
Prostate Cancer and the PSA Test

No two men are the same

This fact sheet provides basic information only. It must not take the place of medical advice, diagnosis or treatment. Always talk to a healthcare professional about any health concerns you have, and before you make any changes to your diet, lifestyle or treatment.

Prostate cancer is the most common type of cancer found in men today. It mainly affects men over age 50. As men reach their 50th birthday, many become concerned about how to protect themselves against prostate cancer.

You may be wondering if you should be tested to identify whether you have prostate cancer, even if you show no symptoms. You may have heard about the PSA test for prostate cancer and wonder whether you should have it. Perhaps family members, friends, or co-workers are urging you to be tested.

This brochure will help you to better understand prostate cancer and the PSA test. Before you read this information, you need to decide which group you belong to :

- I think that I have symptoms of prostate cancer and that I should be tested.
- I have no symptoms of prostate cancer, but I'm considering being tested just to be sure.

If you belong to the **first group**, you should see your doctor without delay.

If you fall into the **second group**, you are thinking about using the PSA test as a screening tool.

This information will be helpful to you in making a decision about being tested.

What is the PSA test ?

It is a blood test that measures a substance produced by the prostate gland called **prostate specific antigen (PSA)**. The PSA blood test tells doctors when patients have a higher than normal level of PSA. A high level of PSA usually means that the patient has a prostate problem, but it does not necessarily mean he has cancer. Men who have a prostate infection or prostate growth that is not cancerous (like benign prostatic hyperplasia - BPH) may also have high levels of PSA.

Before you decide to have the PSA test you should know more about the prostate, prostate cancer and the PSA test.

What is the prostate ?

The prostate is a walnut-sized gland just below the bladder. It produces part of the fluid that carries sperm.

Normally, as men age, the prostate increases in size. If it grows large enough, it may press on the urethra, the tube that carries urine from the bladder. This may make the urine flow weaker or slower or make men have to urinate more often, especially at night. In the large majority of cases, an increase in the size of the prostate and a change in urine flow do not mean you have cancer - these are just a normal part of aging. *Nonetheless, healthy men who experience symptoms should*

consult a physician without delay.

What is prostate cancer ?

In some cases, a growth in the prostate is cancerous. To check for cancer, doctors cut out a small piece of the prostate (a biopsy) and look at it carefully under a microscope.

Prostate cancer is different in different men. Sometimes the cancer stays in the prostate gland and has little or no effect on how a man feels or how long he lives. Some men with prostate cancer have no symptoms - in other words, it is possible to have prostate cancer without the prostate being enlarged, without urinary problems, and without pain.

About seven out of every 10 men diagnosed with prostate cancer will not die from this disease - rather they will die of other causes such as heart disease, stroke or old age. However, some of these men may develop symptoms of the disease before they die of other causes.

Prostate cancer can also be serious and fatal. Sometimes the cancer spreads beyond the gland into the bones, causing bone pain and other symptoms. About three out of every 10 men diagnosed with prostate cancer will die from the disease.

What causes prostate cancer ?

We don't yet know what causes prostate cancer, but we do know that it's more common in :

- men over 50
- men with a family history of prostate cancer (one or two "first-degree" relatives, such as a father or brother)
- men of African ancestry

We also don't know the effect that other factors (such as diets low in fibre or high in fat, or low levels of physical activity) have on the likelihood of developing prostate cancer.

How likely are you to develop prostate cancer ?

The older you are, the more likely you are to develop prostate cancer. In their lifetime, only about 10 out of every 100 men are actually **diagnosed** with prostate cancer. Many men who have prostate cancer never even know they have it. And many men with prostate cancer will remain healthy and may not be affected by the disease.

How is prostate cancer treated ?

To treat localized prostate cancer (cancer that has not spread), doctors use one of two methods :

- Surgery (prostatectomy);
- Radiation therapy (including brachytherapy).

Generally, prostate surgery is preferred for younger men if they don't have other significant health problems. Radiation therapy is more often considered for older men who are at greater risk for complications from a major operation.

No two men with prostate cancer are the same. Some are old, some young. Some have serious health problems, some are well. Some have fast-growing cancers, others have cancers that grow more slowly. Some men are diagnosed so late that the cancer is incurable, and the only thing that doctors can do is help with pain and symptoms. Many men are diagnosed when the cancer can still be stopped or removed.

All of these things affect the decision about how to treat a man who has prostate cancer.

Do these treatments have side effects ?

Yes. 30-60% of men may be unable to get or keep an erection (erectile dysfunction or impotence) after these treatments. Some men may not be able to control their urine flow (incontinence). The treatments can also cause pain and discomfort.

Are there any other options ?

Because of the side effects, treatment is not always the best course of action. For some men diagnosed with a small amount of what appears to be slow-growing prostate cancer, doctors may recommend an approach called "watchful waiting". That means they watch the patient closely and prescribe treatment only if the cancer shows signs of spreading. In many cases, the men will continue to lead normal, healthy lives and will eventually die of other causes before they develop prostate problems. However, there is some risk that, while the doctor is watching and waiting, the cancer will grow and become incurable. For this reason, doctors carefully choose the patients they care for in this way.

What is meant by 'screening for prostate cancer' ?

Screening means **testing men who don't have symptoms** to see if they have prostate cancer. The reason for doing this, like other cancer screening techniques, is to find prostate cancer as early as possible.

How accurate is the PSA test ?

No test is right all the time, and this is true of the PSA test.

For every 100 men over age 50, with no symptoms, who have the PSA test :

- 10 will have a higher than normal level of PSA. These men must then go through other tests and examinations. At the end of these tests :
 - Three of the men with a higher than normal PSA level will be found to have prostate cancer
 - Seven of the men with a higher than normal PSA level will be found not to have prostate cancer at the time of screening.
- 90 of the men will have a normal PSA level. Of these 90 men :
 - 88 of the men with a normal PSA level will not have prostate cancer
 - One or two of the men with a normal PSA level will actually have prostate cancer, undetected by the test, that will cause symptoms.

So the test will identify some men who don't have cancer, creating unnecessary anxiety. It will also miss some men who do have cancer, giving them a false sense of security about their health.

Will the PSA test save lives ?

We do not know yet that using the PSA test will save lives. In some men, using the PSA test to find prostate cancer and then to treat it may help them live longer. But for other men, the test may find very slow-growing cancers that would never have caused problems during their lifetime. If they had not had the test, these men would likely have led healthy lives, unconcerned about prostate cancer. Because they did have the test, they

will have to deal with knowing they have prostate cancer and possibly decide about treatments that may leave them with complications like erectile dysfunction and incontinence.

What do the experts say ?

Even the experts disagree about using the PSA test for screening for prostate cancer in men without symptoms. Some encourage yearly screening for men over age 50; others recommend against routine screening; still others counsel men about the risks and benefits on an individual basis and encourage patients to make personal decisions about screening.

In 1997, the National Prostate Cancer Forum recommended that all men should have an opportunity to have the PSA test if, after assessing the benefits and risks of PSA testing, they still want to have it.

Four of the most reputable groups of experts (*Canadian Task Force on Preventative Health, National Cancer Institute, US Preventative Services Task Force and the American Medical Association*) recommend against screening for the early detection of prostate cancer in healthy men without symptoms because of the lack of evidence at this time.

Results from two large, high quality studies, one in Europe and one in the United States - which will provide answers about whether to screen or not to screen - will not be available until 2008 and 2014, respectively.

Although we need to know more about the PSA test and its risks and benefits as a screening tool, the test is still useful for :

- Monitoring patients who are being treated for prostate cancer or are being followed after treatment for recurrence of this disease;
- Investigating and diagnosing men who are suspected of having prostate cancer based on digital examination and symptoms.

Healthy men without symptoms may decide to have a PSA test after talking to their family doctor or if they are at high risk for prostate cancer ("first degree" relatives with the disease, men of African ancestry).

How do I decide whether to have the test ?

We can't tell you whether or not to have the test. Our role is to make you aware of the most up-to-date information.

In deciding whether or not to have early detection tests, men must weigh the possibility of early diagnosis and treatment of potentially aggressive prostate cancer against the limitation of these tests and the decisions they will be faced with about treatment choices, effectiveness and side effects.

To make your decision :

- talk to your doctor
- bring this pamphlet with you
- talk to your spouse, partner or members of your family
- think about what best suits you

If you want more information about prostate cancer or the PSA test, ask your doctor or call the Canadian Cancer Society toll-free at 1-888-939-3333.

Trained cancer Information Specialists can provide you with the most credible and up-to-date information about prostate cancer as well as direct you to helpful services within your community. You can also find information online at the Society's website at www.cancer.ca

Government of Ontario

For information about health services and resources :
www.health.gov.on.ca

For consumer-friendly health tips and information :
www.HealthyOntario.com

INFOline: 1-877-234-4343;
TTY: 1-800-387-5559

Telehealth Ontario:
1-866-797-0000; TTY 1-866-797-0007

INFOline is open during business hours and can provide general information on healthcare.

Telehealth Ontario is a 24/7 service which uses nurse practitioners to answer your immediate health concerns.