Washington State Department of Labor & Industries

WAC 296-62-095 Outdoor Heat Exposure Standard


August 1, 2021
WAC 296-62-095 Outdoor heat exposure.

WAC 296-62-09510 Scope and purpose.

(1) WAC 296-62-095 through 296-62-09560 applies to all employers with employees performing work in an outdoor environment.

(2) The requirements of WAC 296-62-095 through 296-62-09560 apply to outdoor work environments from May 1 through September 30, annually, only when employees are exposed to outdoor heat at or above an applicable temperature listed in Table 1.

To determine which temperature applies to each worksite, select the temperature associated with the general type of clothing or personal protective equipment (PPE) each employee is required to wear.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Outdoor Temperature Action Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>All other clothing</td>
<td>89°</td>
</tr>
<tr>
<td>Double-layer woven clothes</td>
<td>77°</td>
</tr>
<tr>
<td>including coveralls, jackets</td>
<td></td>
</tr>
<tr>
<td>and sweatshirts</td>
<td></td>
</tr>
<tr>
<td>Nonbreathing clothes</td>
<td>52°</td>
</tr>
<tr>
<td>including vapor barrier</td>
<td></td>
</tr>
<tr>
<td>clothing or PPE such as</td>
<td></td>
</tr>
<tr>
<td>chemical resistant suits</td>
<td></td>
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</tbody>
</table>

Note: There is no requirement to maintain temperature records. The temperatures in Table 1 were developed based on Washington state data and are not applicable to other states.

(3) WAC 296-62-095 through 296-62-09560 does not apply to incidental exposure which exists when an employee is not required to perform a work activity outdoors for more than fifteen minutes in any sixty-minute period. This exception may be applied every hour during the work shift.

(4) WAC 296-62-095 through 296-62-09560 supplement all industry-specific standards with related requirements. Where the requirements under these sections provide more specific or greater protection than the industry-specific standards, the employer must comply with the requirements under these sections. Additional related requirements are found in chapter 296-305 WAC, Safety standards for firefighters and chapter 296-307 WAC, Safety standards for agriculture.
WAC 296-62-09520 Definitions.

**Acclimatization.** The body's temporary adaptation to work in heat that occurs as a person is exposed to it over time.

**Double-layer woven clothing.** Clothing worn in two layers allowing air to reach the skin. For example, coveralls worn on top of regular work clothes.

**Drinking water.** Potable water that is suitable to drink and suitably cool in temperature. Drinking water packaged as a consumer product and electrolyte-replenishing beverages (i.e., sports drinks) that do not contain caffeine are acceptable.

**Engineering controls.** The use of devices to reduce exposure and aid cooling (i.e., air conditioning).

**Environmental factors for heat-related illness.** Working conditions that increase susceptibility for heat-related illness such as air temperature, relative humidity, radiant heat from the sun and other sources, conductive heat sources such as the ground, air movement, workload (i.e., heavy, medium, or low) and duration, and personal protective equipment worn by employees. Measurement of environmental factors is not required by WAC 296-62-095.

**Heat-related illness.** A medical condition resulting from the body's inability to cope with a particular heat load, and includes, but is not limited to, heat cramps, heat rash, heat exhaustion, fainting, and heat stroke.

**Outdoor environment.** An environment where work activities are conducted outside. Work environments such as inside vehicle cabs, sheds, and tents or other structures may be considered an outdoor environment if the environmental factors affecting temperature are not managed by engineering controls. Construction activity is considered to be work in an indoor environment when performed inside a structure after the outside walls and roof are erected.

**Shade.** A blockage of direct sunlight. 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. Shade may 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.

**Vapor barrier clothing.** Clothing that significantly inhibits or completely prevents sweat produced by the body from evaporating into the outside air. Such clothing includes encapsulating suits, various forms of chemical resistant suits used for PPE, and other forms of nonbreathing clothing.

WAC 296-62-09530 Employer and employee responsibility.

1. Employers of employees exposed at or above temperatures listed in WAC 296-62-09510(2) Table 1 must:
   a. Address their outdoor heat exposure safety program in their written accident prevention program (APP); and
   b. Encourage employees to frequently consume water or other acceptable beverages to ensure hydration.
(2) Employees are responsible for monitoring their own personal factors for heat-related illness including consumption of water or other acceptable beverages to ensure hydration.

(3) Employees shall be allowed and encouraged to take a preventative cool-down rest when they feel the need to do so to protect themselves from overheating using the means to reduce body temperature required under WAC 296-62-09550. Preventative cool-down rest time must be paid unless taken during a meal period.

**WAC 296-62-09540 Drinking water.**

(1) Keeping workers hydrated in a hot outdoor environment requires that more water be provided than at other times of the year. Federal OSHA and research indicate that employers should be prepared to supply at least one quart of drinking water per employee per hour. When employee exposure is at or above an applicable temperature listed in WAC 296-62-09510(2) Table 1:

(a) Employers must ensure that a sufficient quantity of suitably cool drinking water is readily accessible to employees at all times; and

(b) Employers must ensure that all employees have the opportunity to drink at least one quart of drinking water per hour.

(2) Employers are not required to supply the entire quantity of drinking water needed to be supplied for all employees on a full shift at the beginning of the shift. Employers may begin the shift with smaller quantities of drinking water if effective procedures are established for replenishment during the shift.

**WAC 296-62-09550 Responding to signs and symptoms of heat-related illness.**

(1) Employees showing signs or demonstrating symptoms of heat-related illness must be relieved from duty and provided with a sufficient means to reduce body temperature.

(2) Employees showing signs or demonstrating symptoms of heat-related illness must be monitored to determine whether medical attention is necessary.

**WAC 296-62-09555 Extreme high heat procedures (Effective 7/13/21 through 9/30/21). When temperatures are at or exceed 100 degrees Fahrenheit.**

(1) Employers shall have and maintain one or more areas with shade at all times while employees are present that are either open to the air or provided with ventilation or cooling, and not adjoining a radiant heat source such as machinery or a concrete structure. The amount of shade present shall be at least enough to accommodate the number of employees on a meal or rest period. The shade shall be located as close as practicable to the areas where employees are working.

(2) In lieu of shade, employers may use other sufficient means to reduce body temperature required under WAC 296-62-09550 if sufficient to accommodate all employees on a meal or rest period.

(3) Employers must ensure that employees take preventative cool-down rest periods of at least ten minutes every two hours. The preventative cool-down rest period required may be provided concurrently with any meal or rest period required under WAC 296-126-092 and must be paid unless taken during a meal period.
WAC 296-62-09560 Information and training.

All training must be provided to employees and supervisors, in a language the employee or supervisor understands, prior to outdoor work which exceeds a temperature listed in WAC 296-62-09510(2) Table 1, and at least annually thereafter.

(1) Employee training. Training on the following topics must be provided to all employees who may be exposed to outdoor heat at or above the temperatures listed in WAC 296-62-09510(2) Table 1:

(a) The environmental factors that contribute to the risk of heat-related illness;

(b) General awareness of personal factors that may increase susceptibility to heat-related illness including, but not limited to, an individual’s age, degree of acclimatization, medical conditions, drinking water consumption, alcohol use, caffeine use, nicotine use, and use of medications that affect the body’s responses to heat. This information is for the employee's personal use;

(c) The employer's procedure for providing employees with sufficient means to reduce body temperature for the preventative cool-down rest under WAC 296-62-09530(3) and the requirement for preventative rest periods during extremely high heat under WAC 296-62-09555.

(d) The importance of removing heat-retaining personal protective equipment such as nonbreathable chemical resistant clothing during all breaks;

(e) The importance of frequent consumption of small quantities of drinking water or other acceptable beverages;

(f) The importance of acclimatization;

(g) The different types of heat-related illness, the common signs and symptoms of heat-related illness; and

(h) The importance of immediately reporting signs or symptoms of heat-related illness in either themselves or in co-workers to the person in charge and the procedures the employee must follow including appropriate emergency response procedures.

(2) Supervisor training. Prior to supervising employees working in outdoor environments with heat exposure at or above the temperature levels listed in WAC 296-62-09510(2) Table 1, supervisors must have training on the following topics:

(a) The information required to be provided to employees listed in subsection (1) of this section;

(b) The procedures the supervisor must follow to implement the applicable provisions of WAC 296-62-095 through 296-62-09560;

(c) The procedures the supervisor must follow if an employee exhibits signs or symptoms consistent with possible heat-related illness, including appropriate emergency response procedures; and

(d) Procedures for moving or transporting an employee(s) to a place where the employee(s) can be reached by an emergency medical service provider, if necessary.