

Melanoma - Risk Factors and Prevention [1]

This section has been reviewed and approved by the [Cancer.Net Editorial Board](#) [2], 09/2015

ON THIS PAGE: You will find out more about the factors that increase the chance of developing this type of cancer. To see other pages, use the menu on the side of your screen.

A risk factor is anything that increases a person's chance of developing cancer. Although risk factors can influence the development of cancer, most do not directly cause cancer. Some people with several risk factors never develop cancer, while others with no known risk factors do. However, knowing your risk factors and talking about them to your doctor may help you make more informed lifestyle and health care choices.

The following factors may raise a person's risk of developing melanoma:

- **Sun exposure.** Exposure to ultraviolet (UV) radiation from the sun plays a major role in the development of skin cancer. People who live at high altitudes or in areas with bright sunlight year-round have a higher risk of developing skin cancer, as do those who spend a lot of time outside during the midday hours.

Exposure to ultraviolet B (UVB) radiation from the sun appears more closely associated with melanoma, but newer information suggests that ultraviolet A (UVA) may also play a role in the development of melanoma, as well as the development of [basal and squamous cell skin cancers](#) [3]. While UVB radiation causes sunburn and does not penetrate through car windows or other types of glass, UVA is able to pass through glass and may cause aging and wrinkling of the skin in addition to skin cancer. Therefore, it is important to protect your skin from both UVA and UVB radiation (see Prevention below.)

- **Indoor tanning.** People who use tanning beds, tanning parlors, or sun lamps have an increased risk of developing all types of skin cancer. Recreational sun tanning outdoors should also be avoided to reduce the risk of skin cancer.
- **Moles.** People with many moles or unusual moles called dysplastic nevi or atypical moles have a higher risk of developing melanoma. Dysplastic nevi are large moles that have irregular color and shape. A doctor may recommend regular photography of the skin to keep a close eye on people with many moles.
- **Fair skin.** People with fair complexion, blond or red hair, blue eyes, and freckles are at increased risk for developing melanoma. This risk is also higher for people whose skin has a tendency to burn rather than tan.
- **Family history.** Approximately 10% of people with melanoma have a family history of the disease. If a person has a close relative (parent, brother, sister, or child) who has been diagnosed with melanoma, his or her risk of developing melanoma is two to three times higher than the average risk. This risk increases if several family members that live in different locations have been diagnosed with melanoma. Therefore, it is recommended that close relatives of a person with melanoma routinely have their skin examined.
- **Familial melanoma.** Although changes called mutations in specific genes, such as *CDKN2A*, *CDK4*, and *MITF*, have been identified that may lead to melanoma, these are rare and only a very small number of families with a history of melanoma actually pass these genetic mutations from generation to generation. Scientists are looking for other genes and environmental factors that might also affect a person's risk of developing melanoma, as well as other cancers. Learn more about [familial melanoma](#) [4].
- **Other inherited conditions.** People with specific genetic conditions, including [xeroderma pigmentosum](#) [5], [retinoblastoma](#) [6], [Li-Fraumeni syndrome](#) [7], [Werner syndrome](#) [8], and certain [hereditary breast and ovarian cancer syndromes](#) [9], have an increased risk of developing melanoma.
- **Previous skin cancer.** People who have had one melanoma have an increased risk of developing other, new melanomas. People who have had basal cell or squamous cell skin cancer also have an increased risk of developing melanoma. Therefore, people who have had one skin cancer need ongoing, follow-up care to watch for additional cancers. See the [Follow-Up Care](#) [10] section for more information.
- **Race or ethnicity.** Melanoma rates are about 24 times higher in white people than black

people. However, it is important to know that a person of any race or ethnicity can develop melanoma. In fact, the rates of melanoma among Hispanic-Americans are rising.

- **Age.** The median age at which people are diagnosed with melanoma is just above 50 years old. However, melanoma occurs in young adults with greater frequency than many other types of cancer.
- **Weakened or suppressed immune system.** People who have weakened immune systems or use certain medications that suppress immune function have a higher risk of developing skin cancer, including melanoma.

Prevention

Different factors cause different types of cancer. Researchers continue to look into what factors cause this type of cancer. Although there is no proven way to completely prevent this disease, you may be able to lower your risk. Talk with your doctor for more information about your personal risk of cancer.

Reducing exposure to UV radiation, particularly by reducing sun exposure, lowers the risk of developing skin cancer significantly. This is important for people of all ages and is especially important for people who have other risk factors for melanoma (see above).

Sun damage builds up over time, so it is important to take the following steps to reduce sun exposure and avoid sunburn:

- Limit or avoid direct exposure to the sun between 10:00 AM and 4:00 PM.
- Wear sun-protective clothing, including a wide-brimmed hat that shades the face, neck, and ears. Clothes made from fabric labeled with UV protection factor (UPF) may provide better protection. UV-protective sunglasses are also recommended.
- Use a broad spectrum sunscreen throughout the year that protects against both UVA and UVB radiation and has with a sun protection factor (SPF) of at least 30. Reapply at least one ounce of sunscreen to your entire body every two hours or every hour after heavy perspiration or being in the water.
- Avoid recreational sunbathing and do not use sun lamps, tanning beds, or tanning salons.

- Examine the skin regularly. This should include examinations by a health care professional, as well as self-examinations. Learn more about melanoma [screening](#) [11].

Learn more about [protecting your skin from the sun](#) [12] in this additional article on Cancer.Net.

Limiting your sun exposure may reduce your body's production of vitamin D, although some research suggests less than 15 minutes of sunlight exposure may be enough for most people to produce an adequate amount of vitamin D. People with limited sun exposure should talk with their doctor about how to include good sources of vitamin D in their diet, including the use of supplements. Your levels of vitamin D can be checked through a simple blood test by your doctor.

The [next section in this guide is Screening](#) [11], and it describes the early warning signs of melanoma and how to perform a self-examination. Or, use the menu on the side of your screen to choose another section to continue reading this guide.

Links

[1] <http://www.cancer.net/es/node/19254>

[2] <http://www.cancer.net/es/node/51>

[3] <http://www.cancer.net/cancer-types/skin-cancer-non-melanoma>

[4] <http://www.cancer.net/cancer-types/familial-malignant-melanoma>

[5] <http://www.cancer.net/cancer-types/xeroderma-pigmentosum>

[6] <http://www.cancer.net/cancer-types/retinoblastoma-childhood>

[7] <http://www.cancer.net/cancer-types/li-fraumeni-syndrome>

[8] <http://www.cancer.net/cancer-types/werner-syndrome>

[9] <http://www.cancer.net/cancer-types/hereditary-breast-and-ovarian-cancer>

[10] <http://www.cancer.net/cancer-types/melanoma/follow-care>

[11] <http://www.cancer.net/cancer-types/melanoma/screening>

[12] <http://www.cancer.net/navigating-cancer-care/prevention-and-healthy-living/protecting-your-skin-sun>