

Melanoma

Information for people with cancer

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

Melanoma is a type of skin cancer. It is the most aggressive (dangerous) of all skin cancers.

More common skin cancers are Basal Cell Carcinoma and Squamous Cell Carcinoma. For information on these cancers go to: www.bccancer.bc.ca/health-info/types-of-cancer/skin/skin-non-melanoma

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

For information on ocular melanoma (melanoma in the eye): www.bccancer.bc.ca/health-info/types-of-cancer/eye

Moles, or nevi, are not usually cancers. However, melanoma often starts in a new or existing mole (nevus).

Melanomas can spread through the lymphatic system or blood stream.

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.
 - Contains melanocytes – cells that make melanin. Melanin gives your skin colour. Melanoma starts in the melanocytes.
- **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 melanoma?

- Mole that changes shape or colour.
- Mole that is itchy or has a burning or tingling feeling.
- The ABCDE rule can help you look for common signs of melanoma. Talk to your doctor or nurse practitioner if you see any of these changes on your skin:
 - **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 the mole is uneven. The edge can be jagged, notched or blurry.
 - **C is for Colour** - The colour of the mole is not the same throughout. It can have shades of brown, black or tan. Sometimes there is blue, grey, red, pink or white.
 - **D is for Diameter** - The size of the mole is larger than 6 mm (1/4 inch) across. This is about the size of the eraser on the end of a pencil.
 - **E is for Evolving** - There is a change in the colour, size, shape or feel of the mole. The mole may be itchy or have a burning or tingling feeling.

For more information on what to look for using the ABCDE rule, go to:

www.canadianskincancerfoundation.com/early-detection/the-abcde-of-early-detection/

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

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How is melanoma diagnosed?

Tests that may help diagnose melanoma include:

- **Complete medical history:** with a focus on skin problems or family history of skin cancer or other cancers.
- **Physical exam:** a careful exam of skin all over your body, especially hard to see areas like the back of the neck, genital area, buttocks and scalp.
- **Excision biopsy:** a doctor completely removes the mole or area of skin. If the area is quite large, only part of it may be removed. The tissue is then examined by a specialist doctor (pathologist) under a microscope.
- **Blood test**
- **Chest x-ray:** to see the tumour and if the cancer has spread.
- **Computerize Tomography (CT) scan:** to see the tumour and if the cancer has spread.
- **Ultrasound:** to see the tumour and if the cancer has spread.
- **Lymphoscintiscan:** scan of lymph nodes near the tumour.

For more information on tests used to diagnose cancer, see our Recommended Websites - Screening and Diagnosis section: bccancer.bc.ca/our-services/services/library/recommended-websites/screening-and-diagnosis-websites

What are the types of melanoma?

There are a few types of melanomas. All types can grow and spread quickly.

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Superficial spreading melanoma (SSM)

- About 66% (66 out of 100) of all melanomas.
- May start from an existing mole (dysplastic nevus).

Nodular melanoma (NM)

- A nodule appears, usually not related to an existing mole.

Lentigo maligna melanoma (LMM)

- Less common
- Most commonly appears on the sun-exposed faces of the elderly.

Acral lentiginous melanoma

- Occurs on the palms or the soles of the feet or under the nail.
- Accounts for the majority of malignant melanomas for dark-skinned people but for only a small percentage of all melanomas for light-skinned people.

What are the stages of melanoma?

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).

Melanoma staging:

- **Stage 0 (melanoma in situ):** Cancer cells are only in the top layer of the skin (epidermis). Sometimes called precancerous condition of the skin.

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- **Stage 1A:** Tumour is 0.8 mm thick or less. No ulceration of the tumour (there is no broken skin or open wound).

OR

Tumour is more than 0.8 mm but not more than 1 mm thick. There may be ulceration.

- **Stage 1B:** Tumour is more than 1mm thick but not more than 2 mm thick. No ulceration.
- **Stage 2A:** Tumour is more than 1mm thick but not more than 2 mm thick. There is ulceration.

OR

Tumour is more than 2 mm thick but not more than 4 mm thick. No ulceration.

- **Stage 2B:** Tumour is more than 2 mm thick but not more than 4 mm thick. There is ulceration.

OR

Tumour is more than 4 mm thick. No ulceration.

- **Stage 2C:** Tumour is more than 4 mm thick. There is ulceration.
- **Stage 3:** Cancer has spread to 1 or more lymph nodes near the cancer. After the lymph nodes are removed and examined by a pathologist, cancer is given stage 3A, 3B, 3C, or 3D. This staging depends on:
 - Number of lymph nodes with cancer.
 - How much cancer is in the lymph nodes.
 - If the cancer has spread to nearby areas of the skin or lymph vessels.
- **Stage 4:** Cancer has spread to other parts of the body (distant metastasis), such as the liver or lungs. This is also called metastatic melanoma skin cancer.

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

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

Treatment

What is the treatment for melanoma?

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

Surgery

- Standard treatment for the primary site of melanoma (where the cancer started).
- Surgery to cure melanoma is usually done after a biopsy.
- For lower risk melanomas, the excision margin (area removed by surgery) may be 1 cm or less.
- Wider margins of up to 2 cm are often recommended for higher risk lesions. A skin graft is sometimes required. This is when skin is taken from one part of your body to help repair another part of your body.
- Lymph nodes are not usually removed if there is no evidence that they have cancer.

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

- May be used after lymph nodes are removed.
- Can help shrink large cancers.
- For more information about radiation therapy go to:
bccancer.bc.ca/our-services/treatments/radiation-therapy

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Systemic therapy (chemotherapy)

- Used in some cases.
- For more information about systemic therapy go to:
[bccancer.bc.ca/our-services/treatments/systemic-therapy-\(chemotherapy\)](https://bccancer.bc.ca/our-services/treatments/systemic-therapy-(chemotherapy))

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 melanoma are on our website:
www.bccancer.bc.ca/health-professionals/clinical-resources/cancer-management-manual/skin/melanoma#Follow-up
- 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.
- You will likely need to see your doctor or nurse practitioner every 3 to 6 months for the first two years after treatment.
- The BC Cancer Life after Cancer page has information on issues that cancer survivors may face: bccancer.bc.ca/lifeaftercancer

More Information

What causes melanoma 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 to start growing.

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- 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.
 - The more sunburns you have, the higher your risk of melanoma. If you had many sunburns as a child, your risk of melanoma is higher.
- Being a light-skinned person with many moles and freckles.
- Being 40-70 years old.
- In white women, melanomas often develop on the back and legs. In white men, they often develop on the back, chest and abdomen [See note below, Statistics].
- Having one melanoma increases your risk of having another melanoma.
- Having moles called dysplastic nevi (atypical nevi). These are moles that are larger than normal moles (more than 5 mm across). They often have irregular edges, different colours and are flat.
- Having atypical nevus syndrome, also called dysplastic nevus syndrome. This is a syndrome caused by a genetic mutation. People who have two or more first degree relatives with melanoma may have the genetic mutation for this syndrome.
 - Visit BC Cancer's Hereditary Cancer Program page for more information:
www.bccancer.bc.ca/our-services/services/hereditary-cancer

Statistics on melanoma:

- B.C. statistics: www.bccancer.bc.ca/health-info/disease-system-statistics/statistics-by-cancer-type
- Canada statistics: www.cancer.ca/en/cancer-information/cancer-type/skin-melanoma/statistics/?region=bc

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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.

Can I help prevent melanoma?

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 melanoma:

- **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

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Is there screening for melanoma?

Screening for melanoma is not available for everyone. 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.
- For tips on what to you look for: www.canadianskincancerfoundation.com/early-detection/the-abcdes-of-early-detection/

If you have a higher risk for melanoma, screening is very important for you. The earlier you find a melanoma, the better your chance of cure and survival.

People who have a higher risk of melanoma include those who have:

- A previous melanoma or who have a strong family history of melanoma, should be examined regularly by a doctor, ideally a dermatologist (skin doctor).
- A family member that has had dysplastic nevi should have their moles examined by their doctor.
- Worrisome or unusual moles. These may need to be removed. This can usually be done in the doctor's office under local anesthetic.

Where can I find more information?

- If you have questions about melanoma, 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 Recommended Melanoma Websites: bccancer.bc.ca/our-services/services/library/recommended-websites/types-of-cancer-websites



Provincial Health Services Authority

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- 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