



# **Understanding Prostate Cancer Fast Facts**

[www.prostatecancerfacts.com](http://www.prostatecancerfacts.com)



This guide was created to give you the tools you need to better understand the disease and to help you make informed decisions about your treatment.

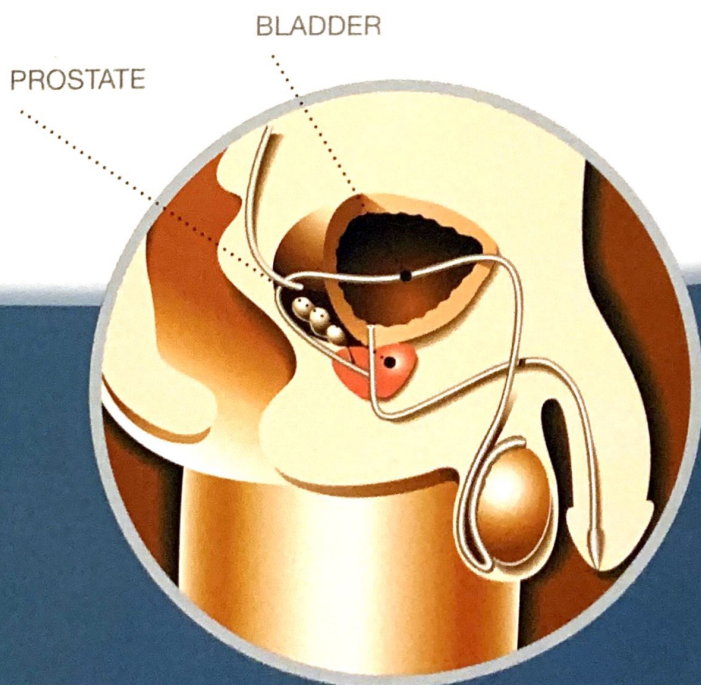
## What is the prostate?

### What does it do?

The prostate gland is part of the male reproductive system. Its main purpose is to produce fluid for semen, which transports sperm during ejaculation.<sup>1</sup>

### Where is it located?

The prostate is the size of a walnut and is located in front of the rectum, just below the bladder. It wraps around the urethra, the tube that carries urine from the bladder out through the tip of the penis.



## What is cancer?

Your body reproduces cells during normal growth. Cancer is a disease characterized by uncontrolled growth and/or spread of abnormal cells. When abnormal cell growth becomes a mass, it is called a tumor. Tumors can be either benign (not malignant) or cancerous (malignant).

- **Benign tumors** may interfere with body functions, such as urinating, but they are seldom life-threatening.<sup>2,3</sup>
- **Cancerous tumor cells** spread through the blood and lymph nodes to other parts of the body, where they form new tumors and invade and destroy surrounding tissue.

**Prostate cancer** is a malignant tumor that begins growing in the prostate gland.<sup>4</sup> It is one of the most common types of cancer diagnosed in American men.<sup>2</sup> More than 200,000 new cases of prostate cancer are diagnosed annually in the U.S.<sup>5</sup>

*During the past 25 years, overall 5-year survival rates for all stages of prostate cancer combined has increased from 69% to nearly 100%.<sup>5</sup>*



## What role does testosterone play?

Testosterone, a key hormone in men, is a factor in the normal growth and function of the prostate gland. The testicles produce most of a man's testosterone, although small amounts are also produced by the adrenal glands.<sup>4</sup>

Testosterone is a concern for those diagnosed with prostate cancer. Testosterone can stimulate hormone-dependent prostate cancer. As a result, as long as the body produces testosterone, prostate cancer will most likely continue to grow and possibly spread.<sup>4</sup>

## Who is at risk for prostate cancer?

While we still do not know exactly why prostate cancer occurs, we do know that risk factors include age, race, environment, diet, genetics and family history.<sup>6</sup>

- More than 65 percent of all prostate cancers are diagnosed in **men over the age of 65**.<sup>5</sup>
- **African-American men** have a death rate two times that of Caucasian men, and therefore earlier screening (beginning at age 45) is recommended.<sup>5</sup>

## What are the symptoms?

When a tumor begins to grow, it usually does not cause symptoms.<sup>2</sup> As it spreads, it eventually puts pressure on areas such as the urethra and may block the flow of urine from the bladder and cause other urinary problems. These are usually the first symptoms of prostate cancer.<sup>4</sup> If untreated, it can spread to nearby lymph nodes, bones or other organs and may cause aches and pains in the pelvis, hips, ribs, back and other bones.

### Symptoms of prostate cancer may include:<sup>5,4</sup>

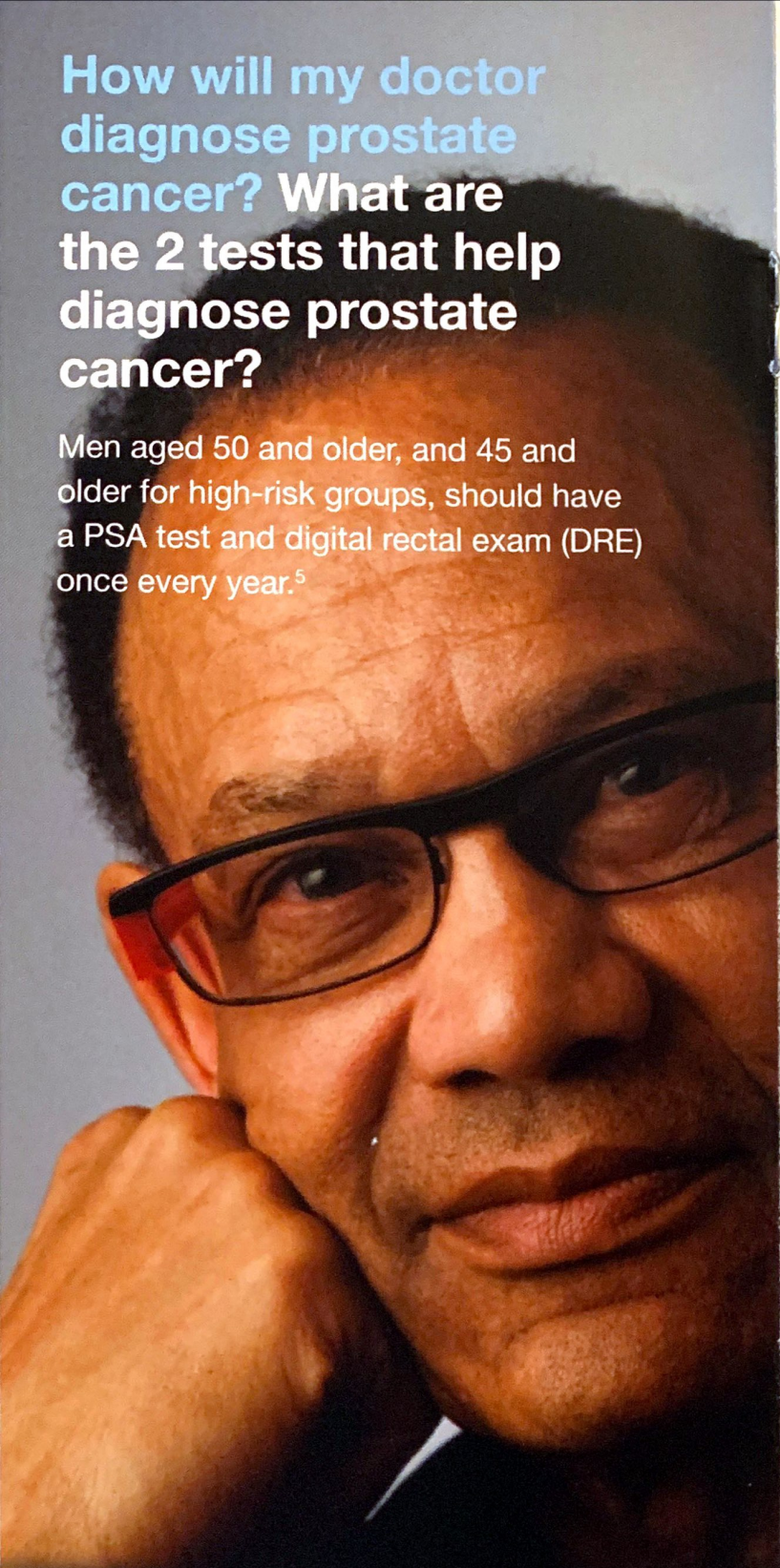
- Frequent urination (especially at night)
- Weak urinary stream
- Inability to urinate
- Interruption of urinary stream (starting and stopping)
- Pain or burning on urination
- Blood in the urine
- Pain in lower back, pelvis or upper thighs

## What is the survival rate?

During the past 25 years, overall five-year survival rates for all stages of prostate cancer combined have increased from 69 percent to nearly 100 percent.<sup>5</sup>

This means that more men are living longer after diagnosis. Some of the possible reasons for this increase include public awareness and early detection.<sup>7</sup>





## How will my doctor diagnose prostate cancer? What are the 2 tests that help diagnose prostate cancer?

Men aged 50 and older, and 45 and older for high-risk groups, should have a PSA test and digital rectal exam (DRE) once every year.<sup>5</sup>

## What is PSA?

PSA, or prostate-specific antigen, is a substance produced by the prostate cells. A PSA test measures the level of PSA in your bloodstream. Very little PSA escapes from a healthy prostate into the bloodstream, but certain prostate conditions can cause large amounts of PSA to leak into the blood.

PSA levels of up to 4.0 ng/mL are considered the upper limit of normal. However, up to 25% of men with prostate cancer have a number below 4.0 ng/mL; therefore, PSA testing alone cannot confirm the presence or absence of prostate cancer.

If the results of the PSA and/or DRE suggest the possibility of prostate cancer, you may need one or more biopsies.

## What is a biopsy?

During a biopsy, a needle is used to remove a small amount of prostate tissue. The tissue is then examined under a microscope to see if cancer cells are present. A biopsy is the only test that definitively confirms prostate cancer.<sup>4,8</sup>



## What is Gleason Grading?

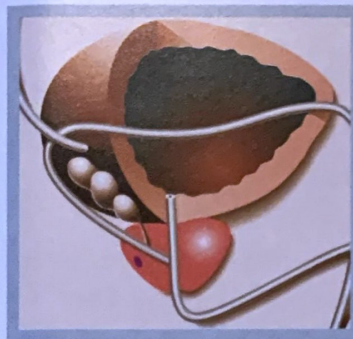
If the biopsy is taken and prostate cancer is found, the tumor is graded in the medical lab. The grade indicates the difference in appearance between normal cells and cancer cells when seen through a microscope. This is referred to as Gleason Grading. A Gleason grade ranging from 1 to 5 describe how closely the tumor resembles normal prostate tissue. A grade of 1 means the cells look almost normal, and 5 means the cells are very abnormal.<sup>9</sup>

Prostate cancers often have areas with different grades. Therefore, a grade is assigned to the two areas that make up most of the cancer. These two grades are added together to yield a Gleason score between 2 and 10. A higher score also means that a more aggressive tumor exists.<sup>9</sup>

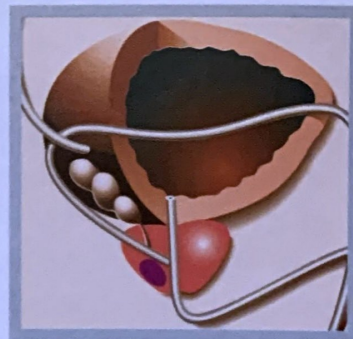
## What is Staging?

*Staging* is the assessment of the size and location of prostate cancer (that is, how far the cancer has already spread). Staging is necessary for you and your physician to decide what type of treatment is most appropriate.<sup>8</sup> Currently, two different systems are used to stage prostate cancer. The traditional method classifies the disease into 4 clinical categories rated A through D. The second system is called TNM, which stands for *tumor-nodes-metastases*. Although TNM is the more accepted staging system, the A-D system is still used.<sup>8</sup>

## A-D Staging



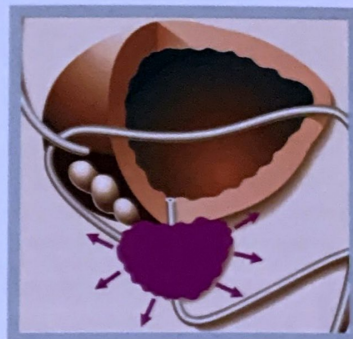
STAGE A



STAGE B



STAGE C



STAGE D

**Stage A** is early cancer. The tumor is located within the prostate gland and cannot be detected by a DRE.<sup>8</sup>

In **Stage B**, the tumor is considered to be within the prostate but is large enough to be felt during a DRE.<sup>8</sup>

In **Stage C**, prostate cancer is more advanced. Stage C indicates that the tumor has spread outside the prostate to some surrounding areas, but has not spread to other organs. This stage of prostate cancer can usually be detected by a DRE.<sup>8</sup>

In **Stage D**, the cancer has spread to the nearby organs and usually to distant sites, such as the bones or lymph nodes.<sup>8</sup>



# How is prostate cancer treated?

The major treatment options for prostate cancer include surgery, radiation therapy, hormonal therapy, chemotherapy and watchful waiting/active surveillance. Your treatment options will depend on several factors including your age, stage of your disease, and the advice of your doctor. The following chart identifies some treatment options based on cancer stage. Your physician may choose to combine therapies.

## Possible Treatment Options<sup>2,4,8</sup>

- |                  |  |
|------------------|--|
| <b>A (T1)</b>    | <ul style="list-style-type: none"><li>• Watchful waiting/active surveillance</li><li>• External beam radiation to eradicate cancer cells</li><li>• Brachytherapy to eradicate cancer cells</li></ul>                 |
| <b>B (T2)</b>    | <ul style="list-style-type: none"><li>• Radical prostatectomy to remove prostate</li><li>• External beam radiation to eradicate cancer cells</li><li>• Brachytherapy to eradicate cancer cells</li></ul>             |
| <b>C (T3-T4)</b> | <ul style="list-style-type: none"><li>• External beam radiation to eradicate cancer cells</li><li>• LH-RHa therapy or orchiectomy to suppress testosterone</li></ul>   |
| <b>D (N0-M1)</b> | <ul style="list-style-type: none"><li>• Watchful waiting/active surveillance</li><li>• LH-RHa therapy or orchiectomy to suppress testosterone</li><li>• Chemotherapy for hormone-resistant prostate cancer</li></ul> |

## Websites and Toll-Free Numbers

Below is a sampling of websites, some of which have toll-free numbers, developed to help you and your family cope with prostate cancer.

### American Association for Cancer Research

[www.aacr.org](http://www.aacr.org) or (866) 423-3965

The American Association for Cancer Research provides research grants, publishes several prestigious medical journals, and has an active patient education program.

### American Cancer Society

[www.cancer.org](http://www.cancer.org) or (800) ACS-2345

Fact sheets prepared by the American Cancer Society (ACS) provide a starting point for dealing with family members and other issues that may arise after a prostate cancer diagnosis. The site also includes information about the ACS and statistics about prostate cancer incidence rates.

### American Urological Association Foundation

[www.urologyhealth.org/auafhome.asp](http://www.urologyhealth.org/auafhome.asp) or (866) 746-4282

This organization is dedicated to the prevention and cure of urologic diseases—such as prostate cancer—through research, education and public awareness. The site includes research facts, educational material and advocacy information.

### Cancer Information Service of the National Cancer Institute

[www.nci.nih.gov/cancer\\_information/cancer\\_type/prostate](http://www.nci.nih.gov/cancer_information/cancer_type/prostate) or (800) 4-CANCER

This is the most useful gateway for information into the National Cancer Institute. From here you can access a portion of the contents of PDQ®—the Physician Data Query database—which provides detailed information about specific cancers written for both medical professionals and patients.

### National Coalition for Cancer Survivorship

[www.canceradvocacy.org](http://www.canceradvocacy.org) or (301) 650-9127

The National Coalition for Cancer Survivorship is a grassroots network of individuals and organizations working on behalf of people with all types of cancer.

### Patient Advocates for Advanced Cancer Treatments (PAACT)

[www.paactusa.org](http://www.paactusa.org) or (616) 453-1477

PAACT offers the latest news releases regarding prostate cancer and new treatment options. You will also find a list of pertinent links for additional information sources.

### Us TOO

[www.ustoo.com](http://www.ustoo.com) or (800) 80-US-TOO

Us TOO helps survivors of prostate cancer and prostate disease and their families. This organization offers fellowship, shared counseling, and discussion sessions in both formal and informal settings that foster a positive mental outlook.

NOTE: Abbott cannot assure the accuracy or timeliness of the information available from these websites and information resources.