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.

*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.

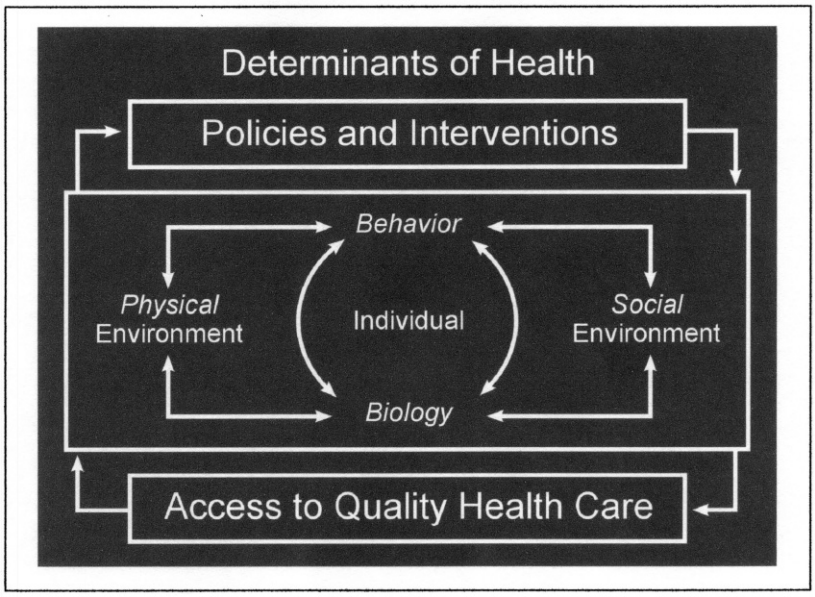
Healthy People 2010 Focus Areas

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.

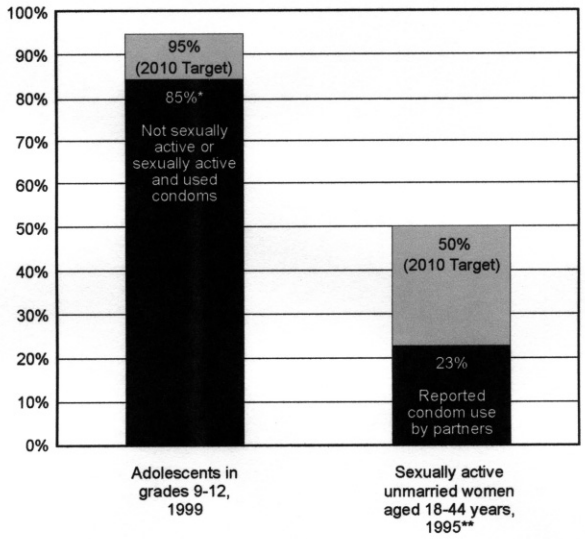
Leading Health Indicators

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

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.

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.