

### ***False negatives***

A false negative can happen when cancer is not detected by screening even though it is there. False negative results can cause you or your doctor to ignore other symptoms that indicate the presence of cancer, causing a delay in diagnosis and treatment.

### ***Slow growing cancers***

Cancer progresses in ways that may not allow for all the benefits of screening to be fully realized. Finding a cancer does not necessarily mean someone will get sick.

A variety of factors can affect how or if cancer develops, and as a result, cancers can behave in any of the following ways:

- Some never grow
- Some will be stopped naturally by the body's immune system
- Some grow so slowly that other illnesses will occur before the cancer becomes a problem.

Because it is difficult to determine which cancers will progress, a person may have unnecessary surgery or treatment for cancer that never would have been life-threatening.

### ***Detecting advanced cancers***

While cancers found during screening are usually small and therefore can be better managed, this is not always so. Some cancers, even when detected by screening before they cause symptoms, are so aggressive that they can not be treated successfully.

While cancer screening does have its limitations, leading health experts agree that these are outweighed by the benefits of detecting cancer early. Early detection reduces the risk of dying, reduces the potential need for aggressive treatments and their associated side effects, and reduces occurrence of some cancers.

## **How can I find out more about screening programs?**



Talk to your doctor to learn more about your risk of cancer, the screening programs available in your province or territory, and whether screening is right for you. Most available screening programs are free for eligible individuals.

**[www.partnershipagainstcancer.ca](http://www.partnershipagainstcancer.ca)**

This information pamphlet is produced by the Canadian Partnership Against Cancer. It is designed to educate participants of cancer screening programs and members of the general public who wish to learn more about cancer screening.



# **cancer screening**

**BENEFITS AND LIMITATIONS**



## What is cancer?

Cancer is a disease that starts in our cells, and is used as a generic term to describe a group of more than 100 diseases that can affect any part of our body. We have millions of cells in our bodies that are grouped together to form tissues or organs, such as our liver, muscles and bones. Our cells usually work normally, and allow us to stay healthy. Cancer happens when cells start dividing uncontrollably. Cancer cells can sometimes spread to other parts of the body.

### The Natural History of Disease



## What's involved in screening?

While cancer may be common, there are many factors that can influence a person's risk of developing it. A preliminary test, or screening test, checks for evidence of cancer even when there may not be any symptoms. Age and many other risk factors influence the decision of whether an individual should be screened.

Screening tests are done to determine who should receive further tests to confirm whether or not cancer is present - generally, people who have cancer will test positive and people who don't have cancer will test negative. There is good evidence to support population-based cancer screening for breast, cervical and colorectal cancer.

Screening does not determine who has cancer. The only way to confirm cancer is to look at a patient's tissue, which is obtained by a biopsy. Biopsies may require surgery.

Screening tests are generally straightforward and are not harmful or damaging to the body. For some, screening may cause varying degrees of discomfort or embarrassment. For example, the x-ray machine applies pressure on the breast in a mammogram screen. Some specific preparations may be required for some screening tests; if these are not followed, the screening test accuracy may be affected.

## How can I benefit from screening?

### *Better chance of survival*

Generally, participating in recommended cancer screening lowers your chance of dying from cancer. The earlier cancer is found, the better your chance of survival.

As an example, breast screening can reduce the chance of death by 25 per cent for those aged 50 to 69. Screening for cervical cancer reduces death by 65 per cent, and screening for colon cancer may reduce the risk of dying by up to 33 per cent for those aged 50 - 74, depending on the type of testing used.

### *Reducing cancer rates*

Quality screening can also detect changes in your cells that happen before these develop into cancer. By finding these changes and treating them appropriately, the number of people who get cancer can actually be reduced. For instance, following screening for colon cancer, precancerous growths, known as polyps, may be found. These may take many years to develop, but can be removed before they become cancerous or have spread outside the colon. Similarly, screening can find early precancerous changes in a woman's cervix. These can be treated and the cancer prevented. Mammograms can find an abnormal growth a few years before it can be physically felt.

### *Better treatment options*

Quality screening, done on a regular basis, can detect cancer at its very early stages. Early detection gives doctors more, and usually less aggressive, treatment options, which often work better and have fewer side effects.

### *Experts recommend it*

Leading international health experts recommend some specific types of cancer screening. Population-based breast, cervical and colorectal screening have the most compelling evidence to recommend them.

## What about the downsides?

Almost every test or procedure carries benefits and limitations. The important thing is to be aware of them so that you can make an informed decision that is right for you.

### *False positives*

A false positive cancer screening test suggests cancer even though cancer is not present. Results of a false positive test can cause anxiety and stress. False positives can also result in unnecessary diagnostic testing and treatment, and side effects resulting from these. Over time, if screening tests are repeated, there is the likelihood of an increase in false positive test results.