



**This information sheet has been written to provide you with information on prostate cancer.**

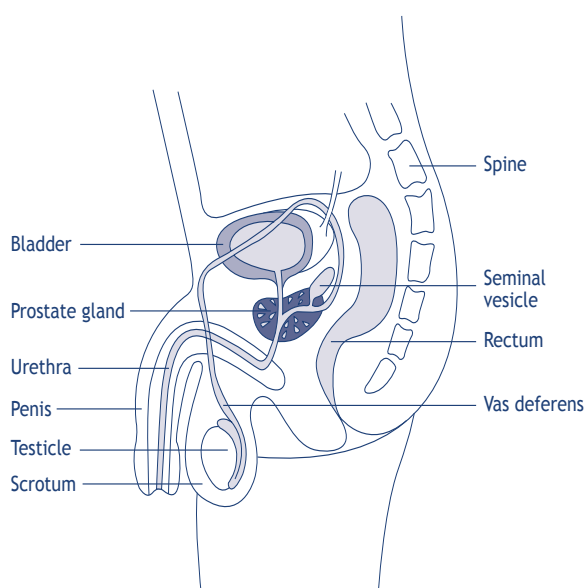
For more detailed information, please see the Cancer Society's booklet *Prostate Cancer*. To get a copy, contact the cancer information nurses on the Cancer Information Helpline 0800 CANCER 226 237, your local Cancer Society or download it from the Society's website ([www.cancernz.org.nz](http://www.cancernz.org.nz)).

## What is cancer?

Cancer is a disease of the body's cells. It starts in our genes. Our bodies are constantly making new cells: to enable us to grow, to replace worn-out cells, or to heal damaged cells after an injury. All cancers are caused by damage to some genes.

This damage usually happens during our lifetime, although a small number of people inherit a damaged gene from a parent when they are born.

## The male reproductive system



## The prostate

The prostate is a small gland, normally about the size of a ping pong ball. It sits just below the bladder and surrounds the upper part of the urethra – the tube that carries urine from the bladder and semen from the testicles to the outside of the body through the penis.

## Prostate cancer

Prostate cancer is a malignant tumour of the prostate gland. Early prostate cancers are contained within the prostate gland and are called localised cancers.

Spread of the cancer through the capsule (the outer covering) of the prostate is known as extracapsular spread or locally advanced cancer.

Some prostate cancers spread to other parts of the body, such as the bones and lymph glands. (This is called metastatic, secondary or advanced cancer.)

## How common is prostate cancer?

Prostate cancer occurs most commonly in men aged over 50 years and is the most common cancer among New Zealand men. Around 3000 men are diagnosed with prostate cancer in New Zealand each year.

## Symptoms of prostate cancer

Men with early prostate cancer are unlikely to have any symptoms, as these only occur when the cancer is large enough to put pressure on the urethra (the tube that drains urine from the bladder). In men over the age of 50, the prostate gland often gets larger due to a non-cancerous condition called benign prostatic hyperplasia or hypertrophy (BPH).

The symptoms of both benign enlargement of the prostate gland and malignant tumours (cancer) are similar and can include any of the following:

- difficulty passing urine

- passing urine more frequently than usual, especially at night
- pain when passing urine
- blood in the urine (this is not common).

If you have any of these symptoms it's important to get them checked by your doctor. But remember, most enlargements of the prostate are not cancer.

## A blood test for prostate-specific antigen (PSA)

PSA levels may rise due to benign enlargement of the prostate, inflammation or infection of the gland (prostatitis), and prostate cancer.

A raised PSA test indicates that your risk of having prostate cancer is higher compared with a person with a normal PSA.

## Ultrasound examination and biopsy

A biopsy of the prostate is the only way cancer can be diagnosed. The information from the biopsy will help you and your specialist make decisions about management of your prostate cancer.

## Grading

If your biopsy sample contains cancer it is graded to show how active the cancer is. The pathologist looks at the pattern made by the cancer cells and gives that pattern a grade from 1 to 5. This is called Gleason grading. The Gleason grade describes what the cancer looks like under the microscope, the stage of the cancer describes where the cancer is found.

## Staging the cancer

A cancer may:

- be confined to the prostate, which is also called localised prostate cancer.
- be locally advanced, which means it has extended beyond the prostate to nearby areas.
- or be metastatic, which means it has spread to other parts of the body.

## Managing and treating your prostate cancer

The treatment choices you are offered will be based on all the information the doctor has about your cancer and what is right for you. This information will include:

- the size of the prostate
- the Gleason Score
- the PSA level
- your urinary function
- the area where the cancer is located
- your general health
- age
- your preferred treatment
- treatment options available in your area.

Treatments your doctor will consider include:

- active surveillance
- surgery
- radiation treatment
- hormone therapy
- chemotherapy
- immunotherapy (still experimental)
- a combination of the treatments listed above.

## Active surveillance

Patients with cancers at very low risk or low risk of spreading may be offered active surveillance. This is a management strategy where the cancer is not immediately treated but is very closely monitored (with regular PSA and repeat biopsy).

## Surgery

If the cancer has not spread beyond the prostate, the whole gland can be surgically removed.

## Radiation treatment

Radiation treatment is the use of high-energy radiation to destroy cancer cells or prevent them from reproducing.

There are three types of radiation treatment for prostate cancer:

- External beam (EBRT)
- Low-dose rate brachytherapy
- High-dose rate brachytherapy.

## Hormone treatment

Hormones are substances that occur naturally in the body. They control the growth and activity of cells and may be used to treat prostate cancer. Prostate cancer needs the male hormone testosterone to grow. There are a number of different ways to slow down or shrink the cancer by reducing the body's testosterone levels.

## Making decisions about treatment

Sometimes it is difficult to make decisions about treatment. You may feel that everything is happening so fast that you do not have time to think things through. However, it is important not to be rushed into a decision – it must be the right one for you. Talking to your doctors a few times before making a decision on treatment can help. Ideally, talking to a surgeon (urologist) and an oncologist is helpful.

## Side effects of prostate cancer

Continence problems are usually temporary. They may last for, at least, 3 months, and are usually sorted out by 6 to 12 months.

Men who have had treatment for prostate cancer can expect to be infertile and may experience changes in their sexual functioning.

These changes can include:

- difficulty having an erection
- dry orgasm (no or less semen)
- loss of interest in sex.

## Depression

Men with prostate cancer are nearly twice as likely to develop depression as other men. Having prostate cancer can cause worry, stress and sadness both in men with cancer and their partner.

If this is a problem for you, counselling can be very helpful. Some men may need medication. Speak to your GP and contact your local Cancer Society about counselling services in your area.

Information reviewed by:

**Associate Professor Chris Atkinson**  
oncologist, St. George's Hospital, Christchurch

**Linda Christian**  
cancer liaison nurse, Auckland

**Professor Brett Delahunt**  
pathologist, Wellington Hospital

**Bob Hale**  
clinical nurse specialist, Wellington Hospital

**Professor David Lamb**  
radiation oncologist, Wellington Hospital

**Dr Brendan Luey**  
oncologist, Wellington Hospital

**Professor John Nacey**  
oncologist, University of Otago, Wellington

**Mr Rod Studd**  
urologist, Wellington Hospital.