

Patient information from BMJ

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Routine screening for prostate cancer

The prostate is a walnut-sized gland that sits near the bladder. Only men have a prostate gland. It makes fluid that helps to carry their sperm. Prostate cancer is a common type of cancer that can happen as men get older.

What is prostate cancer screening?

Prostate cancer can be serious. But in some men it grows so slowly that it does not cause problems in their lifetime.

Screening is when you have a test to find a condition before symptoms or other problems happen. This leaflet looks at having a regular blood test called a **prostate specific antigen (PSA)** to try to find early-stage prostate cancer.

Who is at risk of prostate cancer?

You are said to be at higher risk of getting prostate cancer if you:

- have a first-degree relative (father, brother, or son) who was diagnosed with prostate cancer before the age of 65
- are black or have African ancestry
- have certain genetic mutations (BRCA1 or BRCA2 mutation).

Otherwise you are said to be at average risk.

What is the PSA blood test?

The PSA blood test measures levels of a certain protein produced by cells in your prostate gland. Men with prostate cancer have a high level of PSA in their blood.

But it isn't that simple. Just because someone has a high PSA level doesn't mean they have cancer. High PSA levels can be caused by other things, such as an enlarged prostate, or prostate infection or inflammation.

Having a high level of PSA is not enough on its own to diagnose cancer. You would need further tests.

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Also, as many as 25 in 100 men diagnosed with prostate cancer have normal levels of PSA. So the test is far from perfect.

How could having a screening PSA blood test help me?

The point of screening is to find out whether you have prostate cancer and, hopefully, to reduce your chances of dying from it.

But the evidence about whether screening works in this way is not as clear as we would like.

- Some studies have found that having PSA screening can slightly reduce your chance of dying from prostate cancer.
- Other studies have found that having screening makes no difference to the number of men who die from prostate cancer.

Could having a PSA test harm me?

There can be some drawbacks to having routine PSA blood tests.

Anxiety or distress

A high blood test result can cause distress, even if all further test results eventually come back normal.

False-positives

This means that a blood test result is high when there is no cancer. If a PSA test result is high you will need more tests, including another blood test and possibly a prostate biopsy. A biopsy is when some cells are taken from the prostate with a needle to be examined under a microscope.

Over-diagnosis and over-treatment

Prostate cancer can be serious, but it isn't always. Some men have treatment for prostate cancers found by PSA screening that might not have caused any problems during their lifetime.

This can happen if a cancer grows slowly or doesn't spread, or if the man dies for another reason before the cancer becomes a problem.

Treatments for prostate cancer, such as surgery and radiotherapy, can also cause complications, such as incontinence (not being able to control the flow of urine) or impotence (not being able to get an erection).

Is a rectal examination recommended for prostate cancer screening?

A rectal examination is part of a physical examination. A doctor or nurse uses a lubricated gloved finger to do the examination. This examination is not usually included as part of screening. But it can help doctors to diagnose several problems, including prostate cancer.

What do guidelines recommend about screening?

Various healthcare organisations produce guidelines about prostate cancer screening.

They include the European Society for Medical Oncology, the US Preventive Services Task Force, the American Cancer Society, the American Urological Society, and the US National Comprehensive Cancer Network.

The advice in these guidelines varies. But they all agree that you should decide about prostate cancer screening after a detailed discussion with your doctor about your individual medical background and your own values and preferences.

If you are at average risk for prostate cancer, most guidelines say to start having these discussions at about age 50. If you opt for screening, it is mainly done for people aged between 55 and 69. Most guidelines don't recommend screening after the age of 70.

If you have other medical problems your circumstances may be different. The advice to start discussions about screening generally applies to people who expect to live at least 10 more years.

If you are at high risk for prostate cancer some guidelines say to start discussing your medical background with your doctor by age 40 or 45.

If you opt for screening, how often you get tested can depend on your first result. Some guidance recommends re-testing every one to two years, depending on your test result.

The UK National Health Service (NHS) currently says that the PSA test is not accurate enough to meet the requirements of a national screening programme.

What should I do about routine PSA tests?

Your own health issues, values, and preferences are important to deciding about having a PSA test.

For example, if you are at average risk of getting prostate cancer and are in good health, you might worry about having cancer more than you worry about having extra tests or treatments. So you might choose to start having regular PSA tests.

But if you worry about unnecessary tests and treatments more than about prostate cancer, you might choose not to have PSA testing.

You should make a decision after talking with your doctor about your own medical history and concerns.

As your health or circumstances change, and as new information becomes available about prostate cancer screening, you should talk with your doctor again.

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