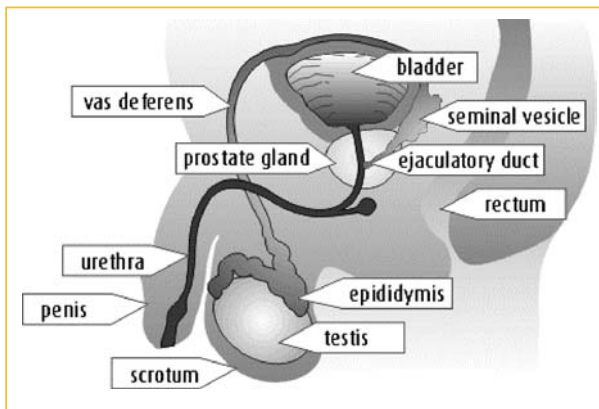


# Prostate cancer

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On behalf of Andrology Australia: [www.andrologyaustralia.org](http://www.andrologyaustralia.org).



## What is the prostate?

The prostate gland is about the size of a walnut and is shaped like a doughnut. It sits underneath the bladder and surrounds the upper part of the urethra.

## What is prostate disease?

It is important to recognise that not all prostate disease is cancer. Prostate disease is a term used to describe any medical problems involving the prostate gland. Benign prostatic hyperplasia is the commonest form of prostate disease. It is a noncancerous enlargement of the prostate gland.

## What is prostate cancer?

Prostate cancer, which occurs mainly in men over the age of 50 years, is a condition where cells within the prostate grow and divide abnormally and a tumour grows in the prostate. Unlike most other cancers in the body, small areas of cancer cells in the prostate are common in many men. For many men, these cancer cells may be very slow growing and not present any problems or symptoms and may not be life threatening. In other cases, the cancer cells can grow more rapidly and may spread to other parts of the body.

## What causes prostate cancer?

The causes of prostate cancer are not known. However, there are certain risk factors that have been associated with prostate cancer. These include:

- a family history of prostate cancer
- aged over 60 years
- race: men from western countries are more at risk;

black men are more at risk than white men

- studies linking vasectomy with increased risk of prostate cancer have not been substantiated.

## How is prostate cancer diagnosed?

The presence of prostate cancer is normally suspected through:

- digital rectal examination where the doctor places a gloved finger inside the rectum to check for changes to the surface of the prostate, and
- a prostate specific antigen (PSA) test to measure levels of PSA in the blood. If the levels of PSA are high and a rectal examination is abnormal, there is an approximately 60% chance of prostate cancer being found.

## Why is biopsy necessary to confirm diagnosis?

A transrectal ultrasound guided (TRUS) biopsy of the prostate gland is the only way prostate cancer can be diagnosed with certainty. To perform the biopsy an ultrasound probe is placed in the rectum and 'sound' waves are used to obtain an image of the

prostate. A TRUS biopsy collects tissue from several areas of the prostate gland for pathological testing.

## What is a Gleason score?

From the biopsy sample, the cancer tissue is graded under a microscope to give an indication if it's an aggressive or slow growing cancer, and what type of treatment is more appropriate. This grading system is called a Gleason score. By grading the appearance of the two commonest cell types and adding the scores together, a total rating from 2–10 is given. Fast growing cancers are called 'high grade cancers' with a Gleason score of 7–10 and usually need to be treated more radically.

## Why are bone scans done?

A bone scan is often done to see whether the cancer has spread to bones. A bone scan is also useful as a baseline for future follow up and monitoring of the disease.

## What determines treatment recommendations?

The type of treatment advised will depend on:

- the stage of the cancer – localised in the prostate gland or spread to other parts of the body
- the Gleason score
- the level of PSA in the blood stream
- the man's age and health
- the side effects of treatment, and
- patient preference.

## Further information

<http://www.andrologyaustralia.org>  
<http://www.prostatehealth.org.au>