

# PPE

## STRATEGIES TO BEAT THE HEAT



This talk provides tips for staying cool to outdoor workers required to wear personal protective equipment (PPE) in hot weather conditions.

### Materials to have on hand:

- PPE designed for hot weather, such as ventilated gloves, hard hats with vents, and sweat liners
- Cooling accessories like evaporative cooling towels, bandanas, and vests

### Items for attendees to consider during the talk:

- What are some ways you can stay cool while wearing your PPE?

## TALK

When it's hot outside, it may be tempting to remove your personal protective equipment, or PPE, to cool down for a moment. You might not even want to put it back on. But you need to remember that PPE is the last line of defense protecting you from workplace hazards. Removing any piece of required PPE, even for a short time, can increase your risk of injury or illness and put us all at risk of Occupational Safety and Health Administration, or OSHA, violations. Here are some tips that will help you beat the heat while staying safe:

- Wear PPE that addresses the hazards caused by sun and heat exposure. These items include vented hard hats, sweat liners for your hard hats

or gloves, ventilated gloves, and anti-fogging goggles. PPE that is made from breathable materials and lighter colors is also available and can help reflect the heat. Heat-protective gloves or sleeves can help you handle materials that have become hot from the sun. Ask your supervisor if you think any of these pieces of PPE could help you better cope with the weather so we can provide them to you.

- Wear accessories beneath or attached to your PPE to protect against the heat and sun. Cooling items, such as tank tops, vests, bandanas, and towels, disperse heat. There are also neck shade attachments available for hard hats.
- You can also choose to wear sunscreen, sunglasses, and clothing designed to protect you from harmful UV rays to give yourself additional relief from the sun.
- Stay hydrated! Because working in the heat makes you sweat, you will need to drink more water to stay hydrated. We will provide water for you. Make sure you take water breaks throughout the day to avoid dehydration.
- Set up a buddy system so you and your coworkers can be on the lookout for signs or symptoms of heat-related illness or dehydration in each other.

If you remember these strategies, you can keep cool while protecting yourself from our workplace hazards.

**Talk Date:** \_\_\_\_\_

**Attendees:** \_\_\_\_\_

**Location:** \_\_\_\_\_

\_\_\_\_\_

**Supervisor/** \_\_\_\_\_

**Comments:** \_\_\_\_\_

**Presenter:** \_\_\_\_\_

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# PREVENTING HEAT STRESS IN CALIFORNIA



This talk discusses the hazards of heat stress, provides tips for outdoor workers to stay safe when working in hot conditions, and describes the employer's procedures for protecting workers from heat stress as required by California's heat illness prevention regulation (8 CCR 3395).

## Materials to have on hand:

- Local weather forecast and/or current heat index

## Points to consider:

- When do you have the right to take a cool-down rest break in the shade?
- How much water should you drink to prevent heat stress?

## TALK

Heat illness, also called heat stress, occurs when your body can't adequately cool itself through sweating. This is most likely to happen during hot, humid weather, especially when you perform hard physical work. Wearing heavy personal protective equipment, or PPE, can also increase the risk of heat illnesses.

There are five main heat-related illnesses you should watch out for. Not all of them are serious, but even a mild heat illness can quickly turn into something very dangerous or even life-threatening, so always pay attention to any symptoms you notice in yourself or in your coworkers.

**Heat rash.** Heat rash consists of a red, bumpy rash that can be itchy. It is usually not dangerous, but it can be uncomfortable, and it is a sign that hot conditions are affecting your body.

**Heat syncope (fainting).** Sometimes heat can cause you to faint. This is called heat syncope and usually occurs if you are not used to working in a hot environment. It is usually not dangerous, and you can prevent it by moving around a little rather than standing still for long periods of time in the heat.

**Heat cramps** are painful muscle cramps caused by a loss of salt when sweating. Drinking electrolyte fluids to replace your body's salt can relieve heat cramps, but severe cramps may require a visit to a medical professional.

**Heat exhaustion** is more serious. It results from the loss of fluid or salt, or both, through sweating. You might feel weak, dizzy, and nauseated; your skin might become clammy; and your body temperature may be above normal. To treat heat exhaustion, rest in a cool place, drink sports drinks, and remove any heavy clothing. If this doesn't help, and you or a coworker starts vomiting or loses consciousness, call for emergency assistance immediately.

**Heatstroke** is the most dangerous type of heat illness. It occurs when the body's natural cooling processes stop working and the ill person stops sweating. Symptoms include very hot and dry skin, confusion, convulsions, seizures, and loss of consciousness. Heatstroke can cause death, so call an

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# PREVENTING HEAT STRESS IN CALIFORNIA

ambulance immediately if you or a coworker shows symptoms. While you're waiting for the ambulance, try to keep the victim cool, and provide fluids if he or she is conscious.

If you notice symptoms of heat stress in yourself or a coworker, tell your supervisor immediately, and move to a cool, shaded area. Your supervisor will make sure the right first aid is provided. For severe symptoms such as altered consciousness, vomiting, disorientation, and convulsions, emergency medical services will be called. Although [name(s)] are responsible for calling emergency medical services, if they are not available during an emergency, anyone can make the call.

***[Describe your procedure for contacting emergency medical services, including means of communication, responsible individuals, directions to the worksite for emergency responders, and how employees will be transported to a location accessible to emergency medical service providers if necessary.]***

Heat stress can be prevented by taking some very simple steps when working in hot conditions:

- Drink plenty of water throughout the day. In hot conditions, you should aim for about 1 cup every 15 to 20 minutes. It's better to drink smaller amounts of water more often than larger amounts less frequently. On our worksite, water is available free of charge. ***[Describe location where employees can access cool, fresh drinking water.]***
- Take frequent breaks in a cool, shady place. On our worksite, shade is available. ***[Describe location where shade or other equally effective cooling measures are available.]*** You have the right to take a cool-down rest break to prevent yourself from overheating whenever you need to.

- If the temperature spikes suddenly or you are new to working in hot conditions, take more frequent breaks, and gradually build up your workload while your body adapts. This is called acclimatization, and your supervisor will observe you more closely for signs of heat stress during this process. ***[Describe your specific acclimatization procedures.]***
- Wear a hat and light-colored clothing.
- Drink sports drinks to help replace the salt you lose when you sweat.
- Avoid caffeine and alcohol, which can both cause dehydration.
- ***[Describe any other heat stress prevention procedures in use at the worksite.]***

When the temperature is 95 degrees Fahrenheit or higher, it's even more important that you drink plenty of water and take rest breaks in the shade to prevent yourself from overheating. ***[Note: When temperatures equal or exceed 95 degrees Fahrenheit, agricultural workers must take at least a 10-minute preventive cool-down rest period every 2 hours.]***

We will also observe everyone more closely for signs of heat illness when the temperature reaches this level. Our procedure for monitoring is:

***[Read the options that apply to your worksite.]***

- Having a supervisor or another designated person observe groups of 20 or fewer employees
- A buddy system where you will be paired with a coworker and watch one another for symptoms of heat stress
- Regular check-ins using a radio or cell phone ***[for lone workers]***
- ***[Other effective monitoring procedures]***

# WORKING SAFELY OUTDOORS

## PREVENTING HEAT STRESS



This talk discusses the hazards of heat stress and provides tips for outdoor workers to stay safe when working in hot conditions.

**Material to have on hand:** Local weather forecast and/or current heat index

### Points to consider:

- What are the symptoms of heat stress?
- What can you do to prevent heat stress?
- What first-aid measures should you take if you or a coworker shows signs of heat stress?

## TALK

Working outdoors in hot weather can be uncomfortable. But did you know it can also be hazardous? If you don't take the right precautions when working in hot conditions, you can develop heat-related illnesses. These can range from mild annoyances, such as heat rash, to life-threatening heatstroke.

Heat Index	Risk Level
Less than 91°F	Lower
91°F to 103°F	Moderate
103°F to 115°F	High
Greater than 115°F	Very high to extreme

Heat illness occurs when your body can't adequately cool itself through sweating. This is most likely to

happen during high-temperature, high-humidity weather, especially when you perform hard physical work under these conditions. You can be at risk of the following heat-related illnesses:

- **Heat rash.** Heat rash consists of a red, bumpy rash that can be itchy. It is usually not dangerous, but it can be uncomfortable, and it is a sign that hot conditions are affecting your body.
- **Heat syncope (fainting).** Sometimes heat can cause you to faint. This is called heat syncope and usually occurs when a person is not used to working in a hot environment. It is usually not dangerous, and you can prevent it by moving around a little rather than standing still for long periods of time in the heat.
- **Heat cramps** are painful muscle cramps caused by a loss of salt when sweating. Drinking electrolyte fluids to replace your body's salt can relieve heat cramps, but severe cramps may require a visit to a medical professional.
- **Heat exhaustion** is more serious. It results from the loss of fluid or salt, or both, through sweating. You might feel weak, dizzy, and nauseous; your skin might become clammy; and your body temperature may be above normal. To treat heat exhaustion, rest in a cool place, drink sports drinks, and remove any heavy clothing. If this doesn't help, and you or a coworker start vomiting or lose consciousness, call for emergency assistance immediately.

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# WORKING SAFELY OUTDOORS

- **Heatstroke** is the most dangerous type of heat illness. It occurs when the body's natural cooling processes stop working and the ill person stops sweating. Symptoms include very hot and dry skin, confusion, convulsions, seizures, and loss of consciousness. Heatstroke can cause death, so call an ambulance immediately if you or a coworker shows symptoms. While you're waiting for the ambulance, try to keep the victim cool and provide fluids if he or she is conscious.
- All of these heat-related illnesses can be prevented by taking some very simple steps when working in hot conditions:
- Drink plenty of water throughout the day. In hot conditions, you should aim for about 1 cup every 15 to 20 minutes.
  - Wear a hat and light-colored clothing.
  - Drink sports drinks to help replace the salt you lose when you sweat.
  - Avoid caffeine and alcohol, which can both cause dehydration.
  - Take frequent breaks in a cool, shady place.
  - If the temperature spikes suddenly or you are new to working in hot conditions, take more frequent breaks and gradually build up your workload while your body adapts.
  - If you notice yourself experiencing symptoms of heat illness, tell your supervisor, and take a break in a cool, shaded area.