

SAFETY BULLETIN

HEAT STRESS

Workers are exposed to heat on the job

Many workers are outdoors and others work in hot indoor environments. Operations involving high air temperatures, radiant heat sources, high humidity, direct physical contact with hot objects, or strenuous physical activities have a high potential for causing heat-related illness. Workplaces with these conditions may include foundries, glass products facilities, electrical utilities, facilities with boiler rooms, commercial kitchens, laundries, chemical plants and many more.

Outdoor operations conducted in hot weather and direct sun, such as construction, landscaping, farm work, oil and gas well operations, and emergency response operations also increase the risk of heat-related illness in exposed workers.

Every year, thousands of workers become sick from occupational heat exposure, and some even die. These illnesses and deaths are preventable.

TYPES OF HEAT STRESS

Heat Stroke occurs when the body becomes unable to control its temperature.

- ▶ **Symptoms include:** Hot, dry skin or profuse sweating, hallucinations, chills, throbbing headache, high body temperature, confusion/dizziness and slurred speech.
- ▶ **First Aid:** Take the following steps to treat a worker with heat stroke: Call 911 and notify their supervisor; Move the sick worker to a cool shaded area; Cool the worker using methods such as soaking their clothes with water, spraying, sponging, or showering them with water and fanning their body.

Heat Exhaustion is the body's response to an excessive loss of the water and salt, usually through excessive sweating.

- ▶ **Symptoms include:** Heavy sweating, extreme weakness or fatigue, dizziness and confusion, nausea, clammy moist skin, a pale or flushed complexion, muscle cramps, body temperature that is elevated slightly and fast and shallow breathing.
- ▶ **First Aid:** To treat a worker suffering from heat exhaustion: Have them rest in a cool, shaded or air-conditioned area; drink plenty of water or other cool, non-alcoholic beverages; and have them take a cool shower, bath or sponge bath.

Heat Syncope is a fainting (syncope) episode or dizziness that usually occurs with prolonged standing or sudden rising from a sitting or lying position.

- ▶ **Symptoms include:** Light-headedness, dizziness and/or fainting.
- ▶ **First Aid:** To treat a worker that has fainted: Have them sit or lie down in a cool place when they begin to feel symptoms; slowly drink water, clear juice, or a sports beverage.

Heat cramps usually affect workers who sweat a lot during strenuous activity.

- ▶ **Symptoms include:** Muscle pain or spasms, usually in the abdomen, arms, or legs.
- ▶ **First Aid:** Workers with heat cramps should: Stop all activity and sit in a cool place; drink clear juice or a sports beverage. The worker should not return to strenuous work for a few hours after the cramps subside because further exertion may lead to heat exhaustion or heat stroke. Seek medical attention if the worker has heart problems, is on a low sodium diet or the cramps do not subside within one hour.

Heat rash is a skin irritation caused by excessive sweating during hot, humid weather.

- ▶ **Symptoms include:** The development of a red cluster of pimples or small blisters, more likely to occur on the neck and upper chest, in the groin, under the breasts and in elbow creases.
- ▶ **First Aid:** Workers experiencing heat rash should: Try to work in a cooler, less humid environment when possible; keep the affected area dry; use dusting powder on the affected area to increase comfort.

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Prevention of heat stress in workers is important. Employers should provide training to workers so they understand what heat stress is, how it affects their health and safety, and how it can be prevented.

Recommendations for Employers

The following steps should be taken to help protect workers from heat stress:

- Schedule maintenance and repair jobs in hot areas for cooler months.
- Schedule hot jobs for the cooler part of the day.
- Acclimatize workers by exposing them for progressively longer periods to hot work environments.
- Reduce the physical demands of workers.
- Use relief workers or assign extra workers for physically demanding jobs.
- Provide cool water or liquids to workers.
- Avoid alcohol, and drinks with large amounts of caffeine or sugar.
- Provide rest periods with water breaks.
- Provide cool areas for use during break periods.
- Monitor workers who are at risk of heat stress.
- Provide heat stress training that includes information about:
 - Worker risk
 - Prevention
 - Symptoms
 - The importance of monitoring yourself and coworkers for symptoms
 - Treatment
 - Personal protective equipment

Recommendations for Workers

Workers should avoid exposure to extreme heat, sun exposure, and high humidity when possible. When these exposures cannot be avoided, workers should take the following steps to prevent heat stress:

- Wear light-colored, loose-fitting, breathable clothing such as cotton.
- Avoid non-breathing synthetic clothing.
- Gradually build up to heavy work.
- Schedule heavy work during the coolest parts of day.
- Take more breaks in extreme heat and humidity.
- Take breaks in the shade or a cool area when possible.
- Drink water frequently. Drink enough water that you never become thirsty. Approximately 1 cup every 15-20 minutes.
- Avoid alcohol, and drinks with large amounts of caffeine or sugar.
- Be aware that protective clothing or personal protective equipment may increase the risk of heat stress.
- Monitor your physical condition and that of your coworkers.

For more information, please contact your local Loss Control Consultant at 800.257.1900 or losscontrol@amerisure.com

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