Basic Information About Prostate Cancer

Español (Spanish)

What Is Prostate Cancer?

Cancer is a disease in which cells in the body grow out of control. When cancer starts in the prostate, it is called prostate cancer. Not including skin cancer, prostate cancer is the most common cancer in American men.

Many men with prostate cancer—especially those with tumors that have not spread beyond the prostate—die of other causes without ever having any symptoms from cancer.

What Is the Prostate?

The prostate is a part of the male reproductive system, which includes the penis, prostate, seminal vesicles, and testicles. The prostate is located just below the bladder and in front of the rectum. It is about the size of a walnut and surrounds the urethra (the tube that empties urine from the bladder). It produces fluid that makes up a part of semen.

As a man ages, the prostate tends to increase in size. This can cause the urethra to narrow and decrease urine flow. This is called benign prostatic hyperplasia, and it is not the same as prostate cancer. Men may also have other prostate changes that are not cancer.

Who Is at Risk for Prostate Cancer?

All men are at risk for prostate cancer, but African-American men are more likely to get prostate cancer than other men. Out of every 100 American men, about 13 will get prostate cancer during their lifetime, and about 2 to 3 men will die from prostate cancer.

The most common risk factor is **age.** The older a man is, the greater the chance of getting prostate cancer.

African-American Men

- Are more likely to get prostate cancer than other men.
- Are more than twice as likely to die from prostate cancer than other men.
- Get prostate cancer at a younger age, tend to have more advanced disease when it is found, and tend to have a more severe type of prostate cancer than other men.

Family History

You may have an increased risk of getting a type of prostate cancer caused by genetic changes that are inherited if—

- You have more than one first-degree relative (father, son, or brother) who had prostate cancer, including relatives in three generations on your mother's or father's side of the family.
- You were diagnosed with prostate cancer when you were 55 years old or younger.
- You were diagnosed with prostate cancer, and other members of your family have been diagnosed with breast, ovarian, or pancreatic cancer.

Talk to your doctor about your family's health history.

What Are the Symptoms of Prostate Cancer?

Different people have different symptoms for prostate cancer. Some men do not have symptoms at all.

If you have any symptoms that worry you, be sure to see your doctor right away. They may be caused by conditions other than prostate cancer.

If you have any of the following symptoms, be sure to see your doctor right away

- Difficulty starting urination.
- Weak or interrupted flow of urine.
- Frequent urination, especially at night.
- Difficulty emptying the bladder completely.

- Pain or burning during urination.
- Blood in the urine or semen.
- Pain in the back, hips, or pelvis that doesn't go away.
- Painful ejaculation.

Keep in mind that these symptoms may be caused by conditions other than prostate cancer.

What Is Screening for Prostate Cancer?

Some men get a PSA test to screen for prostate cancer. Talk to your doctor, learn what is involved, and decide if a PSA test is right for you.

Cancer screening means looking for cancer before it causes symptoms. The goal of screening for prostate cancer is to find cancers that may be at high risk for spreading if not treated, and to find them early before they spread.

If you are thinking about being screened, learn about the possible benefits and harms of screening, diagnosis, and treatment, and talk to your doctor about your personal risk factors.

There is no standard test to screen for prostate cancer. Two tests that are commonly used to screen for prostate cancer are described below.

Prostate Specific Antigen (PSA) Test

A blood test called a prostate specific antigen (PSA) test measures the level of PSA in the blood. PSA is a substance made by the prostate. The levels of PSA in the blood can be higher in men who have prostate cancer. The PSA level may also be elevated in other conditions that affect the prostate.

As a rule, the higher the PSA level in the blood, the more likely a prostate problem is present. But many factors, such as age and race, can affect PSA levels. Some prostate glands make more PSA than others.

PSA levels also can be affected by—

- Certain medical procedures.
- Certain medications.

- An enlarged prostate.
- A prostate infection.

Because many factors can affect PSA levels, your doctor is the best person to interpret your PSA test results. If the PSA test is abnormal, your doctor may recommend a biopsy to find out if you have prostate cancer.

Digital Rectal Examination (DRE)

Digital rectal examination (DRE) is when a health care provider inserts a gloved, lubricated finger into a man's rectum to feel the prostate for anything abnormal, such as cancer. In 2018, the U.S. Preventive Services Task Force stated that it does not recommend DRE as a screening test because of lack evidence on the benefits.

How Is Prostate Cancer Diagnosed?

A biopsy is a procedure that can be used to diagnose prostate cancer. A *biopsy* is when a small piece of tissue is removed from the prostate and looked at under a microscope to see if there are cancer cells.

Gleason score is determined when the biopsy tissue is looked at under the microscope. If there is a cancer, the score indicates how likely it is to spread. The score ranges from 2 to 10. The lower the score, the less likely it is that the cancer will spread.

A biopsy is the main tool for diagnosing prostate cancer, but a doctor can use other tools to help make sure the biopsy is made in the right place. For example, doctors may use a *transrectal ultrasound,* when a probe the size of a finger is inserted into the rectum and high-energy sound waves (ultrasound) are bounced off the prostate to create a picture of the prostate called a sonogram. Doctors also may use magnetic resonance imaging (MRI) to guide the biopsy.

Staging

If prostate cancer is diagnosed, other tests are done to find out if cancer cells have spread within the prostate or to other parts of the body. This process is called *staging.* Whether the cancer is only in the prostate, or has spread outside the prostate, determines your stage of prostate cancer. The stage of prostate cancer tells doctors what kind of treatment you need.

More Information

- Gleason Score and Grade Group (Prostate Cancer Foundation)
- Understanding Your Pathology Report: Prostate Cancer (American Cancer Society)

How Is Prostate Cancer Treated?

Different types of treatment are available for prostate cancer. You and your doctor will decide which treatment is right for you. Some common treatments are—

- **Active surveillance.** Closely monitoring the prostate cancer by performing prostate specific antigen (PSA) and digital rectal exam (DRE) tests and prostate biopsies regularly, and treating the cancer only if it grows or causes symptoms.
- **Surgery.** A *prostatectomy* is an operation where doctors remove the prostate. Radical prostatectomy removes the prostate as well as the surrounding tissue.
- **Radiation therapy.** Using high-energy rays (similar to X-rays) to kill the cancer. There are two types of radiation therapy—
  - **External radiation therapy.** A machine outside the body directs radiation at the cancer cells.
  - **Internal radiation therapy (brachytherapy).** Radioactive seeds or pellets are surgically placed into or near the cancer to destroy the cancer cells.

Other therapies used in the treatment of prostate cancer that are still under investigation include—

- **Cryotherapy.** Placing a special probe inside or near the prostate cancer to freeze and kill the cancer cells.
- **Chemotherapy.** Using special drugs to shrink or kill the cancer. The drugs can be pills you take or medicines given through your veins, or, sometimes, both.
- **Biological therapy.** Works with your body's immune system to help it fight cancer or to control side effects from other cancer treatments. Side effects are how your body reacts to drugs or other treatments.
- **High-intensity focused ultrasound.** This therapy directs high-energy sound waves (ultrasound) at the cancer to kill cancer cells.

- **Hormone therapy.** Blocks cancer cells from getting the hormones they need to grow.

For more information, visit the National Cancer Institute's Prostate Cancer Treatment Option Overview. This site can also help you find a doctor or treatment facility that works in cancer care. Visit Facing Forward: Life After Cancer Treatment for more information about treatment and links that can help with treatment choices.

Clinical Trials

<"box-sizing: border-box;">Clinical trials use new treatment options to see if they are safe and effective. If you have cancer, you may want to take part. Visit the sites listed below for more information.

- NIH Clinical Research Trials and You (National Institutes of Health)
- Learn About Clinical Trials (National Cancer Institute)
- Search for Clinical Trials (National Cancer Institute)
- ClinicalTrials.gov (National Institutes of Health)

Complementary and Alternative Medicine

Complementary and alternative medicine are medicines and health practices that are not standard cancer treatments. Complementary medicine is used *in addition to* standard treatments, and alternative medicine is used *instead of* standard treatments. Meditation, yoga, and supplements like vitamins and herbs are some examples.

Many kinds of complementary and alternative medicine have not been tested scientifically and may not be safe. Talk to your doctor about the risks and benefits before you start any kind of complementary or alternative medicine.

Which Treatment Is Right for Me?

Choosing the treatment that is right for you may be hard. Talk to your cancer doctor about the treatment options available for your type and stage of cancer. Your doctor can explain the risks and benefits of each treatment and their side effects. Side effects are how your body reacts to drugs or other treatments.

Sometimes people get an opinion from more than one cancer doctor. This is called a "second opinion." Getting a second opinion may help you choose the treatment that

is right for you.

For more information go to the CDC Prostate Cancer information page.

Article Source
Centers for Disease Control (CDC)
Source URL
https://www.cdc.gov
Last Reviewed
Thursday, January 20, 2022