



Prostate Cancer Awareness for Men



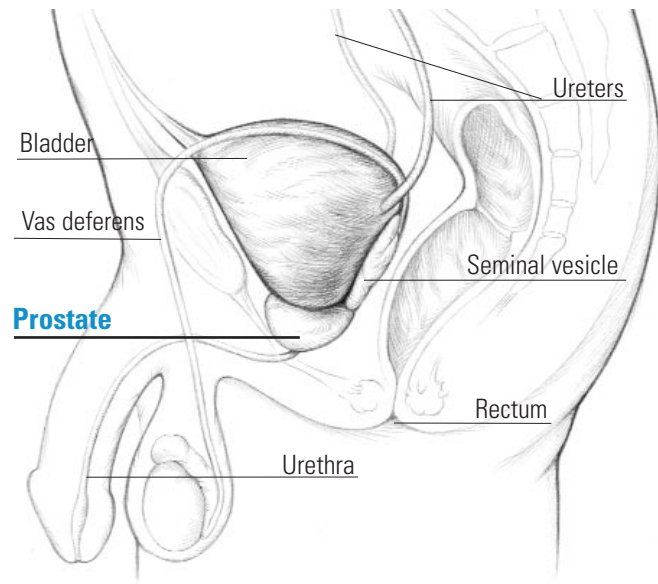
A doctor's guide for patients
developed by the American
Urological Association, Inc.®

Based on the PSA
Best Practice Policy



WHAT IS THE PROSTATE?

The prostate gland is part of the male reproductive system. It is about the same size and shape as a walnut and weighs only about an ounce. As pictured in the diagram, the prostate is located below the bladder and in front of the rectum. The prostate surrounds a tube called the urethra that carries urine from the bladder out through the penis. The main function of the prostate is to produce fluid for semen.



WHAT IS PROSTATE CANCER?

There are many different types of cancer. In fact, cancer is really a group of diseases that affects different cells in the body. Prostate cancer is a disease that affects the cells of the prostate. Normally, cells grow and divide in an orderly way. This is how the body grows and stays healthy. Sometimes this normal process of cell growth can go wrong. If the cells continue to divide when they're not supposed to, they can form a tumor. Cancerous prostate tumors can block the flow of urine and, if untreated, can spread to other parts of the body.



PROSTATE CANCER: THE FACTS

Prostate cancer is one of the most common forms of cancer in men. It is the second leading cause of male cancer deaths in the United States. Most men with prostate cancer do not die from this disease. Yet, prostate cancer still accounts for more than 30,000 American deaths each year.

- **Growth rates for this type of cancer can vary.** Studies have shown that prostate tumors grow at different rates in different people. While some cancers advance rapidly, others grow slowly over many years.
- **The majority of newly diagnosed prostate cancers are localized.** (The tumor growth has not spread beyond the prostate gland.) Given enough time and left untreated, some of these localized tumors can grow in size and spread outside the prostate.
- **Localized prostate cancer usually causes no symptoms.** Prostate cancer usually causes no symptoms until it has spread beyond the prostate. This is one reason why early detection may be important.
- **When the cancer spreads beyond the prostate, it becomes more difficult to manage and the risk of death rises.** It is important to diagnose prostate tumors at an early stage so that they can be watched and treated before the cancer spreads. Although all prostate cancer is potentially life-threatening, in many cases the disease can be cured.

Once prostate cancer is detected, a number of treatment options may be recommended. Each type of treatment poses its own risks and benefits. This booklet is designed to provide information on the early detection and treatment of prostate cancer so that patients, along with their physicians, can make informed, individual decisions about the management of this disease.



PROSTATE CANCER: THE EARLY DETECTION TOOLS

The goal of early detection is to find the disease in its early stages when treatment is most likely to be effective. There are two widely used tests to aid in the early detection of prostate cancer. They are:

- **PSA** - This simple blood test measures the level of a protein called prostate-specific antigen (PSA). Normally, PSA is found in the blood at very low levels. Elevated PSA readings can be a sign of prostate cancer.
- **DRE** - The digital rectal exam (DRE) involves the physician inserting a lubricated, gloved finger into the rectum to feel the prostate for signs of cancer. This test is simple, safe and only slightly uncomfortable.

The most sensitive method for early detection uses **both** the PSA and DRE tests. Although PSA will detect most high-risk cancers, there are cancers that will be missed by this test and are detected by the DRE. Therefore, using both tests together will give your doctor the most accurate information.



WHO IS AT RISK FOR PROSTATE CANCER?

All men, of appropriate age, should be counseled with regard to early detection for prostate cancer. The American Urological Association (AUA) encourages physicians to routinely offer prostate cancer testing to men who have an anticipated lifespan of 10 or more years and are:

- over the age of 50 years,
- over the age of 40 years and have a family history of the disease (for example, a father or brother who was diagnosed with prostate cancer), or
- over the age of 40 years and African-American

In addition, there are a number of warning signs that may indicate the presence of prostate cancer. While often due to other

non-cancerous causes, you should consult your physician if you are experiencing any of the following symptoms:

- difficulty with urination,
- frequent trips to the bathroom at night,
- pelvic discomfort,
- weight loss or
- persistent back pain.



SHOULD YOU BE TESTED FOR PROSTATE CANCER?

Testing for prostate cancer is a personal decision that should be made by each patient with his physician. Patients should be aware of the advantages and disadvantages of early detection and treatment. Some additional information that you should be aware of includes:

- Men with a life expectancy of less than 10 years are unlikely to benefit from early detection and treatment of prostate cancer.
- Treatment of prostate cancer carries a risk of impotence (inability to have an erection) and incontinence (inability to control urine flow from the bladder).
- Studies to evaluate the benefits of early detection are in progress but not complete. Until these studies are completed, the value of early diagnosis is not certain.

You and your doctor should decide together whether you are a good candidate for prostate cancer testing. The AUA believes that monitoring PSA levels as part of your regularly scheduled check-ups offers doctors and patients the chance to establish baseline information, detect problems, and begin treatment before a cancer spreads and comes incurable.



HOW WILL MY DOCTOR MAKE A DIAGNOSIS OF PROSTATE CANCER?

If your physician finds any warning signs with the PSA or DRE tests and you want further evaluation, you should be referred to a urologist. Urologists are doctors who specialize in treating prostate cancer and other conditions that affect the urinary tract and male reproductive organs.

Your chances of having prostate cancer depend on your age and your PSA level. As a rule, PSA levels below 4.0 ng/ml are considered normal. However, about 20% of prostate cancers are found in men whose PSA level is less than 4.0 ng/ml. Further evaluation should be considered for any level over 4.0 ng/ml or if the DRE is abnormal.

If the PSA or DRE tests suggest the presence of cancer, your urologist will discuss the option of a biopsy. A biopsy is the surgical removal of a small sample of tissue. Biopsies are usually performed in the doctor's office.



WHEN IS A PROSTATE BIOPSY NEEDED?

Although an abnormal DRE or an elevated PSA may suggest the presence of prostate cancer, a diagnosis of cancer can only be confirmed by a prostate biopsy. A urologist should be consulted for a biopsy when any of the following findings is present:

- The PSA is 4.0 ng/ml or more.
- The PSA level increases significantly from one test to the next.
- The DRE is abnormal.

Biopsies are minimally invasive procedures. A small amount of prostate tissue is removed by a needle inserted through the rectum. An ultrasound probe is used to guide the needle. Usually this procedure is performed as an outpatient procedure without anesthesia.

After the prostate tissue is removed, it is examined under the microscope by a pathologist. If a tumor is present, the biopsy report will give the tumor a "grade." The tumor grade indicates how quickly the tumor is likely to grow and spread. Once a cancer is diagnosed, you and your physician can discuss treatment options and choose the type of treatment that is best suited to your needs.

What Can I Expect After the Biopsy?

After the biopsy you may have side effects such as infection and minor rectal bleeding. Serious complications are unusual. Blood in the stool or urine usually disappears after a few days; blood in the semen usually disappears within a few weeks. Many physicians have their patients take antibiotics for a few days around the time of the biopsy.

If you are taking aspirin, arthritis medicine, or any medicine that thins the blood, you should tell your doctor. Your doctor may decide to discontinue these types of medicine prior to the biopsy. Also, if you have a heart murmur or any artificial or transplanted material in your body (such as a heart valve, hip, graft or other replacement material), you should tell your doctor. Special antibiotics may be used before, during and after the biopsy.



FACING CANCER: WHAT TO DO IF CANCER IS DIAGNOSED

If you have been diagnosed with prostate cancer, there are a number of routine, pre-treatment tests available to tell if your disease has spread. This information is known as "staging." A thorough physical examination that includes measuring your PSA level can help identify whether you will benefit from these staging tests.

- **Computed Tomography (CT).** A CT scan is not necessary for most patients with newly diagnosed prostate cancer. This test is more useful for patients with a PSA of greater than 25.0 ng/ml.
- **Magnetic Resonance Imaging (MRI).** This test is also not commonly used for patients with newly diagnosed prostate cancer. It is more often used to assess a prostate tumor when the PSA is more than 25.0 ng/ml.
- **Bone Scan.** If your urologist suspects that the cancer has spread, a bone scan may be recommended. This test is generally not necessary

with localized prostate cancers when the PSA level is less than 20.0 ng/ml.

Because your choices about treatments often depend on these findings, it is important for you to know as much as you can about your disease.



TREATMENT METHODS FOR PROSTATE CANCER

There are a number of treatment options for managing prostate cancer including “watchful waiting,” surgery, radiation therapy or hormone therapy. In some cases, it is useful to combine more than one type of treatment. Work with your doctor to decide which approach is best for you.

- **Surveillance.** (also known as “watchful waiting”) In some men with slow-growing prostate tumors that are found at an early stage, it may not be necessary to start an active treatment. Your physician will follow your progress closely and give you regular exams to check for cancer growth. The exams will indicate if and when active treatment should begin.

advantage: This approach has little impact on lifestyle and no side effects.

disadvantage: Possibility of the cancer advancing (and becoming incurable).

- **Surgery.** The surgical procedure that removes the entire prostate and the surrounding tissue is called a **radical prostatectomy**. It is done while the patient is under anesthesia. This treatment is recommended if the tumor is localized to the prostate and is used to treat the early stages of prostate cancer. If the cancer is truly localized to the prostate and the prostate is removed, the chance of death from prostate cancer is low. However, if the cancer has spread beyond the prostate, further treatments may be necessary.

advantage: The entire prostate (including all the cancer cells in the gland) is removed.

disadvantage: The disadvantage of this procedure is the risk of complications (such as impotence or incontinence) resulting from the surgery. Also, there is no guarantee that all the disease is removed.

- **Radiation Therapy.** This is another type of local therapy used to attack cancer cells only in the treated area. For prostate cancer in its early stages, radiation therapy can either be used instead of surgery or it can be used following surgery to destroy cancer cells that may remain. There are two forms of radiation treatment:

1. External Beam Radiotherapy treats the prostate with a carefully targeted beam of radiation from a machine. It is well-tolerated by most patients. Side effects vary and include inflammation of the rectum or bladder and impotence. In most cases, side effects are mild and short-lived. Hospitalization is not required. Patients receive treatment once a day, 5 days a week for a 6 to 8 week period.

2. Brachytherapy involves the placement of tiny radioactive “seeds” into the prostate. This option requires anesthesia but is generally performed without an overnight stay in the hospital.

advantage: Hospitalization is usually not required. Serious side effects are unusual.

disadvantage: Because the prostate remains in place, there is the possibility that some cancer cells remain in the body. Some patients may develop impotence.

- **Hormone Therapy.** Prostate cancer depends on male hormones, such as testosterone. Starving the cancer of hormones may slow or stop its growth. Hormone therapy is primarily used to halt or slow the spread of cancer. It does not cure the cancer.

There are two forms of hormone therapy. One approach involves surgically removing the testicles. The other form of hormone therapy involves injections of a drug, luteinizing hormone releasing hormone (LHRH) analog, every 30 to 120 days.

advantage: This approach is used to control prostate cancer that is anywhere in the body.

disadvantage: Side effects can include hot flashes, impotence, loss of sexual desire, breast swelling and tenderness and brittle bones.

- **Cryosurgery.** This option involves freezing the prostate tissue. The long-term effectiveness of this procedure is unknown.



FOLLOW-UP CARE

Once you have been treated for prostate cancer, it is important to have regular follow-up exams to check for disease recurrence. Your doctor should suggest an appropriate follow-up schedule. This usually involves a check-up every 6 months for a PSA test and DRE.

The following changes in PSA levels may indicate the need for further treatment:

- PSA levels should decrease and remain at undetectable levels after radical prostatectomy. A detectable and rising PSA level following this procedure usually means the disease has returned.
- PSA levels should fall to a stable and low level after radiation therapy or cryosurgery. A rising PSA level is often associated with disease recurrence.
- The pattern of PSA rise after local therapy for prostate cancer can help distinguish between local and distant recurrence.

Fighting cancer is a challenging ordeal, and it is important that you feel you have support, information and counsel. Do not make a sudden decision. Talk to your physician and make sure that you ask all your questions and understand the answers. It is sometimes helpful to get a second opinion from another doctor. Family and support groups can also provide important information. Seek out other sources of information to help you stay on top of the issue. Gather and study information to make the best treatment choice for you.



INFORM YOUR DOCTOR

Certain activities, conditions, and substances can also affect PSA levels, including:

- medicines (such as finasteride for male pattern baldness or BPH and other hormones),
- herbal medicines (such as PC-SPES),
- ejaculation within 48 hours of the test,
- testicular surgery – bilateral simple orchiectomy,
- prostate biopsy,
- urinary infection and
- indwelling catheter.

This Doctor's Guide for Patients is intended for patients and lay readers. It is intended to stimulate and facilitate discussion between the patient and doctor regarding the types of treatment described in summary fashion in this brochure. The American Urological Association, Inc. and its Best Practice Policy Committee developed the Prostate Specific Antigen Best Practice Policy, which is considered the basis for this publication. Best Practice Policies are consensus-based documents developed by a multi-disciplinary panel. The full report of the panel provides the physician with a more detailed discussion of treatment options to be considered.

This material may not be reproduced in electronic or other format without written permission of the AUA.

For additional copies of this brochure, physicians may contact:
American Urological Association, Inc.[®]
1000 Corporate Blvd.
Linthicum, MD 21090
Phone: 800-RING-AUA



RESOURCES FOR PATIENTS

The list below offers a good start to finding out more information on prostate cancer. These organizations are some of the most comprehensive cancer patient information and support organizations. Through their educational materials and on their web sites, you may also find other important resources.

American Cancer Society

1599 Clifton Road, N.E.
Atlanta, GA 30329-4251
1-800-ACS-2345
www.cancer.org

Cancer Information Service

National Cancer Institute
31 Center Drive MSC 2580 Building 31, Room 10A16
Bethesda, MD 20892-2580
1-800-4-CANCER
www.nci.nih.gov

US TOO!

International Prostate Cancer Education & Support Network
5003 Fairview Avenue
Downers Grove, IL 60515-5286
1-800-808-7866
www.ustoo.org

American Urological Association Foundation

1-800-RING-AUA
www.AUAFoundation.org