



People who spend a lot of time outdoors run the risk of suffering from more than just heat exhaustion or heat stress. Repeated exposure to

ultraviolet (UV) radiation places them at risk for various forms of skin cancer and eye diseases, such as cataracts. The number of skin cancer cases in the United States continues to increase each year.

Skin cancer is the most commonly occurring cancer in the United States. The American Cancer Society estimates that over one million cases of skin cancer are diagnosed each year. The most serious form of skin cancer is Melanoma. An estimated 68,720 Americans will be diagnosed with Melanoma this year and about 8,650 of those people will die from the cancer.

UV radiation also damages the sensitive retinal and corneal areas of the eyes. Long term exposure can cause macular degeneration, cataracts, pterygium, and cancer of the eyelids. These disorders affect vision and in some cases cause blindness.

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

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

### **Population Groups at Risk**

Everyone is vulnerable to damage from UV radiation, but people who burn easily and rarely tan, have freckles, have light complexions, have blonde or red hair, and/or blue or gray eyes have a greater risk of developing skin cancer. Early detection of skin cancer is the first step for successful treatment. If you notice the growth of a new mole, discoloration change to an existing mole, see a physician.

### **Protective Measures**

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

# *Sun Safety*

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A 5-Minute Safety Training Aid

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 can be 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 made so that it will be comfortable on a hot day?
- Is it practical for the conditions under which you work (i.e., high humidity, winds, etc.)?
- 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 sunshield that properly fits the hard hat and use 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 clothing that is lightweight, comfortable, and protects 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 a sunscreen, though sunscreens should not be a substitute for wearing proper clothing. Sunscreens recommended for outdoor work should have a sun protection factor (SPF) of at least 15, be waterproof, and labeled broad-spectrum. Broad-spectrum sunscreen protects against both UVA and UVB radiation. A SPF 15 rating means that your skin is protected from the sun 15 times longer than without the sunscreen. 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, but scheduling tasks around the critical time period of 10:00 a.m. until 4:00 p.m. will reduce your exposure. Be aware of the risks involved and make it a habit to protect yourself.

This Take 5 for Safety was published with information from the American Cancer Society and the Texas Department of Insurance, Division of Workers' Compensation and is considered accurate at the time of publication.

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TDI-DWC also offers several heat-related safety publications online at [www.tdi.texas.gov/wc/safety/videoresources/index.html](http://www.tdi.texas.gov/wc/safety/videoresources/index.html) including: Sunglasses Safety Fact Sheet, Heat-related Injuries and Illnesses Prevention Fact Sheet, and Heat Stress Safety Training Program.