

Indoor Heat Illness Prevention

Heat is heat. Did you know indoor workers can experience the same type of heat illness as employees working outdoors? This Safety Talk will help you understand and prevent four different types of heat illness.

Cal/OSHA Regulation

In 2024, Cal/OSHA approved a new Indoor Heat Illness standard (CCR3396) to mitigate employee risk when working in shops, warehouses, and other indoor locations covered by the regulation. The standard is triggered when indoor workers are exposed to temperatures of 82° degrees Fahrenheit or more. This new requirement should not be confused with your District's Outdoor Heat Illness Prevention Plan. Both contain similar elements but have different protocols.

Cal/OSHA defines indoors as "a space that is under a ceiling or overhead covering that restricts airflow and is enclosed along its entire perimeter by walls, doors, windows, dividers, or other physical barriers that restrict airflow, whether open or closed."



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What is Heat Illness?

Heat illness can be one or more of the following medical conditions including heat cramps, fainting (syncope), heat exhaustion, and heatstroke.

Heat illness occurs when the body cannot get rid of excess heat. When this happens, the body's core temperature rises and the heart rate increases. As the body continues to store heat, the person begins to lose concentration, has difficulty focusing on tasks, may become irritable or sick, and often loses the desire to drink. If untreated, a potentially fatal heatstroke could develop.

Risk Factors

Environmental risk factors that contribute to heat illness include high air temperatures, high humidity, direct physical contact with hot objects, and strenuous physical activities especially when wearing personal protective equipment. Radiant heat sources like kilns, ovens, torches, or merely performing strenuous tasks in an indoor environment lacking air conditioning will increase the risk of heat illness.

Heat Illness Symptoms & First Aid

Heat illness can develop rapidly and is not always obvious before it becomes lifethreatening. Symptoms of heat illness may vary between individuals and can even occur after work has stopped for the day. Because of this employees may not accurately recognize and report symptoms. Do not discount discomfort or symptoms you are experiencing when working in heat, after work, or even the next workday.

Heat Cramps

Cramps, muscle pain, or spasms are felt most in the arms and legs.

<u>What to do</u> – Take a recovery break in a cooldown area. Drink cool water. Wait for cramps to stop before doing any physical activity. Seek medical help if cramps last more than (1) hour, or if you're on a low sodium diet or have heart problems.

Heat Syncope (Fainting)

Heat syncope is a fainting episode or dizziness that usually occurs when standing for too long or suddenly standing up after sitting or lying.

<u>What to do</u> – Take a recovery break in a cooldown area. Sit or lie down and slowly drink water.





Heat Exhaustion

The body becomes overly stressed with symptoms such as:

- Cool, pale, clammy skin
- Heavy sweating
- Fatigue or weakness
- Shortness of breath
- · Headache, dizziness, or fainting
- Nausea or vomiting
- Rapid heartbeat and breathing
- Thirst

<u>What to do</u> - Move to a cool-down area immediately. Loosen/remove clothing. Apply cool water/ice packs to the body. Drink slightly cool water and electrolytes. *Seek medical help.*

Heat Stroke

This is the most serious stage of heat illness. Symptoms may include:

- Red, hot, dry skin with very little sweating
- High body temperature, 105° F or higher
- Headache, dizziness, confusion
- Nausea or vomiting
- Rapid pulse

What to do

CALL 911 IMMEDIATELY

- ✓ Get to a cool-down area and remove unnecessary clothing
- ✓ Drink slightly cool water if possible
- ✓ Fan vigorously
- ✓ Apply cool water to clothing or skin
- ✓ Apply ice packs under arms, to the neck, back, and groin area



How can you prevent heat illness?



Drink Water

The most important thing you can do to prevent heat illness is drink plenty of water!!! The key is to drink throughout your shift, even when you don't feel thirsty. Supervisors must remind and encourage workers to drink water every hour. When indoors and working in temperatures 82° or higher, strive to drink one quart of water (4 cups) per hour.

Acclimate

Acclimatization is a process where the body needs time to adjust to increased heat exposure. Cal/OSHA requires employers to observe and check in with employees during the acclimatization timeframe (4-14 days).

Take Recovery Breaks

When working in temperatures of 82° or more, take preventative cool-down rests in designated areas set by your District. Drink plenty of water and rest long enough to feel healthy enough to return to work. Employees who wait until symptoms appear before seeking cool-down areas are at a higher risk of developing heat illness.

Additional Prevention Considerations

- Be familiar with your employer's written Indoor Heat Illness Prevention Program, if applicable.
- If available, use control measures such as air conditioning, fans, local ventilation and personal protective equipment like cooling vests, jackets, and neck wraps.
- When wearing heavy personal protective equipment, respirators, or when conducting significant exertion check for symptoms of heat illness.
- Avoid heavy meals; your body generates heat through digestion
- Wear lightweight clothing that does not restrict heat removal.
- If you have a chronic disease, such as heart disease or diabetes, check with your doctor for heat illness prevention guidance.
- If you're a supervisor, refer to your District's policy for additional responsibilities when whenever the indoor temperature or heat index reaches 87°F.

Resources:

Cal/OSHA Heat Illness Info

<u>Cal/OSHA Frequently Asked</u> <u>Questions</u>

SDRMA Risk Control Department