

State of Wyoming Department of Health

Prostate Cancer in Wyoming Data Brief

The Prostate Cancer in Wyoming data brief is published by the Public Health Division

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Incidence and Mortality

As identified in the Wyoming Cancer Control Plan 2011-2015, prostate cancer is routinely the most diagnosed cancer in Wyoming (448 cases in 2008), but does not play a role in many cancer-related deaths (52 deaths in 2008). While there is some controversy with some prostate cancer screening tests, specifically the Prostate Specific Antigen (PSA) test, the digital rectal examination (DRE) remains an effective technique to detect swelling of the prostate. In 2008, 52.2% of Wyoming men over 50 had received a digital exam in the last year.

Risk Factors

According to the National Cancer Institute (NCI), research has identified risk factors that increase men's chances of getting prostate cancer. Having one or more risk factors does not mean a man will get prostate cancer, but risk of the disease is greater.

- Age: the older the man, the greater his risk for prostate cancer.
- Race: African-American men have the highest risk for prostate cancer, followed by White men, Hispanic men and Native American men. Asian-American men have the lowest rates for prostate cancer.
- Family History: Men whose fathers or brothers have had prostate cancer have a two to three times higher risk of prostate cancer than men who do not have a family history of the disease. A man who has three immediate family members with prostate cancer has about 10 times the risk of a man who does not have a family history. The younger a man's relatives are when they have prostate cancer, the greater his risk for developing the disease. Prostate cancer risk also appears to be slightly higher for men from families with a history of breast cancer.
- Diet: The risk of prostate cancer may be higher for men who eat high-fat diets.

Symptoms

Both the Centers for Disease Control and Prevention (CDC) and NCI recognize that the symptoms for prostate cancer may be different for individuals, and some men may not exhibit any symptoms. Symptoms for prostate cancer can be similar to benign prostatic hypertrophy, which is a non-cancerous enlargement of the prostate. Worrisome symptoms should be discussed with a healthcare provider.

- Trouble passing urine
- Frequent urge to pass urine, especially at night
- Weak or interrupted urine stream
- Pain or burning when passing urine
- Blood in the urine or semen
- Painful ejaculation
- Pain in the back, hips or pelvis that doesn't go away

Screening Tests

The digital rectal exam and PSA test can detect problems with the prostate. The DRE checks the prostate for hard or lumpy areas. The PSA is a blood test that measures the level of protein produced by cells of the prostate gland. Because PSA is produced by the body and can be used to detect disease, it is sometimes called a biological or tumor marker. These tests are being studied in clinical trials to learn whether finding prostate cancer early can lower the number of deaths from the disease.

As men age, both benign prostate conditions and prostate cancer become more common. A man's PSA level alone does not give doctors enough information to distinguish between benign prostate conditions and cancer. Physicians will take PSA results into account when considering further testing.

Screening Recommendations

The Wyoming Comprehensive Cancer Control Consortium (WCCCC) supports the American Urological Association (AUA) Prostate Cancer Screening Guidelines as follows:

- PSA testing for well-informed men who wish to pursue early diagnosis. The decision to use PSA for the early detection of prostate cancer should be individualized.
- For men with an anticipated lifespan of ten or more years who wish to be screened, the AUA recommends a baseline Prostate-Specific Antigen (PSA), along with a physical examination of the prostate (digital rectal exam DRE) at age 40.
- Men who wish to be screened for prostate cancer should have both a PSA test and a DRE.

Informed Decision-Making

Men need to be informed of the known risks and potential benefits of prostate cancer screening and testing before it is undertaken. Part of informed consent is giving men as much information about their personal risk as is available. Applying population-based cut points while ignoring other individual risk factors (such as age, ethnicity, family history, previous biopsy characteristics, etc.) may not give men the most optimal assessment of their risk, including risk of high-grade disease.

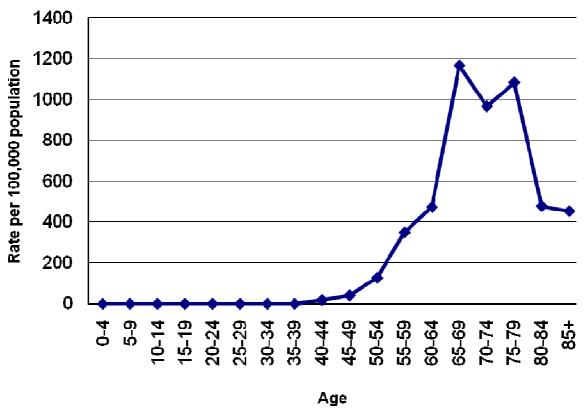
Wyoming Prostate Cancer Task Force

The Wyoming Comprehensive Cancer Control Consortium Prostate Cancer Task Force is dedicated to making prostate cancer a public health priority in Wyoming. To support increased education about prostate cancer, a prostate cancer educational toolkit has been created to support Wyoming men with informed decision-making regarding prostate cancer screening, diagnosis, treatment and survivorship issues.

This resource is available by contacting the Wyoming Comprehensive Cancer Control Program and at www.fightcancerwy.com.

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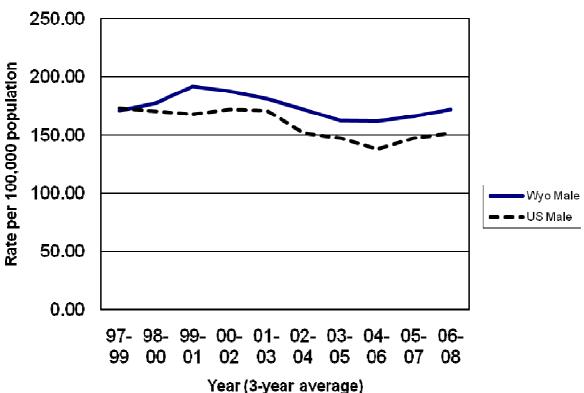
Wyoming Prostate Cancer Incidence by Age - 2008



Source: Wyoming Cancer Surveillance Program

As shown in the above graph, the rates of prostate cancer in Wyoming increase dramatically with age. Relatively few men are diagnosed with prostate cancer before the age of 60; however, the incidence rate escalates rapidly starting at age 65. While the incidence rate of prostate cancer is the highest overall in Wyoming, the mortality rate from prostate cancer is relatively low. In 2008, there were a total of 453 cases of prostate cancer diagnosed in Wyoming men. However, in that same year there were only 52 deaths as a result of prostate cancer.

Wyoming Prostate Cancer Rate v. United States Rate

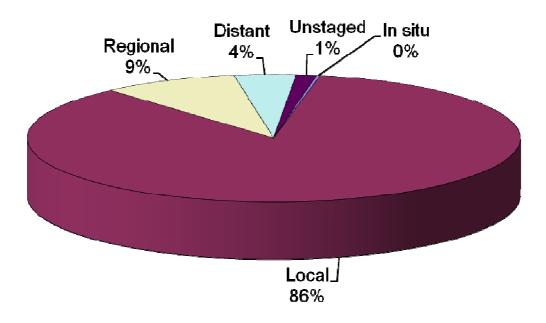


Source: Wyoming Cancer Surveillance Program

One of the reasons for the low mortality rate is the fact that a vast majority of prostate cancers are diagnosed at an early stage. The pie chart on the next page illustrates the percentage of prostate cancer cases diagnosed at each stage in 2008.

It is important to understand that while prostate cancer has a relatively low mortality rate in Wyoming, our incidence rate is one of the highest in the United States. The graph on the previous page shows how the incidence rate of prostate cancer in Wyoming over time has consistently exceeded the United States incidence rate.

Wyoming Prostate Cancer Diagnosis by Stage - 2008



Source: Wyoming Cancer Surveillance Program

A full 86 percent of the prostate cancer cases diagnosed in Wyoming in 2008 were diagnosed at the local level, meaning that the cancer was still situated in the prostate itself or nearby tissues. A stage of in situ or local are considered "early" stages of cancer, whereas regional and distant are considered more "late" stages.

Definitions

<u>Incidence</u>: the number of newly diagnosed cancer cases that occur in the population per unit of time, usually one year.

Rate: the proportion of the population affected, usually defined as per 100,000 persons in a population.