



Canadian
Cancer
Society

Ovarian Cancer

Understanding your diagnosis



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Understanding your diagnosis

When you first hear that you have cancer, you may feel alone and afraid. You may be overwhelmed by the large amount of information you have to take in and the decisions you need to make.

“ *All I could hear was ‘cancer.’ I heard my doctor say something like, ‘We’re going to start your treatment as soon as possible.’ I didn’t hear one word after that.* ”

The information in this brochure can help you and your family take the first steps in learning about ovarian cancer. A better understanding may give you a feeling of control and help you work with your healthcare team to choose the best care for you.

For more information

You can find more in-depth information about ovarian cancer on cancer.ca. Or call us at 1-888-939-3333 to learn more about cancer, diagnosis, treatment, support and services near you.

Check out our video series on common cancer topics. These short, simple videos cover subjects like *What is cancer?* and *Coping when you’re first diagnosed*.

Find the series at cancer.ca/cancerbasics.

What is cancer?

Cancer is a disease that starts in our cells. Our bodies are made up of trillions of cells grouped together to form tissues and organs such as muscles, bones, the lungs and the liver. Genes inside each cell tell it when to grow, work, divide and die. Normally, our cells follow these instructions and we stay healthy.

But sometimes the cells grow and divide out of control. After a while, a group of abnormal cells forms a lump (called a tumour).

Tumours can be either non-cancerous (benign) or cancerous (malignant). Non-cancerous tumours stay in one place in the body and are not usually life-threatening. Cancerous tumours can grow into nearby tissues and spread to other parts of the body. It's important to find and treat cancerous tumours as early as possible. In most cases, finding cancer early increases the chances of successful treatment.

When cancer spreads to other parts of the body, it is called metastasis. Often, the first sign that a tumour has spread (metastasized) is swelling of nearby lymph nodes, but cancer can spread to almost any part of the body.

Cancers are named after the part of the body where they start. For example, cancer that starts in the ovary but spreads to the liver is called ovarian cancer with liver metastases.

What is ovarian cancer?

Ovarian cancer starts in the cells of the ovary or ovaries. The ovaries are the organs in a woman's reproductive system that produce eggs (ova). There are 2 ovaries, and they are deep in a woman's pelvis, on both sides of the uterus (womb), close to the ends of the fallopian tubes.

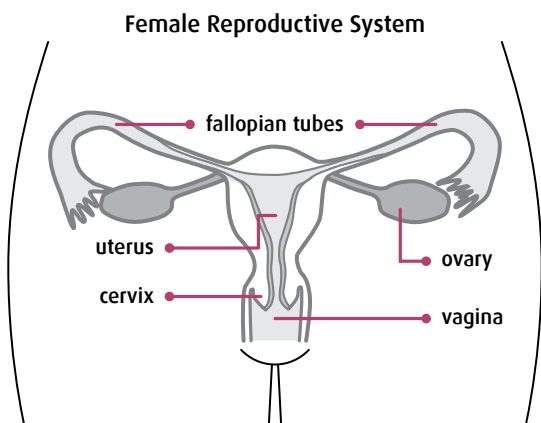
The ovaries make the female sex hormones, and they produce mature eggs. The female sex hormones are estrogen and progesterone.

Estrogen helps bring about changes that develop a woman's breasts, body shape and reproductive organs. Progesterone prepares the body to become pregnant by causing a buildup of the uterine lining (endometrium). It also regulates your monthly period (menstruation).

Each month, an ovary releases a mature egg. This is called ovulation. The egg travels down the fallopian tube to the uterus. If it is fertilized by a sperm, the egg attaches itself to the lining of the uterus and begins to develop into a fetus. If the egg is not fertilized, it is shed from the body along with the lining of the uterus during your period. When a woman ages and reaches menopause, the ovaries stop releasing eggs and producing sex hormones.

There are 3 main types of ovarian cancer. For each type, the cancer starts in a different type of cell found in the ovaries:

- Epithelial cell cancer starts in cells that cover the outer surface of the ovary. It is the most common type of ovarian cancer.*
- Stromal tumours start in cells that hold the ovary together.
- Germ cell tumours start in the egg cells inside the ovary.



* The information in this brochure is about epithelial cell cancer. The other types of ovarian cancer develop differently and may require different treatment.

Diagnosing ovarian cancer

Your doctor may suspect you have ovarian cancer after hearing about your symptoms, taking your medical history and doing a physical exam.

Symptoms: The most common signs and symptoms of ovarian cancer include:

- bleeding from the vagina that isn't normal, such as heavy or irregular periods, bleeding between periods or bleeding after menopause
- frequent discharge from the vagina that is clear, white or coloured with blood
- a lump that can be felt in the pelvis or abdomen
- bladder problems such as a need to urinate often or an urgent need to urinate
- constipation
- feeling of pressure or swelling in the pelvis or abdomen
- pain when having sex

The process of diagnosing cancer may seem long and frustrating. But other health problems can cause some of the same symptoms. The doctor has to make sure there are no other possible reasons for a health problem.

To find out for sure, your doctor will do one or more of the following tests. These tests may also be used to help plan treatment.

Imaging tests: The healthcare team uses x-rays, ultrasounds, CT scans, MRIs or bone scans to look at your tissues, organs and bones in more detail. They can see the size of the tumour and if it has spread. These tests are usually painless, and you don't need an anesthetic (freezing).

A pelvic ultrasound or transvaginal ultrasound may be done to look for ovarian cancer. With a pelvic ultrasound, a wand (probe) is placed on the surface of the abdomen. With the transvaginal ultrasound, the wand is placed into the vagina and aimed at the ovaries.

Blood tests: Blood is taken to see if the different types of blood cells are normal in number and how they look. Blood tests can also show how well your organs are working and may suggest whether you have cancer and if it has spread.

The blood may also be tested for body chemicals called tumour markers. Tumour marker tests are generally used to check your response to cancer treatment and to see if the cancer has come back. They can also be helpful to diagnose ovarian cancer. The following tumour markers may be measured for ovarian cancer:

- cancer antigen 125 (CA125)
- carcinoembryonic antigen (CEA)
- human chorionic gonadotropin (HCG or b-HCG)
- alpha-fetoprotein (AFP)

Biopsy: A biopsy is usually needed to make a definite diagnosis of cancer. Cells are taken from the body and checked under a microscope. If the cells are cancerous, they will be studied to see how fast they are growing. There are different ways to do a biopsy.

For ovarian cancer, your doctor may choose to examine and take samples of tissue or fluid from the abdomen. This may be done by a laparoscopy or laparotomy.

- During a laparoscopy, the surgeon makes a small cut (incision) in the abdomen and places a thin tube (called a laparoscope) into the abdomen. Surgical tools can be passed through the laparoscope to remove small pieces of tissue.
- During a laparotomy, the surgeon makes a large cut in the abdomen to examine all of the organs. The surgeon usually removes the entire tumour and also takes tissue samples from different parts of the pelvis and abdomen to see if the cancer has spread to those areas.

Further testing: Your doctor may order other tests to diagnose the cancer, see if it has spread or help plan your treatment.

Will I be OK?

Most people with cancer want to know what to expect. Can they be cured?

A prognosis is your doctor's best estimate of how cancer will affect you and how it will respond to treatment. It looks at many factors including:

- the type of cancer and how the cells look and act compared to normal cells
- the size of the tumour and whether the cancer has spread
- your age and overall health

Even with all this information, it can still be very hard for your doctor to say exactly what will happen. Each person's situation is different.

Your doctor is the only person who can give a prognosis. Ask your doctor about the factors that affect your prognosis and what they mean for you.

Staging and grading

Once a diagnosis of cancer has been made, the cancer is given a stage and grade. This information helps you and your healthcare team choose the best treatment for you.

Staging is a way to describe or classify the cancer. Staging of ovarian cancer describes how far the tumour has grown into the tissues around the ovary. Staging also describes whether cancer cells are found in any lymph nodes and if the cancer has spread to other parts of the body.

Usually each stage is given a number from 1 to 4. Generally, the higher the number, the more the cancer has spread.

A **grade** is given based on how the cancer cells look and act compared with normal cells. To find out the grade of a tumour, a biopsy sample is looked at under a microscope.

Usually, ovarian cancer tumours are given a grade from 1 to 3. The lower the number, the lower the grade.

Low grade usually means that the cancer cells look and act much like normal cells. They tend to be slow growing and are less likely to spread.

High grade usually means that the cancer cells look and act less normal, or more abnormal. They tend to grow more quickly and are more likely to spread.

Treatments for ovarian cancer

Your healthcare team considers your general health and the type, stage and grade of the cancer to recommend the best treatments for you. You'll work together with your healthcare team to make the final treatment choices. Talk to them if you have questions or concerns.

Talk to your doctor about fertility options before starting treatment

Some treatments can affect your ability to have children. Your treatment choice may depend on whether you want to become pregnant in the future. Talk to your doctor about your options before you start treatment.

For ovarian cancer, you might receive one or more of the following treatments.

Surgery: Most women with ovarian cancer will have surgery. The type of surgery you have will depend mainly on the type of the tumour and stage of the cancer. During the operation, all or part of the tumour and some healthy tissue around the tumour are removed. Surgery is done under a general anesthetic (you will be unconscious). You may stay in the hospital for several days or longer after the surgery.

The most common surgery for ovarian cancer is a total hysterectomy and bilateral salpingo-oophorectomy. This operation removes the uterus, ovaries and fallopian tubes. The surgeon may also remove nearby

lymph nodes, omentum (the fatty covering inside the abdomen) and any other tissues that look abnormal.

After surgery, you may have some pain or nausea or you may not feel like eating. These side effects are usually temporary and can be controlled.

But some side effects of surgery for ovarian cancer are permanent. If you have both of your ovaries removed, you will go into menopause right away (if you haven't gone through menopause already). Menopause means you no longer have your period, and you are not able to become pregnant. Other side effects of menopause include hot flashes, night sweats, vaginal dryness and loss of desire for sex. Your healthcare team can suggest ways to cope with these side effects.

Chemotherapy: Chemotherapy uses drugs to treat cancer. Chemotherapy drugs may be given as pills, injected with a needle into a vein or given through a thin tube inserted into the abdomen (intraperitoneal chemotherapy). These drugs damage cancer cells, but they also damage some healthy cells. Although healthy cells can recover over time, you may experience side effects from your treatment, like nausea, vomiting, loss of appetite, fatigue, hair loss or an increased risk of infection.

Radiation therapy: In external beam radiation therapy, a large machine is used to carefully aim a beam of radiation at the tumour. The radiation damages cells that are in the path of the beam – both cancer cells and normal cells. Radiation therapy is not commonly used to treat ovarian cancer.

The side effects of radiation therapy depend on what part of the body receives the radiation. You may feel more tired than usual, have some diarrhea or bladder problems, or notice changes to the skin (it may be red or tender) where the treatment was given.

Hormonal therapy: Hormonal therapy adds, blocks or removes hormones. Changing the levels of hormones or blocking certain hormones can slow the growth and spread of ovarian cancer cells. Drugs, surgery or radiation therapy can be used to change hormone levels or block their effects. It is sometimes used to treat ovarian cancer.

Some common side effects of hormonal therapy include nausea and vomiting, weight gain and hot flashes.

Targeted therapy: Targeted therapy uses drugs to target specific molecules (such as proteins) on the surface of cancer cells. These molecules help send signals that tell cells to grow or divide. By targeting these molecules, the drugs stop the growth and spread of cancer cells while limiting harm to normal cells.

Because targeted therapy doesn't usually damage healthy cells, it tends to cause fewer and less severe side effects than other treatments. Flu-like symptoms and fatigue are common symptoms of many targeted therapy drugs.

For more information on treatment, you may want to read our booklets *Radiation Therapy* and *Chemotherapy and Other Drug Therapies* (including targeted and hormonal therapies).

Clinical trials: Clinical trials test new ways to treat cancer, such as new drugs, types of treatments or combinations of treatments. They provide information about the safety and effectiveness of new approaches to see if they should become widely available. Ask your doctor if any clinical trials are available as a treatment option for you.

Our brochure *Clinical Trials* has more information, including how to find a clinical trial.

Complementary therapies: Complementary therapies - for example, massage therapy or acupuncture - are used *together with* conventional cancer treatments, often to help ease tension, stress and other side effects of treatment. They don't treat the cancer itself. More research is needed to understand if these therapies are effective and how they work.

If you're thinking about using a complementary therapy, learn as much as you can about the therapy and talk to your healthcare team. It's possible that the therapy might affect other treatments or test results.

Unlike complementary therapies, alternative therapies are used *instead of* conventional treatments. Alternative therapies haven't been tested enough for safety or effectiveness. Using only alternative treatments for cancer may have serious health effects. Talk to your healthcare team before you try an alternative therapy.

Side effects of treatments

Some cancer treatments cause side effects, such as fatigue, hair loss or nausea. Because treatments affect everyone differently, it's hard to predict which side effects – if any – you may have.

Side effects can often be well managed and even prevented. If you're worried about side effects, tell your healthcare team about your concerns and ask questions. They can tell you which side effects you should report as soon as you can and which ones can wait until your next visit.

If you notice any side effects or symptoms that you didn't expect, talk to a member of your healthcare team as soon as possible. They'll help you get the care and information you need.

Living with cancer

Many sources of help are available for people with cancer and their caregivers.

Our booklet *Coping When You Have Cancer* has more detailed information and resources.

Your healthcare team: If you need practical help or emotional support, members of your healthcare team may be able to suggest services in your community or refer you to cancer centre staff or mental health professionals.

Family and friends: People closest to you can be very supportive. Accept offers of help. When someone says, “Let me know how I can help,” tell them what they can do. Maybe they can run errands, cook a meal or drive you to your doctor’s office.

People who’ve had a similar experience: Talking with and learning from others who’ve had similar experiences can be helpful. Consider visiting a support group or talking with a cancer survivor in person, over the telephone or online. Try more than one option to see which one works best for you.

Yourself: Coping well with cancer doesn’t mean that you have to be happy or cheerful all the time. But it can mean looking after yourself by finding relaxing, enjoyable activities that refresh you mentally, spiritually or physically. Take some time to find ways to cope. You may also want to talk to a counsellor for more help.

Talking to someone who's been there

If you would like to talk to someone who's had a similar cancer experience, you can connect by phone with a trained volunteer who will listen, provide hope and suggest ideas for coping – all from the shared perspective of someone who's been there.

Register for this free program at match.cancer.ca or call us at 1-888-939-3333.

Want to connect with someone online?

If you'd like to join our online community, visit CancerConnection.ca. You can read news, join discussion groups, get support and help others at the same time. You'll find caring, supportive people there.

After treatment

Follow-up care helps you and your healthcare team follow your progress and your recovery from treatment. At first, you might meet with one of the specialists from your healthcare team. Later on, it may be your family doctor.

The schedule of follow-up visits is different for each person. You might see your doctor more often in the first year after treatment and less often after that. You should tell your doctor as soon as you can about new symptoms or symptoms that don't go away. Don't wait for your next scheduled visit.

The end of cancer treatment may bring mixed emotions. You may be glad the treatments are over and look forward to returning to your normal activities. But you could feel anxious as well. If you're worried about your treatment ending, talk to your healthcare team. They can help you through this transition period.

Self-esteem, body image and sexuality: It's natural to worry about the effects of ovarian cancer and its treatment on your self-esteem, body image and sexuality. The cancer and its treatment may cause scars, hair loss or skin changes. You may be worried about how your body looks after treatment, about having sex with a partner or that you may be rejected. It may help to talk about these feelings with someone you trust. Your doctor can also refer you to specialists and counsellors who can help you with the emotional side effects of ovarian cancer treatment.

What causes ovarian cancer?

There is no single cause of ovarian cancer, but some factors increase the risk of developing it. Some people can develop cancer without any risk factors, while others have some of these factors but do not get cancer. Most ovarian cancers are found in women who have gone through menopause.

Risk factors for ovarian cancer include:

- a family history of ovarian cancer
- BRCA gene mutations
- Lynch syndrome
- never having been pregnant or given birth
- a family history of breast, colorectal, uterine or pancreatic cancer
- a personal history of breast cancer
- tall adult height
- Ashkenazi Jewish ancestry
- hormone replacement therapy
- smoking

- having come into contact with asbestos at work
- endometriosis

Canadian Cancer Society

We're here for you.

When you have questions about treatment, diagnosis, care or services, we will help you find answers.

Call our toll-free number 1 888 939-3333.



Ask a trained cancer information specialist your questions about cancer. Call us or email info@cis.cancer.ca.



Connect with people online to join discussions, get support and help others. Visit CancerConnection.ca.



Browse Canada's most trusted online source of information on all types of cancer. Visit cancer.ca.

Our services are free and confidential. Many are available in other languages through interpreters.

Tell us what you think

Email cancerinfo@cancer.ca and tell us how we can make this publication better.



What we do

The Canadian Cancer Society fights cancer by:

- doing everything we can to prevent cancer
- funding research to outsmart cancer
- empowering, informing and supporting Canadians living with cancer
- advocating for public policies to improve the health of Canadians
- rallying Canadians to get involved in the fight against cancer

Contact us for up-to-date information about cancer and our services or to make a donation.



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