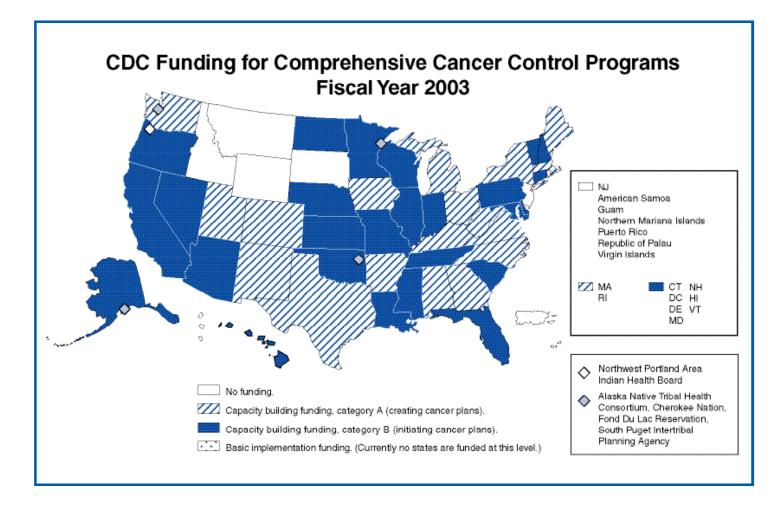


# Preventing and Controlling Cancer: The Nation's Second Leading Cause of Death 2004



"CDC and our public health partners ensure the delivery of the latest scientific advances in cancer prevention to all people, including those in our smallest communities. These people often live far away from the universities and research centers where discoveries about cancer are made."

James S. Marks, MD, MPH Director National Center for Chronic Disease Prevention and Health Promotion

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES CENTERS FOR DISEASE CONTROL AND PREVENTION SAFER • HEALTHIER • PEOPLE<sup>TM</sup>

## **Deaths and New Cases**

Cancer, the second leading cause of death among Americans, is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans or more than 1,500 people a day—will die of cancer. Over 18 million new cases of cancer have been diagnosed since 1990, and about 1.4 million new cases will be diagnosed in 2004 alone. This estimate does not include preinvasive cancer or the more than 1 million cases of nonmelanoma skin cancer expected to be diagnosed this year.

## **Racial Differences**

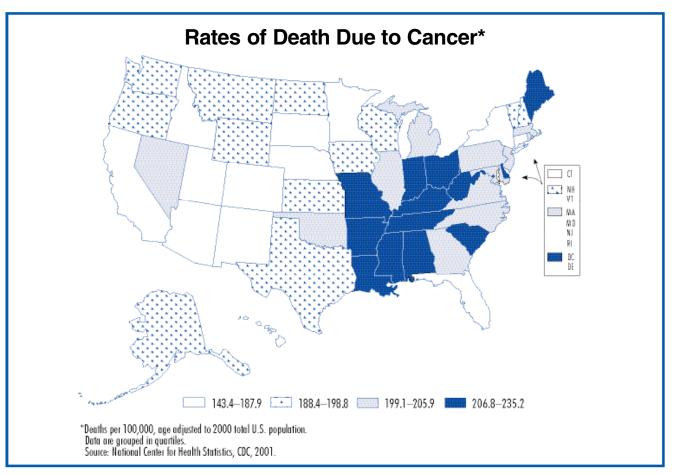
Cancer does not affect all races equally. African Americans a re more likely to die of cancer than people of any other racial or ethnic group. From 1996 through 2000, the average annual death rate per 100,000 people for all cancers combined was 257 for African Americans, 199 for whites, 138 for Hispanics, 138 for American Indians/Alaska Natives, and 125 for Asians/Pacific Islanders.

## **Financial Costs**

The financial costs of cancer are overwhelming. According to the National Institutes of Health, cancers cost the United States more than \$189 billion in 2003. This amount includes over \$64 billion in direct medical costs and more than \$125 billion in lost productivity.

## **Effective Prevention Measures**

The number of new cancer cases can be reduced substantially, and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving optimal weight, improving nutrition, and avoiding sun exposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible to all Americans is also essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths from these diseases by finding them early, when they are most treatable. Screening tests for cervical and colorectal cancers may actually prevent these cancers from developing by detecting treatable precancerous conditions.





With fiscal year 2004 funding of approximately \$413.5 million (\$313.8 million for cancer prevention and control activities and \$99.7 million to address smoking and health issues), CDC provides national leadership for preventing cancer and promoting its early detection. CDC works with its partners—including state and territorial health agencies, other federal agencies, voluntary and professional organizations, academia, and businesses to carry out the following activities:

# Monitoring

CDC provides funding and technical assistance to help states, territorial health agencies, and tribal organizations collect data on cancer incidence and deaths, cancerrelated risk factors, and the use of cancer screening tests. These groups use the data to identify and track cancer trends, strengthen cancer prevention and control activities, and prioritize the use of resources.

# **Conducting Research and Evaluation**

CDC conducts and supports studies to improve understanding of the factors that increase a person's risk for cancer and to identify prevention opportunities. CDC

# **CDC's Cancer Programs**

CDC takes a comprehensive, broad-based approach to preventing and controlling cancer, as the following programs and initiatives demonstrate.

The National Comprehensive Cancer Control

**Program (NCCCP)** integrates and coordinates efforts to reduce cancer's effects by monitoring cancer cases, developing policies to promote cancer prevention and control, developing cancer education programs, establishing intervention programs that target populations at high risk, supporting screening and education services, and evaluating programs. With fiscal year 2003 funding, CDC supported 51 comprehensive cancer control programs in 45 states, the District of Columbia, and 5 tribes and tribal organizations. The funds were used to establish cancer control efforts, and develop and carry out comprehensive cancer control plans.

**The National Breast and Cervical Cancer Early Detection Program (NBCCEDP)** has provided over 4 million breast and cervical cancer screening and diagnostic tests to almost 1.75 million low-income women also evaluates the feasibility and effectiveness of cancer prevention and control strategies. Results from these studies are used to plan and improve activities to prevent and control cancer.

# **Building Capacity and Partnerships**

CDC works with many partners to translate research into public health programs, practices, and services. To ensure that these innovations reach the people who most need them, CDC helps state, territorial, and tribal-serving health agencies build the capacity to apply scientific advances and to develop strong cancer control programs. CDC also works with states to collect data to identify appropriate prevention, early detection, and treatment measures; respond to community concerns; and evaluate programs.

## **Education and Training**

CDC develops communications campaigns and educational materials on cancer prevention for both health professionals and the public. CDC also helps its partners strengthen their education and training programs on cancers that respond to prevention and treatment.

over the past decade. The program also supports education and outreach activities, case management services, and research to increase screening rates. CDC supports early detection programs in all 50 states, 4 U.S. territories, the District of Columbia, and 13 American Indian/Alaska Native organizations.

## The National Program of Cancer Registries (NPCR)

collects data on the occurrence of cancer; the type, extent, and location of the cancer; and the type of treatment. CDC supports cancer registries in 45 states, the District of Columbia, and 3 territories. The NPCR and the National Cancer Institute's Surveillance, Epidemiology, and End Results Program recently published U.S. cancer statistics that include data on about 84% of cancers diagnosed in 2000 and state-specific cancer data from 41 states, 6 metropolitan areas, and the District of Columbia.

Through **colorectal cancer prevention and control initiatives,** CDC and its partners are promoting colorectal cancer screening nationwide by supporting education and research programs, including studies to determine



## **State Programs in Action**

Since 1970, the rates of death due to bladder cancer have increased among white adults in Maine, Vermont, and New Hampshire. To address this problem, the state health departments in these three states, with support from the National Program of Cancer Registries, collaborated with Dartmouth Medical School, the National Institutes of Health, and the U.S. Geological Survey on a case-control study of approximately 1,200 adult residents of these states aged 30-79 with confirmed bladder cancer and an equal number without a history of bladder cancer. A rapid data collection procedure was developed to ask residents about various lifestyle, occupational, and environmental factors such as their diets, past jobs and residences, and medical histories. Data from this study will be used to estimate the extent to which these factors explain the increases in bladder cancer cases and related deaths among residents of Maine, Vermont, and New Hampshire. Determining the importance of these potential risks will help to guide the development of public health intervention and education programs to help residents lower their risk for bladder cancer.

barriers to colorectal cancer screening. The Screen for Life campaign addresses common myths about colorectal cancer screening and educates Americans that screening saves lives by finding precancerous polyps and detecting cancer early. A Call to Action educates primary care providers about the prevention and early detection of colorectal cancer and offers Web-based tools that providers can use to help patients select cancer screening options.

Through **prostate cancer control initiatives,** CDC provides the public, physicians, and policy makers with the information they need to make informed decisions about the potential risks and benefits of prostate cancer screening. CDC materials include two versions of *Prostate Cancer Screening: A Decision Guide*, one for all men who are considering prostate cancer screening and the other specifically for African American men. CDC has also

developed a slide presentation, *Screening for Prostate Cancer: Sharing the Decision*, that gives primary care physicians information about the potential benefits and risks of screening.

Through the **skin cancer primary prevention and education initiative,** CDC supports skin cancer monitoring, research, education, and interventions. CDC recently published the *Guidelines for School Programs to Prevent Skin Cancer* to spread the word about 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 Colorado, Michigan, and North Carolina schools.

Through its **ovarian cancer control initiative**, CDC is working with academic and medical institutions and advocacy groups to identify factors related to the early detection and treatment of ovarian cancer, about which little is known. In addition, three cancer registry programs receive NPCR funds to evaluate care and outcomes for patients with ovarian cancer.

Through its **Tobacco Control Program**, CDC provides national leadership for comprehensive efforts to reduce tobacco use through state and community interventions, countermarketing, policy development, surveillance, and evaluation. CDC supports tobacco prevention and control efforts in all 50 states, 7 U.S. territories, 7 tribal-serving organizations, 8 national networks, and the District of Columbia.

## **Future Directions**

To continue to improve its efforts to reduce the health and economic burden of cancer, CDC will focus on conducting research to determine how best to implement cancer prevention and control programs; providing state programs with ongoing technical assistance and training; evaluating comprehensive cancer control programs; and expanding the number of states, territories, and tribes funded for these programs. CDC is also developing a public health action plan to identify issues related to surviving cancer and public health strategies that will provide support for cancer survivors.

For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-64, 4770 Buford Highway NE, Atlanta, GA 30341-3717; (770) 488-4751.
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