

HEALTH PROMOTION

What is health? Ideally, it is a sense of mental and physical well-being that is much more than the mere absence of disease. Promoting healthy behaviors is one of the best ways of preventing the diseases and disabilities that characterize the lives of too many Americans and their families.

Many CDC activities are designed to help individuals and communities achieve and maintain a healthy lifestyle at any age. For example, starting as early as possible—during pregnancy—CDC’s Safe Motherhood initiative tries to improve the health of pregnant women and their infants. An innovative nutrition program promotes breast feeding and addresses iron deficiencies among infants and toddlers. Adolescent and school health programs try to help young people develop the healthy habits that will serve them well throughout their lives, such as avoiding tobacco use, eating more fruits and vegetables, and making physical activity a part of their daily routines. With an unfolding epidemic of obesity (and a related epidemic of diabetes) escalating among both children and adults, adopting healthier diets and exercise routines will pay off for individuals and for our population as a whole.

CDC’s WISEWOMAN program offers a range of health promotion and screening services to women who have already taken a positive step to improve their health by seeking breast cancer screening. Initiatives on aging, arthritis, and disability help maintain independence and improve millions of Americans’ quality of life, while oral health efforts improve access to this important—but often overlooked—aspect of overall health.

As we work to promote health for all Americans at every stage of life, it is particularly important to bring the benefits of healthy living to minorities and low-income populations who have not benefitted fully from the health advances of recent decades. At the same time, CDC is working with its partners to contribute to a more scientific understanding of complementary and alternative medicine and its role in promoting health. Working on these many fronts simultaneously, CDC hopes to bring the message—and, most importantly, the tangible benefits—of health promotion to every American family and community.

ADOLESCENT AND SCHOOL HEALTH

WHAT IS THE PUBLIC HEALTH ISSUE?

- Each day 4,400 young people try their first cigarette.
- Daily participation in high school physical education classes dropped from 42% in 1991 to 32% in 2001.
- Almost 80% of young people do not eat the recommended number of servings of fruits and vegetables.
- Nearly 30% of young people are overweight or at risk of becoming overweight.
- Every year, almost 800,000 adolescents become pregnant and about 3 million become infected with a sexually transmitted disease.

WHAT HAS CDC ACCOMPLISHED?

Every school day, more than 53 million young people attend 120,000 schools across our nation. Because of the size and accessibility of this population, school health programs are one of the most efficient means of shaping our nation's future health, education, and social well-being. In 1987, in response to the growing impact of HIV infection, CDC began funding state and local education agencies for HIV prevention education. In 1992, while continuing to provide funding to all states for HIV education, CDC started an initiative to support coordinated school health programs that reduce chronic disease risk factors: poor eating habits, physical inactivity, and tobacco use. In 2003, with funds from CDC's Chronic Disease Prevention and Health Promotion appropriations, CDC supported 22 state-coordinated school health programs. In addition, more than 40 professional and volunteer organizations work with CDC to develop model policies, guidelines, and training to help states implement high-quality school health programs.

Example of Program in Action

The North Carolina State Board of Education adopted the Healthy Active Children policy which requires physical education/activity in schools (pre- K-8), local school health advisory committees, and implementation of model coordinated school health programs in each local school district. North Carolina's policy prohibits physical activity and recess from being taken away from children as a "punishment," regulates class size, and defines the elements of a quality physical education class.

WHAT ARE THE NEXT STEPS?

Health risk behaviors often established during youth such as tobacco use, unhealthy dietary patterns, and inadequate physical activity contribute to adult mortality and morbidity resulting from lung and heart disease, cancer, and other chronic diseases. Research has established that school health programs effectively reduce the prevalence of health risk behaviors among youth. Funded state and local education agencies will continue to provide youth with a healthy school environment and the information and skills needed to avoid these risk behaviors. CDC will help these agencies improve the overall quality of their school health programs by strengthening school health policies; improving curricula and instruction; training staff; involving families and communities in school health education; and evaluating program effectiveness.

HEALTHY AGING

WHAT IS THE PUBLIC HEALTH ISSUE?

Without greater public health emphasis on disease prevention and health promotion, the dramatic aging revolution will result in an unprecedented and overwhelming demand on public health, healthcare, and social services.

- By 2030, the number of adults age 65 and older will more than double from 35 million today to 70 million, or 1 of every 5 Americans.
- Effective prevention measures exist today to substantially reduce illness, disability, and long-term care needs among older adults. However, these measures are substantially underused.
- Critical public health strategies for older adults include promoting healthy lifestyles; expanding the use of preventive services (e.g., cancer screening); expanding the use of immunizations against pneumonia and influenza; reducing injury risks in homes (grab bars, improved lighting) and communities (e.g. curb cuts); and promoting the use of chronic disease self-management techniques.

WHAT HAS CDC ACCOMPLISHED?

- Established the “Healthy Aging Network” to determine current gaps in prevention research, identify promising interventions, and examine the feasibility of applying such interventions in community settings.
- Collaborated with the aging network (e.g., the Administration on Aging) to jointly fund mini-grant projects in 14 states/communities that focus on promotion of physical activity, expanding the use of preventive services, and increasing the availability of chronic disease self-management programs.
- Collaborated with external partners to develop and widely disseminate a compendium of key health indicators for older adults (a “Report Card”) for use by policymakers and health and aging professionals.
- Continues to support national organizations (e.g., the American Society on Aging, the National Council on the Aging) to promote healthy lifestyles, increase use of preventive services, and prevent injuries among older adults.

WHAT ARE THE NEXT STEPS?

Aggressive outreach and fuller application of effective health-preserving strategies are critical to meeting the needs of a rapidly growing senior population. State and local health departments, the aging network, and organizations serving older adults are looking to CDC for scientific and programmatic expertise in strategies that reduce long-term care needs and preserve health and quality of life. CDC will lay the foundation for a nationwide “Healthy Aging” program that will serve as a vital resource to states and communities for up-to-date, science-based information. The program will also provide training and technical assistance; as well as provide successful and replicable program models to promote healthy lifestyles; increase the use of early detection services and adult immunizations; reduce home and community hazards for injuries; and promote the use of effective chronic disease self-management techniques.

MATERNAL AND CHILD NUTRITION AND HEALTH

WHAT IS THE PUBLIC HEALTH ISSUE?

CDC promotes optimal nutrition for pregnant women and young children throughout the United States and abroad. While major improvements in nutritional status were made in the 20th century, significant problems still exist. Despite a gradual decline in pediatric anemia during the past decade, 13% of low-income children are anemic, and rates of anemia are greater than 30% among low-income groups in some areas, putting these children at increased risk of developmental delays and impaired cognitive ability. During pregnancy, anemia continues to be problematic, especially among low-income women—33% are anemic, greatly increasing their risk of having pre-term and low birth-weight babies. Inadequate weight gain during pregnancy also contributes to the chances for unhealthy births; 26% of low-income women do not gain enough weight during their pregnancies. About one third of U.S. newborns are never breast-fed, and less than half of these continue for 6 months, putting them at increased risk for diarrhea, ear infections, pneumonia, type 1 diabetes, celiac disease, and childhood overweight. In addition, more than 13% of low-income children are overweight.

WHAT HAS CDC ACCOMPLISHED?

CDC has developed and implemented Web-based training modules on the new CDC pediatric growth charts, which healthcare providers use to evaluate and monitor the weight status of over 82 million infants, children, and adolescents. CDC helped develop the “HHS Blueprint for Action on Breast-feeding” and has supported efforts to promote breast-feeding in the healthcare system, workplace, and community as outlined in the blueprint. CDC also funded two studies of iron supplementation during pregnancy among low-income women. Results of both studies provide evidence that iron supplementation of all pregnant women reduces early deliveries and improves birth weight.

Example of Program in Action

CDC collaborated with the Mississippi Department of Health to evaluate a breast-feeding peer counseling program that had been implemented gradually in about half of the state’s WIC clinics. The proportion of mothers who breast-fed increased eight percentage points in the clinics where the peer counseling was implemented, but only rose one and a half percentage point in clinics without peer counseling. The peer counseling program subsequently was implemented statewide and has served as a model for similar programs around the country.

WHAT ARE THE NEXT STEPS?

CDC continues to facilitate implementation of activities addressed in the “HHS Blueprint for Action on Breast-feeding.” Efforts include collaborating with the U.S. Department Agriculture to help states develop strategies to establish breast-feeding-friendly communities and conduct qualitative research on infant feeding behaviors among African-American women. CDC also funds a range of breast-feeding evaluation projects to help determine the most effective and cost-beneficial interventions. CDC is conducting two etiologic studies to investigate the pockets of high rates of anemia among low-income children. To build on research related to iron supplementation during pregnancy, CDC funds a study in China to evaluate the impact of iron and other mineral and vitamin supplements given during pregnancy. CDC conducts a pilot research project on pediatric overweight through the American Academy of Pediatrics and other partners. CDC has expanded its comprehensive nutrition and physical activity program to prevent overweight among young children by providing funding to 20 states.

For additional information on this or other CDC programs, visit www.cdc.gov/program

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MEDIA CAMPAIGN TO IMPROVE THE HEALTH OF AMERICA'S CHILDREN

WHAT IS THE PUBLIC HEALTH ISSUE?

A staggering number of young people are putting their health in jeopardy by engaging in behaviors with serious short- and long-term consequences. According to CDC's Youth Risk Behavior Surveillance System, only 27% of children in the United States attend physical education classes daily—down from 42% in just the past 9 years. Decreasing physical activity, coupled with unhealthful eating, has resulted in a doubling of the percentage of children and adolescents who are overweight over the past 20 years. Emerging trends of type 2 diabetes in youth may be one of the first consequences of the epidemic of obesity in youth. Tobacco, alcohol, and marijuana use remain high, as are the rates of teenage depression and suicide. Every year, almost 1 million adolescents become pregnant, and about 3 million become infected with a sexually transmitted disease. Given the implications of physical inactivity and other unhealthy, risky behaviors, efforts to improve adolescent well-being must address these behaviors.

WHAT HAS CDC ACCOMPLISHED?

CDC launched *VERB™ It's what you do*, a national multicultural campaign to promote healthy lifestyles among “tweens” (9 to 13 years old) in 2002. The goal of the campaign is to increase and maintain physical activities among tweens through media; public and private sector partnerships; and community efforts with the support and involvement of parents and adult and teen role models. In 2003, the campaign built awareness and affinity for VERB brand among tweens. The VERB campaign exceeded CDC's 1-year awareness target (that tweens have seen the campaign and know what it is about). Seventy-four percent of tweens are aware of the VERB brand and tell us that VERB is “cool.” This positive acceptance of VERB positions the campaign to motivate tweens to get and stay physically active. Through contests, tours, sweepstakes, and the Internet, VERB directly touched almost 5 million children and parents. The campaign has been seen 46 million times nationwide with 147 broadcast, print, and online placements. Audience research is conducted continuously to ensure the ads resonate with youth and parents.

WHAT ARE THE NEXT STEPS?

Today's young people are a generation with high rates of media consumption including television, radio, music, print, and Internet use. These media sources offer a tremendous opportunity to market healthy behaviors to young people. The youth media campaign has been planned as a 5-year effort and will continue to involve young people in all aspects of planning and implementing of fresh, new ideas to keep the campaign relevant for young audiences. Building on the success of its initial phase to create awareness for VERB, the campaign enters its second phase with messages designed to encourage tweens to be physically active on a continued basis. The second phase of the VERB campaign focuses on providing tweens with opportunities and access to fun, physically inspiring events and activities throughout the year.

NATIONAL ORAL HEALTH PROGRAM

WHAT IS THE PUBLIC HEALTH ISSUE?

- A silent epidemic of oral disease is affecting our most vulnerable citizens including poor children, the elderly, and many members of racial and ethnic minority groups.
- In 2003, Americans spent an estimated \$74 billion on dental services, yet many children and adults still go without regular dental services and other measures that have been proven effective in preventing oral disease.
- Almost 25% of children 6 to 17 years of age and 30% of adult Americans have untreated tooth decay. Children of some racial and ethnic groups continue to experience far greater rates of untreated decay. Both African-American children and Mexican-American children have twice the amount of untreated decay as white children.
- More than 100 million Americans lack the proven benefits of fluoridated water.
- Dental sealants applied to children's teeth can prevent tooth decay, yet less than 25% of children—less than 5% in certain low-income groups—have had sealants.
- More than 8,000 people, mostly older Americans, die from oral and pharyngeal cancers each year—nearly one person every hour. This year, 28,260 new cases of oral cancer will be diagnosed.

WHAT HAS CDC ACCOMPLISHED?

With funds from CDC's Chronic Disease Prevention and Health Promotion appropriations, CDC works with 12 states and 1 territory to build effective oral health prevention programs and reduce disparities among disadvantaged populations. This effort includes working with states to develop school-based or school-linked programs to reach children at high risk of oral disease with proven and effective education and prevention services, such as dental sealants. CDC also works with states to expand the fluoridation of community water systems and operates a fluoridation training and quality assurance program. CDC works with states to track oral diseases and provide valuable health information to assess the effectiveness of disease prevention programs and help target those programs to populations at greatest risk. CDC assesses the risk of infectious disease transmission in dental care settings and provides nationally recognized guidance to minimize the risk of disease transmission in dental offices.

Example of Program in Action

With grant assistance from CDC, Nevada has made significant progress in expanding the number of communities with fluoridated water. CDC funds helped the water utility in Clark County, Nevada, which has a population of 1 million primarily in Las Vegas and Henderson, to purchase some of the equipment needed to implement water fluoridation. This increased the population in Nevada with access to water fluoridation from 28,000 to 1 million residents, or about two-thirds of the state population served by public water systems. With funding from a current CDC Cooperative Agreement, Nevada also is working to strengthen its capacity to monitor oral diseases, further extend water fluoridation, and provide dental sealants to children through school-based services.

WHAT ARE THE NEXT STEPS?

CDC plans to fund up to 10 additional states to enhance their current oral health programs, and will continue to work with states to assess the extent of oral diseases; target prevention programs and resources to those at greatest risk; and evaluate changes in policies, programs, and oral disease. This effort includes implementing water fluoridation in additional communities and improving use of sealants through school programs. CDC plans to work to reduce disparities in oral cancers and oral diseases, such as periodontal disease, that are linked to chronic diseases such as diabetes and heart disease and risk factors such as tobacco use.

For additional information on this or other CDC programs, visit www.cdc.gov/program

January 2004

RACIAL AND ETHNIC APPROACHES TO COMMUNITY HEALTH (REACH 2010)

WHAT IS THE PUBLIC HEALTH ISSUE?

- The leading causes of death and disability (i.e., heart disease, cancer, stroke, diabetes, and HIV/AIDS) are dramatically higher among racial and ethnic minority populations in the United States.
- Rates of death from stroke are 41% higher among African Americans than among whites.
- Although African Americans and Hispanics represent only 26% of the U.S. population, they account for roughly 69% of adult and children AIDS cases, 69% of new HIV infections among U.S. adults, and 90% of pediatric (under 13 years of age) AIDS cases.
- While Asian-American cancer rates are lower than other minority populations, cancer is the leading cause of death among Asian-American women. The incidence of cervical cancer among Vietnamese-American women is five times higher than that of white women.
- African Americans and Hispanics have significantly lower influenza and pneumococcal immunization rates compared to the rest of the population. Influenza vaccination coverage among adults 65 years of age and older is 69% for whites, 50% for African Americans, and 49% for Hispanics. The gap for pneumococcal vaccination coverage among ethnic groups is even wider, with 60% for whites, 37% for African Americans, and 27% for Hispanics.

WHAT HAS CDC ACCOMPLISHED?

With funds from CDC's Chronic Disease Prevention and Health Promotion appropriations, Racial and Ethnic Approaches to Community Health (REACH) 2010 supports community coalitions in the design, implementation, and evaluation of unique community-driven strategies to eliminate health disparities by addressing racial and ethnic disparities in infant mortality; breast and cervical cancer; cardiovascular diseases; diabetes; HIV/AIDS; and immunizations. Communities served include African Americans, American Indians, Hispanic Americans, Asian Americans, Pacific Islanders, and Alaska Natives. CDC funds 35 communities, and 5 tribes and tribal organizations under the American Indian/Alaska Native Core Capacity Building program.

Example of Program in Action

The Medical University of South Carolina/Charleston and Georgetown REACH Diabetes Coalition has been successful in eliminating the 21% disparities gap in A1c (blood sugar) testing among African Americans and whites living in Charleston and Georgetown, South Carolina. The Vietnamese Community Health Promotion Project (VCHPP), supported by the University of California, San Francisco, organized the Vietnamese REACH for Health Initiative, which has been instrumental in improving awareness about cervical cancer and associated risk factors among Vietnamese-American women in Santa Clara County, California. Through various prevention and intervention strategies, such as a media education campaign, lay health worker outreach efforts, and patient navigation, VCHPP has increased the percentage of women receiving Papanicolaou tests by 15%.

WHAT ARE THE NEXT STEPS?

Working in partnership with local communities, CDC has been able to make substantial strides in reducing racial and ethnic disparities in health. CDC plans to continue to expand current intervention and dissemination activities as the agency strives to meet its goal of eliminating disparities in health.

For additional information on this or other CDC programs, visit www.cdc.gov/program

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SAFE MOTHERHOOD

WHAT IS THE PUBLIC HEALTH ISSUE?

- About 1 in 4 women, or 1 million per year, have a significant complication during labor and delivery.
- For every 100,000 deliveries in the United States, about 20 women will die from pregnancy complications. This translates to about 3 deaths per day.
- African-American women continue to have almost 4 times the risk of dying due to pregnancy complications than white women.
- Women 35 to 39 years of age are nearly 3 times as likely to experience a pregnancy-related death compared to women 25 to 29 years of age.
- The maternal mortality rates in the United States have not declined in the last 20 years.
- The United States ranks 29th among developed countries in maternal mortality.

WHAT HAS CDC ACCOMPLISHED?

For more than a decade, CDC has worked with state and local health departments, universities, health maintenance organizations, and others to improve the nation's ability to identify illness and deaths due to pregnancy; and determine causes and develop strategies aimed at averting maternal complications and deaths. With funds from CDC's Chronic Disease Prevention and Health Promotion appropriations, CDC assigns eight maternal and child health (MCH) epidemiologists, six MCH Fellows, and one Epidemic Intelligence Service Officer to assist state health departments and tribal organizations. CDC also provides funding to three additional states for MCH epidemiologists. In addition, CDC funds the Pregnancy Risk Assessment Monitoring System (PRAMS) in 31 states and New York City. PRAMS enables states to identify and monitor maternal and infant health outcomes before, during, and after pregnancy not available from other sources. PRAMS now covers 62% of births in the United States.

Example of Program in Action

Arizona uses the Perinatal Periods of Risk model, adapted and validated by CDC's MCH epidemiologist assignees and partners, to analyze its fetal and infant death records. This model allows analysts to determine the period of risk in which the death occurred to better target intervention strategies. The approach divides fetal-infant mortality into four strategic prevention areas: maternal health and premature birth; maternal care; newborn care; and infant health. Arizona found that most deaths were linked to the pre-pregnancy periods of risk, which caused state personnel to rethink their emphasis on prenatal care and to pay more attention to improving women's health during the reproductive health years. As a result, the Governor's Commission of the Health Status of Women and Families in Arizona was formed and a statewide initiative begun.

WHAT ARE THE NEXT STEPS?

Monitoring of health outcomes will provide additional information to improve maternal and infant health programs and to direct future research efforts. Further research is needed to address the fact that there has been no decline in the risk of death from pregnancy complications in the past two decades, and disparities in the risk for maternal death persist. Racial and ethnic disparities in maternal and infant health must be addressed if CDC is to meet the *Healthy People 2010* objectives. Finally, CDC must translate research findings into effective training for healthcare providers; effective maternal and child health programs; and best practices for safe motherhood.