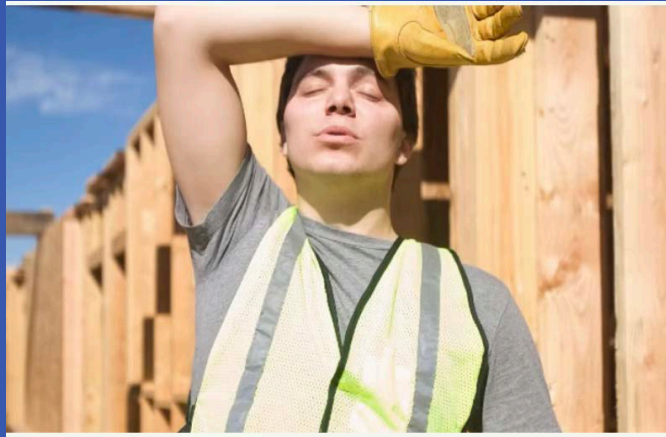




## STAT Lesson:

# *Heat Stress*



## STAT Lesson Plan for English Language Learners

### Heat Stress / *Estrés por calor*

Lesson Duration: 30-40 minutes

#### Standards (as needed or required):

##### Lesson Objectives:

- Student will be able to understand how to stay safe while working in the heat.  
*El estudiante podrá entender cómo mantenerse a salvo mientras trabaja en el calor.*
- Student will be able to match heat stress vocabulary with the correct image. *El estudiante podrá emparejar el vocabulario del estrés por calor con la imagen correcta.*
- Student will be able to recognize symptoms of heat stress and explain how to respond to them.  
*El estudiante podrá reconocer los síntomas del estrés por calor y explicar cómo responder a ellos.*

##### I Can Statements:

- I can explain how to stay safe while working in the heat.  
*Puedo explicar cómo mantenerme a salvo mientras trabajo en el calor.*
- I can match heat stress vocabulary to the correct image.  
*Puedo emparejar el vocabulario del estrés por calor con la imagen correcta.*
- I can recognize symptoms of heat stress and I know how to respond to them.  
*Puedo reconocer los síntomas del estrés por calor y sé cómo responder a ellos.*





## Materials Needed

- [Vocabulary & Image Guide](#)
- [Vocabulary Practice Worksheet](#)
- [Answer Key for Vocabulary Practice Worksheet](#)
- Heat Stress bilingual information sheets: [Heat Symptoms and How to Respond and How to Stay Safe When Working in the Heat](#)
- Cut-out flashcards [Heat Stroke](#) and [Heat Stress](#)
- Quizlet Activities:
  - [Heat Phrases](#)
  - [Heat Vocabulary](#)
- EdPuzzle Videos:
  - [Heat Illness video: Cramps](#)
  - [Heat Illness video: Dehydration and Exhaustion](#)
    - Videos used with permission from Pacific Northwest Agricultural Safety and Health Center (PNASH).
- Copies of [Pre-Test/](#) [Post-Test](#)



## Target Vocabulary

### Words

- Hat
- Light clothing
- Dark clothing
- Water
- Alcohol
- Minutes
- Sun
- Shade
- Rest
- Help

### Phrases

- Wear a hat.
- Wear light clothing.
- Don't wear dark clothing.
- Drink water.
- Don't drink alcohol.
- Drink water every 15 minutes.
- Rest in the shade.
- Do not rest in the sun.
- Help each other.

## Pre-Test Questions

1. Which of the following should you do to stay safe while working in the heat?
2. If a worker is showing signs of heat distress, what should you do?
3. If you are working on a hot day, it's okay to drink water only when you get thirsty.
4. Complete this sentence: Rest in the \_\_\_\_\_.
5. What is this a picture of?



### **Introduction/Opener/Activate Prior Knowledge**

- Show the flashcard of the overheated car. Ask why the car has broken down, how this could have been avoided, and what can be done to fix it.
- Give students time to think and respond.
- Next show the flashcard of the man with heat exhaustion. Ask the same questions as above and give OSY time to respond. Ask them to share if they have experienced this themselves or had a fellow worker who got sick from the heat. This will activate prior knowledge of the topic and indicate how much students already know.
- Once students have given their ideas, explain that people can also “break down” or get sick from the heat and that this lesson will help them to learn more about the topic.

### **Lesson Instructions**

*Language Note: The following lesson is intended to be taught entirely in Spanish or the students' native language for beginning English Language Learners. If your students are more advanced, these same lessons can be taught using as much English as is appropriate.*

While there may be a variety of available activities, it is important to select the particular activities that can be used for group or individual practice to meet the needs of the students. The objective is for students to practice with engaging activities that will enable them to practice what they are learning.

- Introduce Lesson Content:
  - Hand out the bilingual informational sheets: Heat Symptoms and How to Respond and How to Stay Safe When Working in the Heat.
  - Explain that workers can get sick from the heat.
  - Go over the symptoms of heat exhaustion and heat stroke listed in the handout. Look at the pictures and ask students what actions they see being taken to help. Allow students time to respond. Now read the *How to Respond* actions listed.
  - On the handout How to Stay Safe When Working in the Heat, explain that heat sickness can be avoided if the right precautions are taken. Go over the DOs and DON'Ts listed on that page.
  
- Lesson Content Practice:
  - Practice 1. Print paper flashcards of symptoms and response. Lay response cards on the table. Fan symptom cards and have each student pick one. ○ Students should act out the symptoms and have others guess and name the symptom.
  - Students should follow up with telling how to respond ( ex. call 911, cool with a fan, etc.) and lay the symptom card on the correct response pile. ○ Extension: For students at a higher level of English, the symptoms can now be taught in English and the activity can be done with students responding with, "He **feels** \_\_\_\_\_ (dizzy, weak etc.). He **should** \_\_\_\_\_ (rest in the shade, drink water etc.)"

- Introduce English vocabulary:
  - Hand out the Vocabulary and Image Guide and go over the vocabulary in English.
  - Practice out loud as a group.
  - Say the phrases in English and have students repeat.
  - Give students feedback with pronunciation.
  - Repeat the term and give feedback until the student closely mimics your pronunciation.
  
- English vocabulary practice:
  - 1. Practice target words with flashcards.
  - 2. Practice target sentences with flashcards.
  - 3. Do the practice worksheet with multiple choice questions, matching questions, and sentences.

#### **Virtual Activities:**

- Flashcards on Quizlet that match the paper flashcards.
  - [Heat Phrases](#)
  - [Heat Vocabulary](#)
- Interpretive comprehension activities with videos using EdPuzzle.
  - [Heat Illness video: Cramps](#)
  - [Heat Illness video: Dehydration and Exhaustion](#)
    - Videos used with permission from Pacific Northwest Agricultural Safety and Health Center (PNASH).

#### **Extension Activity/Connections to Other Topics**

- Direct students to iSOSY [Life Skills Can I Get Sick From the Heat? Lesson](#) to extend their learning.



### Post-Test Questions

1. Which of the following should you do to stay safe while working in the heat?
2. If a worker is showing signs of heat distress, what should you do?
3. If you are working on a hot day, it's okay to drink water only when you get thirsty.
4. Complete this sentence: Rest in the \_\_\_\_\_.

5. What is this a picture of?

**BONUS:** Explain how you can stay safe when working in the heat.

### Wrap-Up/What Have Students Learned?

- Revisit the "I can" statements at the beginning of the lesson to determine what students have learned and what they can practice more on their own.

### Instructor Reflection

- When did students struggle?
- When did students experience success?
- Where to continue for the next lesson?
- Other ideas for the future?

### Disclaimer

- Images and information used in the iSOSY Heat Stress STAT Lesson were adapted from the OSHA's Heat Illness Prevention Campaign. The complete campaign is available at no charge at <https://www.osha.gov/heat>.



Heat Stress /Estrés por calor  
Pre-Test/Pre-Evaluación

Name/Nombre: \_\_\_\_\_

Date/Fecha: \_\_\_\_\_

Instructions: Choose the correct answer./ Instrucciones: Escoja la respuesta correcta.

1. Which of the following should you do to stay safe while working in the heat?  
*¿Cuál de estos debe hacer para mantenerse a salvo mientras trabaja en el calor?*
  - A. Wear a hat and light-colored clothing
  - B. Rest in the shade
  - C. Don't drink caffeine and alcohol
  - D. All of the above
2. If a worker is showing signs of heat distress, what should you do?  
*Si un empleado muestra las señales del estrés por calor, ¿qué debe hacer?*
  - A. Cool with water, ice, or fan
  - B. Give water to drink
  - C. Let him rest in the sun
  - D. A and B
3. If you are working on a hot day, it's ok to drink water only when you get thirsty.  
*Si trabaja en un día caluroso, está bien beber el agua solamente cuando tiene sed.*
  - A. True
  - B. False
4. Complete this sentence: Rest in the \_\_\_\_\_.  
*Complete esta frase: Descanse en \_\_\_\_\_.*
5. What is the English word for this item?  
*¿Cuál es la palabra en inglés para este artículo?*
  - A. Shade
  - B. Rest
  - C. Sun
  - D. Hat





**Lesson: Heat Stress /La lección: Estrés por calor**  
**VOCABULARY/VOCABULARIO**

**The objectives/Los objetivos:**

Learn at least 10 vocabulary words. *Aprender, por lo menos, 10 palabras del vocabulario*

| El inglés                          | Pronunciation                        | Pronunciation para hispanohablantes | El español                       | La foto                                                                               |
|------------------------------------|--------------------------------------|-------------------------------------|----------------------------------|---------------------------------------------------------------------------------------|
| <b>Hat</b>                         | <i>hat</i>                           | Jat                                 | el <b>sombrero</b>               |    |
| Wear a <b>hat</b> .                | <i>wair uh/ey hat</i>                | Uer e jat                           | Lleve un <b>sombrero</b> .       |                                                                                       |
| <b>Light clothing</b>              | <i>lahyt kloh-thing</i>              | Lait clodin                         | la <b>ropa ligera</b>            |   |
| Wear <b>light clothing</b> .       | <i>wair lahyt kloh-thing</i>         | Uer lait clodin                     | Lleve la <b>ropa ligera</b> .    |                                                                                       |
| <b>Dark clothing</b>               | <i>dahrk kloh-thing</i>              | Darc                                | la <b>ropa oscura</b>            |  |
| DO NOT wear <b>dark clothing</b> . | <i>doo nat wair dahrk kloh-thing</i> | Du nat uer darc clodin              | No lleve la <b>ropa oscura</b> . |                                                                                       |
| <b>Water</b>                       | <i>waw-ter</i>                       | Uater                               | el <b>agua</b>                   |  |
| Drink <b>water</b> .               | <i>dringk waw-ter</i>                | Drinc uater                         | Beba el <b>agua</b> .            |                                                                                       |



|                                                                                    |                                                                                                |                                 |                                                                                            |                                                                                       |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------|--------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>Alcohol</b><br><br>DO NOT drink <b>alcohol.</b>                                 | <i>al-kuh-hawl</i><br><br><i>doo nat dringk al-kuh-hawl</i>                                    | Alkajal                         | el <b>alcohol</b><br><br>No beba el <b>alcohol.</b>                                        |    |
|                                                                                    |                                                                                                | Du nat drinc alkajal            |                                                                                            |                                                                                       |
| <b>Fifteen minutes</b><br><br>Drink water every <b>15 minutes.</b>                 | <i>fif-teen men-uhts</i><br><br><i>dringk waw-ter ev-ree fif-teen men-uhts</i>                 | Fiftin minuts                   | <b>quince minutos</b><br><br>Beba el agua cada <b>quince minutos.</b>                      |    |
|                                                                                    |                                                                                                | Drinc uater everi fiftin minuts |                                                                                            |                                                                                       |
| <b>Sun/ Shade</b>                                                                  | <i>suhn/sheyd</i>                                                                              | San/ Sheid                      | el <b>sol/la sombra</b>                                                                    |    |
| <b>Rest</b><br><br>DO NOT <b>rest</b> in the sun.<br><br><b>Rest</b> in the shade. | <i>rest</i><br><br><i>doo nat rest en thee/thuh suhn</i><br><br><i>rest en thee/thuh sheyd</i> | Rest                            | <b>descansar</b><br><br>No <b>descanse</b> en el sol.<br><br><b>Descanse</b> en la sombra. |   |
|                                                                                    |                                                                                                | Du nat rest en de san           |                                                                                            |                                                                                       |
|                                                                                    |                                                                                                | Rest en de sheid                |                                                                                            |                                                                                       |
| <b>Help</b><br><br><b>Help</b> each other.                                         | <i>help</i><br><br><i>help eech uhth-er</i>                                                    | Jelp                            | <b>ayudar</b><br><br><b>Ayúdenle</b> uno al otro.                                          |  |
|                                                                                    |                                                                                                | Jelp ich oder                   |                                                                                            |                                                                                       |



## Lesson: Heat Stress/La lección: Estrés por Calor

### VOCABULARY PRACTICE WORKSHEET

Instructions: Choose the name associated with the image. *Escoja el nombre asociado con la imagen.*

1.



- A. Water
- B. Hat
- C. Help
- D. Rest

6.



- A. Up
- B. Shade
- C. Yes
- D. Do

2.



- A. Clothing
- B. Alcohol
- C. Water
- D. Sun

7.



- A. Light clothing
- B. Dark
- C. Shade
- D. Water

3.



- A. Shade
- B. Rest
- C. Dark
- D. Help

8.



- A. Drink
- B. Hat
- C. Alcohol
- D. Help

4.



- A. Dark clothing
- B. Shade
- C. Minutes
- D. Hat

9.



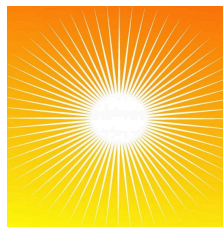
- A. 15 minutes
- B. Help
- C. Water
- D. Rest

5.



- A. Fifteen
- B. Water
- C. Alcohol
- D. Drink

10.



- A. Rest
- B. Sun
- C. Hat
- D. Clothing



Draw a line connecting the two parts of the sentence. *Raya una línea para combinar las dos partes de la oración.*

|                   |                      |
|-------------------|----------------------|
| 1     Wear        | A.     in the shade  |
| 2     Don't wear  | B.     a hat         |
| 3     Drink       | C.     dark clothing |
| 4.    Don't drink | D.     each other    |
| 5.    Rest        | E.     water         |
| 6.    Help        | F.     alcohol       |

Now write the sentence here: *Ahora, escriba la oración aquí:*

|    |
|----|
| 1. |
| 2. |
| 3. |
| 4. |
| 5. |
| 6. |

## Lesson: Heat Stress/La lección: Estrés por Calor

### VOCABULARY PRACTICE WORKSHEET

Instructions: Choose the name associated with the image. *Escoja el nombre asociado con la imagen.*

1.



- A. Water
- B. Hat
- C. Help
- D. Rest

6.



- A. Up
- B. Shade
- C. Yes
- D. Do

2.



- A. Clothing
- B. Alcohol
- C. Water
- D. Sun

7.



- A. Light clothing
- B. Dark
- C. Shade
- D. Water

3.



- A. Shade
- B. Rest
- C. Dark
- D. Help

8.



- A. Drink
- B. Hat
- C. Alcohol
- D. Help

4.



- A. Dark clothing
- B. Shade
- C. Minutes
- D. Hat

9.



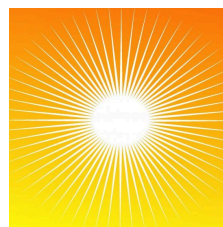
- A. 15 minutes
- B. Help
- C. Water
- D. Rest

5.



- A. Fifteen
- B. Water
- C. Alcohol
- D. Drink

10.



- A. Rest
- B. Sun
- C. Hat
- D. Clothing



Draw a line connecting the two parts of the sentence. *Raya una línea para combinar las dos partes de la oración.*

|                                           |                     |
|-------------------------------------------|---------------------|
| 1    Wear - <b>B. a hat</b>               | A.    in the shade  |
| 2    Don't wear - <b>C. dark clothing</b> | B.    a hat         |
| 3    Drink - <b>E. water</b>              | C.    dark clothing |
| 4.   Don't drink - <b>F. alcohol</b>      | D.    each other    |
| 5.   Rest - <b>A. in the shade</b>        | E.    water         |
| 6.   Help - <b>D. each other</b>          | F.    alcohol       |

Now write the sentence here: *Ahora, escriba la oración aquí:*

|                                |
|--------------------------------|
| 1.   Wear a hat.               |
| 2.   Don't wear dark clothing. |
| 3.   Drink water.              |
| 4.   Don't drink alcohol.      |
| 5.   Rest in the shade.        |
| 6.   Help each other.          |





Heat Stress /Estrés por calor  
Post-Test/Post-Evaluación

Name/Nombre: \_\_\_\_\_  
Date/Fecha: \_\_\_\_\_

Instructions: Choose the correct answer.  
*Instrucciones: Escoja la respuesta correcta.*

1. Which of the following should you do to stay safe while working in the heat?  
*¿Cuál de estos debe hacer para mantenerse a salvo mientras trabaja en el calor?*
  - A. Wear a hat and light-colored clothing
  - B. Rest in the shade
  - C. Don't drink caffeine and alcohol
  - D. All of the above
2. If a worker is showing signs of heat distress, what should you do?  
*Si un empleado muestra las señales del estrés por calor, ¿qué debe hacer?*
  - A. Cool with water, ice, or fan
  - B. Give water to drink
  - C. Let him rest in the sun
  - D. A and B
3. If you are working on a hot day, it's okay to drink water only when you get thirsty.  
*Si trabaja en un día caluroso, está bien beber el agua solamente cuando tiene sed.*
  - A. True
  - B. False
4. Complete this sentence: Rest in the \_\_\_\_\_.  
*Complete esta frase: Descanse en \_\_\_\_\_.*
5. What is the English word for this item?  
*¿Cuál es la palabra en inglés para este artículo?*
  - A. Shade
  - B. Rest
  - C. Sun
  - D. Hat



BONUS: Explain what you can do to stay safe and healthy when working in the heat:  
*EXTRA: Explique lo que puede hacer para mantenerse a salvo y saludable cuando trabaja en el calor.*

---

---

---

---



Heat Stress /Estrés por calor  
Post-Test/Post-Evaluación

Name/Nombre: \_\_\_\_\_  
Date/Fecha: \_\_\_\_\_

Instructions: Choose the correct answer.  
*Instrucciones: Escoja la respuesta correcta.*

1. Which of the following should you do to stay safe while working in the heat?  
*¿Cuál de estos debe hacer para mantenerse a salvo mientras trabaja en el calor?*  
A. Wear a hat and light-colored clothing  
B. Rest in the shade  
C. Don't drink caffeine and alcohol  
D. **All of the above**
2. If a worker is showing signs of heat distress, what should you do?  
*Si un empleado muestra las señales del estrés por calor, ¿qué debe hacer?*  
A. Cool with water, ice, or fan  
B. Give water to drink  
C. Let him rest in the sun  
D. **A and B**
3. If you are working on a hot day, it's okay to drink water only when you get thirsty.  
*Si trabaja en un día caluroso, está bien beber el agua solamente cuando tiene sed.*  
A. True  
B. **False**
4. Complete this sentence: Rest in the shade \_\_\_\_\_.  
*Complete esta frase: Descanse en sombra \_\_\_\_\_.*
5. What is the English word for this item?  
*¿Cuál es la palabra en inglés para este artículo?*  
A. Shade  
B. Rest  
C. Sun  
D. **Hat**



BONUS: Explain what you can do to stay safe and healthy when working in the heat:  
*EXTRA: Explique lo que puede hacer para mantenerse a salvo y saludable cuando trabaja en el calor.*

---

---

---

---





















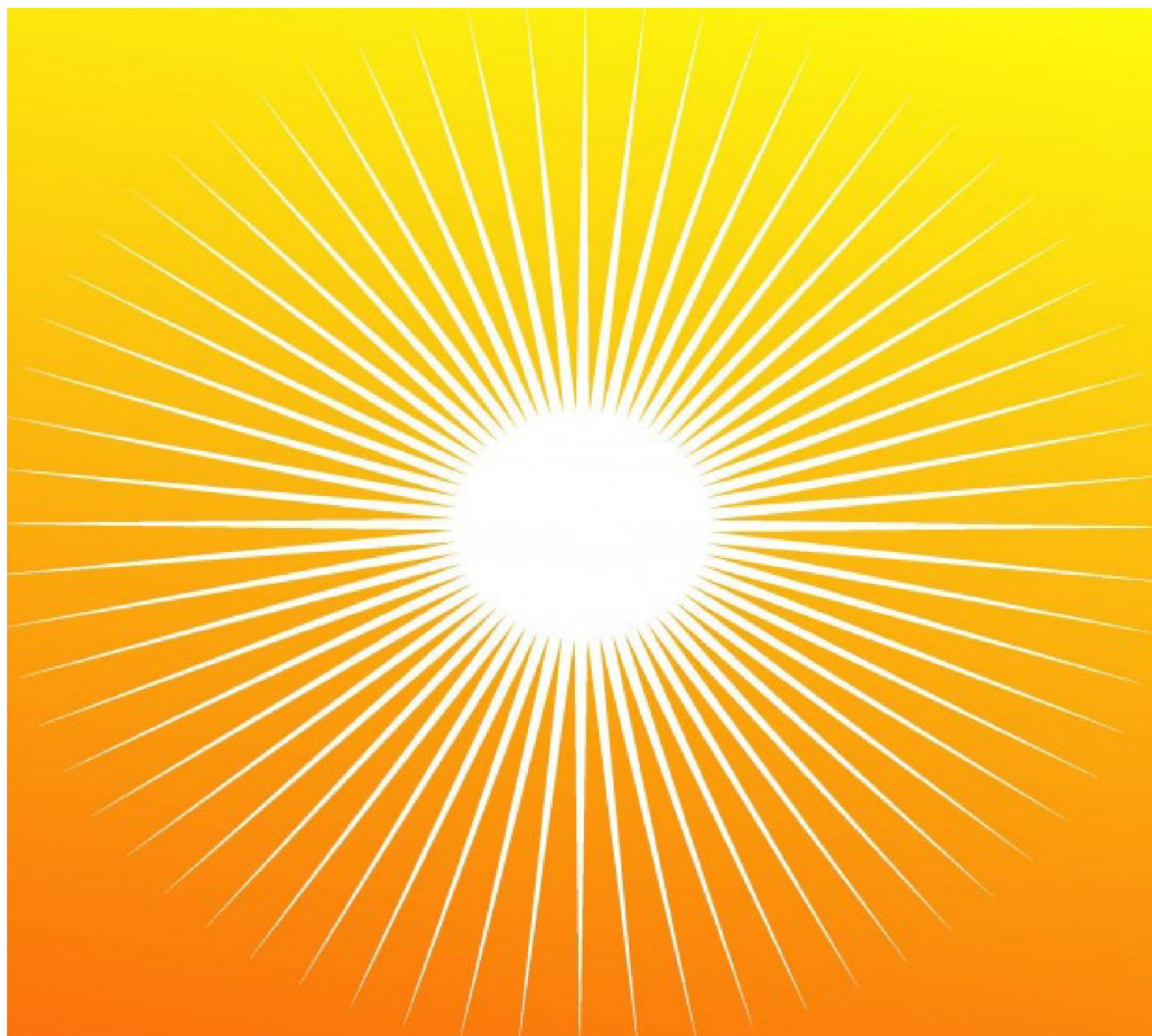






Work safety rules strictly enforce  
a zero-tolerance alcohol policy.





המחלקה לטיפול בנפגעים  
**מחלקת הנפגעים**



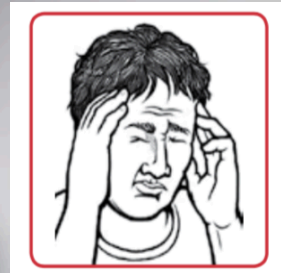




# Dizzy

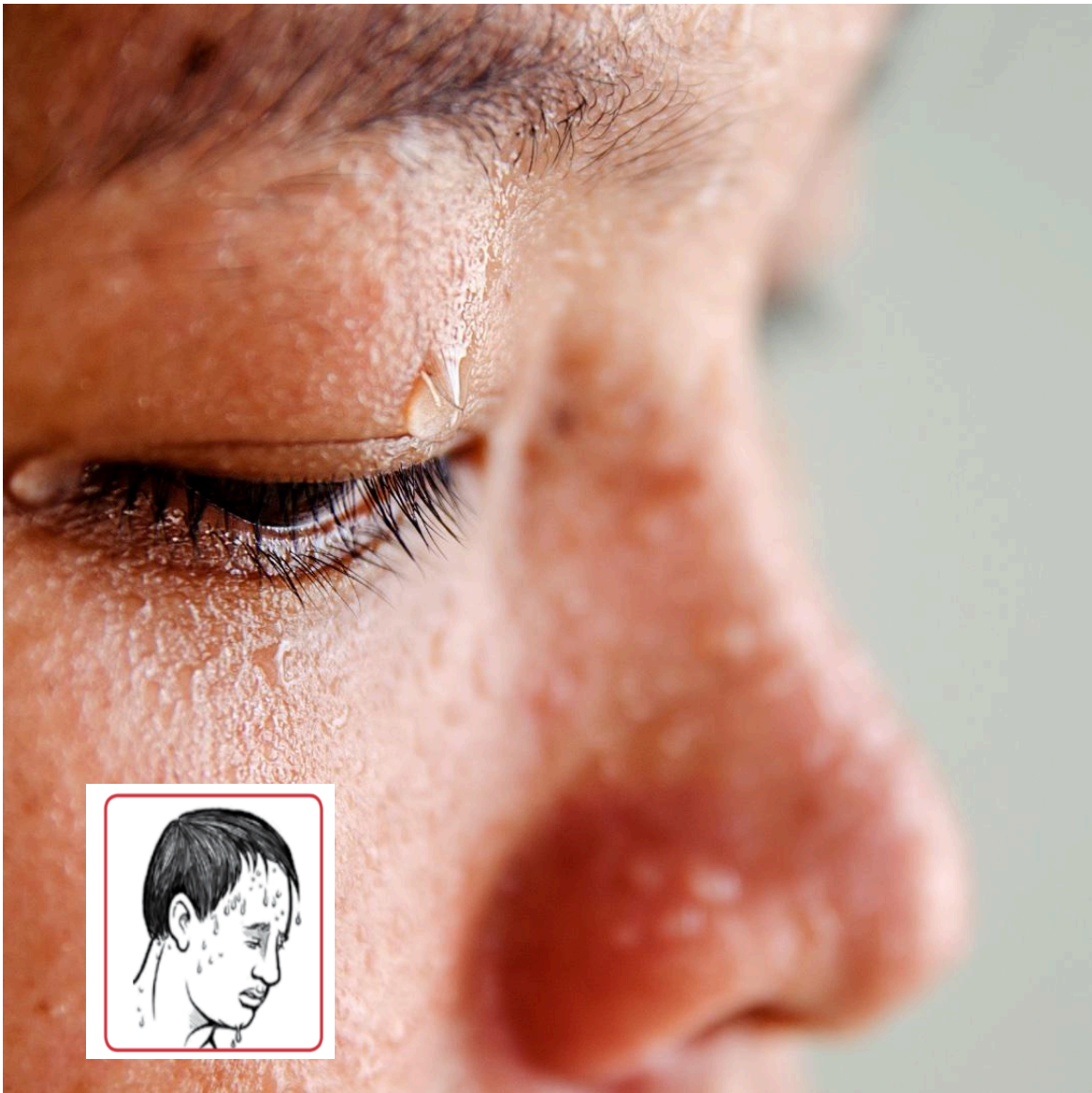


**Headache**  
**I have a headache**  
**Yo tengo un dolor de cabeza**





**Sweat/Sweating**  
**I am sweating**  
**You are sweating**  
**We are sweating**



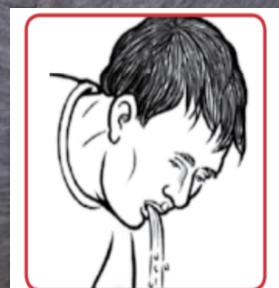
**Corazon = Heart**  
**Heart pump**



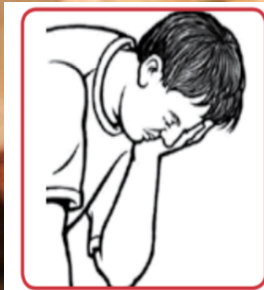


# Nausea

## Vomiting / vomit

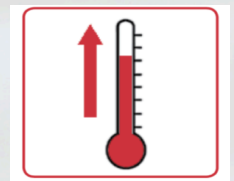


**Very hot**





# High Temperature



**Red**

## Quemado/Burnt





# He Passed Out

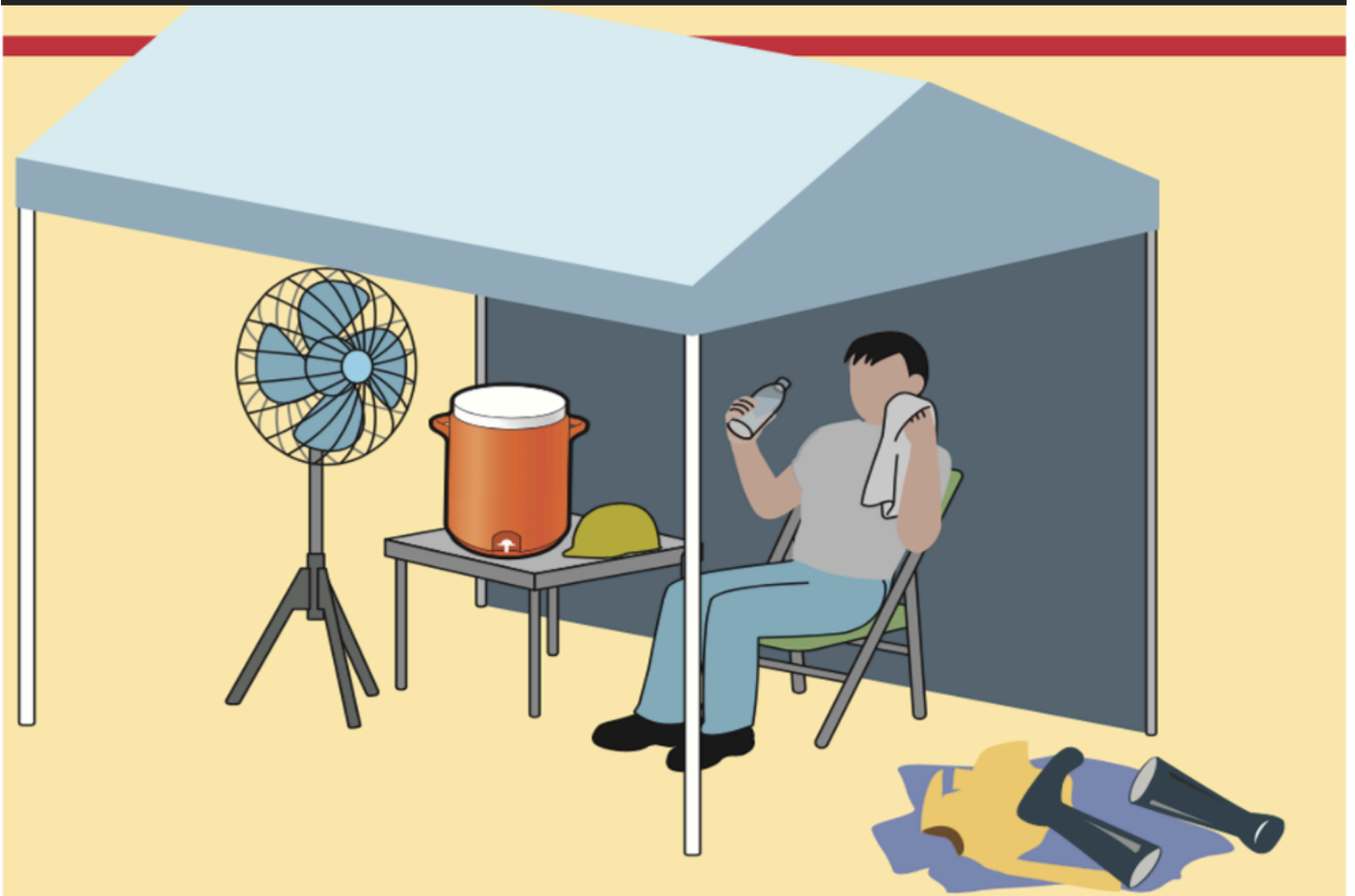


# Epileptic Shock





# How to respond to HEAT STRESS



**Como reaccionar al  
ESTRÉS POR CALOR**

# How to respond to HEAT STROKE

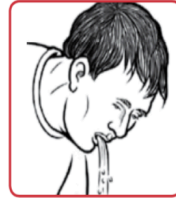


**Como reaccionar al  
GOLPE DE CALOR**



## Heat Symptoms and How to Respond / Los síntomas y cómo responder

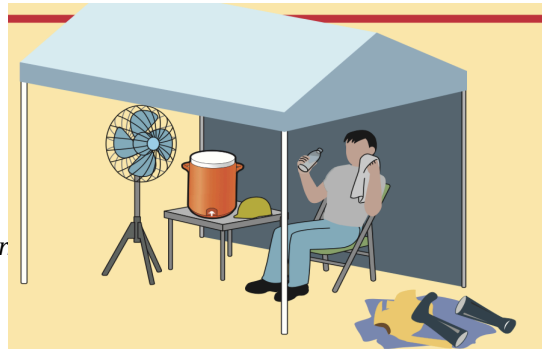
### HEAT EXHAUSTION / el estrés por calor



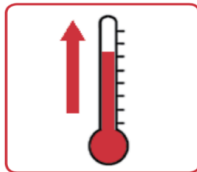
|                              |                                       |                          |                                            |                                                      |                                 |
|------------------------------|---------------------------------------|--------------------------|--------------------------------------------|------------------------------------------------------|---------------------------------|
| Dizziness<br><i>el mareo</i> | Headache<br><i>el dolor de cabeza</i> | Sweating<br><i>sudar</i> | Rapid heartbeat<br><i>el latido rápido</i> | Nausea/<br>Vomiting<br><i>la náusea/<br/>vomitar</i> | Weakness<br><i>la debilidad</i> |
|------------------------------|---------------------------------------|--------------------------|--------------------------------------------|------------------------------------------------------|---------------------------------|

#### For these symptoms: / Para estos síntomas:

- Give water to drink.
  - *Darle el agua para beber.*
- Remove unnecessary clothing.
  - *Quitarse la ropa innecesaria.*
- Move to a cooler area.
  - *Moverse a un lugar más fresco.*
- Cool with water, ice, or fan.
  - *Enfríar con el agua, el hielo o un ventilador*
- Do not leave alone.
  - *No dejarlo solo.*



### HEAT STROKE / el golpe de calor



|                                                                   |                                                       |                              |                               |                                        |
|-------------------------------------------------------------------|-------------------------------------------------------|------------------------------|-------------------------------|----------------------------------------|
| Red, hot,<br>dry skin<br><i>la piel roja,<br/>caliente y seca</i> | High<br>temperature<br><i>la temperatura<br/>alta</i> | Dizziness<br><i>el mareo</i> | Fainting<br><i>desmayarse</i> | Convulsions<br><i>las convulsiones</i> |
|-------------------------------------------------------------------|-------------------------------------------------------|------------------------------|-------------------------------|----------------------------------------|

#### For these symptoms: / Para estos síntomas:

- Call 911 immediately.
  - *Llamar al 911 inmediatamente.*
- Cool with water or ice.
  - *Enfríar con el agua o el hielo.*
- Stay until help arrives.
  - *Quedarse hasta que llegue la ayuda.*





How to Stay Safe When Working in the Heat  
Cómo mantenerse a salvo cuando trabaja en el calor

Heat exposure can be dangerous. Here are some things you can do to stay safe when working in the heat:

*La exposición puede ser peligrosa. Aquí hay unas cosas que puede hacer para mantenerse a salvo cuando trabaja en el calor:*



Drink water even if you are not thirsty every 15-20 minutes.

*Beba el agua aunque no tiene sed- cada 15-20 minutos.*



Do not drink caffeine or alcohol.

*No beba el café ni el alcohol.*



Help each other. Watch out for each other.

*Ayuden uno al otro. Cuidense uno al otro.*



Wear a hat and light-colored clothing.

*Lleve un sombrero y la ropa de color claro.*



Take frequent rest breaks in the shade.

*Descanse frecuentemente en la sombra.*