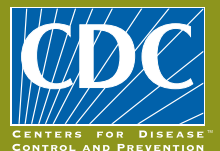


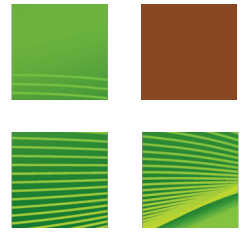
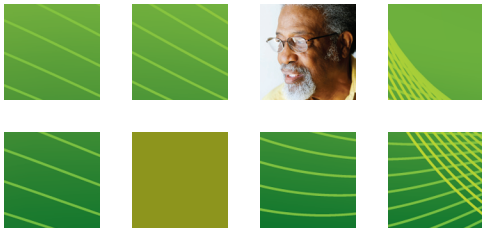


CANCER
ADDRESSING THE
CANCER BURDEN

AT A GLANCE
2010

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 kills 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 pre-release data from *United States Cancer Statistics: 2006 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 1.37 million had a diagnosis of cancer in 2006. The financial costs of cancer are overwhelming. According to the National Institutes of Health, cancer cost the United States an estimated \$228 billion in 2008.

Racial and Ethnic Differences

Cancer does not affect all races and ethnicities equally. African Americans are more likely to die of cancer than people of any other racial or ethnic group. In 2006, the age-adjusted death rate for both sexes per 100,000 people for all types of cancer combined was 219 for African Americans, 180 for whites, 120 for American Indians/Alaska Natives, 119 for Hispanics, and 108 for Asians/Pacific Islanders.

Effective Cancer Prevention Measures

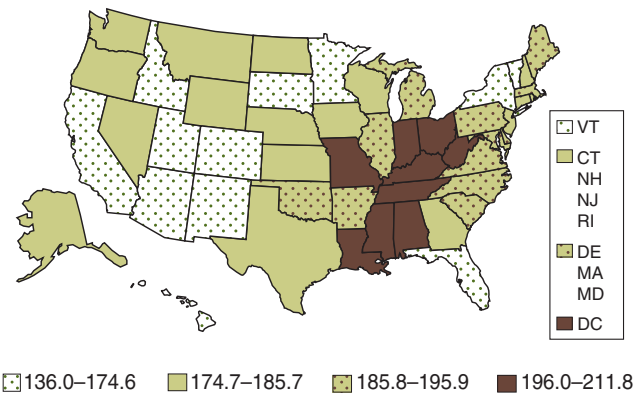
The number of new cancer cases can be reduced, and many cancer deaths can be prevented. Research shows that screening for cervical and colorectal cancers as recommended helps prevent these diseases by finding precancerous lesions so they can be treated before they become cancerous. Screening for cervical, colorectal, and breast cancers also helps find these diseases at an early, often highly treatable stage.

A person's cancer risk can be reduced by receiving regular medical care, avoiding tobacco, limiting alcohol use, avoiding excessive exposure to ultraviolet rays from the sun and tanning beds, eating

a diet rich in fruits and vegetables, maintaining a healthy weight, and being physically active.

Vaccines also help reduce cancer risk. The human papillomavirus (HPV) vaccine helps prevent most cervical cancers and some vaginal and vulvar cancers, and the hepatitis B vaccine can help reduce liver cancer risk. Making cancer screening, information, and referral services available and accessible to all Americans can reduce cancer incidence and deaths.

U.S. Cancer Death Rates,* 2006



* Rates are per 100,000 population and age-adjusted to the 2000 U.S. standard population. Incidence rates are for about 96% of the U.S. population; death rates are for 100% of the U.S. population. Source: *United States Cancer Statistics: 1999–2006 Incidence and Mortality Web-based Report Pre-release Data*.

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

CDC is a leader in cancer prevention and control throughout the United States. With fiscal year (FY) 2009 funding of \$340 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.

DCPC's 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 professionals 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 research and surveillance that contribute to scientific knowledge related to cancer prevention and control.



CDC's Leadership (continued)

This research integrates many areas of expertise, including behavioral science, economics, epidemiology, communications, health services, medicine, and statistics. CDC uses knowledge gained from this research and surveillance to strengthen public health activities, programs, and policies at local, state, national, and international levels.

- **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 use science to develop strong cancer control programs for the people who most need them.
- **Educating.** CDC develops educational campaigns and materials to inform health professionals, policy makers, the media, and the public about cancer prevention and control.

CDC's National 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 provides diagnostic follow-up for abnormal screening results and treatment referrals if cancer is diagnosed. Since its inception in 1991, the NBCCEDP has provided more than 8 million breast and cervical cancer screening exams to more than 3.3 million women.

In 2009, the NBCCEDP appropriation of \$186 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** (NCCCCP) is an integrated and coordinated approach to reducing cancer incidence, morbidity, and mortality through prevention, early detection, treatment, rehabilitation, and palliation. In 2009, the NCCCCP received \$16 million to support programs in all 50 states, the District of Columbia, 7 U.S. territories, and 7 tribes or tribal groups and to assess the burden of cancer, set priorities, and develop and implement comprehensive cancer control (CCC) plans. Since 1998, the number of programs participating in the NCCCCP has increased from 6 to 65, and grantees have released 56 CCC plans.

The **National Program of Cancer Registries** (NPCR) collects data on cancer incidence; the type, extent, and location of cancers; and the type of initial treatment. These data represent 96% of the U.S. population. In 2009, 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. Together, NPCR and the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program collect data for the entire U.S. population. CDC collaborates with the SEER Program to publish these data annually in the *United States Cancer Statistics: Incidence and Mortality* reports.

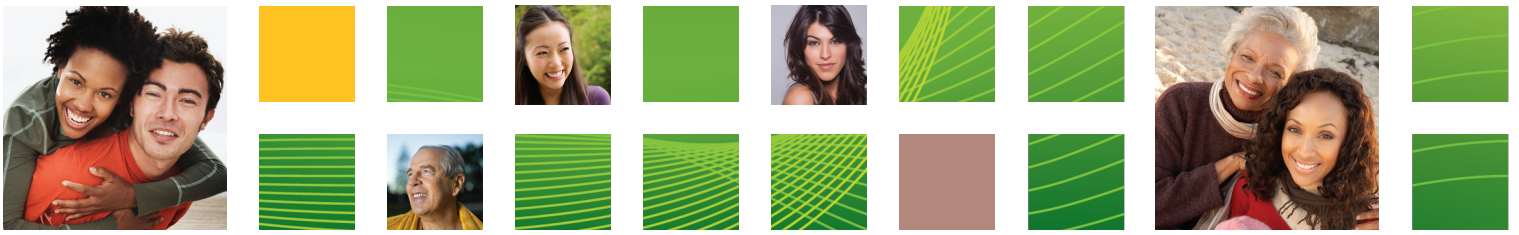
CDC's new **Colorectal Cancer Control Program** (CRCCP) will focus on increasing colorectal cancer screening rates among people aged 50 years or older in the United States. CRCCP also will focus on providing colorectal cancer screenings to populations that most need them. In FY 2009, CRCCP received almost \$40 million to support programs in 22 states and 4 tribal groups and to support screening and diagnostic follow-up care; data collection and tracking; public education and outreach; provider education; and evaluation to measure clinical outcomes, costs, and effectiveness.

CDC's *Screen for Life: National Colorectal Cancer Action Campaign* educates men and women aged 50 years or older about the benefits of colorectal cancer screening. All 50 states, the District of Columbia, and 2 tribal groups are campaign partners. In 2009, CDC partnered with the Entertainment Industry Foundation's National Colorectal Cancer Research Alliance to create public service announcements (PSAs) for colorectal cancer screenings. The new PSAs featured Academy Award-nominated actor Terrence Howard.

Comprehensive Initiatives to Address Cancer

In addition to national cancer control programs that focus on breast, cervical, and colorectal cancers, CDC supports education and awareness campaigns and research activities aimed at lung, prostate, and gynecologic cancers and cancer survivorship.

Lung cancer. CDC collaborates with Research Triangle International to conduct research on lung cancer survivors' knowledge, attitudes, and experiences related to lung cancer screening, testing, and diagnosis. CDC also collects data on lung cancer diagnoses and deaths in the United States. DCCP



CDC's Leadership (continued)

works closely with CDC's Office on Smoking and Health to encourage tobacco control activities at the state level.

Prostate cancer. CDC conducts research and develops materials to help people make informed decisions about prostate cancer screening. Current research focuses on how patients with prostate cancer make treatment decisions and how patients' caregivers influence these decisions. This research also focuses on characterizing the screening patterns of primary care physicians. In addition, CDC conducts research to determine patterns of follow-up care for Native American men with elevated prostate-specific antigen.

Gynecologic and HPV-associated cancers. CDC develops resources on gynecologic cancers for women and health care providers as part of its *Inside Knowledge: Get the Facts About Gynecologic Cancer* campaign. CDC also works with state cancer registries to collect and study tissue taken from cancerous tumors associated with HPV. These tissues are examined to determine the genotype of HPV present in the cancer. This study will provide information on the distribution of HPV types among cervical and other HPV-associated cancers in the United States before the implementation of the HPV vaccine. In September 2009, CDC began a pilot study that added the HPV DNA test to the Pap test used for cervical cancer screening. The study's goal is to determine what factors promote or prevent appropriate use of HPV testing.

Cancer survivorship. Because of advances in detecting and treating cancer, more people are living longer after a cancer diagnosis. However, cancer survivors often face a range of health challenges. CDC worked with its partners to develop *A National Action Plan for Cancer Survivorship: Advancing Public Health Strategies* to determine how public health can meet the needs of cancer survivors and their family members, caregivers, and health care providers. Guided by this report, CDC works with national, state, and local partners and tribal groups

to conduct and support research and programs that promote the well-being of cancer survivors from diagnosis through the years following treatment.

Future Directions

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

- Increasing emphasis on primary prevention by integrating tobacco prevention and control into all state cancer control activities and providing routine referrals to quitlines (telephone-based programs that provide support services for people who are ready to stop using tobacco) in all cancer screening programs.
- Leveraging opportunities provided by health reform to expand the reach of early detection activities.
- Using effective policy and communication strategies and coordinating with health delivery systems to ensure that people have access to high-quality cancer screening.
- Increasing the use of cancer registry data by state and local health officials to achieve policy priorities, target specific populations, measure progress, and ensure screening and treatment quality.
- Defining and supporting evaluation and applied research activities to reduce cancer disparities.
- Defining CDC's role in managing chronic diseases, including cancer, during catastrophic disasters.
- Expanding CDC's public health strategies to address cancer survivorship in underserved populations and improve end-of-life support for cancer patients and their families, friends, and caregivers.

For more information or copies of publications referenced in this document, please contact

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