

# Elevated PSA (Prostate-Specific Antigen) Level

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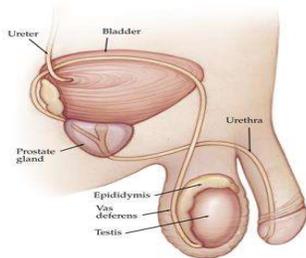
## What is a prostate-specific antigen (PSA)?

Prostate-specific antigen, or PSA, is a protein produced by the prostate gland. When there's a problem with the prostate gland, it releases more PSA. High levels of PSA can be a sign of [prostate cancer](#).

## What is considered an elevated prostate-specific antigen (PSA) level?

Researchers haven't settled on a single normal PSA level. Previously, a level of 4.0 ng/mL or higher would lead to more testing, usually a [prostate biopsy](#). During the biopsy, a healthcare provider removes a small sample of prostate tissue to check it for cancer.

However, healthcare providers now consider other issues together with the PSA level to decide whether to perform a biopsy. Your age, general health, family history and health history factor into the decision.



## Does my PSA level determine whether I have prostate cancer?

Your provider looks at two factors related to your PSA:

- **Your PSA level:** A higher level means a higher risk of prostate cancer.
- **A continuous rise:** PSA levels that continue to rise after two or more tests may mean you have cancer.

- But the PSA level alone doesn't determine if you have cancer or not. Two men can even have the same PSA levels but different risks of prostate cancer. And a high PSA level may reflect prostate problems that aren't cancer.

## What are other risk factors for prostate cancer?

You may be at higher risk for prostate cancer if you:

- Are older than 50 years.
- Are of African-American or Caribbean descent.
- Have a family history of prostate cancer.
- Have certain genetic changes that make it more likely prostate cancer will develop.

## How common is prostate cancer in men with an elevated PSA level?

Men can have prostate cancer even if they have a normal PSA level. But cancer is more likely with an elevated PSA level. When PSA levels are:

- **Below 4:** 15% chance of prostate cancer.
- **Between 4 and 10 (the borderline range):** 25% chance of prostate cancer.
- **Above 10:** More than 50% chance of having prostate cancer.

## Symptoms and Causes

### What causes an elevated PSA level?

Prostate cancer is the main cause of an elevated PSA level. But PSA levels increase with age and can reflect different prostate conditions. Other factors that may raise a person's PSA level include:

- Prostate enlargement and inflammation ([prostatitis](#)).
- [Urinary tract infection](#).
- Urinary catheter (tube) placement.

Your healthcare provider will also consider whether your medications affect PSA levels. For example, 5-alpha reductase blockers treat enlarged prostates and will lower PSA levels.

## Will elevated PSA cause symptoms?

An elevated PSA level does not cause symptoms, but it may be a sign of prostate problems like cancer. If you have any of these symptoms, your provider may want to do a PSA test:

- Difficulty urinating.
- Frequent urination, including during the night.
- Slow urine stream.
- [Urinary incontinence](#) (difficulty holding urine in).

## Diagnosis and Tests

What is the test to see if I have elevated PSA?

Healthcare providers use a blood test to measure PSA levels.

You may have a digital rectal exam (DRE) together with a PSA test to check for signs of prostate cancer. During a DRE, your provider inserts a gloved finger into the rectum to check for bumps or other irregularities.

Depending on the results of your initial test, your provider may want you to repeat the test. PSA levels can change. A second test gives your provider more details about your prostate health.

What happens if my PSA level is elevated?

If you have a high PSA level, you will need ongoing PSA tests and DREs so your provider can look for any changes. If the PSA level continues to increase or if your healthcare provider finds a lump during a DRE, you may need other tests, including:

- Transrectal ultrasound and prostate biopsies.
- Prostate MRI.
- [Iso PSA](#) or 4Kscore® (more blood tests).

A biopsy can tell you definitively if you have prostate cancer. The biopsy results also affect your treatment. For example, if the biopsy shows a lot of cancer cells, you might need more aggressive treatment.

# Management and Treatment

## How is prostate cancer treated?

Treatment options for prostate cancer include:

- Surgery to remove the prostate (such as a [robotic](#) prostatectomy).
- [Radiation therapy](#) (external radiation therapy).
- [Brachytherapy](#) (internal radiation therapy).
- High intensity focused ultrasound (HIFU).
- [Cryotherapy](#) (using extreme cold to freeze off cancerous tissue).
- [Hormone treatment](#), also called androgen suppression therapy.
- Chemotherapy.

You may continue to have PSA level tests during and after prostate cancer treatment. These tests check that the treatment is working.

## Prevention

### Who should have regular screening tests for high PSA?

The PSA test was first developed to observe prostate changes in men who had a history of prostate cancer. Then it became more widely used in the general population to detect and prevent prostate cancer before symptoms developed. But routine screening can find prostate cancers that grow slowly and do not need treatment. Talk to your healthcare provider to see if you should have regular PSA tests.

## Outlook / Prognosis

### What should I expect if I'm told I have elevated PSA?

If your provider finds an elevated PSA level, you'll have repeat tests to check your prostate. Many men with elevated PSA levels — even those who have prostate cancer — live long, healthy lives. Prostate cancer may not need treatment, depending on how slowly the tumor is growing. Keep up with your regular appointments and tests so your care team can keep tabs on your health.

### What does an elevated PSA level mean if I've had prostate cancer in the past?

If you've ever had treatment for prostate cancer, you'll have regular PSA screenings for the rest of your life. An increasing PSA level may mean the cancer has returned. Your care team may use other tests, including imaging scans and biopsies, to check for signs of cancer. If cancer returns, your team will discuss your treatment options with you.

## Living With

How can I best take care of myself if I have elevated PSA?

Regularly visit your healthcare provider for PSA tests and digital rectal exams. If you notice any change in how you feel or function, especially problems with urination, talk to your provider.

### **If I have elevated PSA levels, what should I ask my healthcare provider?**

If you have any symptoms of prostate cancer, or if it runs in your family, ask your provider:

- Should I have regular tests to check my PSA level?
- What can I do to lower my risk for prostate cancer?
- What other tests or monitoring do I need?
- What are my treatment options if I get prostate cancer?
- What other signs or symptoms should I look out for?

### **A note from Cleveland Clinic**

An elevated PSA level can be a sign of prostate cancer, but it doesn't always mean you have cancer. Your healthcare provider will watch you and do more tests to arrive at a diagnosis. Prostate cancer is often slow-growing and may never become life-threatening. If you have symptoms of prostate problems, such as difficulty urinating, don't hesitate to let your provider know.