

Heat-Related Illnesses and First Aid

Several heat-related illnesses can affect workers. Some of the symptoms are non-specific. This means that when a worker is performing physical labor in a warm environment, any unusual symptom can be a sign of overheating.

Heat-Related Illness	Symptoms and Signs
Heat stroke	• Confusion • Slurred speech • Unconsciousness • Seizures • Heavy sweating or hot, dry skin • Very high body temperature • Rapid heart rate
Heat exhaustion	• Fatigue • Irritability • Thirst • Nausea or vomiting • Dizziness or lightheadedness • Heavy sweating • Elevated body temperature or fast heart rate
Heat cramps	• Muscle spasms or pain • Usually in legs, arms, or trunk
Heat syncope	• Fainting • Dizziness
Heat rash	• Clusters of red bumps on skin • Often appears on neck, upper chest, and skin folds
Rhabdomyolysis (muscle breakdown)	• Muscle pain • Dark urine or reduced urine output • Weakness



First Aid

OSHA's [Medical Services and First Aid standard](#) and the [Medical Service and First Aid in Construction](#) require the ready availability of first aid personnel and equipment. First aid for heat-related illnesses involves the following principles:

- Take the affected worker to a cooler area (e.g., shade or air conditioning).
- Cool the worker immediately. Use active cooling techniques such as:
 - Immerse the worker in cold water or an ice bath. Create the ice bath by placing all of the available ice into a large container with water, standard practice in sports. **This is the best method to cool workers rapidly in an emergency.**
 - Remove outer layers of clothing, especially heavy protective clothing.
 - Place ice or cold wet towels on the head, neck, trunk, armpits, and groin.
 - Use fans to circulate air around the worker.
- Never leave a worker with heat-related illness alone. The illness can rapidly become worse. Stay with the worker.
- When in doubt, call 911!

Confusion, slurred speech, or unconsciousness are signs of heat stroke. **When these types of symptoms are present, call 911 immediately and cool the worker with ice or cold water until help arrives.**

Workers who are new to working in warm environments are at increased risk of heat-related illness. See the [Protecting New Workers](#) section of this website for more details. Especially **during a worker's first few days, absolutely all symptoms should be taken seriously. Workers who develop symptoms should be allowed to stop working. They should receive evaluation for possible heat-related illness.**

