school	12	145
High school graduate	19	148
At least some college	28	179
Disability status		
Persons with disabilities	20	169
Persons without disabilities	23	159

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.

Neural tube defects (NTDs), including spina bifida, occur when the fetal neural tube fails to close fully, interrupting development of the central nervous system. Approximately 50 percent of pregnancies affected with NTDs may be prevented with adequate consumption of folic acid from 1 month before conception through the first 3 months of pregnancy.[15] In 1992, the U.S. Public Health Service (PHS) recommended that all women of childbearing age consume 400 micrograms of folic acid daily.[16] For women who already have had an NTD-affected pregnancy, PHS recommends that women consult with a health care professional about taking a much larger amount of folic acid—4,000 micrograms (4.0 milligrams)—when planning a pregnancy.[16] In 1998, the Institute of Medicine further recommended that to reduce the risk of an NTD-affected pregnancy, all women capable of becoming pregnant should consume 400 micrograms of folic acid daily, from fortified foods or supplements or a combination of the two, in addition to consuming folate-rich foods, such as orange juice, green vegetables, and beans.[24]

Most grain products (including enriched flour, breads, breakfast cereals, rice, and pasta) now are fortified with folic acid. However, the amount of folic acid that some segments of the reproductive-aged population might receive through their diet may not adequately meet the PHS recommendation of 400 micrograms daily. Thus, women capable of becoming pregnant need to review their dietary options, eat a diet that includes folate-rich foods, and target consumption of folic acid-fortified food as well as take a folic acid-containing supplement.

Prenatal Substance Exposure

16-17. Increase abstinence from alcohol, cigarettes, and illicit drugs among pregnant women.

Target and baseline:

Objective	Increase in Reported Abstinence in Past Month From Substances by Pregnant Women*	1996-97 Baseline (unless noted)	2010 Target
		Percent	
16-17a.	Alcohol	86	94
16-17b.	Binge drinking	99	100
16-17c.	Cigarette smoking†	87(1998)	99
16-17d.	Illicit drugs	98	100

*Pregnant women aged 15 to 44 years.

†Smoking during pregnancy for all women giving birth in 1998 in 46 States, the District of Columbia, and New York City.

Target setting method: Better than the best for 16-17a and 16-17c; complete elimination for 16-17b and 16-17d.

Data sources: National Household Survey on Drug Abuse, SAMHSA for 16-17a, 16-17b, and 16-17d; National Vital Statistics System, CDC, NCHS for 16-17c.

Pregnant Women Aged 15 to 44 Years, 1996-97 (unless noted)	**16-17a. Alcohol Abstinence, Past Month**	**16-17b. No Binge Drinking, Past Month**	**16-17c. No Cigarette Smoking During Pregnancy, 1998***	**16-17d. No Drugs, Past Month**
	Percent			
TOTAL	86	99	87	98
Race and ethnicity				
American Indian or Alaska Native	DNA	DNA	80	DNA
Asian or Pacific Islander	DNA	DNA	97	DNA
Asian	DNC	DNC	98	DNC
Native Hawaiian and other Pacific Islander	DNC	DNC	84	DNC
Black or African American	DNA	DNA	91	DNA
White	DNA	DNA	86	DNA
Hispanic or Latino	93	99	96	99
Not Hispanic or Latino	DNA	DNA	86	DNA
Black or African American	83	99	90	95
White	85	99	84	98
Education level (aged 18 to 44 years)				
Less than high school	79	99	78	92
High school graduate	91	99	83	100
At least some college	DNA	98	94	DNA
College graduate	DNA	DNA	DNA	DNA
Disability status				
Persons with disabilities	DNC	DNC	DNC	DNC
Persons without disabilities	DSU	DNC	DNC	DNC

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.
*Smoking during pregnancy for all women giving birth in 1998 in 46 States, the District of Columbia, and New York City.

A range of effects, including spontaneous abortion, LBW, and preterm delivery, have been associated with prenatal use of licit and illicit drugs, including alcohol, tobacco, cocaine, and marijuana.[25, 26, 27, 12, 13, 14] As discussed above, tobacco is associated with LBW and spontaneous abortion.[25] Heavy alcohol use is associated with FAS,[26] and even moderate alcohol use has demonstrated effects on preterm delivery.[27] The use of cocaine during pregnancy is associated with premature birth and impaired fetal growth.[5, 12, 13, 14] In addition, women who use cocaine are at especially high risk of infectious diseases, including hepatitis B and HIV. Exposure to marijuana in utero may be associated with LBW, preterm birth, and neurobehavioral functioning. However, isolating the effects of marijuana use on newborns is difficult because users of the drug often use alcohol and tobacco as well.[25]

Self-reported use of illicit drugs, such as cocaine and marijuana, is quite rare, with 98 percent of pregnant women reporting abstaining from these drugs. Rates of abstinence from harmful substances during pregnancy appear to be declining slowly. The use of alcohol during pregnancy, despite the established health risk, exemplifies this trend. In 1996–97, 86 percent of pregnant women abstained from alcohol use, an increase of 9 percent from the 1988 baseline. Rates of frequent drinking (at least seven drinks per week or at least five drinks on any occasion in the past month) among pregnant women have begun to decline, with only 1.3 percent of pregnant women reporting recent binge drinking in 1996–97, compared to 2.9 percent in 1994–95.[28] Unintentional alcohol exposure is particularly likely to occur early in pregnancy, before a woman knows she is pregnant. In addition to the objectives presented here, objectives in Focus Area 26. Substance Abuse, address alcohol consumption among women of reproductive age and tobacco use by pregnant women.

Terminology

Birth defect: An abnormality in structure, function, or body metabolism that is present at birth, such as cleft lip or palate, phenylketonuria, or sickle cell disease.

Developmental disabilities: A broad spectrum of impairments characterized by developmental delay or limitation or both in personal activity, such as mental retardation, cerebral palsy, epilepsy, hearing and other communication disorders, and vision impairment. The more severe developmental disabilities require special interdisciplinary care.

Ectopic pregnancy: A gestation elsewhere than in the uterus, often occurring in the fallopian tube. An ectopic pregnancy cannot develop normally and causes fainting, abdominal pain, and vaginal bleeding.

Fetal alcohol syndrome (FAS): A cluster of structural and functional abnormalities found in infants and children as a result of alcohol consumption by the mother during pregnancy and characterized by growth retardation, facial malformations, and central nervous system dysfunction.

Fetal death: The death of a fetus in utero after 20 weeks or more of gestation. The fetal death rate is the number of fetal deaths in a population divided by the total number of live births and fetal deaths in the same population during the same time period.

Genetic disorders: The group of health conditions that result primarily from alterations in a gene or combination of genes.

Gestational trophoblastic disease: A type of cancer associated with pregnancy in which a grape-like mole develops in the womb.

Infant death: Death of an infant less than 1 year old. Neonatal death is the death of an infant less than 28 days after birth; postneonatal death is the death of an infant between 28 days and 1 year after birth.

Infant mortality rate: The number of deaths of infants less than 1 year old (obtained from death certificates) per 1,000 live births in a population (obtained from birth certificates).

Intrauterine growth retardation (IUGR): The failure of a fetus to maintain its expected growth potential at any stage of gestation. Infants with IUGR may be born at full term but are smaller than expected.

Live birth: The complete expulsion or extraction from its mother of an infant, irrespective of the duration of pregnancy, which after such separation, breathes or shows any other evidence of life, such as the beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached. Each infant from such a birth is considered live born.

Low birth weight (LBW): Weight at birth of less than 2,500 grams (about 5.5 pounds).

Maternal death: Death of a woman while pregnant or within 42 days of the end of pregnancy, irrespective of the duration or site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes.

Maternal mortality rate: (also referred to as the maternal mortality ratio) Represents the number of maternal deaths for every 100,000 live births.

Neonatal period: The first 28 days of life.

Neural tube defects (NTDs): A set of birth defects that result from failure of the neural tube to close in utero. Two of the most common NTDs are anencephaly (absence of the majority of the brain) and spina bifida (incomplete development of the back and spine).

Occurrence: As the term is used in this chapter, occurrence is the incidence of new cases among live births per year that are caused primarily by prenatal factors. In the spina bifida and other neural tube defects objective, identification is in the first year of life, and occurrence is reported as the number of cases per 10,000 live births per year. In the fetal alcohol syndrome objective, some children who have the condition at birth are not identified until age 4 or 5 years; occurrence is reported as a number per 10,000 live births.

Perinatal death: Includes fetal deaths after 28 weeks of gestation and infant deaths within the first 7 days of birth.

Postneonatal period: The period from an infant's 29th day of life until the first birthday.

Postpartum period: The 6-week period immediately following birth.

Prenatal care: Pregnancy-related health care services provided to a woman between conception and delivery. The American College of Obstetricians and Gynecologists recommends at least 13 prenatal visits in a normal 9-month pregnancy: one each month for the first 28 weeks of pregnancy, one every 2 weeks until 36 weeks, and then weekly until birth.

Preterm birth: Birth occurring before 37 weeks of pregnancy.

Sudden infant death syndrome (SIDS): Sudden, unexplained death of an infant from an unknown cause.

Teratogenic: Causing malformations of an embryo or fetus.

Very low birth weight (VLBW): Weight at birth of less than 1,500 grams (about 3.3 pounds).

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Nutrition and Overweight

19

Co-Lead Agencies: **Food and Drug Administration**
National Institutes of Health

Contents

Goal

Promote health and reduce chronic disease associated with diet and weight.

Overview

Nutrition is essential for growth and development, health, and well-being. Behaviors to promote health should start early in life with breastfeeding[1] and continue through life with the development of healthful eating habits. Nutritional, or dietary, factors contribute substantially to the burden of preventable illnesses and premature deaths in the United States.[2]

The *Dietary Guidelines for Americans* emphasize the need for adequate consumption of iron-rich and calcium-rich foods.[3] Although some progress has been made since the 1970s in reducing the prevalence of iron deficiency among low-income children,[4] much more is needed to improve the health of children of all ages and of women who are pregnant or are of childbearing age. Since the start of this decade, consumption of calcium-rich foods, such as milk products, has generally decreased and is especially low among teenaged girls and young women.[5] Because important sources of calcium also can include other foods with calcium—occurring naturally or through fortification—as well as dietary supplements, the current emphasis is on tracking total calcium intake from all sources, demonstrated by an objective in this focus area. In addition, in recent years there has been a concerted effort to increase the folic acid intake of females of childbearing age through fortification and other means to reduce the risk of neural tube defects.[6, 7]

Disparities

Disparities in health status indicators and risk factors for diet-related disease are evident in many segments of the population based on gender, age, race and ethnicity, and income. Despite concerns about the increase in overweight and certain excesses in U.S. diets, segments of the population suffer from undernutrition, including persons who are socially isolated and poor. With food security and other measures of undernutrition, such as growth retardation and iron deficiency, disparities are evident based not only on income but also on race and ethnicity.

Opportunities

Policymakers and program planners at the national, State, and community levels can and should provide important leadership in fostering healthful diets and physical activity patterns among people in the United States. The family and others, such as health care practitioners, schools, worksites, institutional food services and the media, can play a key role in this process. For example, registered dietitians and other qualified health care practitioners can improve health outcomes through efforts focused on nutrition screening, assessment, and primary and secondary prevention.

Several actions are recognized as fundamental in achieving the 2010 objectives:

- Improving accessibility of nutrition information, nutrition education, nutrition counseling and related services, and healthful foods in a variety of settings and for all population groups.
- Focusing on preventing chronic disease associated with diet and weight, beginning in youth.
- Strengthening the link between nutrition and physical activity in health promotion.

- Maintaining a strong national program for basic and applied nutrition research to provide a sound science base for dietary recommendations and effective interventions.
- Maintaining a strong national nutrition monitoring program to provide accurate, reliable, timely, and comparable data to assess status and progress and to be responsive to unmet data needs and emerging issues.
- Strengthening State and community data systems to be responsive to the data users at these levels.
- Building and sustaining broad-based initiatives and commitment to these objectives by public and private sector partners at the national, State, and local levels.

REPRODUCTIVE HEALTH–RELATED OBJECTIVES

Nutrition and Overweight

Goal:

Promote health and reduce chronic disease associated with diet and weight.

Number	Objective Short Title
Iron Deficiency and Anemia	
19-12.	Iron deficiency in young children and in females of childbearing age
19-13.	Anemia in low-income pregnant females
19-14.	Iron deficiency in pregnant females

HEALTHY PEOPLE 2010 OBJECTIVES

Iron Deficiency and Anemia

19-12. Reduce iron deficiency among young children and females of childbearing age.

Target and baseline:

Objective	Reduction in Iron Deficiency*	1988-94 Baseline	2010 Target
		Percent	
19-12a.	Children aged 1 to 2 years	9	5
19-12b.	Children aged 3 to 4 years	4	1
19-12c.	Nonpregnant females aged 12 to 49 years	11	7

*Iron deficiency is defined as having abnormal results for two or more of the following tests: serum ferritin concentration, erythrocyte protoporphyrin, or transferrin saturation. Refer to *Tracking Healthy People 2010* in this volume for threshold values.

Target setting method: Better than the best.

Data source: National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.

Select Populations, 1988-94 (unless noted)	Iron Deficiency 19-12a. Aged 1 to 2 Years	 19-12b. Aged 3 to 4 Years	 19-12c. Females of Childbearing Age
		Percent	
TOTAL	9	4	11
Race and ethnicity			
American Indian or Alaska Native	DSU	DSU	DSU
Asian or Pacific Islander	DSU	DSU	DSU
Asian	DNC	DNC	DNC
Native Hawaiian and other Pacific Islander	DNC	DNC	DNC
Black or African American	10	2	15
White	8	3	10
Hispanic or Latino	DSU	DSU	DSU
Mexican American	17	6	19
Not Hispanic or Latino	DNA	DNA	DNA
Black or African American	10	2	15
White	6	1	8
Family income level*			
Lower income (less than or equal to 130 percent of poverty threshold)	12	5	16
Higher income (greater than 130 percent of poverty threshold)	7	3	9
Disability status			
Persons with disabilities	DNC	DNC	4 (1991-94)
Persons without disabilities	DNC	DNC	12 (1991-94)

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.
*A household income below 130 percent of poverty threshold is used by the Food Stamp Program.

19-13. Reduce anemia among low-income pregnant females in their third trimester.

Target: 20 percent.

Baseline: 29 percent of low-income pregnant females in their third trimester were anemic (defined as hemoglobin < 11.0 g/dL) in 1996.

Target setting method: Better than the best.

Data source: Pregnancy Nutrition Surveillance System, CDC, NCCDPHP.

Low-Income Pregnant Females, Third Trimester, 1996	Anemia Percent
TOTAL	29
Race and ethnicity	
American Indian or Alaska Native	31
Asian or Pacific Islander	26
Asian	DNC
Native Hawaiian and other Pacific Islander	DNC
Black or African American	DNC
White	DNC
Hispanic or Latino	25
Not Hispanic or Latino	DNA
Black or African American	44
White	24
Disability status	
Females with disabilities	DNC
Females without disabilities	DNC

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.

19-14. (Developmental) Reduce iron deficiency among pregnant females.

Potential data source: National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.

The terms anemia, iron deficiency, and iron deficiency anemia often are used interchangeably, but are not equivalent. Iron deficiency ranges from depleted iron stores without functional or health impairment to iron deficiency with anemia, which affects the functioning of several organ systems. Iron deficiency anemia is more likely than iron deficiency without anemia to cause preterm births, low birth weight, and delays in infant and child development.[8, 9, 10] Iron deficiency (with and without anemia) in adolescent females has been associated with decreased verbal learning and memory.[11]

Anemia can be caused by many factors other than iron deficiency, including other nutrient deficiencies, infection, inflammation, and hereditary anemias. Anemia is used for monitoring risk of iron deficiency at the State and local levels because of the low cost and feasibility of measuring hemoglobin or hematocrit in the clinic setting.[12] Anemia is a good predictor of iron deficiency when the prevalence of iron deficiency is high, such as during the third trimester of pregnancy. It is not a good predictor of iron deficiency when the prevalence of iron deficiency is expected to be low, such as among white, non-Hispanic children aged 3 to 4 years in the United States. In that case, the majority of anemia is due to other causes.[4] However, changes in the prevalence of anemia over time at State and local levels can be used to evaluate the effectiveness of programs to decrease the prevalence of iron deficiency.

Nonpregnant females of childbearing age are at increased risk for iron deficiency because of iron loss during menstruation coupled with inadequate intake of iron.[12] Pregnant females are also at increased risk because of the increased iron requirements of pregnancy.[12, 13] Consequently, a Healthy People 2010 objective has been established to reduce the prevalence of anemia among low-income pregnant females in their third trimester. Although groups other than low-income females are considered at risk for iron deficiency during pregnancy, there are no nationally representative data on the prevalence of iron deficiency or iron deficiency anemia among pregnant females.

National data indicate that only one-fourth of all females of childbearing age (12 to 49 years) meet the U.S. recommended dietary allowance for iron (15 mg) through their diets.[14] Iron deficiency among females of childbearing age may be prevented by periodic anemia screening and appropriate treatment and by counseling them about better eating practices, such as selecting iron-rich foods, taking iron supplements during pregnancy, increasing consumption of foods that enhance iron absorption (for example, orange juice and other citrus products), and discouraging consumption of iron inhibitors (for example, coffee and tea) with iron-rich foods.[12] Some good sources of iron include ready-to-eat cereals with added iron; enriched and whole grain breads; lean meats; turkey dark meat; shellfish; spinach; and cooked dry beans, peas, and lentils.

Terminology

Anemia: A condition in which the hemoglobin in red blood cells falls below normal. Anemia most often results from iron deficiency, but also may result from deficiencies of folic acid, vitamin B12, or copper, or from chronic disease, certain conditions, or chronic blood loss.

***Dietary Guidelines for Americans*:** A report published by the U.S. Department of Agriculture and U.S. Department of Health and Human Services that explains how to eat to maintain health. The guidelines form the basis of national nutrition policy and are revised every 5 years. This chapter refers mostly to the 2000 guidelines.

Food security: Access by all people at all times to enough food for an active, healthy life. It includes at a minimum (1) the ready availability of nutritionally adequate and safe foods, and (2) an assured ability to acquire acceptable foods in socially acceptable ways.

Food insecurity: Limited or uncertain availability of nutritionally adequate and safe foods or limited and uncertain ability to acquire acceptable foods in socially acceptable ways.

Iron deficiency: Lack of adequate iron in the body to support and maintain functioning. It can lead to iron deficiency anemia, a reduction in the concentration of hemoglobin in the red blood cells due to a lack of iron supply to the bone marrow.

Medical nutrition therapy: Use of specific nutrition counseling and interventions, based on an assessment of nutritional status, to manage a condition or treat an illness or injury.

Nutrition: The set of processes by which nutrients and other food components are taken in by the body and used.

Obesity: A condition characterized by excessive body fat.

Osteoporosis: A bone disease characterized by a reduction in bone mass and a deterioration of the bone structure leading to bone fragility.

Overweight: Excess body weight.

Physical activity: Bodily movement that substantially increases energy expenditure.

Registered dietitian: A food and nutrition expert who has met the minimum academic and professional requirements to receive the credential "RD." Many States and Commonwealths also have licensing laws for dietitians and nutrition practitioners.

Sedentary behavior: A pattern of behavior that is relatively inactive, such as a lifestyle characterized by a lot of sitting.

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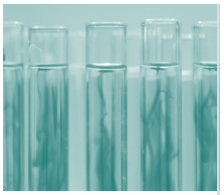
Sexually Transmitted Diseases

25

Lead Agency: Centers for Disease Control and Prevention

Contents



Goal

Promote responsible sexual behaviors, strengthen community capacity, and increase access to quality services to prevent sexually transmitted diseases (STDs) and their complications.

Overview

Sexually transmitted diseases (STDs) refer to the more than 25 infectious organisms transmitted primarily through sexual activity. STDs are among many related factors that affect the broad continuum of reproductive health agreed on in 1994 by 180 governments at the International Conference on Population and Development (ICPD). At ICPD, all governments were challenged to strengthen their STD programs.[1] STD prevention as an essential primary care strategy is integral to improving reproductive health.

Despite the burdens, costs, complications, and preventable nature of STDs, they remain a significant public health problem, largely unrecognized by the public, policymakers, and public health and health care professionals in the United States. STDs cause many harmful, often irreversible, and costly clinical complications, such as reproductive health problems, fetal and perinatal health problems, and cancer. In addition, studies of the worldwide human immunodeficiency virus (HIV) pandemic link other STDs to a causal chain of events in the sexual transmission of HIV infection.[2] (See Focus Area 13. HIV.)

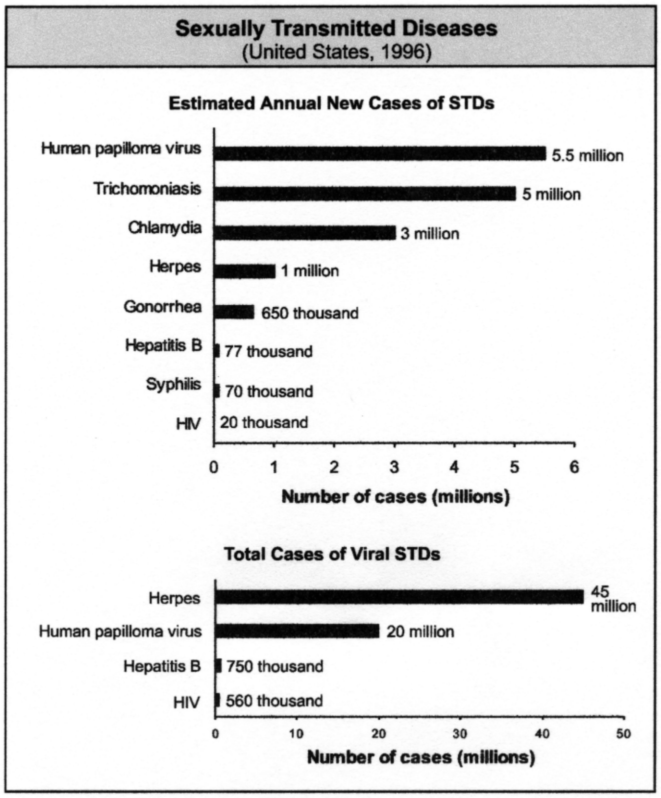
Issues

A 1997 Institute of Medicine (IOM) report characterized STDs as “hidden epidemics of tremendous health and economic consequence in the United States” and stated, “STDs represent a growing threat to the Nation’s health and that national action is urgently needed.”[3] IOM’s principal conclusion was that the United States needs to establish a much more effective national system for STD prevention, which takes into account the complex interaction between biological and social factors that sustain STD transmission in populations; focuses on preventing the disproportionate effect that STDs have on some population groups; applies proven, cost-effective behavioral and biomedical interventions; and recognizes that education, mass communication media, financing, and health care infrastructure policies must foster change in personal behaviors and in health care services.[3]

Biological factors. STDs are behavior-linked diseases that result from unprotected sex.[3] Several biological factors contribute to their rapid spread.

Asymptomatic nature of STDs. The majority of STDs either do not produce any symptoms or signs, or they produce symptoms so mild that they often are disregarded, resulting in a low index of suspicion by infected persons who should, but often do not, seek medical care. For example, as many as 85 percent of women and up to 50 percent of men with chlamydia have no symptoms.[4, 5, 6, 7] A person infected with HIV may be asymptomatic and may transmit the disease to another person. That person may, in turn, be infected for years but remain unaware until symptoms manifest themselves.

Lag time between infection and complications. Often, a long interval—sometimes years—occurs between acquiring a sexually transmitted infection and recognizing a clinically significant health problem. Examples are cervical cancer caused by human papillomavirus (HPV), liver cancer caused by hepatitis B virus infection,[8] and infertility and ectopic pregnancy resulting from unrecognized or undiagnosed chlamydia or gonorrhea.[9] The original infection often is asymptomatic, and, as a result, people frequently do not perceive a connection between the original sexually acquired infection and the resulting health problem.



Source: American Social Health Association. *Sexually Transmitted Diseases in America: How Many Cases and at What Cost?* Menlo Park, CA: Kaiser Family Foundation, 1998.

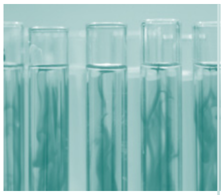
Gender and age. Women are at higher risk than men for most STDs, and young women are more susceptible to certain STDs than are older women. The higher risk is partly because the cervix of adolescent females is covered with cells that are especially susceptible to STDs, such as chlamydia.[10]

Social and behavioral factors. The spread of STDs, especially in certain vulnerable population groups, is directly affected by social and behavioral factors. Social and cultural factors may cause serious obstacles to STD prevention by adversely influencing social norms regarding sex and sexuality.

Poverty and marginalization. STDs disproportionately affect disenfranchised persons and persons who are in social networks in which high-risk sexual behavior is common and either access to care or health-seeking behavior is compromised. Some disproportionately affected groups include sex workers (people who exchange sex for money, drugs, or other goods), adolescents, persons in detention, and migrant workers.[3] Without publicly supported STD services, many people in these categories would lack access to STD care.

Substance abuse, sex work, and STDs are closely connected, and substance abuse and sex work frequently are causes for arrest and detention. Studies show that comprehensive screening of incarcerated populations can be done successfully and safely within the criminal justice system.[11, 12, 13] Discussed below are several connected themes relevant to any discussion of poverty and marginalization issues.

Access to health care. Access to high-quality health care is essential for early detection, treatment, and behavior-change counseling for STDs. Often, groups with the highest rates



of STDs are the same groups in which access to health services is most limited. This limitation relates to (1) lacking access to publicly supported STD clinics (present in only 50 percent of U.S. public health jurisdictions)[14], (2) having no health care coverage, (3) having coverage that imposes a copayment or deductible, or (4) having coverage that excludes the basic preventive health services that help avert STDs or their complications. (See Focus Area 1. Access to Quality Health Services.)

Substance abuse. Many studies document the association of substance abuse, especially the abuse of alcohol and drugs, with STDs.[15] At the population level, the introduction of new illicit substances into communities often can drastically alter sexual behavior in high-risk sexual networks, leading to the epidemic spread of STDs.[16] Behavioral factors that can increase STD transmission in a community include increases in the exchange of sex for drugs, increases in the number of anonymous sex partners, decreases in motivation to use barrier protection, and decreases in attempts to seek medical treatment. The nationwide syphilis epidemic of the late 1980s, for example, was fueled by increased crack cocaine use.[17] Other substances, including alcohol, may affect an individual's cognitive and negotiating skills before and during sex, lowering the likelihood that protection against STD transmission and pregnancy will be used.

Sexual coercion. Analysis of adolescent female sexual activity reveals the frequency of coercive behaviors and brings to light that not all young women enter sexual relationships as willing partners.[18] In fact, sexual coercion is a major problem for significant numbers of young women in the United States. In 1995, 16 percent of females whose first sexual intercourse took place when they were aged 15 years or under reported that it was not voluntary.[19] This aspect of adolescent sexual behavior demands increased national and local attention, both for social justice and for health reasons. Sexual violence against women contributes both directly and indirectly to STD transmission. Directly, women experiencing sexual violence are less able to protect themselves from STDs or pregnancy. Indirectly, research demonstrates that women with a history of involuntary sexual intercourse are more likely to have voluntary intercourse at earlier ages—a known risk factor for STDs—than women who are not sexually abused.[20]

Sexuality and secrecy. Perhaps the most important social factor contributing to the spread of STDs in the United States and the factor that most significantly separates the United States from those industrialized countries with low rates of STDs is the stigma associated with STDs and the general discomfort of people in the United States with discussing intimate aspects of life, especially those related to sex.[21] Sex and sexuality pervade many aspects of the Nation's culture, and people in the United States are fascinated with sexual matters. Paradoxically, while sexuality is considered a normal aspect of human functioning, people in the United States nevertheless are secretive and private about their sexual behavior. Talking openly and comfortably about sex and sexuality is difficult even in the most intimate relationships. One survey showed that, for married couples, about one-fourth of women and one-fifth of men had no knowledge of their partner's sexual history.[22] In its study, IOM stated, "The secrecy surrounding sexuality impedes sexuality education programs for adolescents, open discussion between parents and their children and between sex partners, balanced messages from mass media, education and counseling activities of health care professionals, and community activism regarding STDs."[23]

Changing sexual behaviors and sexual norms will be an important part of any long-term strategy to develop a more effective national system of STD prevention in the United States. A new sexual openness needs to become the norm to ensure that all sexual relationships are consensual, nonexploitive, and honest and to protect against disease and unintended pregnancy. This openness would allow (1) parents to talk frankly and comfortably with their children, and teachers and counselors with their students, about responsible behavior and avoiding risks (for example, abstaining from intercourse, delaying initiation of intercourse, reducing the number of sex partners, and increasing the use of effective barrier contraception), (2) sex partners to talk openly about safe behaviors, and (3) health care providers to talk comfortably and knowledgeably with patients about sexuality and sexual risk, to counsel them about risk avoidance, and to screen them regularly for STDs when indicated.[24] (See Focus Area 11. Health Communication.)

The entertainment industry, particularly television, has noticed interest in sexual themes. While people in the United States are bombarded by sexual messages and images, very little informed, high-quality STD prevention advice or discussion exists regarding contraception, sexuality, or the risks of early, unprotected sexual behavior. Popular television programs depict as many as 25 instances of sexual behaviors for every 1 instance of protected behavior or discussion about STDs or pregnancy prevention.[25] Media companies can play an important part in reshaping sexual behaviors and norms in the United States in the next decade.

Trends

STDs are common, costly, and preventable. Worldwide, an estimated 333 million cases of curable STDs occur annually.[26] In 1995, STDs were the most common reportable diseases in the United States.[27] They accounted for 87 percent of the top 10 infections most frequently reported to the Centers for Disease Control and Prevention (CDC) from State health departments. Of the top 10 infections, 5 were STDs (chlamydia, gonorrhea, AIDS, syphilis, and hepatitis B). Each year an estimated 15 million new STD infections occur in the United States, and nearly 4 million teenagers are infected with an STD.[28] The direct and indirect costs of the major STDs and their complications, including sexually transmitted HIV infection, are conservatively estimated at $17 billion annually.[3]

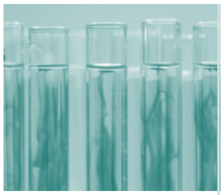
Despite recent progress toward controlling some STDs, when compared to other industrialized nations, the United States has failed to go far enough or fast enough in its national attempt to contain acute STDs and STD-related complications.[3] STD rates in this Nation exceed those in all other countries of the industrialized world (including the countries of western and northern Europe, Canada, Japan, and Australia). Through a sustained, collaborative, multifaceted approach, other countries have reduced significantly the burden of STDs on their citizens, an accomplishment the United States also should strive to achieve.

Disparities

All racial, cultural, economic, and religious groups are affected by STDs. People in all communities and sexual networks are at risk for STDs. Nevertheless, some population groups are disproportionately affected by STDs and their complications.

Gender disparities. Women suffer more frequent and more serious STD complications than men do. Among the most serious STD complications are pelvic inflammatory disease (PID), ectopic pregnancy, infertility, and chronic pelvic pain.[29] Women are biologically more susceptible to infection when exposed to a sexually transmitted agent. Often, STDs are transmitted more easily from a man to a woman.[30] Acute STDs (and even some complications) often are very mild or are completely asymptomatic in women. STDs are more difficult to diagnose in women due to the physiology and anatomy of the female reproductive tract. This combination of increased susceptibility and "silent" infection frequently can result in women being unaware of an STD, which results in delayed diagnosis and treatment.

STDs in pregnant women can cause serious health problems or death to the fetus or newborn.[31] Sexually transmitted organisms in the mother can cross the placenta to the fetus or newborn, resulting in congenital infection, or these organisms can reach the newborn during



delivery, resulting in perinatal infections. Regardless of the route of infection, these organisms can permanently damage the brain, spinal cord, eyes, auditory nerves, or immune system. Even when the organisms do not reach the fetus or newborn directly, they can significantly complicate the pregnancy by causing spontaneous abortion, stillbirth, premature rupture of the membranes, or preterm delivery.[32] For example, women with bacterial vaginosis are 40 percent more likely to deliver a preterm, low birth weight infant than are mothers without this condition.[33, 34] (See Focus Area 16. Maternal, Infant, and Child Health.)

Age disparities. For a variety of behavioral, social, and biological reasons, STDs also disproportionately affect adolescents and young adults.[35] In 1997, females aged 15 to 19 years had the highest reported rates of both chlamydia and gonorrhea among women; males aged 20 to 24 years had the highest reported rates of both chlamydia and gonorrhea among men.[36] The herpes infection rate of white youth aged 12 to 19 years increased nearly fivefold from the period 1976–80 to the period 1988–94.[37] Indeed, because not all teenagers are sexually active, the actual rate of STDs in teens is probably higher than the observed rates suggest.[10] There are several contributing factors:

- Sexually active teenagers are at risk for STDs. In 1995, 50 percent of females aged 15 to 19 years interviewed for the National Survey of Family Growth (NSFG) indicated that they had had sexual intercourse.[19] In the same year, 54 percent of adolescent males in high school reported having had sexual intercourse, including 49 percent of white males, 62 percent of Hispanic males, and 81 percent of African American males.[38]
- Teenagers are increasingly likely to have more sex partners at earlier ages. Compounding this factor is the fact that these partners are active in sexual networks already highly infected with untreated STDs.[36] In 1971, 39 percent of sexually active adolescent females aged 15 to 19 years had more than one sex partner; in 1988 the percentage had increased to 62 percent.[39]
- Sexually active teenagers often are reluctant to obtain STD services, or they may face serious obstacles when trying to obtain them. In addition, health care providers often are uncomfortable discussing sexuality and risk reduction with their patients, thus missing opportunities to counsel and screen young people for STDs.[3]

Racial and ethnic disparities. Certain racial and ethnic groups (mainly African American and Hispanic populations) have high rates of STDs, compared with rates for whites. Race and ethnicity in the United States are risk markers that correlate with other fundamental determinants of health status, such as poverty, limited or no access to quality health care, fewer attempts to get medical treatment, illicit drug use, and living in communities with a high number of cases of STDs. National surveillance data may overrepresent STDs in racial and ethnic groups that are more likely to receive STD services from public-sector STD clinics where timely and complete illness reporting is generally the rule. However, studies using random sampling techniques document higher rates of STDs in marginalized populations, particularly African Americans as compared with whites.[37] Surveillance data from 1997 show:[36]

- Although chlamydia is a widely distributed STD in population groups, it occurs more frequently in certain racial and ethnic groups.
- African Americans (non-Hispanic blacks) accounted for about 77 percent of the total number of reported cases of gonorrhea—31 times the rate in whites (non-Hispanic whites). African American rates were on average about 24 times higher than those of white adolescents aged 15 to 19 years; the rate for African Americans aged 20 to 24 years was almost 28 times greater than that in whites. Gonorrhea rates in Hispanic persons were nearly three times the rate in whites.

- The most recent syphilis epidemic occurred largely in heterosexual minority populations. Since 1990, rates of primary and secondary (P&S) syphilis have declined in all racial and ethnic groups except American Indians or Alaska Natives. However, rates for African Americans and Hispanics continue to be higher than those for whites. In 1997, African Americans accounted for about 82 percent of all reported cases of P&S syphilis.
- In 1997, the rate of congenital syphilis was 113.5 per 100,000 live births in African Americans and 34.6 per 100,000 live births in Hispanics, compared with 3.3 per 100,000 live births in whites.

Finally, young heterosexual women, especially minority women, are increasingly acquiring HIV infection and developing AIDS. In 1998, 41 percent of reported AIDS cases in persons aged 13 to 24 years occurred in young women, and more than four of every five AIDS cases reported in women occurred in certain racial and ethnic groups (mostly African American or Hispanic).[40] The U.S. spread of HIV infection through heterosexual transmission closely parallels other STD epidemics.[2]

Compelling worldwide evidence indicates that the presence of other STDs increases the likelihood of both transmitting and acquiring HIV infection.[2] Prospective epidemiologic studies from four continents, including North America, have repeatedly demonstrated that when other STDs are present, HIV transmission is at least two to five times higher than when other STDs are not present. Biological studies demonstrate that when other STDs are present, an individual's susceptibility to HIV infection is increased, and the likelihood of a dually infected person (having HIV infection and another STD) infecting other people with HIV is increased. Conversely, effective STD treatment can slow the spread of HIV at the individual and community levels.

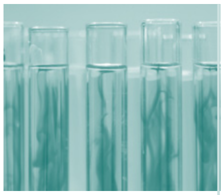
Opportunities

Prevention opportunities arise from an understanding of STD transmission dynamics. The rate of STD infection in a population is determined by the interaction of three principal factors:[41, 42]

- The rate at which uninfected individuals have sex with infected persons (rate of sex partner exchange or exposure).
- The probability that a susceptible exposed person actually will acquire the infection (transmission).
- The time period during which an infected person remains infectious and able to spread disease to others (duration).

Effective STD prevention requires effective population-level and individual-level interventions that can alter the natural course of these factors. IOM advised in its report, "Use of available information and interventions could have a rapid and dramatic impact on the incidence and prevalence of STDs in the United States. Many effective and efficient behavioral and biomedical interventions are available."[3]

Behavioral interventions can be brought to bear on exposure, transmission, and duration factors. They help persons abstain from sexual intercourse, delay initiation of intercourse, reduce the number of sex partners, and increase the use of effective physical barriers, such as condoms, or emerging chemical barriers, such as microbicides. Further attention must be given to helping parents become better at imparting STD information. Currently, a small percentage of adolescents receive STD prevention information from parents.[43] Schools are the main source of STD information for most teenagers,[43] indicating that school-based interventions can play a significant role in informing young people about STD exposure



and transmission issues and in motivating them to modify their behaviors.[43] (See Focus Area 7. Educational and Community-Based Programs.) Both school-based health information and school-based health service programs are potentially beneficial to young persons.[44]

Mass media campaigns have been effective in bringing about significant changes in awareness, attitude, knowledge, and behaviors for other health problems, such as smoking.[45] National communication efforts are needed to help overcome widespread misinformation and lack of awareness about STDs.

Biomedical interventions can affect aspects of transmission and duration factors. Vaccines minimize the probability of infection, disease, or both, after exposure (transmission). While vaccines for some STDs are in various stages of development, the only effective and widely available STD vaccine is for hepatitis B.[46, 47] Unfortunately, hepatitis B vaccine coverage remains minimal, especially in high-risk groups, mainly due to a lack of awareness on the part of health care providers, limited opportunities to reach high-risk youth in traditional health care settings, and limited financial support for wide-scale implementation of this effective intervention. (See Focus Area 14. Immunization and Infectious Diseases.)

Correct and consistent condom use decreases STD transmission.[48] While condom use has been on the rise in the United States over the past few decades,[49] women who use the most effective forms of contraception (sterilization and hormonal contraception) are less likely to use condoms for STD prevention.[50, 51, 52] IOM stated in its report, “Because no single method of preventing STDs or pregnancy confers the maximum level of protection against both conditions, use of dual protection—that is, a condom and another effective contraceptive for pregnancy—is especially important. Not clear, however, is how well the public understands the need for dual protection against STDs and pregnancy.”[3] Dual methods could prevent unwanted pregnancy and STDs.[53] Yet most sexually active young people do not employ this strategy.[54] (See Focus Area 9. Family Planning.)

Identifying and treating partners of persons with curable STDs to break the chain of transmission in a sexual network always have been integral to organized control programs.[55] Early antimicrobial prophylaxis of the exposed partner reduces the likelihood of transmission and thwarts infection. With partner treatment, the initially infected person benefits from a reduced risk of reinfection from an untreated partner, and the partner avoids acute infection and its potential complications. Future sex partners are protected by treating partners; thus, this treatment strategy also benefits the community.

Active partner notification and partner treatment generally have been the responsibility of personnel in public STD clinics. New approaches for getting more partners treated are being assessed both in traditional and nontraditional STD treatment settings. One approach actively involves initially infected patients in the process of referring their partners for evaluation and treatment.[56] Another approach uses new techniques to assess sexual networks in outbreak situations in order to identify infected patients and their partners more quickly.[57] Because most STD care in the United States is delivered in the private sector, private health care providers, managed-care organizations, and health departments need to work together to overcome barriers to rapid and effective treatment of the nonplan sex partners of health plan members.

Screening and treatment of STDs affect both transmission and duration factors. For curable STDs, screening and treatment can be cost-effective, or even cost-saving, in altering the period during which infected persons can infect others. Screening for STDs clearly meets the criteria for an effective preventive intervention.[58] For STDs that frequently are asymptomatic, screening and treatment benefit those who are likely to suffer severe complications (especially women) if infections are not detected and treated early.[59] For example, in a randomized controlled trial conducted in a large managed-care organization, chlamydia screening reduced by 56 percent new cases of subsequent pelvic inflammatory disease in a screened group.[60] Selective screening for chlamydia in the Pacific Northwest reduced the burden of disease in the screened population by 60 percent in 5 years.[61]

When combined with a new generation of sensitive and rapid diagnostic tests, some of which can be performed on a urine specimen, STD screening of specific high-risk populations in nontraditional settings appears to be a promising control strategy that expands access to underserved groups.[62] The success of screening programs will depend on the availability of funds, the willingness of communities and institutions to support them, and the availability of well-trained health care providers and of well-equipped and accessible laboratories.

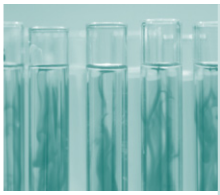
Interim Progress Toward Year 2000 Objectives

Significant progress was made during the 1990s toward reducing the burden of the common bacterial STDs in the United States, such as gonorrhea, syphilis, and congenital syphilis—diseases for which national control programs have existed for the longest period. Encouraging data are emerging from a new and expanding chlamydia prevention program, suggesting that chlamydia screening is reducing disease burden and preventing complications. Nevertheless, STD complications, such as PID, continue to take a heavy toll on women's health and increase health care costs.

Because so many people are already infected, and millions more are infected annually, viral STDs continue to present challenges for prevention and control. One of the most serious health problems associated with STDs is sexually acquired HIV infection that is facilitated by the presence of an inflammatory or ulcerative STD in one or both sex partners. In 1998, females accounted for 23 percent of all AIDS cases in the United States, with African American and Hispanic females incurring a disproportionate share (similar to other STDs) of heterosexually transmitted HIV infection.[40] A nationally representative study showed that genital herpes infection is very common in the United States.[37] Nationwide, 45 million persons aged 12 years and older, or 1 out of 5 of the total adolescent and adult population, are infected with herpes simplex virus type 2. As many as 20 million persons in the United States already are infected with strains of the human papillomavirus, and an estimated 5.5 million new infections occur annually.[28]

Of the 17 STD-related Healthy People 2000 objectives, 10 either met or moved toward their targets. The Nation is making strides in efforts to reduce the occurrence of STDs, educate people about condom use, increase clinic services for HIV and other sexually transmitted diseases, and encourage abstinence from sexual intercourse among adolescents. Routine counseling by clinicians to prevent STDs has slipped away from its target. Two objectives have held steady: adolescents engaging in sexual intercourse and annual first-time consultations about genital herpes and warts. Another four could not be assessed.

Note: Unless otherwise noted, data are from the Centers for Disease Control and Prevention, National Center for Health Statistics, Healthy People 2000 Review, 1998–99.



REPRODUCTIVE HEALTH–RELATED OBJECTIVES

Sexually Transmitted Diseases

Goal:

Promote responsible sexual behaviors, strengthen community capacity, and increase access to quality services to prevent sexually transmitted diseases (STDs) and their complications.

Number	Objective Short Title
Bacterial STD Illness and Disability	
25-1.	Chlamydia
25-2.	Gonorrhea
25-3.	Primary and secondary syphilis
Viral STD Illness and Disability	
25-4.	Genital herpes
25-5.	Human papillomavirus infection
STD Complications Affecting Females	
25-6.	Pelvic inflammatory disease (PID)
25-7.	Fertility problems
25-8.	Heterosexually transmitted HIV infection in women
STD Complications Affecting the Fetus and Newborn	
25-9.	Congenital syphilis
25-10.	Neonatal STDs
Personal Behaviors	
25-11.	Responsible adolescent sexual behavior
25-12.	Responsible sexual behavior messages on television
Community Protection Infrastructure	
25-13.	Hepatitis B vaccine services in STD clinics
25-14.	Screening in youth detention facilities and jails
25-15.	Contracts to treat nonplan partners of STD patients
Personal Health Services	
25-16.	Annual screening for genital chlamydia
25-17.	Screening of pregnant women
25-18.	Compliance with recognized STD treatment standards
25-19.	Provider referral services for sex partners

HEALTHY PEOPLE 2010 OBJECTIVES

Bacterial STD Illness and Disability

25-1. Reduce the proportion of adolescents and young adults with *Chlamydia trachomatis* infections.

Target and baseline:

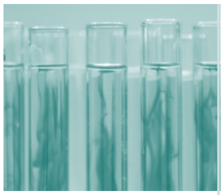
Objective	**Reduction in *Chlamydia trachomatis* Infections**	**1997 Baseline**	**2010 Target**
		Percent	
25-1a.	Females aged 15 to 24 years attending family planning clinics	5.0	3.0
25-1b.	Females aged 15 to 24 years attending STD clinics	12.2	3.0
25-1c.	Males aged 15 to 24 years attending STD clinics	15.7	3.0

Target setting method: Better than the best.

Data source: STD Surveillance System, CDC, NCHSTP.

Note: The table below may continue to the following page.

	Infected with Chlamydia		
Persons Aged 15 to 24 Years Attending Clinics, 1997	**25-1a. Females (Family Planning Clinics)**	**25-1b. Females (STD Clinics)**	**25-1c. Males (STD Clinics)**
		Percent	
TOTAL	5.0	12.2	15.7
Race and ethnicity			
American Indian or Alaska Native	6.3	13.1	12.6
Asian or Pacific Islander	4.7	12.0	16.6
Asian	DNC	DNC	DNC
Native Hawaiian and other Pacific Islander	DNC	DNC	DNC
Black or African American	DNC	DNC	DNC
White	DNC	DNC	DNC
Hispanic or Latino	5.2	14.0	18.5
Not Hispanic or Latino	DNC	DNC	DNC
Black or African American	11.1	15.2	18.1
White	3.1	9.2	11.5



	Infected with Chlamydia		
Persons Aged 15 to 24 Years Attending Clinics, 1997	**25-1a. Females (Family Planning Clinics)**	**25-1b. Females (STD Clinics)**	**25-1c. Males (STD Clinics)**
		Percent	
Family income level			
Poor	DNC	DNC	DNC
Near poor	DNC	DNC	DNC
Middle/high income	DNC	DNC	DNC

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.

Note: The table above may have continued from the previous page.

25-2. Reduce gonorrhea.

Target: 19 new cases per 100,000 population.

Baseline: 123 new cases of gonorrhea per 100,000 population occurred in 1997.

Target setting method: Better than the best.

Data source: STD Surveillance System, CDC, NCHSTP.

Note: The table below may continue to the following page.

	New Gonorrhea Cases		
Total Population, 1997	**25-2. Both Genders**	**Females***	**Males***
		Rate per 100,000	
TOTAL	123	119	125
Race and ethnicity			
American Indian or Alaska Native	100	131	67
Asian or Pacific Islander	20	21	18
Asian	DNC	DNC	DNC
Native Hawaiian and other Pacific Islander	DNC	DNC	DNC
Black or African American	DNC	DNC	DNC
White	DNC	DNC	DNC
Hispanic or Latino	69	72	67
Not Hispanic or Latino	DNC	DNC	DNC

Total Population, 1997	New Gonorrhea Cases 25-2. Both Genders	Females*	Males*
	Rate per 100,000		
Black or African American	808	714	912
White	26	32	20
Family income level			
Poor	DNC	DNC	DNC
Near poor	DNC	DNC	DNC
Middle/high income	DNC	DNC	DNC
Age			
15 to 24 years	512	617	414
25 to 34 years	198	161	235
35 to 44 years	71	40	101

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.
*Data for females and males are displayed to further characterize the issue.

Note: The table above may have continued from the previous page.

25-3. Eliminate sustained domestic transmission of primary and secondary syphilis.

Target: 0.2 cases per 100,000 population.

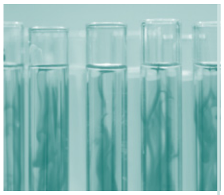
Baseline: 3.2 cases of primary and secondary syphilis per 100,000 population occurred in 1997.

Target setting method: Better than the best and consistent with the National Plan to Eliminate Syphilis from the United States, CDC, 1999.

Data source: STD Surveillance System, CDC, NCHSTP.

Note: The table below may continue to the following page.

Total Population, 1997	Primary and Secondary Syphilis Cases 25-3. Both Genders	Females*	Males*
	Rate per 100,000		
TOTAL	3.2	2.9	3.6
Race and ethnicity			
American Indian or Alaska Native	2.0	1.8	2.3
Asian or Pacific Islander	0.3	0.4	0.3



Total Population, 1997	Primary and Secondary Syphilis Cases		
	25-3. Both Genders	Females*	Males*
	Rate per 100,000		
Asian	DNC	DNC	DNC
Native Hawaiian and other Pacific Islander	DNC	DNC	DNC
Black or African American	DNC	DNC	DNC
White	DNC	DNC	DNC
Hispanic or Latino	1.6	1.0	2.1
Not Hispanic or Latino	DNC	DNC	DNC
Black or African American	22.0	19.3	25.0
White	0.5	0.5	0.6
Family income level			
Poor	DNC	DNC	DNC
Near poor	DNC	DNC	DNC
Middle/high income	DNC	DNC	DNC
Sexual orientation	DNC	DNC	DNC

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.
*Data for females and males are displayed to further characterize the issue.

Note: The table above may have continued from the previous page.

The United States has a unique opportunity to eliminate syphilis within its borders. Syphilis is easy to detect and cure, given adequate access to and use of care. Nationally, it is at the lowest rate ever recorded and is confined to a very limited number of geographic areas. The last epidemic peaked in 1990, with the highest syphilis rate in 40 years. By 1997, the number of cases had declined by 84 percent.[62] In addition, where syphilis does persist in the United States, it disproportionately affects African Americans living in poverty. Although the black:white ratio for reported syphilis has decreased since the early 1990s, the 1997 primary and secondary syphilis rate for non-Hispanic blacks was still 44 times greater than that for non-Hispanic whites.[62] In 1997, of the 1,034 reported congenital syphilis cases with known race or ethnicity of the mother, non-Hispanic blacks and Hispanics accounted for 88 percent of these reported cases, while accounting for only 23 percent of the female population and 33 percent of all births.[62] The persistence of high rates of syphilis in the United States is a sentinel event identifying communities in which there is a fundamental failure of basic public health capacity to control infectious diseases and ensure reproductive health.

Elimination of syphilis would have far-reaching public health implications because it would remove two devastating consequences of the disease—increased likelihood of HIV transmission and compromised ability to have healthy babies due to spontaneous abortions, stillbirths, and multisystem disorders caused by congenital syphilis acquired from mothers with syphilis. Eliminating syphilis in the United States would be a landmark achievement because it would remove these direct health burdens and would significantly decrease one of this Nation's most glaring racial disparities in health.

While many other endemic diseases, such as polio, measles, and smallpox, have been eliminated through widespread use of vaccines, the strategies for syphilis elimination differ from these efforts largely because there currently is no vaccine. Five strategies are critical for eliminating syphilis from the United States. Two strategies—strengthened community involvement and partnerships and rapid outbreak response—will be new in many parts of the United States. The three remaining strategies—enhanced surveillance, expanded clinical and laboratory services, and enhanced health promotion—have been used for syphilis control and will be intensified and expanded for syphilis elimination.

Viral STD Illness and Disability

25-4. Reduce the proportion of adults with genital herpes infection.

Target: 14 percent.

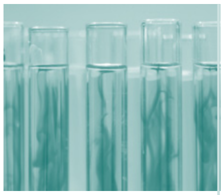
Baseline: 17 percent of adults aged 20 to 29 years had genital herpes infection in 1988–94 (as measured by herpes simplex virus type 2 [HSV-2] antibody).

Target setting method: Better than the best.

Data source: National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.

Note: The table below may continue to the following page.

Adults Aged 20 to 29 Years, 1988-94	Infected with Genital Herpes Percent
TOTAL	17
Race and ethnicity	
American Indian or Alaska Native	DSU
Asian or Pacific Islander	DSU
Asian	DNC
Native Hawaiian and other Pacific Islander	DNC
Black or African American	34
White	15
Hispanic or Latino	DSU
Mexican American	15
Not Hispanic or Latino	DNA
Black or African American	33
White	15
Gender	
Female (all ages)	26
Male (all ages)	18



Adults Aged 20 to 29 Years, 1988-94	Infected with Genital Herpes
	Percent
Family income level	
Poor	28
Near poor	14
Middle/high income	15
Age	
12 to 19 years*	6
20 to 29 years*	17
30 to 39 years*	28
40 to 49 years*	27

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable. *Data for persons aged 12 to 19 years, 30 to 39 years, and 40 to 49 years are displayed to further characterize the issue.

Note: The table above may have continued from the previous page.

25-5. (Developmental) Reduce the proportion of persons with human papillomavirus (HPV) infection.

Potential data source: National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.

Reducing the number of new HPV cases can help to minimize the overall number of cases of high-risk subtypes associated with cervical cancer in females aged 15 to 44 years. Over the past 15 years, molecular, biochemical, and epidemiologic data have firmly established the central role of several types of HPV (types 16, 18, 31, and 45) in the pathogenesis of cervical cancer.[63]

STD Complications Affecting Females

25-6. Reduce the proportion of females who have ever required treatment for pelvic inflammatory disease (PID).

Target: 5 percent.

Baseline: 8 percent of females aged 15 to 44 years required treatment for PID in 1995.

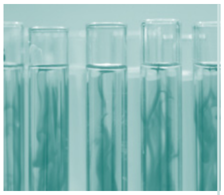
Target setting method: Better than the best.

Data source: National Survey of Family Growth (NSFG), CDC, NCHS.

Females Aged 15 to 44 Years, 1995	Treated for PID Percent
TOTAL	8
Race and ethnicity	
American Indian or Alaska Native	DSU
Asian or Pacific Islander	DSU
Asian	DNC
Native Hawaiian and other Pacific Islander	DNC
Black or African American	11
White	7
Hispanic or Latino	8
Not Hispanic or Latino	8
Black or African American	11
White	7
Family income level (aged 22 to 44 years)	
Poor	12
Near Poor	11
Middle/high income	8
Education level (aged 22 to 44 years)	
Less than high school	14
High school graduate	9
At least some college	7

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.

PID is among the most serious threats to female reproductive capability. PID is caused most frequently by chlamydial infections and gonorrhea that ascend past the cervix into the upper reproductive tract.[64] More than 1 million women have an episode of PID annually.[65, 66] PID often results in scarring and either complete or partial blockage of the fallopian tubes. As a result, as many as one-quarter of women with acute PID experience serious long-term sequelae, most often an ectopic pregnancy or tubal factor infertility. Women who have had PID are 6 to 10 times more likely to have an ectopic pregnancy compared with women who have not had PID.[9] In 1992, approximately 9 percent of all pregnancy-related deaths were caused by ectopic pregnancy.[67]



25-7. Reduce the proportion of childless females with fertility problems who have had a sexually transmitted disease or who have required treatment for pelvic inflammatory disease (PID).

Target: 15 percent.

Baseline: 27 percent of childless females aged 15 to 44 years with fertility problems had a history of STDs or PID treatment in 1995.

Target setting method: 44 percent improvement.

Data source: National Survey of Family Growth (NSFG), CDC, NCHS.

Childless Females Aged 15 to 44 Years with Fertility Problems, 1995	STD History or PID Treatment Percent
TOTAL	27
Race and ethnicity	
American Indian or Alaska Native	DSU
Asian or Pacific Islander	DSU
Asian	DNC
Native Hawaiian and other Pacific Islander	DNC
Black or African American	33
White	27
Hispanic or Latino	27
Not Hispanic or Latino	27
Black or African American	32
White	27
Education level (aged 22 to 44 years)	
Less than high school	30
High school graduate	27
At least some college	28
Age	
15 to 24 years	23
25 to 34 years	26
35 to 44 years	31

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.

In 1995, there were approximately 24.2 million women aged 15 to 44 years who had not given birth to a child and had not had a sterilizing operation. Most of them (21.2 million) were presumed to be able to have a child. Perhaps these women were not aware of fertility problems (see Terminology) because they had not yet tested their fertility potential. This presumption is supported by the fact that most of these 21.2 million childless women were using contraception in 1995. While some fraction of them may remain voluntarily childless and never choose to test their fertility, most are likely to pursue childbearing at some point in the future. Approximately 2.3 million of these "untested" women in 1995 had a history of STDs or PID treatment, increasing the likelihood that some of them will experience a fertility problem in the future. If the social stigma associated with STDs resulted in any underreporting of STDs in this self-report survey, the 2.3 million women at risk for future fertility problems may be a low estimate.

At the time of the NSFG in 1995, nearly 3 million of the 24.2 million childless women had a fertility problem. A subset of this group, approximately 800,000 women, had a history of STDs or PID treatment. This subset comprised 27 percent of the women with known fertility problems, which may be a low estimate of the contribution made by previous STDs or PID to the fertility problems among childless women. Because bacterial STDs and PID may be asymptomatic when present and because diagnosing tubal factor infertility caused by PID is both difficult and expensive, many women with fertility problems may not be aware of having had an STD or PID in the past. Evidence has shown that reducing the burden of bacterial STDs in reproductive age women can dramatically reduce the amount of PID[60] and through this mechanism could reduce fertility problems.

25-8. (Developmental) Reduce HIV infections in adolescent and young adult females aged 13 to 24 years that are associated with heterosexual contact.

Potential data source: HIV/AIDS Surveillance System, CDC, NCHSTP.

STD Complications Affecting the Fetus and Newborn

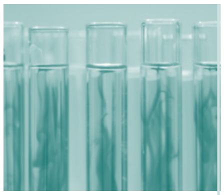
25-9. Reduce congenital syphilis.

Target: 1 new case per 100,000 live births.

Baseline: 27 new cases of congenital syphilis per 100,000 live births were reported in 1997.

Target setting method: Better than the best and consistent with the National Plan to Eliminate Syphilis from the United States, CDC, 1998.

Data sources: STD Surveillance System, CDC, NCHSTP; National Vital Statistics System (NVSS), CDC, NCHS.



Live Births, 1997	New Congenital Syphilis Cases Rate per 100,000
TOTAL	27
Mother's race and ethnicity	
American Indian or Alaska Native	11
Asian or Pacific Islander	8
Asian	DNC
Native Hawaiian and other Pacific Islander	DNC
Black or African American	DNC
White	DNC
Hispanic or Latino	34
Not Hispanic or Latino	DNC
Black or African American	123
White	4
Family income level	
Poor	DNC
Near poor	DNC
Middle/high income	DNC

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable.

25-10. (Developmental) Reduce neonatal consequences from maternal sexually transmitted diseases, including chlamydial pneumonia, gonococcal and chlamydial *ophthalmia neonatorum*, laryngeal papillomatosis (from human papillomavirus infection), neonatal herpes, and preterm birth and low birth weight associated with bacterial vaginosis.

Potential data source: STD Surveillance System, CDC, NCHSTP.

Personal Behaviors

25-11. Increase the proportion of adolescents who abstain from sexual intercourse or use condoms if currently sexually active.

Target: 95 percent.

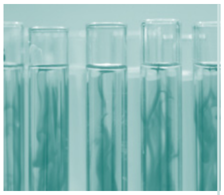
Baseline: 85 percent of adolescents in grades 9 through 12 abstained from sexual intercourse or used condoms in 1999 (50 percent had never had intercourse; 14 percent had intercourse but not in the past 3 months; and 21 percent currently were sexually active and used a condom at last intercourse).

Target setting method: 12 percent improvement.

Data source: Youth Risk Behavior Surveillance System (YRBSS), CDC, NCCDPHP.

Note: The table below may continue to the following page.

Students in Grades 9 through 12, 1999	25-11.	NOT Currently Sexually Active		Currently Sexually Active	
	Abstained From Sexual Inter-course or Used Condom [Column a=b+c +d]	Never Had Inter-course* [Column b]	No Inter-course in Past 3 Months* [Column c]	Used Condom at Last Inter-course* [Column d]	Did NOT Use Condom at Last Inter-course* [Column e]
			Percent		
TOTAL	85	50	14	21	15
Race and ethnicity					
American Indian or Alaska Native	DSU	DSU	DSU	DSU	DSU
Asian or Pacific Islander	DSU	DSU	DSU	DSU	DSU
Asian	DNC	DNC	DNC	DNC	DNC
Native Hawaiian and other Pacific Islander	DNC	DNC	DNC	DNC	DNC
Black or African American	83	30	17	36	17
White	86	55	13	18	14
Hispanic or Latino	84	46	18	20	16
Not Hispanic or Latino	85	51	13	21	15
Black or African American	84	29	18	37	16
White	85	55	12	18	15
Gender					
Female	81	52	11	18	18
Male	87	48	16	23	13
Grade					
9th	90	61	12	17	10
10th	87	53	14	20	13
11th	84	47	15	22	16
12th	73	35	14	24	27
Sexual orientation	DNC	DNC	DNC	DNC	DNC



Students in Grades 9 through 12, 1999	25-11.	NOT Currently Sexually Active		Currently Sexually Active	
	Abstained From Sexual Intercourse or Used Condom [Column a=b+c+d]	Never Had Intercourse* [Column b]	No Intercourse in Past 3 Months* [Column c]	Used Condom at Last Intercourse* [Column d]	Did NOT Use Condom at Last Intercourse* [Column e]
			Percent		
Select populations					
Number of sex partners (past 3 months)					
None	100	79	21	NA	NA
1	57	NA	NA	57	43
2 to 3	62	NA	NA	62	38
4 or more	60	NA	NA	60	40

DNA = Data have not been analyzed. DNC = Data are not collected. DSU = Data are statistically unreliable. NA = Not applicable.

*Data for never had intercourse, had intercourse but not in the past 3 months, and currently sexually active and used a condom at last intercourse are displayed to further characterize the issue.

Note: The table above may have continued from the previous page.

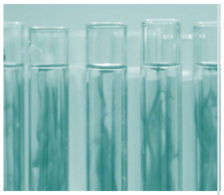
Promoting responsible adolescent sexual behavior targets three protective behaviors that reduce the risk of STDs (including HIV infection) and unintended pregnancy. These behaviors are especially relevant to young people who, as a group, experience a disproportionate share of STDs and unintended pregnancies when they engage in sexual intercourse.[36, 37] The protective behaviors of interest are completely abstaining from sexual intercourse during adolescence (primary abstinence), reverting to abstinence for long periods of time after having had intercourse in the past (secondary abstinence), and at least using condoms (a single method that offers protection against both pregnancy and some STDs) consistently and correctly if regular intercourse is occurring. In 1999, 85 percent of high school youth demonstrated at least one of these behaviors. In contrast, the remaining 15 percent were sexually active and did not use a condom at last intercourse, placing them at high risk for STDs and unwanted pregnancy. Increasing and maintaining the proportion of youth who exhibit the above protective behaviors reduce the risks of HIV infection, other STDs, and unintended pregnancies for adolescents because the proportion of youth who are currently sexually active and do not use condoms will be reduced.

Various societal institutions (such as parents and families, schools, health care providers, postsecondary institutions, religious organizations, media, employers, community agencies that serve youth, celebrities, and government agencies) can positively influence the health and behaviors of the Nation's youth. Collaboration among these institutions can (1) help adolescents abstain from sexual intercourse, (2) help them overcome pressure to become sexually active prematurely, and (3) ensure accessible, confidential community counseling and clinical services for young people who are or have been sexually active.

Abstaining from sexual intercourse offers maximum protection to adolescents who are generally poorly prepared to deal with the physical and psychological consequences of HIV infection, other STDs, and pregnancy. Overall, 50 percent of high school youth fell into this category (see objective 25-11 population data table). Abstaining from sexual intercourse while in high school varied by race and ethnicity, for example, from 55 percent among white youth to 29 percent among African American youth. Abstaining from intercourse decreased as young people progressed through high school, from 61 percent among 9th graders to 35 percent among 12th graders. These data point out that while 61 percent of 9th graders had never had sexual intercourse, at least 39 percent had intercourse during or before 9th grade. Among the 39 percent, 12 percent had not had intercourse in the past 3 months, 17 percent were currently sexually active and used a condom at last intercourse, and the remaining 10 percent were sexually active and did not use a condom at last intercourse. These data suggest a need for counseling, support, education, and services for many young people even before high school begins.

Young people who have had sexual intercourse in the past but are not currently sexually active need special attention and services. Overall, 14 percent of high school youth fall into this category. Slightly more males (16 percent) than females (11 percent) fit into this category. More African American (18 percent) and Hispanic (18 percent) youth fit into this category than do white (12 percent) youth. Even if pregnancy were avoided in the past, the same may not be true for STDs. Some youth may have acquired viral or bacterial STDs that have not been recognized or treated. Previously sexually active adolescents need to be educated about this possibility, and medical evaluation and counseling are strongly suggested both to identify treatable conditions and to reinforce abstinence messages.

Young people who are currently sexually active also require special attention and services. This requirement applies both to the 21 percent of high school youth who were sexually active and used a condom at last intercourse and the remaining 15 percent of youth who were currently sexually active and did not use a condom at last intercourse. These data illustrate wide variation in current sexual activity by race/ethnicity. For African American high school youth, 53 percent were sexually active (37 percent were sexually active and used a condom at last intercourse, and 16 percent were sexually active but did not use a condom at last intercourse). For Hispanic youth, 36 percent were sexually active (20 percent were sexually active and used a condom, and 16 percent were sexually active and did not use a condom). Among white youth, 33 percent were sexually active (18 percent used a condom at last intercourse, and 15 percent did not use a condom). Also, fewer sex partners among currently sexually active youth does not equate with a much higher degree of condom use. Regardless of the number of sex partners in a given interval, approximately one of every two sexually active adolescents did not use a condom at last intercourse. For example, for adolescents who had four or more sex partners in the past 3 months, 40 percent of them would be considered to be at very high risk for STDs (including HIV infection) and possibly pregnancy by not using condoms consistently. Even for youth with one sex partner in the past 3 months, 43 percent did not use condoms consistently. In addition to reinforcing abstinence messages, adult counselors of currently sexually active adolescents must be aware that there is ongoing, very high risk of HIV infection, other STDs, and pregnancy. Responsible and influential adults should help young males and females gain easy access to high quality, confidential, comprehensive reproductive health care in their communities that can help them reduce HIV infection, STD, and pregnancy risk. This is especially true for adolescent females, who bear all the physical consequences of unintended pregnancy and bear disproportionate short- and long-term complications from STDs.



25-12. (Developmental) Increase the number of positive messages related to responsible sexual behavior during weekday and nightly prime-time television programming.

Potential data source: CDC, NCHSTP.

Television messages hold the potential to promote responsible sexual behaviors, such as abstinence, delaying sexual intercourse, or using effective methods to prevent STDs and pregnancy, such as use of condoms and hormonal contraception.

Community Protection Infrastructure

25-13. Increase the proportion of Tribal, State, and local sexually transmitted disease programs that routinely offer hepatitis B vaccines to all STD clients.

Target: 90 percent.

Baseline: 5 percent of State and local STD programs offered hepatitis B vaccines to clients in accordance with CDC guidelines in 1998.[46, 68] Tribal STD program data are developmental.

Target setting method: 85 percentage point improvement.

Data sources: Survey of STD Programs, National Coalition of STD Directors (NCSD); IHS.

Routine vaccination of infants is expected to produce a highly immune population to eliminate hepatitis B virus transmission in the United States. However, high rates of acute hepatitis B continue to occur in young adult risk groups, particularly persons with a history of another sexually transmitted disease and persons with multiple sex partners. Approximately 50 percent of new infections occur in persons with a sexual risk factor for transmission, and most of these persons have had a missed opportunity to be vaccinated. For example, 42 percent of acute hepatitis B cases reported in the CDC Sentinel Counties Study of Viral Hepatitis in 1996 had been treated for a sexually transmitted disease in the past.

25-14. (Developmental) Increase the proportion of youth detention facilities and adult city or county jails that screen for common bacterial sexually transmitted diseases within 24 hours of admission and treat STDs (when necessary) before persons are released.

Potential data sources: Annual Survey of Correctional Facilities, CDC, NCHSTP and National Institute of Justice; U.S. Department of Justice, Bureau of Justice Statistics.

25-15. (Developmental) Increase the proportion of all local health departments that have contracts with managed care providers for the treatment of nonplan partners of patients with bacterial sexually transmitted diseases (gonorrhea, syphilis, and chlamydia).

Potential data source: Survey of STD Programs, National Coalition of STD Directors (NCSD).

Personal Health Services

25-16. (Developmental) Increase the proportion of sexually active females aged 25 years and under who are screened annually for genital chlamydia infections.

Potential data sources: Family Planning Annual Report, OPA; STD Surveillance System, CDC, NCHSTP.

Routine screening for asymptomatic infection with *Chlamydia trachomatis* during pelvic examination is recommended for all sexually active female adolescents and for other women at high risk for chlamydial infection. While evidence is insufficient to make a recommendation concerning routine screening of sexually active males, in situations where asymptomatic chlamydial infection is high in males, screening using urine-based tests may be recommended to prevent spread of the infection.[58] Reported chlamydial infection rates in males are highest among those aged 20 to 24 years.

25-17. (Developmental) Increase the proportion of pregnant females screened for sexually transmitted diseases (including HIV infection and bacterial vaginosis) during prenatal health care visits, according to recognized standards.

Potential data source: STD Surveillance System, CDC, NCHSTP.

While evidence is insufficient to make a recommendation concerning routine screening of pregnant females for STDs, the benefits of early intervention in HIV-asymptomatic pregnant women, for example, are known. Similar benefits have been demonstrated in detecting and treating asymptomatic chlamydia infection in pregnancy.[58]

25-18. Increase the proportion of primary care providers who treat patients with sexually transmitted diseases and who manage cases according to recognized standards.

Target: 90 percent.

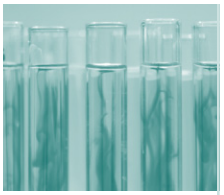
Baseline: 70 percent of primary care providers treated patients with STDs according to CDC STD Treatment Guidelines in 1988.

Target setting method: Retain 2000 target.

Data sources: National Disease and Therapeutic Index, IMS America; National Ambulatory Medical Care Survey (NAMCS), CDC, NCHS.

25-19. (Developmental) Increase the proportion of all sexually transmitted disease clinic patients who are being treated for bacterial STDs (chlamydia, gonorrhea, and syphilis) and who are offered provider referral services for their sex partners.

Potential data source: STD Surveillance System, CDC, NCHSTP.



Terminology

Bacterial and protozoal STDs: Refer to curable sexually transmitted infections caused by *Chlamydia trachomatis* (chlamydia), *Neisseria gonorrhoeae* (gonorrhea), *Treponema pallidum* (syphilis), *Haemophilus ducreyi* (chancroid), *Trichomonas vaginalis* (trichomoniasis), *bacterial vaginosis*, and other organisms.

Congenital syphilis: A condition in a fetus or newborn caused by infection with the syphilis bacteria from an untreated mother. Infected newborns show a wide spectrum of clinical signs, and only severe cases are clinically apparent at birth. Severe illness or death can result after birth if the newborn is not treated.

Fertility problems: Refer to the standard medical definitions of infertility (have not used contraception and have not become pregnant for 12 months or more) or impaired fecundity (women reporting no sterilizing operation and classified as finding it difficult or impossible to get pregnant or carry a baby to term).

Provider referral: Formerly called contact tracing, the process whereby health department personnel directly and confidentially notify the sex partners of infected individuals about their exposure to a sexually transmitted disease for the purposes of education, counseling, and referral to health care services.

STD complications: Refer to serious health problems that occur following an acute bacterial or viral STD. Among the most serious of these complications:

Cancer: Includes cervical cancer and its precursors (due to some strains of human papillomavirus) and liver cancer that can result after chronic infection with hepatitis B virus.

Infection of a fetus or newborn: Includes conditions such as congenital syphilis, neonatal herpes, HIV infection, eye infections, and pneumonia.

Pelvic inflammatory disease (PID): Can cause permanent damage to the female reproductive tract and lead to ectopic pregnancy, infertility, or chronic pelvic pain.

Preterm birth: Can result from maternal infection.

Sexually transmitted HIV infection: Can be facilitated by the presence of an inflammatory or ulcerative STD in one or both sex partners.

Syphilis elimination: Refers to the elimination of sustained domestic transmission of syphilis. Term means that there is no continuing transmission of the disease within a community or jurisdiction and absence of transmission within a jurisdiction except within 90 days of report of an imported case.

Viral STDs: Refer to the sexually transmitted viral infections—HIV infection, genital herpes, and HPV infection. Initial infections with these organisms may be asymptomatic or may cause only mild symptoms. Hepatitis B virus and hepatitis C virus can be transmitted through sexual activity.

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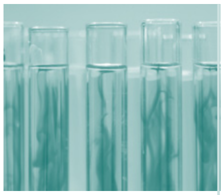

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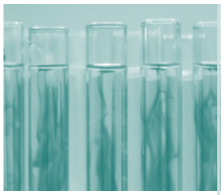

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Substance Abuse

26

Co-Lead Agencies: **National Institutes of Health**
Substance Abuse and Mental Health Services Administration

Contents

Goal

Reduce substance abuse to protect the health, safety, and quality of life for all, especially children.

Overview

Substance abuse and its related problems are among society's most pervasive health and social concerns. Each year, about 100,000 deaths in the United States are related to alcohol consumption.[1] Illicit drug abuse and related acquired immunodeficiency syndrome (AIDS) deaths account for at least another 12,000 deaths. In 1995, the economic cost of alcohol and drug abuse was $276 billion.[2] This represents more than $1,000 for every man, woman, and child in the United States to cover the costs of health care, motor vehicle crashes, crime, lost productivity, and other adverse outcomes of alcohol and drug abuse.

Issues and Trends

Although there has been a long-term drop in overall use, many people in the United States still use illicit drugs. In 1998, there were 13.6 million current users of any illicit drug in the total household population aged 12 years and older, representing 6.2 percent of the total population.[3] Marijuana is the most commonly used illicit drug, and 60 percent of users abuse marijuana only.[3] Among persons aged 12 years and older, 35.8 percent have used an illegal drug in their lifetime. Of these, more than 90 percent used marijuana or hashish, and approximately 30 percent tried cocaine.[3] Relatively rare in 1996, methamphetamine use began spreading in 1997.[3, 4]

Estimated rates of chronic drug use also are significant. Of the estimated 4.4 million chronic drug users in the United States in 1995, 3.6 million were chronic cocaine users (primarily crack cocaine), and 810,000 were chronic heroin users.[5]

Drug dependence is a chronic, relapsing disorder. Addicted persons frequently engage in self-destructive and criminal behavior. Research has confirmed that treatment can help end dependence on addictive drugs and reduce the consequences of addictive drug use on society. While no single approach for substance abuse and addiction treatment exists, comprehensive and carefully tailored treatment works.[6]

Drug use among adolescents aged 12 to 17 years doubled between 1992 and 1997, from 5.3 percent to 11.4 percent.[3] Youth marijuana use has been associated with a number of dangerous behaviors. Nearly 1 million youth aged 16 to 18 years (11 percent of the total) have reported driving in the past year at least once within 2 hours of using an illegal drug (most often marijuana).[7] Drug and alcohol use by youth is associated with other forms of unhealthy and unproductive behavior, including high-risk sexual activity.

Drug users and persons with whom they have sexual contact run high risks of contracting gonorrhea, syphilis, hepatitis, tuberculosis, and human immunodeficiency virus (HIV). The relationship between injection drug use and HIV/AIDS transmission is well known. Injection drug use also is associated with hepatitis B and C infections.[8]

Research confirms that a substantial number of frequent users of cocaine, heroin, and illicit drugs other than marijuana have co-occurring chronic mental health disorders. Some of these persons can be identified by their behavior problems at the time of their entry into elementary school.[9] Such youth tend to use substances at a young age and exhibit sensation-seeking (or "novelty-seeking") behaviors. These youth benefit from more intensive preventive interventions, including family therapy and parent training programs.[10, 11]

The stigma attached to substance abuse increases the severity of the problem. The hiding of substance abuse, for example, can prevent persons from seeking and continuing treatment and from having a productive attitude toward treatment. Compounding the problem is the gap between the number of available treatment slots and the number of persons seeking treatment for illicit drug use or problem alcohol use.

Disparities

Substance abuse affects all racial, cultural, and economic groups. Alcohol is the most commonly used substance, regardless of race or ethnicity, and there are far more persons who smoke cigarettes than persons who use illicit drugs. Usage rates for an array of substances reveal that for adolescents aged 12 to 17 years:

- Whites and Hispanics are more likely than African Americans to use alcohol.
- Whites are more likely than African Americans and Hispanics to use tobacco.
- Whites and Hispanics are more likely than African Americans to use illicit drugs.

Older adolescents and adults with co-occurring substance abuse and mental health disorders need explicit and appropriate treatment for their disorders. Those who suffer from co-occurring disorders, however, frequently are turned away from treatment designed for one or the other problem but not for both.

Opportunities

Many opportunities to prevent drug-related problems have been identified. Core strategies for preventing drug abuse among youth include raising awareness, educating and training parents and others, strengthening families, providing alternative activities, building skills and confidence, mobilizing and empowering communities, and employing environmental approaches. Studies indicate that making youth and others aware of the health, social, and legal consequences associated with drug abuse has an impact on use. Parents also play a primary role in helping their children understand the dangers of substance abuse and in communicating their expectation that drug and alcohol use will not be tolerated. Research suggests that improving parent/child attachment and supervision and monitoring also protect youth from substance abuse. Alternative activities for youth teach social skills and provide an alternative to substance abuse. According to one study, programs that help young persons develop psychosocial and peer resistance skills are more successful than other programs in preventing drug abuse.[6] Findings suggest that having community partnerships in place for sustained periods of time produces significant results in decreasing alcohol and drug use in males. Literature shows that having "buy-in" from local participants greatly enhances the success of any endeavor. Studies also show that changing norms is extremely effective in reducing substance abuse and related problems.[6]

For substance abuse prevention to be effective, people need access to culturally, linguistically, and age-appropriate services; job training and employment; parenting training; general education; more behavioral research; and programs for women, dually diagnosed patients, and persons with learning disabilities. Particular attention must be given to young persons under age 18 years who have an addicted parent because these youth are at increased risk for substance abuse. Because alcoholism and drug abuse continue to affect lesbians, gay men, and transgendered persons at two to three times the rate of the general population,[12] programs that address the special risks and requirements of these population groups also are needed. Government, employers, the faith community, and other organizations in the private and nonprofit sectors must increase their level of cooperation and coordination to ensure that multiple service needs are met.

REPRODUCTIVE HEALTH–RELATED OBJECTIVES

Substance Abuse

Goal:

Reduce substance abuse to protect the health, safety, and quality of life for all, especially children.

Number	Objective Short Title
Treatment for Substance Abuse	
26-20.	Treatment for injection drug use

HEALTHY PEOPLE 2010 OBJECTIVES

Treatment for Substance Abuse

26-20. Increase the number of admissions to substance abuse treatment for injection drug use.

Target: 200,000 admissions.

Baseline: 167,960 admissions for injection drug use were reported in 1997.

Target setting method: 19 percent improvement.

Data source: Treatment Episodes Data System, OAS, SAMHSA.

The 167,960 admissions to treatment for injection drug use indicates a large unmet need for treatment in this group, because estimates of injection drug users in the Nation are as high as 810,000.[13] Better data are needed on this group's need for treatment. Because of the consequences associated with HIV/AIDS, injection drug users are a high priority population group needing substance abuse treatment. HIV infection among females and infants in the United States can be traced primarily to contaminated drug "works" and to sexual relations with infected drug users. Pediatric AIDS is a particularly virulent problem among the children of persons involved in drug-related lifestyles. To address these problems, substance abuse treatment must be provided for injection drug users. Such treatment will be most effective against HIV if it includes information, counseling, and other assistance on how to prevent HIV and unintended pregnancy.

Terminology

Chronic drug use: Use of any heroin or cocaine more than 10 days in the past month.

Co-occurring disorders: The simultaneous presence of two or more disorders, such as the coexistence of a mental health disorder and substance abuse problem.

Drug dependence: A pattern of drug use leading to clinically significant impairment or distress, as manifested by three or more of the following occurring at any time in the same 12-month period: tolerance; withdrawal; use in larger amounts or over a longer period of time than intended; persistent desire or unsuccessful efforts to cut down; spending a great deal of time in activities necessary to obtain drug(s); giving up or reducing important social, occupational, or recreational activities; continued use despite knowledge of having a persistent or recurrent physical or psychological problem.

Hepatitis B and C: Viral infections of the liver spread through contact with infected blood products, injection use of drugs, and needle-sharing.

Injection drug use: The use of a needle and syringe to inject illicit drugs (for example, heroin, cocaine, steroids) into the vein, muscle, skin, or below the skin. Injection drug use places the user at great risk for transmitting or contracting a number of bloodborne infectious diseases, including HIV, hepatitis B, and hepatitis C.

Substance abuse: The problematic consumption or illicit use of alcoholic beverages, tobacco products, and drugs, including misuse of prescription drugs.

Universal preventive interventions: Interventions targeted to the public or a whole population group that has not been identified on the basis of individual risk. The intervention is desirable for everyone in that group. Universal interventions have advantages in terms of cost and overall effectiveness for large populations.

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Tracking Healthy People 2010—Reproductive Health

Introduction

Healthy People 2010 builds on initiatives pursued over the past two decades. The latest of these, *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*, released in 1990, identified health improvement goals and objectives to be reached by the year 2000. The Healthy People 2010 initiative continues in this tradition. Many of the objectives that were in Healthy People 2000 also appear in Healthy People 2010, though some have been modified or adapted to reflect improvements in methodology and changes in the focus of public health policy.

This condensed volume of *Tracking Healthy People 2010* focuses on reproductive health. It presents 72 objectives, which focus on improving the reproductive health of Americans by the year 2010. The purpose of this volume is to provide technical information so that the many partners in this improvement effort understand how the data are derived and the major statistical issues affecting the interpretation of the statistics.

Tracking Healthy People 2010—Reproductive Health is organized into three sections.

- **Part A: General Data Issues** discusses issues that affect many objectives. It covers in detail target-setting methods and developmental objectives. Also included are the minimum select population template and abbreviated sections on national, state, and local data. The reader is encouraged to refer to the main volume, *Tracking Healthy People 2010*, for data issues not covered in this publication.
- **Part B: Operational Definitions** provides definitions for each of the 72 Healthy People 2010 objectives related to reproductive health. The purpose of these definitions is to give the necessary technical information so the statistics can be reproduced for the national populations and comparable statistics can be calculated for other populations.
- **Part C: Major Health Data Sources** describes characteristics of the three major data systems that are responsible for tracking five or more Healthy People 2010 objectives on reproductive health. These characteristics are important considerations for others trying to develop similar data sources or trying to use the data sources for other purposes, such as the calculation of statistics for other select populations.

For additional details not covered in this publication, the reader is encouraged to refer to the main volume, *Tracking Healthy People 2010*.

PART A: GENERAL DATA ISSUES

This section covers issues that affect many of the Healthy People 2010 objectives. Covered here in detail from the source volume, *Tracking Healthy People 2010,* are Target-Setting Methods, Assessing Methods for Measurable Objectives, and Developmental Objectives. Also included are the minimum select population template, along with abbreviated sections on National, State, and Local Data and the Healthy People 2010 Database. Not included here are sections on Population Estimates, Age Adjustment, Mortality and Morbidity Classification, and Variability of Estimates. In all cases, the reader is encouraged to refer to the main volume, *Tracking Healthy People 2010*, for a full explanation of abbreviated sections and for data issues that are not covered in this publication.

Target Setting and Assessing Progress for Measurable Objectives

Target-Setting Methods

One of the three overarching goals for the Healthy People 2000 prevention initiative was to reduce health disparities among Americans. The framework of Healthy People 2010 has taken this a step further by proposing to "eliminate health disparities" as one of the two primary goals for the next decade.

To support this goal of eliminating health disparities, a single national target that is applicable to all select populations has been set for each measurable, population-based objective. Three guiding principles were used in setting targets for the measurable, population-based objectives:

- For objectives that address health services and protection (for example, access to prenatal care, health insurance coverage, etc.) the targets have been set so that there is an improvement for all racial/ethnic segments of the population (that is, the targets are set "better than the best" racial/ethnic subgroup shown for the objective). Data points for at least two population groups under the race and ethnicity category are needed to use "better than the best" as the target-setting method.
- For objectives that can be influenced in the short term by policy decisions, lifestyle choices, and behaviors (for example, physical activity, diet, sexual activity, etc.), the target setting method is also "better than the best" group.
- For objectives that are unlikely to achieve an equal health outcome in the next decade, regardless of the level of investment (for example, occupational exposure and resultant lung cancer), the target represents an improvement for a substantial proportion of the population and is regarded as a minimum acceptable level. Implicit in setting targets for these objectives is the recognition that population groups with baseline rates already better than the identified target should continue to improve.

Beyond this general guidance, the exact target levels were determined by the lead agency workgroups that developed the objectives. The workgroups used various methods for arriving at the target levels, including retention of the year 2000 target, computation of a statistical regression using current rates to project a target, knowledge of the programs currently in place and expected change, and expert judgment.

The following target-setting methods have been used:

- Better than the best.
- __ percent improvement.
- "Total coverage" or "Total elimination" (for targets like 100 percent, 0 percent, all States, etc.).
- Consistent with __________________(another national program, for example, national education goals).
- Retain year 2000 target (the Healthy People 2000 target has been retained).

The specific method for developing the target is described under each objective.

Assessing Progress

Most objectives are tracked by a single measure. For these objectives, progress will be assessed by the change from the baseline measure toward the target. Some objectives seek to increase positive behaviors or outcomes while others are stated in terms of decreasing negative behaviors or outcomes.

A number of objectives contain multiple measures. Progress will be assessed separately for each measure. For these objectives, therefore, the progress may be mixed if some measures are progressing toward the target and others are regressing. Whenever possible, assessment of progress should consider the standard errors associated with the data.

For some objectives, precise measures that match the objective are not available. In these cases, similar proxy measures may be used to track progress. The tracking data and methods for assessing progress will be reviewed during the midcourse review in 2005, and a determination will be made at that time whether any changes will be made.

Developmental Objectives

Developmental objectives are those that currently do not have national baseline data and, therefore, currently have no operational definitions. Some objectives that contain several measures may have parts that are developmental. Developmental objectives indicate areas that need to be placed on the national agenda for data collection. They address subjects of sufficient national importance that investments should be made over the next decade to measure their change.

A potential data source has been identified for all developmental objectives or subobjective measures. These sources, along with other information, will be discussed in the operational definitions under "Comments." As data are developed and become available for these objectives, operational definitions will be disseminated on the Internet and/or in Healthy People publications. No targets have been set for developmental objectives; targets will be proposed at the midcourse review for those developmental objectives that have baseline data.

Population Template

Minimum Template

During the review of the September 1998 *Healthy People 2010 Draft for Public Comment*, the need for greater consistency in tracking population groups became apparent. To address this issue, a minimum template for all Healthy People 2010 population-based objectives was adopted. Population-based objectives may show more detailed and additional breakouts if appropriate.

This minimum select population template applies to most currently measurable population-based objectives and will be applied to developmental population-based objectives when data become available. The template does not apply to non-population-based objectives such as those that measure schools, worksites, or States. Because of problems in interpreting risk, the template is also not shown for population-based measurable objectives that are tracked using counts of events rather than rates or percents.

The minimum template for all population-based objectives is:

Race:

- American Indian or Alaska Native
- Asian or Pacific Islander
  - Asian
  - Native Hawaiian or Other Pacific Islander
- Black or African American
- White
- Hispanic origin and race:
  - Hispanic or Latino
  - Not Hispanic or Latino
    - Black or African American
    - White

Gender:

- Female
- Male

Socioeconomic status:

Family income level-	or	Education level-
Poor		Less than high school
Near poor		High school graduate
Middle/high income		At least some college

The groups listed under most headings (race, Hispanic origin, gender, and income) in the minimum template are comprehensive; that is, they are intended to sum to the population (excluding "unknowns") tracked by the objective. For example, the three groups under income equal the total population tracked by the objective. The exception is the education category, which is limited to people of a minimum age or, in some cases, a maximum age. The groups listed under the subheading "Not Hispanic or Latino" are not inclusive.

If data are not provided for a group, this is indicated by one of four statements: data have been collected but have not yet been analyzed (DNA), data are not collected by the data system used to track the objective (DNC), data are statistically unreliable (DSU), or the specific breakout is not applicable (NA). In cases where data for the entire template are not collected by the data system tracking the objective, a note to this effect will replace the template.

National Data

Data used to track the Healthy People 2010 objectives are based on events occurring in the 50 States and the District of Columbia, where available. Unless specifically noted, all objectives exclude data for U.S. territories. The data used to track most population-based Healthy People 2010 objectives are derived from either a national census of events (for

example, National Vital Statistics System, National Notifiable Disease Surveillance System) or from nationally representative sample surveys (for example, National Health Interview Survey, National Household Survey on Drug Abuse).

For some objectives, however, complete national data are not available and data for selected States and/or areas are used to monitor the objectives. In these cases, the coverage area is described with the data for the objective and in the operational definitions. Data for these objectives may not be representative of the United States as a whole. If during the decade national data become available, they will be used to track the objectives.

For some national data systems that cover the entire United States, such as the Behavioral Risk Factor Surveillance System and the National Vital Statistics System, data are not available for some variables for all States. This is either because data for a specific variable are not collected by some States or because the quality of data for some States is not sufficient to produce reliable estimates for some variables. This information is also shown in the operational definitions for selected objectives.

State and Local Data

The national Healthy People initiatives have served as a "menu" for identifying State and local priorities and selecting objectives that are most relevant to specific States, communities, settings, and health care delivery systems. By using the national Healthy People initiative as a common point of departure, agencies and organizations have tailored programs targeted toward their customers, yet retained a common basis for evaluating performance in relation to both the nation, other States, or populations. This focus on performance has prompted State and local health agencies to shift from their emphasis of primarily providing services to one that conducts needs assessment and quality assurance. This shift has required increased collection and analysis of data. Health care delivery organizations have also experienced this shift and have increased efforts to collect standardized data on patients, services, and outcomes. The increased emphasis on data collection and analysis for purposes of assessment and evaluation has increased the need to address the associated issues of data availability, validity/reliability, comparability, and utilization. Some key areas where these issues need to be examined at State and local levels are discussed below.

Objective Wording/Operational Definition

Many agencies and organizations have tailored the objectives to better focus on specific concerns of their constituents. These modifications reduce comparability when evaluating objective progress relative to the nation, other States, or localities.

Population Data/Race and Ethnicity Reporting

Many Healthy People objectives are population based and are expressed in terms of mortality or morbidity rates, where the denominator is a population estimate. These estimates are provided by gender, age, and race and ethnicity. However, the sizes of some racial groups are relatively small, even at the national level, and are distributed unevenly across State and local areas. This precludes many jurisdictions from producing reliable rates for objectives that focus on these populations.

"Rare" Events/Confidentiality

Some Healthy People objectives (for example, HIV deaths) address important, sensitive health issues that are relatively rare events. Reporting small numbers of HIV deaths in a county or municipality with a small population may produce unreliable, nonrepresentative rates and may jeopardize confidentiality.

Age Adjustment

In general, States and localities age-adjust mortality data to the same standard population used for the national data. However, because Healthy People 2010 is implementing the 2000 standard population ahead of the recommended schedule, there may be a period of time when the State mortality data do not match the Healthy People 2010 data.

Data Sources

The availability and comparability of data for national, State, and local monitoring of Healthy People objectives vary considerably. Some data, especially vital statistics, are readily available at national, State, county, and some municipal levels. However, vital statistics data provide only a limited perspective on health status, risk behaviors, and access to health care. Morbidity and risk factor data are required to monitor a very large proportion of the current and proposed Healthy People objectives. Data for these objectives come from a wide range of household surveys, environmental hazard data, and other sources. In general, it should be noted that both differences in the data collection methods (household interview versus telephone interview) and wording of questions used to monitor the same objectives can affect the comparability of the information collected.

Other national Healthy People objectives are monitored using composite data sources (for example, General Estimates System). The national data are aggregated from data collected at State or local levels. Unlike the vital statistics data (which include all births and deaths), several of these systems are samples of events that use somewhat different data collection and analysis methods between States or between communities. This affects the quality and comparability of national, State, and local data.

During the development of the Healthy People 2010 objectives, participants proposed that a set of Leading Health Indicators be selected to further improve national, State, and local agencies' abilities to measure and evaluate health status and programmatic activity. The availability of data for the Leading Health Indicators may be somewhat limited at the State level, and it represents a substantial challenge for measurement at the local level.

Healthy People 2010 Database

The Healthy People 2010 database, called "DATA2010," can be accessed through the CDC/ WONDER system found on the Internet at http://wonder.cdc.gov/data2010 or through the NCHS Web site at http://www.cdc.gov/nchs. Through DATA2010 the user can create tables that contain the baseline and tracking data for each of the Healthy People 2010 objectives and the Leading Health Indicators.

Tables can be constructed by selecting an entire Healthy People 2010 focus area (with or without related objectives in other focus areas), by selecting an objective within a focus area, or by selecting an objective from a keyword search that will search for all objectives containing a specific word or phrase. Users can also select all data for population subgroups such as race, ethnicity, gender, socioeconomic status, etc. Once tables are generated they can be exported in either ASCII, comma-delimited, or HTML format for use in common software applications such as Lotus 1-2-3 and SAS.

These Web sites also allow users to obtain other Healthy People 2010 information, such as full text of the objectives, lead agency contacts for each focus area, and information on Healthy People 2010 progress reviews.

Database Description

DATA2010 is a SAS database that contains one record (or observation) for each objective and subpart found in the 28 focus areas. The database will also contain records for the measures used to track the goals and the Leading Health Indicators.

Future Plans

In the future, DATA2010 will contain additional population groups, and include options for chart and map generation. State data are expected in the database, and users will be able to select national and/or State data. Where available, standard errors of the estimates will be included in the database.

PART B: OPERATIONAL DEFINITIONS

An operational definition for each Healthy People 2010 objective related to reproductive health is shown in this section, organized by focus area. Some of the objectives have more than one statistical measure. For these objectives, operational definitions are shown separately for each measure. In this section both the Healthy People 2010 objectives and their subparts are referred to as "objectives."

These definitions are provided to assist in the interpretation of the data presented for each Healthy People 2010 objective and to facilitate comparable measurement of these objectives by researchers from the national, State, and local government agencies as well as those from private organizations.

The first page of each focus area includes a list of objectives (short text) and subobjectives. The operational definitions include the following elements about the baseline data for each Healthy People 2010 objective and subobjective measure related to reproductive health:

- Full text of the objective
- National data source
- State data source
- Healthy People 2000 objective (see below)
- Leading Health Indicator (if applicable, see below)
- Type of measure (percent, rate, number, etc.)
- Baseline data
- Numerator
- Denominator
- Population targeted
- Survey questions used to obtain the data (if applicable)
- Expected periodicity (of the statistical measure)
- Additional comments

The reader is encouraged to refer to the complete volume *Tracking Healthy People 2010* for appendices listing Healthy People 2010 work group coordinators, abbreviations and acronyms, specific details on mortality objectives, and crosswalks between Healthy People 2010 and Healthy People 2000 objectives.

The operational definitions shown in this section are as complete as possible at the time of publication. For all relevant objectives with measurable Healthy People 2010 baseline data, the operational definition is complete, partially complete, or not known. If the operational definition is complete, all elements will be filled out appropriately. If the operational definition is either partially complete or not known, all available information is shown in the "Comments" area.

In each operational definition there is a description of the comparability of the objective to the Healthy People 2000 objectives. Each Healthy People 2010 objective measure is identified as either (a) identical to a Healthy People 2000 objective, identified with the Healthy People 2000 objective number; (b) identical to a Healthy People 2000 objective, except for a change in calculation methodology (for example, age adjustment to the 2000 standard

population where the comparable Healthy People 2000 objective was either not adjusted or adjusted to a different standard), identified with the Healthy People 2000 objective number and the new calculation methodology in parentheses; (c) adapted from a Healthy People 2000 objective, with changes in the type of measure, definition, or data source, identified with "adapted from Healthy People 2000 objective __"; or (d) as having no counterpart in Healthy People 2000, identified with "Not applicable."

If the objective was adapted from a Healthy People 2000 objective, the differences between the objectives are described in the Comments section of the operational definition. If the comparable Healthy People 2000 objective was duplicated in more than one priority area, the primary objective number is shown, with the duplicate objective numbers shown in parentheses.

Objective measures that have been designated as measures for the Leading Health Indicators will include an entry called "Leading Health Indicator" that will show the name of the Leading Health Indicator category (for example, Access to Care, Responsible Sexual Behavior).

Unless specifically noted otherwise, data for the numerator and denominator of the objective measures exclude unknown and refused responses. Where applicable, the questions used to obtain the national baseline data are shown in the operational definition. Items shown in italics with the symbol "➤" are actual questions from the original survey instrument. Interviewer instructions and other notes from the survey instrument are shown in italics without the symbol. Notes to guide the user that were not part of the original survey instrument are shown in brackets without italics.

Access to Quality Health Services

Clinical Preventive Care

1-2. Health insurance coverage for clinical preventive services

1-3. Counseling about health behaviors

1-3a. Physical activity or exercise

1-3b. Diet and nutrition

1-3c. Smoking cessation

1-3d. Reduced alcohol consumption

1-3e. Childhood injury prevention: vehicle restraints and bicycle helmets

1-3f. Unintended pregnancy

1-3g. Prevention of sexually transmitted diseases

1-3h. Management of menopause

Primary Care

1-7. Core competencies in health provider training

Clinical Preventive Care

1-2. (Developmental) Increase the proportion of insured persons with coverage for clinical preventive services.

Comments: An operational definition could not be specified at the time of publication.

The proposed data source is the Medical Expenditure Panel Survey (MEPS), AHRQ (formerly AHCPR). The 1996 MEPS data are currently being analyzed and may provide baseline data on percent of persons with coverage for selected preventive services (well-child visits, immunizations, mammograms, cervical cancer screening, and adult physicals).

The numerator will be the number of persons who have coverage for clinical preventive services as part of their health insurance. The denominator will be the number of insured persons.

These data are based on an abstract of the respondents' insurance policies, rather than household reports.

This objective is a modification of Healthy People 2000 objective 21.4, which proposed to improve the financing and delivery of clinical preventive services.

Data will be collected periodically, with as much as a 3-year lag time in reporting these data.

Data that are collected periodically from policy booklets obtained from MEPS household respondents could be modified to collect information on a broader set of preventive services. Recommended services to track include childhood and adult immunizations; recommended cancer screening (breast, cervix, and colon); smoking cessation counseling; and contraceptive services.

1-3. Increase the proportion of persons appropriately counseled about health behaviors.

1-3a. (Developmental) Physical activity or exercise (adults aged 18 years and older).

Comments: An operational definition could not be specified at time of publication.

The proposed national data source is the National Health Interview Survey (NHIS), CDC, NCHS.

The proposed State data source is the Behavioral Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP.

This objective is a modification of Healthy People 2000 objective 1.12, which tracked the proportion of clinicians who counseled 81 to 100 percent of their patients about physical activity and was tracked using the Primary Care Providers Surveys, OPHS, ODPHP, and the Prevention in Primary Care Study, American College of Preventive Medicine. This measure will track adults aged 18 years and older with a physician visit in the past year and is scheduled to be tracked using NHIS, CDC, NCHS.

The proposed questions to be used to obtain the data are scheduled for inclusion in the 2001 NHIS.

1-3b. (Developmental) Diet and nutrition (adults aged 18 years and older).

Comments: An operational definition could not be specified at time of publication.

The proposed national data source is the National Health Interview Survey (NHIS), CDC, NCHS.

The proposed State data source is the Behavioral Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP.

This objective is a modification of Healthy People 2000 objective 2.21, which tracked the proportion of clinicians who counseled 81 to 100 percent of their patients about nutrition and diet; it was tracked using the Primary Care Providers Surveys, OPHS, ODPHP and the Prevention in Primary Care Study, American College of Preventive Medicine. This measure will track adults aged 18 years and older with a physician visit in the past year, who received counseling on diet and nutrition; the measure is scheduled to be tracked using the National Health Interview Survey, CDC, NCHS.

The proposed questions to be used to obtain the data are scheduled for inclusion in the 2001 NHIS.

1-3c. (Developmental) Smoking cessation (adult smokers aged 18 years and older).

Comments: An operational definition could not be specified at time of publication.

The proposed national data source is the National Health Interview Survey (NHIS), CDC, NCHS.

The proposed State data source is the Behavioral Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP.

This objective is a modification of Healthy People 2000 objective 3.16, which tracked the proportion of clinicians who counseled 81 to 100 percent of their patients about smoking cessation, and was tracked using the Primary Care Providers Surveys, OPHS, ODPHP and the Prevention in Primary Care Study, American College of Preventive Medicine. This measure will track adults aged 18 years and older with a physician visit in the past year who are current smokers or who have quit smoking in the past 12 months; the measure is scheduled to be tracked using the National Health Interview Survey, CDC, NCHS.

The proposed questions to be used to obtain the data are scheduled for inclusion in the 2001 NHIS.

1-3d. (Developmental) Reduced alcohol consumption (adults aged 18 years and older with excessive alcohol consumption).

Comments: An operational definition could not be specified at time of publication.

The proposed national data source is the National Health Interview Survey (NHIS), CDC, NCHS.

The proposed State data source is the Behavioral Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP.

This objective is a modification of Healthy People 2000 objective 4.19, which tracked the proportion of clinicians who counseled 81 to 100 percent of their patients about drug and alcohol use; it was tracked using the Primary Care Providers Surveys, OPHS, ODPHP and the Prevention in Primary Care Study, American College of Preventive Medicine. This measure will track adults aged 18 years and older with a physician visit in the past year who have reported excessive alcohol consumption; the measure is scheduled to be tracked using the National Health Interview Survey, CDC, NCHS.

The proposed questions to be used to obtain the data are scheduled for inclusion in the 2001 NHIS.

1-3e. (Developmental) Childhood injury prevention: vehicle restraints and bicycle helmets (children aged 17 years and under).

Comments: An operational definition could not be specified at time of publication.

The proposed national data source is the National Health Interview Survey (NHIS), CDC, NCHS.

The proposed State data source is the Behavioral Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP.

This objective is a modification of Healthy People 2000 objective 9.21, which tracked the proportion of clinicians who counseled 81 to 100 percent of their patients about injury prevention; the objective was tracked using the Primary Care Providers Surveys, OPHS, ODPHP and the Prevention in Primary Care Study, American College of Preventive Medicine. This measure will track children aged 17 years and under who are reported to have had a physician visit in the past year and received counseling on the use of vehicle restraints and bicycle helmets, using the National Health Interview Survey, CDC, NCHS.

The proposed questions to be used to obtain the data are scheduled for inclusion in the 2001 NHIS.

1-3f. Unintended pregnancy (females aged 15 to 44 years).

National Data Source:	National Survey on Family Growth (NSFG), CDC, NCHS.
State Data Source:	Not identified.
Healthy People 2000 Objective:	Adapted from 14.12 (Maternal and Infant Health) (also 5.10).
Measure:	Percent.
Baseline:	19 (1995).
Numerator:	Number of women aged 15 to 44 years with a physician visit in the past 12 months who received counseling on either birth control or getting sterilized.
Denominator:	Number of women aged 15 to 44 years with a physician visit in the past 12 months.
Population Targeted:	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data:	From the 1995 National Survey on Family Growth: ➤ *In the past 12 months, that is since (month/year), have you received any of the following birth control services from a doctor or other health care provider?* *Counseling about birth control or a prescription for a method?* *Counseling about getting sterilized?*
Expected Periodicity:	Periodic.
Comments:	Women were considered to receive counseling if they responded "yes" to either receiving counseling about birth control or getting sterilized.

This objective is a modification of Healthy People 2000 objective 14.12, which tracked the proportion of clinicians who counseled 81 to 100 percent of their patients about family planning; it was tracked using the Primary Care Providers Surveys, OPHS, ODPHP and the Prevention in Primary Care Study, American College of Preventive Medicine.

See Part C for a description of NSFG.

1-3g. (Developmental) Prevention of sexually transmitted diseases (males aged 15 to 49 years, females aged 15 to 44 years).

Comments: An operational definition could not be specified at time of publication.

The proposed national data source is the National Survey on Family Growth (NSFG), CDC, NCHS.

This objective is a modification of Healthy People 2000 objective 18.9 (also 19.14), which tracked the proportion of clinicians who counseled 81 to 100 percent of their patients about prevention of HIV and other sexually transmitted diseases; the objective was tracked using the Primary Care Providers Surveys, OPHS, ODPHP and the Prevention in Primary Care Study, American College of Preventive Medicine.

The 2001 NSFG will collect data on STD counseling for men aged 15 to 49 years. While the NSFG does collect data on family planning services for women aged 15 to 44 years [including the receipt of birth control services (including condoms)], specific questions on STD counseling among women currently are not included.

See Part C for a description of NSFG.

1-3h. (Developmental) Management of menopause (females aged 46 to 56 years).

Comments: An operational definition could not be specified at time of publication.

The proposed national data source is the National Health Interview Survey (NHIS), CDC, NCHS. The proposed State data source is the Behavioral Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP.

This measure is a modification of Healthy People 2000 objective 17.18, which tracked the proportion of perimenopausal women aged 40 to 60 years who were counseled about estrogen replacement therapy. This measure will track women aged 46 to 56 years who have had a physician visit in the past year and report that they have received counseling on management of menopause.

The proposed questions to be used to obtain the data are scheduled for inclusion in the 2001 NHIS.

Primary Care

1-7. (Developmental) Increase the proportion of schools of medicine, schools of nursing, and other health professional training schools whose basic curriculum for health care providers includes the core competencies in health promotion and disease prevention.

Comments: An operational definition could not be specified at the time of publication.

The proposed national data source is the Adaptation of the Prevention Self-Assessment Analysis, ATPM.

Cancer

3-3.	Breast cancer deaths
3-4.	Cervical cancer deaths
3-10.	Provider counseling about cancer prevention
3-10a.	Internists—smoking cessation
3-10b.	Family physicians—smoking cessation
3-10c.	Dentists—smoking cessation
3-10d.	Primary care providers—blood stool tests
3-10e.	Primary care providers—proctoscopic examinations
3-10f.	Primary care providers—mammograms
3-10g.	Primary care providers—Pap tests
3-10h.	Primary care providers—physical activity
3-11.	Pap tests
3-11a.	Ever received a Pap test
3-11b.	Received a Pap test within the preceding 3 years
3-13.	Mammograms

3-3. Reduce the breast cancer death rate.

National Data Source:	National Vital Statistics System (NVSS), CDC, NCHS.
State Data Source:	National Vital Statistics System (NVSS), CDC, NCHS.
Healthy People 2000 Objective:	16.3 (Cancer), age adjusted to the 2000 standard population.
Measure:	Rate per 100,000 female population (age adjusted—see Comments).
Baseline:	27.9 (1998).
Numerator:	Number of female deaths due to breast cancer (ICD-9 code 174).
Denominator:	Number of females.
Population Targeted:	U.S. resident population.
Questions Used To Obtain the National Data:	Not applicable.
Expected Periodicity:	Annual.
Comments:	Data are age adjusted to the 2000 standard population. Age-adjusted rates are weighted sums of age-specific rates. For a discussion on age adjustment, see *Tracking Healthy People 2010*, Part A, section 5.

This objective differs from Healthy People 2000 objective 16.3, which age adjusted the death rates using the 1940 standard population.

See Part C for a description of NVSS.

3-4. Reduce the death rate from cancer of the uterine cervix.

National Data Source:	National Vital Statistics System (NVSS), CDC, NCHS.
State Data Source:	National Vital Statistics System (NVSS), CDC, NCHS.
Healthy People 2000 Objective:	16.4 (Cancer), age adjusted to the 2000 standard population.
Measure:	Rate per 100,000 female population (age adjusted—see Comments).
Baseline:	3.0 (1998).
Numerator:	Number of female deaths due to cancer of the uterine cervix (ICD-9 code 180).
Denominator:	Number of females.
Population Targeted:	U.S. resident population.
Questions Used To Obtain the National Data:	Not applicable.
Expected Periodicity:	Annual.
Comments:	Data are age adjusted to the 2000 standard population. Age-adjusted rates are weighted sums of age-specific rates. For a discussion on age adjustment, see *Tracking Healthy People 2010*, Part A, section 5. This objective differs from Healthy People 2000 objective 16.4, which age adjusted the death rates using the 1940 standard population. See Part C for a description of NVSS.

3-10. Increase the proportion of physicians and dentists who counsel their at-risk patients about tobacco use cessation, physical activity, and cancer screening.

3-10a. Internists who counsel about smoking cessation.

Comments: A complete operational definition was not specified at the time of publication.

This objective is adapted from Healthy People 2000 objectives 16.10 and 3.16.

3-10b. Family physicians who counsel about smoking cessation.

Comments: A complete operational definition was not specified at the time of publication.

This objective is adapted from Healthy People 2000 objectives 16.10 and 3.16.

3-10c. Dentists who counsel about smoking cessation.

Comments: A complete operational definition was not specified at the time of publication.

This objective is adapted from Healthy People 2000 objectives 16.10 and 3.16.

3-10d. Primary care providers who counsel about blood stool tests.

Comments: A complete operational definition was not specified at the time of publication.

This objective is adapted from Healthy People 2000 objective 16.10.

3-10e. Primary care providers who counsel about proctoscopic examinations.

Comments: A complete operational definition was not specified at the time of publication.

This objective is adapted from Healthy People 2000 objective 16.10.

3-10f. Primary care providers who counsel about mammograms.

Comments: A complete operational definition was not specified at the time of publication.

This objective is adapted from Healthy People 2000 objective 16.10.

3-10g. Primary care providers who counsel about Pap tests.

Comments: A complete operational definition was not specified at the time of publication.

This objective is adapted from Healthy People 2000 objective 16.10.

3-10h. Primary care providers who counsel about physical activity.

Comments: A complete operational definition was not specified at the time of publication.

This objective is adapted from Healthy People 2000 objective 16.10.

3-11. Increase the proportion of women who receive a Pap test.

3-11a. Women aged 18 years and older who have ever received a Pap test.

National Data Source: National Health Interview Survey (NHIS), CDC, NCHS.

State Data Source: Behavioral Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP.

Healthy People 2000 Objective: 16.12 (Cancer), age adjusted to the 2000 standard population.

Measure: Percent (age adjusted—see Comments).

Baseline: 92 (1998).

Numerator: Number of women aged 18 years and older who report ever receiving a Pap test.

Denominator: Number of women aged 18 years and older.

Population Targeted: U.S. civilian, noninstitutionalized population.

Questions Used To Obtain the National Data: From the 1998 National Health Interview Survey:

- *Have you ever had a pap smear test*?

Expected Periodicity: Periodic.

Comments: Data include women without a uterine cervix.

Data are age adjusted to the 2000 standard population. Age-adjusted percents are weighted sums of age-specific percents. For a discussion of age adjustment, see *Tracking Healthy People 2010* Part A, section 5.

3-11b. Women aged 18 years and older who received a Pap test within the preceding 3 years.

National Data Source: National Health Interview Survey (NHIS), CDC, NCHS.

State Data Source: Behavioral Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP.

Healthy People 2000 Objective: 16.12 (Cancer), age adjusted to the 2000 standard population.

Measure: Percent (age adjusted—see Comments).

Baseline: 79 (1998).

Numerator: Number of women aged 18 years and older who report receiving a Pap test within the past 3 years.

Denominator: Number of women aged 18 years and older.

Population Targeted: U.S. civilian, noninstitutionalized population.

Questions Used To Obtain the National Data: From the 1998 National Health Interview Survey:

- *Have you ever had a pap smear test?*

  [If yes:] *When did you have your most recent pap smear test? Was it a year ago or less, more than 1 year but not more than two years, more than two years but not more than three years, more than three years but not more than five years, or over 5 years ago?*

Expected Periodicity: Periodic.

Comments: Data include women without a uterine cervix.

Data are age adjusted to the 2000 standard population. Age-adjusted percents are weighted sums of age-specific percents. For a discussion of age adjustment, see *Tracking Healthy People 2010* Part A, section 5.

3-13. Increase the proportion of women aged 40 years and older who have received a mammogram within the preceding 2 years.

National Data Source:	National Health Interview Survey (NHIS), CDC, NCHS.
State Data Source:	Behavioral Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP.
Healthy People 2000 Objective:	Adapted from 16.11 (Cancer).
Measure:	Percent (age adjusted—see Comments).
Baseline:	67 (1998).
Numerator:	Number of women aged 40 years and older who report receiving a mammogram within the past 2 years.
Denominator:	Number of women aged 40 years and older.
Population Targeted:	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data:	From the 1998 National Health Interview Survey: ➤ *A mammogram is an x-ray taken only of the breasts by a machine that presses the breast against a plate. Have you ever had a mammogram?* [If yes:] *When did you have your most recent mammogram? Was it a year ago or less, more than 1 year but not more than 2 years, more than 2 years but not more than 3 years, more than 3 years but not more than 5 years, or over 5 years ago?*
Expected Periodicity:	Periodic.
Comments:	Data are age adjusted to the 2000 standard population. Age-adjusted percents are weighted sums of age-specific percents. For a discussion of age adjustment, see *Tracking Healthy People 2010* Part A, section 5. Although similar questions are used to measure this objective and the comparable Healthy People 2000 objective 16.11, the Healthy People 2010 focuses solely on mammograms received by women 40 years and older while the Healthy People 2000 objective measured women 50 years and older who received both mammograms and clinical breast examinations. Additionally, the data for the Healthy People 2010 objective are age adjusted while data for the Healthy People 2000 objective are unadjusted rates.

Educational and Community-Based Programs

School Setting

7-2. School health education
7-2a. All components
7-2f. Alcohol and other drug use
7-2g. Unintended pregnancy, HIV/AIDS, and STD infection
7-3. Health-risk behavior information for college and university students

Health Care Setting

7-9. Health care organization sponsorship of community health promotion activities

Community Setting and Select Populations

7-11. Culturally appropriate and linguistically competent community health promotion programs
7-11a. Access to quality health services
7-11c. Cancer
7-11g. Educational and community-based programs
7-11i. Family planning
7-11l. Health communication
7-11n. HIV
7-11o. Immunizations and infectious diseases
7-11p. Injury and violence prevention
7-11q. Maternal, infant (and child) health
7-11y. Sexually transmitted diseases
7-11z. Substance abuse (alcohol and other drugs)

School Setting

7-2. Increase the proportion of middle, junior high, and senior high schools that provide school health education to prevent health problems in the following areas: unintentional injury; violence; suicide; tobacco use and addiction; alcohol and other drug use; unintended pregnancy, HIV/AIDS, and STD infection; unhealthy dietary patterns; inadequate physical activity; and environmental health.

7-2a. **All components**

National Data Source: School Health Policies and Programs Study (SHPPS), CDC, NCCDPHP.

State Data Source: School Health Education Profiles (SHEPS), CDC, NCCDPHP.

Healthy People 2000 Objective: Adapted from 8.4 (Educational and Community-Based Programs).

Measure: Percent.

Baseline: 28 (1994).

Numerator: Number of middle, junior, and senior high schools that provide health education on all key behavior and content areas.

Denominator: Number of middle, junior, and senior high schools.

Population Targeted: Middle, junior, and senior high schools.

Questions Used To Obtain the National Data: From the 1994 School Health Policies and Programs Study:

➤ *Now I'd like to ask which health education topics are taught in any of the required courses that we've listed. Please give me the numbers of the topics your school teaches at some time in required courses.*

1. *None of these topics*
2. *Alcohol and other drug use prevention*
3. *Conflict resolution/violence prevention*
4. *Dietary behaviors and nutrition*
5. *Environmental health*
6. *HIV prevention*
7. *Injury prevention and safety*
8. *Physical activity and fitness*
9. *Pregnancy prevention*
10. *Sexually transmitted disease (STD) prevention*
11. *Suicide prevention*
12. *Tobacco use prevention*
13. *Other (List additional topics here):* __________

Expected Periodicity: Periodic.

Comments: A school is considered to provide health education on key risk behavior and content areas if they report having required courses on all the topics listed in the question above.

This objective is adapted from a measure in Healthy People 2000 objective 8.4, which tracked the proportion of elementary and secondary schools that included instruction in six key behavioral areas (unintentional and intentional injury, tobacco use, alcohol and other drug use, sexual behaviors, unhealthy dietary behaviors, physical inactivity) in their health education program. The 2010 measure tracks middle, junior, and senior high schools: it excludes elementary schools. The 2010 measure also includes environmental health.

7-2f. Alcohol and other drug use.

National Data Source: School Health Policies and Programs Study (SHPPS), CDC, NCCDPHP.

State Data Source: School Health Education Profiles (SHEPS), CDC, NCCDPHP.

Healthy People 2000 Objective: Adapted from 8.4 (Educational and Community-Based Programs).

Measure: Percent.

Baseline: 90 (1994).

Numerator: Number of middle, junior, and senior high schools that provide health education on alcohol and other drug use prevention.

Denominator: Number of middle, junior, and senior high schools.

Population Targeted: Middle, junior, and senior high schools.

Questions Used To Obtain the National Data: See Questions Used To Obtain the National Data provided with 7-2a.

Expected Periodicity: Periodic.

Comments: A school is considered to provide health education on key risk behavior and content areas if they report having a required course on alcohol and other drug use prevention.

See Comments provided with objective 7-2a for more information.

7-2g. Unintended pregnancy, HIV/AIDS, and STD infection.

National Data Source: School Health Policies and Programs Study (SHPPS), CDC, NCCDPHP.

State Data Source: School Health Education Profiles (SHEPS), CDC, NCCDPHP.

Healthy People 2000 Objective: Adapted from 8.4 (Educational and Community-Based Programs).

Measure: Percent.

Baseline: 65 (1994).

Numerator: Number of middle, junior, and senior high schools that provide health education on (unintended) pregnancy prevention, HIV (AIDS) prevention, and sexually transmitted disease (STD) prevention.

Denominator: Number of middle, junior, and senior high schools.

Population Targeted: Middle, junior, and senior high schools.

Questions Used To Obtain the National Data: See Questions Used To Obtain the National Data provided with 7-2a.

Expected Periodicity: Periodic.

Comments: A school is considered to provide health education on key risk behavior and content areas if they report having a required course on (unintended) pregnancy prevention, HIV (AIDS) prevention, and sexually transmitted disease (STD) prevention.

See Comments provided with objective 7-2a for more information.

7-3. Increase the proportion of college and university students who receive information from their institution on each of the six priority health-risk behavior areas.

National Data Source:	National College Health Risk Behavior Survey (NCHRBS), CDC, NCCDPHP.
State Data Source:	Not identified.
Healthy People 2000 Objective:	8.5 (Educational and Community-Based Programs).
Measure:	Percent.
Baseline:	6 (1995).
Numerator:	Number of undergraduate students who report that they have received information from their college or university on each of the six priority health-risk behavior areas.
Denominator:	Number of undergraduate college students in post-secondary institutions.
Population Targeted:	Undergraduate college students.
Questions Used To Obtain the National Data:	From the 1995 National College Health Risk Behavior Survey:

➤ *On which health topics have you ever received information from your college or university?*

1. *Tobacco use prevention*
2. *Alcohol and other drug use prevention*
3. *Violence prevention*
4. *Injury prevention and safety*
5. *Suicide prevention*
6. *Pregnancy prevention*
7. *Sexually transmitted disease (STD) prevention*
8. *AIDS or HIV infection prevention*
9. *Dietary behaviors and nutrition*
10. *Physical activity and fitness*

Expected Periodicity: Periodic.

Comments: Students were considered as receiving information on each of the six priority health-risk behavior areas if they responded positively to all of the topics listed in the question above.

The six priority health-risk behaviors are: injuries (intentional and unintentional), tobacco use, alcohol and illicit drug use, sexual behaviors that cause unintended pregnancies and sexually transmitted diseases, dietary patterns that cause disease, and inadequate physical activity.

Postsecondary institutions include 2- and 4-year community colleges, private colleges, and universities.

Health Care Setting

7-9. (Developmental) Increase the proportion of hospitals and managed care organizations that provide community disease prevention and health promotion activities that address the priority health needs identified by their community.

Comments: An operational definition could not be specified at the time of publication.

A proposed data source is the American Hospital Association Survey. This annual survey does not include managed care organizations (MCOs), which are systems that integrate the financing and delivery of health care services to covered individuals by means of arrangements with selected providers to furnish health care services to members.

Proposed questions from the American Hospital Association Survey to be used to obtain the data are:

- *Does the hospital's mission statement include a focus on community benefit?*
- *Does the hospital have a long-term plan for improving the health of its community?*
- *Does the hospital have resources for its community benefits activities?*
- *Does the hospital work with other local providers, public agencies or community representatives to conduct a health status assessment of the community?*
- *Does the hospital work with other local providers, public agencies or community representatives to develop a written assessment of the appropriate capacity for health services in the community?*

  [If yes:] *Has the hospital used the assessment to identify unmet health needs, excess capacity, or duplicative services in the community?*

This objective is adapted from a measure in Healthy People 2000 objective number 8.12, which tracked the proportion of community hospitals that offer community health programs addressing the priority health needs of their communities. This measure will track the proportion of community hospitals, as well as managed care organizations, that provide community disease prevention and health promotion activities that address the priority health needs identified by their communities.

Managed care includes health maintenance organizations (HMOs), preferred provider organizations (PPOs), and point-of-service (POS) plans.

Community Setting and Special Populations

7-11. Increase the proportion of local health departments that have established culturally appropriate and linguistically competent community health promotion and disease prevention programs.

7-11a. (Developmental) Access to quality health services.

Comments: An operational definition could not be specified at the time of publication.

This measure is adapted from Healthy People 2000 objective 8.11, which tracked the proportion of local health departments that have established culturally and linguistically appropriate community health promotion programs for clinical preventive services for racial and ethnic minority populations. This measure will track the proportion of local health departments that have culturally appropriate and linguistically competent community health promotion programs that address access to quality health services for racial and ethnic minority populations.

Data from the 1996–97 National Profile of Local Health Departments on clinical preventive services are presented for illustrative purposes for the access to quality health services measure.

7-11c. Cancer.

National Data Source:	National Profile of Local Health Departments, NACCHO.
State Data Source:	National Profile of Local Health Departments, NACCHO.
Healthy People 2000 Objective:	8.11 (Educational and Community-Based Programs).
Measure:	Percent.
Baseline:	30 (1996–97).
Numerator:	Number of local health departments that provided culturally and linguistically appropriate cancer programs to their jurisdiction in the past year.
Denominator:	Number of local health departments with one or more minority racial/ethnic population groups comprising at least 10 percent of the population.

Questions Used To Obtain the National Data: From the 1996–97 National Profile of Local Health Departments:
[NUMERATOR:]

➤ *In the past year, which of the following programs and interventions were provided in your jurisdiction, either directly by your local health department or through a contractual agreement with another organization?*

[Programs:]

➤ *(a) Physical activities and fitness*
(b) Nutrition
(c) Tobacco
(d) Alcohol and other drugs
(e) Family Planning

(f) Mental health and mental disorders
(g) Violent and abusive behavior
(h) Educational and community-based programs
(i) Unintentional injuries
(j) Occupational safety and health
(k) Environment health
(l) Food and drug safety
(m) Oral health
(n) Maternal and infant health
(o) Heart disease and stroke
(p) Cancer
(q) Diabetes and chronic disabling conditions
(r) HIV infections
(s) Sexually transmitted diseases
(t) Immunization and infectious diseases
(u) Clinical preventive services
(v) Surveillance and data systems
(w) Other (specify) ____________

[Interventions:]

Informational Materials
(a) Print
(b) Audiovisual

Public Service Announcement
(a) Radio
(b) Television

Internet
Community Outreach

On-site
(a) Individual Instruction
(b) Group Instruction
Other (specify) ________________

➤ *In the past year, which of the following programs and interventions listed above were adapted and/or provided to meet the special language needs of any racial/minority group you serve, either directly by your local health department or through a contractual agreement with another organization?*

➤ *In the past year, which of the following programs and interventions listed above were adapted and/or provided to address the cultural differences of any racial/minority population you serve, either directly by your local health department or through a contractual agreement with another organization?*

[DENOMINATOR:]

➤ *Please indicate the percentages of the racial composition of your jurisdiction.*
(a) Asian or Pacific Islander
(b) American Indian, Alaska native or Aleut
(c) Black
(d) White
(e) Other

➤ *Please indicate the percentages of the ethnic composition of your jurisdiction.*
(a) Hispanic origin
(b) Not of Hispanic origin
(c) Unknown

Expected Periodicity: Periodic.

Comments: A local health department is classified as having a culturally appropriate and linguistically competent community program in the specific health area targeted by the objective if it indicated that in the past year:

(1) it provided programs or interventions in the specific health area targeted by the objective (in the first question above);

(2) the programs were adapted and/or provided to meet special language needs of racial/ethnic minorities (in the second question above); and,

(3) the programs were adapted and/or provided to address cultural differences of racial/ethnic minorities (in the third question above).

Local health departments eligible for inclusion in this objective are those for which either the American Indian/Alaska Native, Asian/Pacific Islander, black/African American, or Hispanic populations comprise at least 10 percent of the total population in their jurisdiction.

This objective currently is being tracked in local health departments in which a racial or ethnic group constitutes at least 10 percent of the population. In future studies, by utilizing census data, local health departments that serve communities in which at least 3,000 people in the county indicate that their primary language is other than English or a similar population meets the concentration standards of 1,000 in a single zip code or 1,500 in two contiguous zip codes also should be measured.

Culturally appropriate refers to an unbiased attitude and organizational policy that values cultural diversity in the population served; reflects an understanding of diverse attitudes, beliefs, behaviors, practices, and communication patterns that could be attributed to race, ethnicity, religion, socioeconomic status, historical and social context, physical or mental ability, age, gender, sexual orientation, or generations and acculturation status; an awareness that cultural differences may affect health and the effectiveness of health care delivery; and knowledge of disease prevalence in specific cultural populations, whether defined by race, ethnicity, socioeconomic status, physical or mental ability, gender, sexual orientation, age, disability, or habits.

Linguistically competent refers to skills to communicate effectively in the native language or dialect of the targeted population, taking into account general educational level, literacy, and language preferences.

In 1996–97, 151 local health departments reported that a program or intervention in the area of cancer was provided to its jurisdiction.

7-11g. Educational and community-based programs.

National Data Source:	National Profile of Local Health Departments, NACCHO.
State Data Source:	National Profile of Local Health Departments, NACCHO.
Healthy People 2000 Objective:	8.11 (Educational and Community-Based Programs).
Measure:	Percent.
Baseline:	33 (1996–97).
Numerator:	Number of local health departments that provided culturally and linguistically appropriate education and community-based programs to their jurisdiction in the past year.
Denominator:	Number of local health departments with one or more minority racial/ethnic population groups comprising at least 10 percent of the population.
Questions Used To Obtain the National Data:	See Questions Used To Obtain the National Data provided with 7-11c.
Expected Periodicity:	Periodic.
Comments:	See the definition of racial/ethnic composition, culturally appropriate, and linguistically competent provided with 7-11c for more information. In 1996–97, 127 local health departments reported that a program or intervention in the area of education and community-based programs was provided to its jurisdiction.

7-11i. Family planning.

National Data Source:	National Profile of Local Health Departments, NACCHO.
State Data Source:	National Profile of Local Health Departments, NACCHO.
Healthy People 2000 Objective:	8.11 (Educational and Community-Based Programs).
Measure:	Percent.
Baseline:	42 (1996–97).
Numerator:	Number of local health departments that provided culturally and linguistically appropriate family planning programs to their jurisdiction in the past year.
Denominator:	Number of local health departments with one or more minority racial/ethnic population groups comprising at least 10 percent of the population.
Questions Used To Obtain the National Data:	See Questions Used To Obtain the National Data provided with 7-11c.

Expected Periodicity: Periodic.

Comments: See the definition of racial/ethnic composition, culturally appropriate, and linguistically competent provided with 7-11c for more information.

In 1996–97, 158 local health departments reported that a program or intervention in the area of family planning was provided to its jurisdiction.

7-11l. (Developmental) Health communication.

Comments: An operational definition could not be specified at the time of publication.

This measure is adapted from Healthy People 2000 objective 8.11, which tracked the proportion of local health departments that have established culturally and linguistically appropriate community health promotion programs for racial and ethnic minority populations. This measure will track the proportion of local health departments that have culturally appropriate and linguistically competent community health communication programs for racial and ethnic minority populations.

7-11n. HIV.

National Data Source: National Profile of Local Health Departments, NACCHO.

State Data Source: National Profile of Local Health Departments, NACCHO.

Healthy People 2000 Objective: 8.11 (Educational and Community-Based Programs).

Measure: Percent.

Baseline: 45 (1996–97).

Numerator: Number of local health departments that provided culturally and linguistically appropriate HIV programs to their jurisdiction in the past year.

Denominator: Number of local health departments with one or more minority racial/ethnic population groups comprising at least 10 percent of the population.

Questions Used To Obtain the National Data: See Questions Used To Obtain the National Data provided with 7-11c.

Expected Periodicity: Periodic.

Comments: See the definition of racial/ethnic composition, culturally appropriate, and linguistically competent provided with 7-11c for more information.

In 1996–97, 170 local health departments reported that a program or intervention in the area of HIV was provided to its jurisdiction.

7-11o. Immunizations and infectious diseases.

National Data Source: National Profile of Local Health Departments, NACCHO.

State Data Source: National Profile of Local Health Departments, NACCHO.

Healthy People 2000 Objective: 8.11 (Educational and Community-Based Programs).

Measure: Percent.

Baseline: 48 (1996–97).

Numerator: Number of local health departments with that provided culturally and linguistically appropriate immunizations and infectious disease programs to their jurisdiction.

Denominator: Number of local health departments with at least 10 percent racial/ethnic population groups in their jurisdiction that offered immunizations and infectious disease programs.

Questions Used To Obtain the National Data: See Questions Used To Obtain the National Data provided with 7-11c.

Expected Periodicity: Periodic.

Comments: See the definition of racial/ethnic composition, culturally appropriate, and linguistically competent provided with 7-11c for more information.

In 1996–97, 183 local health departments reported that a program or intervention in the area of immunizations and infectious diseases was provided to its jurisdiction.

7-11p. (Developmental) Injury and violence prevention.

Comments: An operational definition could not be specified at the time of publication.

This measure is adapted from Healthy People 2000 objective 8.11, which tracked the proportion of local health departments that have established culturally and linguistically appropriate community health promotion programs for racial and ethnic minority populations on violent and abusive behavior or unintentional injury. This measure includes only the proportion of local health departments that have culturally appropriate and linguistically competent community injury and violence prevention programs for racial and ethnic minority populations.

7-11q. Maternal, infant (and child) health.

National Data Source: National Profile of Local Health Departments, NACCHO.

State Data Source: National Profile of Local Health Departments, NACCHO.

Healthy People 2000 Objective: Adapted from 8.11 (Educational and Community-Based Programs).

Measure: Percent.

Baseline: 47 (1996–97).

Numerator:	Number of local health departments that provided culturally and linguistically appropriate maternal, infant and child health programs to their jurisdiction in the past year.
Denominator:	Number of local health departments with one or more minority racial/ethnic population groups comprising at least 10 percent of the population.
Questions Used To Obtain the National Data:	See Questions Used To Obtain the National Data provided with 7-11c.
Expected Periodicity:	Periodic.
Comments:	See the definition of racial/ethnic composition, culturally appropriate, and linguistically competent provided with 7-11c for more information. This measure is adapted from Healthy People 2000 objective 8.11, which tracked the proportion of local health departments that have established culturally and linguistically appropriate maternal and infant health community health promotion programs for racial and ethnic minority populations. This measure tracks the proportion of local health departments that have culturally appropriate and linguistically competent community maternal, infant and child health programs for racial and ethnic minority populations. In 1996–97, 174 local health departments reported that a program or intervention in the area of maternal and infant health was provided to its jurisdiction.

7-11y. Sexually transmitted diseases.

National Data Source:	National Profile of Local Health Departments, NACCHO.
State Data Source:	National Profile of Local Health Departments, NACCHO.
Healthy People 2000 Objective:	8.11 (Educational and Community-Based Programs).
Measure:	Percent.
Baseline:	41 (1996–97).
Numerator:	Number of local health departments that provided culturally and linguistically appropriate sexually transmitted diseases programs to their jurisdiction in the past year.
Denominator:	Number of local health departments with one or more minority racial/ethnic population groups comprising at least 10 percent of the population.
Questions Used To Obtain the National Data:	See Questions Used To Obtain the National Data provided with 7-11c.
Expected Periodicity:	Periodic.
Comments:	See the definition of racial/ethnic composition, culturally appropriate, and linguistically competent provided with 7-11c for more information.

In 1996–97, 172 local health departments reported that a program or intervention in the area of sexually transmitted diseases was provided to its jurisdiction.

See Part C for a description of NPLHD and Appendix A for focus area contact information.

7-11z. Substance abuse (alcohol and other drugs).

National Data Source:	National Profile of Local Health Departments, NACCHO.
State Data Source:	National Profile of Local Health Departments, NACCHO.
Healthy People 2000 Objective:	Adapted from 8.11 (Educational and Community-Based Programs).
Measure:	Percent.
Baseline:	26 (1996–97).
Numerator:	Number of local health departments that provided culturally and linguistically appropriate substance abuse of alcohol and other drugs programs to their jurisdiction in the past year.
Denominator:	Number of local health departments with one or more minority racial/ethnic population groups comprising at least 10 percent of the population.
Questions Used To Obtain the National Data:	See Questions Used To Obtain the National Data provided with 7-11c.
Expected Periodicity:	Periodic.
Comments:	See the definition of racial/ethnic composition, culturally appropriate, and linguistically competent provided with 7-11c for more information.

This measure is adapted from Healthy People 2000 objective 8.11, which tracked the proportion of local health departments that have established culturally and linguistically appropriate alcohol and other drug community health promotion programs for racial and ethnic minority populations. This measure tracks the proportion of local health departments that have culturally appropriate and linguistically competent substance abuse of alcohol and other drugs programs for racial and ethnic minority populations.

In 1996–97, 172 local health departments reported that a program or intervention in the area of substance abuse of alcohol and other drugs was provided to its jurisdiction.

Family Planning

9-1.	Intended pregnancy
9-2.	Birth spacing
9-3.	Contraceptive use
9-4.	Contraceptive failure
9-5.	Emergency contraception
9-6.	Male involvement in pregnancy prevention
9-7.	Adolescent pregnancy
9-8.	Abstinence before age 15 years
9-8a.	Females
9-8b.	Males
9-9.	Abstinence among adolescents aged 15 to 17 years
9-9a.	Females
9-9b.	Males
9-10.	Pregnancy prevention and sexually transmitted disease (STD) protection
9-10a.	Condom at first Intercourse: Females
9-10b.	Condom at first Intercourse: Males
9-10c.	Condom plus hormonal method at first intercourse: Females
9-10d.	Condom plus hormonal method at first intercourse: Males
9-10e.	Condom at last intercourse: Females
9-10f.	Condom at last intercourse: Males
9-10g.	Condom plus hormonal method at last intercourse: Females
9-10h.	Condom plus hormonal method at last intercourse: Males
9-11.	Pregnancy prevention education
9-12.	Problems in becoming pregnant and maintaining a pregnancy
9-13.	Insurance coverage for contraceptive supplies and services

9-1. Increase the proportion of pregnancies that are intended.

National Data Sources:	National Survey of Family Growth (NSFG), CDC, NCHS; National Vital Statistics System (NVSS), CDC, NCHS; Abortion Provider Survey, The Alan Guttmacher Institute (AGI); Abortion Surveillance Data, CDC, NCCDPHP.
State Data Source:	Not identified.
Healthy People 2000 Objective:	Adapted from 5.2 (Family Planning).
Measure:	Percent.
Baseline:	51 (1995).

Numerator: Number of intended births among females aged 15 to 44 years.

Denominator: Number of live births plus abortions among females aged 15 to 44 years.

Population Targeted: U.S. resident population; U.S. civilian, noninstitutionalized population.

Questions Used To Obtain the National Data: From the 1995 National Survey of Family Growth:

- *Before you became pregnant this time, was the reason you did not use any birth control methods because you, yourself wanted to become pregnant?*
- *At the time you became pregnant, did you, yourself actually want to have a baby at some time?*
- *So would you say you became pregnant too soon, at about the right time, or later than you wanted?*

  1) Too soon
  2) Right time
  3) Later
  4) Didn't care

Expected Periodicity: Periodic.

Comments: Intended pregnancies include births that were wanted at the time of conception. Births that were wanted at the time of conception are those resulting from pregnancies that happened at the right time, later than wanted or those answering didn't care. All abortions are considered unintended pregnancies.

Estimates of pregnancies that were intended are derived from the following sources: (1) live births to U.S. residents in 1994; (2) the proportion of recent births that were intended according to the 1995 NSFG; and (3) estimates of induced abortions based on reports by CDC and The Alan Guttmacher Institute (AGI). AGI's national estimates of abortions, based on surveys it conducts of all known abortion providers, are distributed by age, race, marital status, and ethnicity according to estimates prepared by CDC's National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP), which are based on reports from State health departments.

The proportion of births intended (females who wanted to become pregnant and wanted to have a baby at sometime and became pregnant at the right time, later, or didn't care) from NSFG are applied to all resident live births, divided by all births and abortions combined.

Information about potential sources of error in the data sources have been published.[1, 2, 3]

Known pregnancies that ended in fetal loss (for example, miscarriage, stillbirth, or ectopic pregnancy) are excluded. However, it was found that incorporating information on the planning status of pregnancies resulting in fetal loss, as reported in the 1995 NSFG, had very little impact on the proportions shown.

This objective is adapted from a measure in Healthy People 2000 objective 5.2, which tracked the proportion of pregnancies that were unintended. This measure tracks the proportion of pregnancies that are intended.

See Part C for a description of NSFG and NVSS.

9-2. Reduce the proportion of births occurring within 24 months of a previous birth.

National Data Source:	National Survey of Family Growth (NSFG), CDC, NCHS.
State Data Source:	Not identified.
Healthy People 2000 Objective:	Not applicable.
Measure:	Percent.
Baseline:	11 (1995).
Numerator:	Number of females aged 15 to 44 years whose most recent live birth occurred within 24 months of a previous live birth.
Denominator:	Number of females aged 15 to 44 years with at least one live birth.
Population Targeted:	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data:	From the 1995 National Survey of Family Growth: ➤ *How many times have you been pregnant altogether?* [For each pregnancy:] ➤ *In which of the ways did the pregnancy end?* *(a) Miscarriage* *(b) Still birth* *(c) Abortion* *(d) Ectopic or tubal pregnancy* *(e) Live birth by Cesarean section* *(f) Live birth by vaginal delivery* [For each live birth:] ➤ *On what date was (baby's name) born?*
Expected Periodicity:	Periodic.
Comments:	A female is considered to have had a birth within 24 months of a previous birth if she had consecutive pregnancies ending in a live birth by Cesarean section or live birth by vaginal delivery. The interval between consecutive live births is derived from the date of birth.

Vaginal delivery includes delivery through natural or induced labor.

Questions addressing how the pregnancy ended and date baby was born are repeated based on the number of pregnancies.

See Part C for a description of NSFG.

9-3. Increase the proportion of females at risk of unintended pregnancy (and their partners) who use contraception.

National Data Source:	National Survey of Family Growth (NSFG), CDC, NCHS.
State Data Source:	Not identified.
Healthy People 2000 Objective:	5.12 (Family Planning).
Measure:	Percent.
Baseline:	93 (1995).
Numerator:	Number of at-risk females aged 15 to 44 years who currently use a method of contraception other than withdrawal.
Denominator:	Number of at-risk females aged 15 to 44 years.
Population Targeted:	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data:	From the 1995 National Survey of Family Growth:

[NUMERATOR:]

➤ *Please write the methods you used each month on the calendar. I need to know about all the methods you used, so if you used more than one method, please write down all methods you used that month.*

1) Birth control pills
2) Condom
3) Partner's vasectomy
4) Diaphragm
5) Foam
6) Jelly or cream
7) Cervical cap
8) Suppository, insert
9) Today sponge
10) Female condom, vaginal pouch
11) IUD, Coil, Loop
12) Norplant
13) Depo-provera, Injectables
14) Morning after pill
15) Rhythm or safe period by calendar
16) Safe period by temperature, or cervical mucus test, or natural family planning
17) Withdrawal, pulling out
18) Respondent sterile
19) Partner sterile
20) Other method (specify)

[DENOMINATOR:]

- *Is the reason you are not using a method of birth control now because you, yourself, want to become pregnant as soon as possible?*
- *Many women have times when they are not having intercourse at all, for example, because of pregnancy, separation, not dating anyone, illness, or other reasons. Since (Date), have there been any times when you were not having intercourse at all for one month or more?*
- *What months and years were those?*

Expected Periodicity: Periodic.

Comments: A female (and her partner) is considered to be at risk of unintended pregnancy if there is a negative response to the denominator questions above on wanting to become pregnant (first question) or not having intercourse (second question).

"At risk" females are those who had intercourse in the 3 months prior to the survey who were not pregnant, nor seeking pregnancy, nor post partum, nor (themselves or partners) surgically or nonsurgically sterile.

"Currently using" refers to having used any contraceptive method (categories 1, 2, 4 through 16 above) other than sterilization or withdrawal in the month of the interview.

An unintended pregnancy is one that was not wanted at the time of conception or not wanted at all.

See Part C for a description of NSFG.

9-4. Reduce the proportion of females experiencing pregnancy despite use of a reversible contraceptive method.

National Data Sources: National Survey of Family Growth (NSFG), CDC, NCHS; Abortion Patient Survey, The Alan Guttmacher Institute (AGI).

State Data Source: Not identified.

Healthy People 2000 Objective: 5.7 (Family Planning).

Measure: Percent.

Baseline: 13 (1995).

Numerator: Number of pregnancies that occur within the first 12 months of reported continuous use of a reversible contraceptive method among females aged 15 to 44 years, and their partners.

Denominator: Number of consecutive months that a reversible contraceptive method was used by females aged 15 to 44 years, and their partners.

Population Targeted: U.S. civilian, noninstitutionalized population.

Questions Used To Obtain the National Data:

From the 1995 National Survey of Family Growth:

- *Please write the methods you used each month on the calendar. I need to know about all the methods you used, so if you used more than one method, please write down all methods you used that month.*

  1) Birth control pills
  2) Condom
  3) Partner's vasectomy
  4) Diaphragm
  5) Foam
  6) Jelly or cream
  7) Cervical cap
  8) Suppository, insert
  9) Today sponge
  10) Female condom, vaginal pouch
  11) IUD, Coil, Loop
  12) Norplant
  13) Depo-provera, Injectables
  14) Morning after pill
  15) Rhythm or safe period by calendar
  16) Safe period by temperature, cervical mucus test, natural family planning
  17) Withdrawal, pulling out
  18) Respondent sterile
  19) Partner sterile
  20) Other method (specify)

- *How many months or weeks had you been pregnant when the baby was born/that pregnancy ended? (Note: this yields date pregnancy began.)*

From the 1994 Abortion Patient Survey:

- *Before you found out you were pregnant, what was the LAST contraceptive method that you used to prevent pregnancy, including rhythm, withdrawal or condoms?*

  (a) Pill
  (b) Condom, rubber (for males)
  (c) Female condom, vaginal pouch
  (d) Diaphragm with or without jelly or cream
  (e) Sponge (TODAY)
  (f) Foam/cream/jelly
  (g) Suppository, insert (Semicid, Encara Oval)
  (h) IUD, coil, loop
  (i) Rhythm/natural family planning
  (j) Withdrawal
  (k) Norplant, implants in the arm
  (l) Depo-Prevera, injectables, shot
  (m) Emergency contraception/morning-after pill
  (n) Other method (specify)
  (o) Never used a method before this pregnancy

- *In what month and year did you stop using that method?*
  ______/______Month Year

- *For about how many months in a row had you been using that method?*

  Less than 1 month
  1 month
  2 months
  3 months
  4 months
  5 months
  6 months
  7 months
  8 months
  9 months
  10 months
  11 months
  12 months
  13 months
  14 months
  15 months
  16 months
  17 months
  18-24 months
  25-26 months
  27-28 months
  29-36 months
  37 or more months (3 or more years)

- *Had you ever used that method before the months specified above?*

- *Had you stopped using all methods to prevent pregnancy before you became pregnant this time?*

Expected Periodicity: Periodic.

Comments: Pregnancies include live births, miscarriages, or induced abortions.

Females are considered to have experienced pregnancy despite use of a reversible method if there was continuous method use (in 12-month intervals) and they became pregnant during a month of use of one or more of the following methods: birth control pills, condom (rubber), diaphragm, foam/jelly/cream, cervical cap, suppository, insert, Today™ sponge, female condom (vaginal pouch), IUD, coil, loop, Norplant, Depo-provera, injectables, withdrawal (pulling out), rhythm/natural family planning, or emergency contraception/morning-after pill.

NSFG data are adjusted for underreporting of abortions according to AGI's Abortion Patient Survey. Detailed information on adjustment procedure, contraceptive methods and failure rates have been published by AGI.[4]

See Part C for a description of NSFG.

9-5. (Developmental) Increase the proportion of health care providers who provide emergency contraception.

Comments:	An operational definition could not be specified at the time of publication. A proposed national data source is The Alan Guttmacher Institute (AGI).

9-6. (Developmental) Increase male involvement in pregnancy prevention and family planning efforts.

Comments:	An operational definition could not be specified at the time of publication. A proposed national data source is the National Survey of Family Growth (NSFG), CDC, NCHS. Proposed questions to be used to obtain the data are scheduled to be included in the 2001 NSFG. NSFG collect comparable data on males aged 15 to 49 years starting with data collected in 2001.

9-7. Reduce pregnancies among adolescent females.

National Data Sources:	Abortion Provider Survey, The Alan Guttmacher Institute (AGI); Abortion Surveillance Data, CDC, NCCDPHP; National Vital Statistics System (NVSS), CDC, NCHS; National Survey of Family Growth (NSFG), CDC, NCHS.
State Data Source:	Not identified.
Healthy People 2000 Objective:	5.1 (Family Planning).
Measure:	Rate.
Baseline:	68 (1996).
Numerator:	Number of pregnancies among females aged 15 to 17 years.
Denominator:	Number of adolescent females aged 15 to 17 years.
Population Targeted:	U.S. civilian, noninstitutionalized population; U.S. resident population.
Questions Used To Obtain the National Data:	From the 1995 National Survey of Family Growth:

➤ *(For fetal losses) In which of the ways did your pregnancy end?*

1) Miscarriage
2) Stillbirth

3) Abortion
4) Ectopic or tubal pregnancy
5) Live birth by Cesarean section
6) Live birth by vaginal delivery
[Responses 1 and 2 are used as indicators of fetal loss.]

Expected Periodicity: Periodic.

Comments: Adolescent pregnancies are the sum of all U.S. resident live births, induced abortions, and fetal losses to females aged 15 to 17 years.

Data on live births are counts of all births to U.S. residents occurring in the United States. Estimates of induced abortion are based on reports by CDC and The Alan Guttmacher Institute (AGI). AGI's national estimates of abortions, based on surveys it conducts of all known abortion providers, are distributed by age and race according to estimates prepared by CDC's National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP), based on reports of induced abortions from selected State health departments.

Estimates of fetal losses are estimates from the 1995 NSFG. Females participating in this survey were asked to report the dates and outcomes of each of their pregnancies in the past 5 years, including spontaneous fetal losses (miscarriages, stillbirths) from recognized pregnancies.

Fetal losses refer to pregnancies that end in miscarriage or stillbirth.

See Part C for a description of NSFG.

9-8. Increase the proportion of adolescents who have never engaged in sexual intercourse before age 15 years.

9-8a. Females.

National Data Source: National Survey of Family Growth (NSFG), CDC, NCHS.

State Data Source: Not identified.

Healthy People 2000 Objective: Adapted from 5.4 (Family Planning) (also 18.3 and 19.9).

Measure: Percent.

Baseline: 81 (1995).

Numerator: Number of females aged 15 to 19 years who had no sexual intercourse with a male before age 15.

Denominator: Number of females aged 15 to 19 years.

Population Targeted: U.S. civilian, noninstitutionalized population.

Questions Used To Obtain the National Data: From the 1995 National Survey of Family Growth:

➤ *At any time in your life, have you ever had sexual intercourse with a man, that is, made love, had sex, or gone all the way?*

[If yes:] *Please look at the calendar and think back to the very first time in your life that you ever had sexual intercourse with a man. In what month and year was that?*
____Month ____Year

Expected Periodicity: Periodic.

Comments: Females are considered to have never had sexual intercourse before age 15 if they report that they either never had sexual intercourse with a male or their age at first intercourse was greater than 15 years.

This objective is adapted from Healthy People 2000 objective 5.4, which tracked the proportion of adolescents aged 15 to 17 years who engaged in sexual intercourse. This measure tracks the proportion of females aged 15 to 19 years who have never engaged in sexual intercourse.

See Part C for a description of NSFG.

9-8b. Males.

National Data Source: National Survey of Adolescent Males (NSAM), Urban Institute.

State Data Source: Not identified.

Healthy People 2000 Objective: Adapted from 5.4 (Family Planning) (also 18.3 and 19.9).

Measure: Percent.

Baseline: 79 (1995).

Numerator: Number of males aged 15 to 19 years who had no sexual intercourse with a female before age 15.

Denominator: Number of males aged 15 to 19 years.

Population Targeted: U.S. civilian, noninstitutionalized population.

Questions Used To Obtain the National Data: From the 1995 National Survey of Adolescent Males:

➤ *Have you ever had sexual intercourse with a female (sometimes this is called "making love," "having sex" or "going all the way")?*

[Followed by a question of when the intercourse occurred, similar to that used in objective 9.8a]

Expected Periodicity: Periodic.

Comments: Males are considered to have never had sexual intercourse before age 15 if they report that they either never had sexual intercourse with a female or their age at first intercourse was greater than 15 years.

This objective is adapted from Healthy People 2000 objective 5.4, which tracked the proportion of adolescents aged 15 to 17 years who engaged in sexual intercourse. This measure tracks the proportion of males aged 15 to 19 years who have never engaged in sexual intercourse.

NSFG will collect comparable data on males aged 15 to 49 years starting with data collected in 2001 and will thereby replace NSAM for tracking of this measure.

9-9. Increase the proportion of adolescents who have never engaged in sexual intercourse.

9-9a. Females.

National Data Source: National Survey of Family Growth (NSFG), CDC, NCHS.

State Data Source: Not identified.

Healthy People 2000 Objective: Adapted from 5.4 (Family Planning) (also 18.3 and 19.9).

Measure: Percent.

Baseline: 62 (1995).

Numerator: Number of females aged 15 to 17 years who had never had sexual intercourse with a male.

Denominator: Number of females aged 15 to 17 years.

Population Targeted: U.S. civilian, noninstitutionalized population.

Questions Used To Obtain the National Data: From the 1995 National Survey of Family Growth:

- *At any time in your life, have you ever had sexual intercourse with a man, that is, made love, had sex, or gone all the way?*

Expected Periodicity: Periodic.

Comments: This objective is adapted from Healthy People 2000 objective 5.4, which tracked the proportion of adolescents aged 15 to 17 years who engaged in sexual intercourse. This measure tracks the proportion of females aged 15 to 17 years who have never engaged in sexual intercourse.

See Part C for a description of NSFG.

9-9b. Males.

National Data Source: National Survey of Adolescent Males (NSAM), Urban Institute.

State Data Source: Not identified.

Healthy People 2000 Objective: Adapted from 5.4 (Family Planning) (also 18.3 and 19.9).

Measure: Percent.

Baseline: 57 (1995).

Numerator: Number of males aged 15 to 17 years who had never had sexual intercourse with a female.

Denominator Number of males aged 15 to 17 years.

Population Targeted: U.S. civilian, noninstitutionalized population.

Questions Used To Obtain the National Data: From the 1995 National Survey of Adolescent Males:

➤ *Have you ever had sexual intercourse with a female (sometimes this is called "making love," "having sex" or "going all the way")?*

Expected Periodicity: Periodic.

Comments: This objective is adapted from Healthy People 2000 objective 5.4, which tracked the proportion of adolescents aged 15 to 17 years who engaged in sexual intercourse. This measure tracks the proportion of males aged 15 to 17 years who have never engaged in sexual intercourse.

NSFG will collect comparable data on males aged 15 to 49 years starting with data collected in 2001 and will thereby replace NSAM for tracking of this measure.

9-10. Increase the proportion of sexually active, unmarried adolescents aged 15 to 17 years who use contraception that both effectively prevents pregnancy and provides barrier protection against disease.

9-10a. Condom at first intercourse: Females.

National Data Source: National Survey of Family Growth (NSFG), CDC, NCHS.

State Data Source: Not identified.

Healthy People 2000 Objective: Adapted from 5.6 (Family Planning).

Measure: Percent.

Baseline: 67 (1995).

Numerator: Number of sexually experienced, unmarried females aged 15 to 17 years who used a condom at first intercourse.

Denominator: Number of sexually experienced, unmarried females aged 15 to 17 years.

Population Targeted: U.S. civilian, noninstitutionalized population.

Questions Used To Obtain the National Data: From the 1995 National Survey of Family Growth:

➤ *What is your current marital status? Are you...*

1) Married
2) Widowed
3) Divorced
4) Separated, because you and your husband are not getting along
5) Have you never been married?

[Following a series of questions on when sexual intercourse with a man occurred and whether or not the sexual intercourse was voluntary:]

➤ *The very first time you ever used a birth control method, which method did you use? If you used more than one method that first time, please tell me about it.*

1) Birth control pills
2) Condom
3) Partner's vasectomy
4) Diaphragm
5) Foam
6) Jelly or cream
7) Cervical cap
8) Suppository, insert
9) Today sponge
10) Female condom, vaginal pouch
11) IUD, Coil, Loop
12) Norplant
13) Depo-provera, Injectables
14) Morning after pill
15) Rhythm or safe period by calendar
16) Safe period by temperature, or cervical mucus test, natural family planning
17) Withdrawal, pulling out
18) Respondent sterile
19) Partner sterile
20) Other method (specify)

➤ *Thinking again of the very first time you used a method of birth control, was it the first time you had intercourse?*

Expected Periodicity: Periodic.

Comments: Unmarried females are considered to have used a condom at first intercourse if they reported they were sexually active and partner used a condom (rubber) at their first intercourse.

Sexually experienced refers to females who had their first premarital voluntary intercourse in the past 5 years.

This objective is adapted from a measure in Healthy People 2000 objective 5.6, which tracked the proportion of sexually active, unmarried people aged 15 to 19 years who used contraception at first intercourse. This measure tracks the proportion of females aged 15 to 17 years who used a condom at first intercourse.

See Part C for a description of NSFG.

9-10b. Condom at first intercourse: Males.

National Data Source: National Survey of Adolescent Males (NSAM), Urban Institute.

State Data Source: Not identified.

Healthy People 2000 Objective: Adapted from 5.6 (Family Planning).

Measure: Percent.

Baseline:	72 (1995).
Numerator:	Number of sexually experienced, unmarried males aged 15 to 17 years who used a condom at first intercourse.
Denominator:	Number of sexually experienced, unmarried males aged 15 to 17 years.
Population Targeted:	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data:	From the 1995 National Survey of Adolescent Males:

[Following a question on marital status:]

- *Have you ever had sexual intercourse with a female (sometimes this is called "making love," "having sex" or "going all the way")?*
- *That time (the first intercourse) did you, yourself, use any method of contraceptive to prevent pregnancy or sexually transmitted disease?*
- *What method did you use?*

  1) Condom, rubber
  2) Withdrawal, pulling out
  3) Combination of methods, specify
  4) Other, specify

Expected Periodicity: Periodic.

Comments: Unmarried males are considered to have used a condom at first intercourse if they reported they were sexually active and used a condom (rubber) at their first intercourse.

Sexually experienced refers to males aged 15 to 17 years who had ever had intercourse.

NSFG will collect comparable data on males aged 15 to 49 years starting with data collected in 2001 and will thereby replace the NSAM for tracking of this measure.

This objective is adapted from a measure in Healthy People 2000 objective 5.6, which tracked the proportion of sexually active, unmarried people aged 15 to 19 years who used contraception at most recent intercourse. This measure tracks the proportion of males aged 15 to 17 years who used a condom at first intercourse.

9-10c. Condom plus hormonal method at first intercourse: Females.

National Data Source:	National Survey of Family Growth (NSFG), CDC, NCHS.
State Data Source:	Not identified.
Healthy People 2000 Objective:	Adapted 5.6 (Family Planning).

Measure: Percent.

Baseline: 7 (1995).

Numerator: Number of sexually experienced, unmarried females aged 15 to 17 years who used a condom plus hormonal method at first intercourse.

Denominator: Number of sexually experienced, unmarried females aged 15 to 17 years.

Population Targeted: U.S. civilian, noninstitutionalized population.

Questions Used To Obtain the National Data: See Questions Used To Obtain the National Data provided with 9-10a.

Expected Periodicity: Periodic.

Comments: Unmarried females are considered to have used a condom and hormonal method at first intercourse if they reported they were sexually active; partner used a condom (rubber); and they used either birth control pills, Depo-provera injectables, Norplant implants, or morning-after pills at their first intercourse.

Sexually experienced refers to females who had their first premarital voluntary intercourse in the past 5 years.

This objective is adapted from a measure in Healthy People 2000 objective 5.6, which tracked the proportion of sexually active, unmarried people aged 15 to 19 years who used both an oral contraceptive and condom at most recent intercourse. This measure tracks the proportion of females aged 15 to 17 years who used a condom plus hormonal method at first intercourse.

See Part C for a description of NSFG.

9-10d. Condom plus hormonal method at first intercourse: Males.

National Data Source: National Survey of Adolescent Males (NSAM), Urban Institute.

State Data Source: Not identified.

Healthy People 2000 Objective: Adapted from 5.6 (Family Planning).

Measure: Percent.

Baseline: 8 (1995).

Numerator: Number of sexually experienced, unmarried males aged 15 to 17 years who used a condom plus hormonal method at first intercourse.

Denominator: Number of sexually experienced, unmarried males aged 15 to 17 years.

Population Targeted: U.S. civilian, noninstitutionalized population.

Questions Used To Obtain the National Data: See Questions Used To Obtain the National Data provided with 9-10b.

Expected Periodicity: Periodic.

Comments:	Unmarried males are considered to have used a condom and hormonal method at first intercourse if they reported they were sexually active; used a condom (rubber); and their partner used either pills, Norplant, or Depo-provera at their first intercourse. Sexually experienced refers to males aged 15 to 17 years who had ever had intercourse. NSFG will collect comparable data on males aged 15 to 49 years starting with data collected in 2001 and will thereby replace NSAM for tracking of this measure. This objective is adapted from a measure in Healthy People 2000 objective 5.6, which tracked the proportion of sexually active students aged 15 to 17 years who used condom and birth control pill at most recent intercourse using the Youth Risk Behavior Surveillance System (YRBSS), CDC, NCCDPHP. This measure tracks the proportion of males aged 15 to 17 years who used a condom plus hormonal method at first intercourse.

9-10e. Condom at last intercourse: Females.

National Data Source:	National Survey of Family Growth (NSFG), CDC, NCHS.
State Data Source:	Not identified.
Healthy People 2000 Objective:	Adapted from 19.10a (Sexually Transmitted Diseases) (also 18.4a).
Measure:	Percent.
Baseline:	39 (1995).
Numerator:	Number of sexually active, unmarried females aged 15 to 17 years who used a condom at last intercourse.
Denominator:	Number of sexually active, unmarried females aged 15 to 17 years.
Population Targeted:	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data:	From the 1995 National Survey of Family Growth:

- *What is your current marital status? Are you...*
  1) *Married*
  2) *Widowed*
  3) *Divorced*
  4) *Separated, because you and your husband are not getting along*
  5) *Have you never been married?*

[Following a series of questions on when sexual intercourse with a man occurred:]

- *The last time you had intercourse, did you or your partner use any method?*

- *Which methods?*

  1) Birth control pills
  2) Condom
  3) Partner's vasectomy
  4) Diaphragm
  5) Foam
  6) Jelly or cream
  7) Cervical cap
  8) Suppository, insert
  9) Today sponge
  10) Female condom, vaginal pouch
  11) IUD, Coil, Loop
  12) Norplant
  13) Depo-provera, Injectables
  14) Morning after pill
  15) Rhythm or safe period by calendar
  16) Safe period by temperature, or cervical mucus test, natural family planning
  17) Withdrawal, pulling out
  18) Respondent sterile
  19) Partner sterile
  20) Other method (specify)

Expected Periodicity: Periodic.

Comments: Unmarried females are considered to have used a condom at last intercourse if they reported they were sexually active and partner used a condom (rubber) at their last intercourse.

Sexually active refers to females who have had intercourse in the 3 months prior to interview.

This objective is adapted from a measure in Healthy People 2000 objective 19.10a, which tracked the proportion of sexually active, unmarried people aged 15 to 19 years who report their partner used a condom at last intercourse. This measure tracks the proportion of females aged 15 to 17 years who used a condom (male or female) at last intercourse.

See Part C for a description of NSFG.

9-10f. Condom at last intercourse: Males.

National Data Source: National Survey of Adolescent Males (NSAM), Urban Institute.

State Data Source: Not identified.

Healthy People 2000 Objective: Adapted from 19.10b (Sexually Transmitted Diseases) (also 18.4b).

Measure: Percent.

Baseline: 70 (1995).

Numerator: Number of sexually active, unmarried males aged 15 to 17 years who used a condom at last intercourse.

Denominator: Number of sexually active, unmarried males aged 15 to 17 years.

Population Targeted: U.S. civilian, noninstitutionalized population.

Questions Used To Obtain the National Data: From the 1995 National Survey of Adolescent Males:

[Following a question on marital status:]

➤ *Have you ever had sexual intercourse with a female (sometimes this is called "making love," "having sex" or "going all the way")?*

➤ *The last time you had intercourse with (Initials of partner) did you, yourself, use any method of contraception - that is, something to prevent pregnancy or sexually transmitted disease?*

➤ *What method did you use?*

1) Condom, rubber
2) Withdrawal, pulling out
3) Combination of methods, specify
4) Other, specify

The last time you had intercourse with (Initials of partner) did she use any contraceptive methods?

➤ *What method did she use?*

1) Depo-provera
2) Diaphragm or cervical cap
3) Douching (washing out) after intercourse
4) Female condom
5) Spermicidal foam/jelly/cream or suppository
6) IUD, Coil, Loop
7) Norplant
9) Pill
10) Rhythm, or safe period by calendar
11) Sterilization
12) Today sponge
13) Vaginal contraceptive film or insert
14) Combination of methods, specify
15) Something else, specify

Expected Periodicity: Periodic.

Comments: Unmarried males are considered to have used a condom at last intercourse if they reported they were sexually active and used a condom (rubber) at their last intercourse.

Sexually active refers to males who have had intercourse in the 3 months prior to interview.

NSFG will to collect comparable data on males aged 15 to 49 years starting with data collected in 2001 and will thereby replace NSAM for tracking this measure.

This objective is adapted from a measure in Healthy People 2000 objective 19.10b, which tracked the proportion of sexually active, unmarried people aged 15 to 19 years who used a condom at last intercourse. This measure tracks the proportion of males aged 15 to 17 years who used a condom (rubber) or partner used a female condom (vaginal pouch) at last intercourse.

9-10g. Condom plus hormonal method at last intercourse: Females.

National Data Source:	National Survey of Family Growth (NSFG), CDC, NCHS.
State Data Source:	Not identified.
Healthy People 2000 Objective:	Adapted from 5.6 (Family Planning).
Measure:	Percent.
Baseline:	7 (1995).
Numerator:	Number of sexually active, unmarried females aged 15 to 17 years who used a condom plus hormonal method at last intercourse.
Denominator:	Number of sexually active, unmarried females aged 15 to 17 years.
Population Targeted:	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data:	See Questions Used To Obtain the National Data provided with 9-10e.
Expected Periodicity:	Periodic.
Comments:	Unmarried females are considered to have used a condom and hormonal method at last intercourse if they reported they were sexually active; partner used a condom (rubber); <u>and</u> they used either birth control pills, Depo-provera injectables, Norplant implants, or morning-after pills at their last intercourse. Sexually active refers to females who have had intercourse in the 3 months prior to interview. This objective is adapted from a measure in Healthy People 2000 objective 5.6, which tracked the proportion of sexually active students aged 15 to 19 years who used oral contraceptives and condom (by partner) at most recent intercourse. This measure tracks the proportion of females aged 15 to 17 years who used a condom (male or female) plus hormonal method at last intercourse. See Part C for a description of NSFG.

9-10h. Condom plus hormonal method at last intercourse: Males.

National Data Source:	National Survey of Adolescent Males (NSAM), Urban Institute.
State Data Source:	Not identified.
Healthy People 2000 Objective:	Adapted from 5.6 (Family Planning).
Measure:	Percent.
Baseline:	16 (1995).
Numerator:	Number of sexually active, unmarried males aged 15 to 17 years who used a condom plus hormonal method at last intercourse.

Denominator:	Number of sexually active, unmarried males aged 15 to 17 years.
Population Targeted:	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data:	See Questions Used To Obtain the National Data provided with 9-10f.
Expected Periodicity:	Periodic.
Comments:	Unmarried males are considered to have used a condom and hormonal method at last intercourse if they reported they were sexually active; used a condom (rubber); and their partner used either pills, Norplant, or Depo-provera at last intercourse. Sexually active refers to males who have had intercourse in the 3 months prior to interview. NSFG will collect comparable data on males aged 15 to 49 years starting with data collected in 2001 and thereby replace NSAM for tracking this measure. This objective is adapted from a measure in Healthy People 2000 objective 5.6, which tracked the proportion of sexually active students aged 15 to 17 years who used birth control pills (by partner) and condom at most recent intercourse using the Youth Risk Behavior Surveillance System (YRBSS), CDC, NCCDPHP. This measure tracks the proportion of males aged 15 to 17 years who used a condom (rubber) or partner used a female condom (vaginal pouch) plus hormonal method at last intercourse.

9-11. Increase the proportion of young adults who have received formal instruction before turning age 18 years on reproductive health issues, including all of the following topics: birth control methods, safer sex to prevent HIV, prevention of sexually transmitted diseases, and abstinence.

National Data Source:	National Survey of Family Growth (NSFG), CDC, NCHS.
State Data Source:	Not identified.
Healthy People 2000 Objective:	Adapted from 5.8 (Family Planning).
Measure:	Percent.
Baseline:	64 (1995).
Numerator:	Females aged 18 to 24 years who report having had formal instruction, before turning age 18 years, on all 4 reproductive health issues.
Denominator:	Number of females aged 18 to 24 years.
Population Targeted:	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data:	From the 1995 National Survey of Family Growth:

[Question asked for each health topic:]

➤ *Now I'm interested in knowing about formal sex education you may have had. Before you were 18, did you have any formal instruction at school, church, a community center, or some other place about...*

1) Method of birth control?
2) Sexually transmitted diseases?
3) How to prevent AIDS using safe sex practices?
4) Abstinence or how to say NO to sex?

Expected Periodicity: Periodic.

Comments: Females are considered as having received formal instruction if they report they received formal sex education before age 18 years on all four topics: birth control, sexually transmitted diseases, safe sex practices, and abstinence.

This objective is adapted from a measure in Healthy People 2000 objective 5.8, which tracked the proportion of people aged 10 to 18 years who have discussed human sexuality, 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. This measure tracks the proportion of females aged 18 to 24 years who have received formal instruction, before turning age 18 years, on reproductive health issues, such as birth control methods, safer sex to prevent HIV, prevention of STDs, and abstinence.

See Part C for a description of NSFG.

9-12. Reduce the proportion of married couples whose ability to conceive or maintain a pregnancy is impaired.

National Data Source: National Survey of Family Growth (NSFG), CDC, NCHS.

State Data Source: Not identified.

Healthy People 2000 Objective: Adapted from 5.3 (Family Planning).

Measure: Percent.

Baseline: 13 (1995).

Numerator: Number of married females with impaired fecundity.

Denominator: Number of married females aged 15 to 44 years.

Population Targeted: U.S. civilian, noninstitutionalized population.

Questions Used To Obtain the National Data: From the 1995 National Survey of Family Growth:

➤ *What is your current marital status? Are you...*

1) Married,
2) Widowed,
3) Divorced,

4) *Separated, because you and your husband are not getting along,*
5) *Have you never been married?*

[Following a series of questions to ALL respondents that address pregnancy, contraceptive use and periods of no sexual activity:]

- *Have you ever had both your tubes tied, cut, or removed? This procedure is often called a tubal ligation.*
- *Have you ever had a hysterectomy, that is, surgery to remove your uterus?*
- *Have you ever had both your ovaries removed?*
- *Have you ever had any other operation that makes it impossible for you to have another baby?*
- *As far as you know, are you completely sterile from this operation, that is, does it make it impossible for you to have a baby in the future?*
- *Has (name of husband/partner) ever had a vasectomy or any other operation that would make it impossible to father a baby in the future?*

[Nonsurgically sterile respondents are those who have not reported any operations for themselves, or if they are married or cohabiting, for their husbands/partners.] [For respondents who are nonsurgically sterile:]

- *Some women are not physically able to have children. As far as you know, is it physically possible for you, yourself, to have a baby?*
- *What about (name of husband/partner)? As far as you know, is it physically impossible for him to father a baby in the future?*

[If it is physically possible:]

- *Some women are physically able to have a baby, but have difficulty getting pregnant or carrying a baby to term. As far as you know, would you, yourself, have any difficulty getting pregnant or carrying a baby to term?*
- *As far as you know, does (name of male partner) have any difficulty fathering a baby?*
- *At any time has a medical doctor ever advised you to never become pregnant (again)?*

Expected Periodicity: Periodic.

Comments: Females are considered to have impaired fecundity if they reported they are married; and neither they nor their husband has had a sterilizing operation; or any one of the following:

(a) she and her husband are nonsurgically sterile and it is physically impossible for her to get pregnant or carry a baby to term, or for her husband to father a baby;

(b) it is physically difficult for her to get pregnant or carry a baby to term, or for her husband to father a baby;

(c) she has been advised by a doctor (for health reasons) not to become pregnant;

(d) she and her husband have been married for at least 36 consecutive months and have reported sexual activity without contraception for at least 36 consecutive months, and have had no pregnancies in that time period.

This objective is adapted from a measure in Healthy People 2000 objective 5.3, which tracked the prevalence of infertility. This measure tracks the proportion of married couples who are unable to conceive or maintain a pregnancy due to impaired fecundity.

See Part C for a description of NSFG.

9-13. (Developmental) Increase the proportion of health insurance policies that cover contraceptive supplies and services.

Comments: An operational definition could not be specified at the time of publication.

A proposed data source is The Alan Guttmacher Institute (AGI).[5]

References

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4. Fu, H.; Darroch, J.E.; Haas, T.; et al. Contraceptive Failure Rates: New Estimates from the 1995 NSFG. *Family Planning Perspectives* 31(2):56-63, 1999. <http://www.agi-usa.org/pubs/journals/3105699.html>
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Health Communication

11-3. Research and evaluation of communication programs

11-6. Satisfaction with health care providers' communication skills

11-3. (Developmental) Increase the proportion of health communication activities that include research and evaluation.

Comments: An operational definition could not be specified at the time of publication.

Proposed sources of data for this objective are *Federal Register* notices, Grantmakers in Health, and the National Health Council.

11-6. (Developmental) Increase the proportion of persons who report that their health care providers have satisfactory communication skills.

Comments: An operational definition could not be specified at the time of publication.

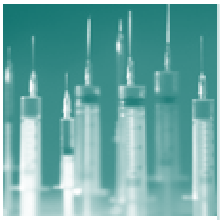
Proposed sources of data for this objective include the National Committee for Quality Assurance (NCQA); the Behavioral Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP; the National Health Interview Survey (NHIS), CDC, NCHS; and industry surveys such as those conducted by FIND/SVP, Nielsen, and Jupiter Communications.

HIV

13-1.	New AIDS cases
13-5.	New HIV cases
13-6.	Condom use
13-6a.	Females aged 18 to 44 years
13-6b.	Males aged 18 to 49 years
13-7.	Knowledge of serostatus
13-9.	HIV/AIDS, STD, and TB education in State prisons
13-10.	HIV counseling and testing in State prisons
13-12.	Screening for STDs and immunization for hepatitis B
13-14.	HIV-infection deaths
13-15.	Interval between HIV infection and AIDS diagnosis
13-17.	Perinatally acquired HIV infection

13-1. Reduce AIDS among adolescents and adults.

National Data Source:	HIV/AIDS Surveillance System, CDC, NCHSTP.
State Data Source:	State HIV/AIDS Surveillance Programs.
Healthy People 2000 Objective:	18.2 (HIV infection).
Measure:	Rate per 100,000 population.
Baseline:	19.5 (1998).
Numerator:	Number of reported AIDS cases among adolescents and adults aged 13 years and older.
Denominator:	Number of adolescents and adults aged 13 years and older.
Population Targeted:	U.S. resident population.
Questions Used To Obtain the National Data:	CDC Adult HIV/AIDS Confidential Case Report, Form 50.42A, Rev. 7/93.
Expected Periodicity:	Annual.
Comments:	The AIDS case definition used by the HIV/AIDS Surveillance system for an AIDS case is provided by the CDC.[1, 2, 3, 4, 5, 6, 7] Data are adjusted for reporting delay.[1]



13-5. (Developmental) Reduce the number of cases of HIV infection among adolescents and adults.

Comments:	An operational definition could not be specified at the time of publication. The proposed national data source is the HIV/AIDS Surveillance System, CDC, NCHSTP. As of November 1, 1999, a total of 34 States and the U.S. Virgin Islands participate in HIV case surveillance with CDC. Combined, these areas represent approximately 42 percent of AIDS cases reported. It is expected that additional States will move to HIV case surveillance and release the data to CDC. This objective is a modification of Healthy People 2000 objective 18.2, which tracked HIV prevalence using estimates based on data from a number of sources to derive estimates on HIV prevalence, including data from the National Health and Nutrition Examination Survey (NHANES), CDC, NCHS (for the total population), anonymous surveys conducted in STD clinics (for men who have sex with men), seroprevalence studies (for injecting drug users), and the Survey on Childbearing Women (for females giving birth).[8, 9] This measure will provide data based on HIV case surveillance reports from the HIV/AIDS Surveillance System.

13-6. Increase the proportion of sexually active persons who use condoms.

13-6a. Females aged 18 to 44 years.

National Data Source:	National Survey of Family Growth (NSFG), CDC, NCHS.
State Data Source:	Not identified.
Healthy People 2000 Objective:	Adapted from 19.10 (Sexually Transmitted Diseases) (also 18.4).
Leading Health Indicator:	Responsible Sexual Behavior.
Measure:	Percent.
Baseline:	23 (1995).
Numerator:	Number of sexually active, unmarried females aged 18 to 44 years who reported using a condom at last sexual intercourse.
Denominator:	Number of sexually active, unmarried females aged 18 to 44 years.
Population Targeted:	U.S. civilian, noninstitutionalized population.

Questions Used To Obtain the National Data:

From the 1995 National Survey of Family Growth:

- *What is your current marital status? Are you…*

  1) Married
  2) Widowed
  3) Divorced
  4) Separated, because you and your husband are not getting along
  5) Have you never been married?

- *The last time you had intercourse, did you or your partner use any method?*

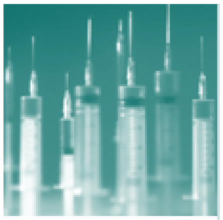
  [If yes:]
  Which methods?
  1) Birth control pills
  2) Condom
  3) Partner's vasectomy
  4) Diaphragm
  5) Foam
  6) Jelly or cream
  7) Cervical cap
  8) Suppository, insert
  9) Today sponge
  10) Female condom, vaginal pouch
  11) IUD, Coil, Loop
  12) Norplant
  13) Depo-provera, Injectables
  14) Morning after pill
  15) Rhythm or safe period by calendar
  16) Safe period by temperature, or cervical mucus test, natural family planning
  17) Withdrawal, pulling out
  18) Respondent sterile
  19) Partner sterile
  20) Other method (specify)

Expected Periodicity: Periodic.

Comments: Unmarried females are considered to have used a condom at last intercourse if they reported they had never been married, were sexually active, and either used a female condom (vaginal pouch) or partner used a condom (rubber) at their last intercourse.

Sexually active refers to females who have had intercourse in the 3 months prior to interview.

This objective is adapted from a measure in Healthy People 2000 objective 19.10, which tracked the proportion of sexually active, unmarried people aged 15 to 44 years who report their partner used a condom at last intercourse. This measure tracks the proportion of females aged 18 to 44 years who used a condom (male or female) at last intercourse.



This objective is one of the measures used to track the Responsible Sexual Behavior Leading Health Indicator.

See Part C for a description of NSFG.

13-6b. (Developmental) Males aged 18 to 49 years.

Comments: An operational definition could not be specified at the time of publication.

The proposed national data source is the National Survey of Family Growth (NSFG), CDC, NCHS.

The current NSFG does not collect data on males. Starting in 2001, data for males aged 18 to 49 years will be collected and can track this objective.

See Part C for a description of NSFG.

13-7. (Developmental) Increase the number of HIV-positive persons who know their serostatus.

Comments: An operational definition could not be specified at the time of publication.

The proposed national data source is the HIV/AIDS Surveillance System, CDC, NCHSTP.

This measure is a modification of Healthy People 2000 objective 18.8, which tracked the percent of positive HIV tests for which people returned for counseling. This measure will track the number of HIV positive persons who know their serostatus.

13-9. (Developmental) Increase the number of State prison systems that provide comprehensive HIV/AIDS, sexually transmitted diseases, and tuberculosis (TB) education.

Comments: An operational definition could not be specified at time of publication.

The proposed national data source is the Biennial Survey of HIV, STD, and TB Prevention in Correctional Facilities, CDC, and NIJ.

13-10. (Developmental) Increase the proportion of inmates in State prison systems who receive voluntary HIV counseling and testing during incarceration.

Comments: See Comments provided with objective 13-9 for more information.

13-12. (Developmental) Increase the proportion of adults in publicly funded HIV counseling and testing sites who are screened for common bacterial sexually transmitted diseases (STDs) (chlamydia, gonorrhea, and syphilis) and are immunized against hepatitis B virus.

Comments: An operational definition could not be specified at the time of publication.

A proposed national and State data source is the HIV Counseling and Testing System (CTS), CDC, NCHSTP.

For STD screening, the proposed numerator is the number of HIV tests among persons aged 18 years and older visiting an STD, family planning, or prenatal/obstetric HIV counseling and testing site who also receive screening for common bacterial STDs.

For hepatitis B immunization, the proposed numerator is the number of HIV tests among persons aged 18 years and older visiting an STD, family planning, or prenatal/obstetric HIV counseling and testing site who receive a hepatitis B vaccination, according to Advisory Committee on Immunization Practices (ACIP) recommendations.

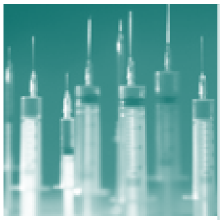
Screening for common bacterial STDs and immunizations against hepatitis B are not feasible in all publicly funded CTS sites, which may include sites without a primary care provider on the premises. HIV counseling and testing sites providing STD, family planning, or prenatal/obstetric care will be able to offer appropriate services to populations at risk.

CTS data are from publicly funded HIV counseling and testing sites provided in a variety of settings, including freestanding HIV counseling and testing sites (which offer anonymous tests, confidential tests, or both), STD clinics, family planning clinics, prenatal clinics, drug treatment centers, and correctional facilities (including long-term and short-term detention facilities).

Data are collected and analyzed at the level of an individual test encounter, without the identity of the client. A single client can have multiple tests recorded during 1 year. Sites that only report test encounters in summary records and not individual test encounters will not be included in the analysis.

13-14. Reduce deaths from HIV infection.

National Data Source:	National Vital Statistics System (NVSS), CDC, NCHS.
State Data Source:	State Vital Statistics.
Healthy People 2000 Objective:	Not applicable.
Measure:	Rate per 100,000 (age adjusted—see Comments).
Baseline:	4.9 (1998).



Numerator:	Number of deaths due to HIV infection (ICD-9 codes *042-*044).
Denominator:	Number of persons.
Population Targeted:	U.S. resident population.
Questions Used To Obtain the National Data:	Not applicable.
Expected Periodicity:	Annual.
Comments:	Data are age adjusted to the 2000 standard population. Age-adjusted rates are weighted sums of age-specific rates. For a discussion on age adjustment, see *Tracking Healthy People 2010* Part A, section 5. Resident death data are based on information from death certificates filed in the 50 States and the District of Columbia. See Part C for a description of NVSS.

13-15. (Developmental) Extend the interval of time between an initial diagnosis of HIV infection and AIDS diagnosis in order to increase years of life of an individual infected with HIV.

Comments:	An operational definition could not be specified at the time of publication. The proposed national data source is the HIV/AIDS Surveillance System, CDC, NCHSTP.

13-17. (Developmental) Reduce new cases of perinatally acquired HIV infection.

Comments:	An operational definition could not be specified at the time of publication. The proposed national data source is the HIV/AIDS Surveillance System, CDC, NCHSTP.

References

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Immunization and Infectious Diseases

Diseases Preventable Through Universal Vaccination

14-3.	Hepatitis B in adults and high-risk groups
14-3a.	19 to 24 years
14-3b.	25 to 39 years
14-3c.	40 years and older
14-3d.	Injection drug users
14-3e.	Heterosexually active persons
14-3f.	Men who have sex with men
14-3g.	Occupationally exposed workers

Infectious Diseases and Emerging Antimicrobial Resistance

14-9.	Hepatitis C

Vaccination Coverage and Strategies

14-28.	Hepatitis B vaccination among high-risk groups
14-28a.	Long-term hemodialysis patients
14-28b.	Men who have sex with men
14-28c.	Occupationally exposed workers

Diseases Preventable Through Universal Vaccination

14-3. Reduce hepatitis B.

Adults

14-3a. 19 to 24 years.

National Data Source:	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
State Data Source:	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.
Healthy People 2000 Objective:	Adapted from 20.3 (Immunization and Infectious Diseases).
Measure:	Rate per 100,000 population.
Baseline:	24.0 (1997).
Numerator:	Number of estimated cases of hepatitis B among persons aged 19 to 24 years.
Denominator:	Number of persons aged 19 to 24 years.
Population Targeted:	U.S. resident population.

Questions Used To Obtain National Data: CDC Viral Hepatitis Case Record for Reporting of Patients the With Symptomatic Acute Viral Hepatitis, Form 53.1, Rev. 06/93.

Expected Periodicity: Annual.

Comments: To determine the estimated number of hepatitis B cases by year of age, the number of hepatitis B cases reported to NNDSS by year of age is multiplied by age-specific ratios of infections to reported cases and divided by the age-specific proportions of infections which are symptomatic.[2, 3]

To determine the estimated hepatitis B rate for a specific age group, the estimated number of cases for each year of age included in the group are added together and divided by the total population in that age group.

This measure is a modification of its comparable Healthy People 2000 objective 20.3, which tracked all ages. This measure tracks specific age groups.

14-3b. 25 to 39 years.

National Data Source: National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.

State Data Source: National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.

Healthy People 2000 Objective: Adapted from 20.3 (Immunization and Infectious Diseases).

Measure: Rate per 100,000 population.

Baseline: 20.2 (1997).

Numerator: Number of estimated cases of hepatitis B among persons aged 25 to 39 years.

Denominator: Number of persons aged 25 to 39 years.

Population Targeted: U.S. resident population.

Questions Used To Obtain the National Data: CDC Viral Hepatitis Case Record for Reporting of Patients With Symptomatic Acute Viral Hepatitis, Form 53.1, Rev. 06/93.

Expected Periodicity: Annual.

Comments: See Comments provided with objective 14-3 for more information.

14-3c. 40 years and older.

National Data Source: National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.

State Data Source: National Notifiable Disease Surveillance System (NNDSS), CDC, EPO.

Healthy People 2000 Objective: Adapted from 20.3 (Immunization and Infectious Diseases).

Measure: Rate per 100,000 population.

Baseline: 15.0 (1997).

Numerator:	Number of estimated cases of hepatitis B among persons aged 40 years and older.
Denominator:	Number of persons aged 40 years and older.
Population Targeted:	U.S. resident population.
Questions Used To Obtain the National Data:	CDC Viral Hepatitis Case Record for Reporting of Patients With Symptomatic Acute Viral Hepatitis, Form 53.1, Rev. 06/93.
Expected Periodicity:	Annual.
Comments:	See Comments provided with objective 14-3 for more information.

High-risk groups

14-3d. Injection drug users.

National Data Sources:	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO; Sentinel Counties Study of Viral Hepatitis, CDC, NCID.
State Data Sources:	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO; Viral Hepatitis Surveillance Program.
Healthy People 2000 Objective:	20.3a (Immunization and Infectious Diseases).
Measure:	Number.
Baseline:	7,232 (1997).
Numerator:	Number of estimated hepatitis B cases multiplied by the proportion of hepatitis B cases reported to the Sentinel Counties Study of Viral Hepatitis that were attributable to injection drug use.
Denominator:	Not applicable.
Population Targeted:	U.S. resident population.
Questions Used To Obtain the National Data:	CDC Viral Hepatitis Case Record for Reporting of Patients With Symptomatic Acute Viral Hepatitis, Form 53.1, Rev. 06/93.
Expected Periodicity:	Annual.
Comments:	To determine the estimated number of hepatitis B cases occurring in injection drug users nationwide, the estimated total number of hepatitis B cases in all age groups (for complete description of the calculation method, see objective 14-3a Comments) is multiplied by the proportion of cases reported to Sentinel Counties Study of Viral Hepatitis that occurred in injection drug users. To obtain State-specific measures for this objective, local Viral Hepatitis Surveillance Program data are used to determine the estimated number of cases occurring in the State and the proportion attributable to injection drug use.

14-3e. Heterosexually active persons.

National Data Sources:	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO; Sentinel Counties Study of Viral Hepatitis, CDC, NCID.

State Data Sources:	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO; Viral Hepatitis Surveillance Program.
Healthy People 2000 Objective:	20.3b (Immunization and Infectious Diseases) (also part of 19.7).
Measure:	Number.
Baseline:	15,225 (1997).
Numerator:	Number of estimated hepatitis B cases multiplied by the proportion of new symptomatic hepatitis B cases reported to the Sentinel Counties Study of Viral Hepatitis that occurred among heterosexually active persons.
Denominator:	Not applicable.
Population Targeted:	U.S. resident population.
Questions Used To Obtain the National Data:	CDC Viral Hepatitis Case Record for Reporting of Patients With Symptomatic Acute Viral Hepatitis, Form 53.1, Rev. 06/93.
Expected Periodicity:	Annual.
Comments:	To determine the estimated number of hepatitis B cases occurring in heterosexually active persons nationwide, the estimated total number of hepatitis B cases in all age groups (for complete description of the calculation method, see objective 14-3a Comments) is multiplied by the proportion of cases reported to Sentinel Counties Study of Viral Hepatitis that occurred in heterosexually active persons. To obtain State-specific measures for this objective, local Viral Hepatitis Surveillance Program data are used to determine the estimated number of cases occurring in the State and the proportion attributable to heterosexual activity.

14-3f. Men who have sex with men.

National Data Sources:	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO; Sentinel Counties Study of Viral Hepatitis, CDC, NCID.
State Data Sources:	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO; Viral Hepatitis Surveillance Program.
Healthy People 2000 Objective:	20.3c (Immunization and Infectious Diseases) (also part of 19.7).
Measure:	Number.
Baseline:	7,232 (1997).
Numerator:	Number of estimated hepatitis B cases multiplied by the proportion of hepatitis B cases reported to the Sentinel Counties Study of Viral Hepatitis that were attributable to male homosexual behavior.
Denominator:	Not applicable.

Population Targeted:	U.S. resident population.
Questions Used To Obtain the National Data:	CDC Viral Hepatitis Case Record for Reporting of Patients With Symptomatic Acute Viral Hepatitis, Form 53.1, Rev. 06/93.
Expected Periodicity:	Annual.
Comments:	To determine the estimated number of hepatitis B cases occurring in homosexual males nationwide, the estimated total number of hepatitis B cases in all age groups (for complete description of the calculation method, see objective 14-3a Comments) is multiplied by the proportion of cases reported to Sentinel Counties Study of Viral Hepatitis that occurred in homosexual males. To obtain State-specific measures for this objective, local Viral Hepatitis Surveillance Program data are used to determine the estimated number of cases occurring in the State and the proportion attributable to male homosexual activity.

14-3g. Occupationally exposed workers.

National Data Sources:	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO; Sentinel Counties Study of Viral Hepatitis, CDC, NCID.
State Data Sources:	National Notifiable Disease Surveillance System (NNDSS), CDC, EPO; Viral Hepatitis Surveillance Program.
Healthy People 2000 Objective:	20.3e (Immunization and Infectious Diseases) (also 10.5).
Measure:	Number.
Baseline:	249 (1997).
Numerator:	Number of estimated hepatitis B cases multiplied by the proportion of hepatitis B cases reported to the Sentinel Counties Study of Viral Hepatitis that were attributed to occupational exposure.
Denominator:	Not applicable.
Population Targeted:	U.S. resident population.
Questions Used To Obtain the National Data:	CDC Viral Hepatitis Case Record for Reporting of Patients With Symptomatic Acute Viral Hepatitis, Form 53.1, Rev. 06/93.
Expected Periodicity:	Annual.
Comments:	To determine the estimated number of hepatitis B cases occurring in occupationally exposed workers nationwide, the estimated total number of hepatitis B cases in all age groups (for a complete description of the calculation method, see objective 14-3a Comments) is multiplied by the proportion of cases reported to Sentinel Counties Study of Viral Hepatitis that occurred in occupationally exposed workers. To obtain State-specific measures for this objective, local Viral Hepatitis Surveillance Program data are used to determine the estimated number of cases occurring in the State and the proportion attributable to occupational exposure.

Infectious Diseases and Emerging Antimicrobial Resistance

14-9. Reduce hepatitis C.

National Data Source:	Sentinel Counties Study of Viral Hepatitis, CDC, NCID.
State Data Source:	Viral Hepatitis Surveillance Program, CDC, NCID.
Healthy People 2000 Objective:	20.3 (Immunization and Infectious Diseases).
Measure:	Rate per 100,000 population.
Baseline:	2.4 (1996).
Numerator:	Number of new symptomatic hepatitis C cases.
Denominator:	Number of persons.
Population Targeted:	U.S. resident population.
Questions Used To Obtain the National Data:	CDC Viral Hepatitis Case Record for Reporting of Patients With Symptomatic Acute Viral Hepatitis, Form 53.1, Rev. 06/93.
Expected Periodicity:	Annual.
Comments:	A case definition for new symptomatic cases of hepatitis C is available from CDC.[1] To estimate the incidence of new symptomatic hepatitis C, the incidence rate of reported non-A, non-B hepatitis per 100,000 population in the sentinel counties is multiplied by an underreporting adjustment factor of 2.4 and then by the factor of 0.9, the proportion of non-A, non-B hepatitis that is attributable to hepatitis C virus (HCV) infection, weighted to the U.S. population. The estimates from sentinel counties are then weighted to the U.S. resident population. Because reporting of new symptomatic hepatitis C to national surveillance systems has been unreliable to date, the national incidence of hepatitis C is based on cases reported through the Sentinel Counties Study of Viral Hepatitis.

Vaccination Coverage and Strategies

14-28. Increase hepatitis B vaccine coverage among high-risk groups.

14-28a. Long-term hemodialysis patients.

National Data Source:	Annual Survey of Chronic Hemodialysis Centers, CDC, NCID and HCFA.
State Data Source:	Not identified.
Healthy People 2000 Objective:	Not applicable.
Measure:	Percent.
Baseline:	35 (1995).

Numerator:	Number of patients receiving chronic hemodialysis who have ever received at least three doses of hepatitis B vaccine.
Denominator:	Number of patients receiving chronic hemodialysis.
Population Targeted:	U.S. chronic hemodialysis patient population.
Questions Used To Obtain the National Data:	From the 1995 Annual Survey of Chronic Hemodialysis Centers: ➤ *How many patients were assigned to your hemodialysis center as of (date of survey)?* ➤ *How many of these patients had ever in their lives received at least 3 doses of hepatitis B vaccine?*
Expected Periodicity:	Annual.

14-28b. Men who have sex with men.

Comments:	A complete operational definition was not provided at the time of publication. The national data source is the Young Men's Survey, National Center for HIV, STD, and TB Prevention, CDC, NCHSTP. This objective is comparable to one of the measures in Healthy People 2000 objective 20.11 (Immunization and Infectious Diseases).

14-28c. Occupationally exposed workers.

National Data Source:	Periodic Vaccine Coverage Surveys, CDC, NCID (See Comments).
State Data Source:	Not identified.
Healthy People 2000 Objective:	20.11 (Immunization and Infectious Diseases) (also 10.9).
Measure:	Percent.
Baseline:	71 (1995).
Numerator:	Number of health care workers reported by participating facilities to have received at least three doses of hepatitis B vaccine.
Denominator:	Number of health care workers employed at participating facilities.
Population Targeted:	U.S. health care worker population.
Questions Used To Obtain the National Data:	From the 1995 survey:[4, 5] ➤ *How many full-time and part-time staff who had direct contact with patients were employed at your center?* ➤ *How many of these staff had ever received at least 3 doses of hepatitis B vaccine?*

Expected Periodicity:	Periodic.
Comments:	Methodology on measuring this objective has been previously published.[4, 5] The expected periodicity for measuring this objective is every 5 years.

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Injury and Violence Prevention

Violence and Abuse Prevention

15-34. Physical assault by intimate partners
15-35. Rape or attempted rape
15-36. Sexual assault other than rape

Violence and Abuse Prevention

15-34. Reduce the rate of physical assault by current or former intimate partners.

National Data Source:	National Crime Victimization Survey (NCVS), DOJ, BJS.
State Data Source:	Not identified.
Healthy People 2000 Objective:	Adapted from 7.5 (Violent and Abusive Behavior).
Measure:	Rate per 1,000 population.
Baseline:	4.4 (1998).
Numerator:	Number of persons aged 12 years and older who report being threatened or assaulted by current or former spouse, boyfriend, or girlfriend.
Denominator:	Number of persons aged 12 years and older.
Population Targeted:	Noninstitutionalized population.
Questions Used To Obtain the National Data:	From the 1998 National Crime Victimization Survey:

- *Other than any incidents already mentioned, has anyone attacked or threatened you in any of these ways:*

  a) With any weapon, for instance, a gun or knife
  b) With anything like a baseball bat, frying pan, scissors or stick
  c) By something thrown, such as a rock or bottle
  d) Include any grabbing, punching, or choking
  e) Any rape, attempted rape or other type of sexual attack
  f) Any face-to-face threats
  OR
  g) Any attack or threat or use of force by anyone at all? Please mention it even if you are not certain that it was a crime. (Briefly describe incident.)

- *People often don't think of incidents committed by someone they know. (Other than incidents already mentioned) did you have something stolen from you OR were you attacked or threatened by (Exclude telephone threats)…*
  - *a) Someone at work or school*
  - *b) A neighbor or friend*
  - *c) A relative or family member*
  - *d) Any other person you've met or known?*

  (Briefly describe incident.)

Expected Periodicity: Annual.

Comments: This objective differs from Healthy People 2000 objective 7.5, which included females only.

15-35. Reduce the annual rate of rape or attempted rape.

National Data Source: National Crime Victimization Survey (NCVS), DOJ, BJS.

State Data Source: Not identified.

Healthy People 2000 Objective: Adapted from 7.7 (Violent and Abusive Behavior).

Measure: Rate per 1,000 population.

Baseline: 0.8 (1998).

Numerator: Number of persons aged 12 years and older who reported being raped or a victim of an attempted rape.

Denominator: Number of persons aged 12 years and older.

Population Targeted: Noninstitutionalized population.

Questions Used To Obtain the National Data: From the 1998 National Crime Victimization Survey:

- *Other than any incidents already mentioned, has anyone attacked or threatened you in any of these ways:* [Response categories include:]
  Any rape, attempted rape, or other type of sexual attack?
  (Briefly describe the incident.)

Expected Periodicity: Annual.

Comments: This objective differs from Healthy People 2000 objective 7.7, which included females only.

15-36. Reduce sexual assault other than rape.

National Data Source: National Crime Victimization Survey (NCVS), U. S. Department of Justice, Bureau of Justice Statistics.

State Data Source: Not identified.

Healthy People 2000 Objective: Not applicable.

Measure:	Rate per 1,000 population.
Baseline:	0.6 (1998).
Numerator:	Number of persons aged 12 years and older who report being threatened or physically assaulted in a sexual way other than rape.
Denominator:	Number of persons aged 12 years and older.
Population Targeted:	Noninstitutionalized population.
Questions Used To Obtain the National Data:	From the 1998 National Crime Victimization Survey:
	➤ *Other than any incidents already mentioned, has anyone attacked or threatened you in any of these ways:* [Response categories include:] *Any rape, attempted rape, or other type of sexual attack? (Briefly describe the incident.)*
Expected Periodicity:	Annual.
Comments:	Sexual assaults include sexual attacks or threats other than rape or attempted rape against males and females.

Maternal, Infant, and Child Health

Fetal, Infant, Child, and Adolescent Deaths

16-3.	Adolescent and young adult deaths
16-3a.	Adolescents aged 10 to 14 years
16-3b.	Adolescents aged 15 to 19 years
16-3c.	Young adults aged 20 to 24 years

Maternal Deaths and Illnesses

16-4.	Maternal deaths
16-5.	Maternal illness and complications due to pregnancy
16-5a.	During labor and delivery
16-5b.	Ectopic pregnancies
16-5c.	Postpartum complications

Prenatal Care

16-6.	Prenatal care
16-6a.	First trimester
16-6b.	Early and adequate

Developmental Disabilities and Neural Tube Defects

16-16.	Optimum folic acid levels
16-16a.	Folic acid consumption
16-16b.	Median RBC folate levels

Prenatal Substance Exposure

16-17.	Prenatal substance exposure
16-17a.	Alcohol
16-17b.	Binge drinking
16-17c.	Cigarette smoking
16-17d.	Illicit drugs

Fetal, Infant, Child, and Adolescent Deaths

16-3. Reduce deaths of adolescents and young adults.

16-3a. **Adolescents aged 10 to 14 years.**

National Data Source:	National Vital Statistics System (NVSS), CDC, NCHS.
State Data Source:	National Vital Statistics System (NVSS), CDC, NCHS.
Healthy People 2000 Objective:	Not applicable.

Measure: Rate per 100,000 population.

Baseline: 22.1 (1998).

Numerator: Number of deaths among adolescents aged 10 to 14 years.

Denominator: Number of adolescents aged 10 to 14 years.

Targeted Population: U.S. resident population.

Questions Used To Obtain the National Data: Not applicable.

Expected Periodicity: Annual.

Comments: See Part C for a description of NVSS.

16-3b. Adolescents aged 15 to 19 years.

National Data Source: National Vital Statistics System (NVSS), CDC, NCHS.

State Data Source: National Vital Statistics System (NVSS), CDC, NCHS.

Healthy People 2000 Objective: Not applicable.

Measure: Rate per 100,000 population.

Baseline: 70.6 (1998).

Numerator: Number of deaths among adolescents aged 15 to 19 years.

Denominator: Number of adolescents aged 15 to 19 years.

Targeted Population: U.S. resident population.

Questions Used To Obtain the National Data: Not applicable.

Expected Periodicity: Annual.

Comments: See Part C for a description of NVSS.

16-3c. Young adults aged 20 to 24 years.

National Data Source: National Vital Statistics System (NVSS), CDC, NCHS.

State Data Source: National Vital Statistics System (NVSS), CDC, NCHS.

Healthy People 2000 Objective: Not applicable.

Measure: Rate per 100,000 population.

Baseline: 95.3 (1998).

Numerator: Number of deaths among young adults aged 20 to 24 years.

Denominator: Number of young adults aged 20 to 24 years.

Targeted Population: U.S. resident population.

Questions Used To Obtain the National Data: Not applicable.

Expected Periodicity:	Annual.
Comments:	See Part C for a description of NVSS.

Maternal Deaths and Illnesses

16-4. Reduce maternal deaths.

National Data Source:	National Vital Statistics System (NVSS), CDC, NCHS.
State Data Source:	National Vital Statistics System (NVSS), CDC, NCHS.
Healthy People 2000 Objective:	14.3 (Maternal and Infant Health).
Measure:	Ratio per 100,000 live births.
Baseline:	7.1 (1998).
Numerator:	Number of female deaths due to obstetric causes (ICD-9 codes 630 to 676) within 42 days of a pregnancy.
Denominator:	Number of live births.
Targeted Population:	U.S. resident population.
Questions Used To Obtain the National Data:	Not applicable.
Expected Periodicity:	Annual.
Comments:	Caution should be used when comparing these data with pregnancy-related mortality rates from other reports. NCHS uses the definition of maternal mortality and related coding conventions recommended in the ICD-9 by the World Health Organization. Other definitions may use different time intervals from pregnancy to death and may be more inclusive with regard to cause of death. A description of the maternal mortality measurement has been published by NCHS.[2] See Part C for a description of NVSS.

16-5. Reduce maternal illness and complications due to pregnancy.

16-5a. Maternal complications during hospitalized labor and delivery.

National Data Source:	National Hospital Discharge Survey (NHDS), CDC, NCHS.
State Data Source:	State hospital discharge data systems.
Healthy People 2000 Objective:	Adapted from 14.7 (Maternal and Infant Health).
Measure:	Rate per 100 deliveries.
Baseline:	31.2 (1998).

Numerator: Number of hospital discharges for females with any listed diagnosis of maternal complications during labor/delivery (see Comments).

Denominator: Number of hospital discharges for females who delivered one or more infants (principal diagnosis of ICD-9-CM code V27).

Targeted Population: U.S. civilian population.

Questions Used To Obtain the National Data: Not applicable.

Expected Periodicity: Annual.

Comments: This objective was adapted from Healthy People 2000 objective 14.7, which measured "severe complications of pregnancy," defined as hospitalizations for ICD-9-CM codes 630-676 (excluding 635 and 650).[2] The data used to track this Healthy People 2010 objective use any listed diagnosis of selected ICD-9-CM codes 641-672; including 641, 666, 642.4-642.7, 648.8, 664.2, 664.3, 664.5, 665.0-665.1, 665.2-665.9, 658.4, 670, 659.2, 659.3, 646.6, 674.1-674.3, 668, 671.3-671.4, 673, 669.0-669.4, 674.8-674.9, 646.7, 643.2, 671.5, 674.0, 648.0, 642.0-642.3, 642.9, 648.5-648.6, 646.2, 672.

Principal diagnosis is the diagnosis chiefly responsible for admission of the person to the hospital.

16-5b. (Developmental) Ectopic pregnancies.

Comments: An operational definition could not be specified at the time of publication.

A proposed data source is the National Hospital Discharge Survey (NHDS), CDC, NCHS.

16-5c. (Developmental) Postpartum complications, including postpartum depression.

Comments: An operational definition could not be specified at the time of publication.

Prenatal Care

16-6. Increase the proportion of pregnant women who receive early and adequate prenatal care.

16-6a. Care beginning in first trimester of pregnancy.

National Data Source: National Vital Statistics System (NVSS), CDC, NCHS.

State Data Source: National Vital Statistics System (NVSS), CDC, NCHS.

Leading Health Indicator: Access to Care.

Healthy People 2000 Objective: 14.11 (Maternal and Infant Health).

Measure: Percent of live births.

Baseline: 83 (1998).

Numerator: Number of females receiving prenatal care in the first trimester (three months) of pregnancy.

Denominator: Number of live births.

Targeted Population: U.S. resident population.

Questions Used To Obtain the National Data: Not applicable.

Expected Periodicity: Annual.

Comments: A description of the primary measurement used to determine the fetus's gestational age—the interval between the first day of the last normal menstrual period (LMP) and the birth—has been published by NCHS.[1]

This objective uses the same measurement protocol as the comparable Healthy People 2000 objective 14.11. A description of the prenatal care measurement has been published by NCHS.[2]

This objective is one of the measures used to track the Access to Care Leading Health Indicator.

See Part C for a description of NVSS.

16-6b. Early and adequate prenatal care.

National Data Source: National Vital Statistics System (NVSS), CDC, NCHS.

State Data Source: National Vital Statistics System (NVSS), CDC, NCHS.

Healthy People 2000 Objective: Not applicable.

Measure: Percent of live births.

Baseline: 74 (1998).

Numerator: Number of pregnant females receiving adequate prenatal care (by the Adequacy of Prenatal Care Utilization Index, APNCU).

Denominator: Number of live births.

Targeted Population: U.S. resident population.

Questions Used To Obtain the National Data: Not applicable.

Expected Periodicity: Annual.

Comments: The APNCU is a measure of prenatal care utilization that combines the month of pregnancy prenatal care began with the number of prenatal visits. Rates can be classified as "intensive use," "adequate," "intermediate," or "less than adequate." For this objective, adequate prenatal care is defined as a score of either "adequate" or "intensive use." A discussion of the APNCU has been published in a previous article.[3]

See Part C for a description of NVSS.

Developmental Disabilities and Neural Tube Defects

16-16. Increase the proportion of pregnancies begun with an optimum folic acid level.

16-16a. Consumption of at least 400 µg of folic acid each day from fortified foods or dietary supplements by nonpregnant women aged 15 to 44 years.

National Data Source:	National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.
State Data Source:	Behavioral Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP.
Healthy People 2000 Objective:	Not applicable.
Measure:	Percent.
Baseline:	21 (1991–94).
Numerator:	Number of nonpregnant females aged 15 to 44 years who report consuming an average of 400 µg of folic acid daily over the past month.
Denominator:	Number of nonpregnant females aged 15 to 44 years.
Targeted Population:	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data:	From the 1988–94 National Health and Nutrition Examination Survey: Folic acid intake is estimated from questions regarding vitamin intake for specific vitamin brand names and the frequency and duration of use.
Expected Periodicity:	Annual, beginning with 1999 data.
Comments:	For this measure only folic acid intake from dietary supplements is included. Folic acid intake from food was not included. In 1991–94, very few women would have been consuming 400 µg folic acid per day unless they were taking a supplement containing folic acid. The method of calculation of this objective involves averaging the intake of folic acid in the past month. Because the number of days in a month varies, the threshold consumption level used in the calculation of the baseline data for this objective is an average of 394 µg per day.

16-16b. Median red blood cell (RBC) folate level among nonpregnant women aged 15 to 44 years.

National Data Source:	National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.
State Data Source:	Not identified.
Healthy People 2000 Objective:	Not applicable.
Measure:	Number (ng/ml).

Baseline: 160 (1991–94).

Numerator: Median RBC folate level.

Denominator: Not applicable.

Targeted Population: U.S. civilian, noninstitutionalized population.

Questions Used To Obtain the National Data: Not applicable.

Expected Periodicity: Annual beginning with 1999 data.

Comments: The median RBC folate is a population-weighted estimate from a blood specimen collected from women aged 15 to 44 years as part of the standard NHANES protocol.

Prenatal Substance Exposure

16-17. Increase abstinence from alcohol, cigarettes, and illicit drugs among pregnant women.

6-17a. Alcohol.

National Data Source: National Household Survey on Drug Abuse (NHSDA), SAMHSA.

State Data Source: Not identified.

Healthy People 2000 Objective: Adapted from 14.10 (Maternal and Infant Health).

Measure: Percent.

Baseline: 86 (1996–97).

Numerator: Number of nonpregnant females, aged 15 to 44 years, reporting not drinking alcohol at all in the past month (30 days).

Denominator: Number of nonpregnant females aged 15 to 44 years.

Targeted Population: U.S. civilian, noninstitutionalized population.

Questions Used To Obtain the National Data: From the 1996–97 National Household Survey on Drug Abuse:

➤ *Think about the last time you drank any type of alcoholic beverage. How long has it been since you last drank an alcoholic beverage?*

If you last drank an alcoholic beverage within the past 30 days, mark the first box.

If it has been more than 30 days ago but within the past 12 months that you last drank an alcoholic beverage, mark the second box.

If it was more than 12 months ago but within the past 3 years, mark the third box.

If it has been more than 3 years since you last drank an alcoholic beverage, mark the fourth box.

If you have never drunk an alcoholic beverage in your life, mark the last box.

➤ *Are you currently pregnant?*

[If yes:] *How many months pregnant are you?*
Number of months pregnant _____

Expected Periodicity: Annual.

Comments: To ensure adequate precision of estimates for pregnant women, baseline data are based on combined data from 1996 and 1997 NHSDAs and represent annual average estimates for 1996 and 1997.

This objective is a measure similar to Healthy People 2000 objective 14.10, which used data from the National Maternal and Infant Health Survey and the National Pregnancy and Health Survey.

16-17b. Binge drinking.

National Data Source: National Household Survey on Drug Abuse (NHSDA), SAMHSA.

State Data Source: Not identified.

Healthy People 2000 Objective: Adapted from 14.10 (Maternal and Infant Health).

Measure: Percent.

Baseline: 99 (1996–97).

Numerator: Number of nonpregnant females aged 15 to 44 years reporting not binge drinking at all in the past month (30 days).

Denominator: Number of nonpregnant females aged 15 to 44 years.

Targeted Population: U.S. civilian, noninstitutionalized population.

Questions Used To Obtain the National Data: From the 1996–97 National Household Survey on Drug Abuse:

➤ *During the past 30 days, on how many days did you have 5 or more drinks on the same occasion? By "occasion," we mean at the same time or within a couple of hours of each other.*
On the solid line, write the number of days in the past 30 days when you drank 5 or more drinks of an alcoholic beverage on the same occasion.

If you never had 5 or more drinks on the same occasion on any day when you drank during the past 30 days, mark the first box.

If you have never drunk an alcoholic beverage in your life, mark the last box.

➤ *Are you currently pregnant?*

[If yes:] *How many months pregnant are you?*
Number of months pregnant _____

Expected Periodicity: Annual.

Comments: Binge drinking is defined as drinking five or more alcoholic drinks on the same occasion on at least one day in the past 30 days. By "occasion" is meant at the same time or within a couple of hours of each other.

To ensure adequate precision of estimates for pregnant women, baseline data are based on combined data from 1996 and 1997 NHSDAs and represent annual average estimates for 1996 and 1997.

This objective is adapted from Healthy People 2000 objective 14.10, which measured use of alcohol during pregnancy data from the National Maternal and Infant Health Survey and the National Pregnancy and Health Survey. Binge drinking during pregnancy was not addressed in Healthy People 2000.

16-17c. Cigarette smoking.

National Data Source: National Vital Statistics System (NVSS), CDC, NCHS.

State Data Source: National Vital Statistics System (NVSS), CDC, NCHS.

Healthy People 2000 Objective: 14.10 (Maternal and Infant Health).

Measure: Percent.

Baseline: 87 (1998) (selected areas—see Comments).

Numerator: Number of women having live births reporting abstaining from cigarette smoking during pregnancy.

Denominator: Number of live births.

Targeted Population: Resident population (selected areas—see Comments).

Questions Used To Obtain the National Data: From the U.S. Standard Certificate of Live Birth (1989 revision):

> *Other risk factors for this pregnancy - Complete all items.*
> [A number of check boxes are provided including...] *Tobacco use during pregnancy........... yes* ☐ *no* ☐
> *Average number of cigarettes per day* ______

Expected Periodicity: Annual.

Comments: Baseline data for smoking during pregnancy are for 46 States, the District of Columbia, and New York City. Data on smoking during pregnancy were not available for California, Indiana, New York State (New York City did report), and South Dakota.

See Part C for a description of NVSS.

16-17d. Illicit drugs.

National Data Source: National Household Survey on Drug Abuse (NHSDA), SAMHSA.

State Data Source: Not identified.

Healthy People 2000 Objective:	Adapted from 14.10 (Maternal and Infant Health).
Measure:	Percent.
Baseline:	98 (1996–97).
Numerator:	Number of nonpregnant females aged 15 to 44 years reporting not using any illicit drugs in the past month (30 days).
Denominator:	Number of nonpregnant females aged 15 to 44 years who were pregnant.
Targeted Population:	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data:	From the 1996–97 National Household Survey on Drug Abuse:

[The following question is asked separately for each illicit drug: marijuana or hashish, cocaine, “crack,” heroin, hallucinogens, and inhalants:]

- *How long has it been since you last used [marijuana or hashish, cocaine, “crack,” heroin, hallucinogens, inhalants]?*
  If your answer is within the past 30 days, mark the first box.
  If your answer is more than 30 days ago but within the past 12 months, mark the second box.
  If your answer is more than 12 months ago but within the past 3 years, mark the third box.
  If your answer is more than 3 years ago, mark the next-to-last box.
  If you have never used (marijuana or hashish, cocaine, “crack,” heroin, hallucinogens, inhalants) in your life, mark the last box.

[The following questions are asked separately for nonmedical use of analgesics (prescription pain killers), tranquilizers, stimulants, and sedatives:]

- *As you read the following list of (prescription pain killers, tranquilizers, stimulants, sedatives), please mark one box beside each (pain killer, tranquilizers, stimulants, sedatives) to indicate whether you have ever used that (pain killer, tranquilizers, stimulants, sedatives) when it was not prescribed for you, or that you took only for the experience or feeling it caused. Again, we are interested in all kinds of (prescription pain killers, tranquilizers, stimulants, sedatives), in pill or nonpill form.*

[This question is followed by a list of common drugs in the category specified and the following additional questions:]

- *Have you ever used a (pain killer, tranquilizers, stimulants, sedatives) whose name you don’t know that was not prescribed for you, or that you took only for the experience or feeling it caused? If “YES,” mark the first box; if “NO,” mark the second box.*

- *Have you ever used any other (pain killer, tranquilizers, stimulants, sedatives) besides the ones listed above, that was not prescribed for you, or that you took only for the experience* *or feeling it caused? PLEASE PRINT NAME(S) OF OTHER [PAIN KILLERS, TRANQUILIZERS, STIMULANTS, SEDATIVES] BELOW. If "YES," mark the first box; if "NO," mark the second box.*

[If the respondent reported use of any (pain killer, tranquilizers, stimulants, sedatives) they are asked:]

➤ *How long has it been since you last used (a pain killer, tranquilizers, stimulants, sedatives) that was not prescribed for you, or that you took only for the experience or feeling it caused?*
If your answer is within the past 30 days, mark the first box.
If your answer is more than 30 days ago but within the past 12 months, mark the second box.
If your answer is more than 12 months ago but within the past 3 years, mark the third box.
If your answer is more than 3 years ago, mark the next-to-last box.

➤ *Are you currently pregnant?*

[If "yes":] *How many months pregnant are you?*
Number of months pregnant ______

Expected Periodicity: Annual.

Comments: Illicit drugs are defined as marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP and LSD), heroin, and nonmedical use of psychotherapeutics.

To ensure adequate precision of estimates for pregnant women, baseline data are based on combined data from 1996 and 1997 NHSDAs and represent annual average estimates for 1996 and 1997.

This objective is adapted from Healthy People 2000 objective 14.10, which tracked abstinence from marijuana and cocaine use during pregnancy with data from the National Maternal and Infant Health Survey and the National Pregnancy and Health Survey. The Healthy People 2010 objective measures abstinence from any illicit drug.

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Nutrition and Overweight

Iron Deficiency and Anemia

19-12. Iron deficiency in young children and in females of childbearing age
19-12a. Children aged 1 to 2 years
19-12b. Children aged 3 to 4 years
19-12c. Nonpregnant females aged 12 to 49 years
19-13. Anemia in low-income pregnant females
19-14. Iron deficiency in pregnant females

Iron Deficiency and Anemia

19-12. Reduce iron deficiency among young children and females of childbearing age.

19-12a. Children aged 1 to 2 years.

National Data Source:	National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.
State Data Source:	Not identified (see Comments).
Healthy People 2000 Objective:	Adapted from 2.10 (Nutrition).
Measure:	Percent.
Baseline:	9 (1988–94).
Numerator:	Number of children aged 1 to 2 years with abnormal results for two or more of the following tests: serum ferritin, free erythrocyte protoporphyrin, or transferrin saturation.[1, 2]
Denominator:	Number of children in the survey population aged 1 to 2 years.
Population Targeted:	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data:	Not applicable.
Expected Periodicity:	Annual, beginning with 1999 data.
Comments:	Blood was collected by phlebotomy. Transferrin saturation was calculated by dividing serum iron by total iron binding capacity. Serum iron and total iron binding capacity were measured colorimetrically (by Alpkem RFA analyzer, Clackamas, OR), and 1 percent thiourea was added to complex copper to prevent copper interference.[3] Free erythrocyte protoporphyrin was measured via fluorescence extraction,[4] and serum ferritin was measured with the BioRad Quantimmune IRMA kit (BioRad Laboratories, Hercules, CA).

Iron deficiency is defined as abnormal results for two or more of the following tests: serum ferritin, free erythrocyte protoporphyrin, or transferrin saturation. The basis of the use for two of three abnormal tests was the finding that populations with only one abnormal test of these three had scarcely more anemia than those with all normal test results. The prevalence of anemia was substantially elevated in those who had two or three abnormal tests.[2, 5] The selection of threshold values for abnormal results were based on those derived for the previous NHANES (1976–80) by an expert panel,[2, 6] except where (1) evidence existed for changes in assay methods or in changes in other confounding factors like blood lead; and (2) an evaluation of the iron status indicator distribution in a reference group of healthy persons from the 1988–94 NHANES supported a change in the 1976–80 NHANES thresholds.[1]

Threshold values for abnormal results on iron tests vary by age. Abnormal values for serum ferritin concentration are defined as less than 10 µg/L for children aged 1 to 4 years and less than 12 µg/L for females aged 12 to 49 years. Abnormal values for free erythrocyte protoporphyrin are greater than 1.42 µmol/L for children aged 1 to 2 years (80 µg/dL of red blood cells), and greater than 1.24 µmol/L (70 µg/dL of red blood cells) for other persons. Abnormal values for transferrin saturation are less than 10 percent for children aged 1 to 2 years, less than 12 percent for children aged 3 to 4 years, less than 14 percent for females aged 12 to 15 years, and less than 15 percent for females aged 16 years and older.

The terms anemia, iron deficiency, and iron deficiency anemia are often used interchangeably, but are not equivalent. Anemia can be caused by many factors other than iron deficiency, including other nutrient deficiencies, infection, inflammation, and hereditary anemias. When the prevalence of iron deficiency is high, such as during the third trimester of pregnancy, anemia is a good predictor of iron deficiency. When the prevalence of iron deficiency is low, such as among white, non-Hispanic children aged 3 to 4 years in the United States, the majority of anemia is due to other causes.

No comparable data source is available to measure iron deficiency at the State level. The Pediatric Nutrition Surveillance System is used to monitor the percent of anemia (low hemoglobin or hematocrit) among low-income children aged 1 to 4 years participating in public health programs.

Anemia is used for monitoring risk of iron deficiency at the State and local levels because of its cost and feasibility for use in the clinic setting. Changes in the prevalence of anemia over time at the State and local levels can be used to evaluate the effectiveness of programs to decrease the prevalence iron deficiency.

This objective differs from Healthy People 2000 objective 2.10, which defined iron deficiency as abnormal results for two or more of the following tests: mean cell volume, free erythrocyte protoporphyrin, and transferrin saturation. For Healthy People

2010 objective 19-12, serum ferritin replaces mean cell volume in the definition of iron deficiency. Serum ferritin is a more sensitive measure of iron deficiency.[7]

19-12b. Children aged 3 to 4 years.

National Data Source: National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.

State Data Source: Not identified (see Comments).

Healthy People 2000 Objective: Adapted from 2.10 (Nutrition).

Measure: Percent.

Baseline: 4 (1988–94).

Numerator: Number of children aged 3 to 4 years with abnormal results for two or more of the following tests: serum ferritin, free erythrocyte protoporphyrin, or transferrin saturation.[1, 2]

Denominator: Number of children in the survey population aged 3 to 4 years.

Population Targeted: U.S. civilian, noninstitutionalized population.

Questions Used To Obtain the National Data: Not applicable.

Expected Periodicity: Annual, beginning with 1999 data.

Comments: See Comments provided with objective 19-12a for more information on the measurement of this objective.

19-12c. Nonpregnant females aged 12 to 49 years.

National Data Source: National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.

State Data Source: Not identified.

Healthy People 2000 Objective: Adapted from 2.10 (Nutrition).

Measure: Percent.

Baseline: 11 (1988–94).

Numerator: Number of females aged 12 to 49 years with abnormal results for two or more of the following tests: serum ferritin, free erythrocyte protoporphyrin, or transferrin saturation.[1, 2]

Denominator: Number of females in the survey population aged 12 to 49 years.

Population Targeted: U.S. civilian noninstitutionalized population.

Questions Used To Obtain the National Data: Not applicable.

Expected Periodicity: Annual, beginning with 1999 data.

Comments: See Comments provided with objective 19-12a for more information on the measurement of this objective.

19-13. Reduce anemia among low-income pregnant females in their third trimester.

National Data Source:	Pregnancy Nutrition Surveillance System (PNSS), CDC, NCCDPHP.
State Data Source:	State Pregnancy Nutrition Surveillance System (PNSS), CDC, NCCDPHP.
Healthy People 2000 Objective:	Adapted from 2.10e (Nutrition).
Measure:	Percent.
Baseline:	29 (1996) (Selected sites—see Comments).
Numerator:	Number of pregnant females participating in public programs in their third trimester with abnormal results for either hemoglobin (less than 11 g/dL) or hematocrit (less than 33 percent).[8]
Denominator:	Number of pregnant females participating in public programs in their third trimester.
Population Targeted:	Selected sites—see Comments.
Questions Used To Obtain the National Data:	Not applicable.
Expected Periodicity:	Annual.
Comments:	PNSS is used to monitor anemia among low-income women participating in public health programs. In 1996, 21 States, the District of Columbia, and two Tribal governments participated.[8, 9] The threshold for anemia during pregnancy is based on clinical studies of European women who had taken iron supplementation during pregnancy.[10, 11, 12, 13, 14] This threshold is advocated by CDC[8] and the World Health Organization.[15] See the Comments section with iron deficiency objective 19-12 for a discussion of the differences between iron deficiency and anemia. Nationally representative data are unavailable for monitoring the percent of iron deficiency during pregnancy. This objective differs from Healthy People 2000 objective 2.10e, which targeted black, low-income pregnant females only.

19-14. (Developmental) Reduce iron deficiency among pregnant females.

Comments:	An operational definition could not be specified at the time of publication. A proposed national data source is the National Health and Nutrition Examination Survey (NHANES).

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Sexually Transmitted Diseases

Bacterial STD Illness and Disability

25-1. Chlamydia

25-1a. Females aged 15 to 24 years attending family planning clinics

25-1b. Females aged 15 to 24 years attending STD clinics

25-1c. Males aged 15 to 24 years attending STD clinics

25-2. Gonorrhea

25-3. Primary and secondary syphilis

Viral STD Illness and Disability

25-4. Genital herpes

25-5. Human papillomavirus infection

STD Complications Affecting Females

25-6. Pelvic inflammatory disease (PID)

25-7. Fertility problems

25-8. Heterosexually transmitted HIV infection in women

STD Complications Affecting the Fetus and Newborn

25-9. Congenital syphilis

25-10. Neonatal STDs

Personal Behaviors

25-11. Responsible adolescent sexual behavior

25-12. Responsible sexual behavior messages on television

Community Protection Infrastructure

25-13. Hepatitis B vaccine services in STD clinics

25-14. Screening in youth detention facilities and jails

25-15. Contracts to treat nonplan partners of STD patients

Personal Health Services

25-16. Annual screening for genital chlamydia

25-17. Screening of pregnant women

25-18. Compliance with recognized STD treatment standards

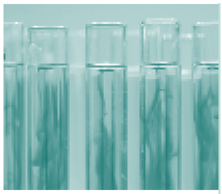
25-19. Provider referral services for sex partners

Bacterial STD Illness and Disability

25-1. Reduce the proportion of adolescents and young adults with *Chlamydia trachomatis* infections.

25-1a. **Females aged 15 to 24 years attending family planning clinics.**

National Data Source: STD Surveillance System (STDSS), CDC, NCHSTP.



State Data Sources:	State and local Health Department STD Control Programs and Regional Infertility Prevention Programs.
Healthy People 2000 Objective:	Adapted from 19.2 (Sexually Transmitted Diseases).
Measure:	Percent.
Baseline:	5.0 (1997).
Numerator:	Number of positive tests among women aged 15 to 24 years who attended family planning clinics in the past 12 months.
Denominator:	Number tests administered (unsatisfactory tests, indeterminate or inconclusive results, or inadequate specimens are excluded) among women aged 15 to 24 years who attended family planning clinics in the past 12 months.
Population Targeted:	U.S. civilian population.
Questions Used To Obtain the National Data:	Not applicable.
Expected Periodicity:	Annual.
Comments:	A case definition for *Chlamydia trachomatis* is provided by CDC.[1] Data are collected from Regional Infertility Prevention Program laboratory reports. This measure tracks only tests that are specific for *Chlamydia trachomatis* infection. The number of positive cases is based on test results from persons routinely screened. Routine screening is defined by each clinic. In some clinics, all patients are universally screened. In others, routine screening is done selectively based on clinical findings or behavioral risk factors. A minimum of 500 valid test results by gender and subpopulation is recommended to derive reliable estimates for this measure. Some clinics may not collect all U.S. Census-defined race and/or ethnicity data categories. Data for this measure are also included in the annual STD Surveillance Report.[2] This measure is a modification of Healthy People 2000 objective 19.2, which tracked percent positivity in women under age 25 years who attended family planning clinics. This measure tracks percent positivity among women aged 15 to 24 years who attended family planning clinics. See Part C for a description of STDSS.

25-1b. Females aged 15 to 24 years attending STD clinics.

National Data Source:	STD Surveillance System (STDSS), CDC, NCHSTP.
State Data Sources:	State and local Health Department STD Control Programs and Regional Infertility Prevention Programs.
Healthy People 2000 Objective:	Adapted from 19.2 (Sexually Transmitted Diseases).

Measure: Percent.

Baseline: 12.2 (1997).

Numerator: Number of positive tests among women aged 15 to 24 years who attended STD clinics in the past 12 months.

Denominator: Number of tests administered (unsatisfactory tests, indeterminate or inconclusive results, or inadequate specimens are excluded) to women aged 15 to 24 years who attended STD clinics in the past 12 months.

Population Targeted: U.S. civilian population.

Questions Used To Obtain the National Data: Not applicable.

Expected Periodicity: Annual.

Comments: A case definition for *Chlamydia trachomatis* is provided by CDC.[1]

Data are collected from Regional Infertility Prevention Program laboratory reports.

This measure tracks only tests that are specific for *Chlamydia trachomatis* infection. The number of positive cases is based on test results from persons routinely screened. Routine screening is defined by each clinic. In some clinics, all patients are universally screened. In others, routine screening is done selectively based on clinical findings or behavioral risk factors.

A minimum of 500 valid test results by gender and subpopulation is recommended to derive reliable estimates for this measure. Some clinics may not collect all U.S. Census-defined race and/or ethnicity data categories.

Data for this measure are also included in the annual STD Surveillance Report.[2]

This measure is a modification of Healthy People 2000 objective 19.2, which tracked percent positivity in women under age 25 years who attended family planning clinics. This measure expands upon the Healthy People 2000 measure and tracks percent positivity among women aged 15 to 24 years who attended STD clinics.

See Part C for a description of STDSS.

25-1c. Males aged 15 to 24 years attending STD clinics.

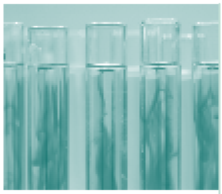
National Data Source: STD Surveillance System (STDSS), CDC, NCHSTP.

State Data Source: State and local Health Department STD Control Programs.

Healthy People 2000 Objective: Adapted from 19.2 (Sexually Transmitted Diseases).

Measure: Percent.

Baseline: 15.7 (1997).



Numerator:	Number of positive tests among men aged 15 to 24 years who attended STD clinics in the past 12 months.
Denominator:	Number tests administered (unsatisfactory tests, indeterminate or inconclusive results, or inadequate specimens are excluded) among men aged 15 to 24 years who attended STD clinics in the past 12 months.
Population Targeted:	U.S. civilian population.
Questions Used To Obtain the National Data:	Not applicable.
Expected Periodicity:	Annual.
Comments:	A case definition for *Chlamydia trachomatis* is provided by CDC.[1] Data are collected from Regional Infertility Prevention Program laboratory reports. This measure tracks only tests that are specific for *Chlamydia trachomatis* infection. The number of positive cases is based on test results from persons routinely screened. Routine screening is defined by each clinic. In some clinics, all patients are universally screened. In others, routine screening is done selectively based on clinical findings or behavioral risk factors. A minimum of 500 valid test results by gender and subpopulation is recommended to derive reliable estimates for this measure. Some clinics may not collect all U.S. Census-defined race and/or ethnicity data categories. Data for this measure are also included in the annual STD Surveillance Report.[2] This measure is a modification of Healthy People 2000 objective 19.2, which tracked percent positivity in women under age 25 years who attended family planning clinics. This measure expands the Healthy People 2000 measure and tracks percent positivity among men aged 15 to 24 years who attended STD clinics. See Part C for a description of STDSS.

25-2. Reduce gonorrhea.

National Data Source:	STD Surveillance System (STDSS), CDC, NCHSTP.
State Data Source:	State and local Health Department STD Control Programs.
Healthy People 2000 Objective:	19.1 (Sexually Transmitted Diseases).
Measure:	Rate per 100,000 population.
Baseline:	123 (1997).

Numerator: Number of new reported cases of gonorrhea in the past 12 months.

Denominator: Number of persons.

Population Targeted: U.S. resident population.

Questions Used To Obtain the National Data: CDC Report of Civilian Cases of Primary and Secondary Syphilis, Gonorrhea, and Chlamydia by Reporting Source, Sex, Race/ Ethnicity, and Group, Form 73.2638, Rev. 01/96.

Expected Periodicity: Annual.

Comments: In most instances, if age or race/ethnicity was not specified, cases were allocated according to the distribution of cases for which these variables were specified. In 1998, New Jersey and Idaho did not report race/ethnicity for most cases and were excluded.

Data for this measure are also included in the annual STD Surveillance Report.[2]

See Part C for a description of STDSS.

25-3. Eliminate sustained domestic transmission of primary and secondary syphilis.

National Data Source: STD Surveillance System (STDSS), CDC, NCHSTP.

State Data Source: State and local Health Department STD Control Programs.

Healthy People 2000 Objective: 19.3 (Sexually Transmitted Diseases).

Measure: Rate per 100,000 population.

Baseline: 3.2 (1997).

Numerator: Number of new reported cases of primary and secondary syphilis in the past 12 months.

Denominator: Number of persons.

Population Targeted: U.S. resident population.

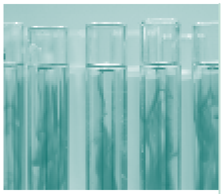
Questions Used To Obtain the National Data: CDC Report of Civilian Cases of Primary and Secondary Syphilis, Gonorrhea, and Chlamydia by Reporting Source, Sex, Race/ Ethnicity, and Group, Form 73.2638, Rev. 01/96.

Expected Periodicity: Annual.

Comments: Data are collected using Form 2638 from CDC. In most instances, if age or race/ethnicity was not specified, cases were allocated according to the distribution of cases for which these variables were specified.

Data for this measure are also included in the annual STD Surveillance Report.[2]

See Part C for a description of STDSS.



Viral STD Illness and Disability

25-4. Reduce the proportion of adults with genital herpes infection.

National Data Source:	National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.
State Data Source:	Not identified.
Healthy People 2000 Objective:	Adapted from 19.5 (Sexually Transmitted Diseases).
Measure:	Percent.
Baseline:	17 (1988–94).
Numerator:	Number of adults aged 20 to 29 years with a positive result from a herpes simplex virus, type 2 (HSV-2) laboratory test.
Denominator:	Number of adults aged 20 to 29 years.
Population Targeted:	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data:	Not applicable.
Expected Periodicity:	Annual beginning with 1999 data.
Comments:	A case definition for genital herpes is provided by CDC.[1] This measure is a modification of Healthy People 2000 objective 19.5, which tracked the number of first-time visits to physicians' offices for genital herpes, as measured by the National Disease and Therapeutic Index, IMS America, Ltd. This measure tracks the proportion of persons aged 20 to 29 years with a positive laboratory test result for herpes simplex virus, type 2, as measured by NHANES.

25-5. (Developmental) Reduce the proportion of persons with human papillomavirus (HPV) infection.

Comments:	An operational definition could not be specified at the time of publication. The proposed national data source is the National Health and Nutrition Examination Survey (NHANES), CDC, NCHS. A reduction in the number of HPV cases will minimize the prevalence of subtypes 16 and 18 and other subtypes associated with cervical cancer in persons aged 15 to 44 years. This objective is modified from Healthy People 2000 objective 19.5, which tracked the number of first-time consultations for genital warts.

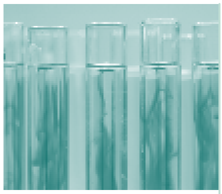
STD Complications Affecting Females

25-6. Reduce the proportion of females who have ever required treatment for pelvic inflammatory disease (PID).

National Data Source:	National Survey of Family Growth (NSFG), CDC, NCHS.
State Data Source:	Not identified.
Healthy People 2000 Objective:	Adapted from 19.6 (Sexually Transmitted Diseases).
Measure:	Percent.
Baseline:	8 (1995).
Numerator:	Number of females aged 15 to 44 years who reported ever requiring treatment for PID.
Denominator:	Number of females aged 15 to 44 years.
Population Targeted:	U.S. civilian population.
Questions Used To Obtain the National Data:	From the 1995 National Survey of Family Growth: ➤ *Have you ever been treated for an infection in your fallopian tubes, womb, or ovaries, also called a pelvic infection, pelvic inflammatory disease, or P.I.D.?*
Expected Periodicity:	Periodic.
Comments:	There are no reliable national surveillance systems that measure women requiring treatment for PID. This measure, based on data from NSFG, is used as a proxy for this objective. PID is a subjective diagnosis made by physicians. Laparoscopy is required for a definitive diagnosis of PID. The data from the NSFG are self-reported and therefore may not be accurate, particularly due to the unknown prevalence of asymptomatic or subclinical PID. This measure is a modification of Healthy People 2000 objective 19.6, which tracked the number of hospitalizations due to PID, as measured by the National Hospital Discharge Survey (NHDS), CDC, NCHS. This measure tracks the number of women aged 15 to 44 years who report ever requiring treatment for PID. See Part C for a description of NSFG.

25-7. Reduce the proportion of childless females with fertility problems who have had a sexually transmitted disease or who have required treatment for pelvic inflammatory disease (PID).

National Data Source:	National Survey of Family Growth (NSFG), CDC, NCHS.
State Data Source:	Not identified.
Healthy People 2000 Objective:	Not applicable.



Measure: Percent.

Baseline: 27 (1995).

Numerator: Number of childless females aged 15 to 44 years with fertility problems who report history of STD or PID.

Denominator: Number of females aged 15 to 44 years who are childless and have fertility problems.

Population Targeted: U.S. civilian population.

Questions Used To Obtain the National Data: From the 1995 National Survey of Family Growth:

[NUMERATOR:]

- *Has a doctor or other medical care provider ever told you that you had:*
  - *genital warts?*
  - *gonorrhea?*
  - *syphilis?*
  - *genital herpes?*
- *Have you ever been treated for an infection in your fallopian tubes, womb, or ovaries, also called a pelvic infection, pelvic inflammatory disease, or P.I.D.?*

[Following a series of questions to ALL respondents that address pregnancy, contraceptive use and periods of no sexual activity:]

[DENOMINATOR:]

- *Have you ever had both your tubes tied, cut, or removed? This procedure is often called a tubal ligation.*
- *Have you ever had a hysterectomy, that is, surgery to remove your uterus?*
- *Have you ever had both your ovaries removed?*
- *Have you ever had any other operation that makes it impossible for you to have another baby?*
- *As far as you know, are you completely sterile from this operation, that is, does it make it impossible for you to have a baby in the future?*
- *Has (name of husband/partner) ever had a vasectomy or any other operation that would make it impossible to father a baby in the future?*

[Nonsurgically sterile respondents are those who have not reported any operations for themselves, or if they are married or cohabiting, for their husbands/partners.] [For respondents who are nonsurgically sterile:]

- *Some women are not physically able to have children. As far as you know, is it physically possible for you, yourself, to have a baby?*

- ➤ *What about (name of husband/partner)? As far as you know, is it physically impossible for him to father a baby in the future?*

[If it is physically possible:]

- ➤ *Some women are physically able to have a baby, but have difficulty getting pregnant or carrying a baby to term. As far as you know, would you, yourself, have any difficulty getting pregnant or carrying a baby to term?*
- ➤ *As far as you know, does (name of male partner) have any difficulty fathering a baby?*
- ➤ *At any time has a medical doctor ever advised you to never become pregnant (again)?*

Expected Periodicity: Periodic.

Comments: Women are classified as childless if they have not given birth to a child and have not had a sterilizing operation.

Fertility problems refer to the standard medical definitions of infertility (have not used contraception and have not become pregnant for 12 months or more) or impaired fecundity (women reporting no sterilizing operation and are classified as those who find it difficult or impossible to get pregnant or carry a baby to term).

Respondents are considered to have fertility problems if they report that neither they or their husband/partner has had a sterilizing operation or any one of the following:
(1) she and her husband/partner are nonsurgically sterile and it is physically impossible for her to get pregnant or carry a baby to term or for her husband to father a baby.

(2) it is physically difficult for her to get pregnant or carry a baby to term or for her husband/partner to father a baby.

(3) she has been advised by a doctor (for health reasons) not to become pregnant.

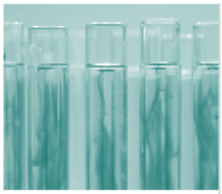
(4) she and her husband/partner have reported sexual activity without contraception for at least 12 consecutive months and have had no pregnancies in that time period.

See Part C for a description of NSFG.

25-8. (Developmental) Reduce HIV infections in adolescent and young adult females aged 13 to 24 years that are associated with heterosexual contact.

Comments: An operational definition could not be specified at the time of publication.

The proposed national data source is the HIV/AIDS Surveillance System, CDC, NCHSTP.



STD Complications Affecting the Fetus and Newborn

25-9. Reduce congenital syphilis.

National Data Sources:	STD Surveillance System (STDSS), CDC, NCHSTP; National Vital Statistics System (NVSS), CDC, NCHS.
State Data Sources:	State and local Health Department STD Control Programs; State and Local Vital Statistics.
Healthy People 2000 Objective:	19.4 (Sexually Transmitted Diseases).
Measure:	Rate per 100,000 live births.
Baseline:	27 (1997).
Numerator:	Number of new reported cases of congenital syphilis in the past 12 months.
Denominator:	Number of live births.
Population Targeted:	U.S. resident population.
Questions Used To Obtain the National Data:	CDC Congenital Syphilis (CS) Case Investigation and Report, Form 73.126, Rev. 09/91.
Expected Periodicity:	Annual.
Comments:	Less than 5 percent of cases have missing race/ethnicity data and were excluded from the baseline estimate. Data for this measure are also included in the annual STD Surveillance Report.[2] See Part C for a description of STDSS.

25-10. (Developmental) Reduce neonatal consequences from maternal sexually transmitted diseases, including chlamydial pneumonia, gonococcal and chlamydial opthalmia neonatorum, laryngeal papillomatosis (from human papillomavirus infection), neonatal herpes, and preterm birth and low birth weight associated with bacterial vaginosis.

Comments:	An operational definition could not be specified at the time of publication. The proposed national data source is the STD Surveillance System (STDSS), CDC, NCHSTP.

Personal Behaviors

25-11. Increase the proportion of adolescents who abstain from sexual intercourse or use condoms if currently sexually active.

National Data Source:	Youth Risk Behavior Surveillance System (YRBSS), CDC, NCCDPHP.
State Data Source:	Youth Risk Behavior Surveillance System (YRBSS), CDC, NCCDPHP.
Healthy People 2000 Objective:	Adapted from 5.5 and 5.6 (Family Planning) (also 18.15 and 19.16).

Leading Health Indicator: Responsible Sexual Behavior.

Measure: Percent.

Baseline: 85 (1999).

Numerator: Number of students in grades 9 through 12 who report that they have never had sexual intercourse; or who have had sexual intercourse, but not in the past 3 months; or who have had sexual intercourse in the past 3 months but used a condom at last sexual intercourse.

Denominator: Number of students in grades 9 through 12.

Population Targeted: Students in grades 9 through 12.

Questions Used To Obtain the National Data: From the 1999 Youth Risk Behavior Surveillance System:

- *Have you ever had sexual intercourse?*
- *During the past three months, with how many people have you had sexual intercourse?*

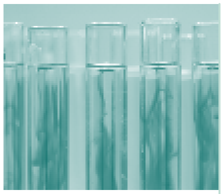
  I have never had sexual intercourse
  I have had sexual intercourse, but not in the past 3 months
  1 person
  2 people
  3 people
  4 people
  5 people
  6 or more people
- *The last time you had sexual intercourse, did you or your partner use a condom?*

  I have never had sexual intercourse
  yes
  no

Expected Periodicity: Biennial.

Comments: This measure is a modification of Healthy People 2000 objectives 5.5 and 5.6, which tracked the proportion of sexually active in-school adolescents in grades 9 through 12 that abstained from sexual intercourse in the past 3 months and used contraception at most recent intercourse, respectively. This measure tracks the proportion of adolescents in grades 9 through 12 who have never had sexual intercourse; or who have had sexual intercourse, but not in the past 3 months; or have had sexual intercourse in the past 3 months but used a condom at last sexual intercourse.

This objective is one of the measures used to track the Responsible Sexual Behavior Leading Health Indicator.



25-12. (Developmental) Increase the number of positive messages related to responsible sexual behavior during weekday and nightly prime-time television programming.

Comments:	An operational definition could not be specified at the time of publication. The proposed national data source is CDC, NCHSTP. Responsible sexual behavior includes abstinence, delaying sexual intercourse, or using condoms.

Community Protection Infrastructure

25-13. Increase the proportion of Tribal, State, and local sexually transmitted disease programs that routinely offer hepatitis B vaccines to all STD clients.

National Data Source:	Survey of STD Programs, National Coalition of STD Directors (NCSD).
State Data Source:	Survey of STD Programs, National Coalition of STD Directors (NCSD).
Healthy People 2000 Objective:	Not applicable.
Measure:	Percent.
Baseline:	5 (1998).
Numerator:	Number of State and local STD clinics that reported all clients are eligible to receive the hepatitis B vaccine.
Denominator:	Number of STD programs (free-standing facilities with the capacity to diagnose and treat STDs).
Questions Used to Obtain the National Data:	From the 1998 Survey of STD Programs: ➤ *Who is eligible for the hepatitis B vaccine in STD clinics?*
Expected Periodicity:	Periodic.
Comments:	This measure tracks the proportion of programs that offer hepatitis B vaccines to clients in accordance with CDC guidelines.[3] The numerator is the number of facilities that report "hepatitis vaccines are offered to all clients" to the question listed above. The Survey of STD Programs is a national convenience sample of free-standing facilities with the capacity to diagnose and treat STDs. Data for Tribes are developmental. The proposed national data source is the Indian Health Service (IHS).

25-14. (Developmental) Increase the proportion of youth detention facilities and adult city or county jails that screen for common bacterial sexually transmitted diseases within 24 hours of admission and treat STDs (when necessary) before persons are released.

Comments: An operational definition could not be specified at the time of publication.

The proposed national data source is the Annual Survey of Correctional Facilities, CDC, NCHSTP and National Institute of Justice; U.S. Department of Justice, U.S. Bureau of Justice Statistics.

25-15. (Developmental) Increase the proportion of all local health departments that have contracts with managed care providers for the treatment of nonplan partners of patients with bacterial sexually transmitted diseases (gonorrhea, syphilis, and chlamydia).

Comments: An operational definition could not be specified at the time of publication.

The proposed national data source is the Survey of STD Programs, National Coalition of STD Directors (NCSD).

This objective is modified from Healthy People 2000 objective 19.15, which tracked partner notification of exposure to sexually transmitted by patients with bacterial STDs using the STDSS.

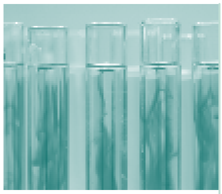
Personal Health Services

25-16. (Developmental) Increase the proportion of sexually active females aged 25 years and under who are screened annually for genital chlamydia infections.

Comments: An operational definition could not be specified at the time of publication.

The proposed national data sources are the Office on Population Affairs (OPA) data reported in Family Planning Annual Report and the STD Surveillance System (STDSS), CDC, NCHSTP.

Primary health care centers include: family planning clinics, community health centers, university health services, Department of Defense health clinics for active duty military, and managed care plans.



25-17. (Developmental) Increase the proportion of pregnant females screened for sexually transmitted diseases (including HIV infection and bacterial vaginosis) during prenatal health care visits, according to recognized standards.

Comments: An operational definition could not be specified at the time of publication.

The proposed measure is the percent of pregnant females screened for STDs in community health centers, and the proposed data sources are the Department of Defense health clinics for active duty military, and managed care plans data from the STD Surveillance System (STDSS), CDC, NCHSTP.

Recognized standards are the most recent edition of the *Guide to Clinical Preventive Services*.[4]

25-18. Increase the proportion of primary care providers who treat patients with sexually transmitted diseases and who manage cases according to recognized standards.

Comments: An operational definition was not specified at the time of publication.

The national data source for the 1998 baseline is the National Disease and Therapeutic Index (NDTI), IMS America. The proposed tracking source is the National Ambulatory Medical Care Survey (NAMCS), CDC, NCHS.

This objective is modified from Healthy People 2000 objective 19.13, which tracked correct management of sexually transmitted disease cases by primary care providers using the NDTI.

25-19. (Developmental) Increase the proportion of sexually transmitted disease clinic patients who are being treated for bacterial STDs (chlamydia, gonorrhea, and syphilis) and who are offered provider referral services for their sex partners.

Comments: An operational definition could not be specified at the time of publication.

The proposed national data source is STD Surveillance System (STDSS), CDC, NCHSTP.

Provider referral (previously called contact tracing) is the process whereby health department personnel directly and confidentially notify the sexual partners of infected individuals of their exposure to a sexually transmitted disease for the purposes of education, counseling, and referral to health care services.

This objective is modified from Healthy People 2000 objective 19.15, which tracked partner notification of exposure to sexually transmitted diseases by patients with bacterial STDs using STDSS.

References

1. Centers for Disease Control and Prevention (CDC). Case definitions for infectious conditions under public health surveillance. Morbidity and Mortality Weekly Report 46 (RR-10): 1997.
2. CDC, Division of STD Prevention. Sexually Transmitted Disease Surveillance, 1997. Atlanta, GA: U.S. Department of Health and Human Services (HHS), Public Health Service, CDC, 1998.
3. CDC. Hepatitis B virus: A comprehensive strategy for eliminating transmission in the United States through universal childhood vaccination: Recommendations of the Advisory Committee on Immunization Practices (ACIP). Morbidity and Mortality Weekly Report 40 (RR-13): 1-20, 1991.
4. U.S. Preventive Services Task Force. Guide to Clinical Preventive Services. 2nd ed. Washington, DC: HHS, 1995.

Substance Abuse

Treatment for Substance Abuse

26-20 Treatment for injection drug use

Treatment for Substance Abuse

26-20. Increase the number of admissions to substance abuse treatment for injection drug use.

National Data Source:	Treatment Episodes Data System (TEDS), SAMHSA, OAS.
State Data Source:	State administrative data.
Healthy People 2000 Objective:	Not applicable.
Measure:	Number.
Baseline:	167,960 (1997).
Numerator:	Number of admissions for injection drug use in substance abuse treatment programs.
Denominator:	Not applicable.
Population Targeted:	Public and private nonprofit substance abuse treatment program population.
Questions Used To Obtain the National Data:	Not applicable.
Expected Periodicity:	Annual.
Comments:	TEDS data are not based on a statistical data collection system. TEDS data are continuously submitted to SAMHSA by States from their administrative data systems. The States collect data from substance abuse treatment providers, primarily from publicly-funded treatment programs. Each State uses its own form for collecting information on substance abuse admissions. When data are submitted to SAMHSA, data are matched to the core variables contained in TEDS. There is a considerable time lag between the date of admission and when SAMHSA receives data from each State. SAMHSA publishes data in tabular form in an annual report.

PART C: MAJOR DATA SOURCES

A major data source is defined as a data system responsible for tracking five or more Healthy People 2010 objectives. The 72 Healthy People 2010 objectives related to reproductive health are being tracked by more than a dozen data sources, and there are three data systems that track five or more of the objectives on reproductive health:

- National Survey of Family Growth (NSFG)
- National Vital Statistics System, Mortality (NVSS-M)
- STD Surveillance System (STDSS)

A brief discussion of these three data systems is provided in this section.

Besides the major data sources included in the pages that follow, the list below reflects additional national data sources, systems, and organizations used to determine the outcomes of the Healthy People 2010—Reproductive Health objectives. No detailed information exists in the original Healthy People documents about these sources.

Ž Abortion Patient Survey, The Alan Guttmacher Institute (AGI)

- Abortion Provider Survey, The Alan Guttmacher Institute (AGI)
- Abortion Surveillance Data, CDC, NCCDPHP
- Adaptation of the Prevention Self-Assessment Analysis (ATPM)
- Agency for Healthcare Research Quarterly (AHRQ)
- American Hospital Association Survey
- Annual Survey of Chronic Hemodialysis Centers
- Annual Survey of Correctional Facilities
- Behavior Risk Factor Surveillance System (BRFSS)
- Biennial Survey of HIV, STD, and TB Prevention in Correctional Facilities
- Bureau of Justice Statistics (BJS)
- CDC:
  - National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP)
  - National Center for HIV, STD, and TB Prevention (NCHSTP)
  - Epidemiology Program Office (EPO)
  - National Center for Infectious Diseases (NCID)
- Department of Defense health clinics for active duty military

  Federal Register notices
- Grantmakers in Health
- Health Care Financing Administration (HCFA)
- HIV Counseling and Testing System (CTS)
- HIV/AIDS Surveillance System

- Medical Expenditure Panel Survey (MEPS)
- National Association of County and City Health Officials (NACCHO)
- National Coalition of STD Directors (NCSD)
- National College Health Risk Behavior Survey (NCHRBS)
- National Committee for Quality Assurance (NCQA)
- National Crime Victimization Survey (NCVS)
- National Disease and Therapeutic Index (NDTI)
- National Health and Nutrition Examination Survey (NHANES)
- National Health Council
- National Health Interview Survey (NHIS)
- National Hospital Discharge Survey (NHDS)
- National Household Survey on Drug Abuse (NHSDA)
- National Notifiable Disease Surveillance System (NNDSS)
- National Profile of Local Health Departments (NPLHD)
- National Survey of Adolescent Males (NSAM), Urban Institute
- National Center for Health Statistics (NCHS)
- National Institute of Justice (NIJ)
- Office of Applied Science (OAS)
- Office on Population Affairs (OPA) data reported in Family Planning Annual Report
- Periodic Vaccine Coverage Surveys
- Pregnancy Nutrition Surveillance System (PNSS)
- School Health Policies and Program Study (SHPPS)
- Sentinel Counties Study of Viral Hepatitis
- Survey of STD Programs, National Coalition of STD Directors
- The Alan Guttmacher Institute (AGI)
- Treatment Episodes Data System (TEDS)
- Young Men's Survey, National Center for HIV, STD, and TB Prevention
- Youth Risk Behavior Surveillance System (YRBSS)

National Survey of Family Growth (NSFG)	
Sponsor	U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS).
Mode of Administration	Computer-assisted personal interview (CAPI) by professional female interviewers. In addition, a self-administered audio section for more sensitive topics (ACASI), in which respondents hear questions on headphones (and read on a computer screen) and enter responses on the computer themselves.
Survey Sample Design	The 1995 Survey was a multistage probability design consisting of households that had been interviewed in 198 PSUs in the the National Health Interview Survey in 1993. Of the 13,795 eligible females in the sample, 10,847 were interviewed. Black and Hispanic females were oversampled.
Response Rates	Response rates have averaged around 80 percent for prior cycles; in the most recent cycle, 1995, the response rate was 79 percent.
Primary Survey Content	The NSFG contains data on factors affecting birth and pregnancy rates, adoption, and maternal and infant health. These factors include sexual activity, marriage, divorce and remarriage, unmarried cohabitation, contraception and sterilization, infertility, breastfeeding, pregnancy loss, low birthweight, and use of medical care for family planning and infertility.
Population Targeted	Civilian noninstitutionalized females aged 15 to 44 years residing in the United States.
Demographic Data	Age, race, Hispanic ethnicity, family income, educational attainment.
Years Collected	1973; 1976; 1982; 1988; and 1995. Future surveys will be conducted in 2001, 2004, and 2007.
Schedule	Periodic.
Geographic Estimates	National; four U.S. Census Bureau regions; metropolitan and nonmetropolitan areas; some of the 10 HHS regions.
Notes	The sample size of future surveys will increase. Beginning in 2001, males will be sampled as well as females. Persons aged 15 to 19 and 20 to 24 years will be oversampled as well as black and Hispanic population groups.
Contact Information	Data system homepage: http://www.cdc.gov/nchs/nsfg.htm Data system phone: 301-458-4222 Agency homepage: http://www.cdc.gov/nchs Agency phone: 301-458-INFO (4636)

National Survey of Family Growth (NSFG)

References	Potter, F.J.; Iannacchione, V.G.; Mosher, W.D.; et al. Sampling weights, imputation, and variance estimation in the 1995 National Survey of Family Growth. National Center for Health Statistics (NCHS). *Vital and Health Statistics* 2(124), 1998. Kelly, J.E.; Mosher, W.D.; Duffer, A.P.; et al. Plan and operation of the 1995 National Survey of Family Growth. NCHS. *Vital and Health Statistics*1(36), 1997. Waksberg, J.; Sperry, S.; Judkins, D.; et al. National Survey of Family Growth, Cycle IV, evaluation of linked design. NCHS. *Vital and Health Statistics* 2(117), 1993. Judkins, D.R.; Mosher, W.D., and Botman, S. National Survey of Family Growth: Design, estimation, and inference. NCHS. *Vital and Health Statistics* 2(109), 1991. Waksberg, J., and Northrup, D.R. Integration of sample design for the National Survey of Family Growth, Cycle IV, with the National Health Interview Survey. NCHS. *Vital and Health Statistics* 2(96), 1985.

National Vital Statistics System, Mortality (NVSS-M)	
Sponsor	U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS).
Mode of Administration	Administrative records (death certificates) completed by physicians, coroners, medical examiners, and funeral directors are filed with State vital statistics offices; selected statistical information is forwarded to NCHS to be merged into a national statistical file. Beginning with 1989, revised standard certificates replaced the 1978 versions; the next scheduled revision is 2003. Demographic information on the death certificate is provided by the funeral director and is based on information supplied by an informant. Medical certification of cause of death is provided by the physician, medical examiner, or coroner.
Survey Sample Design	NVSS mortality files include data for the 50 States, the District of Columbia, and the territories of Puerto Rico, Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Marianas. All deaths occurring in those areas are included (approximately 2.2 to 2.3 million annually). Data for Healthy People 2010 are based only on resident deaths filed in the 50 States and the District of Columbia. Deaths to nonresidents of the United States are not included.
Response Rates	N/A.
Primary Survey Content	Year of death, place of decedent's residence, place death occurred, age at death, day of week and month of death, Hispanic origin, race, marital status (beginning 1n 1979), place of birth, gender, underlying and multiple causes of death for all States, injury at work (beginning in 1993), hospital and patient status, educational attainment (beginning in 1989) for selected States, and occupation and industry (beginning in 1984) for selected States.
Population Targeted	The U.S. population.
Demographic Data	Gender, race, Hispanic origin (beginning in 1984), age at death, place of decedent's residence, educational attainment (beginning in 1989) for selected States, marital status, and industry and occupation for selected States. Race and ethnic origin are separate items on the death certificate. Beginning with 1992 data, California, Hawaii, Illinois, New Jersey, New York, Texas, and Washington reported expanded Asian and Pacific Islander categories of Asian Indian, Korean, Vietnamese, Samoan, and Guamanian. The rest of the States reported a combined Other Asian and Pacific Islander category in addition to the categories of white, black, American Indian, Chinese, Hawaiian, Japanese, and Filipino that all States report. As of 1997, all States report Hispanic origin. The categories reported include Mexican, Puerto Rican, Cuban, Central and South American, and Other Hispanic.

National Vital Statistics System, Mortality (NVSS-M)	
Years Collected	The data system began in 1900 but not all States participated before 1933. Coverage for deaths has been complete since 1933.
Schedule	Annual.
Geographic Estimates	National, regional, State, and county. Beginning with 1989 data, some changes were initiated to increase confidentiality protection. Identifying information including date of death and geographic identifiers for counties of less than 100,000 persons are not available for public use.
Contact Information	Data system homepage: http://www.cdc.gov/nchs/about/major/dvs/mortdata.htm Data system phone: 301-458-4555 Agency homepage: http://www.cdc.gov/nchs Agency phone: 301-458-4666
References	Hoyert, D.L.; Kochanek, K.D.; and Murphy, S.L. Deaths: Final Data for 1997. *National Vital Statistics Reports* 19(Suppl. 47). Hyattsville, MD: National Center for Health Statistics (NCHS), 1999. NCHS. *Technical Appendix. Vital Statistics of the United States*, 1992. Vol. II, Mortality, Part A. HHS Pub. No. (PHS) 96-1101. Washington, DC: U.S. Government Printing Office, 1996.

STD Surveillance System (STDSS)

Sponsor	U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC), National Center for HIV, STD, and TB Prevention (NCHSTP).
Mode of Administration	Reports from health care providers are sent to the local/State/territorial health departments.
Survey Sample Design	All 50 States, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, and 64 select large cities report STD cases.
Response Rates	Response rates vary by disease and patient population. Estimates of completeness for case reporting for syphilis, gonorrhea, and chlamydia are 65, 50, and 20 percent, respectively.
Primary Survey Content	Summary case count data are submitted monthly, quarterly, and annually using OMB-approved hard copy forms. Hard copy reporting is being replaced by electronic line-listed data. Currently, electronic line-listed data are submitted by more than half of the reporting States. Disease-specific information and demographics are available.
Population Targeted	Health care providers and laboratories providing medical care and laboratory services to persons with STDs.
Demographic Data	Age, gender, race, ethnicity, State and county of residence, country of birth.
Years Collected	CDC first provided reports of persons with STDs in 1941.
Schedule	Annual. STD Surveillance Report is published annually and is supplemented by the Chlamydia Prevalence Monitoring Annual Report, the Gonococcal Isolate Surveillance Project (GISP) Annual Report, and the Syphilis Surveillance Report. Report is available on the Web at http://www.cdc.gov/wonder/STD/Contents.shtml.
Geographic Estimates	National, State, regional, and selected large cities and counties. Data release policies dictate that no data that could be used to identify a person reported to the system may be released; thus, release of data in cell sizes less than or equal to five in a given category is prohibited.
Contact Information	Data system homepage: http://www.cdc.gov/nchstp/dstd/Stats_Trends/Stats_and_Trends.htm Data system phone: 404-639-8356 Agency homepage: http://www.cdc.gov/nchstp/od/nchstp.html Agency phone: 404-639-2070
References	Centers for Disease Control and Prevention (CDC), Division of Sexually Transmitted Disease Prevention. *Sexually Transmitted Disease Prevention Surveillance*. Atlanta, GA: CDC, 1999. CDC. Case definition for infectious conditions under public health surveillance. *Morbidity and Mortality Weekly Report* 46(RR10), 1997. CDC. Guidelines for evaluating surveillance systems. *Morbidity and Mortality Weekly Report* 37(S5), 1988.