

# The Risk of Prostate Cancer and the Benefits of Early Screening

*Learn more about diagnosis,  
treatment and healthy lifestyle tips.*



# The Risk of Prostate Cancer

The Official Prostate Cancer Guide of SERO



## Did you know?

---

- 1 in 9 American men will get prostate cancer during his lifetime.
- 97% of prostate cancer cases occur in men 50 and older.

### *How does prostate cancer impact Americans in today's society?*

Prostate cancer is the second most common cancer to occur in American men. According to the American Cancer Society (ACS), nearly 200,000 men will receive a prostate cancer diagnosis in 2020 alone.

For those that survive, life can be drastically altered. There may be the fear of the cancer returning, ongoing doctor's visits, and side effects from the cancer treatment. Prostate cancer treatments, while life-saving, can lead to the deterioration of tissue surrounding the prostate, diminishing quality of life. However, innovations in the treatment of prostate cancer, as well as education regarding its true prevalence, early detection, and unique care planning, will go a long way in reducing mortality and the side effects of treatment.

# Prostate Cancer Prevalence: The Statistics

*Here's what you should know about prostate cancer.*

One in four deaths in the United States is due to cancer, making cancer the second leading cause of death following heart disease. Prostate cancer is the most common form of cancer to affect men, afflicting 35 more men per 100,000 individuals. Sixty percent of prostate cancers occur in men over age 65, making mature adults more likely to be diagnosed. Fortunately, when caught early and treated effectively, prostate cancer survival rates are high. The survival rate at five years after remission is 99 percent. Still, over 24,000 men will die from prostate cancer each year.

The best way to improve survival in prostate cancer every year is to improve prevention methods and increase early detection. The earlier prostate cancer is caught, the more options men and their families have, and the higher the likelihood of a positive outcome.



## Prostate Cancer Risk Factors

*These six factors can help determine your risk of developing prostate cancer.*

Like all cancers, prostate cancer arises when cells lose their ability to undergo normal cellular death and result in the growth of tumors. With that in mind, the exact causes of prostate cancer and such changes in the genetic structure of cells remain unclear. The cancerous cells have mutations, or changes, in their DNA caused primarily by external influences. These influences are also known as the risk factors or behaviors that are associated with a higher chance of developing prostate cancer.

Prostate cancer risk factors exist that people cannot change include:

- **Race** – African American men appear to have a greater risk of cancer than other races. Moreover, prostate cancer in this demographic is more likely to become aggressive and advance more rapidly.
- **Family history** – Cancer can be a genetic disease, meaning a man may possess genes that make him more likely to develop prostate cancer. Those with a family history of prostate cancer, breast cancer, or a known history of genes associated with an increased risk of breast cancer (BRCA1 or BRCA2) have a higher risk.

Prostate cancer risk factors that you can change through a healthy lifestyle include:

- **Obesity** – Obese men tend to have more aggressive/less responsive prostate cancers when compared to individuals with a healthy body mass index (BMI).
- **Smoking** – Smoking exposes individuals to toxins that can be carried through the bloodstream. Those toxins may cause changes to the genetic structure of prostate cellular tissue.
- **Poor diet** – A diet that emphasizes processed red meat, dairy, or animal fat may increase the risk of prostate cancer. A diet that emphasizes fruits and vegetables may decrease your risk.
- **Lack of exercise** – A contributor to obesity, a lack of exercise increases the risk of prostate cancer and even prostate cancer death. Individuals with an active lifestyle are less likely to die from prostate cancer.

While you can reduce your risk of prostate cancer and other concerns through healthy habits, there is no way to reduce your risk to zero. Even healthy men can develop prostate cancer, which is why screening and early detection is so important, even if you don't have any overt signs or symptoms of prostate cancer.

# Prostate Cancer Signs and Symptoms

*If you experience these signs and symptoms, contact your doctor.*

There's a common misconception that prostate cancer symptoms appear in the early stages of the disease. While sometimes true, there are many cases in which symptoms don't appear until the later stage of the disease, when the cancer has had more time to grow or spread. Prostate cancer signs and symptoms you may notice include:

- Trouble urinating
- Incontinence or the inability to control urination
- Discomfort in the pelvic area
- Bone pain, particularly in the lower back or upper thighs
- Erectile dysfunction
- Blood in semen
- Reduced force of the urine stream

While these are the primary symptoms of prostate cancer, the same signs may also point to other potentially harmful health problems. If any unusual signs or issues occur in your pelvic area, it is always important to see a health provider for evaluation. Do not rely solely on internet resources and best-guess, computer judgment.

Since many of the symptoms above won't present until the later stages of prostate cancer, it's important for even men who feel healthy to get screened regularly. Regular screenings will increase your likelihood of catching prostate cancer early and getting proper treatment.



*The American Cancer Society recommends screening for prostate cancer at different ages depending on your risk level.*

# Prostate Cancer Screening

The Official Prostate Cancer Guide of SERO



Prostate cancer prevention begins with understanding your personal risk. Anyone in the groups listed below should follow the advice of a primary care physician to begin prostate cancer screening at an appropriate time.

The American Cancer Society recommends screening for prostate cancer at different ages depending on your risk level.

When in doubt about your risk level, speak to your physician. They can evaluate your family and medical history to determine the best time for you to be screened for prostate cancer.

## What's your risk level?

---

**Low Risk:** Men with few or no risk factors should begin screenings at age 50.

**Moderate Risk:** Men who identify with one or more risk factors, but do not have an immediate relative with a history of prostate cancer should begin screenings at age 45.

**High Risk:** For men at high risk with a family history of prostate cancer, screenings should begin at age 40. A family history of prostate cancer typically includes a close relative, such as brother, child, or parent with prostate cancer.

# Prostate Cancer Screening Methods

*Talk to your doctor about getting tested.*

Medical professionals typically use two tests to screen for prostate cancer, including:

- **Digital Rectal Exam (DRE)**, which involves the insertion of one finger to check for abnormal growths on the surface of, the hardening of, or enlargement of the prostate.
- **Completion of the prostate specific antigen test (PSA)**, which is a blood test used to check for increased antigens from the prostate gland.

Unfortunately, neither screening test is 100 percent accurate and it is possible to receive a false positive result. However, additional testing, such as a prostate biopsy or follow-up screening -like

tests, can be used to help confirm or deny the presence of cancer. If either screening shows troubling signs, such as an enlarged prostate, your physician may make the decision to perform the other screening test as well.

While screening may cause some discomfort, including the need to obtain a blood sample, it is the best way to improve early detection and likely save lives. These prostate cancer tests help individuals and their families make the decision to receive or delay treatment, which will affect quality of life. Some men simply choose to live with prostate cancer and monitor the cancer with routine PSA tests at set intervals.

# Prostate Cancer Prevention

*How to reduce your risk of a prostate cancer diagnosis.*

In addition to following the recommend prostate cancer screening schedule, people can take a few steps to reduce the risk of prostate cancer, including:

- **Eat a healthy diet, full of fruits, vegetables and clean meats.** Deriving more of your fats from fruits and vegetables will also provide protective effects for your heart.
- **Consume fewer dairy products and eating less processed meat,** as both have been linked to increased rates of prostate cancer in men.
- **Exercise regularly.** Some evidence suggests those living a sedentary lifestyle have a higher risk of prostate cancer, while those who exercise regularly are less likely to die from prostate cancer. Men should try to exercise at least 30 minutes per day, even walking slowly for this period is better than nothing.

- **Maintain a healthy weight,** working with your primary care physician to create a healthy plan for weight loss or maintaining a healthy weight, and only eating the number of calories needed. Never begin an exercise or weight management program without first consulting your physician.
- **Keep your BMI less than 30.** Multiple online calculators can help you determine your BMI by entering your height and weight.
- **Speak with your doctor about your prostate cancer risk.** Your doctor can help you determine when to start getting screened for prostate cancer, as well as keep you up to date on the latest prevention methods and strategies. For example, health professionals are studying various vitamins and medications for their protective effects against prostate cancer. Your doctor may recommend introducing more of those protective vitamins into your diet, based on your personal health situation.
- **Maintain healthy sexual habits.** Some studies have shown men that ejaculate at least 20 times per month can lower their prostate cancer risk by up to 30 percent.



# Prostate Cancer Treatment Options and Prognosis

The Official Prostate Cancer Guide of SERO



## Treatment Options

---

- Hormone Therapy Treatment
- Chemotherapy
- Surgical Removal of the Prostate
- Radiotherapy and Space OAR

Knowing your treatment options will help you make the right decision for you.

Early detection is crucial to putting individuals and their families in the best possible position to handle prostate cancer. If you are diagnosed with prostate cancer you have multiple treatment options, including:

### **Hormone Therapy Treatment**

Hormone therapies prevent the body from producing testosterone, which is essential to prostate cells. Since prostate cancer can be stimulated by the presence of testosterone, removal of the bodily supply of testosterone seeks to reduce the growth of the tumor. Medications known as luteinizing hormone-releasing hormone (LH-RH), such as Lupron, Zoladex, and Trelstar, prevent the testicles from making testosterone.

## Hormone Therapy Treatment cont.

Other medications, such as Casodex, Nilandron, and Xtandi, may block testosterone from reaching cancer cells. However, some men do not respond to these medications. In such cases, a more drastic approach to affecting hormone production may be used. Removal of the testicles, also known as orchiectomy, will reduce levels of testosterone, but also comes with the risk of erectile dysfunction and trouble urinating. If these options are not effective, additional treatment measures may be necessary.

## Chemotherapy

Chemotherapy uses drugs to attack and kill rapidly growing cells and is commonly used when hormone therapy fails to control cancer progression. The side effects of chemotherapy can be severe, including vomiting, diarrhea, hair loss, loss of appetite, mood swings, and more.

## Surgical Removal of the Prostate

Known as a prostatectomy, surgical removal of the prostate is one of the more drastic treatment options. It involves the removal of the prostate, some surrounding tissue, and nearby lymph nodes. Surgeons may opt to do a robot-assisted surgery to reduce the incision size and risk or a traditional incision in the lower abdomen. Unfortunately, traditional surgical methods have a high risk of urinary incontinence and erectile dysfunctions.

## Radiotherapy and Space OAR

Radiotherapy is a common and popular alternative to major surgery and is usually done through a multi-week course of outpatient treatment where highly focused photons strategically target the prostate gland. For appropriate candidates, radiation can be done in a single setting or over several days utilizing strategically placed internal radiation (brachytherapy). Your doctor can refer you to a radiation oncologist to review the various treatment options. Like other cancer treatment methods, radiotherapy can have side effects though thankfully the risk for chronic or ongoing issues are low. This can occur because surrounding tissues receive lesser doses of radiation that infrequently causes noticeable irritation (ex. bowel irritation, bleeding or pain). With risks being low, prostate radiation is attractive for its efficacy, safety and ability to avoid major surgery.

In effort to further improve results with radiation there has been the development of SpaceOAR, a biocompatible gel that displaces tissues near the prostate, thus reducing the exposure of the adjacent bowel and further reducing the small risk for long term effects from the treatment. When indicated, SpaceOAR is inserted via a needle into the tissue between the rectum and the prostate prior to beginning radiation.

Experts in radiotherapy treatment, like Southeast Radiation Oncology Group (SERO), can help individuals and their families with their radiation treatment options including the addition of SpaceOAR. Contact our team for more information.



**SOUTHEAST  
RADIATION  
ONCOLOGY GROUP**

Visit us online at [treatcancer.com](http://treatcancer.com)



# Improve Prostate Cancer Statistics with Prevention and Early Detection

*Together, we can fight and put an end to prostate cancer.*

No one wants to get to the point of needing cancer treatment. With prostate cancer being one of the most common forms of cancer for men, risk factors and screening recommendations must be taken seriously. If you're at risk of prostate cancer due to any risk factor, including your age, it's critical that you get screened as recommended by your physician.

And if your screening does find prostate cancer, remember that you have options. The five-year survival rate after remission is 99 percent, and an expert team can help you get there. SERO has the resources and experience needed to reduce the risk of poor outcomes and give you the best chance of getting back to your life after treatment. To learn more, check out our resources on prostate cancer and treatment, or request a consultation with SERO online now at [treatcancer.com](http://treatcancer.com).

## Your Local Radiation Oncologists

Meet Our 30+ Physicians Online

[treatcancer.com/staff/physicians/](http://treatcancer.com/staff/physicians/)

### *Southeast Radiation Oncology Group*

Southeast Radiation Oncology Group (SERO) is home to over 30 board-certified physicians practicing radiation oncology across 20 locations in the Charlotte Metro area. Since 1977, our radiation oncologists have partnered with medical oncologists, internists, physician assistants, nurses and nutritionists to provide patients state-of-the-art care.

Our physicians are among the best in the country, and attended top medical schools, including Emory School of Medicine, Stanford University, Duke University School of Medicine, UNC School of Medicine – Chapel Hill, Yale School of Medicine and more. SERO physicians are involved in ongoing cancer research, and are members of organizations such as American Society for Radiation Oncology, Society of Neuro-Oncology and American Society of Clinical Oncology.

30+ Board-Certified  
Physicians

**30+**

40 Years of Radiation  
Oncology Experience

**40**

20 locations across the  
Charlotte area

**20**