



Are You Doing Enough in the Heat?

Hot weather is part of the job in agriculture, construction, landscaping, manufacturing, warehousing, and many other industries. However, accepting heat as “just part of the job” can lead employers and workers to underestimate a serious workplace hazard.

Providing a cooler of water is a good start, but is it enough?

An effective heat-safety program requires planning, training, supervision, and a willingness to adjust the work when conditions become dangerous. Before the next hot day, employers should ask an important question: **Are we doing enough to protect our employees in the heat?**

Heat Is More Than a Temperature

The temperature shown on a thermometer does not tell the whole story. Humidity, direct sunlight, air movement, physical workload, clothing, and personal protective equipment can all affect the amount of heat stress placed on a worker.

A worker performing strenuous labor in direct sunlight may face significant heat stress even when the reported temperature does not appear extreme. Heat can also build up inside cotton gins, warehouses, shops, equipment cabs, trailers, and other enclosed or poorly ventilated areas.

Employers should monitor the weather and workplace conditions throughout the day. The OSHA-NIOSH Heat Safety Tool is one useful resource, but employers must also consider the work being performed and the actual conditions at the jobsite.

Water Must Be Available—and Workers Must Drink It

Simply having water somewhere on the property is not enough. Cool drinking water should be readily available near the work area, and employees should be encouraged to drink it frequently.

For moderate work lasting less than two hours, NIOSH recommends approximately one cup, or eight ounces, of water every 15 to 20 minutes. Workers should not wait until they are thirsty because thirst may not keep pace with the body’s need for fluids. When heavy sweating continues for several hours, beverages containing balanced electrolytes may also be appropriate. Alcohol and drinks containing large amounts of caffeine or sugar should be avoided.

Supervisors should periodically check the water supply and remind employees to drink. During demanding work, a worker may become so focused on the task that hydration is forgotten.

Rest Is a Safety Control

Some employers and employees view rest breaks as lost production. In reality, appropriate breaks can prevent illness, injuries, emergency medical treatment, and much greater operational disruptions.

Rest breaks should become longer and more frequent as:

- Temperature and humidity increase.

- Work becomes more strenuous.
- Employees work in direct sunlight.
- Air movement decreases.
- Workers wear heavy clothing or protective equipment.
- Employees show signs of heat-related discomfort.

A shaded location is helpful, but an air-conditioned or otherwise cooled recovery area may be necessary during extreme conditions. Employees should be permitted to stop work and cool down when they experience heat discomfort without fear of criticism or retaliation.

New and Returning Workers Need Time to Adjust

One of the most important, and frequently overlooked, heat precautions is acclimatization. Acclimatization is the process of gradually allowing the body to adjust to working in hot conditions.

New employees, temporary workers, and employees returning after an extended absence may be especially vulnerable. Even experienced workers can lose some heat tolerance after time away from hot work or when an unexpected heat wave occurs.

NIOSH recommends gradually increasing exposure to hot conditions over a period of 7 to 14 days. New workers should generally begin with no more than 20 percent of the normal heat exposure on the first day, followed by increases of no more than 20 percent each additional day. New employees should also be closely supervised during their first 14 days or until fully acclimatized.

Assigning a new employee a full day of strenuous work in the heat simply because others are accustomed to it can have deadly consequences.

Train Workers to Recognize the Warning Signs

Heat illness does not always begin with a dramatic collapse. It may start with a headache, unusual fatigue, dizziness, nausea, irritability, muscle cramps, or heavy sweating.

Signs of heat exhaustion can include:

- Headache
- Dizziness or weakness
- Nausea
- Irritability
- Thirst
- Heavy sweating
- Elevated body temperature
- Decreased urine output

A worker showing these symptoms should be removed from the heat, actively cooled, and evaluated promptly. Someone should remain with the worker because the condition can worsen.

Heat stroke is a medical emergency. Warning signs include confusion, altered behavior, slurred speech, seizures, loss of consciousness, or a very high body temperature. A person experiencing heat stroke may have hot, dry skin or may continue sweating heavily.

If heat stroke is suspected:

1. Call 911 immediately.
2. Move the worker to a shaded or cool location.
3. Remove unnecessary outer clothing.

4. Begin rapid cooling with cold water, ice, wet towels, or whatever effective cooling methods are available.
5. Stay with the worker until emergency medical personnel arrive.

Do not wait to see whether the employee improves before calling for help. Heat stroke can cause permanent disability or death when emergency treatment is delayed.

Make Heat Safety Part of the Daily Plan

Heat protection should not depend entirely on employees speaking up after they begin feeling sick. Each hot-weather shift should begin with a plan.

That plan should identify:

- Who will monitor weather and workplace conditions.
- How water will be supplied and replenished.
- Where workers can rest and cool down.
- How work and break schedules will be adjusted.
- Which employees are new or not acclimatized.
- How employees will monitor one another.
- Who will provide first aid and call emergency services.
- How emergency responders will reach the worksite.

Employers should consider scheduling the most strenuous work during cooler parts of the day, rotating demanding assignments, using mechanical equipment to reduce physical exertion, adding workers to labor-intensive tasks, and improving ventilation where practical. OSHA emphasizes three basic protective measures—**water, rest, and shade**—supported by planning and effective supervision.

Ask the Hard Question

Having water available, mentioning the heat at a morning meeting, or telling employees to “take a break if you need one” may not be enough.

Doing enough means recognizing heat as a workplace hazard and managing it like any other serious hazard. It means developing a plan before the temperature rises, training employees, acclimatizing workers, monitoring conditions, providing appropriate water and rest, and preparing supervisors to respond immediately when symptoms appear.

Take a few minutes to evaluate your operation. Talk with the employees performing the work. Look at where they obtain water, where they take breaks, and how quickly help could reach them during an emergency.

Then ask again: **Are you doing enough in the heat?**