

Health Effects From Overexposure to the Sun

Alabamians love the sun and spend a great deal of time outside—working, playing, exercising—often in clothing that exposes a lot of skin to the sun. Most people are now aware that too much sun has been linked to skin cancer. However, few know the degree of risk posed by overexposure, and fewer are aware that the risks go beyond skin cancer. Each year more than one million cases of skin cancer are diagnosed in the United States and one person dies every hour from melanoma or nonmelanoma skin cancer.

A Word About Risk. Overexposure to UV radiation poses the risk of serious health effects for everyone, but not everyone is equally at risk. For example, you may be at greater risk of contracting skin cancer if your skin always burns, or burns easily, and if you have blond or red hair or blue, green or gray eyes. Other factors indicating an increased risk of skin cancer include a history of blistering sunburns in early childhood, usually from acute sun exposure; the presence of many moles; or a family history of skin cancer. Also, people who work or otherwise spend a large amount of time outdoors (i.e., chronic exposure to the sun) may be at higher risk of health effects.

Melanoma

Melanoma, the most serious form of skin cancer, also is one of the fastest growing types of cancer in the United States. Many scientists believe there might be a link between childhood sunburns and malignant melanoma later in life. Melanoma cases in this country have more than doubled in the past 2 decades; according to the American Cancer Society, about 44,200 new cases of melanoma and 7,300 deaths are currently reported each year.

Cure Rate. Melanoma can spread to other parts of the body quickly, but when detected in its earliest stages it is almost always curable. If not caught early melanoma is often fatal.

Warning Sign. Melanoma begins as an uncontrolled growth of pigment-producing cells in the skin. This growth leads to the formation of dark-pigmented malignant moles or tumors called melanomas. Melanomas can appear suddenly without warning but also can develop from or near a mole. For this reason, it is important to know the location and appearance of moles on the body so any change will be noticed. Melanomas are found most frequently on the upper backs of men and women and the legs of women, but they can occur anywhere on the body.

Nonmelanoma Skin Cancers

Unlike melanoma, nonmelanoma skin cancers are rarely fatal. Untreated, however, they can spread and cause more serious health problems. An estimated 1 million Americans will develop nonmelanoma skin cancers this year, while 1,900 will die from the disease.

There are two primary types of nonmelanoma skin cancers: **Basal Cell Carcinomas** are tumors of the skin that usually appear as small, fleshy bumps or nodules on the head and neck but can occur on other skin areas as well.

Squamous Cell Carcinomas are tumors that might appear as nodules or as red, scaly patches. The second most common skin cancer found in fair-skinned people, squamous cell carcinoma, is rarely found in darker-skinned people.

Cure Rate. These two nonmelanoma skin cancers have cure rates as high as 95 percent if detected and treated early.

Warning Sign. Basal cell carcinoma tumors usually appear as slowly growing, raised, translucent, pearly nodules that, if untreated, might crust, discharge pus, and sometimes bleed. They typically develop on the edge of the ears, the face, lips, mouth, hands and other exposed areas of the body.

Actinic Keratoses

These sun-induced skin growths occur on body areas exposed to the sun. The face, hands, forearms, and the “V” of the neck are especially susceptible to this type of blemish. They are premalignant, but if left untreated, actinic keratoses can become malignant.

Premature Aging of the Skin

Chronic exposure to the sun causes changes in the skin called actinic (or solar) degeneration. Over time, the skin becomes thick, wrinkled, and leathery.

Cataracts and Other Eye Damage

Cataracts are a form of eye damage, a loss of transparency in the lens that clouds vision. Left untreated, cataracts can rob people of vision. Research has shown that UV radiation increases the likelihood of certain cataracts.

Other kinds of eye damage include pterygium (tissue growth on the white of the eye that can block vision), skin cancer around the eyes, and degeneration of the macula (the part of the retina near the center, where visual perception is most acute).

Immune Suppression

Scientists have found that sunburn can alter the distribution and function of disease-fighting white blood cells in humans for up to 24 hours after exposure to the sun. Mild sunburns can suppress immune functions in people of all skin types.

Eight Action Steps for Sun Protection

- **Limit Time in the Midday Sun as Much as Possible.** The sun's UV rays are strongest between 10 a.m. and 4 p.m. To the extent you can, limit exposure to the sun during these hours.
- **Watch for the UV Index.** The UV Index provides important information to help you plan your outdoor activities in ways that prevent overexposure to the sun's rays.
- **Wear Sunglasses That Block 99 to 100 Percent of UV Radiation.** Sunglasses that provide 99 to 100 percent UVA and UVB protection will greatly reduce sun exposure that can lead to cataracts and other eye damage.

• **Wear a Hat.** A hat with a wide brim offers good sun protection for your eyes, ears, face, and the back of your neck—areas particularly prone to overexposure to the sun.

• **Seek Shade.** Staying under cover is one of the best ways to protect yourself from the sun.

• **Protect Other Areas of Your Body With Clothing During Prolonged Period in the Sun.**

Tightly woven, loose-fitting, and full-length clothes are best for protection of exposed skin.

• **Always Use a Sunscreen When Outside.**

A sunscreen with a sun protection factor (SPF) of at least 15 blocks most harmful UV radiation. Apply sunscreen liberally and reapply every two hours when working, playing, or exercising outdoors. Even waterproof sunscreen can come off when you towel off sweat or water.

• **Avoid Sunlamps and Tanning Salons.** The light source from sun beds and sunlamps damages the skin and unprotected eyes. It's a good idea to avoid artificial sources of UV light.

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Skin Cancer

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Protect Yourself

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