

Fast Facts

Protecting Yourself from Sun Exposure

Anyone working outdoors is exposed to the sun's ultraviolet (UV) rays, even on cloudy days. UV rays are a part of sunlight that is an invisible form of radiation. There are three types of UV rays. UVA is believed to damage connective tissue and increase the risk for developing skin cancer. UVB penetrates less deeply into the skin, but can still cause some types of skin cancer. Natural UVC is absorbed by the atmosphere and does not pose a risk.

Sunburn

Sunburn is not immediately apparent. Symptoms usually start about 4 hours after sun exposure, worsen in 24–36 hours, and resolve in 3–5 days. They include red, tender and swollen skin, blistering, headache, fever, nausea, and fatigue. In addition to the skin, eyes can become sunburned. Sunburned eyes become red, dry, painful, and feel gritty. Chronic eye exposure can cause permanent damage, including blindness.

First Aid

- Take aspirin, acetaminophen, or ibuprofen to relieve pain, headache, and fever.
- Drink plenty of water to help replace fluid losses.
- Comfort burns with cool baths or the gentle application of cool wet cloths.
- Avoid further exposure until the burn has resolved.
- Use of a topical moisturizing cream, aloe, or 1% hydrocortisone cream may provide additional relief.

If blistering occurs:

- Lightly bandage or cover the area with gauze to prevent infection.
- Do not break blisters. (This slows healing and increases risk of infection.)
- When the blisters break and the skin peels, dried skin fragments may be removed and an antiseptic ointment or hydrocortisone cream may be applied.

Seek medical attention if any of the following occur:

- Severe sunburns covering more than 15% of the body
- Dehydration
- High fever (>101 °F)
- Extreme pain that persists for longer than 48 hours

Skin Cancer

Skin cancer is the most common form of cancer in the United States. The most common types of skin cancer include basal cell carcinoma, squamous cell carcinoma, and melanoma.

Indicators of skin cancer may include:

- Irregular borders on moles (ragged, notched, or blurred edges)
- Moles that are not symmetrical (one half doesn't match the other)
- Colors that are not uniform throughout
- Moles that are bigger than a pencil eraser
- Itchy or painful moles
- New moles
- Sores that bleed and do not heal
- Red patches or lumps

Protect Yourself

- Avoid prolonged exposure to the sun when possible.
- Wear sunscreen with a minimum of SPF 15.
 - SPF refers to how long a person will be protected from a burn. (SPF 15 means a person can stay in the sun 15-times longer before burning.) SPF only refers to UVB protection.
 - To protect against UVA, look for products containing: Mexoryl, Parsol 1789, titanium dioxide, zinc oxide, or avobenzone.
 - Sunscreen performance is affected by wind, humidity, perspiration, and proper application.
 - Throw away sunscreens after 1–2 years (they lose potency).
 - Apply liberally (minimum of 1 oz) at least 20 minutes before sun exposure.
 - Apply to ears, scalp, lips, neck, tops of feet, and backs of hands.
 - Reapply at least every 2 hours and each time a person gets out of the water or perspires heavily.
 - Some sunscreens may lose their effectiveness when applied with insect repellents. You may need to reapply more often.
- Wear clothing with a tight weave or high-SPF clothing.
- Wear wide-brimmed hats and sunglasses with UV protection and side panels.
- Take breaks in shaded areas.

DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health
www.cdc.gov/niosh/topics/outdoor/
DHHS (NIOSH) Publication No. 2010–116

Telephone: 1–800–CDC–INFO
TTY: 1–888–232–6348
E-mail: cdcinfo@cdc.gov



NIOSH