Decisions about screening for and treating prostate cancer are complicated. It’s important to discuss them with your doctor.

You’ll talk about whether you should be screened — and, if so, when and how. And you’ll discuss how to interpret test results. If you do have prostate cancer, you’ll talk about treatment options. Some men don’t need immediate treatment; others don’t need treatment at all. If you do need treatment, you’ll help your doctor decide which option is best for you.

TALK WITH YOUR DOCTOR

Ask your doctor about screening and treatment options.

Screening and biopsy:
- What are the pros and cons of screening for prostate cancer?
- Do I need a biopsy? What are the risks if I don’t get a biopsy right now?

If your biopsy shows cancer:
- Is this a slow- or fast-growing prostate cancer?
- Has the cancer spread beyond my prostate?
- What other tests do I need? What will they tell us?

Treatment options:
- Do I need to start treatment now?
- Should I have surgery? Radiation therapy? Hormone therapy?
- Would chemotherapy help?
- What side effects might I have? How can I minimize them?

At follow-up visits:
- Is the treatment working as expected?
- Do we need to modify my treatment plan?
Prostate cancer is the uncontrolled growth of abnormal cells in the prostate. Only men have a prostate gland. The prostate makes some of your semen. That’s the fluid that carries, nourishes, and stores sperm before it is released out of your body during ejaculation.

Cancer cells multiply faster than normal cells. As more and more cancer cells build up, one or more lumps form within the prostate gland.

Most often, the size of a prostate tumor increases slowly and the cancer cells stay inside the gland. Fast-growing cancers are more likely to spread outside the gland to other parts of the body.

Tests that check for cancer

Doctors screen for prostate cancer with a prostate-specific antigen (PSA) blood test.

Your doctor might also do a digital rectal exam (DRE) to check your prostate for lumps.

The standard PSA blood test alone may not provide a clear answer. For example, although men who have prostate cancer often have a high PSA level, elevated PSA is also common in men who don’t have cancer. An enlarged or infected prostate can cause PSA levels to rise.

Other types of PSA tests:

* **PSA velocity**
  Your doctor looks at two or more PSA blood levels measured at different times. PSA levels in men with cancer tend to rise faster than expected.

* **Free PSA**
  This test measures how much of the PSA in your blood is not bound to another protein. Men with higher levels of free PSA are more likely to have a prostate problem that is not cancer.

A biopsy is the only sure way to know if you have cancer. For the biopsy, your doctor removes small pieces of prostate tissue to check for cancer cells.
GLEASON SCORES AND STAGING

Your cancer’s Gleason score and stage help guide treatment.

**Gleason score**

A doctor called a pathologist uses a microscope to examine cancer cells from prostate tissue removed during biopsy or surgery. The pathologist selects two different types of cancer cells and assigns each a grade between 1 and 5.

Cancer cells that look almost normal are graded 1. Grade 1 cells grow slowly and are least likely to spread. Very abnormal-looking cells are graded 4 or 5. Grade 5 cells grow fastest and are most likely to spread.

Adding the two grades together results in the Gleason score.

**Stage**

Your doctor will also stage the cancer from zero (0) to four (IV).

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Prostate cancer is not present</td>
</tr>
<tr>
<td>I</td>
<td>Prostate cancer is present</td>
</tr>
<tr>
<td>II</td>
<td>Prostate cancer is present</td>
</tr>
<tr>
<td>III</td>
<td>Prostate cancer is present</td>
</tr>
<tr>
<td>IV</td>
<td>Prostate cancer is present</td>
</tr>
</tbody>
</table>

In addition to the Gleason score, the stage number is based on:
- the size of the primary tumor
- whether the cancer has spread beyond the outside edge of the gland
- whether the cancer has spread to nearby lymph nodes
- whether the cancer has spread to other organs

**YOUR OPTIONS**

Many factors influence which treatment is best for you.

They include the cancer’s stage as well as your age, overall health, and lifestyle.

You may be able to postpone or avoid treatment. (See “Watchful waiting vs. active surveillance,” page 8.) If you need treatment, your options may include surgery, radiation, hormone therapy, or one of several newer treatments.

Often, there is no obvious “best” choice. You will need to make a decision with the help of your doctor and your loved ones. Some things to consider include:

- how worried you are about the cancer
- how strongly you feel about having it treated
- your risk for treatment side effects, including urinary incontinence and erectile dysfunction (See “Incontinence and erectile dysfunction,” page 13.)
Surgery is one treatment choice for prostate cancer.

Radical prostatectomy is the most common type. During the procedure, a surgeon removes the entire prostate and the lymph nodes near it.

The goal is to cure the cancer by removing all traces of it from the body. However, even with radical prostatectomy, there is no guarantee that the cancer won’t return.

The best candidates for radical prostatectomy are men who:

- are age 69 or younger
- have a high Gleason score
- have no evidence of cancer outside the prostate

Radical prostatectomy may be done through a large cut. This is called an open radical prostatectomy. Or, you may have a laparoscopic radical prostatectomy or a robot-assisted laparoscopic prostatectomy. Both require only a few small cuts in the abdomen and pelvic area.

The most common complications of surgery for prostate cancer are:

- urinary incontinence
- difficulty maintaining erections (erectile dysfunction)
A combination of external beam radiation therapy (EBRT) and hormone therapy is often recommended for men with advanced cancer.

EBRT machines aim radiation at the outside of your body. Radiation goes through your skin to the tumor. Newer types of EBRT expose less healthy tissue to radiation, resulting in fewer side effects.

EBRT after surgery may be a good choice for you if

• the cancer has spread outside the prostate
• a high PSA test result after surgery suggests the cancer may have recurred
• your overall health puts you at increased risk for surgery

The most common side effects of EBRT are similar to those for brachytherapy. EBRT may also cause

• mild fatigue
• swelling and pain in the legs or genital area

Internal radiation may be an alternative to surgery if you have early-stage prostate cancer.

Internal radiation is also called brachytherapy or seed therapy. For this treatment, a doctor implants tiny radioactive seeds in the prostate. The radiation kills cancer cells.

There are two main types of brachytherapy.

**Permanent seed therapy**
In this treatment, the radioactive seeds are left in the body. Over time, the seeds emit less and less radiation. After three months to a year, they are no longer radioactive. You can usually have this done as an outpatient.

**Temporary brachytherapy**
This uses higher doses of radiation and the seeds are left in for only five to 15 minutes. This treatment is performed in the hospital. Typically, you’ll stay two days and have about three treatments.

Seed therapy might not be a good choice for you if your prostate is very large. Or you may need to take medication to shrink the prostate before treatment.

The most common side effects of brachytherapy are:

• urinary difficulties
• diarrhea, blood in the stool, or rectal pain
• erectile dysfunction
All prostate cancer treatments can result in urinary incontinence or erectile dysfunction.

The main goal of prostate cancer treatment is to cure the cancer. But most men also want to maintain sexual function and control over urinary continence.

Ask your doctor about the risk of urinary incontinence and erectile dysfunction for each treatment you consider.

Keep in mind:

- Having incontinence right after surgery doesn’t mean it will continue.
- It can take more than a year for sexual function to return.
- Medicines and other treatments can help treat erectile dysfunction.
- Not being able to have an erection usually doesn’t affect sexual urges or the ability to have orgasms.

Even if you went into treatment knowing the risks, it’s okay for you to talk to your doctor about your experiences after treatment.

In some men, testosterone and other male hormones can fuel the growth of prostate cancer.

Hormone therapy treats prostate cancer by dramatically reducing the levels of these hormones. Most types of hormone therapy (also called androgen deprivation therapy or endocrine therapy) are given as shots.

Hormone therapy may be used

- as primary treatment when cancer has spread beyond the prostate gland
- as primary treatment for men who are not candidates for surgery and who prefer not to have radiation
- before brachytherapy, to shrink a large tumor
- at the same time as radiation therapy, to boost its effectiveness
- after surgery or radiation therapy, if PSA levels suggest the cancer may have recurred

Side effects of hormone therapy may include:

- erection problems
- loss of sexual desire
- hot flashes
- loss of muscle mass
- breast enlargement
- loss of bone tissue

Side effects usually go away when treatment ends, though it may take as long as a few years for all the drugs to leave your system. Ask your doctor how to ease side effects.
New treatments may offer better outcomes or fewer side effects.

Chemotherapy isn’t a new treatment. But in the past, chemotherapy was usually offered only when other therapies stopped working. Today, your doctor may suggest chemotherapy even if you are newly diagnosed but have evidence that cancer has spread beyond your prostate.

Other newer cancer therapies include immunotherapy and focal therapy.

**Immunotherapy** “revs up” your immune system to attack and kill cancer cells.

**Focal therapy** may be an option if the cancer is just in one part of the prostate gland. Treatment is targeted to that area, resulting in fewer side effects.

Focal therapy may be a good option for men with early-stage prostate cancer and men who cannot tolerate other treatments.

Types of focal therapy include:

- focal cryoablation, also called focal cryosurgery or cryotherapy, which uses a tiny probe to freeze the tumor and kill it.

- high-intensity focused ultrasound (HIFU), which uses energy from sound waves to superheat the tumor and destroy cancer cells.

**LIFESTYLE CHANGES TO PREVENT RECURRENCE**

Here are some things you can do to help prevent cancer from spreading or coming back.

Follow a healthy lifestyle:

- Maintain a healthy weight.
- Eat a diet loaded with fruits and vegetables.
- Avoid red meats.
- Avoid extra amounts of vitamin E and selenium.
- Exercise regularly.
- Limit alcohol to no more than two drinks per day and avoid binge drinking.
- Don’t smoke.
- Stick with the schedule for follow-up appointments that you and your doctor have agreed on.

Ask your doctor about support groups or survivor programs near you. Some men find them helpful as a place to talk with other men who understand the ongoing physical and emotional issues of cancer diagnosis and treatment.