

Understanding Ovarian Cancer

A guide for people with cancer, their families and friends

Cancer information

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Note to reader

Always consult your doctor about matters that affect your health. This booklet is intended as a general introduction to the topic and should not be seen as a substitute for medical, legal or financial advice. You should obtain independent advice relevant to your specific situation from appropriate professionals, and you may wish to discuss issues raised in this book with them.

All care is taken to ensure that the information in this booklet is accurate at the time of publication. Please note that information on cancer, including the diagnosis, treatment and prevention of cancer, is constantly being updated and revised by medical professionals and the research community. Cancer Council Australia and its members exclude all liability for any injury, loss or damage incurred by use of or reliance on the information provided in this booklet.

Cancer Council

Cancer Council is Australia's peak non-government cancer control organisation. Through the eight state and territory Cancer Councils, we provide a broad range of programs and services to help improve the quality of life of people living with cancer, their families and friends. Cancer Councils also invest heavily in research and prevention. To make a donation and help us beat cancer, visit cancer.org.au or call your local Cancer Council.



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About this booklet

This booklet has been prepared to help you understand more about ovarian cancer. It is common to feel shocked and upset when told you have ovarian cancer. We hope this booklet will help you, your family and friends understand how ovarian cancer is diagnosed and treated. We also include information about support services.

We cannot give advice about the best treatment for you. You need to discuss this with your doctors. However, this information may answer some of your questions and help you think about what to ask your treatment team (see page 67 for a question checklist).

This booklet does not need to be read from cover to cover – just read the parts that are useful to you. Some medical terms that may be unfamiliar are explained in the glossary (see pages 68–71). You may also like to pass this booklet to your family and friends for their information.

How this booklet was developed

The information in this booklet was developed with help from a range of health professionals and people affected by ovarian cancer. It is based on Australian and international clinical practice guidelines for ovarian cancer.^{1–2}

If you or your family have any questions, call Cancer Council **13 11 20**. We can send you more information and connect you with support services in your area. You can also visit your local Cancer Council website (see back cover).



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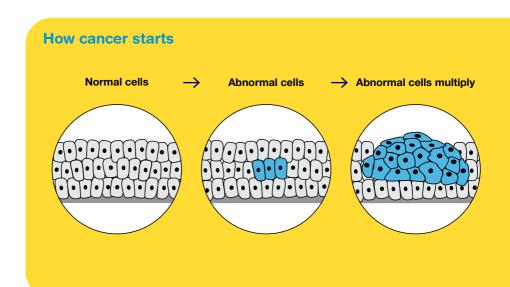
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What is cancer?

Cancer is a disease of the cells. Cells are the body's basic building blocks – they make up tissues and organs. The body constantly makes new cells to help us grow, replace worn-out tissue and heal injuries.

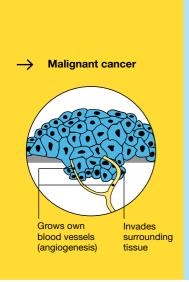
Normally, cells multiply and die in an orderly way, so that each new cell replaces one lost. Sometimes, however, cells become abnormal and keep growing. In solid cancers, such as ovarian cancer, the abnormal cells form a mass or lump called a tumour. In some cancers, such as leukaemia, the abnormal cells build up in the blood.

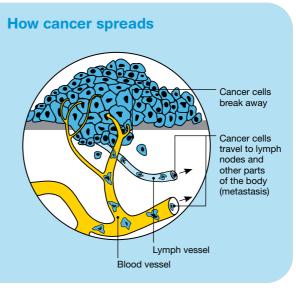
Not all tumours are cancer. Benign tumours tend to grow slowly and usually don't move into other parts of the body or turn into



cancer. Cancerous tumours, also known as malignant tumours, have the potential to spread. They may invade nearby tissue, destroying normal cells. The cancer cells can break away and travel through the bloodstream or lymph vessels to other parts of the body.

The cancer that first develops is called the primary cancer. It is considered localised cancer if it has not spread to other parts of the body. If the primary cancer cells grow and form another tumour at a new site, it is called a secondary cancer or metastasis. A metastasis keeps the name of the original cancer. For example, ovarian cancer that has spread to the liver is called metastatic ovarian cancer, even though the main symptoms may be coming from the liver.







The ovaries are part of the female reproductive system, which also includes the fallopian tubes, uterus (womb), cervix (the neck of the uterus), vagina (birth canal) and vulva (external genitals).

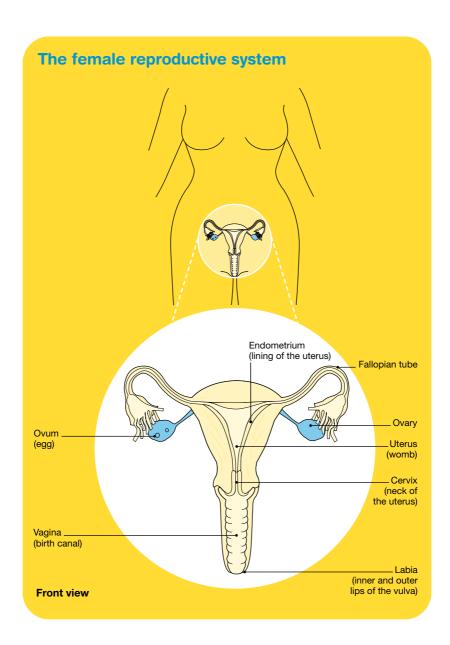
The ovaries are two small, walnut-shaped organs. They are found in the lower part of the abdomen (the pelvic cavity). There is one ovary on each side of the uterus, close to the end of the fallopian tubes.

Each ovary is made up of:

- epithelial cells found on the outside of the ovary in a layer known as the epithelium
- germ (germinal) cells found inside the ovaries, and eventually mature into eggs (ova)
- stromal cells form connective (supporting) tissue within the ovaries, and make the hormones oestrogen and progesterone.

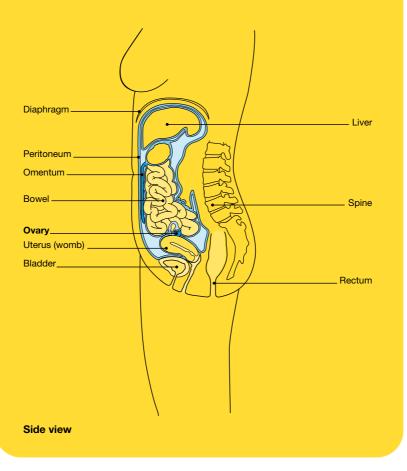
At puberty, the ovaries begin releasing an egg (ovum) each month in a process known as ovulation. The egg travels down the fallopian tube into the uterus. If the egg is fertilised by a sperm, it will implant itself into the lining of the uterus and grow into a baby. If the egg is not fertilised by a sperm, the lining is shed and flows out of the body through the vagina. This flow is known as a period or menstruation.

The hormones oestrogen and progesterone cause ovulation and menstruation. As you get older, the ovaries gradually produce less of these hormones. When the levels of oestrogen and progesterone fall low enough, periods become irregular and finally stop. This is known as menopause. After menopause, you can't conceive a child naturally. The ovaries also become smaller.



Organs near the ovaries

Near the ovaries are many organs and other structures. These include the diaphragm (the sheet of muscle that separates the chest from the abdomen), the peritoneum (the lining of the abdomen) and the omentum (the sheet of fatty tissue that hangs like an apron inside the abdomen).





Q: What is ovarian cancer?

A: Ovarian cancer occurs when cells in one or both ovaries become abnormal, grow out of control and form a lump called a tumour. There are different types of ovarian cancer – see table, next page.

Sometimes an ovarian tumour is diagnosed as borderline (also known as a low malignant potential tumour). This is not considered to be cancer.

If ovarian cancer spreads beyond the ovaries, it often spreads to the organs in the abdomen (see diagram opposite).

Q: How common is it?

A: Each year, about 1400 Australians are diagnosed with ovarian cancer. It is more commonly diagnosed over the age of 50, but can occur at any age. It is the 10th most common cancer in women in Australia.3-4

Anyone with ovaries can get ovarian cancer, so it mostly affects women. Transgender men and intersex people can also get ovarian cancer if they have ovaries. For information specific to your situation, speak to your doctor.

For an overview of what to expect during all stages of your cancer care, visit cancerpathways.org.au/optimal-care-pathways/ ovarian-cancer. This is a short guide to what is recommended, from diagnosis to treatment and beyond.

Types of ovarian cancer

There are many forms of ovarian cancer. The three main types start in different types of cells: epithelial, germ or stromal cells.

epithelial	 the most common type of ovarian cancer (about 9 out of 10 cases) starts on the surface of the ovary (epithelium)* subtypes include serous, mucinous, endometrioid and clear cell cancers mostly occurs over the age of 60
germ cell	 rare type of ovarian cancer (about 4% of cases) starts in the egg-producing (germinal) cells mostly occurs under the age of 40
stromal cell (or sex cord- stromal tumours)	 rare cancer that starts in the cells in the ovaries that produce the hormones oestrogen and progesterone may produce extra hormones, such as oestrogen mostly occurs between the ages of 40 and 60

^{*} Epithelial cancer that starts in the fallopian tubes or in the peritoneum is very similar to epithelial ovarian cancer. Recent research suggests that many ovarian cancers start in the fallopian tubes.

Q: What are the symptoms?

A: In its early stages, ovarian cancer usually has no symptoms. This means it is typically diagnosed when the cancer is more advanced and has spread to other organs.

Occasionally, symptoms of ovarian cancer do occur before the disease is diagnosed. These symptoms may include:

- pressure, pain or discomfort in the abdomen or pelvis
- a swollen or bloated abdomen
- changes in appetite, such as not feeling like eating, or feeling full quickly
- changes in toilet habits (e.g. constipation, diarrhoea, passing urine more often, increased wind)
- indigestion and feeling sick (nausea)
- feeling very tired
- unexplained weight loss or weight gain
- changes in the pattern of periods, or vaginal bleeding after menopause
- pain during sex.

These symptoms do not necessarily mean you have cancer – they might be caused by another health condition.

If you have these symptoms and they are new for you, are severe or continue for more than a few weeks, it is best to arrange a check-up. Keep a record of how often the symptoms occur and make an appointment to see your general practitioner (GP).



Ovarian Cancer Australia has produced a symptom diary to help you record any symptoms and talk about your health concerns with your doctor. Visit ovariancancer.net.au/signs-and-symptoms to download a PDF that you can print out.

Q: What are the risk factors?

A: The causes of most cases of ovarian cancer are unknown, but factors that can increase the risk include:

- age ovarian cancer is most common in women over 50 and in women who have stopped having periods (have been through menopause), and the risk increases with age
- genetic factors up to 20% of serous ovarian cancers (the most common subtype) are linked to an inherited faulty gene, and a smaller proportion of other types of ovarian cancer are also related to genetic faults (see opposite page)
- family history having one or more close blood relatives diagnosed with ovarian, breast, bowel or uterine cancers, or having Ashkenazi Jewish ancestry
- endometriosis this condition is caused by tissue from the lining of the uterus growing outside the uterus
- reproductive history women who have not had children, who have had assisted reproduction, or who have had children over the age of 35 may be slightly more at risk
- lifestyle factors some types of ovarian cancer have been linked to smoking or being overweight
- hormonal factors such as early puberty or late menopause. Some studies suggest that menopause hormone therapy (MHT), previously called hormone replacement therapy (HRT), may increase the risk of ovarian cancer, but the evidence is not clear.

Some factors reduce the risk of developing ovarian cancer. These include having children before the age of 35; breastfeeding; using the combined oral contraceptive pill for several years; and having your fallopian tubes tied (tubal ligation) or removed.

Q: Should I have genetic testing?

A: Most women diagnosed with ovarian cancer do not have a family history of the disease, but some have inherited a faulty gene that increases the risk of developing ovarian cancer. Having an inherited faulty gene does not mean you will definitely develop ovarian cancer, and you can inherit a faulty gene without having a history of cancer in your family.

About 15–20% of women with ovarian cancer have an inherited fault in the BRCA1 or BRCA2 genes or other similar genes. The BRCA gene faults can also increase the risk of breast cancer. Less commonly, a group of gene faults known as Lynch syndrome is associated with ovarian cancer and can also increase the risk of cancer of the bowel or uterus. As other genetic conditions are discovered, they may be included in genetic tests for cancer risk.

If you are diagnosed with ovarian cancer, your specialist or a family cancer centre will check if you need a blood test to look for a fault in the BRCA1, BRCA2 or another similar gene. This genetic test may be available through the public hospital system or with a Medicare rebate. The results may help work out the best treatment for you. If a cancer-related gene fault is found, Medicare-funded testing may be offered to close adult female and male relatives to check their risk (men can inherit and pass on BRCA faults and may have a higher risk of prostate cancer).

For more information, listen to our podcast episode on genetic tests, and read Ovarian Cancer Australia's booklet at ovariancancer.net.au/know-ovarian-cancer/genetic-risks.

Q: Which health professionals will I see?

A: Your GP will probably arrange the first tests if you have symptoms. If these tests do not rule out cancer, you will usually be referred to a specialist called a gynaecological oncologist. The gynaecological oncologist will arrange further tests, perform

Health professionals you may see	
GP	assists you with treatment decisions and works in partnership with your specialists in providing ongoing care
gynaecological oncologist*	diagnoses and performs surgery for cancers of the female reproductive system, such as ovarian, cervical, uterine, vulvar and vaginal cancers
gynaecological pathologist*	examines tissue removed from the abdomen or ovaries under a microscope
medical oncologist*	treats cancer with drug therapies including chemotherapy and targeted therapy
radiation oncologist*	treats cancer by prescribing and overseeing a course of radiation therapy
radiation therapist	plans and delivers radiation therapy
radiologist*	reads and interprets diagnostic scans, such as x-rays and CT and PET scans
cancer care coordinator	coordinates your care, liaises with other members of the MDT and supports you and your family throughout treatment

any recommended surgery and consider treatment options. Often the treatment options will be discussed with other health professionals at what is known as a multidisciplinary team (MDT) meeting. During and after treatment, you will see a range of health professionals who specialise in different aspects of your care.

nurse	administers drugs and provides care, information and support throughout treatment
physiotherapist, occupational therapist	assist with physical and practical problems, including restoring movement and mobility after treatment and recommending aids and equipment
exercise physiologist	prescribes exercise to help people with medical conditions improve their overall health and fitness
dietitian	recommends an eating plan to follow while you are in treatment and recovery
social worker	links you to support services and helps you with emotional, practical and financial issues
counsellor, clinical psychologist	help you manage your emotional response to diagnosis and treatment
palliative care specialists* and nurses	work closely with the GP and oncologist to help control pain and other symptoms and maintain quality of life
family cancer specialist*, genetic counsellor	provide advice about genetic causes of ovarian cancer; arrange genetic test results if required and interpret the results for you and your family
	* Specialist doctor



If you have been diagnosed with ovarian cancer, you may wonder why it wasn't found sooner and why it was never picked up in a screening test. Screening tests look for some types of cancer in people who do not have any symptoms. They are sometimes called early detection tests. At present, there is no effective screening test for ovarian cancer.

The Cervical Screening Test (which has replaced the Pap test) looks for human papillomavirus (HPV), which causes most cases of cervical cancer but not ovarian cancer. Neither the Cervical Screening Test nor the Pap test can help find ovarian cancer.

If you do have symptoms and your doctor suspects you have ovarian cancer, you may have some of the tests and scans described in this chapter. These tests can show if there are any abnormalities that need to be checked by taking a tissue sample (biopsy).

The only way to confirm a cancer diagnosis is to take a biopsy and look at the cells under a microscope. For ovarian cancer, this is usually done during surgery (see page 30), which means that the diagnosis is confirmed and the cancer is treated at the same time.

Sometimes ovarian cancer is diagnosed before it causes symptoms. This is usually when abnormalities are found during tests or procedures for another health condition.

66 I went in to have minor surgery. Afterwards the doctor said, 'I'm sorry, but it looks like ovarian cancer'. It certainly changed my life. 99 Louisa

Pelvic examination

In a pelvic examination, the doctor will check for any masses or lumps by feeling your abdomen. To check your uterus and ovaries, the doctor places two fingers inside your vagina while pressing on your abdomen with their other hand. To examine inside the vagina, they may insert an instrument called a speculum that separates the vaginal walls. A pelvic examination is not painful but it may be uncomfortable. You can ask for a family member, friend or another staff member to be present during the examination if you prefer.

The doctor may also perform a digital rectal examination, placing a gloved finger into the anus and rectum. This lets the doctor feel the tissue behind the uterus where cancer cells may grow.

Blood tests

You may have blood tests to check for proteins produced by cancer cells. These proteins are called tumour markers. The most common tumour marker for ovarian cancer is CA125. The level of CA125 may be higher in some cases of ovarian cancer. It can also rise for reasons other than cancer, including ovulation, menstruation, irritable bowel syndrome, liver or kidney disease, endometriosis or fibroids.

The CA125 blood test is not used for screening for ovarian cancer if you do not have any symptoms. It can be used:

At diagnosis – A CA125 test is more accurate in diagnosing ovarian cancer if you have been through menopause than if you haven't. If you have early-stage ovarian cancer, it is common to have normal

CA125 levels. This is why doctors will often combine CA125 tests with an ultrasound (see below).

During treatment - For ovarian cancer that produces CA125, the blood test may be used to check how well the treatment is working. Falling CA125 levels may mean it is working, and rising CA125 levels may mean the treatment is not working well, but the CA125 level is only one of the signs used to check your response to treatment.

After treatment - CA125 blood tests are sometimes included in follow-up tests. See pages 60–61 for more information.

Further tests

Your doctor may recommend a number of imaging scans and investigations to work out how far the cancer has spread. You may also have chest x-rays to check the lungs for cancer or fluid.

Pelvic ultrasound

A pelvic ultrasound uses echoes from soundwaves to create a picture of your uterus and ovaries on a computer. A technician called a sonographer does the scan. It can be done in two ways:

Abdominal ultrasound - You will lie on an examination table while the sonographer moves a small handheld device called a transducer over your abdominal (belly) area.

Transvaginal ultrasound – The sonographer will insert a small transducer wand into your vagina. It will be covered with a disposable plastic sheath and gel to make it easier to insert. Sometimes this test may be uncomfortable, but it should not be painful. Talk to your doctor and the sonographer if you feel distressed or concerned. You can also ask for someone else to be present.

The transvaginal ultrasound is often the preferred type of ultrasound, as it provides a clearer picture of both the ovaries and uterus.

CT scan

A CT (computerised tomography) scan uses x-ray beams to take pictures of the inside of the body. It is used to look for signs that the cancer has spread, but a CT scan may not be able to detect all ovarian tumours. CT scans are usually done at a hospital or radiology clinic.

You will be asked not to eat or drink for several hours (fast) before the scan. A liquid dye (called a contrast) may be injected into a vein to help make the pictures clearer. The contrast makes your organs appear white on the scan, so anything unusual can be seen more clearly.

The contrast may make you feel hot all over and leave a bitter taste in your mouth, and you may also feel a sudden urge to pass urine. These sensations usually ease quickly, but tell the person carrying out the scan if they don't go away.

The CT scanner is a large, doughnut-shaped machine. You will lie on a table that moves in and out of the scanner. The scan takes about 10-20 minutes, but it may take extra time to prepare and then wait for the scan. While a CT scan can be noisy, it is painless. You usually go home as soon as the CT scan is over.



Before having scans, tell the doctor if you have any allergies or have had a reaction to contrast during previous scans. You should also let them know if you have diabetes or kidney disease, or if you are pregnant or breastfeeding.

PET-CT scan

A PET (positron emission tomography) scan combined with a CT scan is a specialised imaging test. It provides more detailed information about the cancer than a CT scan on its own. Only some people need this test. Medicare covers the cost of PET scans only for ovarian cancer that has returned, so they are not often used for the first diagnosis.

To prepare for a PET-CT scan, you will be asked not to eat or drink for a period of time (fast). Before the scan, you will be injected with a glucose solution containing a small amount of radioactive material. Cancer cells show up brighter on the scan because they take up more glucose than normal cells do.

You will be asked to sit quietly for 30–90 minutes as the glucose spreads through your body, then you will have the scan. The scan itself will take about 30 minutes. Let your doctor know if you are claustrophobic, as you need to be in a confined space for the scan. Any radiation will leave your body within a few hours.

MRI scan

An MRI (magnetic resonance imaging) scan uses a powerful magnet and radio waves to build up detailed, cross-sectional pictures of the

inside of your body. It may be used if it is difficult to tell from the ultrasound whether a tumour is benign or may be malignant.

Let your medical team know if you have a pacemaker, as the magnet can interfere with some pacemakers. As with a CT scan, a dye might be injected into your veins before an MRI scan.

During the scan, you will lie on a bench inside a large metal tube that is open at both ends. The noisy, narrow machine makes some people feel anxious or claustrophobic. If you think you may become distressed, mention it beforehand to your medical team. You may be given a medicine to help you relax, and you will usually be offered headphones or earplugs. The MRI scan may take between 30 and 90 minutes.

Colonoscopy

In some cases, you may need to have a bowel examination (colonoscopy) to check that your symptoms are not caused by a bowel problem. The doctor will insert a thin, flexible tube with a small camera and light (colonoscope) through the anus into the bowel.

Before the test, you will have to change your diet and take prescribed laxatives to clean out your bowel completely (bowel preparation). The process varies for different people and between hospitals. Your doctor will give you specific instructions and talk to you about what to expect. On the day of the test, you will probably be given light sedation, which means you won't be fully unconscious but you won't feel any discomfort and may fall into a light sleep. A colonoscopy usually takes about 20-30 minutes. You will need to have someone take you home afterwards, as you may feel drowsy or weak.

Taking a biopsy

In most cases, a diagnosis of ovarian cancer will be confirmed after surgery to remove the ovary, which is also the main treatment. A sample of the tumour, known as a biopsy, will be checked under a microscope for cancer cells.

If scans show that the cancer has spread too much to be removed by surgery, a biopsy may be taken in a different way before treatment begins. This can be done with a very thin needle during a CT scan. The procedure is known as a fine-needle aspiration when the needle removes a sample of cells from the tumour, or as paracentesis when the needle removes a sample of fluid from the abdomen.

The cells in the sample will then be checked under a microscope to get more information about the cancer.

Staging ovarian cancer

The tests described on pages 17–22 help show whether you have ovarian cancer and whether it has spread to other parts of the body. This process is called staging and it helps your health care team plan the best treatment for you.

In most instances, your doctor will not have enough information to work out the stage of the ovarian cancer until after surgery (see page 36 for more information).

The staging system most commonly used for ovarian cancer is the International Federation of Gynecology and Obstetrics (FIGO) system (see table below). It divides ovarian cancer into four stages. Stages 1–2 mean it is early ovarian cancer. Stages 3–4 mean the cancer is advanced. About 7 out of 10 cases of ovarian cancer are diagnosed at stage 3 or 4.

Stages of ovarian cancer (FIGO system)

The four stages of ovarian cancer in the FIGO system may be further divided into sub-stages, such as A, B, C, which indicate increasing amounts of tumour.

stage 1	Cancer is in one or both ovaries only.
stage 2	Cancer is in one or both ovaries and has spread to other organs in the pelvis (uterus, fallopian tubes, bladder or bowel).
stage 3	Cancer is in one or both ovaries and has spread beyond the pelvis to the lining of the abdomen (peritoneum) or to nearby lymph nodes.
stage 4	The cancer has spread further to distant organs such as the lung or liver.

Grading ovarian cancer

The cancer will also be given a grade based on how the cancer cells look compared to normal cells under a microscope. This suggests how quickly the cancer may grow.

Grade 1 (or low grade) ovarian cancer is likely to grow relatively slowly. Grade 2 (moderate grade) might grow more quickly. Grade 3 (high grade) is likely to grow quickly.

Prognosis

Prognosis means the expected outcome of a disease. You may wish to discuss your prognosis and treatment options with your doctor, but it is not possible for anyone to predict the exact course of the disease in a particular person.

Your doctor will consider many factors in assessing your prognosis. These include test results; the type of ovarian cancer and its stage and grade; genetic factors (see page 13); your response to treatment; and other factors such as your age, fitness and overall health.

Epithelial cancer – If epithelial ovarian cancer is diagnosed and treated before the cancer has spread outside the ovary (stage 1), it has a good prognosis. Many cases of more advanced cancer may respond well to treatment, but the cancer often comes back (recurs) and further treatment is needed.

Germ cell and stromal cell tumours - These can usually be treated successfully, although there may be a small risk the cancer will come back and need further treatment.

Borderline tumour - This can usually be treated successfully with surgery alone.

Discussing your prognosis and thinking about the future can be challenging and stressful. It may help to talk with family and friends. You can also call Cancer Council 13 11 20 if you or your family or friends need more information or emotional support.

Listen to our podcast episode "Coping with a cancer diagnosis".



Key points about diagnosing ovarian cancer

Getting a diagnosis

- There is no effective screening test for ovarian cancer at present.
- Most ovarian cancers are advanced before they are diagnosed.
- If you have symptoms, you may have a range of tests and scans to look for signs of cancer.
- In most cases, the only way to confirm a diagnosis of ovarian cancer is to take a tissue sample (biopsy) during surgery. This surgery is usually also the main treatment for the cancer.

Tests and scans

- The doctor may feel your abdomen and do internal examinations of the vagina and rectum to check for masses or lumps.
- Blood tests will be done to look for tumour markers such as CA125.
- An ultrasound scan uses soundwaves to create a picture of the ovaries.
- A CT scan looks for signs that the cancer has spread. It may not detect all tumours.
- Other tests sometimes used to check for cancer spread include PET-CT and MRI scans, and colonoscopy (to check the bowel).

Staging and prognosis

- Results of the tests and biopsy help your doctors work out whether and how far the cancer has spread. This is called staging.
- The grade describes how similar the cancer cells look to normal cells.
- A prognosis is a disease's expected outcome. Early-stage cancer has a better prognosis.

Making treatment decisions

Sometimes it is difficult to decide on the type of treatment to have. You may feel that everything is happening too fast, or you might be anxious to get started. Check with your specialist how soon treatment should begin, as it may not affect the success of the treatment to wait a short time. Ask them to explain the options, and take what time you can before making a decision.

Know your options – Understanding the disease, the available treatments, possible side effects and any extra costs can help you weigh up the options and make a well-informed decision. Check if the specialist is part of a multidisciplinary team (see page 15) and if the treatment centre is the most appropriate one for you – you may be able to have treatment closer to home, or it might be worth travelling to a centre that specialises in a particular treatment.

Record the details – When your doctor first tells you that you have cancer, you may not remember everything you are told. Taking notes can help or you might like to ask if you can record the discussion. It is a good idea to have a family member or friend go with you to appointments to join in the discussion, write notes or simply listen.

Ask questions - If you are confused or want to check anything, it is important to ask your specialist questions. Try to prepare a list before appointments (see page 67 for suggestions). If you have a lot of questions, you could talk to a cancer care coordinator or nurse.

Consider a second opinion – You may want to get a second opinion from another specialist to confirm or clarify your specialist's recommendations or reassure you that you have explored all of

your options. Specialists are used to people doing this. Your GP or specialist can refer you to another specialist and send your initial results to that person. You can get a second opinion even if you have started treatment or still want to be treated by your first doctor. You might decide you would prefer to be treated by the second specialist.

It's your decision - Adults have the right to accept or refuse any treatment that they are offered. For example, some people with advanced cancer choose treatment that has significant side effects even if it gives only a small benefit for a short period of time. Others decide to focus their treatment on quality of life. You may want to discuss your decision with the treatment team, GP, family and friends.

> See our *Cancer Care and Your Rights* booklet.

Should I join a clinical trial?

Your doctor or nurse may suggest you take part in a clinical trial. Doctors run clinical trials to test new or modified treatments and ways of diagnosing disease to see if they are better than current methods. For example, if you join a randomised trial for a new treatment, you will be chosen at random to receive either the best existing treatment or the modified new treatment. Over the years, trials have improved treatments

and led to better outcomes for people diagnosed with cancer.

You may find it helpful to talk to your specialist, clinical trials nurse or GP, or to get a second opinion. If you decide to take part in a clinical trial, you can withdraw at any time. For more information, visit australiancancertrials.gov.au.

> See our *Understanding Clinical* Trials and Research booklet.



The treatment for ovarian cancer depends on the type of ovarian cancer you have, the stage of the cancer, whether you wish to have children, whether you have a faulty gene (see page 13), your general health and fitness, and your doctors' recommendations.

In most cases, surgery is the main treatment. Surgery for ovarian cancer is complex. It is recommended that you have it performed by a gynaecological oncologist at a hospital that does a lot of these operations (high-volume centre).

Treatment options by type of ovarian cancer	
epithelial – stage 1	 usually treated with surgery alone may be offered chemotherapy after surgery if there is a high risk of the cancer coming back
epithelial – stages 2, 3 and 4	 usually treated with a combination of surgery and chemotherapy new targeted therapy drugs are being offered to people with a BRCA gene fault in some cases, radiation therapy is offered
germ cell	 usually treated with surgery or chemotherapy or both
stromal cell	 usually treated with surgery, sometimes followed by chemotherapy or targeted therapy
borderline tumour	usually treated with surgery only

Other treatment options

Some women with ovarian cancer may feel that they are not given as many options for treatment as there are for other types of cancer. This is because there are only a few treatment plans for ovarian cancer that have been proven to be effective. Research is continuing into ovarian cancer treatments and, in some cases, you may be able to join a clinical trial (see page 27) to access new treatments.

Surgery

Surgery for ovarian cancer allows your gynaecological oncologist to confirm the diagnosis of ovarian cancer and work out how far the cancer has spread. They will also remove as much of the cancer as possible. This may involve several procedures during the operation.

Your gynaecological oncologist will talk to you about the most suitable type of surgery, as well as the risks and side effects. These may include infertility. If having children is important to you, talk to your doctor before surgery and ask for a referral to a fertility specialist (see page 48).

How the surgery is done

You will be given a general anaesthetic and will have either a laparoscopy (with 3–4 small cuts in your abdomen) or a laparotomy (with a vertical cut from around your bellybutton to your bikini line). The type of surgery you have will depend on how certain the gynaecological oncologist is that cancer is present and how far they think the cancer has spread. A laparoscopy may be used to see if a suspicious mass is cancerous; if the cancer is advanced, you will usually have a laparotomy.

Taking a biopsy

The gynaecological oncologist will look inside your pelvis and abdomen for signs of cancer, and take tissue and fluid samples (biopsy). During the operation, the samples may be sent to a specialist called a pathologist, who checks them right away for signs of cancer. This is called a frozen section analysis or biopsy.

Debulking

If cancer is present, the operation will continue and as much cancer as possible will be removed. This is called debulking. The surgeon usually has to remove the ovaries, fallopian tubes, uterus and cervix (see opposite). Depending on how far the cancer has spread, other organs or tissue may also be removed during the same operation:

Omentectomy – The omentum is a sheet of fatty tissue that hangs down in front of the intestines like an apron. If the cancer has spread to the omentum, it will need to be removed.

Lymphadenectomy – Cancer cells can spread from your ovaries to nearby lymph nodes. Your doctor may suggest removing some in a lymphadenectomy (also called lymph node dissection).

Colectomy – If cancer has spread to the bowel, some of the bowel may need to be removed. A new opening called a stoma might be created (colostomy or ileostomy). See page 53 for more details.

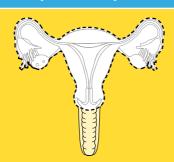
Removal of other organs – Ovarian cancer can spread to many organs in the abdomen. In some cases, parts of the liver, diaphragm, bladder and spleen may be removed if it is safe to do so.

Types of surgery

If ovarian cancer is found, all or some of the reproductive organs will be removed.



Total hysterectomy and bilateral salpingo-oophorectomy



In most cases, surgery for ovarian cancer means removing the uterus and cervix, along with both fallopian tubes and ovaries.

Unilateral salpingo-oophorectomy



If cancer is found early and it is in one ovary, some young women who still wish to have children may have only one ovary and fallopian tube removed.

Further treatment

It may not be possible to remove all the cancerous tissue during the operation, but surgery for ovarian cancer is often followed by other treatments to shrink or destroy any remaining cancer cells (see pages 36-44).

What to expect after surgery

When you wake up from surgery, you will be in a recovery room near the operating theatre. Once you are fully conscious, you will be taken back to your bed on the hospital ward. The surgeon will visit you as soon as possible to explain the results of the operation.

Tubes and drips – You are likely to have several tubes in place, which will be removed as you recover:

- a drip inserted into a vein in your arm (intravenous drip) will give you fluid, medicines and pain relief
- a small plastic tube (catheter) may be inserted into your bladder to collect urine in a bag
- a tube may be inserted down your nose into your stomach (nasogastric tube) to drain stomach fluid and prevent vomiting
- tubes may be inserted in your abdomen to drain fluid from the site of the operation.

Pain - After an operation, it is common to feel some pain, but this can be controlled. For the first day or two, you may be given pain medicine through:

- a drip into a vein (intravenous drip)
- a local anaesthetic injection into the abdomen (a transverse abdominis plane or TAP block) or into the spine (an epidural)
- a patient-controlled analgesia (PCA) system you press a button to give yourself a measured dose of pain relief.

Let your doctor or nurse know if you are in pain so they can adjust the medicine. Managing your pain will help you to recover and move around more quickly.

■ I felt great relief after the surgery, as once the tumour had been removed, the pain that I had in my lower abdomen and hip was gone. ■ Ann

Injections – It is common to have daily injections of a blood thinner to reduce the risk of blood clots. These injections may continue for some time after the operation and while you're having chemotherapy. A nurse will show you how to give this injection to yourself before you leave hospital.

Compression devices and stockings – You will need to use compression devices or wear elastic stockings to keep the blood in your legs circulating. Once you are able to move around, compression devices will be removed so you can get out of bed, but you may still wear the stockings for a couple of weeks.

Wound care – You can expect some light vaginal bleeding after the surgery, which should stop within two weeks. Your doctor will talk to you about how to keep the wound clean once you go home to prevent it becoming infected.

If you had part of the bowel removed and have a stoma (see page 53), a stomal therapy nurse will explain how to manage it.

Length of stay – You will probably stay in hospital for several days after a big operation. Your hospital stay will usually be shorter after a laparoscopy or smaller operation.

> See our *Understanding Surgery* booklet.

Taking care of yourself at home after surgery

Your recovery time will depend on the type of surgery you had, your general health, and your support at home. If you don't have support from family, friends or neighbours, ask a social worker if it's possible to get help at home. In most cases, you will be able to fully return to your usual activities after 4-8 weeks.

Rest

Take things easy and do only what is comfortable. You may like to try meditation or some relaxation techniques to reduce anxiety or tension.



Work

Depending on the nature of your work, you will probably need several weeks off work.



Lifting

Avoid heavy lifting or heavy work (e.g. gardening) for at least four weeks. Use a clothes horse or dryer until it's comfortable to hang out your washing on a line.





Driving

You will most likely need to avoid driving for a few weeks after the surgery. Check with your car insurer for any conditions regarding major surgery and driving.

Bowel problems

You may have constipation after the surgery and when you are taking strong painkillers. It is important to avoid straining when passing a bowel motion, so your doctor may advise you to take laxatives and drink plenty of fluids.



Nutrition

To help your body recover from surgery, focus on eating a balanced diet (including proteins such as lean meats and poultry, fish, eggs, milk, yoghurt, nuts, seeds and legumes/beans).



Sex

Sexual intercourse should be avoided for about six weeks after the operation to give your wounds time to heal. Ask your doctor when you can have sexual intercourse again, and explore other ways you and your partner can be intimate, such as massage.



Your health care team will probably encourage you to start walking the day after the surgery. Exercise may help manage some side effects and speed up a return to usual activities. Start with a short walk and go a little further each day. Because of the risk of infection, avoid swimming for 4–6 weeks after surgery.



Will I need further treatment after surgery?

All tissue and fluids removed during surgery are checked for cancer cells by a pathologist. The results will help confirm the type of ovarian cancer you have, if it has spread (metastasised), and its stage.

Your doctor should have all the test results within two weeks of surgery.

Further treatment will depend on the type of ovarian cancer, the stage of the disease and the amount of any remaining cancer. If the cancer is advanced, it's more likely to come back, so surgery will usually be followed by chemotherapy, and occasionally by targeted therapy. Radiation therapy is recommended only in particular cases.

Chemotherapy

Chemotherapy is the treatment of cancer with anti-cancer (cytotoxic) drugs. The aim is to destroy cancer cells while causing the least possible damage to normal, healthy cells. Chemotherapy may be used at different times.

After surgery - Chemotherapy is usually given 2-4 weeks after the surgery (adjuvant chemotherapy) as there may be some cancer cells still in the body. For ovarian cancer, the drugs are usually given in repeating cycles spread over 4–5 months, but this can vary depending on the stage of the cancer and your general health. Your treatment team will provide details about your specific schedule.

Before surgery – For stage 3 or 4 ovarian cancer, chemotherapy is sometimes given before surgery (neoadjuvant chemotherapy). The aim is to shrink the tumours to make them easier to remove. This usually involves three cycles of chemotherapy, followed by surgery, and then another three cycles.

Primary treatment - Chemotherapy may be recommended as the main treatment if you are not well enough for a major operation or when the cancer cannot be surgically removed.

Having chemotherapy

Chemotherapy is usually given as a combination of two or more drugs, or sometimes as a single drug. Let your oncologist know if you are taking nutritional or herbal supplements as these can interact with chemotherapy and may lessen the effect.

In most cases, the drugs are delivered into a vein (intravenous drip). To reduce the need for repeated needles, you may receive chemotherapy through a small medical appliance or tube inserted beneath your skin. This may be called a port-a-cath or a peripherally inserted central catheter (PICC), or it may have another name.

You will usually have chemotherapy as an outpatient (also called a day patient), but some people need to stay in hospital overnight.

> See our *Understanding Chemotherapy* booklet.

Each chemotherapy treatment is called a cycle and is followed by a rest period to give your body time to recover. Ask your doctor about the treatment plan recommended for you.

Intraperitoneal chemotherapy

Occasionally, chemotherapy is given directly into the abdominal cavity - the space between the organs in the abdomen and the walls of the abdomen. This is known as intraperitoneal chemotherapy.

In this method, the drugs are delivered through a tube (catheter) that is put in place during surgery and removed once the course of chemotherapy is over.

Intraperitoneal chemotherapy is used only in specialised units in Australia. It may be offered for stage 3 disease with less than 1 cm of tumour remaining after surgery. Some studies have shown it may be more effective than giving chemotherapy through an intravenous drip.

Ask your medical oncologist for more information about this type of chemotherapy and the benefits and risks

Blood tests during chemotherapy

Before each chemotherapy session, you will have blood tests to ensure your body's healthy cells have had time to recover. If your blood count has not recovered, your doctor may delay treatment.

In some cases, you may also have blood tests during treatment to check your tumour markers, such as CA125 (see pages 17-18). If the CA125 level was high before chemotherapy, it can be monitored to see if the treatment is working.

Side effects of chemotherapy

Chemotherapy can affect healthy cells in the body, which may cause side effects. Not everyone will have side effects, and they will vary

according to the drugs you are given. Your treatment team will talk to you about what to expect and how to manage any side effects (see also *Managing side effects* on pages 47–56).

Fatigue – Your red blood cell level may drop (anaemia), which can cause you to feel tired and short of breath. Fatigue is very common during and after cancer treatment, and can also be caused by many other factors.

> See our Fatigue and Cancer fact sheet.

Nausea and vomiting – Some types of chemotherapy drugs may make you feel sick (nauseous) or vomit. You will generally be given anti-nausea medicines with each chemotherapy session to help prevent or reduce nausea and vomiting. Whether or not you feel sick is not a sign of how well the treatment is working.

Changed bowel habits – Some chemotherapy drugs, pain medicines and anti-nausea drugs can cause constipation or diarrhoea. Tell your doctor or nurse if your bowel habits have changed. If you are constipated, they may recommend taking laxatives.

Joint and muscle pain – This may occur after your treatment session. It may feel like you have the flu, but the symptoms should disappear within a few days. Ask your doctor if taking a mild painkiller such as paracetamol may help.

Risk of infections - Chemotherapy reduces your white blood cell level, making it harder for your body to fight infections. Colds and flu may be easier to catch and harder to shake off, and scratches or cuts may get infected more easily. You may also be more likely to catch a serious infection and need to be admitted to hospital. Contact your doctor or go to the nearest hospital immediately if you have one or more symptoms of an infection, such as:

- a temperature of 38°C or above
- chills or shivering
- burning or stinging feeling when urinating
- a severe cough or sore throat
- severe abdominal pain, constipation or diarrhoea
- any sudden decline in your health.

Hair loss – Depending on the chemotherapy drug you receive, you will probably lose your head and body hair. The hair will grow back after treatment is completed, but the colour and texture may change for a while. If you choose to wear a wig until your hair grows back, you can call Cancer Council 13 11 20 to ask about wig services in your area. If you have private health insurance, check whether your provider offers a rebate if you buy a wig because of hair loss related to chemotherapy.

> See our *Hair Loss* fact sheet.

Numbness or tingling in your hands and feet - This is known as peripheral neuropathy, and it can be a side effect of certain chemotherapy drugs. Let your doctor know if this happens, as your dose of chemotherapy may need to be adjusted.

> See our *Understanding Peripheral Neuropathy* fact sheet.



Emma's story

Although I had a long history of gynaecological problems, my diagnosis of ovarian cancer at age 36 was a complete surprise.

During an emergency operation to fix a twisted ovary, the doctors took a biopsy from an ovarian cyst. Five days later, I got a call to say I had ovarian cancer.

I had surgery to remove my remaining ovary, along with the uterus and some lymph nodes. Luckily the cancer was found early and it hadn't spread outside the ovary.

As they found a clustering of cells in my abdomen during the surgery, the medical oncologist recommended I have a course of chemotherapy to help prevent the cancer coming back.

Even though I was young and fit, I found the chemotherapy very difficult. I had treatment weekly for 16 weeks and had a lot of side effects, including fatigue, nausea, diarrhoea and constipation, numbness in the hands and feet, and hair loss.

I also had a bad reaction to the first drug, which meant I had to take medicines before each infusion to try to prevent this.

Although some people bounce right back, once treatment was over I questioned my values and reasons for being here. Attending support groups and seeing an oncology psychologist really helped me come to grips with the experience of having had ovarian cancer, and my emotions are now in a much better place.

My body also needed time to recover after treatment.

Although I'm still dealing with lymphoedema and fatigue, I'm happy to be getting back to work and my usual activities.

I now realise how important it is to build a relationship with my health care professionals and to actively look after my health.

Targeted therapy

Targeted therapy drugs can get inside cancer cells and block specific particles (molecules) that tell the cancer cells to grow. These drugs are used to treat some types of ovarian cancer. They may also be used in certain situations (e.g. if chemotherapy has not been successful). Genetic testing (see page 13) will help show if you have a particular faulty gene that may respond to targeted therapy drugs.

Bevacizumab is a targeted therapy drug sometimes used to treat advanced epithelial tumours. It is given with chemotherapy every three weeks as a drip into a vein (intravenous infusion).

Olaparib is a targeted therapy drug occasionally used for ovarian cancer. You may be offered this if you have a high-grade epithelial ovarian cancer that has come back after initial treatment and has a BRCA1 or BRCA2 gene mutation. This drug is usually given after chemotherapy to help stop the cancer growing. It is taken as a tablet twice a day for as long as it appears to be helping control the cancer. This is known as maintenance treatment.

Other targeted therapy drugs may be available on clinical trials (see page 27). Talk with your doctor about the latest developments and whether you are a suitable candidate.

Side effects of targeted therapy

Although targeted therapy minimises harm to healthy cells, it can still have side effects. It is important to discuss any side effects with your doctor right away. If left untreated, some can become life-threatening. Your doctor will monitor you throughout treatment.

The most common side effects of bevacizumab include bleeding, wound-healing problems, high blood pressure and kidney problems. In very rare cases, small tears (perforations) may develop in the bowel wall.

The most common side effects of olaparib include nausea, fatigue, vomiting and low blood cell counts. More serious side effects include bone marrow or lung problems.

> See our *Understanding Targeted Therapy* fact sheet.

Immunotherapy for ovarian cancer

Immunotherapy is a type of drug treatment that uses the body's own immune system to fight cancer. In Australia, immunotherapy drugs are currently available as treatment options for some types of cancer, such as melanoma and lung cancer. At present, immunotherapy has not been

proven to be an effective treatment for ovarian cancer.

International clinical trials are continuing to test immunotherapy drugs for ovarian cancer. You can ask your treatment team for the latest updates.

> See our *Understanding*Immunotherapy fact sheet.

Radiation therapy

Also known as radiotherapy, radiation therapy uses a controlled dose of radiation to kill cancer cells or damage them so they cannot grow, multiply or spread. The radiation is usually in the form of x-ray beams.

Radiation therapy is occasionally used to treat ovarian cancer that has spread to the pelvis or to other parts of the body. It may be used after chemotherapy or surgery, or on its own as a palliative treatment.

Before treatment starts, the radiation oncology team will explain the treatment schedule and the possible side effects.

For each radiation therapy session, you will lie on a treatment table under a machine that delivers radiation to the affected parts of the body. You will not feel anything during the treatment, which will take only a few minutes each time. You may be in the room for a total of 10–20 minutes for each appointment.

The number of radiation therapy sessions you have will depend on the type and size of the cancer. You may have a few treatments or daily treatment for a number of weeks.

Side effects of radiation therapy

The side effects of radiation therapy vary. Most are temporary and disappear a few weeks or months after treatment. Radiation therapy for ovarian cancer is usually given over the abdominal area, which can irritate the bowel and bladder. It can also cause infertility (see page 48).

Common side effects include feeling tired, diarrhoea, needing to pass urine more often and a burning feeling when passing urine (cystitis), and a slight reddening of the skin around the treatment site. More rarely, you may have some nausea or vomiting. If this occurs, you will be prescribed medicine to control it.

> See our *Understanding Radiation Therapy* booklet.

Palliative treatment

Palliative treatment helps to improve people's quality of life by managing the symptoms of cancer without trying to cure the disease. It is best thought of as supportive care.

Many people think that palliative treatment is only for people at the end of their life, but it can help people at any stage of advanced ovarian cancer, even if they are still having active treatment of the cancer. It is about living for as long as possible in the most satisfying way you can.

As well as slowing the spread of cancer, palliative treatment can relieve pain and help manage other symptoms. Treatment may include chemotherapy and radiation therapy. If you have swelling and are uncomfortable, you may have a procedure called paracentesis or ascitic tap to drain the extra fluid from your abdomen (see page 54).

Palliative treatment is one aspect of palliative care, in which a team of health professionals aims to meet your physical, emotional, cultural, social and spiritual needs. The team also provides support to families and carers.

> See our *Understanding Palliative Care* and *Living with Advanced*Cancer booklets.



Key points about treating ovarian cancer

Treatment options

 Your treatment will depend on many factors, including the type of ovarian cancer, its stage, whether you wish to have children, whether you have a faulty gene, and your overall health and fitness.

Surgery

- Ovarian cancer is usually treated with surgery. In most cases, this involves a total hysterectomy (removal of the uterus and cervix), as well as the removal of both fallopian tubes and both ovaries. Other nearby tissue may also be removed. All removed tissue will be checked for cancer cells.
- It will take several weeks to recover from the operation. You may need other treatments after surgery.

Other treatments

- Chemotherapy is usually given soon after the surgery for 4-5 months (adjuvant therapy). In some cases of advanced ovarian cancer. it may be given before surgery (neoadjuvant therapy). Side effects may include tiredness, nausea and vomiting, and hair loss.
- Sometimes targeted therapy drugs are used to help stop the cancer growing. You may need a genetic test to see if you are likely to respond to these drugs.
- Radiation therapy is offered in some cases. This uses radiation to damage cancer cells.
- Palliative treatment aims to improve your quality of life by relieving the symptoms of cancer.

Managing side effects

Treatment can cause physical and emotional changes. Some people experience many side effects, while others have few. Most side effects are temporary, but some may be permanent. It is important to tell your treatment team about any new or ongoing side effects you have, as they will often be able to help you manage them. This chapter also offers tips for coping with some common side effects.

Fatique

It is common to feel very tired and lack energy during or after treatment. Fatigue for people with cancer is different from tiredness as it doesn't always go away with rest or sleep. Most people who have chemotherapy start treatment before they have had time to fully recover from their operation. Fatigue may continue for a while after chemotherapy has finished, but it is likely to gradually improve over time. In some cases, it may take a year or two to feel well again.

> See our fact sheet and listen to our podcast episode on fatigue.



Tips for managing fatigue

- Plan your day. Set small, manageable goals and rest before you get too tired.
- Ask for and accept offers of help with tasks such as cleaning and shopping.
- Eat nutritious food to keep your energy levels up.

- Regular light exercise has been shown to reduce fatigue. Even a walk around the block can help.
- Talk to your doctor about what type of exercise would be suitable for you or ask for a referral to a physiotherapist or exercise physiologist.

Infertility

In most cases, surgery or radiation therapy for ovarian cancer will mean you are unable to conceive children. Before cancer treatment starts, ask your doctor or fertility specialist to explain the options available to you. If you have stage 1 ovarian cancer and have not yet reached menopause, you may be able to have surgery that leaves the uterus and one ovary in place (unilateral salpingo-oophorectomy, see page 31). You will need to avoid pregnancy while on chemotherapy.

Many women experience a sense of loss when told that their reproductive organs will be removed or will no longer function. You may feel extremely upset if you cannot have children, and may worry about the impact of this on your relationship or future relationships. Even if your family is complete or you were not planning to have children, you may feel a sense of loss and grief.

If you have a partner, you may find it helpful to talk to them about your feelings. Speaking to a counsellor or gynaecological oncology nurse may also help.

> See our *Fertility and Cancer* booklet.

Menopause

If you were still having periods (menstruating) before surgery, having your ovaries removed will mean you no longer produce the hormones oestrogen and progesterone, and you will stop menstruating. This is called menopause. When menopause occurs naturally, it is a gradual process that starts between the ages of 45 and 55, but menopause after surgery is sudden.

Symptoms of menopause can include hot flushes, dry or itchy skin, mood swings, trouble sleeping (insomnia), tiredness and vaginal dryness. These symptoms are usually more intense after surgery than during a natural menopause, because the body hasn't had time to get used to the gradual decrease in hormone levels.



Tips for managing the symptoms of menopause

- Vaginal moisturisers available over the counter from chemists can help with vaginal discomfort and dryness.
- Talk to your doctor about the benefits and risks of menopause hormone therapy (MHT), previously called hormone replacement therapy (HRT). If taken after natural menopause, MHT containing oestrogen may increase the risk of some diseases. If you were on MHT when cancer was diagnosed, you'll need to consider whether to continue.
- Menopause can increase your risk of developing thinning of the bones (osteoporosis). Talk to your doctor about having a bone density test or taking medicines to prevent

- your bones becoming weak. Regular exercise will help keep your bones strong. For more information, call Osteoporosis Australia on 1800 242 141 or visit osteoporosis.org.au.
- Cholesterol levels can change after menopause, and this can increase your risk of heart disease. Regular exercise and a balanced diet may help improve cholesterol levels. If not, talk to your doctor about cholesterol-lowering drugs.
- Meditation and relaxation techniques may help reduce stress and lessen symptoms.
- Talk to your doctor or call Cancer Council 13 11 20 for more ways to relieve the symptoms of menopause.

Impact on sexuality and intimacy

Ovarian cancer can affect your sexuality in physical and emotional ways. The impact of these changes depends on many factors, such as treatment and side effects, your self-confidence, and whether you have a partner.

It is important to feel that your sexuality is respected when discussing how cancer treatment will affect you. Whatever your sexual orientation, your medical team should be able to openly discuss your needs and support you through treatment. Try to find a doctor who helps you feel at ease talking about sexual issues and relationships.

Treatment can cause physical side effects such as vaginal dryness, scarring and internal scar tissue (pelvic adhesions, see page 54). These side effects can make sexual penetration painful, and you may have to explore different ways to climax (orgasm). The experience of having cancer can also reduce your desire for sex (libido).

For most people, sex is more than arousal, intercourse and orgasms. It involves feelings of intimacy and acceptance, as well as being able to give and receive love. Although sexual intercourse may not always be possible, closeness and sharing can still be part of your relationship.

Changes to your body can affect the way you feel about yourself (your self-esteem) and make you feel self-conscious. You may feel less confident about who you are and what you can do. Give yourself time to adapt to any changes. Try to see yourself as a whole person (body, mind and personality) instead of focusing on the parts that have changed.

> See our Sexuality, Intimacy and Cancer booklet and listen to our "Sex and Cancer" podcast episode.



Tips for managing sexual changes

- Give vourself time to get used to any physical changes after cancer treatment.
- Show affection by touching. hugging, massaging, talking and holding hands.
- Let your partner know if you don't feel like having sex, or if you find penetration uncomfortable.
- Talk to your doctor about ways to manage side effects that change your sex life. These may include using vaginal dilators, lubricants and moisturisers.
- If you find that vaginal dryness is a problem, take more time before and during sex to help the vagina relax and become more lubricated.
- Extra lubrication may make intercourse more comfortable. Choose a water-based or silicone-based gel without perfumes or colouring.
- Spend more time on foreplay and try different ways to become aroused.

- Try different positions during sex to work out which position is the most comfortable for you.
- If you can't enjoy penetrative sex, explore other ways to climax, such as oral and manual stimulation.
- Talk about your feelings with your sexual partner or doctor, or ask your treatment team for a referral to a sexual therapist or psychologist.
- Do some regular physical activity to boost your energy and mood. Talk to your GP about managing any depression as it may be affecting your libido.
- For ideas about how to discuss sexuality questions with your treatment team. visit Cancer Australia at canceraustralia.gov.au and search for their online resource Intimacv and sexuality for women with gynaecological cancer starting a conversation.

Bowel changes

After surgery or during chemotherapy or radiation therapy, some people notice problems with how their bowel works. You may experience diarrhoea, constipation or stomach cramps. Pain relief medicines may also make you feel constipated. Diarrhoea and constipation can occur for some time, but are usually temporary. Sometimes tissues in the pelvis stick together after surgery (pelvic adhesions). This can lead to ongoing bowel problems and pain and in rare cases may need further surgery. To help manage bowel changes, ask your doctor, nurse or dietitian for advice about eating and drinking, and see the tips below.

> See our Nutrition and Cancer booklet.



Tips for managing bowel changes

- Drink plenty of liquids to replace fluids lost through diarrhoea or to help soften faeces (poo) if you are constipated. Avoid alcohol, caffeinated drinks and very hot or very cold liquids.
- Avoid fried, spicy or greasy foods, which can cause pain and make diarrhoea and constipation worse.
- Ask your pharmacist or doctor about suitable medicines to relieve symptoms of diarrhoea or constipation.

- Eat small, frequent meals instead of three big ones.
- Drink peppermint or chamomile tea to reduce stomach or wind pain.
- If you have diarrhoea, rest as much as possible - diarrhoea can make you very tired.
- If you are constipated, do some gentle exercise, such as walking.

Treating a blockage in the bowel

Surgery for ovarian cancer sometimes causes the bowel to become blocked. This is called a bowel obstruction. A bowel obstruction can also occur if the cancer comes back. Because faeces (poo) cannot pass through the bowel easily, symptoms may include feeling sick, vomiting, or a swollen and painful stomach.

A bowel obstruction can sometimes be treated by resting the bowel, which means you have nothing to eat or drink until the blockage clears. Your doctor may also try giving you an anti-inflammatory medicine to reduce the swelling around the obstruction.

Some bowel obstructions require a surgical procedure. If only one area is blocked, you may have a small tube (stent) put in to help keep the bowel open and relieve symptoms. The stent is inserted through the rectum using a flexible tube called an endoscope.

If the bowel is blocked in more than one spot, you may have surgery to create a stoma, an opening in the abdomen that allows faeces to leave the body. A stoma may be a colostomy (made from the colon, part of the large bowel) or an ileostomy (made from the ileum, part of the small bowel). A small bag called a stoma bag or appliance is worn on the outside of the body to collect the waste. A stomal therapy nurse will show you how to look after the stoma. The stoma may be reversed when the blockage is cleared, or it may be permanent.

To find out more, call Cancer Council 13 11 20 or visit the Australian Association of Stomal Therapy Nurses at stomaltherapy.com or the Australian Council of Stoma Associations at australianstoma.com.au.



Tissues in the pelvis may stick together after a hysterectomy. This is called a pelvic adhesion, and it can be painful or cause other problems such as constipation. Rarely, adhesions to the bowel or bladder may need to be treated with further surgery.

Fluid build-up

Sometimes ovarian cancer can cause fluid to build up in different parts of the body.

Ascites - This is when fluid collects in the abdomen. It causes swelling and pressure, which can be uncomfortable and make you feel breathless. If you have ascites, your doctor may inject a local anaesthetic into the abdomen and then insert a needle to take a sample of the fluid. This is called a paracentesis or ascitic tap. The fluid sample is sent to a laboratory to be examined under a microscope for cancer cells.

Sometimes, to make you feel more comfortable, the doctor will remove the remaining fluid from your abdomen. It will take a few hours for all the fluid to drain into a drainage bag.

Pleural effusion – This is when fluid builds up in the area between the lung and the chest wall (pleural space). It can cause pain and breathlessness. The fluid can be drained using a procedure called a thoracentesis or pleural tap. Your doctor will inject a local anaesthetic into the chest area, and then insert a needle into the pleural space to drain the fluid.

Lymphoedema

Some people who have lymph nodes removed from the pelvis (a lymphadenectomy, see page 30) may find that one or both legs become swollen. This is known as lymphoedema. It can happen if lymph fluid doesn't circulate properly and builds up in the legs. Radiation therapy in the pelvic area may also cause lymphoedema.

Lymphoedema can make movement and some types of activities difficult. The swelling may appear at the time of treatment or months or years later. It is important to seek help with lymphoedema symptoms as soon as possible because early diagnosis and treatment lead to better outcomes.

Though lymphoedema may be permanent, it can usually be managed. Gentle exercise, compression stockings and a type of massage called manual lymphatic drainage can all help to reduce the swelling.

To find a practitioner who specialises in managing lymphoedema, you can visit the Australasian Lymphology Association website at lymphoedema.org.au. If your GP refers you to a lymphoedema practitioner, you may be eligible for a Medicare rebate. Talk to your GP about developing a Chronic Disease Management Plan or Team Care Arrangement to help you manage the condition.

> See our *Understanding Lymphoedema* fact sheet.



Key points about managing side effects

What to expect after treatment

- Cancer treatment can cause a range of side effects, but there are often ways to reduce or manage them.
- The most common side effect is fatigue. This may continue for a while after treatment has finished. It may help to plan your activities so you can take regular rest breaks.

Infertility, menopause and sexuality

- If you are unable to have children (infertility) as a result of treatment for ovarian cancer. you may feel very upset. Talking with your family, friends or a counsellor may be helpful.
- If your ovaries have been removed, you will go through menopause. This means that your periods will stop and it will no longer be possible to become pregnant. You may also have other symptoms of menopause.
- Treatment for ovarian cancer can have an impact on sexuality and self-esteem. There are things you can do to manage these changes.

Other side effects

- Bowel changes such as diarrhoea, cramps or constipation are common. Less often, the bowel might become blocked.
- If fluid builds up in your abdomen (ascites) or in your lungs or chest wall (pleural effusion), your medical team may need to drain it.
- If fluid builds up in the legs (lymphoedema), a lymphoedema practitioner can help you manage it with gentle exercise, compression stockings and massage.

Looking after yourself

Cancer can cause physical and emotional strain, so it's important to look after your wellbeing. Cancer Council has free booklets and programs to help you during and after treatment. Call 13 11 20 to find out more, or visit your local Cancer Council website (see back cover).

Eating well – Healthy food can help you cope with treatment and side effects. A dietitian can explain how to manage any special dietary needs or eating problems and choose the best foods for your situation.

> See our *Nutrition and Cancer* booklet.

Staying active - Physical activity can reduce tiredness, improve circulation and lift mood. The right exercise for you depends on what you are used to, how you feel, and your doctor's advice.

> See our *Exercise for People Living with Cancer* booklet.

Complementary therapies – Complementary therapies are designed to be used alongside conventional medical treatments. Therapies such as massage, relaxation and acupuncture can increase your sense of control, decrease stress and anxiety, and improve your mood. Let your doctor know about any therapies you are using or thinking about trying, as some may not be safe or evidence-based.

> See our *Understanding Complementary Therapies* booklet.



Alternative therapies are therapies used instead of conventional medical treatments. These are unlikely to be scientifically tested and may prevent successful treatment of the cancer. Cancer Council does not recommend the use of alternative therapies as a cancer treatment. Work and money - Cancer can change your financial situation, especially if you have extra medical expenses or need to stop working. Getting professional financial advice and talking to your employer can give you peace of mind. You can also check with a social worker or Cancer Council whether any financial assistance is available to you.

See our Cancer and Your Finances and Cancer. Work & You booklets.

Relationships – Having cancer can affect your relationships with family, friends and colleagues in different ways. Cancer is stressful, tiring and upsetting, and this may strain relationships. It may also result in positive changes to your values, priorities or outlook on life. Give yourself time to adjust to what's happening, and do the same for those around you. It may help to discuss your feelings with each other.

> See our *Emotions and Cancer* booklet.

• I am glad my doctor helped me work through the emotions of what was my top priority. I finally felt that overcoming cancer and getting on with my life were most important and everything else came after that. 99 Thuy



For most people, the cancer experience doesn't end on the last day of treatment. Life after cancer treatment can present its own challenges. You may have mixed feelings when treatment ends, and worry that every ache and pain means the cancer is coming back.

Some people say that they feel pressure to return to "normal life". It is important to allow yourself time to adjust to the physical and emotional changes, and establish a new daily routine at your own pace. Your family and friends may also need time to adjust.

Cancer Council 13 11 20 can help you connect with other people who have had cancer, and provide you with information about the emotional and practical aspects of living well after cancer.

> See our *Living Well After Cancer* booklet.

Dealing with feelings of sadness

If you have continued feelings of sadness, have trouble getting up in the morning or have lost motivation to do things that previously gave you pleasure, you may be experiencing depression. This is quite common among people who have had cancer.

Talk to your GP, as counselling or medication - even for a short time - may help. Some people

can get a Medicare rebate for sessions with a psychologist. Ask your doctor if you are eligible. Cancer Council may also run a counselling program in your area.

For information about coping with depression and anxiety, call Beyond Blue on 1300 22 4636 or visit beyondblue.org.au. For 24-hour crisis support, call Lifeline 13 11 14 or visit lifeline.org.au.

Follow-up appointments

After treatment ends, you will have regular appointments to monitor your health, manage any long-term side effects and look for any signs that the cancer has come back or spread. These are known as follow-up appointments.

In most cases, your follow-up appointments will be with your gynaecological oncologist or medical oncologist, who may do a physical examination and arrange blood tests or scans such as ultrasounds and CT scans. You will also be able to discuss how vou are feeling and mention any concerns you may have.

There is no set follow-up schedule for ovarian cancer, but people commonly see their specialist every three months for the first two years, and every four to six months for the next two years. Some people prefer not to follow a schedule but to see their specialist if they experience symptoms. Check with your doctor if you are unsure of your follow-up plan.

Your check-ups will become less frequent if you have no further problems. Between follow-up appointments, let your doctor know immediately of any symptoms or health problems.



When a follow-up appointment or test is approaching, you may find that you think more about the cancer and feel anxious. Talk to your treatment team or call Cancer Council 13 11 20 if you are finding it hard to manage this anxiety.

Having CA125 blood tests

Your specialist will also talk to you about the advantages and disadvantages of having regular CA125 blood tests. This test is optional; research has found that waiting until new symptoms develop before starting treatment is just as effective as starting treatment earlier. This means that your quality of life is better for longer because side effects of further treatment are delayed.

What if ovarian cancer returns?

If ovarian cancer is advanced at diagnosis, it often does come back after treatment and a period of improvement (remission). This is known as a recurrence and it is why regular follow-up appointments are important. In many cases, there may be a number of recurrences, with long intervals in between recurrences when cancer treatment is not needed. Early-stage ovarian cancer is less likely to come back than advanced ovarian cancer.

The most common treatment for epithelial ovarian cancer that has come back is more chemotherapy or targeted therapy. The drugs used will depend on what drugs you had initially, the length of remission and the aim of the treatment. The drugs used the first time may be given again if you had a good response to them and the cancer stayed away for six months or more.

New drugs are constantly being developed. Genetic tests and targeted therapy are offering new treatment options for people with ovarian cancer. Talk with your doctor about the latest developments and whether a clinical trial (see page 27) may be right for you.

Living with uncertainty

One of the challenges of an ovarian cancer diagnosis is dealing with uncertainty. When first diagnosed, many people want to know what's going to happen and when it will be over. But living with uncertainty is part of having cancer, especially if the cancer is advanced.

There are some questions you will not be able to answer. Learning as much as you can about the cancer may make you feel more in control.



Tips for dealing with uncertainty

- Talk with other people who have had ovarian cancer. You may find it reassuring to hear about their experiences. See page 64 for information about support groups.
- Keep a diary to track how you're feeling.
- Explore different ways to relax, such as meditation or yoga.
- Talk to a psychologist or counsellor about how you are feeling - they may be able to teach you some strategies to help you manage your fears.
- Practise letting your thoughts come and go without getting caught up in them.

- Try to exercise regularly. Exercise has been shown to help people cope with the side effects of treatment.
- Focus on making healthy choices in areas of your life that you can control, such as eating well and getting regular exercise.
- Set yourself some goals as you achieve each one, set some new goals.
- Listen to our "Managing Fear" and "Living Well with Advanced Cancer" podcast episodes.

Seeking support

A cancer diagnosis can affect every aspect of your life. You will probably experience a range of emotions - fear, sadness, anxiety, anger and frustration are all common reactions. Cancer also often creates practical and financial issues.

There are many sources of support and information to help you, your family and carers navigate all stages of the cancer experience, including:

- information about cancer and its treatment
- access to benefits and programs to ease the financial impact of cancer treatment
- home care services, such as Meals on Wheels, visiting nurses and home help
- aids and appliances
- support groups and programs
- counselling services.

The availability of services may vary depending on where you live, and some services will be free but others might have a cost.

To find good sources of support and information, you can talk to the social worker or nurse at your hospital or treatment centre, or get in touch with Cancer Council 13 11 20.



Ovarian Cancer Australia provides an online forum and a free resilience kit on their website - visit ovariancancer.net.au. The Ovarian Cancer Research Alliance (OCRA) has an online support group for women from all over the world at inspire.com/groups/ovarian-cancer.

Support from Cancer Council

Cancer Council offers a range of services to support people affected by cancer, their families and friends. Services may vary depending on where you live.

Cancer Council 13 11 20

Trained professionals will answer any questions you have about your situation and link you to services in your area (see inside back cover).





Information resources

Cancer Council produces booklets and fact sheets on over 25 types of cancer, as well as treatments, emotional and practical issues, and recovery. Call 13 11 20 or visit your local Cancer Council website (see back cover).

Practical help

Your local Cancer Council can help you find services or offer guidance to manage the practical impact of a cancer diagnosis. This may include access to transport and accommodation services.





Legal and financial support

If you need advice on legal or financial issues, we can refer you to qualified professionals. These services are free for people who can't afford to pay. Financial assistance may also be available. Call Cancer Council 13 11 20 to ask if you are eligible.

Peer support services

You might find it helpful to share your thoughts and experiences with other people affected by cancer. Cancer Council can link you with individuals or support groups by phone, in person, or online. Call 13 11 20 or visit cancercouncil.com.au/OC.



Useful websites

You can find many useful resources online, but not all websites are reliable. These websites are good sources of support and information.

Australian	
Cancer Council Australia	cancer.org.au
Cancer Council Online Community	cancercouncil.com.au/OC
Cancer Council podcasts	cancercouncil.com.au/podcasts
Australasian Lymphology Association	lymphoedema.org.au
Australia New Zealand Gynaecological Oncology Group	anzgog.org.au
Australian Gynaecological Cancer Foundation	agcf.org.au
Beyond Blue	beyondblue.org.au
Cancer Australia	canceraustralia.gov.au
Carer Gateway	carergateway.gov.au
Carers Australia	carersaustralia.com.au
Centre for Genetics Education	www.genetics.edu.au
Healthdirect Australia	healthdirect.gov.au
Optimal Care Pathways	cancerpathways.org.au
Ovarian Cancer Australia	ovariancancer.net.au
International	
American Cancer Society	cancer.org
Cancer Research UK	cancerresearchuk.org
Macmillan Cancer Support (UK)	macmillan.org.uk
Ovarian Cancer Research Alliance (US)	ocrahope.org



You may be reading this booklet because you are caring for someone with cancer. What this means for you will vary depending on the situation. Being a carer can bring a sense of satisfaction, but it can also be challenging and stressful.

It is important to look after your own physical and emotional wellbeing. Give yourself some time out and share your concerns with somebody neutral such as a counsellor or your doctor, or try calling Cancer Council 13 11 20. There is a wide range of support available to help you with both the practical and emotional aspects of your caring role.

Support services – Support services such as Meals on Wheels, home help or visiting nurses can help you in your caring role. You can find local services, as well as information and resources, through the Carer Gateway. Call 1800 422 737 or visit carergateway.gov.au.

Support groups and programs - Many cancer support groups and cancer education programs are open to carers as well as to people with cancer. Support groups and programs offer the chance to share experiences and ways of coping.

Carers Associations – Carers Australia works with the Carers Associations in each state and territory to provide information and services to carers. Call 1800 242 636 or visit carersaustralia.com.au.

Cancer Council - You can call Cancer Council 13 11 20 or visit your local Cancer Council website to find out more about carers' services. > See our *Caring for Someone with Cancer* booklet.



Asking your doctor questions will help you make an informed choice. You may want to include some of the questions below in your own list.

Diagnosis

- What type of ovarian cancer do I have?
- Has the cancer spread? If so, where has it spread? How fast is it growing?
- Are the latest tests and treatments for this cancer available in this hospital?
- What sort of genetic testing can I have? Can I see a genetic counsellor?
- Will a multidisciplinary team be involved in my care?
- Are there clinical guidelines for this type of cancer?

Treatment

- What treatment do you recommend? What is the aim of the treatment?
- Are there other treatment choices for me? If not, why not?
- If I don't have the treatment, what should I expect?
- How long do I have to make a decision?
- I'm thinking of getting a second opinion. Can you recommend anyone?
- How long will treatment take? Will I have to stay in hospital?
- Are there any out-of-pocket expenses not covered by Medicare or my private health cover? Can the cost be reduced if I can't afford it?
- How will we know if the treatment is working?
- Are there any clinical trials or research studies I could join?

Side effects and after treatment

- What are the risks and possible side effects of each treatment?
- Will I have a lot of pain? What will be done about this?
- Can I work, drive and do my normal activities while having treatment?
- Will the treatment affect my sex life and fertility? What are my fertility options?
- Should I change my diet or physical activity during or after treatment?
- Are there any complementary therapies that might help me?
- How often will I need check-ups after treatment?
- If the cancer returns, how will I know? What treatments could I have?



abdomen

The part of the body between the chest and hips, which contains the stomach, spleen, pancreas, bowel, bladder and kidneys. Also known as the belly. The lower part of the abdomen (pelvic cavity) contains the ovaries and other female reproductive organs.

advanced cancer

Cancer that is unlikely to be cured. In most cases, the cancer has spread to other parts of the body (secondary or metastatic cancer). Treatment can often still control the cancer and manage symptoms.

ascites

Fluid build-up in the abdomen, making it swollen and bloated.

bilateral salpingo-oophorectomy

Surgery that removes both ovaries and fallopian tubes.

biopsy

The removal of a sample of tissue from the body for examination under a microscope to help diagnose a disease.

borderline tumour

A type of ovarian tumour that is not considered cancerous.

bowel

The long, tube-shaped organ in the abdomen that is part of the digestive tract. The bowel has two main parts: the small bowel and the large bowel.

bowel obstruction

When the bowel is blocked and faeces (poo) cannot pass through easily.

bowel preparation

The process of cleaning out the bowel before a test or scan.

BRCA1 and **BRCA2** mutations

Gene changes that increase the risk of getting breast or ovarian cancer.

CA125

A protein found in the blood that is often higher than normal in people with ovarian cancer.

cervix

The lower part of the uterus that connects the uterus to the vagina. Also called the neck of the uterus.

chemotherapy

A cancer treatment that uses drugs to kill cancer cells or slow their growth.

colectomy

An operation in which diseased areas of the colon are cut out and the healthy parts are sewn back together.

colonoscopy

An examination of the large bowel with a camera on a flexible tube (endoscope), which is passed through the anus.

colostomy

A surgically created opening (stoma) in the abdomen to the outside of the body. It is made from the colon (part of the large bowel).

CT scan

Computerised tomography scan. This scan uses x-rays to create a detailed cross-sectional picture of the body.

debulking

Surgery to remove as much of a tumour as possible. This makes it easier to treat the cancer that is left and increases the effectiveness of other treatments.

endoscope

A flexible tube with a light and camera on the end. It is used during diagnostic tests to look inside the body.

epithelial ovarian cancer

Cancer that starts in the surface of the ovary (epithelium).

epithelium

Layers of cells covering internal and external surfaces of the body.

fallopian tubes

The two thin tubes that extend from the uterus to the ovaries. The tubes carry sperm to the egg, and a fertilised egg from the ovaries to the uterus.

family cancer centre

A medical clinic that offers genetic counselling and other services for people with a family history of cancer. Also called a familial cancer centre.

genes

The microscopic units that determine how the body's cells grow and behave. Genes are found in every cell of the body and are inherited from both parents.

genetic testing

Genetic testing aims to detect faulty genes that may increase the risk of developing certain cancers. There are a number of genetic conditions included in genetic tests for ovarian cancer.

germ cell ovarian cancer

Ovarian cancer that begins in the cells that eventually develop into eggs.

germ cells

Cells that produce eggs in females and sperm in males. Also called germinal cells.

grade

A number that describes how similar cancer cells look to normal cells and how quickly the cancer is likely to grow.

gynaecological oncologist

A gynaecologist who specialises in treating cancer of the female reproductive organs.

hysterectomy

The surgical removal of the uterus. See also total hysterectomy.

ileostomy

A surgically created opening (stoma) in the abdomen to the outside of the body. It is made from the ileum (part of the small bowel).

immunotherapy

Treatment that uses the body's own immune system to fight cancer.

infertility

The inability to conceive a child. intraperitoneal chemotherapy

A technique of putting chemotherapy into the abdominal cavity.

laparoscopy

Surgery done through small cuts in the abdomen using a viewing instrument called a laparoscope.

laparotomy

A type of open surgery in which a long cut is made in the abdomen to examine and remove internal organs.

lymphadenectomy

Surgical removal of the lymph nodes from a part of the body. Also called a lymph node dissection.

lymph nodes

Small, bean-shaped structures that collect and destroy bacteria and viruses. Also called lymph glands.

lymphoedema

Swelling caused by a build-up of lymph fluid. This happens when lymph vessels or nodes can't drain properly because they have been removed or damaged.

Lynch syndrome

A genetic condition that increases the risk of developing ovarian cancer.

maintenance treatment

Treatment given for months or years as part of the treatment plan after the initial treatment to prevent the cancer coming back.

malignant

Cancerous, Malignant cells can spread (metastasise) and eventually cause death if they cannot be treated.

menopause

When a woman stops having periods (menstruating). This can happen naturally, from treatment, or because the ovaries have been removed.

menopause hormone therapy (MHT)

Drug therapy that supplies the body with hormones that it is no longer able to produce naturally. Previously known as hormone replacement therapy (HRT).

metastasis (plural: metastases)

Cancer that has spread from a primary cancer in another part of the body. Also called secondary cancer.

oestrogen

A sex hormone produced mainly by the ovaries.

omentectomy

Surgical removal of the omentum.

omentum

A sheet of fatty tissue that hangs over the abdominal organs.

ovarv

A female reproductive organ that contains eggs (ova). It produces the hormones oestrogen and progesterone. ovulation

The release of an egg during the menstrual cycle.

palliative treatment

Medical treatment for people with advanced cancer to help them manage pain and other symptoms.

paracentesis

abdomen. Also called an ascitic tap. patient-controlled analgesia (PCA) An intravenous system that allows a person to administer a measured dose of pain relief by pressing a button.

The draining of excess fluid from the

pelvis

The lower part of the trunk of the body; roughly, the area that extends from hip to hip and waist to groin.

peritoneum

The lining of the abdomen.

pleural effusion

A collection of fluid between the two sheets of tissue that cover the lungs.

progesterone

A sex hormone made mostly by the ovaries that prepares the uterus lining (endometrium) for pregnancy.

puberty

The process of reaching sexual maturity and becoming capable of reproduction.

radiation therapy

The use of targeted radiation (usually x-ray beams) to kill or damage cancer cells so they cannot grow, multiply or spread. Also called radiotherapy.

recurrence

The return of a disease after a period of improvement (remission).

remission

When the symptoms and signs of the cancer reduce or disappear.

stage

The extent of a cancer and whether the disease has spread from its original site to other parts of the body.

stromal cell cancer

Cancer that begins in the cells in the ovaries that release the hormones progesterone and oestrogen.

targeted therapy

Treatment that attacks specific particles (molecules) within cells that allow cancer to grow and spread.

total hysterectomy

The surgical removal of the uterus and cervix. See also hysterectomy.

tumour markers

Chemicals produced by cancer cells and released into the blood. These may suggest the presence of a tumour. Markers can be found by blood tests or by testing tumour samples.

ultrasound

A scan that uses soundwaves from a device called a transducer to create a picture of part of the body. The transducer may be a handheld device moved over your belly area (abdominal ultrasound) or a wand inserted in your vagina (transvaginal ultrasound).

uterus

A hollow muscular organ in a woman's lower abdomen in which a fertilised egg (ovum) grows and a fetus is nourished until birth. Also called the womb.

Can't find a word here?

For more cancer-related words, visit:

- cancercouncil.com.au/words
- cancervic.org.au/glossary
- cancersa.org.au/glossary.

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At Cancer Council, we're dedicated to improving cancer control. As well as funding millions of dollars in cancer research every year, we advocate for the highest quality care for cancer patients and their families. We create cancer-smart communities by educating people about cancer, its prevention and early detection. We offer a range of practical and support services for people and families affected by cancer. All these programs would not be possible without community support, great and small.

Join a Cancer Council event: Join one of our community fundraising events such as Daffodil Day, Australia's Biggest Morning Tea, Relay For Life, Girls' Night In and other Pink events, or hold vour own fundraiser or become a volunteer.

Make a donation: Any gift, large or small, makes a meaningful contribution to our work in supporting people with cancer and their families now and in the future.

Buy Cancer Council sun protection products: Every purchase helps you prevent cancer and contribute financially to our goals.

Help us speak out for a cancer-smart community: We are a leading advocate for cancer prevention and improved patient services. You can help us speak out on important cancer issues and help us improve cancer awareness by living and promoting a cancer-smart lifestyle.

Join a research study: Cancer Council funds and carries out research investigating the causes, management, outcomes and impacts of different cancers. You may be able to join a study.

To find out more about how you, your family and friends can help, please call your local Cancer Council.



Being diagnosed with cancer can be overwhelming. At Cancer Council, we understand it isn't just about the treatment or prognosis. Having cancer affects the way you live, work and think. It can also affect our most important relationships.

When disruption and change happen in our lives, talking to someone who understands can make a big difference. Cancer Council has been providing information and support to people affected by cancer for over 50 years.

Calling 13 11 20 gives you access to trustworthy information that is relevant to you. Our cancer nurses are available to answer your questions and link you to services in your area, such as transport, accommodation and home help. We can also help with other matters, such as legal and financial advice.

If you are finding it hard to navigate through the health care system, or just need someone to listen to your immediate concerns, call 13 11 20 and find out how we can support you, your family and friends.

Cancer Council services and programs vary in each area.

13 11 20 is charged at a local call rate throughout Australia (except from mobiles).



If you need information in a language other than English, an interpreting service is available. Call 13 14 50. If you are deaf, or have a hearing or speech impairment, you can contact us through the National Relay Service. www.relayservice.gov.au



For information and support on cancer-related issues, call Cancer Council **13 11 20**. This is a confidential service.

Visit your local Cancer Council website

Cancer Council ACT acteancer.org

Cancer Council NSW cancercouncil.com.au

Cancer Council NT nt.cancer.org.au

Cancer Council Queensland cancerald.org.au

Cancer Council SA cancersa.org.au

Cancer Council Tasmania cancertas.org.au

Cancer Council Victoria cancervic.org.au

Cancer Council WA cancerwa.asn.au

Cancer Council Australia cancer.org.au

This booklet is funded through the generosity of the people of Australia.

To support Cancer Council, call your local Cancer Council or visit your local website.