Testing for ovarian cancer in women who do not have symptoms

Frequently asked questions

Ovarian cancer affects around 1600 women in Australia each year. It is the eighth most common cancer in Australian women.

Unlike some other cancers, there is currently no evidence to support using any screening test to look for early changes due to ovarian cancer in women who do not have symptoms. This includes surveillance (monitoring) tests for women at high risk or potentially high risk of ovarian cancer who do not have symptoms.

Information in this document is designed to help women and their doctors understand the reasons for this advice. It includes information for women at high and potentially high risk of ovarian cancer as well as information for women at average (population) risk.

In the absence of a screening test, it is important that all women are aware of the symptoms of ovarian cancer and seek advice about any severe or persistent symptoms that are unusual for them. It is also important that women at high or potentially high risk of ovarian cancer are informed about what they can do to reduce their risk.

About Ovarian Cancer

What is ovarian cancer?

Ovarian cancer is cancer that affects a woman's reproductive organs. It occurs when abnormal cells in the ovaries, fallopian tubes or peritoneum (the cells lining the abdomen) grow in an uncontrolled way.

What affects a woman's risk of developing ovarian cancer?

Several things – called risk factors – can affect a woman's risk of developing ovarian cancer. Having one or more of these risk factors does not mean that a woman will develop ovarian cancer. Similarly, having no risk factors does not mean that a woman will not develop ovarian cancer.

The most significant risk factors for ovarian cancer are getting older and having a family history of breast or ovarian cancer. Having a family history means having one or more blood relatives (such as a mother, sister or daughter) who has had breast or ovarian cancer.

In some women with a family history, the risk of ovarian cancer increases because the woman inherits certain faulty genes from the mother's or father's side of the family. Women with a family history of breast or ovarian cancer may be offered genetic testing to look for these faulty genes.

Ovarian cancer can be caused by faults in BRCA1 and BRCA2 genes. Less commonly, ovarian cancer is caused by faults in genes involved in Lynch Syndrome (an inherited condition associated with increased risk of bowel, uterus, ovary and other cancers).

Some factors can reduce the risk of developing ovarian cancer. These include:

- having children
- taking the oral contraceptive pill
- tubal ligation (having your tubes tied).

*Information is based on the Cancer Australia Position Statement **Testing for ovarian cancer in asymptomatic women**. The term 'ovarian cancer' includes cancer affecting the ovary, fallopian tube or peritoneum.*

What does it mean if a woman is at high risk or potentially high risk of ovarian cancer?

Fewer than 1 in 100 Australian women are at high risk or potentially high risk of ovarian cancer.

A woman is said to be at *high risk of ovarian cancer* if genetic testing finds that she has a faulty BRCA1 or BRCA2 gene, or a fault in one of the Lynch Syndrome genes.

A woman is said to be at *potentially high risk of ovarian cancer* if she has not had genetic testing, but tests show a blood relative has a faulty BRCA1, BRCA2 or Lynch Syndrome gene.

Even if no-one in the family has had genetic testing, a woman may still be said to be at *potentially high risk of ovarian cancer*. This may be because of her family history of breast and / or ovarian cancer or her family background. This may include having:

- a blood relative who was diagnosed with ovarian cancer before the age of 60
- more than one blood relative on the same side of the family diagnosed with ovarian cancer at any age
- multiple blood relatives diagnosed with breast and / or ovarian cancer
- a family history of breast and / or ovarian cancer and being of Ashkenazi Jewish heritage.

Find out more about the risk of ovarian cancer due to family history.

About cancer screening and surveillance

What is cancer screening?

Cancer screening programs use simple tests to look for changes or early signs of cancer before symptoms appear. The aim of screening is to reduce the number of people who die from cancer by finding and treating any abnormal changes early. In Australia, population-based screening programs are available for breast cancer, bowel cancer and cervical cancer.

Screening tests are not suitable for every type of cancer. The World Health Organisation has developed guidelines about what makes a suitable screening program. A key principle in these guidelines is the need for clear evidence that the screening program will provide more benefit than harm.

Cancer screening relies on having an early change that can be picked up by the screening test. It is important the test is as accurate as possible. The aim is to minimise the chance of missing changes that may be due to cancer and to reduce the chance of getting a positive result in people who do not have cancer. It is also important to show that treatment of people with early changes reduces the number of people who die from the cancer.

What is cancer surveillance?

Cancer surveillance is similar to cancer screening but involves more regular and / or additional tests in people at higher risk of cancer. Effective cancer surveillance relies on having an early and recognisable change that can be picked up by regular testing. As with cancer screening, it is important that the change can be treated, leading to an improvement in survival.

Cancer screening and surveillance in ovarian cancer

What is the current advice about screening and surveillance in ovarian cancer?

The Cancer Australia Position Statement ***Testing for ovarian cancer in asymptomatic women*** states that:

- there is no evidence to support the use of any test for routine population-based screening for ovarian cancer (in other words, screening in women at average risk who do not have symptoms)
- there is no evidence to support the use of any surveillance test for ovarian cancer in women at high or potentially high risk of ovarian cancer who do not have symptoms.

Why are screening and surveillance tests not recommended for ovarian cancer?

Diagnosis of ovarian cancer requires removal of the ovary by surgery so that the tissue can be examined under a microscope. It is essential that any screening or surveillance test for ovarian cancer is accurate enough to justify a woman having surgery.

We do not yet have tests that are accurate enough to pick up early changes due to ovarian cancer which would improve survival.

What screening and surveillance tests have been studied for ovarian cancer?

International studies conducted over many years have looked to see whether an increase in levels of certain proteins in the blood can be used as an early sign of ovarian cancer. For example, the level of a protein called CA125 is known to be higher in some women diagnosed with ovarian cancer. Studies have looked to see whether having a higher level of CA125 might be an early sign of ovarian cancer.

Other studies have used ultrasound (including transvaginal ultrasound) to look for changes in the size or appearance of the ovaries as an early sign of ovarian cancer.

Some studies have tried using blood tests and transvaginal ultrasound together.

None of the studies conducted to date has shown conclusively that these tests can accurately find changes due to ovarian cancer in women with no symptoms. This is the case regardless of the woman's risk of ovarian cancer. In the studies, changes were found in some women who did not go on to develop ovarian cancer. Also, some women in whom no changes were found went on to develop the disease. Importantly, these studies were not able to show with certainty that using the screening tests resulted in fewer women dying from ovarian cancer.

Is further research ongoing about screening and surveillance for ovarian cancer?

Research is continuing to explore the use of surveillance tests to find ovarian cancer in women at high or potentially high risk. Research is also looking to find other ways to diagnose ovarian cancer, and the use of such methods for screening and surveillance may be assessed in future if successful.

Managing your risk

What should I do if I have questions about my risk of ovarian cancer?

If you are concerned about your risk of breast and ovarian cancer, speak to your GP or a member of your health care team.

For more information, see the Cancer Australia website.

Women at high risk of ovarian cancer

For women at high risk of ovarian cancer, the most effective way to reduce the risk of developing ovarian cancer is to have surgery to remove the ovaries and fallopian tubes. This is called risk-reducing salpingo-oophorectomy (RRSO). Women at high risk of ovarian cancer should seek advice from a family cancer clinic and gynaecological oncologist before making decisions about surgery.

Find out more here.

Women at potentially high risk of ovarian cancer

Women at potentially high risk of ovarian cancer who have not undergone genetic testing should consider referral to a family cancer clinic. A family cancer clinic can provide genetic counselling and advice about genetic testing and support.

For information about individual risk, see the Cancer Australia website.

What are the symptoms of ovarian cancer?

It is important that all women are aware of the symptoms of ovarian cancer.

The most common symptoms of ovarian cancer are:

- abdominal bloating or increased abdominal size
- abdominal or pelvic pain
- appetite loss, feeling full quickly or indigestion
- urinary changes, such as frequency or urgency
- changes in bowel habit, such as constipation
- unexplained weight loss or weight gain
- unexplained fatigue.

These symptoms can be vague and similar to other common conditions. The vast majority of women with these symptoms will not have ovarian cancer.

Women should consult their GP if they have symptoms that are unusual for them, or if symptoms are severe or persistent.

For more information about ovarian cancer, see the Cancer Australia website.

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