HEAT ILLNESS PREVENTION

OCCUPATIONAL SAFETY AND HEALTH MANUAL

Policy Owner:	Risk Management	**Effective Date:**	August 1, 2021
Category:	600	**Reviewed Date:**	n/a
Policy Number:	029	**Revised Date:**	n/a
Scope:	All Employees and Volunteers	**Training Needed:**	Yes – Supervisor and Employee
Associated Form:	n/a	**Training Frequency:**	Annual

Heat Stress

Oregon OSHA adopted a temporary rule (effective August 1, 2021) to address employee exposure to high ambient temperatures. These rules are adopted in Division 2 – General Occupational Safety and Health.

Therefore, reasonable measures will be taken to protect employees and volunteers from heat illnesses in compliance with OSHA rules specific to the hazards of high and extreme heat to include:

1. **When the heat index is equal to or above 80 degrees F.**
2. **When the heat index rises above 90 degrees F.**
3. **Access to shade**
4. **Drinking water**
5. **Supervisor and employee training**

Scope

This policy applies to all employees and volunteers whose job assignment(s) involve outdoor work that may expose them to environmental risk factors that could result in heat illnesses.

DEFINITIONS

Acclimatization: The temporary adaptation of the body to work in the heat that occurs gradually when a person is exposed work in a hot environment. Acclimatization peaks in most people within four to fourteen days of regular work for about two hours per day in the heat.

Drinking Water: Also known as potable water, is safe to drink or use for food preparation.

An adequate supply of drinking water must be:

- Readily accessible to employees at all times and at no cost.
- Sufficient quantity to enable each employee to consume 32 ounces per hour. Employees must also have ample opportunity to drink water.
- Cool (66-77 degrees Fahrenheit) or cold (35-65 degrees Fahrenheit).
- Packaged as a consumer product. Electrolyte-replenishing drinks that do not contain caffeine (for example, sports drinks) are acceptable substitutes, but should not completely replace required water.

Environmental Risk Factors: Factors in working conditions that create the possibility that heat illness could occur, include:

- Air temperature
- Relative humidity
- Radiant heat from the sun and other sources
- Conductive heat sources such as the ground
- Air movement
- Workload severity and duration
- Protective clothing and personnel protective equipment worn by employees.

Heat Illness: A serious medical condition resulting when the body is no longer able to control its internal temperature. Heat stress can lead to heat exhaustion and heat stroke. The symptoms of heat exhaustion include dizziness, headache, rapid pulse, nausea, and vomiting. The symptoms of heat stroke include high body temperature, confusion, and convulsions. Heat stroke can be fatal.

Heat Index: The heat index, also known as the apparent temperature, is what the temperature feels like to the human body when relative humidity is combined with the air temperature.

Preventative Recovery Period: A period of time to recover from the heat in order to prevent heat illness. Heat illness can be prevented when working in a hot environment by drinking water frequently (even if not thirsty), resting in the shade to cool down, and wearing a hat and light-colored clothing.

Shade: The blockage of direct sunlight. To be sufficient, shade must:

- Be provided by any natural or artificial means that does not expose employees to unsafe or unhealthy conditions and that does not deter or discourage access or use.
- Either be open to the air or provide mechanical ventilation for cooling.
- At least accommodate the number of employees on recovery or rest periods, so that they can sit in in the shade.
- Be located as close as practical to the areas where employees are working.
- Shade present during meal periods must be large enough to accommodate the number of employees on the meal period that remain onsite.

Canopies, umbrellas, and other temporary structures or devices may be used to provide shade. One indicator that blockage is sufficient is when objects do not cast a shadow in the area of blocked sunlight. Shade is not adequate when heat in the area of shade defeats the purpose of shade, which is to allow the body to cool. For example, a car sitting in the sun does not provide acceptable shade to a person inside it, unless the car is running with air conditioning.

GENERAL RESPONSIBILITIES

A. Risk Management:

1. Preparing and maintaining a written program that complies with the requirements of applicable OSHA requirements.
2. Assisting with training potentially impacted employees and their supervisors on the risks and prevention of heat illnesses, including recognizing symptoms and responding when they appear.

B. Directors, Managers, and Supervisors are responsible for:

1. Identifying all employees who are required to work outdoors where potential heat illnesses could occur.
2. Assuring that adequate water and shade are available at a job site when the environmental risk factors for heat illnesses are present.
3. Providing a cool-down rest period in the shade of 10 minutes for every two hours of work. These preventative cool-down rest periods may be provided concurrently with any other meal or rest period required by policy, rule, or law.
4. Ensuring that employees are observed for alertness and signs and symptoms of heat illness and monitored to determine whether medical attention is necessary.
5. Ensuring that all affected employees have received proper training on heat illness prevention.

    - The environmental and personal risk factors for heat illness, as well as the added burden of heat load on the body caused by exertion, clothing, and personal protective equipment.
    - The procedures for complying with the requirements of this standard, including the employer's responsibility to provide water, provide daily heat index information, shade, cool-down rests, and access to first aid as well as an employee's right to exercise their rights under this standard without fear of retaliation.
    - The concept, importance, and methods of adapting to working in a hot environment.
    - The importance of employees immediately reporting symptoms or signs of heat illness in themselves or co-workers.
    - The effects of non-job factors (medications, alcohol, obesity, etc.) on tolerance to workplace heat stress.
    - The different types of heat-related illness and the common signs and symptoms of heat-related illness.

6. Ensuring that the requirements in this document are followed.

C. Affected employees:

1. Complying with the provisions of the rules described in this document to include attending required training.
2. Verify they have drinking water available at all times when environmental risk factor(s) for heat illnesses are present.
3. Report water supply deficiencies to their supervisor.
4. Verify they have access to a shaded area to prevent or recover from heat-related symptoms and report to their supervisor any inadequate shade conditions.
5. Observe supervisors, peers, and subordinates for alertness and signs and symptoms of heat illness and monitored to determine whether medical attention is necessary.
6. Reporting heat related illness symptoms to the supervisor.

PROCEDURES

A. Employees and volunteers determined to be at risk for heat illness shall be identified for inclusion and training.

B. Training shall be provided for all potentially impacted employees and their supervisors.

- Training information shall include, but not be limited to, the risks and prevention of heat illnesses, including how to recognize symptoms and respond when they appear.

C. Ample quantities of cool drinking water (one quart per hour per employee) shall be available at all times for each employee for the duration of the entire shift while working outdoors in the heat. Supervisors shall remind employees to drink frequently.

D. Employees shall have access to a properly shaded (natural and/or artificial) area(s) to prevent or recover from heat illness symptoms and where they can take their rest breaks.

E. In the event an employee feels the onset of heat illness symptoms, a preventative recovery period will be provided to allow the employee to cool down and prevent heat illness while being monitored by a supervisor or co-worker. If symptoms do not subside within a reasonable period of time, medical attention should be sought.

For additional information and resources regarding prevention of Heat Related Illness, go to:

- https://www.oregon.gov/oha/ph/preparedness/prepare/pages/prepareforextremeheat.aspx
- https://www.cdc.gov/disasters/extremeheat/heattips.html