

Tools for Life – Weekly Health & Safety Meeting



Apollo

— MECHANICAL CONTRACTORS —
Building People Who Build Great Things

Home Healthy - Home Safe

Date: May 2022

Heat Exposure Plan-Heat Related Illness AISH 25

During the months of May through September, emphasis is placed on Heat Related Illness due to the rising temperatures. Outside of the direct consequences such as heat stroke, heat stress can cause incidents due to loss of focus or excessive fatigue on the job. Today we are going to address some common requirements when it comes to developing and executing an Outdoor Heat Exposure plan. In the Apollo Industrial Safety and Health Manual you will find that AISH 25 covers this subject.

Heat Related Illnesses –

- **Heat cramps:** Painful, brief muscle cramp, spasm, or jerk.
- **Heat Exhaustion:** Warning that the body's heat control mechanism has become overworked.
 - Type 1 – Water Depletion:** Signs include excessive thirst, clammy and pale skin, weakness, headache, and loss of consciousness.
 - Type 2 – Salt depletion:** Signs include nausea and vomiting, muscle cramps, and dizziness.
- **Heat Stroke:** Results from prolonged exposure to high temperatures. Can kill or cause damage to the brain and other internal organs.

Employer Responsibilities –

A heat exposure program covers anyone working outdoors more than 15 minutes in any 60-minute period in temperatures as follows

- As low as 52°F when wearing clothing that is non-breathable or provides a vapor barrier like rain gear, chemical resistant suits, or Level A suits.
- Starting at 77°F when wearing double layer woven clothing like sweatshirts, coveralls, and jackets on top of other clothes.
- At 89°F when wearing any other type of clothing like typical shirts and pants.

Heat Exposure Control Methods (Heat index 80°F or Air Temp 89°F) –

- Provide 32oz of water per hour per employee.
- Provide shade structures or air-conditioned trailers/vehicles where outside workers can cool off. Shade must be located as close as practical to work areas (example: pop up tents with water and a rest area for roof tops or remote locations).

Extreme Heat Exposure Control Methods (Heat Index 90°F or Air Temp 100°F) – Along with the above control methods

- 10-minute preventative cool-down rest break at least every 2 hours.
- Effective means of observation and communication for Heat Related Illnesses.
 - Supervisors and employees should know the signs and symptoms and who to report them to.
- Ensure medical emergency plan includes response to Heat Related Illnesses.
 - Designate response actions to employees in the event of an emergency. Who is calling 911? Who is getting cool water and soaked towels? Where is the closest shaded area to let someone rest?

HEALTHY OR SAFETY REMINDER: We do not rise to the level of our expectations; we fall to the level of our training.

During the summer months exposure to the sun and heat can have a negative effect on our bodies. Heat stress and exhaustion is the body's natural response to excessive heat. During the summer it is vital that we self-monitor and those around us for symptoms of heat exhaustion and stroke

Heat Stroke	Heat Exhaustion
<ul style="list-style-type: none"> • Confusion, altered mental status, slurred speech • Fatal if treatment delayed • Hot, dry skin or profuse sweating • Loss of consciousness (coma) • Seizures • Very high body temperature 	<ul style="list-style-type: none"> • Decreased urine output • Dizziness Weakness • Elevated body temperature • Headache • Heavy sweating • Irritability • Nausea • Thirst
Heat Stroke First Aid	Heat Exhaustion First Aid
<ul style="list-style-type: none"> • Call 911 for emergency medical care • Stay with worker until support arrives • Move the worker to a shaded, cool area and remove outer clothing • Cool the worker quickly with cold water or ice bath if possible; wet the skin, place cold/wet cloths on skin, or soak clothing with cool water • Place worker in well ventilated area • Place cold packs on head, neck, armpits, and groin 	<ul style="list-style-type: none"> • Take worker to a clinic or emergency room for medical evaluation and treatment • If medical care is unavailable, call 911 • Stay with worker • Remove worker from hot area and give liquids to drink • Remove unnecessary clothing, including shoes and socks • Cool the worker with cold packs or have the worker wash head, face, and neck with cold water • Encourage frequent sips of cool water

Discussion Points/Quiz Questions:

1. What activities on your job require outdoor work for more than 15 minutes in nay 60-minute period?
2. When do workers need to be assessed for possible Heat Related Illness?

