Melanoma is the most dangerous type of skin cancer. It is the leading cause of death from skin disease. Melanoma is caused by changes in cells called melanocytes, which produce a skin pigment called melanin. Melanin is responsible for skin and hair color. It can appear normal on skin, or it may begin as a mole or other area that has changed in appearance. Some moles that are present at birth may develop into melanomas.

The U.S. Centers for Disease Control and Prevention has concluded that about 65 percent to 90 percent of melanomas are caused by exposure to ultraviolet light, such as from the sun or tanning booths.

**Risk Factors for Melanoma**

The risk of developing melanoma increases with age. However, it also is frequently seen 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
- Spend a lot of time in high levels of strong sunlight, because of a job or other activities
- Have had one or more blistering sunburns during childhood
- Use tanning devices

Other risk factors include:

- Close relatives with a history of melanoma
- Certain types of moles (atypical or dysplastic) or multiple birthmarks
- Weakened immune system due to disease or medication

**Melanoma Incidence Trend**

Over the past 15 years, the age-adjusted incidence rate has steadily been rising in both Illinois and the United States. In Illinois, the rate has increased from 9.7 cases per 100,000 in 1995 to 15.9 cases per 100,000 in 2009. In the United States, the rate has increased from 16.4 cases per 100,000 to 22.6 cases per 100,000 in the same time period.

![Incidence Rates of Melanoma, Illinois and the U.S., 1995-2009](chart.png)

Source: Illinois Department of Public Health, Illinois State Cancer Registry, data as of November 2011; National Cancer Institute, November 2011 SEER data submission

Note: Age-adjusted rates are per 100,000 and adjusted to the 2000 U.S. standard population
**MELANOMA INCIDENCE BY AGE**

Over the past 15 years, the age-adjusted incidence rate of melanoma by age group has steadily been rising in all adult age groups in Illinois. However, the incidence rate has doubled for the 18-34 age group (3.4 cases per 100,000 in 1995 to 7 cases per 100,000 in 2009) and nearly doubled for the 65 years and older age group (28.3 cases per 100,000 in 1995 to 54.3 cases per 100,000 in 2009).

**MELANOMA INCIDENCE BY GENDER**

Over the past 15 years, the age-adjusted incidence rate of melanoma has steadily been rising in both males and females in Illinois. The rate has increased from 12.7 cases per 100,000 in 1995 to 19.8 cases per 100,000 in 2009 in men. In women, the rate has nearly doubled from 7.6 cases per 100,000 to 13.6 cases per 100,000 in the same time period.
**MELANOMA INCIDENCE BY RACE**

Whites in Illinois have a higher age-adjusted incidence rate of melanoma than blacks and Asians and other racial groups. Additionally, the incidence rate among whites has grown from 11.0 cases per 100,000 in 1995 to 18.3 cases per 100,000 in 2009.

![Incidence Rate of Melanoma by Race, Illinois, 1995-2009](image)

Source: Illinois Department of Public Health, Illinois State Cancer Registry, data as of November 2011

Note: Age-adjusted rates are per 100,000 and adjusted to the 2000 U.S. standard population

**PREVENTION OF MELANOMA**

Protection from ultraviolet (UV) radiation is important year round, not just during the summer or at the beach. UV rays from the sun can reach you on cloudy and hazy days, as well as bright and sunny days. UV rays also reflect off of surfaces like water, cement, sand and snow. Indoor tanning (using a tanning bed, booth or sunlamp to get tan) exposes users to UV radiation.

The hours between 10 a.m. and 4 p.m. daylight savings time (9 a.m. to 3 p.m. standard time) are the most hazardous for UV exposure outdoors in the continental United States. UV rays from sunlight are the greatest during the late spring and early summer in North America.

There are specific actions everyone should take to help prevent melanoma:

- Limit your time in the sun.
- Seek shade, especially during midday hours.
- Protect yourself in the sun by using sunscreen lotions with a sun protection factor (SPF) of at least 15. (Some doctors will suggest using a lotion with an SPF of at least 30.) Apply the product's recommended amount to uncovered skin 30 minutes before going outside to give it a chance to be absorbed, and apply again every two hours or after swimming or sweating.
- Cover up by wearing clothing that covers the skin to help protect against UV rays.
- Wear a hat with a wide brim to shade the face, head, ears and neck.
- Wear sunglasses that wrap around and block as close to 100 percent of UV rays as possible.
- Examine yourself regularly for changes on your skin, such as new moles or changes to old moles, and talk to your doctor about having a skin exam done by a health care professional.
- Avoid indoor tanning using a tanning bed, booth or sunlamp to get tan.