Managing your breast cancer risk: Screening methods

This information sheet tells you about screening methods that may reduce your risk. It is based on current scientific evidence. Other information sheets in this series tell you about prevention strategies and lifestyle changes.

This information is for women who are at high risk because they have:

- a strong family history of breast and/or ovarian cancer, and/or
- a change in a gene which normally protects against breast/ovarian cancer (see: gene change).

What are screening methods?
These are methods that look for early signs of cancer. Treatment is usually most effective when a cancer is found early.

What types of screening exist for breast cancer?
You need to be familiar with the normal look and feel of your breasts, and, of greatest importance, report any changes to your doctor promptly. Regular examination by a doctor is also important. These checks, combined with tests such as mammography and/or ultrasound, help to locate changes that may point to breast cancer.

Breast awareness:
Some breast cancers are found when a woman detects a change in her breast. This is why it is important to be familiar with the normal look and feel of your breasts.

A woman’s breasts change throughout her lifetime. Be aware of the normal appearance and feel of your breasts at different times. That way, you’ll be more likely to notice a change.

Changes that need to be checked by a doctor include:

- a new lump or thickening in the breast or armpit
- dimpling or redness in the skin
- a change in the direction of the nipple (pointing in another direction or inwards rather than outwards)
- discharge from the nipple (apart from when you are breastfeeding).

If you notice a change, see your doctor within a few days.

Clinical breast examination:
This is a breast check done by a doctor. Your doctor will thoroughly examine the breast area, including the collarbone and armpits.

You’ll be asked by your doctor to remove your clothes from the waist up. Your doctor will look at your breasts while you are sitting or standing, then check them when you are lying down. The doctor will feel for any lumps or areas of thickening. If you’ve found a change yourself, tell your doctor before they begin the examination.

Clinical breast examination, combined with other screening tests such as mammography, help to detect cancer. If you are at high risk of breast cancer, regular clinical breast examinations by a breast specialist are recommended.

Mammography:
This type of x-ray uses a low dose of radiation to take a picture of the breast. It can find some lumps that may be breast cancer that are too small to detect by hand.

You will be asked to remove your clothes from the waist up. The x-ray centre will give you a gown to cover yourself between x-rays.

A radiographer will place your breast between two plates of the x-ray machine and the machine will gradually flatten the breast. This may be uncomfortable, but is only for a short while.
Flattening the breast tissue as much as possible ensures that good pictures of the breast tissue can be taken.

The radiographer will take the pictures of your breast. A radiologist will check the pictures, and provide a written report, with your films, to your doctor.

Mammography works best in postmenopausal women, whose breasts are less dense-appearing than younger women’s. If you are at high risk of breast cancer, your breast specialist or the radiologist may decide you need a breast ultrasound as well as your mammogram. Your doctor will advise you how often you need to have these tests.

**Ultrasound:**
This uses sound waves to make a picture of the breast tissue inside your breast.

You will be asked to go into a private room and remove all your clothes from the waist up and cover up with a gown. You will then go into another room and lie down on a comfortable bench near the ultrasound machines.

The radiographer will place a cool gel on your breast and then roll the ultrasound transducer (which is shaped like a microphone) over the surface of the breast. The radiographer will take a series of pictures of your breasts, which will be given to a radiologist to assess and report on to your doctor.

Ultrasound is usually not used on its own to screen for breast cancer but may be used alongside mammograms. In particular, ultrasound may be used if you are young (less than 35 years) or your breasts are very dense.

**Magnetic resonance imaging (MRI):**
Breast MRI screening now has a Medicare rebate for women at high risk of breast cancer who are under 50 years, under the supervision of a medical specialist.

MRI doesn’t use radiation. Research suggests that MRI is more accurate than mammograms at finding changes, even in women with dense breast tissue. MRI is used together with mammography. Not all women need an MRI as well as a mammogram and so it is important to discuss with your doctor whether you might be suitable for MRI.

How effective is breast cancer screening?
Breast cancer screening in young, high risk women has been disappointing to date, with lower rates of cancer detection at very early stages than in postmenopausal average risk women. Currently, the most effective method is the combination of breast awareness, clinical breast examination and mammography.

**Will someone remind me to have my test?**
The Victorian Family Cancer Register is a confidential database of families who have an inherited risk of developing cancer. It is kept by Cancer Council Victoria.

The register helps these families by sending them reminders when screening appointments and tests are due. It also updates family histories so other family members are followed up with appropriate care.

Talk to your Family Cancer Centre about having your name added to the register and having reminders sent about your next screening appointments. This will only be done with your consent. Your family cancer clinic may also be able to help to remind you and organise your screening.

**How will the register protect my privacy?**
The register takes privacy seriously. Information about you is kept only if you have given permission. No information about you will be released to your family members without your permission.

**What that word means**

family history A careful assessment by a Family Cancer Centre of cancer occurrences in a family.

gene change A change somewhere in a gene. A change may be inherited or be caused by an error while a cell is reproducing itself, by factors such as some chemicals or viruses, or by events that science is yet to discover. A change in a gene may lead to disease such as cancer. However, people with a change in a gene that may predispose to cancer don’t always get cancer. Also known as a gene error or gene mutation.

high risk This means that someone’s chance of developing a disease in the future is higher than average, due to a family history of the disease and/or a change in a gene known to predispose to that disease. People assessed as at high risk are advised to consider strategies that could reduce their risk.

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