

Health Promotion through Healthy People 2010*

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I. Introduction

Until the mid 20th century, the chief causes of morbidity and mortality in the United States were infectious diseases such as pneumonia, gastrointestinal infections, tuberculosis or influenza. Infectious diseases still cause much suffering in the United States, but most of America's major health problems are chronic rather than acute in nature. Chronic diseases such as cardiovascular disease(CVD) - which represents a staggering burden for individual patients and society at large - are best addressed through helping

patients to make better lifestyle choices and promoting beneficial health practices and appropriate environmental changes.^{1,2,3}

By 2030, approximately 20 percent of Americans will be 65 years of age and older. This demographic reality coupled with rising health care costs has prompted public health authorities to increasingly emphasize health promotion activities for older Americans. Since the average life expectancy of Americans at age 65 is roughly 14 years for men and 19 years for women, there is growing awareness of the need for public health workers to work

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with elderly persons and their caregivers to prevent unnecessary disability, maintain physical functioning and avoid complications from chronic disease, to “add life to years,” rather than simply years to life.^{4,5}

An important challenge for public health during the 21st century will be a radical reduction of the number of deaths from heart disease, stroke and cancer. In 1998 of \$1 trillion spent on health care by American citizens, roughly \$950 billion dollars was allocated for direct medical care services, while only \$5.6 billion was devoted to health promotion activities and other population health activities. Chronic diseases in America’s aging population are the primary cause of rising health care costs.^{1,3,5,6}

The Centers for Disease Control and Prevention(CDC) - the nation’s lead agency for the prevention of disease and injuries - is committed to fostering a public health agenda that balances prevention and treatment for individuals with activities and programs designed to promote health among the population as a whole.

On May 13, 2004, Dr. Julie Gerberding, CDC Director announced the CDC “Futures Initiative,” which includes goals and organizational changes intended to enable the CDC to increase its ability to promote health

on a national and global level. CDC will align its priorities and investments under two overarching health protection goals: 1) ensuring communities are prepared to mitigate environmental and infectious causes of disease, including biological, chemical and radiological terrorism and; 2) encouraging health promotion and disease prevention activities to ensure the best possible quality of life for people of every age and background.⁷

Healthy People 2010, managed by the Office of Disease Prevention and Health Promotion(ODPHP), US Department of Health and Human Services(US DHHS) have established national goals for disease prevention efforts. These goals include: 1) assisting people of every age group to increase their life expectancy and improve their quality of life and; 2) eliminating health disparities among different segments of the population.

II. Definition of Health Promotion & Historical Development

Health promotion is the science and art of helping people change their lifestyle to move toward a state of optimal health.⁸ Optimal health is defined as a balance of physical, emotional, social, spiritual, and intellectual health.

The 5 optimal health factors are further defined as follows:

<i>Physical</i>	Fitness. Nutrition. Medical self-care. Control of substance abuse.
<i>Emotional</i>	Care for emotional crisis. Stress Management.
<i>Social</i>	Communities. Families. Friends.
<i>Intellectual</i>	Educational. Achievement. Career development.
<i>Spiritual</i>	Love. Hope. Charity.

Lifestyle changes can be facilitated through a combination of efforts to enhance awareness, change behaviors and ensure that a person's environment is conducive to good health practices. A supportive environment probably is the most important factor in producing lasting lifestyle changes.

Mayhew Derryberry, Ph.D. who joined the US Public Health Service(PHS) from the New York City Health Department in 1937 played a crucial role in helping public health workers in the United States to recognize the importance of personal behavior in the causation of disease and injury and deepening our understanding of the part played by health education in promoting the public's health, safety and wellbeing.⁹ Derryberry became chief of the newly formed Division of Health Education, US

PHS in 1941. He and his associates laid the foundation for the modern theory and practice of health education. During the 1950s and 1960s, research conducted and funded by the National Institutes of Health (NIH) highlighted the preventable nature of many health problems and the critical role of human behavior.¹⁰

In 1973, President Richard Nixon formed the Presidential Committee on Health Education. Among other initiatives, the Committee recommended parallel health education efforts by the government and private sector. Adopting the Committee's suggestion, the United States established the Bureau of Health Education at CDC as the governmental health education entity and the National Center for Health Education as the private sector health education agency.⁸

In 1977, the Task Force on Disease Prevention and Health Promotion was created. J. Michael McGinnis MD, HEW Deputy Assistant Secretary and Assistant Surgeon General served as chairperson of the Task Force. The Task Force's 1979 report - "The Surgeon General's Report on Health Promotion and Disease Prevention" - suggested that the health of the American people had improved substantially, that health promotion and health education activities were crucial to addressing future health

challenges. The Task Force further suggested that the results of these efforts could be measured.^{2,11}

In 1980, the Health Department announced its “Promoting Health & Preventing Diseases” program, which established 226 measurable targets for the year 1990 in health promotion and clinical preventive services.¹²

Thereafter, the Healthy People 2000 Objectives were established. This process is now in its 3rd decade: as Healthy People 2010 is being implemented.

Adopting healthy behaviors such as eating nutritious foods, being physically active and avoiding tobacco can prevent or control the devastating effects of many diseases. CDC is committed to programs that reduce the health and economic consequences of the leading cases of death and disability and ensure a long, productive, healthy life for all people.^{2,13}

III. Definitions of Public Health and Essential Public Health Services

Charles-Edward Amory Winslow defined public health in 1923 as the science and art of; preventing disease, prolonging life,

organizing community efforts for the sanitation of the environment, control of communicable diseases, personal hygiene education, organization of medical and nursing services for the early diagnosis and preventive treatment of disease and development of the social machinery to ensure everyone an adequate standard of living.²

However, the Institute of Medicine, part of the National Academy of Sciences, defines public health as the fulfillment of society’s interest in assuring the conditions in which people can be healthy and the organization of community efforts aimed at the prevention of disease and promotion of health. Public health practice links many disciplines and rests upon the scientific core of epidemiology.

The World Health Organization contributes another definition of public health as “a state of complete well-being, physical, social, and mental, and not merely the absence of disease”.¹⁴

In 1994, the Health Functions Steering Committee of the Institute of Medicine (IOM), comprised of major governmental agencies and public health organizations, developed a broad consensus definition of the public health services which should be

provided by the public health system in every jurisdiction.¹⁵ The 10 Essential Public Health Services include:

1. Monitor health status to identify community health problems;
2. Diagnose and investigate health problems and health hazards in the community;
3. Inform, educate, and empower people about health issues;
4. Mobilize community partnerships to identify and solve health problems;
5. Develop policies and plans that support individual and community health efforts;
6. Enforce laws and regulations that protect health and ensure safety;
7. Link people to needed personal health services and assure the provision of health care when otherwise unavailable;
8. Assure a competent public health and personal health care workforce;
9. Evaluate the effectiveness, accessibility, and quality of personal and population-based health services;
10. Conduct research to attain new insights and innovative solutions to health problems.

IV. Public Health Challenges in the 21st Century

In addition to developing the concept of

“essential health services”, Healthy People 2010 includes a national health plan to reinforce the public health infrastructure. Healthy People 2010 is being implemented in an era of radical transformation in public health as a result of demographic changes (e.g., older and more ethnically diverse population), the shifting disease epidemiology from acute to chronic illness, advancing medical science and technology and the impact of globalization and rapid and frequent travel. In addition, state and federal agencies have increased their investment in government public health infrastructure, workforce development, information technology(IT), lab and other organizational capacity.¹⁶

For instance, local health departments received substantial federal and state funding to address bioterrorism following the Anthrax episodes in October 2001. However, there are concerns about the adequacy and stability of the funding. In fact, as part of the recently announced City Readiness initiative CDC has redirected a significant portion of the federal government’s emergency public health preparedness dollars from the states to the nation’s major cities

The “Committee on Assuring the Health of the Public in the 21st Century” was convened by IOM for 19 months between

January 2001 and July 2002 to create a framework for assuring population in the United States that would be more inclusive and of broader scope than that called for in the IOM's 1988 "The Future of Public Health" report. The committee embraced "Healthy People 2010" and emphasized the need to focus prevention efforts on the broad determinants of health; strengthen the public health infrastructure by building partnerships, ensure system accountability, emphasize evidence and enhance communication. The concept of a "public health system" was developed; the public health system shapes population health and includes governmental agencies, health care providers and institutions, businesses, media organizations and academic institutions.^{14,16}

As the 21st Century unfolds, the U.S. confronts diverse and complex health challenges such as the prevalence of obesity, toxic environments, the large number of un- or underinsured Americans(4.5 million in 2003: CNN News on 8/27/04), health disparities, antimicrobial resistance and the threat of bioterrorism. The social, cultural, and global context of the nation's health also is undergoing rapid change.¹⁷ To address the present and future challenges faced by the nation's public health system the nation must:

1. Adopt a population health approach that

considers the multiple determinants of health;

2. Strengthen the governmental public health infrastructure, which forms the backbone of the public health system;
3. Build a new generation of intersectoral partnerships that also draw on the perspectives and resources of diverse communities and actively engage them in health action;
4. Develop systems of accountability to assure the quality and availability of public health services;
5. Make evidence and foundation of decision making and the measure of success; and
6. Enhance and facilitate communication within the public health system(e.g., among all levels of the governmental public health infrastructure and between public health professionals and community members).

V. Chronic Diseases, Health Risk & Health Behaviors

Health promotion activities funded by the Department of Health & Human Services under Healthy People 2010 hopefully will help to reduce morbidity and mortality caused by some of the more prevalent and dangerous chronic diseases in the United States. Specifically, health promotion activities will

help to promote behaviors and lifestyle changes that will help prevent or reduce complications caused by such conditions as heart disease and stroke, cancer and arthritis.

1. Preventing Heart Disease and Stroke:

Death, Disabilities & Economic Impacts: Despite impressive advances in medicine and science, cardiovascular diseases remain major causes of disability and death. The two principal components of cardiovascular disease (CVD) - heart disease and stroke - are the first and third leading causes of death for both men and women in the US, accounting for nearly 40% of all deaths. More than 930,000 Americans die of CVD each year, which is equivalent to one death every 34 seconds. Even though these conditions are most prevalent among people ages 65 years and older, the number of sudden deaths due to heart disease among young adults (ages 15-34) has increased.¹⁸

Almost one-fourth of Americans, 64 million people, live with CVD. Coronary heart disease is a leading cause of premature, permanent disability in the US workforce. CVD has caused over 6 million hospitalizations annually. Stroke alone has resulted in significant disabilities for more than 1 million Americans.

The cost of heart disease and stroke is

projected to reach \$368 billion in 2004, including health care and disability costs and decreases in productivity by victims of these diseases.

Risk Factors: High blood pressure and cholesterol are the two primary risk factors for CVD. Diabetes, tobacco use, physical inactivity, poor nutrition and obesity also are important risk factors.

About 90 percent of middle aged Americans develop high blood pressure during their lifetime and more than 70 percent are not taking the steps necessary to control hypertension. Studies of those with high blood pressure suggest that lowering blood pressure by about 12 points can reduce the incidence of heart attacks by 21 percent and strokes by 37 percent. Educating members of the public and health care providers about the main risk factors is a key strategy for reducing the number of deaths caused by CVD.

Funding & Future Challenges: During fiscal year 2004, Congress appropriated \$45.7 million for health promotion activities in 32 states and District of Columbia under the slogan of "A Public Health Action Plan to Prevent Heart Disease and Stroke". Priorities include.

- Controlling high blood pressure

- Controlling high blood cholesterol
- Increasing awareness of the signs and symptoms of heart disease and stroke and the importance of calling for medical assistance when these signs and symptoms occur
- Improving emergency response
- Improving quality of care
- Eliminating health disparities.

2. Preventing and Controlling Cancer:

Death & New Cases: Cancer is the second most common cause of death in the United States, responsible for one in every 4 deaths. In 2004, more than 560,000 Americans are anticipated to die of cancer or over 1,500 deaths a day.¹⁹ Nearly 18 million new cases have been diagnosed since 1990 and about 1.4 million new cases will be diagnosed in 2004.

Racial Disparities: African-Americans are more likely to die of cancer than people of any other racial or ethnic group. Between 1996 and 2000, the annual cancer death rate for blacks was 257 per million people compared to 199 per million for whites, 138 per million for Hispanics, 138 per million for American Indians/Alaskan Natives and 125 per million for Asian/Pacific Islanders.

Costs: In 2003, the economic impact of cancer was estimated to exceed \$189 billion,

including \$64 billion for medical treatment and \$125 billion in lost productivity. In fiscal year 2004, \$413.5 million was allocated by CDC for health promotion activities designed to help people understand and address cancer risk factors, including \$318.8 million for cancer prevention and control activities such as early screening and diagnosis and \$99.7 million to address smoking-related health issues.

Preventive Measures: Adopting healthier lifestyles can significantly reduce cancer risks. Recommended steps include avoiding tobacco use, engaging in physical activity, eating healthy, controlling weight and avoiding direct sun exposure. Screening and early detection, health education referral services and accessible care also are essential for reducing cancer rates.

3. Targeting Arthritis:

Public Health Concern: Arthritis can be caused by more than 100 different diseases and conditions. The most common forms of arthritis are osteoarthritis, rheumatoid arthritis, fibromyalgia and gout. Common symptoms include pain, aching, stiffness and swelling in or around the joints.

In 2001, 49 million American adults reported physician-diagnosed arthritis and 21 million other Americans reported chronic

symptoms of arthritis, making arthritis one of the nation’s most common health problems. As the US population ages, the number of people aged 65 years old with arthritis symptoms is projected to increase from 21.4 million in 2001 to 41.4 million in 2030. But arthritis is not just an old person’s disease. In fact, two-thirds of Americans with arthritis are younger than 65 years of age. Arthritis tends to be more common among women.

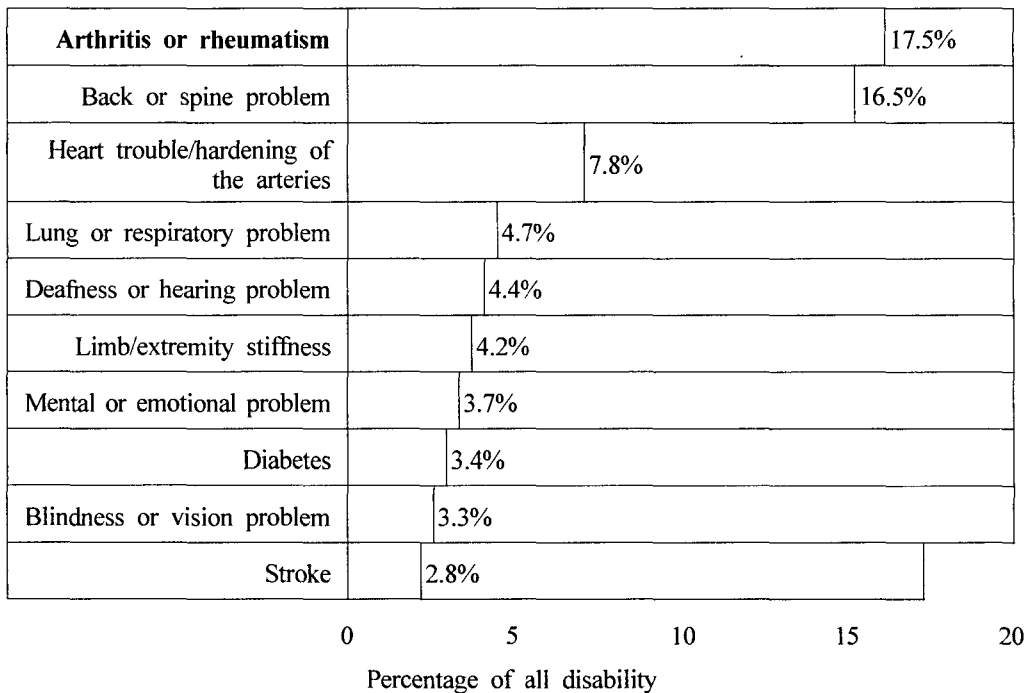
Arthritis limits the daily activities of 8 million Americans and results in roughly 750,000 hospitalization and 36 million outpatient visits. In 1997, the cost of medical

treatment for arthritis in the United States was nearly \$51 billion.²⁰ The following figure shows that in 1999 arthritis was the most common cause of disability among adults in the United States.

4. The Health and Economic Effects of an Aging Society:

One hundred years ago, only 3 million people in the United States were over 65 years old. Today, more than 33 million Americans are older than 65, and that number is expected to double over the next 30 years as the “baby boomer” generation matures. Seniors in 2030 will be even more racially and ethnically

Most Common Causes of Disability Among US Adults, 1999



diverse than today's seniors.²¹

The aging of America will generate a huge demand for health care and social services. Health care expenditures are now four times higher for a 65-year-old than for a 40-year-old. Because the population will be older and greater in number, overall US health care expenditures are projected to increase 25 percent by 2030.

Currently, at least 80 percent of seniors have at least one chronic condition, and 50 percent have at least two. These conditions can cause years of pain, disability, and loss of function. About 12 million seniors living at home report that chronic conditions limit their activities. Three million older adults say they cannot perform such basic activities of daily living as bathing, shopping, dressing, or eating. Their quality of life suffers as a result and demands on family and caregivers can be challenging.

Preventing health problems is one of the few known ways to reduce rising health care costs. By preventing disease and injury, we also can help seniors remain independent for as long as possible, which can improve their quality of life and delay the need for costly long-term care. A recent trend is encouraging; during the last 2 decades, rates of nursing home use have declined.

5. Racial and Ethnic Disparities in Health:

Despite great improvements in the overall health of the nation, Americans who are members of racial and ethnic minority groups are more likely to have poor health and to die prematurely, as the following examples illustrate:²²

- *Breast and cervical cancer:* Death rates from breast cancer declined significantly between 1992 and 1998, but remain higher among black women than among white women. In addition, women of racial and ethnic minorities are less likely to receive pap smears than white women, which can prevent invasive cervical cancer by detecting precancerous changes in the cervix.
- *Cardiovascular disease:* In 2001, rates of death from diseases of the heart were 30 percent higher among African Americans than among whites, and death rates from stroke 41 percent higher.
- *Diabetes:* American Indians and Alaska Natives are 2.3 times more likely than whites to have diagnosed diabetes; African Americans are 1.6 times and Hispanics 1.5 times more likely than whites to be diagnosed with diabetes.
- *HIV/AIDS:* Although African-Americans and Hispanics represent only 26 percent of the US population, they account for roughly 82 percent of pediatric AIDS cases and 69

percent of both AIDS cases and new HIV infections among US adults. In 2002, they accounted for 62 percent of all people living with HIV or AIDS in the United States.

- *Immunizations:* Among adults age 65 years and older is 69 percent of whites, 50 percent of African Americans, and 49 percent of Hispanics receive the flu vaccine. The gap for pneumococcal vaccination coverage among ethnic groups is even wider. While 60 percent of whites 65 and older receive the pneumococcal vaccine only 37 percent of African Americans, and 27 percent of Hispanics in this age group are vaccinated.
- *Infant mortality:* Although the 2001 US infant mortality rate of 6.8 deaths per 1,000 live births was the lowest ever recorded, African-American, American Indian, and Puerto Rican infants continue to have higher mortality rates than white infants. In 2001, the black-to-white ratio in infant mortality was 2.3:1.

Because racial and ethnic minority groups are expected to comprise an increasingly larger proportion of the US population in coming years, the number of people affected by disparities in health care will only increase without culturally appropriate, community-driven programs designed to eliminate these disparities.

6. Physical Activities and Good Nutrition:

Chronic diseases account for 70 percent of US deaths. Yet, many chronic diseases and conditions can be reduced or prevented. Physical inactivity and unhealthy eating contribute to obesity, cancer, cardiovascular disease and diabetes. These two behaviors alone account for as many as 400,000 deaths each year.²³

Nearly 59 million adults are obese and the number of young people who are overweight has more than doubled during the last 20 years. About 15 percent of children and adolescents(9 million young people) are considered overweight. In the last 30 years, caloric intake has increased for both men and women. Obesity is a risk factor for heart disease, high blood pressure, diabetes, arthritis related disabilities and some cancers. The estimated annual cost of obesity in the US in 2000 was \$117 billion.

Promoting regular physical activity and healthy eating and creating an environment that supports these behaviors is essential to reducing this epidemic of obesity. Despite the proven benefits of physical activities, more than 50 percent of American adults do not get enough physical activity; 26 percent are not active at all in their leisure time. More than one-third of high-school students(age 14-18) do not exercise on a regular basis. At

the same time, daily participation in high school physical education classes dropped from 42 percent in 1991 to 32 percent in 2001.

Good nutrition, like physical activity, can help reduce the risk of suffering from many chronic diseases. At least 10 million Americans are at risk for diabetes; proper nutrition and physical activities can lower their chances of getting diabetes. Only about one-fourth of US adults and 21 percent of young people eat the recommended five or more servings of fruits and vegetables each day.

CDC will expand communication efforts to promote physical activity and good nutrition in work sites, schools, and health care settings and continue to support the **Steps to a Healthier US initiative**.

7. Safeguarding the Health of Mothers:

Proper prenatal care begins even before conception by promoting a healthy lifestyle among adults of child-bearing age. Effective prenatal care prevents complications for mother and child during and after pregnancy.²⁴

Deaths from pregnancy complications in the US declined dramatically from 1900 to 1982, but two or three women still die of pregnancy complications each day in the United States. Yet most pregnancy

complications can be prevented if women have access to better health care, and make changes in their lifestyle habits.

The risk of death during childbirth is almost four times higher for African American women than for white women. Among Asian women, the risk for death during childbirth is twice as high for women who recently immigrated to the United States than for Asian women who were born in America. Women over 40 are five times more likely to die during childbirth than women between 20 and 24 years old.

Deaths are only part of the problem and physical and emotional effects of pregnancy complications are the other concerns. The most common pregnancy complications include ectopic pregnancy, high blood pressure, complicated delivery, premature labor, depression, infection, diabetes, and hemorrhage. In addition, domestic violence, smoking and substance abuse can jeopardize the health of both mother and infant.

8. Oral Health:

Mouth and throat diseases ranging from cavities to cancer cause pain and disabilities for millions of Americans. Tooth decay affects nearly 20 percent of 2-4 year olds, 50 percent of 8 year-olds and 75 percent of 17 year olds. About 50 percent of low-income

children do not receive dental care. This fact is disturbing because almost all oral diseases can be prevented and treated.²⁵

Even though dental care for older adults has improved, nearly 30 percent of Americans over age 65 have lost all their teeth, primarily due to tooth decay and gum disease.

About 30,000 Americans were diagnosed for mouth and throat cancers and about 8,000 die of these diseases. Nearly 25 percent of Americans suffer from gum disease.

In 2003, dental care was estimated to cost \$74 billion. More than 100 million Americans still do not have access to fluoridated drinking water. Healthy People 2010 calls for half of all US children to have dental sealants.

9. Health Risks:

For the last 20 years, CDC's Behavioral Risk Factor Surveillance System (BRFSS) has become an instrumental tool for surveying US adults behaviors that affects their health that are linked with the leading causes of deaths. Risky behaviors include not getting enough physical activity, being overweight, not using seatbelts, using tobacco and alcohol and not seeking preventive medical care. The BRFSS addresses the challenges presented by a growing demand for survey data from state health departments, legislators, planners,

community based organizations, and local governments. The BRFSS has increased the number of adults interviewed in each State from 2,000 to 4,000. This increase allows sites to provide local level data and to use split sampling. With the addition of SMART (Selected Metropolitan/Micropolitan Area Risk Trends) to BRFSS data, CDC is able to provide health-specific risk profiles for various age and racial groups.²⁶

10. Health Risk Behaviors Among Young People:

While BRFSS is a critical source of information on many adult health topics, the Youth Risk Behavioral Surveillance System (YRBSS) provides vital information about the behaviors affecting the health development and academic attainment of American youth.²⁷

Youth risk behaviors identified by the YRBSS include tobacco use, unhealthy dietary behaviors, inadequate physical activity, alcohol and drug use, sexual behaviors and violence.

Among both children and adults, the leading causes of death and disability are closely linked to these behaviors. Before the 1990s, little was known about the prevalence of behaviors engaged by young people that put their health at risk, but it presently

<i>Behavior Survey</i>	9 th Grade	11 th Grade
Last 12 mos., 2-3 times physical fights	14%	15%
Last 12 mos., ever hit by boy/girlfriend	10%	12%
Ever forced to sexual intercourse	7%	8%
Last 12 mos., sad or hopeless	29%	33%
Last 12 mos., considered to attempt suicide	14%	18%
Ever tried cigarette smoking	49%	65%
For 3-9 days, ever had at least one alcohol drink	24%	16%
For 1-2 times, ever used marijuana	9%	9%
Ever had sexual intercourse	30%	45%
Self proclaimed overweight	10%	10%
Did not drink fruit juice/7 days	23%	16%
Drink fruit juice, 1-3 times/7d	29%	28%
Did not eat fruit/7d	25%	24%
Eat fruit, 1-3 times/7d	32%	40%
Eat fruit, 4-6 times/7d	18%	15%
Did not eat green salad/7d	31%	35%
Eat green salad 1-3 times/7d	42%	33%
Eat green salad 4-6 times/7d	13%	16%
No physical exercise/7d	10%	21%
5 days exercise/7d	14%	9%
Every day exercise/7d	38%	18%
Watching TV-less than 1 hr/d	12%	21%
Watching TV-5 hrs or more/d	12%	13%

provides vital information on risk behaviors among young people to effectively target and improve their health program.

During 2001, the Camden County Department of Health & Human Services conducted the YRBS among 9th and 11th graders. The survey contained 87 multiple-choice questions.²⁸ The table below indicates the need for additional health promotion efforts for young people.

VI. Healthy People 2010

1. Definition & Implementation Process:

Understanding the impact of chronic diseases and disorders and the need to educate the public and health care providers, the US Department of Health and Human Services launched **Healthy People 2010**(HP, 2010), a comprehensive, nationwide health promotion and disease prevention agenda. HP 2010, published in January 2000, is a set of health

objectives for the US to achieve over the first decade of the 21st century.²⁹

HP 2010 is the prevention agenda for the nation. It is a statement of national health objectives designed to identify the most significant preventable threats to health and to establish national goals to reduce these threats.

HP 2010 builds on initiatives pursued over the past two decades. The 1979 Surgeon General's Report, *Healthy People, and Healthy People 2000: National Health Promotion and Disease Prevention Objectives* both established national health objectives and served as the basis for the development of state and community plans. Like its predecessors, HP 2010 was developed

through a broad consultation process, reflected current scientific knowledge and included an evaluation component for health promotion and education programs.

HP 2010 offers a simple but powerful idea: provide health objectives in a format that enables diverse groups to combine their efforts and work as a team. It is a road map to better health for all and can be used by many different people, states, communities, professional organizations, and others to improve health. The initiative has partners from all sectors.

2. Framework:

Healthy People 2010 builds on similar initiatives pursued over the past two decades. Goals of HP 2010 include helping Americans

Healthy People 2010 Focus Areas

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

to live longer and healthier lives eliminating health disparities and serving as a guide for developing objectives that will actually measure progress.³⁰

HP 2010 contains 467 objectives designed to serve as a road map for improving the health of all people in the United States during the first decade of the this century.

The objectives are organized in 28 focus areas shown below, each representing an important public health area.^{31,32,33}

3. Measurable and Developmental Objectives:

Each HP 2010 objective has a target for improvements to be achieved by the year 2010. A limited set of the objectives, known as the *Leading Health Indicators*, are intended to help everyone more easily understand the importance of health promotion and disease prevention and to encourage wide participation in improving health in this decade. These indicators were selected based on their ability to motivate action, the availability of data to measure progress, and their relevance as broad public health issues.³⁰

In some cases, HP 2010 establishes specific goals based on data collected by the government; in other cases, a specific goal has not yet been established:

Measurable: National baseline data are available from a specified data source and a HP 2010 target has been set for 328 indicators (70%).

Developmental: National baseline data are not available and a reliable data source has not been set: for 139 indicators(30%); this number will decrease during the decade as data sources are identified during the next few years.

4. Leading Health Indicators:

The *Leading Health Indicators* will be used to measure the health of the nation over the next 10 years. Each of the 10 *Leading Health Indicators* has one or more objectives from Healthy People 2010 associated with it. As a group, the *Leading Health Indicators* reflect the major health concerns in the United States at the beginning of the 21st century. The *Leading Health Indicators* were selected on the basis of their ability to motivate action, the availability of data to measure progress, and their importance as public health issues.^{34,35}

The *Leading Health Indicators* are:

- Physical Activity
- Overweight and Obesity
- Tobacco Use
- Substance Abuse
- Responsible Sexual Behavior

- Mental Health
- Injury and Violence
- Environmental Quality
- Immunization
- Access to Health Care

5. Health Data & Role of National Center for Health Statistics(NCHS):

NCHS is responsible for coordinating the effort to monitor the Nation's progress toward the objectives, using data from NCHS data systems as well as many other data sources. National data are gathered from more than 150 different data sources, from more than seven federal government departments (Health and Human Services, Commerce, Education, Justice, Labor, Transportation, and the Environmental Protection Agency), and from voluntary and private non-governmental organizations. To the extent appropriate, data for the HP 2010 objectives are provided for subgroups defined by relevant dimensions (such as socioeconomic subgroups of the population, health status, or major industrial classifications).³⁵

Data are made available through *DATA2010*, an interactive data system accessible through the NCHS web site and the *CDC WONDER* system. Spreadsheet files containing Healthy People 2010-related data –including *Leading Health Indicators*,

Selected Mortality Objectives, *Selected Natality Objectives*, and *Health Status Indicators*, by all states are also available for downloading through the NCHS web site. The achievement of these objectives depends in part on the ability of health agencies at all levels of government and on non-governmental organizations to assess objective progress. Therefore, NCHS is preparing a document entitled *Tracking Healthy People 2010*.

6. HP 2010 Health Promotion Initiative Highlights:

1) Be a Healthy Person:

Take every opportunity to improve your own health, the health of your loved ones, and the health of your community.

▪ **Make Healthy Choices**

Make better choices for yourself and your family when choosing doctors, health insurance, online health information, and a healthy lifestyle. Follow the links below to reliable health information from www.healthfinder.gov:

- Basic library of health information
- Online health checkups
- Health care decisions
- Health information by age, gender, race or ethnic origin, and caregiver and family roles

◦ Health-related organizations

2) Healthy People in Healthy Communities:

A healthy community: One that embraces the belief that health is more than merely an absence of disease; a healthy community includes those elements that enable people to maintain a high quality of life and productivity.^{33,36,37,38}

- A healthy community offers access to healthcare services that focus on both treatment and prevention for all members of the community.
- A healthy community is safe.
- A healthy community has roads, schools, playgrounds, and other services to meet the needs of the people in that community. (These items are often referred to as “infrastructure.”)
- A healthy community has a healthy and safe environment.

Guide: Are the people in your community as healthy and safe as they can be? If not, would you like to change that? This guide can help you make positive changes in your community, whether you are a physician, government official, business owner, truck driver, store clerk, retired person, etc. anybody else.

Indeed, this guide can help you:

- Learn how to build and run a healthy community coalition;
- Find information about your community on many health problems such as drug abuse, teen pregnancy, depression, and infectious disease; and
- Use Health People 2010 to improve the quality of life of the people in your community.

MAP-IT: To begin to achieve the goal of improving health, a community must develop a strategy. That strategy, to be successful, must be supported by many individuals who are working together.

In much the same way you might map out a trip to a new place, you can use the MAP-IT technique to ‘map out’ the path toward the change you want to see in your community.³⁶

Mobile individuals and organizations that care about the health of your community into a coalition.

Assess the areas of greatest need in your community, as well as the resources and other strengths that you can tap into to address those areas.

Plan your approach: start with a vision

of where you want to be as a community; then add strategies and action steps to help you achieve that vision.

Implement your plan using concrete action steps that can be monitored and will make a difference.

Tract your progress over time.

3) HealthierUS:

The President's HealthierUS initiative of June 2002 helps Americans take steps to improve personal health and fitness and encourages all Americans to.³⁷

- Be physically active every day;
- Eat a nutritious diet;
- Get preventive screenings; and
- Make healthy choices.

4) Steps to a HealthierUS:

A bold new initiative from the Department of Health and Human Services(HHS) that advances President George W. Bush's *HealthierUS* goal of helps Americans live longer, better, and healthier lives. Recognizing that the United States is in a healthcare crisis, HHS Secretary Tommy G. Thompson launched Steps to a *HealthierUS* in 2003.

The *Steps* initiative envisions a healthy,

strong U.S. population supported by a healthcare system in which diseases are prevented when possible, controlled when necessary, and treated when appropriate. This initiative is a shift in the traditional approach to the health of our citizens, moving us from a disease care system to a healthcare system.³⁹

To Be Accomplished: The current US healthcare system is not structured to deal with the escalating costs of treating diseases that are largely preventable through modifiable behavior changes, realizing that small changes over time can yield dramatic results. *Steps* will unite the forces of all US Department of Health & Human Services (HHS) agencies, including the Centers for Disease Control and Prevention(CDC), Centers for Medicare & Medicaid Services, Food and Drug Administration(FDA), and National Institutes of Health(NIH).

Two major goals are:

- 1) Reducing the burden of disease - diabetes, obesity, asthma, cancer, heart disease and stroke.
- 2) Addressing lifestyle choices - poor nutrition and physical inactivity, tobacco use, and youth risk taking.

Steps to promote the following:

- Health promotion programs to motivate and support responsible health choices.
- Community initiatives to promote and enable healthy choices.
- Health care and insurance systems that put prevention first by reducing risk factors and complications of chronic disease.
- State and federal policies that invest in the promise of prevention for all Americans.
- Cooperation among policy makers, local health agencies, and the public to invest in disease prevention instead of spending our resources to treat diseases after they occur.

5) Take a Small Step to Get Healthy:

Poor diet and physical inactivity are poised to surpass tobacco use as the leading cause of preventable death in the U.S. To encourage individuals to make small deliberate changes in their lifestyle - changes that foster healthy eating, physical activity and the development of habits that support the prevention of disease - HHS Secretary Tommy G. Thompson, in partnership with The Advertising Council, has introduced the *Health Lifestyles Campaign*. The national public education program highlights small changes over time rather than drastic lifestyle changes that are difficult to maintain. A state-of-the-art website, www.smallstep.gov offers consumers ongoing ideas and support to pave the road to a healthier lifestyle.

1. Walk to work.
2. Use fat free milk over whole milk.
3. Do sit-ups in front of the TV
4. Walk during lunch hour.
5. Drink water before a meal.
6. Eat leaner red meat and poultry.
7. Eat half your dessert.
8. Walk instead of driving whenever you can.
9. Take family walks after dinner.
10. Skate to work instead of driving.
11. Avoid food portions larger than your fist.
12. Mow lawn with push mower.
13. Increase the fiber in your diet.
14. Walk to your place of worship instead of driving.
15. Walk kids to school.
16. Get a dog and walk it.
17. Join an exercise group.
18. Drink diet soda.
19. Replace Sunday drive with Sunday walk.
20. Do yard work.
21. Eat off small plates.
22. Get off a stop early and walk.
23. Don't eat late at night.
24. Skip seconds.
25. Work around the house.
26. Skip buffets.
27. Grill, steam or bake instead
28. Bicycle to the store instead of driving.
29. Take dog to the park.
30. Ask your doctor about taking a multi-vitamin.
31. Go for a half-hour walk instead of

watching TV.

32. Use vegetable oils over solid fats.
33. More carrots, less cake.
34. Fetch the newspaper yourself.
35. Sit up straight at work.
36. Wash the car by hand.
37. Don't skip meals.
38. Eat more celery sticks.
39. Run when running errands.
40. Pace the sidelines at kids' athletic games.
41. Take wheels off luggage.
42. Choose an activity that fits into your daily life.
43. Park further from the store and walk.
44. Ask a friend to exercise with you.
45. Make time in your day for physical activity.
46. Exercise with a video if the weather is bad.
47. Bike to the barbershop or beauty salon instead of driving.
48. Keep to a regular eating schedule.
49. If you find it difficult to be active after work, try it before work.
50. Take a walk or do desk exercises instead of a cigarette or coffee break.
51. - 118.

VII. Conclusion

The US is facing major health challenges, as indicated by the alarming statistics listed

below, that reinforce the need for increased awareness and action.^{41,42,43}

- Currently, 17 million Americans have diabetes, and nearly one-third are unaware that they have the disease.
- More than 64% of the U.S. adult population is overweight or obese.
- More than 31 million people in the United States have diagnosed asthma. Although a lot is known about how to prevent its symptoms and consequences, many people are not applying this knowledge.
- Heart disease and stroke account for more than 40% of all deaths each year.
- Cancer is the second leading cause of death in the United States, killing more than half a million people each year.

Through initiatives like *Healthy People 2010* and *Steps to a HealthierUS*, the US Department of Health & Human Services (US DHHS) is poised to meet these challenges.

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NOTE

1. Competency of Health Educator:

Certified Health Educator Specialist (CHES)

Health Educators are specialists in educating the public about health. They are professionals who design, conduct, and evaluate activities to help improve the health of people. These activities can take place in a variety of settings to include schools, communities, healthcare facilities, businesses, academic settings, and government agencies.

Health Educators are employed under a range of job titles such as patient educators, health education teachers, public health/community health educators, trainers, community organizers, and health program managers, to name a few.

Certified Health Education Specialists (CHES) are those who have met the standards of competence established by the National Commission for Health Education Credentialing, Inc. (NCHEC). "CHES" after a health educator's name is one indication of professional competency and a commitment to continued professional development.

2. For Additional Information, Contact:

The National Commission for Health
Department Education Credentialing, Inc.

944 Marcon Blvd., Suite 310

Allentown, PA 18109

Toll Free Phone: 1-888-624-3248

Toll Free FAX: 1-800-813-0727

Website: <http://www.nchec.org>

3. Eligibility for the CHES Exam:

The applicant must possess a bachelor's,
master's, or doctoral degree from an
accredited institution of higher education,
AND

1. An official transcript that clearly shows
a major in Health Education, e.g.,
Health Education, Community Health
Education, Public Health Education,
School Health Education, and the like,
OR

2. An official transcript that reflects at
least 25 semester hours (37 quarter
hours) of course work with specific
preparation addressing the seven areas
of responsibility in the *Competencies
Based Framework*.

4. Relevant Professional Organizations:

- Society for Public Health Educators and
(SOPHE)
- Association of State & Territorial Directors
of Health Promotions and Public Health
Education (ASTDHPHE)
- American Association for Health Education
(AAHE)
- American School Health Association
(ASHA)
- National Commission for Health Education
Credentialing (NCHEC)
- Council on Education for Public Health
(CEPH)