



PROSTATE 101

1 MAN IN 7 WILL GET
PROSTATE CANCER
DURING HIS **LIFETIME.**



ZERO 
THE END OF PROSTATE **CANCER**

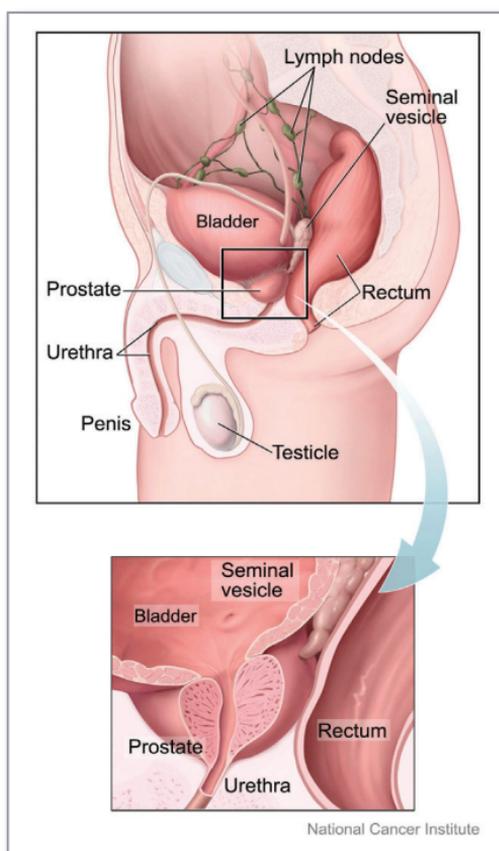
EDUCATION AND
TESTING ARE VITAL
TO **DEFEATING**
THIS DISEASE.

PROSTATE CANCER 101

WHAT IS PROSTATE CANCER?

Prostate cancer is cancer that begins in the prostate. The prostate is a walnut-shaped gland in the male reproductive system located below the bladder and in front of the rectum. It surrounds the urethra and makes the fluid to nourish and protect sperm cells.

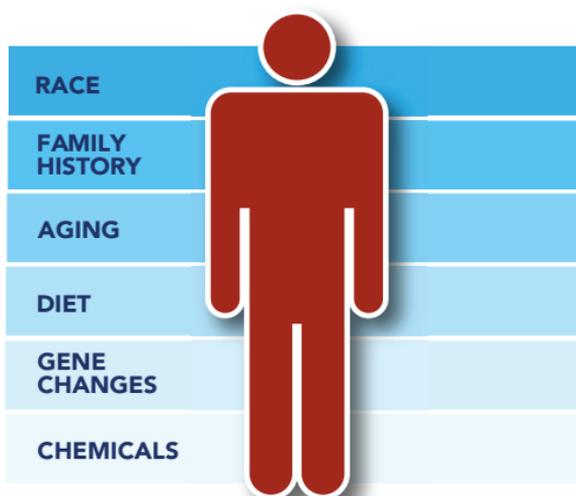
Sometimes cells grow beyond their natural lifespan and swell up to create a tumor. Tumors can be benign, not cancerous, or malignant, meaning cancerous. Most prostate cancer grows slowly and stays in the prostate. Many men with prostate cancer die of other causes. While most prostate cancer is slow growing others will be aggressive and can spread quickly.



WHO IS AT RISK?

Every 20 minutes another American man dies from prostate cancer. That is a little more than 75 deaths per day. A man's risk of prostate cancer increases with age and most prostate cancer is found in men over 50 years. The greatest risk factors are increasing age, family history, African-American ancestry, and exposure to certain chemicals. African-American men are 1.7 times more likely to develop the disease and 2.4 times more likely to die from the disease than white men*.

RISK FACTORS



RISK QUIZ

- Are you over the age of 65?
- Are you African-American?
- Were you exposed to Agent Orange in Vietnam or Korea?
- Did your father or brother have prostate cancer?

*Cancer Facts and Figures 2016, American Cancer Society

BENEFITS OF EARLY DETECTION

All men are at risk of prostate cancer. Finding the disease early means the best chance of curing it. When found early more than 99 percent of men will be alive five years later.

Prostate cancer can be found in two ways:

- Prostate Specific Antigen (PSA) Test – The level of PSA in the blood. Levels of PSA can be higher in men with prostate cancer.
- Digital Rectal Exam (DRE) – A test done when a physician inserts a finger into the rectum to feel the prostate.

Guidelines for Early Detection

The National Comprehensive Cancer Network® (NCCN®) and ZERO recommend a man should be educated about prostate cancer and understand his options for early detection. Talk with your doctor about your personal risk and the guidelines to make a plan for testing.



PSA Screening Guidelines*

NCCN GUIDELINES® FOR PROSTATE CANCER EARLY DETECTION	
Age 40	Talk to your physician about testing and your personal risk
Age 45 – 49	Have a baseline PSA and DRE if PSA above 1 ng/mL, repeat at 1 – 2 year intervals until 50 if PSA below 1 ng/mL repeat PSA at 50
Age 50 – 70	If PSA is below 3 ng/mL, repeat testing at 1 – 2 year intervals
Age 70 and over	Talk with physician and assess general health to decide together if routine PSA testing should continue

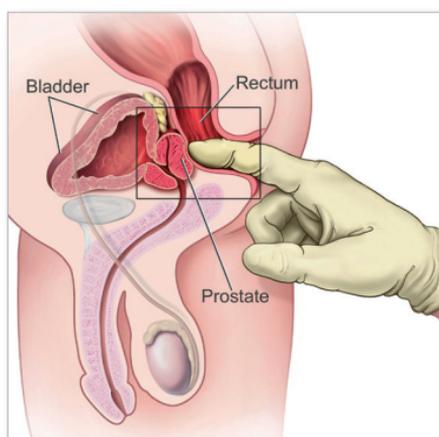
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IF **YOU HAVE**
PROSTATE CANCER
YOU CAN BEAT IT.

Diagnosing Prostate Cancer

If cancer is suspected as a result of a PSA test, DRE, or other factors, a biopsy will most likely be performed. A prostate biopsy is the removal of samples of tissue from your prostate with a needle and the help of ultrasound.

Exciting research shows that using both MRI and ultrasound can help doctors pinpoint aggressive prostate tumors.



National Cancer Institute

Genomic Testing

Genomic testing is a type of specialized medical test done on cancerous tissue. These tests provide information about how the prostate cancer will behave and the risk of spread.

These tests look at the makeup of the cancer from the prostate. The results from a genomic test can help with making a plan to manage the prostate cancer. Commonly used genomic tests for prostate cancer include Oncotype DX® and Polaris®.

More than 50 percent of men newly diagnosed with prostate cancer have low-risk disease which will likely not spread beyond the prostate to cause harm.

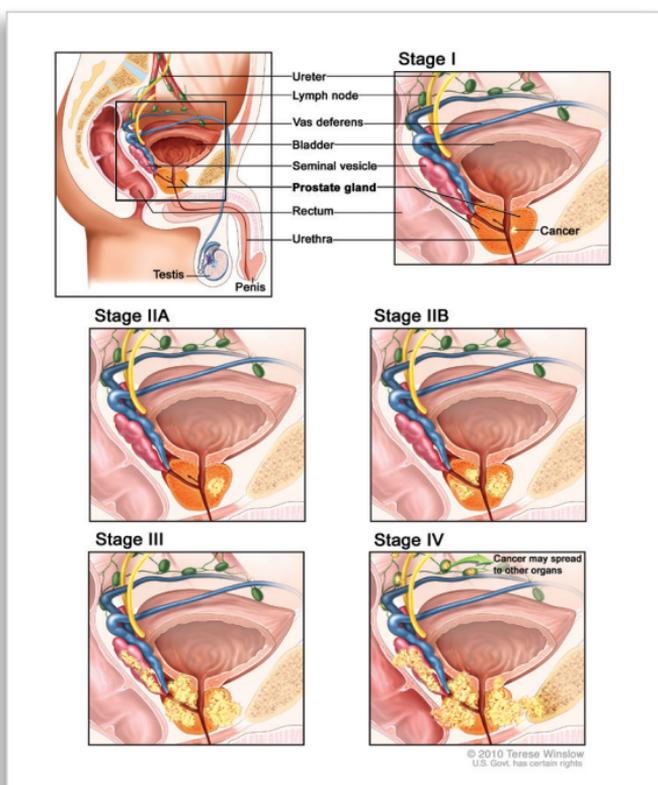
Grading and Staging

Once prostate cancer is confirmed, additional tests are done to learn the location (stage) and Gleason score (grade) of the tumor.

Staging is the process used to find out if the cancer has spread within the prostate or to other parts of the body.

PROSTATE CANCER STAGES

Stage I	The cancer is small and only in the prostate
Stage II	The cancer is larger and may be in both lobes of the prostate but is still confined to the prostate
Stage III	The cancer has spread beyond the prostate to nearby lymph glands or seminal vesicles
Stage IV	The cancer has spread to other organs such as the bone and is referred to as metastatic cancer. If prostate cancer spreads, or metastasizes, to the bone, you have prostate cancer cells in the bone, not bone cancer.



Grading, using the Gleason score, indicates how quickly the tumor will grow and spread. The grade is the description of the tumor based on how abnormal the cells look under the microscope. Today most scores range from 6 – 10.

GLEASON SCORES IN CATEGORICAL ORDER	
Gleason X	Gleason score cannot be determined
Gleason 6 or less	The tumor tissue is well differentiated, less aggressive and likely to grow more slowly
Gleason 7	The tumor tissue is moderately differentiated, moderately aggressive, and likely to grow but may not spread quickly
Gleason 8-10	The tumor tissue is poorly differentiated, or undifferentiated, highly aggressive, and likely to grow faster and spread

TREATMENT

Choosing a health care team is an important decision. Take the time to get educated on all available options and potential negative side effects to make the best decision for you. Early stage, also called localized, prostate cancer is cancer that has not moved outside of the prostate, either Stage I or Stage II. Treatment is done to cure the cancer. Between 15 - 40 percent of men treated with localized prostate cancer will experience a recurrence.

Advanced prostate cancer is cancer that has moved outside of the prostate. Stage III prostate cancer has spread to the seminal vesicles or nearby lymph nodes.

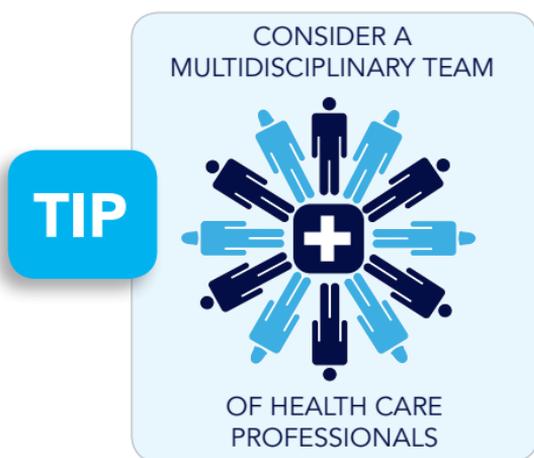
Stage IV prostate cancer has spread to other organs, such as the bone. This is referred to as metastatic prostate cancer. About 5 percent of men are diagnosed with metastatic disease.

The best treatment for one man may not be the best for another. The right treatment for you depends on many factors including:

- Age
- Gleason score (grade) of the tumor
- Stage of prostate cancer
- Symptoms
- General health

Prostate cancer is a disease that can be treated by several different types of medical specialists. And the treatment chosen may mean that the doctor who diagnosed your cancer is not the one doing the majority of your treatment. You may meet with many doctors before you make a final decision about treatment and your doctor.

Consider a multidisciplinary team for the treatment of your prostate cancer. A multidisciplinary team is a group of health care professionals from different specialties that work together to suggest a treatment plan.



If you cannot work with a multidisciplinary team, meeting with a medical oncologist will help you to have a full picture of all treatment options available to you. This is especially important should your cancer return at some point in the future.

Specialists involved in the treatment of prostate cancer include:



Physicians:

- Urologist
- Radiation Oncologist
- Medical Oncologist
- Primary Care Physician



Other Health Care Professionals:

- Oncology Social Worker
- Physical Therapist
- Nutritionist
- Navigator

TREATMENT OPTIONS

Early Stage Prostate Cancer

Active Surveillance is the close monitoring of the status of the prostate cancer through regular office visits and repeat medical tests. Prostate cancer can grow slowly, allowing time to evaluate options.

Surgery, known as a radical prostatectomy, is the removal of the entire prostate by a surgeon.

Radiation therapy uses radiation to destroy the cancer cells in the prostate while leaving the prostate in the body. It can be given in two ways, externally (from the outside) and internally (placed inside) to fight prostate cancer. Other treatment options for early stage prostate cancer include:

- Cryotherapy is freezing of the tumor to destroy the cancer cells.
- HIFU (high intensity focused ultrasound) uses heat to kill the prostate cancer cells. At this time, HIFU is not approved by the FDA for treatment of prostate cancer in the U.S.

Advanced Prostate Cancer

Hormone Therapy

Hormone therapy, also called androgen deprivation therapy (ADT), lowers the testosterone level in a man's body. Because prostate cancer cells use testosterone as fuel, ADT starves the tumor cells. Hormone therapies cannot kill prostate cancer but can improve the quality of life and extend survival. Hormone therapy can be used at many points during the treatment of men with prostate cancer including with surgery and radiation.

Immunotherapy

Immunotherapy stimulates the immune system to kill cancer cells in men with advanced prostate cancer. A treatment is made by taking a man's blood cells and 'training' them to destroy prostate cancer cells. These are then injected back into the man a few days later.

Chemotherapy

Chemotherapy uses anti-cancer drugs to kill cancer cells. The drugs for prostate cancer are usually given into a vein (intravenously) with a needle. This treatment is routinely given at a clinic or doctor's office.

Radiation for Bone Metastases

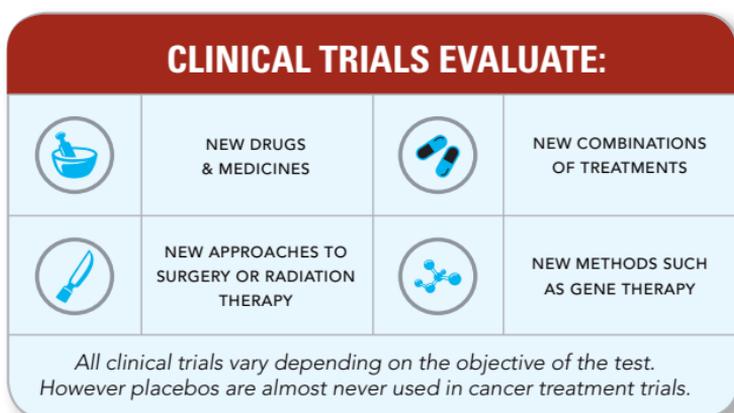
Frequently prostate cancer travels to the bone and can cause pain, increased fractures, and other problems. There are several treatments using radiation available.

External radiation can be used to treat individual areas of the bone where the prostate cancer has spread.

Internal radiation, a radiopharmaceutical, is given as a shot and goes to the bone. It gives off strong energy to help kill off cancer cells but does limited damage to healthy cells.

CLINICAL TRIALS

A clinical trial is an investigation of an experimental treatment to see if it is safe to use and effective in fighting a disease, such as prostate cancer.



Many clinical trials consist of two groups:

- Patients who receive the experimental drug or treatment
- Patients who are given either a standard treatment for the disease or a placebo which has no direct therapeutic effect

Regardless of which group they are in, all patients receive the same level of medical attention and care. In most clinical trials, the health of the participants is monitored both during and after the study period.

Clinical trials are highly controlled and regulated. They are typically sponsored by pharmaceutical or biotech companies, the federal government, medical institutions, or private foundations.

QUESTIONS TO ASK YOUR DOCTOR

Before starting treatment you should make sure you talk to your doctor about your options. You may want to seek a second opinion or even talk to several different doctors about all treatment options, their side effects, and the expected results.



QUESTIONS FOR THE DOC



Q What are my treatment options?
Which do you recommend for me? Why?

Q What are the expected benefits of each kind of treatment?

Q What are the risks and possible side effects of each treatment? How can the side effects be managed?

Q What can I do to prepare for treatment?

Q Will I need to be hospitalized?
If so, for how long?

Q What is the cost of treatment?
Will my insurance cover it?

Q How will treatment affect my normal activities? Will it affect my sex life?
Will I have urinary problems?
Will I have bowel problems?

Q Is a clinical trial an option for me?

SIDE EFFECTS OF TREATMENT

The side effects from treatment can range from temporary to long term incontinence, trouble controlling your bladder, and erectile dysfunction to other issues such as pain and depression.

Fortunately side effects can be managed. Talk with the doctor to learn how potential side effects can be managed. Side effects may include:

- **Incontinence:** Prostatectomy and radiation therapy can cause muscle damage that disrupts the way the bladder holds and discharges urine. Treatment for this will depend on the severity of the condition.
- **Erectile Dysfunction:** Erectile dysfunction is a common side effect following prostatectomy and radiation therapy. Treatment includes medication and implants.
- **Pain:** Treatment ranges from over-the-counter pain killers and prescription narcotics to radiation treatment and acupuncture.
- **Depression:** Feelings of sadness, anger, and anxiety are common for people going through a major challenge like cancer. If you are having trouble coping, don't be afraid to talk to your doctor.



**TALK TO
YOUR DOCTOR**



HEALTHY LIVING

An overall wellness plan of healthy living is critical when it comes to prostate health and fighting prostate cancer. A growing list of studies show a strong connection between fighting cancer and important choices in diet, physical activity, and lifestyle.



Tips for Healthy Living

- Eat a healthy, plant-based diet and limit animal products
- Be physically active
- Seek to maintain a healthy weight
- Limit the amount of alcohol you drink
- If you use tobacco, stop, do not start
- Protect your skin from UV radiation
- Have regular physical exams and talk with your doctor about your risk for prostate and other cancers

A **HEALTHY** LIFESTYLE IS THE KEY TO **PREVENTION.**



ZERO PROSTATE CANCER RUN/WALK

The ZERO Prostate Cancer Run/Walk is the largest men's health event series in America with nearly 40 cities nationwide. The

series brings together patients, survivors, family members, friends, colleagues, athletes, and medical professionals to end prostate cancer. These events encourage men to take an active role in their health and will raise more than \$3M annually for prostate cancer research, advocacy, patient education, and support. Join us as a walker, runner, or volunteer for this family-friendly event in a city near you! Register at:

www.zeroprostatecancerrun.org

RESOURCES

Life with prostate cancer can bring profound changes and challenges. Understanding the disease and how to manage it can increase your confidence in making changes to improve and maintain your health. At ZERO we are dedicated to helping you live your best life possible. Learn more about our resources available on our website at www.zerocancer.org/learn.

Co-Pay Assistance – ZERO provides financial assistance and educational resources to men with advanced prostate cancer. Learn more about the program and how ZERO can help offset the cost of treatment for men with castrate resistant prostate cancer.

Educational Webinars – Hear directly from experts in the prostate cancer community on various topics from the comfort of your home. Our live webinar programs are taped and available for you to listen to at any time on our website.



Education Video Library – We are pleased to offer some of our information in patient education videos featuring physicians, patients, survivors, and loved ones.



Fact Sheets, Worksheets, and Questions to Ask Your Doctor – Download one of our fact sheets today to learn more about prostate cancer. We also provide worksheets to track your disease and questions to ask your doctor.



For Families – If someone you love has been diagnosed with prostate cancer, you are not alone. Read our tips for coping and taking care of your loved one.

Social Media – Like and follow ZERO on social media where we share helpful educational resources.

ABOUT ZERO - THE END OF PROSTATE CANCER

ZERO – The End of Prostate Cancer is the leading national nonprofit organization with the mission to end prostate cancer. ZERO advances research, encourages action, and provides education and support to men and their families through our patient-centric programs. ZERO's premier activities include the ZERO Prostate Cancer Run/Walk, America's largest men's health event series. We are a 501c3 philanthropic organization recognized with four stars out of four stars by Charity Navigator, accredited by the Better Business Bureau, and 97 cents of every dollar donated goes to research and programs. For more information, visit **www.zerocancer.org**.

ZERO

THE END OF PROSTATE **CANCER**

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