



Skin Cancer

Basic Description

Skin cancer is the most common of all cancers. Fortunately, most skin cancers are slow-growing, easy to recognize, and relatively easy to treat when detected early. Skin cancers are either nonmelanoma or melanoma.

Most skin cancers are nonmelanoma, meaning they occur in either basal cells or squamous cells. These cells are located at the base of the outer layer of the skin or cover the internal and external surfaces of the body. Most non-melanoma skin cancers develop on sun-exposed areas of the body, like the face, ear, neck, lips, and the backs of the hands. Depending on the type, they can be fast- or slow-growing, but they rarely spread to other parts of the body.

Melanoma skin cancers develop from melanocytes, the cells that produce our skin color. Melanoma is curable when it is detected in its early stages. Although melanoma accounts for only 4% of skin cancers, it is a far more serious skin cancer, and it causes about 73% of skin cancer deaths.

Opportunities

Prevention The best way to prevent skin cancer is to limit unprotected exposure to the sun, especially between 10 a.m. and 4 p.m. Most of the skin can be protected with clothing and broad-brimmed hats. Wraparound sunglasses provide the best protection for the eyes and the skin around the eyes. Sunscreens with a sun protection factor (SPF) of 15 or more should be used on areas of skin exposed to the sun. The use of tanning parlors and sun lamps should be avoided.

Detection The American Cancer Society recommends a cancer-related checkup by a physician, including skin examination, during a periodic health examination for people ages 20 and older. Everyone should know their own pattern of moles, blemishes, freckles, and other marks on the skin so they can notice changes during monthly self-examinations. Key warning signs of non-melanoma skin cancers are a new growth, a spot that is getting larger, or a visible sore that does not heal within three months.

For melanoma, the most important warning sign is a change in the size, shape, or color of a mole or signs that its border is becoming more ragged. Other symptoms include scaliness, bleeding, or change in the appearance of a bump or nodule; the spread of pigmentation beyond its border; or a change in sensation, itchiness, tenderness, or pain. People who notice these kinds of signs should see their doctor immediately.



Treatment Fortunately, when detected and treated early, most nonmelanoma skin cancers may be cured by fairly minor surgery. Most common is simple excision (cutting out the tumor with a surgical knife), but other treatments may be used, including lasers, heat, cold, radiation, and chemotherapy, depending on where and how large the tumor is.

If detected early, melanoma may be treated successfully with surgical excision, although additional surgery to test and, if necessary, remove surrounding tissue will be required. If the cancer has spread, more extensive surgery and treatment will be needed.

Statistics

The five-year relative survival rate represents the percentage of patients who live at least five years after diagnosis, whether disease-free, in remission, or under treatment (after excluding people who die of other causes from these calculations). They do not imply that five-year survivors have been permanently cured of cancer. Localized cancer represents cancer that, at the time of diagnosis, has not spread to other sites within the body. Typically, the earlier cancer is detected and diagnosed, the more successful the treatment, thus enhancing the survival rate.

Who Is at Risk?

Gender Men are more likely to develop nonmelanoma and melanoma skin cancers than women. Melanoma accounts for 4% of all cancers in both men and women.

Age The rate of melanomas increases with age. The rate in 70-year-olds is double that of 45-year-olds. But this is one of the few cancers that is also found in younger people.

Race The risk of melanoma is about 10 times higher for whites than for African Americans because of the protective effect of skin pigment. Whites with fair skin that freckles or burns easily are at especially high risk.

Immune system suppression People who have been treated with medicines that suppress the immune system have an increased risk of developing skin cancer.

Ultraviolet radiation and sunburn People with excessive exposure to light from tanning lamps, booths, or sunlight are at greater risk for skin cancer. If a person has had severe, blistering sunburns, particularly in his or her childhood or teenage years, he or she also has an increased risk of developing skin cancer.

Other Risk Factors

Nonmelanoma Skin Cancers:

Chemical exposure Exposure to arsenic increases the risk of developing nonmelanoma skin cancer. Exposure to industrial tar, coal, paraffin, and certain types of oil may also increase the risk of developing nonmelanoma skin cancer.

Radiation exposure People who have had radiation treatment have a higher risk of developing non-melanoma skin cancer in the area that received the treatment.

Skin Cancer in the United States 2007 Estimates

- **New cases**
Nonmelanoma >1 million
Melanoma 59,940
- **Deaths per year**
Nonmelanoma 2,740
Melanoma 8,110
- **Five-year localized survival rate**
Melanoma 99%
- **Five-year overall survival rate**
Melanoma 92%

For localized melanoma, survival rates are 99%, but they fall sharply to 15% if the cancer has spread to distant parts of the body.

Melanoma Skin Cancers:

Moles People with many moles and those who have some large moles have an increased risk for melanoma.

Family history Risk of melanoma is greater if one or more of a person's first-degree relatives (mother, father, brother, sister, child) have been diagnosed with melanoma. Depending on the number of affected relatives, the risk can be up to eight times greater than that of people without a family history of melanoma. Around 10% of all people with melanoma have a family history of melanoma.

Quality-of-Life Issues

From the time of diagnosis, the quality of life for every cancer patient and survivor is affected in some way. The American Cancer Society has identified four quality-of-life factors that affect cancer patients and their families; these factors are social, psychological, physical, and spiritual.

The concerns that patients and survivors most often express are fear of recurrence; chronic and/or acute pain; sexual problems; fatigue; guilt for delaying screening or treatment, or for doing things that may have caused the cancer; changes in physical appearance; depression; sleep difficulties; changes in what they are able to do after treatment; and the burden on finances and loved ones. People with skin cancer may have a fear of possible disfigurement, and concern about protecting their skin from the sun may greatly increase.

In recent years, the quality of life for those who are living with cancer has received increased attention. No one has to make the cancer journey alone. The American Cancer Society Cancer Survivors Network® is one source of support for people with cancer and their families and friends. To participate, visit www.cancer.org.

Emerging Trends

Emerging trends in the area of skin cancers include:

Treatment Many treatments for nonmelanoma skin cancers are being studied, such as immune-boosting drugs, laser surgery, and retinoids (drugs related to Vitamin A). Researchers are currently testing a vaccine and gene therapies against melanoma.

Basic research Research to understand how UV exposure damages DNA and how changes in DNA cause normal skin cells to become cancerous is underway and may lead to new treatments.

Education Researchers are studying the effectiveness of public health campaigns to encourage prevention and early detection of skin cancer.

Additional Resources

To learn more about skin cancers and the American Cancer Society's programs, please call 1-800-ACS-2345 (toll free) or visit our Web site at www.cancer.org.

Additional information on skin cancer may be found at:

- **National Cancer Institute**
Cancer Information Service
Telephone: 1-800-4-CANCER (toll free)
Internet Address: www.cancer.gov
- **American Academy of Dermatology**
Telephone: 1-866-503-7546 (toll free)
Internet Address: www.aad.org
- **Skin Cancer Foundation**
Telephone: 1-800-754-6490 (toll free)
Internet Address: www.skincancer.org
- **Environmental Protection Agency**
Telephone: 202-272-0167
Internet Address: www.epa.gov

Bottom Line

Nearly all skin cancers are preventable by limiting unprotected exposure to the sun. When they do occur, most skin cancers can be treated successfully if detected early — even melanoma, the most serious type of skin cancer. In addition to seeking shade, the American Cancer Society recommends the "Slip! Slop! Slap! Wrap!"[®] method of prevention — **slip** on a shirt, **slop** on 15 SPF (or higher) sunscreen, **slap** on a hat, and **wrap** on sunglasses before any exposure to the sun.



1.800.ACS.2345
www.cancer.org

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