saif
Work. Life. Oregon.

Protect your team from heat illness

As global temperatures rise, more workers are exposed to extreme heat.

Unlike hurricanes and tornadoes, heat is an invisible hazard. Even though all heat-related illness is preventable, heat kills more people each year than all other natural disasters combined. Oregon OSHA has adopted a permanent rule to address this growing threat (bit.ly/3P4LgfL). The new rules apply to conditions where the heat index exceeds 80°F whether indoors or outdoors.

This guide offers all you need to know; from insights of the new rule to resources to help you achieve the highest level of protection.

How does heat impact health?

Heat illness typically refers to two different conditions: heat exhaustion and heat stroke. Heat exhaustion often precedes heat stroke, which manifests after prolonged exposure. Heat stress may also cause long-term health effects, including muscle tissue breakdown and increased risk of kidney disease.

Heat index, explained

When you look up the temperature on any weather app, you usually get two numbers: first the air temperature, and then how hot it really feels. This second number is called the "heat index," also known as apparent temperature. Oregon OSHA's new heat rule uses the heat index instead of raw air temperature to determine the appropriate level of protection. This takes other factors, like humidity, into account.

Symptoms of heat exhaustion include:

- elevated body temperature
- dizziness
- headache
- heavy sweating
- decreased urination
- nausea
- thirst
- irritability
- fatigue

Treatment of heat exhaustion include:

- Move worker to a cool place.
- Loosen or remove clothes.
- Cool with wet cloths or a cool bath, if available.
- Offer small sips of water.
- Call 911 if symptoms worsen or persist.

Symptoms of heat stroke include:

- a high temperature (103°F or more)
- confusion
- slurred speech
- seizures
- fainting
- skin that is hot, red, and dry

If untreated, heat stroke can cause death.

Treatment of heat stroke include:

- Call 911: This is a medical emergency.
- Move worker to a cool place and keep company until help arrives.
- Lower temperature by removing clothes.
- Give a cool bath, if available.

Who's at risk?

Exposure depends on many factors, including intensity of work, access to cooler areas, and environmental conditions, including humidity, wind, and cloud coverage. People who work outdoors, are over age 65, have respiratory conditions or circulatory disease, are overweight, or are pregnant have a higher risk of health impacts.

What can employers do?

Before heat season:

- Provide annual heat training for all employees. Include information about risk factors, symptoms of heat illness, health effects, hydration, acclimatization, two-way communication, and other relevant procedures.
- Include heat events in your emergency response and business continuity plans. Designate a team for handling business and personnel impacts.
- Prepare production schedules and work assignments with heat in mind, especially if you are in a high-impact area.

Plan for work (Pre-work planning):

- Identify the risk of heat exposure for each type of employee and task, including those who travel or provide transportation.
- Describe levels of increasing hazard and response for each work situation.
- Prepare necessary supplies for different responses, such as personal protective equipment (like cooling vests or scarves and shade), water, cell phones, and radio communication.
- Include treatment descriptions for the different heat illnesses and necessary supplies.
- Identify resources for monitoring the heat index in your area. One resource is the National Weather Service's apparent temperature forecast (bit.ly/3JEqCSE).

Applying the heat index

Heat index at or above 80°F
Supply each employee with 32 ounces of cool or cold drinking water per hour.
Establish and maintain one or more shaded areas that are readily available to outdoor employees.
Implement acclimatization practices that allow employees to gradually adapt to working in the heat.
Implement an emergency medical plan that includes response to possible heat illness.

Heat index at or above 90°F (this list also includes the above mentioned)
Directly measure temperature and humidity at the start of each shift. Calculate the actual heat index using the NIOSH Heat Safety Tool App (bit.ly/3Q9fKyJ).
Implement a heat illness prevention rest break schedule. Refer to OAR 437-004-1131 to determine length of breaks based on heat index and type of work.
Monitor employees for signs of heat illness using regular two-way communication, a mandatory buddy system, or other equally effective means of observation or communication.

After a heat event:

Discuss lessons learned; make any necessary changes to your plan and processes.

Where to get more information

Heat Rule Key Requirements:
bit.ly/3P4LgfL

NIOSH Heat Safety Tool App:
bit.ly/3Q9fKyJ

National Weather Service Forecast
bit.ly/3JEqCSE

Heat Illness Prevention Course
bit.ly/3BPY0DX

Heat Illness Infographic
saif.com/S1182

Exemptions from the new rule:

- Incidental heat exposure for less than 15 minutes in a 60-minute period.
- Exposure to heat generated by the work process, such as in bakeries.
- Emergency operations directly involved in the protection of life or property, or the restoration of essential services.
- Buildings and structures with mechanical ventilation that keeps the heat index below 80°F.

More information about partial exemptions can be found in the official rule (bit.ly/3dkClKc).