

Search:

Go

[1](#) [2](#) [3](#) [4](#) [5](#) [8](#) [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Melanoma

Definition

Melanoma is the most dangerous type of skin cancer. It is the leading cause of death from skin disease.

Melanoma can also involve the colored part of the eye.

Other common types of skin cancer are [squamous cell carcinoma](#) and [basal cell carcinoma](#).

Alternative Names

Skin cancer - melanoma; Malignant melanoma; Lentigo maligna melanoma; Melanoma in situ; Superficial spreading melanoma; Nodular melanoma; Acral lentiginous melanoma

Causes

Melanoma is caused by changes in skin cells called melanocytes. These cells make a skin color pigment called melanin. Melanin is responsible for skin and hair color.

Melanoma can appear on normal skin. Or, it can begin as a mole or other area that then changes in appearance. Some moles that are present at birth may develop into melanomas. Larger moles that are present at birth are at higher risk of developing melanoma.

There are four major types of melanoma:

- **Superficial spreading melanoma** is the most common type. It is usually flat and irregular in shape and color, with different shades of black and brown. It is most common in Caucasians.
- **Nodular melanoma** usually starts as a raised area that is dark blackish-blue or bluish-red. Some do not have any color (amelanotic melanoma).
- **Lentigo maligna melanoma** usually occurs in older people. It is most common in sun-damaged skin on the face, neck, and arms. The abnormal skin areas are usually large, flat, and tan with areas of brown.
- **Acral lentiginous melanoma** is the least common form. It usually occurs on the palms, soles, or under the nails. It is more common in African Americans.

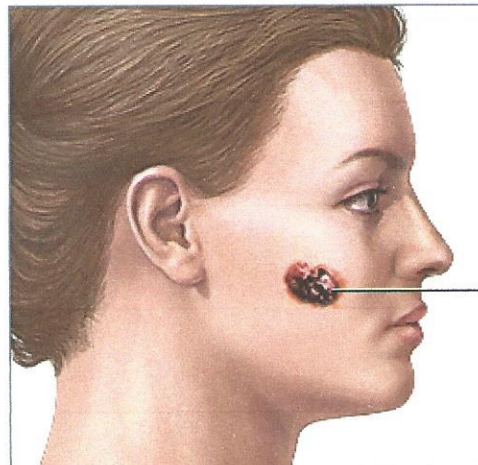
In rare cases, melanomas appear in the mouth, iris of the eye, or retina at the back of the eye. These may be found during dental or eye exams. In very rare cases, a melanoma develops in the vagina, esophagus, anus, urinary tract or small intestine.

Melanoma is not as common as other types of skin cancer, such as basal cell carcinoma. But more and more people are developing melanoma, especially young adults.

The risk of developing melanoma increases with age, though the risk is rising in young people.

You are more likely to develop melanoma if you:

- Have fair skin, blue or green eyes, or red or blond hair
- Live in sunny climates or at high altitudes
- Spent a lot of time in high levels of strong sunlight because of a job or other activities



Malignant melanoma

ADAM

Melanoma

- Have had one or more blistering sunburns during childhood
- Use tanning devices

Other risk factors include:

- Having close relatives with melanoma
- Certain types of moles (atypical or dysplastic) or many birthmarks
- Weakened immune system due to disease or medicines

Symptoms

A mole, sore, lump, or growth on the skin can be a sign of melanoma or other skin cancer. A sore or growth that bleeds, or changes in color can also be a sign of skin cancer.

The **ABCDE** system can help you remember possible symptoms of melanoma:

- **Asymmetry:** One half of the abnormal area is different from the other half.
- **Borders:** The edges of the growth are irregular.
- **Color:** Color changes from one area to another, with shades of tan, brown, or black, and sometimes white, red, or blue. A mixture of colors may appear within one sore.
- **Diameter:** The spot is usually (but not always) larger than 6 mm in diameter -- about the size of a pencil eraser.
- **Evolution:** The mole keeps changing appearance.

The key to successfully treating melanoma is recognizing symptoms early. You might not notice a small spot if you do not look carefully. Have yearly skin checks by a dermatologist, and examine your own skin once a month. Use a hand mirror to check hard-to-see places. Call your doctor if you notice anything unusual.

Exams and Tests

Your doctor will check your skin and look at the size, shape, color, and texture of any suspicious areas.

If your doctor thinks you might have skin cancer, a piece of skin from the growth will be removed. This is called a [skin biopsy](#). The sample is sent to a lab for examination under a microscope.

A [sentinel lymph node \(SLN\) biopsy](#) may be done in some people with melanoma to see if the cancer has spread to nearby lymph nodes.

Once melanoma has been diagnosed, [CT scans](#) or other types of x-rays may be done to see if the cancer has spread.

Treatment

Surgery is needed to treat melanoma. The skin cancer and some surrounding area will be removed. How much skin is removed depends on how deep the melanoma has grown.

If the cancer has spread to nearby lymph nodes, these lymph nodes may also be removed. After surgery, you may receive a medicine called interferon.

Treatment is more difficult when the melanoma has spread to other organs. In this case, it usually cannot be cured. Treatment involves shrinking the skin cancer and treating the cancer in other areas of the body. You may receive:

- [Chemotherapy](#): Medicines are used to kill cancer cells. It is usually given if the melanoma has returned or spread.
- [Immunotherapy](#): Drugs such as interferon or interleukin help your immune system fight the cancer. They may be used along with chemotherapy and surgery.
- [Radiation treatments](#): These may be used to relieve pain or discomfort caused by cancer that has spread.
- [Surgery](#): Surgery may be done to remove cancer that has spread to other parts of the body. This is done to relieve pain or discomfort associated with the growing cancer.

If you have melanoma that is hard to treat, you might consider enrolling in a clinical trial. Ask your doctor for more information. Researchers continue to study new treatments.

Support Groups

You can ease the stress of illness by joining a [cancer support group](#). Sharing with others who have common experiences and problems can help you not feel alone.

Outlook (Prognosis)

How well you do depends on many things, including how soon the cancer was diagnosed, and how far it has spread.

If caught early, some melanomas can be cured.

Melanoma

Melanoma that is very deep or has spread to the lymph nodes is more likely to return after treatment. If it is deeper than 4 mm or has spread to the lymph nodes, the cancer is more likely to have spread to other tissues and organs.

Melanoma usually cannot be cured when the cancer has spread beyond the skin and nearby lymph nodes.

If you have had melanoma and recovered, it is very important to examine your body regularly for any unusual changes. Your risk of melanoma increases once you have had this cancer. Melanoma can return years later. Usually, people who have had melanoma are checked by their skin doctor several times a year.

Possible Complications

Melanoma can spread to other parts of the body very quickly.

Melanoma treatment can cause side effects, including pain, nausea, and fatigue.

When to Contact a Medical Professional

Call your health care provider if you notice a new growth or any other changes in your skin. You should also call if an existing spot becomes painful, swollen, or inflamed, or if it starts to bleed or itch.

Prevention

Some people should see a dermatologist for regular skin exams. These include people with:

- A family history of melanoma
- Severely sun-damaged skin
- Lots of moles on their skin

A skin doctor can examine you and tell you whether you need regular skin checks. Sometimes, unusual moles are removed to prevent them from turning into melanoma.

You should also examine your own skin once a month. Use a mirror to check hard-to-see places. Use the ABCDE system when checking your skin. Call your provider if you notice any changes.

The best way to prevent skin cancer is to reduce your exposure to sunlight. Ultraviolet light is most intense between 10 a.m. and 4 p.m. Try to avoid sun exposure during these hours. Protect your skin by wearing a hat, long-sleeved shirt, long skirt, or pants when you have to be outside. The following tips can also help:

- Apply high-quality sunscreen with a sun protection factor (SPF) rating of 15 or higher, even when you are only going outdoors for a short time.
- Apply a large amount of sunscreen on all exposed areas, including ears and feet.
- Look for sunscreens that block both UVA and UVB light.
- Use a waterproof formula.
- Apply sunscreen at least 30 minutes before going outside. Reapply it often, especially after swimming.
- Use sunscreen in winter, too. Protect yourself even on cloudy days.

Other important facts to help you avoid too much sun exposure:

- Avoid surfaces that reflect light more, such as water, sand, concrete, and white-painted areas.
- Be extra careful at higher altitudes, where skin burns faster.
- Avoid sun lamps, tanning beds, and tanning salons.

References

Gangadhar TC, Fecher LA, Miller CJ, et al. Melanoma. In: Niederhuber JE, Armitage JO, Doroshow JH, Kastan MB, Tepper JE, eds. *Abeloff's Clinical Oncology*. 5th ed. Philadelphia, PA: Elsevier Churchill Livingstone; 2014:chap 69.

Hui A, Friedlander P, Markowitz O. Malignant melanoma. In: Lebowitz MG, Heymann WR, Berth-Jones J, Coulson I, eds. *Treatment of Skin Disease: Comprehensive Therapeutic Strategies*. 4th ed. Philadelphia, PA: Elsevier; 2014:chap 143.

National Cancer Institute: PDQ melanoma treatment. Bethesda, MD: National Cancer Institute. Updated February 2, 2016. www.cancer.gov/types/skin/hp/melanoma-treatment-pdq. Accessed March 17, 2016.

National Comprehensive Cancer Network. NCCN clinical practice guidelines in oncology: melanoma. Version 2. 2016. www.nccn.org/professionals/physician_gls/pdf/melanoma.pdf. Accessed March 17, 2016.

Review Date: 1/31/2016

Reviewed By: Kevin Berman, MD, PhD, Atlanta Center for Dermatologic Disease, Atlanta, GA. Review provided by VeriMed Healthcare Network. Also reviewed by David Zieve, MD, MHA, Isla Ogilvie, PhD, and the A.D.A.M. Editorial team.