

Breast Cancer

Breast cancer is the most common cancer in women in Australia. One in nine Australian women will develop breast cancer by the time they are 85.

Each year in Australia over 12,500 women are diagnosed with breast cancer with around 200 in the ACT.

Although it is rare, men can also develop breast cancer. Around 100 men are diagnosed each year in Australia.

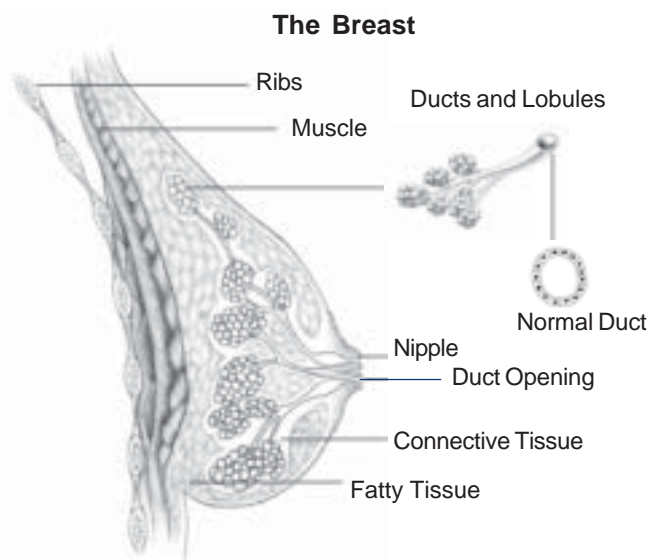
Breast cancer can occur at any age. It is more common in women aged over 60 but around one-quarter of women are younger than 50.

More than 88% of women who get breast cancer survive this disease five or more years from diagnosis. The major advances to date have been the early detection of cancer by breast screening and improved treatment options.

The Breasts

Breast tissue is made up of milk glands, fibrous and fatty tissues, extending upwards towards the collar bone and sideways to the armpit. Beneath the breast are muscles of the chest and ribs. Milk glands consist of lobules, where milk is made and ducts, which take the milk to the nipple.

Both women and men have breast tissue. In women the breasts are designed to produce milk after pregnancy.



What is breast cancer?

Breast cancer is a malignant tumour that starts in breast tissue. There are several types of breast cancer. They all begin in the milk ducts and/or the milk lobules.

Some breast cancers are found when they're 'in situ', which means they've not spread outside the duct or lobule where they began. However, most breast cancers are

found when they're 'invasive', which means the cancers have grown beyond the duct or lobule into other breast tissue or out of the breast.

Breast cancer that spreads out of the breast can also spread to lymph nodes in the armpit nearest the breast affected by cancer (axillary lymph nodes).

Breast cancer found before it appears to have spread beyond the breast and axillary lymph nodes is known as early breast cancer

Causes

The exact cause of breast cancer is not known, but some factors may increase the risk:

- getting older
- having several close relatives, like a mother, sister or daughter, diagnosed with breast cancer – these relatives can be from either the mother's or father's side of the family
- having been previously diagnosed with breast cancer
- having been previously diagnosed with other breast conditions such as ductal carcinoma in situ, lobular carcinoma in situ or atypical ductal hyperplasia

Having some of these risk factors doesn't mean that a woman will develop breast cancer. Most women with breast cancer have no known risk factors, aside from getting older.

In men, breast cancer usually occurs over the age of 60. It is most common in men who have:

- several close members of their family (male or female) who have had breast cancer
- a relative diagnosed with breast cancer under the age of 40
- several members of the family with cancer of the ovary or colon
- a rare genetic syndrome called Klinefelter's syndrome. Men with this syndrome have three sex chromosomes (XXY) instead of the usual two (XY)

Inherited Breast Cancer Gene A set of genes is inherited from each parent. Sometimes there's a fault in one copy of a gene, which stops that gene working properly. This fault is called a mutation.

A small number of breast cancers (about 5%) may be caused by an inherited gene fault. Two breast cancer genes have been found: BRCA1 and BRCA2. Women in families with an inherited gene change could also be at increased risk of ovarian cancer. Men in these families may also be at increased risk of breast cancer and prostate cancer.

People with a strong family history of breast cancer can be tested to see if they have inherited a gene change.

Symptoms

These breast changes may not be breast cancer but it is important that a doctor checks any of these without delay:

- A breast lump, lumpiness or thickening of the tissue
- Changes to the nipple - such as a change in shape, crusting, a sore or an ulcer, redness or a nipple that turns in (inverted) when it used to stick out
- Unusual discharge from the nipple without squeezing
- Changes to the skin of the breast - such as dimpling, unusual redness or other colour changes
- Swelling or discomfort in the armpit
- A change in the shape or size of the breast - this might be either an increase or decrease in size
- Persistent unusual pain anywhere in the breast - if this is not related to your normal monthly cycle, remains after your period and occurs in one breast only.

These changes don't necessarily mean a woman has breast cancer. However, if any of these symptoms are found they should be checked by a doctor without delay. Some women have no symptoms and their breast cancer may be found on a screening mammogram.

Men's symptoms are similar to women's.

Early Detection

Women should be aware of how their breasts normally look and feel. This can be done by looking at the breasts in the mirror and feeling them from time to time and learning what is normal for them at different times of the month. If any changes are found they should see a doctor immediately.

Women aged 50-69 years should also have a screening mammogram every two years. Call BreastScreen on 13 20 50 to book a free mammogram. A screening mammogram is simply a breast x-ray. It is used to look for breast cancer in women who have no breast symptoms. It can detect most breast cancers, including those too small to be felt.

Diagnosis

Several tests are used to find out if a breast change is due to breast cancer.

Physical examination The doctor will look at and feel the breasts. They will look for anything unusual, feel the lymph nodes in the armpit and above the collarbone.

Mammogram A mammogram is a low-dose x-ray of the breast that will tell the doctor more about lumps and other changes. Both breasts are checked and it can find lumps that are too small to be felt. Sometimes, a lump that can be felt is not seen on a mammogram and other tests will need to be done.

Ultrasound scan Ultrasound uses soundwaves to make a picture of your breast.

Biopsy The doctors will suggest a biopsy if they are concerned about a lump in the breast. Biopsy means removing the lump, or part of it, so it can be looked at under a microscope. There are different types of biopsies.

- **Fine needle aspiration** A thin needle is used to take some cells from the breast lump or abnormal area. Sometimes an ultrasound is used to help guide the needle.
- **Core biopsy** A wider needle is used to remove a small piece of tissue, called core, from the lump or abnormal area. It is usually done under a local anaesthetic. An ultrasound or mammogram is used to help guide the needle.
- **Open biopsy (Surgical biopsy)** If the lump is too small to be felt a surgical biopsy is needed. Before the biopsy, a needle and wire may be put into the breast under local anaesthetic. The wire helps the surgeon find the abnormal tissue during the biopsy. The whole lump and a small area of normal breast tissue around the lump are removed, along with the wire. Sometimes the surgical biopsy removes all the cancer and no further treatment is needed.

Treatment

Treatments for breast cancer include surgery, radiotherapy, chemotherapy and hormone treatment. Usually more than one is used. Treatment for breast cancer in men is similar to and as effective as the treatment for breast cancer in women.

Surgery

Surgery is usually the first treatment for breast cancer. Surgery to the breast either removes part of the breast (breast-conserving surgery) or the whole breast (mastectomy). Most people have axillary surgery at the same time. This removes lymph nodes in the armpit near the affected breast.

Radiotherapy

Radiotherapy uses x-rays to kill cancer cells or stop them from growing. It is usually recommended after breast conserving surgery to help destroy any cancer cells left in the breast area.

Chemotherapy

Chemotherapy uses drugs to kill or slow the growth of cancer cells. It may be used after surgery if there is a high risk of the cancer returning. It may also be used if cancer does return after surgery or radiotherapy to gain control of the cancer and to relieve symptoms or if the cancer does not respond to hormone treatment.

Hormone Treatment

Hormone treatment is for people who have hormone receptors on their breast cancer cells. It is used to destroy any cancer cells left in the breast or that may have spread outside the breast and armpit after other treatment by slowing or stopping the growth of hormone receptor positive cancer cells.

For further information please call the Cancer Council Helpline on 13 11 20.

This information sheet contains general information, for specific information regarding your cancer diagnosis or treatment, it is always best to talk to your doctor or health care team.

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