



Canadian
Cancer
Society

Non-melanoma Skin Cancer

Understanding your diagnosis



1 888 939-3333 | cancer.ca

Non-melanoma Skin Cancer

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 didn’t hear one word my doctor said after that.* ”

The information in this brochure can help you and your family take the first steps in learning about non-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 non-melanoma skin 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 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.

When cancer spreads to other parts of the body, it is called metastasis. But most non-melanoma skin cancers do not spread to other parts of the body.

What is non-melanoma skin cancer?

Non-melanoma skin cancer is the most common cancer in Canada.* It starts in the cells of the skin. The skin is the body's largest organ. It covers your entire body and protects you against harmful things like the sun, hot temperatures and germs. The skin controls your body temperature, removes waste products from the body through sweat and gives the sense of touch. It also helps make vitamin D.

Non-melanoma skin cancer can grow into and destroy nearby tissue. It can also spread (metastasize) to other parts of the body, but this is rare for most non-melanoma skin cancers.

There are 2 main types of non-melanoma skin cancer:

Basal cell carcinoma starts in basal cells in the top layer of the skin (called the epidermis). It is the most common type of non-melanoma skin cancer and makes up about 75% to 80% of all skin cancers.

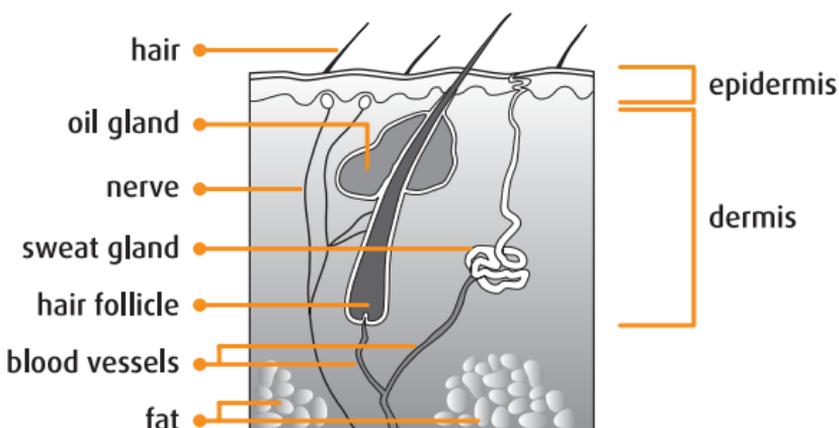
Squamous cell carcinoma starts in squamous cells in the outer part of the epidermis. It is the second most common type of non-melanoma skin cancer and makes up about 20% of all skin cancers.

* Melanoma is another type of skin cancer. It's less common than non-melanoma. Contact us for information about melanoma skin cancer.

Basal cell and squamous cell cancers tend to grow slowly and are often found early. They are usually treated in a doctor's office.

Other types of non-melanoma skin cancer can develop, but they are rare.

The Skin



Diagnosing non-melanoma skin cancer

Your doctor may suspect you have non-melanoma skin cancer after seeing an abnormal area or a change on your skin and taking your health history.

Symptoms: How non-melanoma skin cancer looks often depends on the type of cancer. The most common signs and symptoms of non-melanoma skin cancer are:

- a sore that doesn't heal or comes back after healing
- pale white or yellow areas that are flat and look like scars
- raised and scaly red patches
- rough or scaly red patches with uneven borders
- small, smooth and shiny lumps that are pearly white, pink or red

- raised lumps that indent in the centre
- a pink growth with raised edges that indents in the centre
- a growth that looks like a wart
- a sore that is crusty or bleeds easily
- a growth that has small blood vessels on the surface
- a growth or area that is itchy, irritated or sore

Other health problems can also cause these symptoms. To find out for sure if you have non-melanoma skin cancer, your doctor will do one or more of the following tests. These tests may also be used to help plan treatment.

Skin exam: During this exam, your doctor will check the entire surface of your skin for any signs of cancer or abnormal areas of skin, especially areas exposed to the sun.

Skin biopsy: A biopsy is usually needed to make a definite diagnosis of cancer. Cells are taken from the skin 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 skin biopsy. The type of biopsy you have often depends on what the growth or abnormal area looks like and where it is.

A shave biopsy shaves off a growth or abnormal area of skin using a flexible razor blade or a surgical knife (scalpel). It is usually used for raised growths. It can also be used for flat abnormal areas that are only on the outer surface of the skin.

A punch biopsy removes a round area of skin using a sharp tool called a punch. It is usually used when the growth or abnormal area is under the skin or seems to have grown deep into the skin.

An excisional biopsy removes the entire growth or abnormal area using a knife. It is usually done when the doctor thinks the whole growth or area needs to be examined to make a proper diagnosis.

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:

- where the cancer is on the skin
- the size of the cancer and how deep it has grown into the skin
- the type of cancer
- how the cells look and act compared to normal cells
- your 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 excellent for most non-melanoma skin cancers because they can be found and treated early. But 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.

Risk groups

Doctors often group non-melanoma skin cancers into risk groups depending on things like the size of the cancer, where it is and how quickly it is growing. Doctors use the risk groups to help plan the best treatment and to estimate the chance that the cancer will come back (recur).

Basal cell and squamous cell cancers are grouped into a low-risk group or a high-risk group.

Treatments for non-melanoma skin cancer

Non-melanoma skin cancer is often found early and treated easily. Your healthcare team considers the type and size of the cancer, where the cancer is on the body and your general health to recommend the best treatment for you. You'll work with your healthcare team to make the final treatment choices. Talk to them if you have questions or concerns.

For non-melanoma skin cancer, you might receive one or more of the following treatments.

Surgery: Many non-melanoma skin cancers are treated with surgery. The type of surgery you have depends on the size of the tumour and where it is. Surgery is often done using a local anesthetic that freezes (numbs) the area.

A surgical cut (excision) is the standard treatment for many non-melanoma skin cancers. The doctor uses a knife to cut out the cancer from the skin along with some normal tissue around it (called a surgical margin).

Other types of surgery may be used:

- Mohs surgery removes the cancer in layers, little by little, until no cancer remains.
- Curettage and electrodesiccation scrapes away cancer with a sharp tool and then destroys any remaining cancer cells using an electrical current.
- Cryosurgery uses extreme cold to freeze and destroy tissue.
- A lymph node dissection removes lymph nodes from the body when cancer has spread there.

Sometimes the doctor has to remove a large area of skin to make sure all of the cancer is gone. Reconstructive surgery can help fix the area where the cancer was removed and make it look better.

After surgery, you may have some pain and bruising. These side effects are usually temporary and can be controlled.

Radiation therapy: In external beam radiation therapy, a large machine is used to carefully aim a beam of radiation at the cancer. The radiation destroys cells that are in the path of the beam – both cancer cells and normal cells. External beam radiation therapy is most often used when it is hard to remove the cancer with surgery.

The side effects of radiation therapy mainly depend on the size of the area being treated. You may notice changes to the skin where the treatment was given. It may be red, irritated or sore.

Photodynamic therapy: Photodynamic therapy (PDT) uses a special drug (called a photosensitizer) applied to the skin and a light to destroy cancer cells. The drug makes cells sensitive to light. PDT is sometimes used instead of surgery if surgery can't be done.

PDT can cause side effects, such as the skin becoming red or itchy or feeling like it's burning and stinging. Also, the skin and eyes can become very sensitive to light.

Drugs: Drugs are sometimes used to treat non-melanoma skin cancer. They can be given in different ways.

Some drugs can be put directly on the skin as a cream or gel (called topical therapy). These drugs may be used to treat small cancers that are only on the surface of the skin. They may make your skin red or itchy or you may feel burning in the treated area.

Targeted therapy uses drugs to target specific molecules (such as proteins) on cancer cells or inside them. The drugs stop the growth and spread of cancer cells but limit harm to normal cells. Targeted therapy is used to treat basal cell cancer. It is given as a pill and used for cancer that has spread to other organs or grown into nearby areas. Flu-like symptoms and fatigue are common side effects of many targeted therapy drugs.

Chemotherapy drugs may be given as pills or injected with a needle into a vein to destroy cancer cells throughout the body. But the drugs also damage some normal cells. Although

the normal cells usually recover over time, the damage can cause side effects like nausea, vomiting, loss of appetite, fatigue, hair loss or a higher risk of infection. Chemotherapy given throughout the body is usually only used for advanced non-melanoma skin cancer that has spread to other areas of the body.

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

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 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. 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.

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 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.

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.

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.

After treatment

Self-esteem and body image: It's natural to worry about the effects of non-melanoma skin cancer and its treatment on your self-esteem and body image. The cancer and its treatments may result in changes to your skin, such as scars and skin colour changes. You may feel the changes are very noticeable, especially if they're on an area like your face. You may be afraid to go out and worried that others will stare at you. 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 physical and emotional side effects of treatment.

Worry that the cancer will come back: You may be worried that the cancer will come back after treatment, especially if your doctor said the cancer has a high risk of it. So it's important to check your skin and have regular follow-ups with your doctor. Also, the best way to lower your risk of the same cancer coming back or developing another skin cancer is to protect yourself from the sun. Most non-melanoma skin cancers are caused by ultraviolet radiation from the sun.

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 unique 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.

What causes non-melanoma skin cancer?

There is no single cause of non-melanoma skin cancer, but some things 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.

Being exposed to ultraviolet radiation from the sun, tanning beds or sun lamps is the most important risk for non-melanoma skin cancer.

Other factors that increase the risk of non-melanoma skin cancer include:

- light-coloured skin, eyes and hair
- having had skin cancer before
- being around ionizing radiation, such as having had radiation therapy in the past
- being around arsenic or certain petroleum products
- receiving PUVA therapy for certain skin conditions
- having a rare inherited condition, such as xeroderma pigmentosum or basal cell nevus syndrome
- a weakened immune system
- having a precancerous skin condition such as actinic keratosis

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 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.



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