

Prostate Cancer:

The Public Health Perspective



“When medical experts don’t have the answers, the only right decision is what’s right for the patient.”

*David Kessler, MD, JD, Dean
Yale School of Medicine*

A Public Health Concern

Prostate cancer is the most common form of cancer, other than skin cancer, among men in the United States, and it is second only to lung cancer

as a cause of cancer-related death among men. The American Cancer Society estimates that in 2003, about 220,900 new cases of prostate cancer

will be diagnosed and 28,900 men will die of the disease.

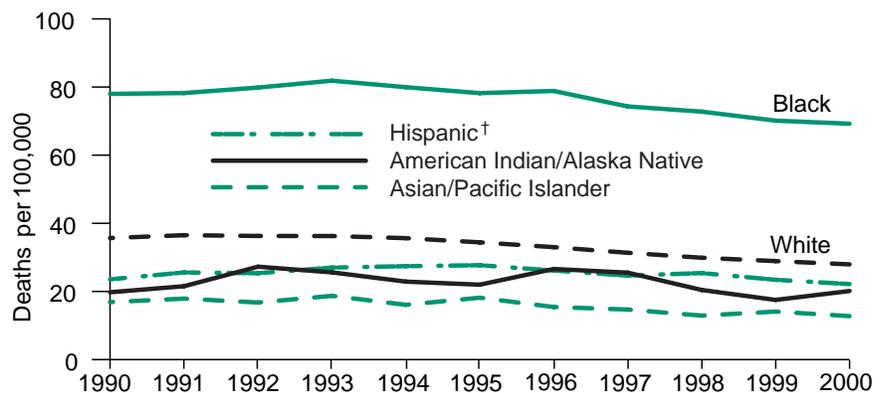
The Facts*

- About 70% of all diagnosed prostate cancers are found in men aged 65 years or older.
- Over the past 20 years, the survival rate for prostate cancer has increased from 67% to 97%.
- The prostate cancer death rate is higher for African-American men than for any other racial or ethnic group.
- Compared to other racial and ethnic groups, the Asian/Pacific Islander group has relatively low rates of prostate cancer incidence and mortality.
- Among all racial and ethnic groups, prostate cancer death rates were lower in 1999 than they were in 1990.

- Decreases in prostate cancer death rates during 1990–1999 were almost twice as great for whites and Asian/Pacific Islanders

than they were for African Americans, American Indian/Alaska Natives, and Hispanics.

Prostate Cancer Death Rates,* by Race and Ethnicity, United States, 1990 – 2000



*Rates are age-adjusted to the 2000 U.S. population.

†Includes Hispanics of any race.

Source: CDC, National Center for Health Statistics.

*American Cancer Society, *Cancer Facts and Figures 2003*.



DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention

Can Prostate Cancer Be Prevented?

Researchers are trying to determine the causes of prostate cancer and whether it can be prevented. They do not yet agree on the factors that can influence—either positively or negatively— a man’s risk of developing the disease. Some of the factors under study include

- Use of herbal supplements.
- Diets high in fat or low in fruits and vegetables.
- Consumption of vitamin E or selenium.
- Certain infectious diseases.
- Men’s hormonal characteristics.

What Is Known About the Effectiveness and Benefits of Prostate Cancer Screening?

The two most common tests used by physicians to detect prostate cancer are the digital rectal examination (DRE) and the prostate-specific antigen (PSA) test. For the DRE, which has been used for many years, the physician inserts a gloved finger into the rectum to feel for abnormalities. The prostate-specific antigen test is a blood test that measures the PSA enzyme.

Although there is good evidence that PSA screening can detect early-stage prostate cancer, evidence is mixed and inconclusive about whether early detection improves health outcomes. In addition, prostate cancer screening is associated with important harms. These include the anxiety and follow-up testing occasioned by frequent false-positive results, as well as the complications that can result from treating prostate cancers that, left untreated, might not affect the patient’s health.

Since current evidence is insufficient to determine whether the potential benefits of prostate cancer screening outweigh its potential harms, there is no

scientific consensus that such screening is beneficial. The position of the Centers for Disease Control and Prevention (CDC) in regard to prostate cancer screening is as follows:

- CDC promotes informed decision making, which occurs when a man understands the seriousness of prostate cancer; understands the risks, benefits, and alternatives to screening; participates in decision making to the level he wishes; and makes a decision about screening that is consistent with his preferences.
- CDC supports a man’s right to discuss the pros and cons of prostate cancer screening with his physician and to make his own decision about screening.
- CDC does not recommend routine screening for prostate cancer because there is no scientific consensus on whether screening and treatment of early stage prostate cancer reduces mortality.

CDC Activities Targeting Prostate Cancer

With \$14 million allocated to prostate cancer activities in fiscal year 2003, CDC is

- Conducting research and developing materials on how to communicate information, and promote informed decision making, about prostate cancer screening.
- Enhancing prostate cancer data in cancer registries, especially information on the disease stage at the time of diagnosis, on quality of care, and on race and ethnicity.
- Sponsoring research on whether screening for prostate cancer reduces deaths caused by the disease, and on knowledge and awareness of

prostate cancer screening among men and health care providers.

- Providing partnership funding to states, tribal organizations, and U.S. territories for prostate cancer activities identified in their cancer control plans.

These activities will further efforts to develop and deliver appropriate public health strategies for prostate cancer and will improve information sharing between providers and the public relating to screening and treatment alternatives. Examples of these and other CDC activities relating to prostate cancer are highlighted in the sections that follow.

Research Supported by CDC

Does Screening Reduce Deaths?

CDC is collaborating with four health plans to conduct a large-scale, population-based, case-control study designed to assess the ability of the PSA test and DRE to reduce mortality from prostate cancer. Collection of information from medical records has been completed and data analysis is under way. The report on the study is expected to be submitted for publication in the summer of 2003.

Making Informed Decisions About Screening

CDC is funding the University of California at San Diego to conduct an intervention research project on informed decision making and prostate cancer screening. A randomized trial will compare two Internet-based approaches for helping men decide whether to be screened for prostate cancer using the PSA test. This study, scheduled for completion in September 2005, will help to provide much-needed information about how to facilitate informed decision making.

Four projects targeting professional education are being funded in 2003: two at Baylor College of Medicine, one at the University of Texas Health Science Center at San Antonio, and one at the University of California. The purpose is to develop and disseminate educational materials, derived from current evidence, that give primary care professionals the information they need to help their patients make informed decisions about prostate cancer screening. The materials will provide information about screening, factors that influence health outcomes, and options for managing the disease. They will be developed in multiple formats to accommodate differing learning preferences among providers, and Web-based technology will be used to maximize access to and dissemination of the materials.

Patterns of Care

CDC's National Program of Cancer Registries is funding eight state cancer registries to study patterns of care for

cancer patients, including those with a diagnosis of prostate cancer. This research will collect detailed clinical information (e.g., stage at diagnosis, treatment received) on a random sample of prostate cancer patients whose cancers were diagnosed in 1997 and followed for 3 years. Results are expected in September 2004.

Patient-Provider Communication

Loma Linda University in California is focusing on prostate cancer screening behaviors among African-American men. This research is examining the relationship between what primary care physicians report telling their patients about prostate cancer prevention and how patients perceive these messages. The project is scheduled for completion in the fall of 2003.

Screening Assessment Tools

The University of Alabama is researching tools and methods that can be used to track the use, impact, and cost-effectiveness of prostate cancer screening. Methods of gathering data on the use of screening and on men's knowledge and attitudes about prostate cancer are being tested in two urban communities. In addition, the researchers are creating and testing a computerized surveillance system designed to capture data on screening results, diagnostic procedures, diagnoses, treatment, and rehabilitation. This study will be completed in the fall of 2003.

Quality of Life

Researchers at the University of North Carolina at Chapel Hill are comparing the health status and health-related, quality-of-life outcomes of asymptomatic men whose prostate cancers are detected by screening, to the outcomes of men whose cancers are discovered because of symptoms. A complementary cohort study is also being conducted. This study, which involves black men and white men from rural and urban areas in North Carolina, is evaluating the impact of race and community setting on treatment choice and quality-of-life outcomes. The project is scheduled for completion by the fall of 2003.

Development of Educational Materials

CDC is developing a Web-based slide presentation, *Screening for Prostate Cancer: Sharing the Decision*, to give primary care physicians information on what is and is not known about the potential benefits and side effects of screening for prostate cancer. Physicians will be encouraged to use a shared decision-making approach in helping men decide whether to use screening. The goal is to ensure that men are adequately informed about

the issue and are given the opportunity to participate in making this important health care decision. CDC plans to disseminate the slide show in late 2003.

CDC has also prepared a decision guide for men who are considering a first-time prostate cancer screening test or who want more information on regular screening. *Prostate Cancer Screening: A Decision Guide* helps men

make informed decisions about screening, by providing them with information about the prostate gland, prostate cancer, and prostate cancer screening, and by encouraging them to discuss screening with their physician or health care provider. The guide can be ordered online at <http://www.cdc.gov/cancer>. Accompanying materials planned or under development include a two-part video for men, a decision guide for African-American men, and a video and brochure for health care providers.

The Association of State and Territorial Chronic Disease Program Directors and its member organizations have received CDC funding to educate state and local policy makers about the complicated issues surrounding prostate cancer screening. The association has developed and released an informational booklet entitled *Prostate Cancer Screening: A Matter of Routine or Patient Choice?*

CDC Partnerships with States and Tribal Organizations

CDC is providing financial support to help cancer prevention and control programs—operated by state governments and by American Indian/Alaska Native tribal organizations—implement priority activities relating to prostate cancer. Recent examples of these activities include the following:

- The Colorado program conducted random statewide surveys of men aged 50–75 years to gauge awareness, knowledge, and attitudes regarding prostate cancer and screening for the disease. The state also added six questions about prostate cancer screening and awareness to the 1999 Behavioral Risk Factor Surveillance System survey.



- The Texas Department of Health surveyed physicians about their practice patterns, knowledge, and attitudes relating to prostate

cancer. The results of this survey are available on the Texas Cancer Council Web site at <http://www.texasccouncil.org>.

- The Michigan Cancer Control Initiative/Prostate Cancer Awareness Program is developing and testing public education materials designed to increase awareness of prostate health, prostate cancer, and early detection options.



States receiving CDC funding in 2003 to support their priority prostate cancer activities include Alabama, Alaska, Colorado, Georgia, Michigan, New Mexico, and Utah. CDC and the states recognize that a coordinated, comprehensive approach to cancer prevention and control is essential in order to maximize the impact of limited resources and more readily achieve desired outcomes.

The Role of the Public Health Community in Prostate Cancer Control

In December 2000, CDC sought advice from approximately 100 experts concerning the role of public health in prostate cancer prevention and control. Those consulted included medical and public health practitioners, researchers, and representatives from community organizations and voluntary associations. They explored the role of public health in relation to risk factors, disease burden, primary and

secondary prevention, treatment, and quality of life. Discussions focused on four areas of public health practice: surveillance and monitoring, research, services and programs, and communication. The information that emerged from these sessions continues to help guide CDC and its public health partners in activities relating to prostate cancer. A report summarizing the discussions is available at <http://www.cdc.gov/cancer/prostate/index.htm>.

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