

Sun Exposure at Work

- Working outdoors in sunlight can increase the risk of sunburn and skin cancer.
- Workers can take steps to protect against sun exposure.

Working outdoors in the sunlight can increase your risk of sunburn and skin cancer.

Ultraviolet (UV) rays are a part of sunlight that is an invisible form of radiation. UV rays can penetrate and change the structure of skin cells. There are three types of UV rays: ultraviolet A (UVA), ultraviolet B (UVB), and ultraviolet C (UVC). UVA is the most abundant source of solar radiation on the earth's surface. UVA penetrates beyond the top layer of human skin. Scientists believe that UVA radiation can cause damage to connective tissue and increase a person's risk for developing skin cancer. UVB rays penetrate less deeply into skin but can still cause some forms of skin cancer.

Sunlight exposure is highest during the summer and between 10:00 a.m. and 4:00 p.m. Working outdoors during these times increases the chances of getting sunburned.

Workers are at risk of UV radiation even on cloudy days.

Many drugs increase sensitivity to sunlight and the risk of getting sunburn.

Reducing risk

Supervisors can protect workers from sun exposure by:

- Scheduling outdoor work when there is less sunlight exposure.
- Providing shade or indoor break areas.
- Training workers about sun exposure including:
 - Their risk of exposure
 - How to prevent exposure
 - The signs and symptoms of overexposure

Workers can protect themselves from UV damage from sun exposure by:

- Wearing sunscreen with a minimum of SPF 15.
 - SPF refers to the amount of time that people will be protected from a burn.
 - An SPF of 15 will allow a person to stay out in the sun 15 times longer than they normally would be able to stay without burning.
 - Sunscreen performance is affected by wind, humidity, perspiration, and proper application.
- Applying at least 1 ounce of sunscreen 20 minutes before sun exposure.
 - Special attention should be given to covering the ears, scalp, lips, neck, tops of feet, and backs of hands.
- Reapplying sunscreens at least every 2 hours. and each time you get out of the water or sweat heavily.
 - You may need to apply sunscreen more frequently when also using insect repellents.
- Wearing appropriate clothing.
 - Dark clothing with a tight weave is more protective than light-colored, loosely woven clothing.
 - High-SPF clothing can provide more protection.
- Wearing wide-brimmed hats and sunglasses with almost 100% UV protection and with side panels to protect your eyes.

Treating a sunburn

Sunburn is a sign of skin damage from spending too much time outdoors without wearing sunscreen. Years of overexposure to the sun leads to premature wrinkling, age spots, and an increased risk of skin cancer.

Eyes can also get burned from sun exposure. Sunburned eyes become red, dry, and painful, and feel gritty.

Sunburns usually appear about 4 hours after sun exposure.

A worker with a sunburn may experience:

- *Red, warm, and tender skin
- *Headaches
- *Swollen skin
- *Fever
- *Blistering
- *Nausea
- *Fatigue

There is no quick cure for minor sunburn. Workers with sunburn should avoid further exposure to the sun until the burn has resolved.

If you have a sunburn, you can:

- Take a pain reliever to help with pain, headaches, and fever.
- Drink plenty of water to replace fluid losses.
- Take cool baths or apply cool wet cloths on the burned area.
- Apply a topical moisturizing cream, aloe, or 1% hydrocortisone cream.

If blistering occurs, lightly bandage or cover the area with gauze to prevent infection. Broken blisters slow the healing process and increase the risk of infection.

When the blisters break and the skin peels, dried fragments may be removed. Apply an antiseptic ointment or hydrocortisone cream.

Seek medical attention if: (1) You are dehydrated. (2) You have a high fever (over 101°F). (3) Extreme pain lasts longer than 48 hours. (4) Severe sunburns cover more than 15% of your body.

