Melanoma
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 melanoma skin 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 melanoma 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 tumour cells stay in one place in the body and are not usually life-threatening.
• Cancerous tumour cells 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.

Cancers are named after the part of the body where they start. If cancer spreads to other parts of the body (called metastasis), the cancer still has the same name. For example, melanoma that starts in the skin but spreads to the lung is called melanoma with lung metastases.
What is melanoma?

Melanoma is a type of skin cancer that starts in the melanocyte cells of the skin. Melanocytes make melanin, which gives skin, hair and eyes their colour. Melanocytes can group together and form moles on the skin. Moles are non-cancerous bumps or spots that are usually brown or pink. Most people have a few moles.

The skin is the body’s largest organ. It covers your entire body and protects you from heat, cold, sunlight, injury and infection. The skin controls body temperature, removes waste products from the body through sweat and gives the sense of touch. It also helps make vitamin D.

The skin has 3 layers – the epidermis, the dermis and the subcutis.

- The epidermis is the top or outer layer of the skin that you can see. It is a thin, tough layer that protects the body, gives skin its colour and makes new skin. Melanocytes are found in the deepest part of the epidermis.
• The dermis is the thickest layer of skin, under the epidermis. It contains things like nerves, blood vessels and hair follicles.

• The subcutis is the innermost layer of the skin, found under the dermis. It contains mainly fat tissue.

Melanoma is less common than squamous cell and basal cell skin cancers (sometimes called non-melanoma skin cancers). There are different types of melanoma. Some rare types do not start in the skin but other places in the body where melanocytes are found, such as the mouth, throat, vagina or eye.

**Diagnosing melanoma**

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

**Symptoms:** The most common sign of melanoma is a change in the colour, size or shape of an existing mole or spot or a new mole or spot. The ABCDE rule can help you look for the common signs and symptoms.

**A** is for asymmetry. One-half of a mole does not have the same shape as the other half.

**B** is for border. The edge of a mole is uneven, jagged, notched or blurry.

**C** is for colour. The colour of a mole is not the same throughout.

**D** is for diameter. The mole is larger than a pencil eraser.

**E** is for evolving. The mole is changing in colour, size, shape or feel.
You may feel frustrated that it’s taking a long time to make a diagnosis, but it’s important to rule out other health problems that can also cause these symptoms. To find out for sure if you have melanoma, your doctor will do one or more of the following tests. These tests may also be used to help plan treatment.

**Skin exam:** A skin exam is often part of a physical exam. Your doctor will check the entire surface of your skin and look for any abnormal moles or spots.

**Skin biopsy:** A skin biopsy is usually needed to make a definite diagnosis of melanoma. All or part of the growth is taken from the body and checked under a microscope to see if the cells are cancerous. There are different ways to do a biopsy.

- Excisional biopsy removes the entire growth using a scalpel (knife).
- Punch biopsy removes part of the growth using a sharp tool called a punch.
- Incisional biopsy removes part of the growth using a scalpel.

**Lymph node biopsy:** A lymph node biopsy removes a lymph node or some lymph node tissue so it can be tested in a lab. It is done if the doctor thinks the cancer has spread to lymph nodes. A lymph node biopsy is also often part of the treatment for melanoma. There are different ways to do a lymph node biopsy.

- Fine needle aspiration (FNA) uses a very thin needle to remove a small amount of fluid or cells from a lymph node.
Sentinel lymph node biopsy (SLNB) identifies and removes the sentinel lymph node to see if it contains cancer cells. The sentinel node is the first lymph node in a group of lymph nodes that receives lymph fluid from around a tumour.

**Imaging tests:** Depending on the results of the biopsy and how deep the melanoma is, the healthcare team may use x-rays, CT scans, MRIs or PET scans to look at your tissues, organs and bones in more detail. They can see if the cancer has spread. These tests are usually painless, so you don’t need a local anesthetic (freezing).

**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. 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 aspects of the cancer and your situation including:

- the thickness of the tumour and where the cancer is on the skin
- whether the cancer has spread
- your age, sex 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.

The prognosis is usually very good for melanoma when it is found and treated early. But your doctor is the only person who can give a prognosis. Ask your doctor about what can affect your prognosis and what it means for you.
Staging

Once a diagnosis of cancer has been made, the cancer is given a stage. 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 melanoma describes the thickness of the tumour. It 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 0 to 4. Generally, the higher the number, the more the cancer has spread.

Treatments for melanoma

Your healthcare team considers your general health and the type and stage 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.

For melanoma, you might have one or more of the following treatments.

Surgery: Surgery is the main treatment for most melanomas. The tumour and some healthy tissue around the tumour are removed. You may have surgery to repair or rebuild the area where the cancer was removed. Or you may have surgery to remove lymph nodes. Depending on the type of surgery, you may be given a general anesthetic (a drug that puts you into a deep
sleep so you don’t feel pain). You might have to stay in the hospital for several days or longer after the surgery.

After surgery, you may have some pain, scarring or bruising. If your lymph nodes are removed, you may have an increased risk of developing lymphedema. Lymphedema is swelling of an arm or leg due to buildup of lymph fluid in an area where lymph nodes are removed.

**Immunotherapy:** Immunotherapy is sometimes used after surgery to lower the risk of melanoma coming back. It is also used to shrink and control the growth of metastatic melanoma and tumours that can’t be removed with surgery. Immunotherapy helps strengthen or restore your immune system’s ability to find and destroy cancer cells. Some immunotherapy drugs make the immune system work harder. Others help the immune system find cancer cells more easily. Immunotherapy may also be used to control side effects of cancer treatments.

The side effects of immunotherapy depend on the type of immunotherapy drug you get. Side effects include fatigue, diarrhea and skin problems.

**Radiation therapy:** Radiation therapy is sometimes used after surgery to lower the risk of melanoma coming back or to shrink and control the growth of melanoma when surgery can’t be done. External radiation therapy uses a machine to aim a beam of radiation at the area of the skin and a small
amount of nearby tissue. The radiation damages cells that are in the path of the beam - both cancer cells and normal cells.

The side effects of radiation therapy depend on what part of the body receives the radiation. Side effects include fatigue, skin changes (redness or tenderness) and hair loss in the area treated.

**Targeted therapy:** Targeted therapy is usually used in people with metastatic melanoma who have certain changes in the BRAF gene. Targeted therapy uses drugs to target specific molecules (such as proteins) on the surface of cancer cells or inside cancer cells. The 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 side effects of many targeted therapy drugs.

**Chemotherapy:** Chemotherapy uses drugs to treat cancer. It may be given as pills or injected with a needle into a vein. Chemotherapy may sometimes be used to relieve symptoms of metastatic melanoma. Chemotherapy damages cancer cells, but it also damages some normal cells. Although normal cells usually recover over time, you may experience side effects from your treatment.
The side effects of chemotherapy depend on the type of drug, the dose and how it’s given. Side effects include nausea, vomiting, diarrhea, fatigue, hair loss and an increased risk of infection.

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

Clinical treatment 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 booklet 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 that are widely used in Canada. Complementary therapies are often used to help ease tension, stress and other side effects of treatment. They don’t treat the cancer itself.

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.
Alternative therapies are used instead of conventional cancer 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 and nausea. Because treatments affect everyone differently, it’s hard to predict which side effects you may have. Some people have many side effects. Other people have only a few.

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 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.

*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:** Look 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 people 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 may see one of the specialists from your healthcare team for follow-up care. Later, you may see 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 melanoma and its treatment on your self-esteem, body image and sexuality. Melanoma and its treatment may result in changes to your skin, such as scars and skin colour changes. Some of these changes can be temporary or will lessen with time. Others could last for a long time or be permanent. You may feel the changes are very noticeable, especially if they are on an area like your face. You may be worried about how your body looks after treatment or about
having sex with a partner. 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 melanoma treatment.

Our booklet *Sex, Intimacy and Cancer* has more detailed information.

**Worrying that the cancer will come back:** You may be worried that the cancer will come back (recur) after treatment, especially if your doctor says there is a high risk. When melanoma is found and treated early, it is usually much easier to treat. So it’s important to check your skin and have regular follow-ups with your doctor. Tell your doctor if you have any new growths, moles or abnormal areas on your skin. Most melanomas are caused by getting too much ultraviolet radiation (UVR) from the sun or indoor tanning. The best way to lower your risk of cancer coming back or developing another skin cancer is to protect yourself from the sun and other UVR.
What causes melanoma?

Some things increase your chance of developing cancer. These are called risks or risk factors. The most important risk for melanoma is getting too much UVR from the sun or indoor tanning.

Some people can develop cancer without any risks, while others have some of these risks but do not get cancer.

Risk factors for melanoma include:

- sun and indoor tanning
- many moles
- atypical moles
- congenital melanocytic nevi
- familial atypical multiple mole melanoma (FAMMM) syndrome
- light-coloured skin, eyes and hair
- personal history of skin cancer
- family history of skin cancer
- CDKN2A gene mutation
- weak immune system
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 helps people live their lives to the fullest.

• We do everything we can to help prevent cancer.
• We fund groundbreaking research on many types of cancer.
• We empower, inform and support Canadians living with cancer.
• We advocate for public policies to improve the health of Canadians.
• We unite people to help achieve our vision of a world where no Canadian fears cancer.

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