



Preventing and Controlling Cancer

The Nation's Second Leading Cause of Death

2007



Clark J. Mischler Photo/Courtesy of Alaska Native Tribal Health Consortium

“In the battle against cancer, we know that no one group or individual can do it all. Collaboration is a fundamental and necessary process to promote cancer prevention, improve cancer detection, increase access to health and social services, and reduce the burden of cancer.”

*Eddie Reed, MD
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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: 2003 Incidence and Mortality*, which tracks cancer incidence for about 96% of the U.S. population and mortality for the entire country, more than 556,000 Americans died of cancer, and over 1.29 million had a diagnosis of cancer in 2003.

The financial costs of cancer are overwhelming. According to the National Institutes of Health, in 2006, cancers will cost the United States an estimated \$206 billion, including \$128 billion for lost productivity and \$78 billion in direct medical costs.

Racial and Ethnic Differences

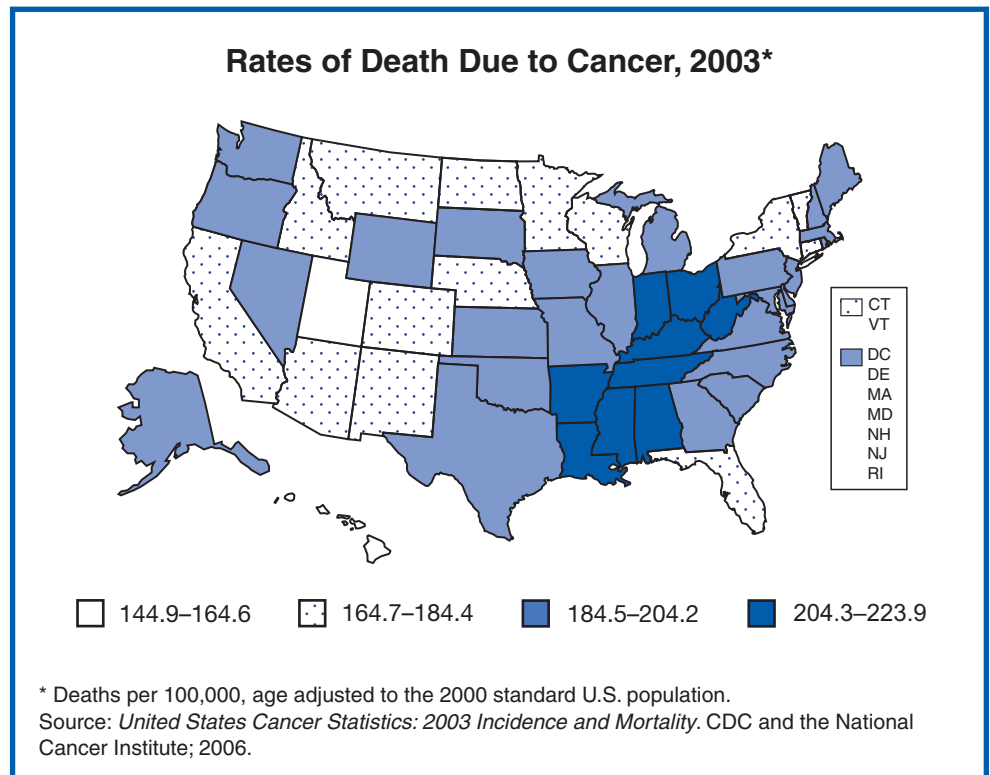
Cancer does not affect all races equally. African Americans are more likely to die of cancer than people of any other racial or ethnic group. In 2003, the age-adjusted death rate per 100,000 people for all types of cancer combined was 235 for African Americans, 188 for white Americans, 127 for Hispanic Americans, 121 for American Indians/Alaska Natives, and 114 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 significantly reduced by adopting a healthy lifestyle, avoiding tobacco use, increasing physical activity, achieving optimal weight, improving nutrition, 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 tests for breast, cervical, and colorectal cancers decrease deaths from these diseases by finding them early, often as treatable precancerous conditions.



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

CDC is committed to ensuring that all people, especially those at greater risk for health disparities, will achieve their optimal lifespan with the best possible quality of health in every stage of life. With new health protection goals that support healthy people in healthy places across all life stages, CDC is setting the agenda to enable people to enjoy a healthy life by delaying death and the onset of illness and disability by accelerating improvements in public health.

With fiscal year 2006 funding of \$306.2 million for cancer prevention and control activities, CDC is a leader in this area. 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.

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

- **Monitoring.** CDC helps states, territories, and tribes and tribal organizations collect data on cancer incidence and deaths, cancer risk factors, and the use of cancer 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 studies to help the cancer community better understand factors that increase cancer risk and identify opportunities to prevent cancer. CDC also evaluates the feasibility and effectiveness of strategies designed to prevent and control cancer.
- **Building capacity and partnerships.** CDC works with many partners to translate research into public health programs, practices, and services. CDC helps states, U.S. territories, and tribes and tribal organizations apply scientific advances to the development of strong cancer control programs for the people who most need them.
- **Educating.** CDC develops communication campaigns and materials for teaching health professionals, policy makers, the media, and the public about the importance of cancer prevention and control.

CDC's Cancer Programs

Since its inception in 1991, the **National Breast and Cervical Cancer Early Detection Program** (NBCCEDP) has provided more than 6.5 million breast and cervical cancer screening and diagnostic exams to more than 2.7 million women in need, such as those who are uninsured, have low incomes, or have health insurance that does not pay for screening services. The NBCCEDP supports early detection programs in all 50 states, the District of Columbia, 4 U.S. territories, and 13 tribes or tribal organizations. CDC supports public education, client recruitment, case management services, and program evaluation to increase screening rates among priority populations.

The **National Comprehensive Cancer Control Program** (NCCCP) funds states, U.S. territories, tribes and tribal organizations to establish coalitions, assess the burden of cancer, determine priorities, and develop and implement comprehensive cancer control (CCC) programs. CCC is a collaborative process through which a community pools resources to reduce the burden of cancer, resulting in risk reduction, early detection, better treatment, and enhanced survivorship. CDC supports all 50 states, the District of Columbia, 6 U.S. territories, and 6 tribes or tribal organizations to develop and implement cancer control 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. To provide high-quality data on cancer and cancer care, CDC supports registries in 45 states, the District of Columbia, and 3 U.S. territories. The NPCR and the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program collaborate to publish annual cancer incidence and death data in the *United States Cancer Statistics: Incidence and Mortality* reports.

Ongoing Initiatives

Colorectal cancer prevention and control. CDC and its partners promote colorectal cancer screening by supporting education and research programs. For example, CDC's *Screen for Life: National Colorectal Cancer Action Campaign* educates

Americans about the importance of regular screening for this disease beginning at age 50. CDC is funding a 3-year demonstration program at the community level to learn how best to implement colorectal cancer screening for low-income adults.

Prostate cancer control. CDC provides the public, doctors, and policy makers with information they need to make informed decisions about the potential risks and benefits of prostate cancer screening and to improve quality of life after diagnosis. CDC produces three versions of *Prostate Cancer Screening: A Decision Guide*: one for all English-speaking men, another for African American men, and the third in Spanish for Hispanic men. CDC also developed a slide presentation for primary care physicians called *Screening for Prostate Cancer: Sharing the Decision*.

Skin cancer primary prevention and education. CDC conducts monitoring, research, education, and interventions for skin cancer. CDC published the *Guidelines for School Programs to Prevent Skin Cancer* to promote strategies that have reduced skin cancer risks among students aged 5–18. CDC is working with state and local education agencies and other partners to put these strategies into practice in schools in Colorado, Michigan, and North Carolina.

Hematologic cancer. CDC funds efforts to improve awareness and understanding of the diagnosis and treatment of hematologic cancers, which are cancers of the blood and bone marrow. These efforts help the public and people living with hematologic cancers (as well as their friends and families) get resources to better understand these diseases, receive optimal treatment, and find community support networks.

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, about which little is known. Cancer registries in Maryland, California, and New York currently collaborate with the NPCR to evaluate care and outcomes for patients with ovarian cancer. In addition, the NCCCP funds ovarian cancer projects in Alabama, Colorado, Maine, New York, Utah, and West Virginia.

Gynecologic cancer. In 2006, CDC received congressional funding to implement a national education campaign that targets gynecologic cancers, which originate in the female

State Program in Action: Louisiana

When Hurricane Katrina devastated New Orleans in 2005, the **Louisiana Breast and Cervical Cancer Early Detection Program** (BCCEDP) was left with little of its normal infrastructure—no offices, no available services, and a population that had fled to higher ground. Some big questions faced the program: How do we keep going, how can we rebuild, and how can we do it quickly? Fortunately, key partnerships and a newly discovered reservoir of ingenuity and positive attitude helped put the Louisiana BCCEDP back together faster than anyone had dreamed possible.

Within weeks after Katrina, one staff member working from a home with a damaged roof began recreating the program's entire data system. Other BCCEDP employees worked in space borrowed from a program partner in Baton Rouge, shifting resources to parts of Louisiana where New Orleans residents had sought refuge. When New Orleans reopened and its residents began coming home, the BCCEDP began to rebuild services in the city in partnership with a reopened community clinic.

The BCCEDP in New Orleans now offers both cervical and breast cancer screening, including mammography and other diagnostic tests at its own service provider's site. Perhaps most amazing is that the program not only kept up operations, it served more than 6,900 women during 2005–2006. This figure represents the most women ever seen in the state in one fiscal year, and it includes more than 600 women served in New Orleans since Katrina hit. To prepare for future emergencies, the BCCEDP is launching a new data system that will allow online data entry and reports, as well as off-site data storage, in Idaho. As a result, participant records will be available any place with an Internet connection, which will help to ensure the availability of ongoing, life-saving breast and cervical cancer screening services to women in Louisiana.

reproductive organs. This campaign is expected to provide information for the general public about risk factors, research, appropriate screening and prevention opportunities, treatment, and survivorship resources.

Cervical cancer. In June 2006, CDC's Advisory Committee on Immunization Practices recommended use of the first FDA-licensed vaccine for human papillomavirus (HPV) for girls and women to prevent cervical cancer, cervical precancers, and genital warts. All women receiving the HPV vaccine should continue to receive regular cervical cancer screening (Pap tests) according to current screening recommendations.

Lung cancer. CDC works to prevent and control lung cancer by collecting critical data about diagnoses and deaths in the United States; supporting programs in states, U.S. territories, and tribes and tribal organizations to prevent and control tobacco use and promote a healthy diet; and implementing public health interventions and counter-marketing strategies to reduce smoking.

Cancer survivorship. Because of advances in the detection and treatment of 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 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*.

Future Directions

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

- 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 National Breast and Cervical Cancer Early Detection Program.
- Expanding CDC's focus to include malignancies not previously addressed.
- Defining the proper role for managing chronic diseases, including cancer, during catastrophic disasters.

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

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