

Safety Zone: Risks and Treatment of Heat-Related Illnesses

Risks of Heat-Related Illnesses

The combination of heat and humidity can be a serious health threat during the summer months and working outdoors puts workers at risk for heat-related illnesses. Workers are at an increased risk for heat-related illnesses when they:

- Use improper work methods
- Are not accustomed to hot temperatures or high humidity
- Are over the age of 40
- Are in poor physical condition or overweight
- Use certain medications, such as antihistamines, diuretics, and some tranquilizers
- Have had prior heat-related illnesses
- Use drugs or alcohol within 24 hours before working in the heat
- Have heat rash or sunburn
- Wear restrictive or too much clothing

Heat Exhaustion

Heat exhaustion is a mild form of heat-related illness that can develop after several days of exposure to high temperatures and inadequate or unbalanced replacement of fluids. Those most prone to heat exhaustion are elderly workers, workers with high blood pressure and working in hot environments. Heat exhaustion warning signs include:

- Heavy sweating
- Paleness
- Muscle cramps
- Tiredness
- Weakness
- Dizziness
- Headache
- Nausea or vomiting
- Fainting
- Confusion

Cooling measures that may be effective include:

- Cool, nonalcoholic beverages
- Rest and move to shade, in front of a fan or to an air-conditioned building or vehicle
- A cool shower, bath, or sponge bath
- Lightweight clothing

Heat Stroke

Heat stroke occurs when the body is unable to regulate its temperature. The body's temperature rises rapidly, the sweating mechanism fails and the body is unable to cool down. Heat stroke can cause death or permanent disability if emergency treatment is not provided immediately. Warning signs of heat stroke vary, but may include the following:

- An extremely high body temperature (above 103° F, orally)
- Red, hot and dry skin (no sweating)
- Rapid, strong pulse
- Throbbing headache
- Dizziness
- Nausea
- Unconsciousness

If a worker shows signs of heat stroke have someone call for immediate medical assistance and cool down the victim. Do the following:

- Get the victim to a shaded area and in front of a fan or, preferably, to a cool place such as an air-conditioned building or vehicle while medical personnel is summoned
- Get medical assistance as soon as possible.
- Cool the victim using whatever methods are available, for example, immerse the victim in a tub of cool water; place the victim in a cool shower; spray the victim with cool water from a garden hose; sponge the victim with cool water; or if the humidity is low, wrap the victim in a cool, wet sheet and fan him or her vigorously.
- Monitor body temperature, and continue cooling efforts until the body temperature drops to 101° - 102° F.
- If emergency personnel are delayed call 911 for further instructions.
- Do not give the victim alcohol to drink.

Sun Exposure

In addition to heat, sun exposure can be harmful to outdoor workers. Workers who burn easily, spend a lot of time outdoors or have certain physical features, including numerous, irregular or large moles; freckles; fair skin; or blond, red or light brown hair, should be especially careful in the sun. There are several ways workers can block harmful rays:

- Cover up. Wear tightly woven clothing you can't see through.
- Use sunscreen. A sun protection factor (SPF) of at least 15 blocks 93 percent of UV rays.
- Wear a hat. A wide brim hat, not a baseball cap, works best because it protects the neck, ears, eyes, forehead, nose and scalp.
- Wear UV-absorbent shades. Sunglasses should block 99 to 100 percent of UVA and UVB radiation.
- Limit exposure. UV rays are most intense between 10 a.m. and 4 p.m.

Heat Rash

Heat rash is a skin irritation caused by excessive sweating during hot, humid weather. Heat rash looks like a red cluster of pimples or small blisters. The best treatment for heat rash is to provide a cooler, less humid environment. Keep the affected area dry. Dusting powder may be used to increase comfort, but avoid using ointment or creams. Treating heat rash is simple and usually does not require medical assistance.

Sunburn

Sunburn should be avoided because it damages the skin. Although the discomfort is usually minor and healing often occurs in about a week, more severe sunburn may require medical attention. Consult a doctor if these symptoms are present:

- Fever
- Fluid-filled blisters
- Severe pain

Remember these tips when treating sunburn:

- Avoid repeated sun exposure
- Apply cold compresses or immerse the sunburned area in cool water
- Apply moisturizing lotion to affected areas, not salve, butter, or ointment
- Do not break blisters

Sources

For additional [safety resources](#) and other risk management subjects, visit the [AmTrust Loss Control website](#).

Contact Info:

PHONE: 888.486.7466

WEB: www.amtrustfinancial.com

EMAIL: AskLC@amtrustgroup.com

AmTrust maintains this article as a service for its customers. This information is intended to give you a place to start when finding information about a particular safety question. This article is not intended to provide authoritative answers to safety and health questions. Before using the information here, the accuracy and appropriateness of the information to your specific situation should be verified by a person qualified to assess all the factors involved.

This article contains hyperlinks to information created and maintained by other public and private organizations. Please be aware that we do not control or guarantee the accuracy, relevance, timeliness or completeness of this outside information. Further, the inclusion of pointers to particular items in hypertext is not intended to reflect their importance, nor is it intended to endorse any views expressed or products or services offered by the author of the reference or the organization operating the site on which the reference is maintained.