



A 5-Minute Safety Training Aid

Sun Safety

Spending time outside is a great way to get physical activity, reduce stress, and get [Vitamin D](#). However, repeated exposure to ultraviolet radiation (UV) places people at risk for skin cancer and eye diseases, such as [cataracts](#).



Skin Cancer

Skin cancer is the [most common cancer](#) in the United States, and the number of cases continues to rise.¹ The [American Cancer Society](#) estimates that over one million cases of skin cancer are diagnosed each year. The most severe form of skin cancer is melanoma. An estimated 100,350 new melanoma cases were diagnosed in the United States in 2020, with approximately 6,850 people dying from the condition.²



Eye Damage

UV radiation can also damage the sensitive retinal and corneal areas of the eyes. Long-term exposure to the sun can cause [macular degeneration](#), cataracts, [pterygium](#), and [eyelid cancer](#). These disorders affect vision and, in some cases, cause blindness.



At-Risk Workers

Farmers, landscapers, and others whose occupations require long hours working outdoors are at risk from prolonged exposure to UV radiation. Skin cancer and eye damage are not usually the result of a single, painful sunburn or exposure to intense light. Small changes occur each time a person is exposed to sunlight. Repeated exposure can cause progressive damage to the skin's and eye's biological structure.

While everyone is vulnerable to damage from UV radiation, people are at greater risk of developing skin cancer when they have the following traits:

- sunburn easily and rarely tan;
- freckles;
- light complexions;
- blonde or red hair; and
- blue or gray eyes.

Early detection of skin cancer and eye diseases is the first step for successful treatment. If you notice the growth of a new mole, discoloration change to an existing mole, or changes in your vision, seek medical attention.



At-Risk Times

The sun's rays are most intense and damaging during the summer months. The most damaging exposure occurs from **10:00 a.m. until 4:00 p.m.** However, you can still get sun damage during cloudy weather, other seasons, and other times of the day.



Protection

The areas of the body **most at risk** to exposure to UV radiation are the **back of the neck, ears, face, eyes, and arms**. These and other body parts can be easily protected by wearing proper clothing, sunglasses, and sunscreen. You can reduce your risk by taking precautions and avoiding repeated exposure to the sun.



Hats

Protection for the face and other parts of the head is as simple as wearing a hat. A hat with a **2- or 3-inch brim is ideal**. There are several questions you need to ask yourself when selecting a hat for sun safety:

- How much of your face, ears, and neck are protected?
- Is it comfortable to wear on a hot day?
- Is it practical for your work conditions, such as high winds and humidity?
- Will it stay on while performing various tasks?
- Can it be worn around or in close quarters?
- Does it limit your vision or hearing?
- Will you wear it?

For sun safety while wearing a hard hat, use a sun shield that properly fits the hard hat and a cloth neck shield to protect the back of your neck.



Clothing

Proper clothing protects against damaging UV radiation and minimizes heat stress. **Long-sleeved shirts** and **long pants** in **lightweight, tightly woven fabrics** (preferably 100% cotton) provide both comfort and protection.

Some companies now make lightweight, comfortable clothing that protect against UV exposure even when wet. It tends to be more tightly woven, and some have special coatings to help absorb UV rays. These sun-protective clothes may have a label listing the ultraviolet protection factor (UPF) value – the level of protection the garment provides from the sun's UV rays on a scale from 15 to 50+. The higher the UPF, the higher the protection from UV rays.



Sunglasses

UV-absorbent sunglasses can help protect your eyes from sun damage. When purchasing sunglasses, look for the manufacturer's label specifying the **UV rating** of the lens. The best sunglasses should **block 99% to 100% of UV radiation**, including the entire spectrum of UVA and UVB radiation. If no UV rating is specified, the sunglasses may offer minimal or no protection.



Sunscreen

Parts of the body that cannot be covered with clothing should be protected with sunscreen. Sunscreens, however, should not be a substitute for wearing proper clothing. Sunscreens recommended for outdoor work are:

- rated with a **sun protection factor (SPF) of 15 or more**;
- waterproof;
- labeled broad-spectrum.

An SPF 15 rating means that your skin is protected from the sun 15 times longer than without sunscreen. Broad-spectrum sunscreen protects against both UVA and UVB radiation. Be sure to read the label for specific application instructions.



Avoidance

The best way to reduce exposure to UV radiation is to **avoid the sun**. Sun avoidance may be impossible for some activities. Still, scheduling tasks around the critical time of 10:00 a.m. until 4:00 p.m. can reduce your exposure. Be aware of the risks involved and make it a habit to protect yourself.