



Today's safety training is on a very important topic. Heat related illnesses can happen anywhere whether you are at home, at work, at the beach, or anywhere else. If you are able to identify the symptoms, you could save yourself, your family, or others from more severe heat illnesses.

## GOAL

The goal of this training is to increase awareness of heat related illnesses, and to recognize and respond promptly to warning signs of trouble.

## LEARNING OBJECTIVES

By the end of this training, you should be able to

- **Identify** key heat illnesses
- **Recognize** symptoms of heat illnesses
- Know steps to take to **prevent** heat illnesses
- Know **what to do** if you or others show symptoms

## WHAT ARE HEAT ILLNESSES?

Heat illness is the body's inability to cool itself. Your body normally cools itself by sweating. When the weather is hot, especially when it's humid, sweating sometimes isn't enough to cool you off. Your body temperature can rise to dangerous levels and you can develop a heat illness. **So when temperatures are high, make sure you look out for symptoms in yourself or your coworkers.**

## WHAT ARE COMMON HEAT ILLNESSES?

### SIGNS & SYMPTOMS



#### Heat cramps

- Muscle cramps, pain, or spasms in the abdomen, arms, or legs

#### Heat Syncope (Fainting)

Fainting, dizziness, or light headedness after standing or suddenly rising from a sitting/lying position

#### Heat Exhaustion

Headache, nausea, dizziness, weakness, irritability, thirst, heavy sweating, elevated body temperature, decreased urine output

### WHAT TO DO



- Rest in cool area
- Drink water
- Apply pressure to cramping muscles
- Seek medical attention after cramps subside
- If cramps progress to unconsciousness, call 911 and alert your supervisor.

- Sit or lie down in a cool place when beginning to feel faint or dizzy
- Slowly drink water

- Call for medical help or take worker to a health facility for evaluation or treatment
- Stay with worker until help arrives
- Remove worker from hot area and give liquids to drink
- Remove unnecessary clothing, including shoes and socks
- Cool worker with water, cold compresses, an ice bath, or fans
- Encourage frequent sips of cool water



## Heat Stroke

- Confusion, altered mental state, slurred speech, loss of consciousness
- Hot, dry skin or profuse sweating
- Seizures
- Very high body temperatures
- Fatal if treatment is delayed

- **This is an emergency! Call 911 immediately.**
- Move worker to a cool area and remove outer clothing
- Cool worker with water, cold compresses, and ice bath, or fans
- Circulate air around worker to speed cooling
- Place cold, wet cloths or ice on head, neck, armpits, and groin
- Stay with worker until emergency medical services arrive

## WHAT ARE SOME OF THE RISK FACTORS?

Some of the things that can contribute to heat illnesses include external factors and personal risk factors. Knowing the risk factors could help you to better prepare for your day and understand your risks.

### EXTERNAL FACTORS

- High temperatures, high humidity
- Air movement
- High radiant heat (e.g., sunshine), high conductive heat (e.g., ground)
- Higher intensity and/or duration of physical activity
- PPE/clothing can also be a factor

### PERSONAL RISK FACTORS

- Poor physical condition\*
  - Older age
  - Degree of acclimation
  - Low water consumption
  - Some medications\*
  - Use of alcohol/drugs
- \*recommend checking w/personal physician about heart illness risk.

## HOW CAN YOU AVOID HEAT ILLNESSES?

### Stay hydrated!

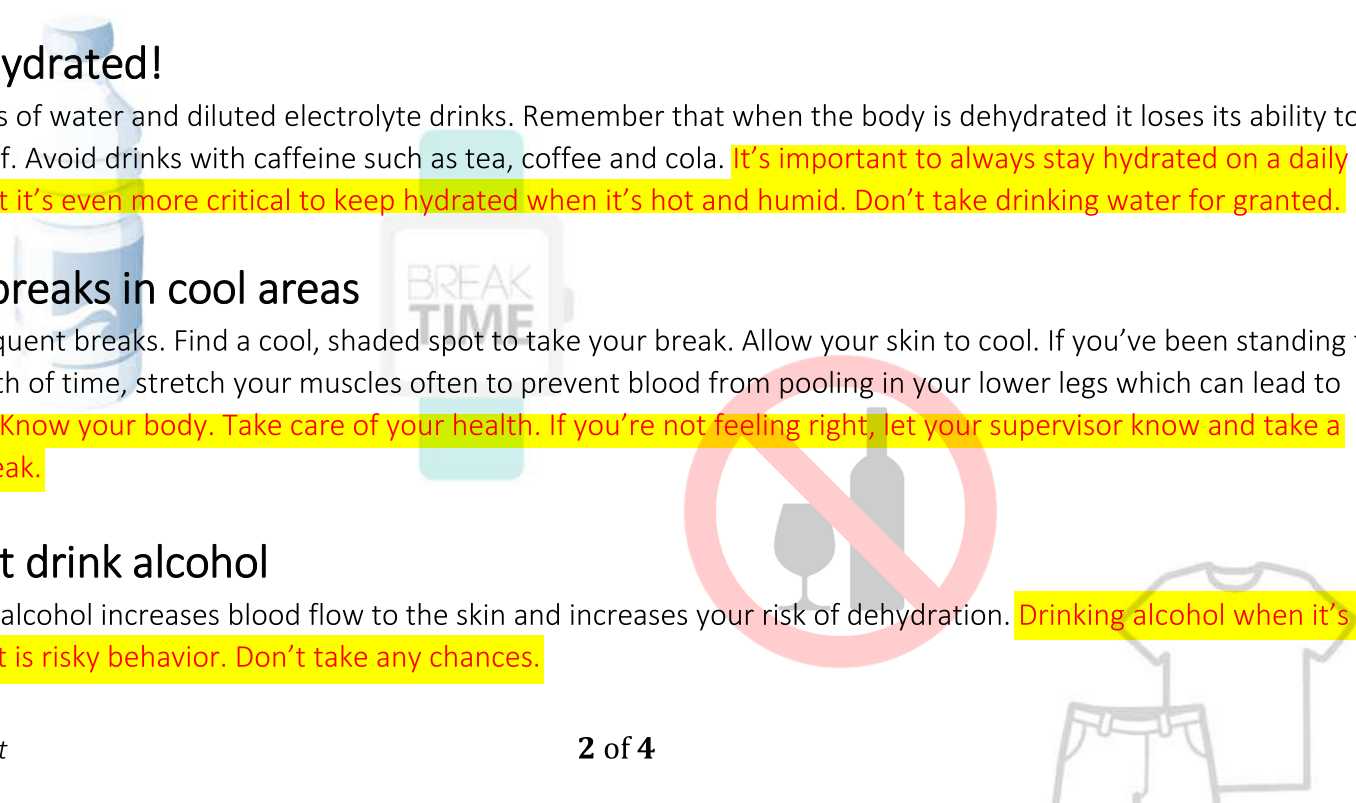
Drink lots of water and diluted electrolyte drinks. Remember that when the body is dehydrated it loses its ability to cool itself. Avoid drinks with caffeine such as tea, coffee and cola. **It's important to always stay hydrated on a daily basis, but it's even more critical to keep hydrated when it's hot and humid. Don't take drinking water for granted.**

### Take breaks in cool areas

Take frequent breaks. Find a cool, shaded spot to take your break. Allow your skin to cool. If you've been standing for any length of time, stretch your muscles often to prevent blood from pooling in your lower legs which can lead to fainting. **Know your body. Take care of your health. If you're not feeling right, let your supervisor know and take a quick break.**

### Do not drink alcohol

Drinking alcohol increases blood flow to the skin and increases your risk of dehydration. **Drinking alcohol when it's really hot is risky behavior. Don't take any chances.**





## Wear the right clothes

Wear light-weight, light-colored, loose-fitting clothing that does not restrict your movement and allows for good circulation of air. When you're in the sun, wear a wide-brimmed hat that will keep your head cool, and don't forget to put on sunscreen.

## IMPORTANT NOTES

- Feeling ill while working in the heat is a serious warning sign. **Do not ignore this. Tell your supervisor right away.** If you feel unwell during work in hot conditions, you could potentially have heat exhaustion which can quickly progress to heat stroke if not treated.
- Proper first aid for someone with suspected heat exhaustion or heat stroke involves **COOLING** the body as quickly as possible – not simply just drinking water. **So remember to focus on cooling the body. Remind me, what are you supposed to remember if someone is having a heat stroke? Answer: Cool the body.**
- People with severe heat illness do not always recognize the risks they face. If anyone shows signs of heat exhaustion or heat stroke, do not leave him/her alone until he or she receives medical attention.

## THE TAKEAWAYS

If you remember nothing else about this training, at least remember the following.

1. Prevent heat related illnesses by staying hydrated, taking breaks, avoiding alcoholic drinks, and wearing the proper clothing to keep your body cool.
2. Common signs of heat illness include irritability, headaches, nausea, dizziness, pale skin, heavy sweating, vomiting, confusion, dry skin, rapid, shallow breathing.
3. Proper first aid for someone with suspected heat exhaustion or heat stroke involve **COOLING** the body as quickly as possible – not simply just drinking water. Get them to a cooler place or call your supervisor for help.



## TEST YOUR KNOWLEDGE

1. For a heat syncope (fainting), you should sit or lie in a cool place and slowly drink water.
  - a. **True. Be careful and take it slow when rising after sitting or lying down.**
  - b. False
2. Signs of a heat stroke include, confusion, altered mental state, slurred speech and loss of consciousness.
  - a. **True. If you see anyone exhibiting these symptoms, get help immediately. It could turn fatal if treatment is delayed.**
  - b. False
3. When the body is dehydrated, it loses its ability to cool itself.
  - a. **True. This is why it's very important that you keep yourself hydrated.**
  - b. False



- 4. Drinking soda and alcohol is NOT a good way to avoid heat illnesses.
  - a. True. It is **NOT** at all a good idea for you to drink soda or alcohol on days where it's extremely hot or if you'll be working in hot areas.
  - b. False
  
- 5. Heat illness is the body's inability to cool itself.
  - a. True. If it can't cool itself, your body's temperature can rise to dangerous levels. Know the symptoms to avoid heat illnesses.
  - b. False
  
- 6. What should you do if someone seems to be experiencing symptoms of a heat stroke?
  - a. Call 911 immediately
  - b. Lay victim down in a cool area and remove outer clothing
  - c. Apply ice packs or cool cloths to the body to reduce temperature
  - d. All of the above. A heat stroke is an emergency situation and it is important to take immediate action without delay.

Name: \_\_\_\_\_ Site: \_\_\_\_\_ Date: \_\_\_\_\_