



CANCER
HALTING THE
CANCER BURDEN

# AT A GLANCE 2009

NATIONAL CENTER FOR CHRONIC DISEASE PREVENTION AND HEALTH PROMOTION
IMPROVING HEALTH AND QUALITY OF LIFE FOR ALL PEOPLE

























## The Burden of Cancer

Every year, cancer claims the lives of more than half a million Americans. Cancer is the second leading cause of death in the United States, exceeded only by heart disease. According to *United States Cancer Statistics: 2005 Incidence and Mortality*, which tracks cancer incidence for about 96% of the U.S. population and mortality for the entire country, more than 559,000 Americans died of cancer, and more than 1.34 million had a diagnosis of cancer in 2005. The financial costs of cancer are overwhelming. According to the National Institutes of Health, cancer cost the United States an estimated \$228 billion in medical costs in 2008.

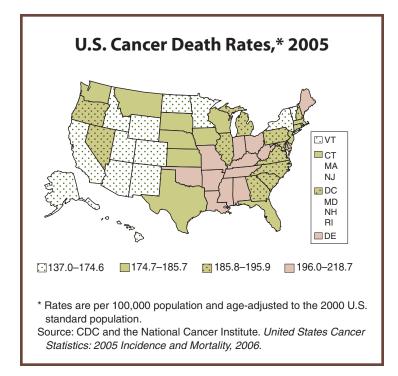
#### **Racial and Ethnic Differences**

Cancer does not affect all races equally in the United States. African Americans are more likely to die of cancer than people of any other racial or ethnic group. In 2005, the age-adjusted death rate per 100,000 people for all types of cancer combined was 224 for African Americans, 183 for whites, 125 for American Indians/Alaska Natives, 124 for Hispanics, and 111 for Asians/Pacific Islanders.

#### **Effective Cancer Prevention Measures**

The number of new cancer cases can be reduced, and many cancer deaths can be prevented. A person's cancer risk can be reduced by adopting a healthy lifestyle, avoiding tobacco use (see Tobacco At A Glance 2009), getting the human papillomavirus (HPV) vaccine, increasing physical activity, achieving and maintaining optimal weight, improving nutrition (see Obesity At A Glance 2009), and avoiding sun exposure.

Making cancer screening, information, and referral services available and accessible to all Americans can lower the high rates of cancer and cancer deaths. Screening for cervical and colorectal cancers decreases incidence of these diseases by finding precancerous lesions so they can be treated before they have a chance to become cancerous. Screening for cervical, colorectal, and breast cancers also helps find these diseases at an early, often highly treatable stage.



# CDC's Leadership in Detecting, Preventing, and Controlling Cancer

CDC is a leader in the fight to prevent and control cancer throughout the United States. With Fiscal Year 2008 (FY 2008) funding of \$290 million, CDC's Division of Cancer Prevention and Control (DCPC) works with national organizations, state health agencies, and other key groups to develop, implement, and promote effective cancer prevention and control practices.

Our comprehensive and collaborative approach to addressing the nation's cancer burden includes the following activities:

• **Monitoring.** CDC helps states, U.S. territories, tribes, and tribal groups collect data on cancer incidence and deaths, risk factors, and the use of screening tests. Public health profes-

sionals use these data to identify and track cancer trends, strengthen cancer prevention and control activities, and prioritize use of resources.

• Conducting research and evaluation. CDC conducts and supports studies, often in collaboration with academic partners, to develop and promote application of sound science to reduce the burden of cancer and eliminate health disparities. This research uses many different areas of expertise (behavioral science, economics, epidemiology, health services, medicine, and statistics) to address the public health research needs of CDC programs, health care providers, people affected by cancer, and the larger cancer control community.















# CDC's Leadership (continued)

- Building capacity through partnerships. CDC works with many partners to translate research into public health programs, practices, and services. CDC helps states, U.S. territories, tribes, and tribal groups apply scientific advances to develop strong cancer control programs for the people who most need them.
- Educating. CDC develops communications campaigns and materials to inform health professionals, policy makers, the media, and the public about the importance of cancer prevention and control.

### **CDC's Cancer Programs**

The National Breast and Cervical Cancer Early Detection **Program** (NBCCEDP) provides clinical breast exams, mammograms, pelvic exams, and Pap tests to women in need, such as those who are uninsured, have low incomes, or have health insurance that does not pay for screening. The program also provides diagnostic follow-up for abnormal screening results and referrals for treatment if cancer is diagnosed. Since its inception in 1991, the NBCCEDP has provided more than 7.8 million breast and cervical cancer screening exams to over 3.2 million women. In 2008, the NBCCEDP congressional appropriation of \$182 million funded all 50 states, the District of Columbia, 5 U.S. territories, and 12 American Indian/Alaska Native tribes or tribal groups to provide clinical screening and diagnostic services to medically underserved women.

# The National Comprehensive Cancer Control Program

(NCCCP) is an integrated and coordinated approach to reducing cancer incidence, morbidity, and mortality through prevention, early detection, treatment, rehabilitation, and palliation. In 2008, the NCCCP appropriation of \$22.4 million supported programs in all 50 states, the District of Columbia, 7 U.S. territories, and 7 tribes or tribal groups to assess the burden of cancer, set priorities, and develop and implement comprehensive cancer control (CCC) programs. Since 1998, the number of programs participating in the NCCCP has increased from 6 to 65, and grantees have released 56 CCC plans.

The National Program of Cancer Registries (NPCR) collects data on cancer occurrence; the type, extent, and location of cancers; and the type of initial treatment. In 2008, the NPCR appropriation of \$46 million supported central cancer registries in 45 states, the District of Columbia, Puerto Rico, and the U.S. Pacific Island jurisdictions. CDC also collaborates with the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program to publish cancer data in the United States Cancer Statistics: Incidence and Mortality reports.

#### **Ongoing Initiatives**

Colorectal cancer. CDC and its partners promote colorectal cancer screening by supporting education and research programs. CDC established a 3-year demonstration program at five sites to increase screening among low-income men and women who have inadequate or no health insurance coverage for colorectal cancer screening. These programs also provide diagnostic followup and patient navigation and support services; conduct public education and outreach; create standards, policies, and procedures; develop partnerships; collect and track data; and evaluate program effectiveness. CDC also educates Americans about the importance of regular screening, beginning at age 50, through its Screen for Life: National Colorectal Cancer Action Campaign.

**Prostate cancer.** CDC provides the public, health care providers, and policy makers with information to make informed decisions about the potential risks and benefits of prostate cancer screening and to improve quality of life after diagnosis. CDC produced three versions of Prostate Cancer Screening: A Decision Guide one in English, one in Spanish, and one specifically for African American men.

**Skin cancer.** CDC conducts research and promotes education designed to expand knowledge about skin cancer prevention and control. As part of the NCCCP, CDC funded programs in nine states to implement skin cancer activities outlined in the states' CCC plans. These states are increasing awareness and educating children and adolescents, as well as establishing school policies based on the recommendations of Guidelines for School Programs to Prevent Skin Cancer. CDC also promotes and disseminates Shade Planning for America's Schools, a manual that helps schools create and maintain a physical environment that supports sun safety by ensuring adequate shade.

Hematologic cancers. CDC funds efforts to improve awareness and understanding of hematologic cancers, which are cancers of the blood and bone marrow. These efforts provide the public and people affected by hematologic cancers with resources to understand these diseases better, receive optimal treatment, and find community support networks.

Cancer survivorship. Because of advances in detecting and























treating cancer, more people are living longer after a cancer diagnosis, and survivors often face a range of health challenges. CDC works with national, state, and local partners and tribal groups to create and implement successful strategies to help the millions of people who live with, through, and beyond cancer. For example, DCPC and the Lance Armstrong Foundation worked together to develop *A National Action Plan for Cancer Survivorship: Advancing Public Health Strategies*.

Lung cancer. To prevent and control lung cancer, CDC collects data on diagnoses and deaths in the United States; supports programs in states, U.S. territories, tribes, and tribal groups to prevent and control tobacco use and promote a healthy diet; and implements public health interventions and countermarketing strategies to reduce smoking. CDC also maintains a Web site (http://www.cdc.gov/cancer/lung) to increase awareness of and provide resources for preventing and controlling lung cancer. The site presents information about disease burden, risk factors, and risk modification, as well as screening recommendations, a review of CDC's activities in lung cancer control, and links to additional resources.

Ovarian cancer. CDC works with academic and medical institutions, state health departments, and advocacy groups to conduct research to improve early detection and treatment of ovarian cancer. Cancer registries funded in Maryland, California, and New York collaborate with the NPCR to evaluate care and outcomes for patients with ovarian cancer. The NCCCP also funds ovarian cancer projects in California, Florida, Michigan, New York, Pennsylvania, Texas, and West Virginia to develop health messages for health care providers and consumers.

**Gynecologic cancers.** CDC collaborated with the Office on Women's Health in the U.S. Department of Health and Human Services to create the *Inside Knowledge: Get the Facts About Gynecologic Cancer* campaign to raise awareness of the five main

types of gynecologic cancer—cervical, ovarian, uterine, vaginal, and vulvar. This campaign supports the Gynecologic Cancer Education and Awareness Act of 2005. Educational materials that focus on symptoms, risk factors, and screening (when recommended) are available for health care providers and consumers at http://www.cdc.gov/cancer/knowledge.

**Cervical cancer.** In 2008, CDC completed the first large-scale study to assess the burden of HPV-associated cancers (cervical, vaginal, vulvar, anal, penile, oropharyngeal) in the United States. The findings from this study will allow researchers and public health officials to monitor the effect of the HPV vaccine and changes in the HPV-associated disease burden.

#### **Future Directions**

To help ensure that people are healthy at every stage of life, CDC is committed to

- Collaborating with partners, policy makers, and other individuals and groups working to ease the burden of cancer in the United States and abroad.
- Expanding the use of information technology in cancer surveillance, particularly in cancer registries.
- Improving the cost-effectiveness of the NBCCEDP.
- Defining CDC's role in managing chronic diseases, including cancer, during catastrophic disasters.
- Expanding CDC's role in addressing public health strategies to increase survivorship in underserved populations and improve end-of-life support for cancer patients and their families, friends, and caregivers.
- Expanding the colorectal cancer screening demonstration project to include additional states, territories, and tribes.

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