Cancer screening

Summary

- The purpose of cancer screening is to find a disease or condition in its early stages, before it causes symptoms, which increases the chance of successful treatment.
- Population-based screening programs exist for three cancers—breast, cervical and bowel.
- If you have worrying symptoms, see your doctor as soon as possible.

Screening is testing a group of people in the population for signs of a disease when treatment is still possible. Screening tests aim to find disease in the early stages, before it causes symptoms. Tests are offered to people who may have an increased risk of a particular disease because of their age, gender or other factors.

Purpose of cancer screening

Cancer screening programs look for early signs of the disease or indications that a person is more likely to develop the disease in the future. In most cases, early detection of cancer increases the chances of successful treatment.

It's important to remember that a screening test cannot diagnose cancer. To make a cancer diagnosis, further investigations are necessary to confirm the findings of a screening test.

Types of cancer screening programs

There are three different approaches to screening that include:

- mass (population-based) screening – an entire population in a certain age group is tested, for example, cervical cancer screening
- selective screening – screening of selected groups of people in high-risk categories, for example, genetic screening of people with a strong family history of breast cancer
- opportunistic screening – screening tests offered to people who are being examined for other reasons, as part of a routine medical check-up. For example, genetic screening tests are available for people with an established family history of bowel, breast or skin cancers.

Developing a cancer screening test

Population-based screening programs are only introduced when a range of factors can be met. These include:

- The cancer is common with a high rate of morbidity (illness) and mortality (death).
- The test can detect the disease or condition in its early stages or pick up signs that the disease may develop later.
- The disease or condition can be treated and the treatment is more effective, affordable, safe or acceptable in the earlier stages.
- The screening test is acceptable, since people tend to avoid unpleasant or painful medical tests, especially if they don’t have any symptoms.
- The program, including follow-up treatment where required, must be available to the majority of the people in the group you want to test (known as the ‘target population’).
- The target population group can be contacted from records kept in a central register to undergo screening, for example, by letters sent in the mail.
- The program is cost-effective.

These strict requirements mean that population-based screening tests exist for only three types of cancer so far—breast, cervical and bowel. However, medical researchers are devising and trialling screening tests for other types...
of cancer. New tests may be available in the future.

**Population-based cancer screening in Australia**

There are three national population-based screening programs for breast, bowel and cervical cancer. Each program aims to detect pre-cancerous abnormalities or early-stage cancers before symptoms occur, and when there is the best chance of successful treatment and survival. Through these programs all Australians within an eligible target age range are invited to screen. More specifically in Victoria;

- **BreastScreen Victoria**: aims to continue to reduce deaths from breast cancer through early detection of the disease. It invites women aged 50 – 74 years for 2 yearly mammography screening at a BreastScreen Victoria clinic. Find more information on breast cancer.

- **National Bowel Cancer Screening Program (NBCSP)**: aims to continue to reduce deaths from bowel cancer through early detection of the disease. The NBCSP offers free bowel cancer detection kits to eligible people between the ages of 50-74 years. By 2020, all eligible people between 50-74 years will be offered free testing every two years. Find more information on bowel cancer or visit the National Bowel Cancer Screening Program website.

- **National Cervical Screening Program**: aims to prevent and detect cervical cancer early through regular cervical screening. Based on new evidence and better technology, the National Cervical Screening Program has been renewed and from 1 December 2017;
  - Women aged 25 - 74 will be invited to have a primary human papillomavirus (HPV) test replacing the Pap test.
  - Women who are aged 25 – 74 that have ever been sexually active should have a cervical screening test every five years if results are normal.
  - Healthcare providers will still perform a speculum examination to take a cervical sample. If HPV is detected, a reflex liquid based cytology (LBC) test will be performed on the same cervical specimen.
  - Find information on the National Cervical Screening Program website. Find publications and resources about cervical screening.

**Challenges of cancer screening programs**

Cancer screening has dramatically reduced illness and death rates in Australia. For example, since the National Cervical Screening Program was introduced in 1992, the death rate from cervical cancer has approximately halved and is now among the lowest in the world.

Despite the importance of screening, there are some challenges to overcome when trying to test large numbers of people in a population-based program, including:

- Some people find some screening tests invasive, uncomfortable, unpleasant or embarrassing, and may not want to participate in the program.
- A person may be afraid of medical tests or procedures, and avoid screening altogether. Concerns or fears about a screening test can be discussed with a doctor. It may be helpful to take a family member or friend along for support and reassurance.
- The tests aren’t perfect. Every test carries a small risk of giving a ‘false negative’, which means that the test shows the person doesn’t have cancer when in fact they do. There is also a small risk of giving a ‘false positive’, which means that the test concludes the person has cancer when they don’t. This can lead to unnecessary worry and invasive tests such as a biopsy. Some of these tests may carry a small but usually significant risk of side effects or complications.
- Every test also carries a small risk of ‘over-diagnosis’, which refers to the diagnosis of disease that will never cause symptoms or death during the person’s lifetime.

**See your doctor if you have symptoms**

Cancer screening is testing for early signs of some types of cancer in people who have no symptoms. If you have any health concerns, or worrying symptoms, always see your doctor without delay.
Reducing cancer risk
You can reduce your risk of cancer by:

- having regular screening tests when due
- not smoking
- avoiding second-hand tobacco smoke (passive smoking)
- being sunsmart
- being physically active
- maintaining a healthy body weight
- avoiding or limiting alcohol
- eating a healthy diet.

Where to get help

- Your GP or healthcare provider
- Cancer Council Victoria Helpline Tel. **13 11 20**
- BreastScreen Victoria Tel. **13 20 50**
- National Cervical Screening Program Tel: **1800 627 701**
- Multilingual Cancer Information Line, Victoria Tel. **13 14 50**

This page has been produced in consultation with and approved by:

DHHS - Screening and Cancer Prevention