

# How Can We Protect Ourselves from Heat Stress at Work?



## TRAINER'S FLIP CHART

*Part of the Heat Safety Training Toolkit*

# Introduction

❖ What are you going to say when you arrive and want to begin the training?

❖ Note your ideas for how you will begin here.

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# Heat Stress

# Heat Stress

❖ Have any of you heard about heat stress?

❖ What do you know about heat stress?



Direct sun exposure increases the risk of heat stress.

# Heat Stress

- ❖ **Heat stress occurs when the body becomes too hot.**
- ❖ **If a person doesn't take time to rest and cool down, it can become more serious and cause heat illness (heat exhaustion; heat stroke).**



*Photo: Katie Langley*

Farmworkers are at high risk of heat stress.

# Symptoms

- ❖ **How do you know if you have heat stress?**
- ❖ **Sometimes the symptoms are very similar to those caused by pesticide exposure.**
- ❖ **You can have a headache or feel sick to your stomach.**





*Photo: Adobe Stock*

Heat stress can cause weakness, nausea, dizziness and other symptoms.

# Symptoms

❖ **Have you heard of other symptoms?**

❖ **You can have...**

➤ **Rashes**

➤ **Weakness**

➤ **Sweating**

➤ **Extreme thirst**

➤ **Nausea**

➤ **Dizziness**



*Photo: Adobe Stock*

Heavy sweating and extreme thirst are symptoms of heat stress.

## Health Risks

- ❖ **Heat stress can rapidly become something very serious.**
- ❖ **If you don't treat it in time, it can cause problems –sometimes very serious health problems, including death.**
- ❖ **Have any of you experienced heat stress?**



*Photo: David Bacon*

More serious symptoms of heat illness require medical attention.

# Prevention of Heat Stress

- ❖ **There are steps you can take to prevent heat stress.**
- ❖ **Do you have any ideas about what they are?**



*Photo: David Bacon*

Don't wait until you feel sick to drink water.

## Prevention of Heat Stress

- ❖ **Take breaks in the shade during the day.**
- ❖ **Begin working early and take a break during the hottest part of the day.**
- ❖ **Drink water before, during, and after work. Don't wait until you feel sick to drink.**





Photo: David Bacon

Farmworkers taking a rest break in the shade.

## Prevention of Heat Stress

- ❖ You should drink at least a quarter of a gallon (4 cups) of water every hour.
- ❖ The water should be close to where you are working.



*Photo: Adobe Stock*

Drinking water throughout the day helps prevent heat stress.

# Prevention of Heat Stress

❖ **What kind of clothes should you wear to protect yourself from heat stress?**

*Note to the trainer:*

- ❖ *Ask for a volunteer.*
- ❖ *Ask the other participants to tell the volunteer what he or she should wear to prevent heat stress.*
- ❖ *Ask the other participants to choose clothing from the box and the volunteer can put the clothing on and show the group.*

*Materials: box of clothing*



*Photo: Rebecca Young*

Farmworker wearing sun protection and personal protective equipment.

## Prevention of Heat Stress

- ❖ **Light-colored, lightweight clothing is recommended.**
- ❖ **Cotton shirts with long sleeves, cotton pants, and a hat with a wide rim can protect you best!**
- ❖ **Be sure to keep wearing boots and gloves to protect yourself from pesticides.**
- ❖ **If you have to wear thick protective clothing or equipment on top of your regular clothes, make sure to take it off when you are resting to give your body a chance to cool off.**



*Photo: David Bacon*

Farmworkers laboring in the midday sun.

## Treatment of Heat Stress

❖ **What should you do if you or someone else is experiencing symptoms of heat stress?**

*Note to the trainer: Ask participants for their ideas about what to do...*





*Photo: Adobe Stock*

High temperatures put workers at risk of heat stress.

## Treatment of Heat Stress

- ❖ **Move to a shaded area to rest.**
- ❖ **Take off unnecessary clothing.**
- ❖ **Drink water.**
- ❖ **Put cool water on the body – especially on the chest.**

**HEAT  
STROKE**

*Image: Adobe Stock*

Severe, untreated heat stress can lead to heat stroke, which can be deadly.

## Treatment of Heat Stress

❖ If you see the following symptoms:

- Slurred speech
- Confusion, inability to think clearly
- Convulsions/Seizures
- Collapsing
- Loss of consciousness/Fainting

**SEEK MEDICAL ATTENTION! Call 911 for an ambulance, move the person to the shade, remove unnecessary clothing, and cool them down with cold water, cold damp towels, and/or ice packs.**

**Don't leave the person alone. If they are able to drink, give them cold fluids to drink. Don't give anything to drink to someone who is convulsing or unconscious.**

Workers on water breaks.



*Photo: Jesus Lopez*



*Photo: Adobe Stock*

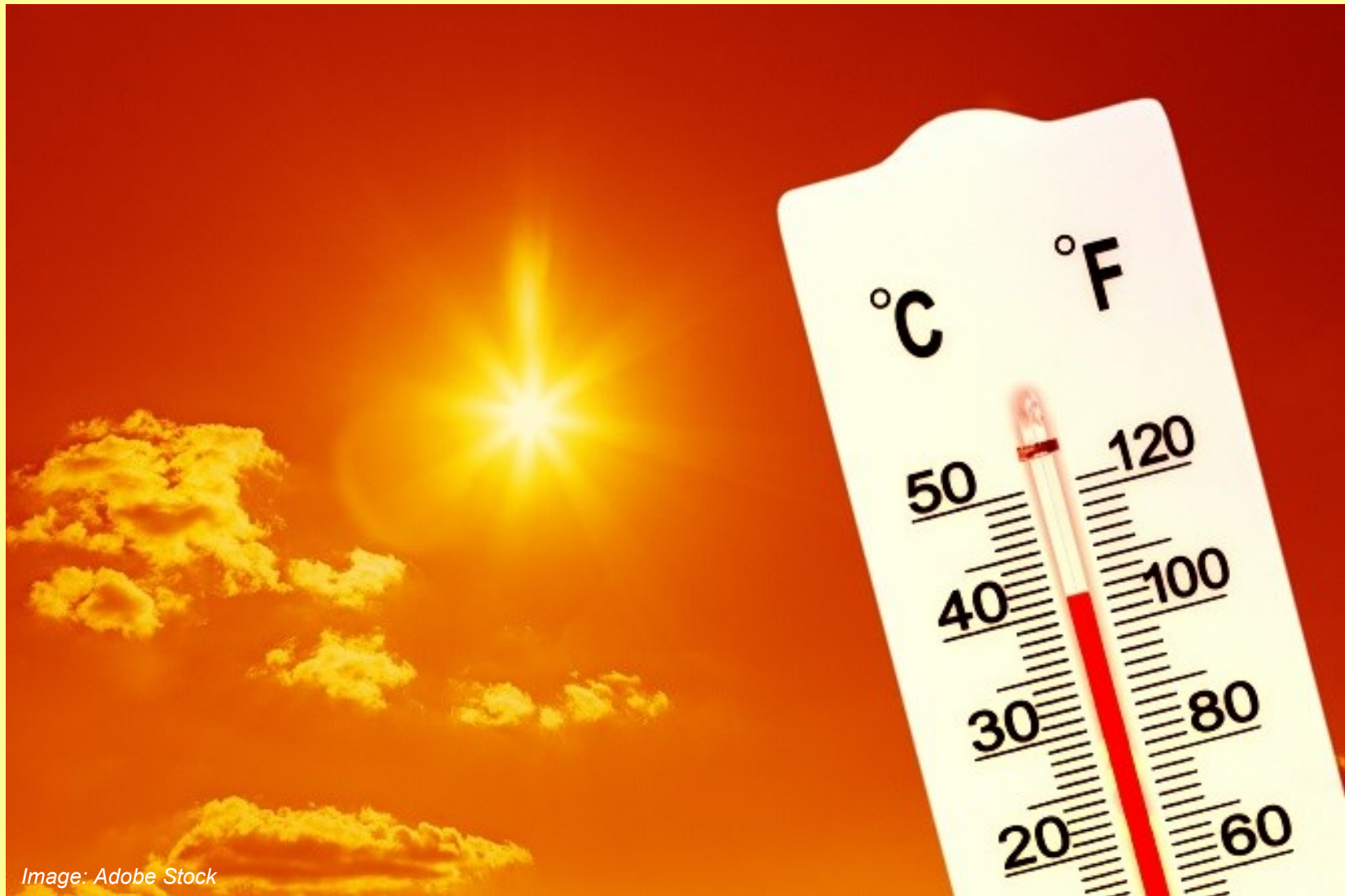


*Image: Adobe Stock*

## Heat Stress and the Law

How can the law help to protect you from heat stress? According to OSHA's Field Sanitation Standard ([29 CFR 1928.110](#)):

- ❖ Your employer should provide sufficient clean drinking water for each person.
- ❖ Drinking water should be close to where you work and there should be disposable cups.



*Image: Adobe Stock*

Rest breaks in the shade can reduce the risk of heat stress.

## Heat Stress and the Law

- ❖ The Occupational Safety and Health Act's *General Duty Clause* ([Section 5\(a\)\(1\)](#)) requires that your employer provide a work environment *“free from recognized hazards that are causing or are likely to cause death or serious physical harm”*.
- ❖ Excessive heat is a recognized hazard.





A community health worker does outreach on heat stress safety in Quincy, Washington.

# **Small group activity**



**AGUA.  
SOMBRA.  
DESCANSOS.**

*Sin ellos  
no se puede trabajar.*

*Image: osha.gov*



**WATER.  
REST.  
SHADE.**

*The work can't get done  
without them.*

*Image: osha.gov*

Water, rest and shade are the key to heat safety.

# Small group activity

*Note to the trainer: Divide participants into small groups and assign each group one of the following three scenarios. Ask them to discuss their assigned scenario and answer the corresponding questions. Once they have had time to discuss, ask a volunteer from each group to share their group's answers with everyone. Help them and the larger group think of any correct answers they missed.*

- ❖ **Scenario 1.** Emilio has been working in the fields with the rest of the crew for a couple of hours. It's a hot day, and he is wearing protective equipment on top of his regular clothes. He is feeling very thirsty and dizzy. Suddenly, he collapses and falls unconscious. You are his coworkers. What should you do to help?

*Correct answers include: Call for an ambulance. Move him to the shade. Take off any excess clothing he may be wearing. Put cold water or ice packs on his body. Stay with him until medical help arrives.*

*Make sure trainees understand that they should not give anything to drink to someone who is unconscious.*

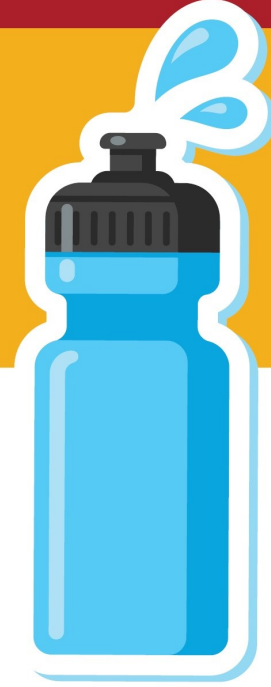
- ❖ **Scenario 2.** It is Sofia's first day on the job. She has never worked in agriculture before. It's a hot day. What would you recommend to her to prevent heat stress? Is there anything the rest of the crew can do to help keep Sofia and each other safe?

*Correct answers include: Recommend that she drink water before and during work and that she take necessary breaks in the shade. Recommend that she take off any personal protective equipment during breaks. The crew can keep an eye on each other for symptoms of heat stress to keep everyone safe.*

**DON'T WAIT...  
HYDRATE!**

**Prevent  
heat illness  
at work**

**[osha.gov/heat](https://www.osha.gov/heat)**



*Image: osha.gov*

## Small group activity

❖ **Scenario 3.** Antonio has been working in the field for hours when he begins feeling dizzy. He is afraid he is going to faint. What should he do to recover? How can his coworkers help?

*Correct answers include: He should tell his coworkers or crew leader how he is feeling. He should take a long break in the shade and drink water. He should take off any excess clothing or personal protective equipment. He should pour cold water over himself. His coworkers can help by making sure someone stays with him until he recovers. His coworkers can call for medical help if necessary.*



**STOPPING FOR WATER  
KEEPS YOU GOING.**

	<p><b>WATER. REST. SHADE.</b></p>	 <p><b>OSHA</b> Occupational Safety and Health Administration <a href="http://www.osha.gov">www.osha.gov</a> 1-800-321-OSHA (6742) TTY 1-877-889-5627</p>
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*Image: osha.gov*

## Review Questions

- ❖ **What is heat stress?**
- ❖ **How can you protect yourself from heat stress?**
- ❖ **What should you do if you feel symptoms of heat stress?**



# Questions

**What is heat stress?**

**How can you protect yourself from heat stress?**

**What should you do if you feel symptoms of heat stress?**

# Change

**Mention a change that you will make to protect yourself from heat stress now that you have had this training.**

**❖ *Note to the trainer: Ask that each participant share something that he or she can do differently. Make a list of these ideas.***

## Change

**Mention a change that you will make to protect yourself from heat stress now that you have had this training.**

## Conclusion

**Do you have any other questions?**

**I want to thank each of you for coming today and for sharing in this presentation.**



Gracias



Thank You



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This flipchart, entitled “How Can We Protect Ourselves from Heat Stress at Work?” was developed as a presentation and guide for promotores de salud who provide health education to farmworkers. The promotores receive a training using the curriculum, entitled Heat Illness: A Training Curriculum for Lay Health Educators.

The contents are solely the responsibility of the authors and do not necessarily represent the official views of OSHA.

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