

Skin Cancer, Non-Melanoma

Information for people with cancer

This information should not be used to diagnose yourself or in place of a doctor's care.

Non-melanoma skin cancer is the most common cancer diagnosed in Canada. The main types of non-melanoma skin cancers are Basal Cell Carcinoma (BCC) and Squamous Cell Carcinoma (SCC).

These types are different than the more serious type of skin cancer called melanoma. For information about melanoma: www.bccancer.bc.ca/health-info/types-of-cancer/skin/melanoma

Another type of skin cancer is Skin Lymphoma: www.bccancer.bc.ca/health-info/types-of-cancer/skin/skin-lymphoma

Skin does many things. It keeps moisture inside your body. It is also part of your immune system.

The skin has three layers:

- **Epidermis:** outer layer of the skin.
 - New skin cells are made in the bottom layer, called the basal layer.
 - Skin cancers start in this layer, usually on skin that has been exposed to the sun.
- **Dermis:** made up of connective tissue, blood vessels, and nerves
 - Contains hair follicles, sweat glands, sebaceous glands and nerve endings.
- **Hypodermis:** made of fat and connective tissue.

Image of skin layers: visualsonline.cancer.gov/details.cfm?imageid=7280

Cancers of the skin are also called cutaneous cancers or dermatological cancers. Melanoma may also be called cutaneous malignant melanoma.

Diagnosis and Staging

What are the signs and symptoms of non-melanoma skin cancer?

- Any change in your skin, such as a sore that does not heal.
- A new skin spot or growth.
- A change in a skin spot or growth.

If you have any signs or symptoms that you are worried about, please talk to your family doctor or nurse practitioner.

How is non-melanoma skin cancer diagnosed?

Tests that may help diagnose non-melanoma skin cancer include:

- **Physical exam** by a family doctor or dermatologist (skin doctor), including exam of lymph nodes.
- **Biopsy:** a doctor removes a sample of skin. The tissue is then examined by a specialist doctor (pathologist) under a microscope.

For more information on tests used to diagnose cancer, see our Screening and Diagnosis pathfinder: bccancer.libguides.com/pathfinder-screening

What are the types of non-melanoma skin cancer?

There are two main types of non-melanoma skin cancer.

Basal cell carcinoma

- Most common type of skin cancer.
- About 75-80% (75-80 out of 100) of all skin cancers.
- Often found in skin that has had severe sun damage. Most commonly found on your face, ears, scalp, back of hands, arms or legs.
- Usually grows slowly.

Squamous cell carcinoma

- Second most common type of skin cancer.
- About 20% (20 out of 100) of all skin cancers.
- Grows slowly, but more quickly than basal cell carcinoma.
- Often found in skin that has been exposed to the sun.

Actinic keratosis

- Pre-cancerous (may develop into squamous cell carcinoma).
- Rough, scaly spots that develop on skin that has been most exposed to the sun.

What are the stages of non-melanoma skin cancer?

Staging describes the cancer. Staging is based on how much cancer is in the body, where it was first diagnosed, if the cancer has spread and where it has spread to.

The stage of the cancer can help your health care team plan your treatment. It can also tell them how your cancer might respond to treatment and the chance that your cancer may come back (recur).

Doctors do not often use staging for non-melanoma skin cancer. This is because these cancers are often found early and are treated. They do not often spread to other parts of the body. Some doctors group these cancers into risk groups instead of staging.

Risk groups are based on several things, including the grade of the cancer. For more about the grade of non-melanoma skin cancer, see grading section below.

Risk groups for basal cell carcinoma (BCC)

Low risk BCC:

- On the trunk of the body, arms, legs, cheeks, forehead, temples, scalp, neck or chin.
- 2 cm or smaller.
- It is a primary cancer and not a cancer that has come back after treatment.
- Edge is clear and smooth.
- No cancer in or around nerves.

High risk BCC:

- On eyelids, nose, ears, or skin around the eyes.
- Larger than 2 cm.
- Aggressive type of cancer.
- Has come back after treatment.
- Edge is uneven.
- Has grown into or around nerves.

Risk groups for squamous cell carcinoma (SCC)

Low risk SCC:

- Anywhere on the skin except for the ears, lips or scalp.
- Smaller than 2cm.
- Less than 2 mm deep.
- Only in the top or outer layer of the skin.
- Low grade.

- Primary cancer.
- No cancer in or around nerves.

High risk SCC:

- On the ears, lips or scalp.
- 2 cm or larger.
- 2 mm or more deep.
- High grade.
- Growing quickly.
- Has come back after treatment.
- Person has a weakened immune system.
- Cancer has grown into or around nerves

Below is the staging for certain types of non-melanoma skin cancer**Non-melanoma skin cancer staging (except eyelid cancer and head and neck skin cancer):**

- **Stage 0 (carcinoma in situ):** Cancer cells are only in the top layer of the skin (epidermis). Squamous cell carcinoma in situ is also called Bowen's disease.
- **Stage 1:** Tumour is 2 cm (about 1 inch) or smaller.
- **Stage 2:** Tumour is larger than 2 cm but not more than 4 cm (1.5 inches)
- **Stage 3 is any of the following:**
 - Tumour is larger than 4 cm.
 - Tumour has slightly worn away nearby bone (bone erosion).
 - Tumour has grown into or around nerves (perineural invasion).
 - Tumour has grown deep, past the fat under the skin (deep invasion).
 - Cancer has spread to 1 lymph node. The lymph node is 3 cm (just over 1 inch) or smaller.

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- **Stage 4A is any of the following:**
 - Cancer has spread to 1 lymph node that is larger than 3 cm but not more than 6 cm (about 2 inches). The lymph node is on the same side of the body where the cancer started.
 - Cancer has spread to many lymph nodes and none of the lymph nodes are larger than 6 cm. The lymph nodes are on the same side of the body where the cancer started.
 - Cancer has spread to a lymph node that is larger than 6 cm.
- **Stage 4B:** Cancer has spread to other parts of the body (called distant metastasis), such as the liver or lymph nodes on the other side of the body from where the cancer started.

Non-melanoma skin cancer of the head and neck (scalp, ears, lips, face and neck)

Staging is same as above except:

- **Stage 3 is any of the following:**
 - Tumour is larger than 4 cm.
 - Tumour has slightly worn away nearby bone (bone erosion).
 - Tumour has grown into or around nerves (perineural invasion).
 - Tumour has grown deep, past the fat under the skin (deep invasion).
 - Cancer has spread to 1 lymph node. The lymph node is 3 cm (just over 1 inch) or smaller. Lymph nodes is on the same side of the body as where the cancer started.
- **Stage 4A is one of the following:**
 - Cancer has spread to 1 or more lymph nodes that are large than 3 cm. The lymph nodes may be one or both sides of your body.
 - Tumour has grown into bone, such as your skull or ribs. Cancer may have spread to 1 or more lymph nodes.

Non-melanoma skin cancer of the eyelid

- **Stage 0:** Cancer cells are only in the top layer of the skin (epidermis).
- **Stage 1A:** Tumour is 1 cm (0.4 inches) or smaller.
- **Stage 1B:** Tumour is larger than 1 cm but not more than 2 cm (0.8 inches).
- **Stage 2A is one of the following:**
 - Tumour is larger than 1 cm but not more than 2 cm. Tumour has grown in the fibrous layer of the eyelid or the edge of the eyelid. Tumour may be as thick as the eyelid.
 - Tumour is more than 2 cm but not more than 3 cm (1 inch).
- **Stage 2B:** Tumour has grown into nearby areas of the face, such as the sinuses or eye socket.
- **Stage 3A:** Cancer has spread to 1 lymph node. The lymph node is larger than 3 cm and is on the same side of the body as where the cancer started.
- **Stage 3B is one of the following:**
 - Cancer has spread to 1 lymph node. The lymph node is 3 cm or smaller and is on the same side of the body as where the cancer started.
 - Cancer has spread to lymph nodes on the opposite of the body from where the cancer started or it has spread to both sides.
- **Stage 4:** Cancer has spread to other parts of the body, such as the lungs or bone. This is called distant metastasis.

For more information on staging, see our About Cancer page:

bccancer.bc.ca/health-info/types-of-cancer/about-cancer

What are the grades of non-melanoma skin cancer?

The grade of the cancer describes how different the cancer cells look from normal cells and how fast the cancer cells are growing. A pathologist will give the cancer a grade after looking at the cells under a microscope.

Non-melanoma skin cancer can be grade 1, 2, 3 or 4. The lower the number, the lower the grade.

Low grade: cells are abnormal but look a lot like normal cells. Low grade cancers usually grow slowly and are less likely to spread.

High grade: cells are abnormal and do not look like normal cells. High grade cancers usually grow more quickly and are more likely to spread.

The grade of the cancer can help your health care team plan your treatment.

Treatment

What is the treatment for non-melanoma skin cancer?

Cancer treatment may be different for each person. It depends on your particular cancer. Your treatment may be different than what is listed here.

Surgery

- The most common treatment. Surgery depends on type, size and location of cancer.
 - **Surgical excision:** removes cancer and some tissue around it (margin). Common surgery for all non-melanoma skin cancers.
 - **Mohs surgery:** removes cancer in layers, a little bit at a time. Mainly for high-risk cancers, such as those on the face.
 - **Curettage and electrodesiccation:** a sharp tool (curette) scrapes off the cancer. The area is then treated with an electrical current. Common treatment for low-risk cancers.

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Radiation therapy (uses high energy x-rays to kill or shrink cancer)

- May be used if surgery is not possible.
- For more information about radiation therapy go to:
bccancer.bc.ca/our-services/treatments/radiation-therapy

Systemic therapy (chemotherapy)

- Used in some cases, if surgery or radiation therapy are not possible.
- A drug called Interferon may be used.
- For more information about systemic therapy go to:
[bccancer.bc.ca/our-services/treatments/systemic-therapy-\(chemotherapy\)](http://bccancer.bc.ca/our-services/treatments/systemic-therapy-(chemotherapy))

Treatment for Actinic Keratosis

- Topical 5-fluorouracil therapy: a drug that is applied to the skin.
- Cryotherapy: freezing with liquid nitrogen.
- Electrofulguration: using electric current to destroy cells.

What is the follow-up after treatment?

- Follow-up testing and appointments are based on your type of cancer.
- Guidelines for follow-up after treatment for non-melanoma skin cancer are on our website: www.bccancer.bc.ca/health-professionals/clinical-resources/cancer-management-manual/skin/non-melanoma#Follow-Up-non-melanoma
- These are guidelines written for your doctor, nurse practitioner or specialist. You can look at them to see what appointments and tests you might need after treatment.
- After treatment, you may return to the care of your family doctor or specialist for regular follow-up. If you do not have a family doctor, please talk to your BC Cancer health care team.

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- The BC Cancer Life after Cancer page has information on issues that cancer survivors may face: bccancer.bc.ca/lifeaftercancer

More Information

What causes non-melanoma skin cancer and who gets it?

These are some of the risk factors for this cancer. Not all of these risk factors may cause this cancer, but they may help the cancer start growing.

- Exposure to ultraviolet radiation:
 - The sun is the main source of ultraviolet radiation (UVR).
 - UVR damages your skin. Damage includes sunburn, wrinkles and aging.
 - Tanning is your skin's response to damage.
 - UVR from tanning beds also damages skin.
- Skin cancers are more common in Caucasians but anyone can get it.

Statistics on non-melanoma skin cancer

- The chance of developing a skin cancer in B.C. is about 1 in 7 (1 out of every 7 people).
- We do not have good statistics for non-melanoma skin cancers because these cancers are often found and treated in the doctor's office and not reported. For B.C., these types of cancers are put in the "all other cancers" category.
 - B.C. statistics: www.bccancer.bc.ca/health-info/disease-system-statistics/statistics-by-cancer-type

Note: Available statistics do not have information about the inclusion of transgender and gender diverse participants. It is unknown how these statistics apply to transgender and gender diverse people. Patients are advised to speak with their primary care provider or specialists about their individual considerations and recommendations.

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Can I help prevent non-melanoma skin cancer?

Skin cancer is one of the most preventable types of cancer. The key is to protect your skin from the sun and other sources of ultraviolet (UV) radiation throughout your life.

Here are some things you can do to lower your risk of non-melanoma skin cancer:

- **Do not get a sunburn:** This is even more important for children.
- **Limit your time in the sun:** The sun is the strongest between 11 am and 3 pm.
 - It is best to stay in the shade as much as possible.
 - Wear long sleeve shirts, pants, and hat with a wide brim.
 - Use sunscreen. This should be one labelled as broad-spectrum, SPF 30.
 - Protect your lips with sunscreen.
- **Do not use tanning beds:** Tanning beds damage skin. In B.C., people under the age of 18 are not allowed to use tanning beds.
- **Be aware that some drugs increase your reaction to ultraviolet radiation:** Check with your doctor or pharmacist about any drugs you are taking.
- **Visit the BC Cancer Sun Safety and Cancer Prevention page:**
www.bccancer.bc.ca/health-info/prevention/sun-safety

Is there screening for non-melanoma skin cancer?

There is no screening program for this cancer. However, it is important that you check your skin and your children's skin regularly.

- Look for any changes in moles, freckles or areas where the skin has changed colour. Talk to your doctor about any changes.



Provincial Health Services Authority

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Where can I find more information?

- If you have questions about non-melanoma skin cancer, please talk to your health care team.
- Our librarians can help you find the information you need. Visit our Library page: bccancer.bc.ca/our-services/services/library
- BC Cancer Library Skin Cancer pathfinder: bccancer.libguides.com/pathfinder-skin
- Managing Your Symptoms: www.bccancer.bc.ca/health-info/coping-with-cancer/managing-symptoms-side-effects
- Emotional Support: www.bccancer.bc.ca/health-info/coping-with-cancer/emotional-support