



## GOALS

This safety session teaches employees to:

- Recognize the hazards and symptoms of working in the heat.
- Reduce risks of working in hot temperatures and respond to danger signals.

**Applicable Regulations: General Duty Clause Sec. 5(b), 1910.132**



### 1. Working in hot conditions, indoors or outdoors, creates health risks.

- Heat cramps occur when the body loses too much salt from heavy exertion in the heat.
- Heat exhaustion occurs when the body can't replace fluids and/or salt lost in sweating.
  - Perspiration in heat is important, because it cools the body as it evaporates.
- Heatstroke occurs when the body no longer sweats and holds so much heat that body temperature reaches dangerous levels.
  - Heatstroke is a medical emergency and can lead to delirium, convulsions, unconsciousness, or even death.

Factors that can increase the risk of these types of heat stress include:

- Physical exertion
- Being unaccustomed to working in the heat
- Wearing protective clothing that traps body heat
- Age
  - Older people may have less body water and lower sweat gland efficiency.
- Being overweight, which makes you use more energy to perform tasks
- Medications that can interfere with normal body reactions to heat

### 2. Take precautions to avoid heat stress when working in hot conditions.

For work outdoors in the heat or indoors in laundries, foundries, or other hot areas:

- Gradually adjust to heat when new to a job or after a 2-week or longer absence.
  - Take about 5 days to gradually build up time spent working in heat.
  - Use general ventilation, cooling fans, and evaporative cooling whenever possible.
  - Shield furnaces and other heat producing equipment.
  - Check for and eliminate any steam leaks.
  - Plan the most strenuous work for the coolest parts of the day.
  - Wear loose, lightweight, light-colored clothes.
  - Wear a hat and use sunscreen to work outdoors.
- Drink water steadily before and during work in the heat.
  - Drink about 16 ounces before starting, and 5 to 7 ounces every 15 or 20 minutes during hot work.
- Eat well-balanced meals, avoiding heavy or hot food, alcohol, and caffeine.
- Take salt tablets to replace what's lost in perspiration, if approved by a doctor.



- Work at a steady pace, minimizing overexertion.
- Take regular breaks in a cool, well-ventilated area.
- Know your own limits and ability to work safely in the heat.
- Take fast action for symptoms of heat cramps, exhaustion, or heatstroke.

### 3. Be alert to heat stress symptoms.

Heat exhaustion symptoms include:

- Weakness, dizziness, sometimes nausea
- Pale or flushed appearance
- Sweating, moist and clammy skin

Heatstroke symptoms include:

- Dry, hot reddish skin, and lack of sweating
- High body temperature and strong, rapid pulse
- Chills
- Confusion

### 4. Respond quickly and correctly to heat stress symptoms.

Heatstroke is a medical emergency that can be fatal. Act immediately.

- Move a victim immediately to a cool place, and call for medical help.
- Cool the person down as much as possible while waiting for medical help.
  - Use a hose or soak clothes with water and fan the body.
  - Monitor breathing. Don't give fluids if the person is unconscious.

Heat exhaustion requires fast response to prevent worse problems.

- Move to a cool place immediately.
- Loosen clothing and place cool wet compresses on the skin.
- Drink water or an electrolyte beverage slowly.
- Elevate feet 8 to 12 inches.

If you experience heat cramps:

- Drink water.



#### DISCUSSION POINTS:

Ask participants to discuss the jobs they perform that could create heat stress risks and specifically how they would reduce those risks.



#### CONCLUSION:

- Pay attention to your body when you work in the heat.
- Work at a slow, steady pace and drink plenty of water. Remember that heatstroke can be deadly and that symptoms demand immediate action.



#### TEST YOUR KNOWLEDGE:

Have your employees take the Working in the Heat quiz. By testing their knowledge, you can judge their understanding of how to prevent these accidents and whether you need to review this important topic again soon.



## Avoid Illness When You Work in the Heat

### **Take precautions to avoid heat stress.**

- Gradually build up hours spent working in the heat.
- Wear light, loose clothing.
- Wear a hat outdoors.
- Drink water steadily before and during working in the heat.
- Avoid hot foods and drinks that contain alcohol or caffeine.
- Don't overexert yourself; work at a steady pace.
- Take regular breaks in cool places.

### **Take action to respond to heat stress.**

#### **Heat cramps:**

- Drink water.

#### **Heat exhaustion (weakness; dizziness; sweating; moist, pale, or flushed skin):**

- Move to a cool place.
- Loosen clothes and apply cool compresses.
- Drink water slowly.
- Elevate feet 8–12 inches.

#### **Heatstroke (lack of sweating; high body temperature; dry and hot skin; chills; strong rapid pulse; confusion):**

- Treat as a medical emergency.
- Call for a doctor immediately.
- Move to a cool area immediately.
- Use cool water to soak person's clothes and body.
- Fan the body.
- Don't give fluids if victim is unconscious.