

# Skin Cancer

## Melanoma

### What is Melanoma?

Melanoma is a type of cancer occurring in cells that color the skin called melanocytes. Located in the lower part of the epidermis, these cells produce melanin. When the skin is exposed to the sun, melanocytes produce more pigment, causing the skin to darken, or tan. The most aggressive form of skin cancer, Melanoma can occur anywhere on the body. If detected and treated early, it is curable in most instances. Once it advances, however, it can be difficult to treat. Melanoma cases have increased over the past 10 years more rapidly than that of any other cancer, with more than 50,000 cases reported each year.

The best defense against Melanoma is to stay out of the sun, use potent topical sun blocks, and have a physician or dermatologist regularly check pigmented areas of your skin for changes.

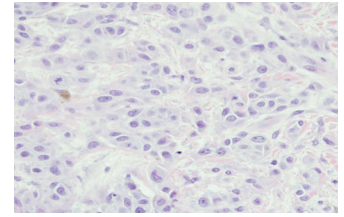
### Who is most likely to have Melanoma?

In men, Melanoma is often found on the upper trunk (between the shoulders and hips), head, or neck. In women, this cancer often develops on the arms and legs. More common in adults, Melanoma often develops in children and teens.

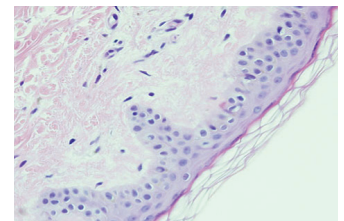
Risk factors include unusual moles, sun exposure, ultraviolet light exposure (tanning booths), and a personal or family history of Melanoma. Caucasians – especially those with blue eyes, red or blonde hair, or freckles – have an increased likelihood of having Melanoma.

### What characterizes Melanoma?

A possible sign of Melanoma is a change in a mole or pigmented area. The change could be in size, shape, height, or color. In some cases, there may be an irregular edge or border, itching, oozing, or bleeding. Asymmetry (two sides of a mole looking or shaped differently) or new moles growing near an existing mole are other signs of possible Melanoma.



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Normal skin cells.

#### Definitions

##### Epidermis:

The outer layer of skin.

##### Malignant:

Cancerous and capable of spreading.

##### Melanin:

A pigment that gives skin its natural color.

##### Pathologist:

A physician who examines tissues and fluids to diagnose disease in order to assist in making treatment decisions.

##### Lymphatic:

Relating to lymph glands.

### How does the pathologist diagnose Melanoma?

Your primary care physician or specialist conducts a thorough skin examination, looking for abnormalities in moles, birthmarks, or other pigmented areas. If a suspicious lesion or area is found, the physician will take a **biopsy specimen** for the pathologist to examine under a microscope. In some cases, a physician may use a diagnostic tool called **dermoscopy** to examine a lesion before taking a biopsy sample. This tool magnifies the lesion to 10 times its size. To highlight the pigmented skin's features, a special type of oil is spread on the area before viewing.

### What else does a pathologist look for?

If the pathologist finds malignant cells in the biopsy, your primary care physician may order other tests to find out whether or not the cancer has spread. These tests include a **local excision** or **wide local excision** to see if cancer has spread into the normal area surrounding the Melanoma and **lymph node mapping** or **biopsy** to find and remove cancer from the lymph nodes. A **chest x-ray** or a **CT (computed tomography)**, **MRI (magnetic resonance imaging)**, or **PET (positron emission tomography)** scan gives physicians views inside the body. The pathologist may also examine blood and urine samples.

These tests help the pathologist assess the location, spread, and **stage** of the Melanoma. Stage 1 Melanomas are relatively small tumors confined to the location of the original tumor. In stage 4, cancer has spread throughout the body. Stages 2 and 3 describe conditions in between these two extremes. About 70 percent of Melanomas are detected at an early stage.

For more information, go to: [www.cancer.gov](http://www.cancer.gov) (National Cancer Institute), [www.skincancer.org](http://www.skincancer.org) (Skin Cancer Foundation) or [www.familydoctor.org](http://www.familydoctor.org) (American Academy of Family Physicians). Type the key word melanoma into the search box.



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