

OSHA Heat Sensitivity



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Introduction

Purpose of Training

Samaritan Health Services has created the following training to meet the Oregon OSHA requirement for education related to OAR 437-002-0156 Rules for Working in High Temperatures.

Assignment of this training has been requested/approved by SHS Employee Health & Safety and SHS Learning & Development.

Course Requirements

To complete this training, you must attest that you have viewed and understood the training materials.

Questions/Concerns

For questions and concerns related to:

- Reason for assignment, course content, or quiz questions/answers, contact Jenaya LeMay at jlemay@samhealth.org.
- Technical issues, including courses not progressing or grading correctly, contact eLearning at elearning@samhealth.org.

CONTINUE

Outcomes

By the end of this CBL, you will be able to:

- Explain how SHS plans to provide water, shade, acclimatization, and rest breaks to individuals in order to comply with the OR-OSHA rule
- Identify environmental and personal risk factors that may increase their risk of developing heat related illness
- Recognize the warning signs and symptoms of heat related illness and how to report them

CONTINUE


Rules for Working in High Temperatures

- This standard applies whenever an employee performs work activities, both indoors and outdoors, and the heat index (apparent temperature) equals or exceeds 80 degrees Fahrenheit.
- Employees working from home are subject only to the training requirements outlined in the rule and contained in this CBL.
- Heat illness prevention training must be provided to all affected employees annually, including new employees, supervisory and non-supervisory employees.

- There are many types of heat illness including heat cramps, heat syncope, heat exhaustion, and heat stroke.
- It is important to be able to recognize the signs and symptoms of each type of heat illness, as well as appropriate interventions.
- Heat illness may progress quickly from mild signs and symptoms to a serious life-threatening condition.

Heat exhaustion vs. Heat stroke

Learn the symptoms

| Heat exhaustion | Heat stroke |
|---|---|
| What it looks like | What it looks like |
| Elevated body temperature | High temperature (103° F or more) |
| Dizziness | Confusion |
| Headache | Slurred speech |
| Heavy sweating | Skin is hot, red, and dry |
| Decreased urination | Seizures |
| Nausea | Fainting |
| Thirst | |
| Irritability | |
| Fatigue | |
| Take action | Take action |
| <p>Move worker to a cool place</p> <p>Remove and loosen clothes</p> <p>Cool with wet cloths or take a cool bath if available</p> <p>Offer small sips of water</p> | <p>Call 911: this is a medical emergency</p>  <p>After you call</p> <p>Move worker to a cool place and don't leave alone until help gets there</p> <p>Lower temperature by removing clothes</p> <p>Give a cool bath, if available</p> |
| When to call for help | |
| Symptoms worsen | |
| Symptoms persist | |

Information from the Centers for Disease Control and Prevention (CDC.gov)

Find more on saif.com Search Q Prevent injuries

S1106 | ©SAIF 07.21

Click to zoom.

Heat Cramps and Heat Syncope

Heat Cramps –

Cramping usually associated with loss of salt and moisture from sweating

| | |
|--------------------|---|
| Signs and Symptoms | <ul style="list-style-type: none">• Muscle cramps, pain, or spasms in the abdomen, arms, or legs |
| Interventions | <ul style="list-style-type: none">• Drink water and have a snack and/or sport drink every 15-20 minutes• Get medical help if the person has heart problems, is on a low sodium diet, or if the cramps do not subside within one hour |

Heat Syncope –

A fainting episode or dizziness that usually occurs with prolonged standing or sudden rising from a sitting or lying position.

| | |
|--------------------|--|
| Signs and Symptoms | <ul style="list-style-type: none">• Fainting (short duration)• Dizziness |
| Interventions | <ul style="list-style-type: none">• Sit or lie down in a cool place• Drink plenty of clear fluids |

Heat Exhaustion

Heat Exhaustion –

The body's response to an excessive loss of water and salt, usually through excessive sweating. Most often occurs in those that are elderly, have high blood pressure, and those working in a hot environment. Heat exhaustion can progress to heat stroke without intervention

| | |
|--------------------|---|
| Signs and Symptoms | <ul style="list-style-type: none">• Profuse sweating• Weakness and fatigue• Nausea and vomiting• Muscle cramps (associated with dehydration)• Headache• Light-headedness or fainting |
| Interventions | <ul style="list-style-type: none">• Drink plenty of clear fluids• Stop the activity and move the worker to a cooler environment• Render first aid on-site and seek medical attention if needed |

Heat Stroke

Heat Stroke –

The most serious heat-related illness which occurs when the body becomes unable to control its temperature: the body's temperature rises rapidly, the sweating mechanism fails, and the body is unable to cool down. When heat stroke occurs, the body temperature can rise to 106°F or higher within 10 to 15 minutes. Heat stroke can cause death or permanent disability if emergency treatment is not given

Signs and Symptoms

- Absence of sweating
- Dry skin
- Agitation or strange behavior
- Dizziness, disorientation, or lethargy
- Seizures or signs that mimic those of a heart attack

Interventions

- **Call 911 immediately**
- Cool the worker
- Move the worker to an air-conditioned environment or cool, shady area
- Help the worker remove any unnecessary clothing
- Do not leave the worker unattended



- All work-related accidents, injuries, or illnesses must be reported via RL Datix.
- If a worker displays signs of, or reports symptoms of, heat related illness the worker must be relieved from duty and provided with a means to reduce body temperature.
- A worker exhibiting signs or symptoms of heat illness must be monitored and must not be left alone or sent home without being offered on-site first aid or provided with emergency medical services.
- If additional medical care is needed to treat minor symptoms, direct the worker to the nearest medical provider/urgent care, or an Emergency Department. If signs or symptoms indicate severe heat illness, contact emergency medical services (call 911), and follow provided instructions.

**THE FOLLOWING ENVIRONMENTAL RISK FACTORS
MAY PUT YOU AT INCREASED RISK OF DEVELOPING
HEAT ILLNESS:**

- Air temperature.
- Conductive heat sources such as dark colored work surfaces.
- Lack of air movement.
- Physical effort needed for the work.

**THE FOLLOWING PERSONAL RISK FACTORS MAY
PUT YOU AT INCREASED RISK OF DEVELOPING HEAT
ILLNESS:**

- Use of nonbreathable protective clothing or other PPE.

**THE FOLLOWING ENVIRONMENTAL RISK FACTORS
MAY PUT YOU AT INCREASED RISK OF DEVELOPING
HEAT ILLNESS:**

**THE FOLLOWING PERSONAL RISK FACTORS MAY
PUT YOU AT INCREASED RISK OF DEVELOPING HEAT
ILLNESS:**

- Lack of acclimation to warmer temperatures.
- Poor general health.
- Dehydration.
- Alcohol or caffeine consumption.
- Previous heat related illness.
- Pregnancy.
- Advanced age.
- Use of prescription medications that affect the body's heat retention or other physiological responses to heat such as beta blockers, diuretics, antihistamines, tranquilizers, and antipsychotics.

- It is important to frequently consume small quantities of water, up to 32 ounces per hour, when working in hot temperatures.

- Drinking at shorter intervals is more effective than drinking large amounts infrequently.
- Drink before you are thirsty – by the time you feel thirsty, you are already behind in fluid replenishment.
- Dehydration is a primary contributor to heat exhaustion.



- Acclimatization is the temporary adaptation of the body to work in the heat that occurs gradually when a person is exposed to it.

- SHS will acclimatize workers to hot environments following the CDC NIOSH established schedule:
 - For new workers: no more than 20% exposure on day 1 and an increase of no more than 20% on each additional day.
 - For experienced workers: no more than 50% exposure on day 1, 60% on day 2, 80% on day 3, and 100% on day 4.

- Acclimatization will be repeated for employees who return from an absence of longer than one week.



Refer to the SHS Heat Illness Prevention Plan Policy in PolicyTech for more information.

SHS is complying with this rule through the following measures:

- Providing water to employees working in high ambient temperatures.
- Monitoring heat index information for affected department's specific work location.
- Providing preventative rest breaks either in shaded areas or well-ventilated indoor areas.
- Providing access to first aid.

CONTINUE

Attestation

To fulfill the requirements of this training, you must complete the attestation.

Question

01/01

I am attesting that I have read, understand, and agree to follow all the information provided in this training. This includes all relevant policies, if applicable. Selecting “Yes” is equivalent to providing your electronic signature.

Yes

No

References

Click this button to exit the module

EXIT

Click this button to restart the module

RESTART

References

Graphic related to heat exhaustion vs. heat stroke [Heat/cold stress \(saif.com\)](#).

Photos obtained via stock photo library in Microsoft Power Point

CDC NIOSH Heat Acclimatization Schedule [Heat Stress
Acclimatization | NIOSH | CDC](#)

OR OSHA Administrative Rules OAR 437-002-0156 and OAR
437-002-1081

EPAs AirNow.gov