

Ovarian cancer is a form of the disease which begins in one of the two ovaries which form part of the female reproductive system. These produce eggs as well as the hormones oestrogen and progesterone.

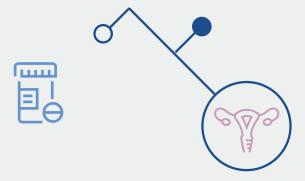
Cancer occurs when abnormal cells begin to grow and divide in an uncontrolled way - eventually forming a growth (tumour).

Around 7,000 women are diagnosed in the UK every year and the majority are aged 50 and over. It can occur in younger women, but around half of all cases occur in those aged 65 and over.

Symptoms of ovarian cancer

The symptoms of ovarian cancer can be very vague, particularly when the disease is in its early stages.

Ovarian cancer often goes undetected until it has spread within the pelvis and abdomen. At this late stage, it is more difficult to treat. If found when still confined to the ovary, is more likely to be treated successfully.



See your doctor if you have any of these signs and symptoms:

- > Feeling full quickly
- > Loss of appetite
- Pain in your tummy (abdomen) or lower part of your abdomen that doesn't go away
- Bloating or an increase in the size of your abdomen
- Discomfort in the pelvis area, pain with sex
- > Frequent need to urinate.

Other possible symptoms:

- > Tiredness which is unexplained
- > Weight loss which is unexplained

Changes in your bowel habit (constipation or diarrhoea) or symptoms of irritable bowel syndrome, especially if this starts after the age of 50

These are all symptoms of other less-serious conditions but if you have them - or anything else which is not normal - do get checked out by a doctor.



The National Institute for Health and Care Excellence (NICE) recommends that if you have the following symptoms 12 or more times a month, your GP should arrange tests - especially if you are over 50:

Swollen abdomen or bloating

Feeling full quickly or loss of appetite

Pain in your abdomen

Needing to pass urine often or urgently

Types of ovarian cancer

The type of cell where the cancer begins determines the type of ovarian cancer you have. Ovarian cancer types include:

Epithelial tumors

The most common type of ovarian cancer, these represent around 90 per cent of cases. They begin in the thin layer of tissue that covers the outside of the ovaries.

Stromal tumors

These begin in the ovarian tissue that contains hormone-producing cells. These tumors are usually diagnosed at an earlier stage than other ovarian tumors. About 7 per cent of ovarian tumors are stromal.

Germ cell tumors

These are rare ovarian cancers and they begin in the egg-producing cells. They tend to occur in younger women.

Risks and causes

Your risk of developing ovarian cancer depends on many things including age, genetics, lifestyle and environmental factors.



Having one or more risk factors doesn't mean that you will definitely get ovarian cancer, but the following factors can increase the risk of ovarian cancer:

> Older age

Ovarian cancer can occur at any age, but is most common in women aged over 50.

> Inherited gene mutations

A small percentage of ovarian cancers are caused by gene mutations you inherit from your parents. The genes known to increase the risk are called breast cancer gene 1 (BRCA1) and breast cancer gene 2 (BRCA2). These genes also increase the risk of breast cancer.

> Previous cancer

You have an increased risk of ovarian cancer if you've had breast cancer in the past, especially at a younger age or if you had oestrogen receptor negative (ER negative) breast cancer.

Women who had bowel cancer at a young age have an increased risk of ovarian cancer compared to the general population.

The increase in risk of ovarian cancer after previous cancer is likely to be partly due to inherited faulty genes such as BRCA 1 and 2, and Lynch syndrome.

Family history of ovarian cancer People with two or more close relatives with ovarian cancer have an increased risk.

> Oestrogen hormone replacement therapy

Especially with long-term use and in large doses.

Age when menstruation started and ended

Beginning menstruation at an early age or starting menopause at a later age - or both - may increase the risk of ovarian cancer.

> Smoking

Smoking can increase the risk of certain types of ovarian cancer such as mucinous ovarian cancer (a type of epithelial ovarian carcinoma). The longer you have smoked, the greater the risk.

> Radiation

There is some evidence to link radiation with an increased risk of ovarian cancer. A very small number of ovarian cancer cases may be caused by radiotherapy for a previous cancer.

> Medical conditions

Studies have shown that women with the following conditions have an increased risk of ovarian cancer:

- Endometriosis
- Diabetes (there may be a higher risk if you use insulin)

> Being overweight or obese

Having excess body fat is linked to an increase in risk of ovarian cancer.

> Exposure to asbestos

The International Agency for Research on Cancer (IARC) classify asbestos as a cause of ovarian cancer.

> Exposure to talcum powder

Some studies suggest talcum powder is associated with a higher risk of ovarian cancer, but the evidence isn't very strong. It is possible that any links are due to statistical blips, or that there is something else talc users have in common that could affect their risk.

If the talc contains asbestos, it can cause cancer if inhaled. The evidence is less clear for non-asbestos talc.



The following factors may reduce your risk of ovarian cancer:

1. Taking the combined contraceptive pill

Ask your doctor whether birth control pills may be right for you. Women who use oral contraceptives may have a reduced risk of ovarian cancer. But oral contraceptives do have risks, so discuss whether the benefits outweigh those risks based on your situation.

2. Having children and breastfeeding.

- Having children seems to reduce the risk of ovarian cancer. The more children you have, the lower the risk.
- Breastfeeding also reduces the risk of ovarian cancer.
- > This reduction in risk may be because, while you are pregnant or breastfeeding you're not ovulating (releasing eggs). The fewer times you ovulate in your lifetime the lower the risk of ovarian cancer.

3. Having a hysterectomy or having your tubes tied

Having your tubes tied because you don't want any more pregnancies is called sterilisation – and studies have found it reduces the risk of ovarian cancer.

Until recently, most research has shown that having your womb removed (hysterectomy) may also reduce your risk of ovarian cancer. But this may depend on several factors, including the age you had the operation. Any reduction in risk may be greater for younger women.

4. Discuss your risk factors with your doctor

If you have a family history of breast and ovarian cancers, bring this up with your doctor.

In some cases, your doctor may refer you to a genetic counselor, who can help you decide

whether genetic testing may be right for you.

If you're found to have a gene mutation that increases your risk of ovarian cancer, you may consider surgery to remove your ovaries, to prevent cancer.

Is there a screening test for ovarian cancer?

Women in the UK are not all currently offered ovarian cancer screening. However, research is underway to see if a test will detect ovarian cancer early (when treatment is most likely to be curative).



Screening tests being studied are the CA 125 blood test and regular ultrasound scan of the ovary.

Initial tests to diagnose ovarian cancer may include:



1. An examination by a doctor

He or she may feel an enlarged ovary or another suspicious abnormality.



2. An ultrasound scan

This is a painless test which uses sound waves to create images of structures inside your body. The probe of the scanner may be placed on your lower tummy to scan the ovaries. A small probe is also commonly placed inside the vagina to scan the ovaries from this angle, to obtain more detailed pictures.



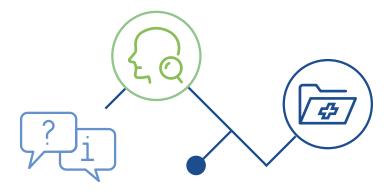
3. A blood test

A sample of blood can detect a protein called CA 125 – which is found in elevated levels in more than eight-in-10 women with advanced ovarian cancer, and in about half of women with early ovarian cancer.

Other non-cancerous (benign) conditions can also cause a high level. This means that this test does not conclusively diagnose or rule out ovarian cancer, but it can be helpful. It is also often used to monitor the effects of treatment for ovarian cancer.

Treatment and survival

Your care will be planned by a team of specialist doctors, including a gynaecological oncologist - a surgeon who specialises in cancers affecting the female reproductive system.



The recommended treatment will depend on the type of ovarian cancer you have, whether it's spread, and if so, how far. They'll talk to you about all the possible options, and anything that might affect your decision – including your general health and whether you plan to have children.

Survival

Survival depends on many different factors, with life expectancy depending on your:

- > Type and stage of cancer
- > Level of fitness
- > Previous treatment

For women with ovarian cancer in England:

- More than 70 per cent will survive their cancer for one year or more after they are diagnosed.
- Almost 45 per cent will survive their cancer for five years or more.
- > 35 per cent will survive their cancer for 10 years or more.

These are general statistics based on large groups of patients. Remember, they can't tell you what will happen in your individual case.

Further sources of information

Good support and advice is available online. Some of the best sources are listed below:

NHS - https://www.nhs.uk/conditions/ ovarian-cancer/

Cancer Research UK https://www.cancerresearchuk.org/ about-cancer/ovarian-cancer

Ovarian Cancer Action https://ovarian.org.uk/

Ovarian Cancer Awareness Month is usually held in March, with a number of organisations participating.





