

**\*\*DISCUSSION DRAFT AUGUST 2022\*\***

AMENDATORY SECTION (Amending WSR 19-01-094, filed 12/18/18, effective 1/18/19)

**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.~~

~~**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.~~

~~Outdoor Temperature Action Levels~~

<del>(All other clothing</del>	<del>89°)</del>
<del>Nonbreathable clothes including vapor barrier clothing or PPE such as chemical resistant suits</del>	<del>52° F</del>
<del>Double-layer woven clothes including coveralls, jackets and sweatshirts</del>	<del>77° F</del>

<del>-(Nonbreathing clothes including vapor barrier clothing or PPE such as chemical resistant suits</del>	<del>52°)</del>
<u>All other clothing</u>	<u>89° F</u>

**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)) 15 minutes in any ((sixty-minute)) 60-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.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, and 49.17.060. WSR 19-01-094, § 296-62-09510, filed 12/18/18, effective 1/18/19; WSR 08-12-109, § 296-62-09510, filed 6/4/08, effective 7/5/08.]

AMENDATORY SECTION (Amending WSR 19-01-094, filed 12/18/18,  
effective 1/18/19)

**WAC 296-62-09520 Definitions. Acclimatization.** The body's gradual temporary adaptation to work in heat that occurs as a person is exposed to it over a period of 7seven to 14 days ~~with a substantial amount of adaptation occurring in the first four to five days.~~ depending on the amount of recent work in the heat and individual factors. ~~Acclimatization can be~~ is lost after 7 days ~~a week~~ away from working in the heat. ~~.~~

**Buddy system.** A system where individuals are paired or teamed up into work groups so each employee can be observed by at least one other member of the group to monitor and report signs and symptoms of heat-related illness.

~~**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. ~~Other acceptable beverages~~

include ~~d~~Drinking water packaged as a consumer product, and electrolyte-replenishing beverages (i.e., sports drinks) that do not contain high amounts of sugar, caffeine, or both such as energy drinks~~are acceptable.~~

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

**Risk ~~Environmental~~ factors for heat-related illness.**

~~Working e~~Conditions that increase susceptibility for heat-related illness such as environmental factors (e.g. 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))~~ light, moderate, or heavy), ~~and~~ work duration, ~~and~~ personal protective equipment and clothing worn by employees, and personal factors (e.g. age, medications, physical condition, pregnancy).

~~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~~) nonbreathable clothing.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, and 49.17.060. WSR 19-01-094, § 296-62-09520, filed 12/18/18, effective 1/18/19; WSR 08-12-109, § 296-62-09520, filed 6/4/08, effective 7/5/08.]

AMENDATORY SECTION (Amending WSR 08-12-109, filed 6/4/08, effective 7/5/08)

**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 of this section must:

- (1) ~~(a)~~ Address their outdoor heat exposure safety program in their written accident prevention program (APP), in a language that employees understand.

(2) Ensure the heat-illness prevention program contains, at minimum, the following elements:

a) Procedures for providing sufficiently cool drinking water

b) Procedures for providing shade or other sufficient means to reduce body temperature, including the location of such means and how employees can access them; ~~((and))~~

c) Emergency response procedures for employees demonstrating signs or symptoms of heat-related illness

d) Acclimatization methods and procedures

e) High heat procedures

~~a~~f) The specific method for close observation of employees used by the employer.

(3) ~~(b)~~ Ensure a copy of the heat-illness prevention program is made available to employees and their authorized representatives.

(4) Encourage employees to frequently consume water or other acceptable beverages to ensure hydration; and

(5)(e) Encourage and allow employees to take a preventative cool-down rest period when they feel the need to do so to protect themselves from overheating using sufficient means to reduce body temperature such as shade or other equally or more effective means. The preventative cool-down rest period must be paid unless taken during a meal period. If an employee is showing signs or symptoms of heat-related illness during the cool-down rest period, the employer must comply with requirements under WAC 296-62-09550.

**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.

<u>Non-breathable clothes including vapor barrier clothing or PPE such as chemical resistant suits</u>	<u>52° F</u>
<u>All other clothing</u>	<u>80° F</u>

**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.



(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, and taking preventative cool-down rest periods when they feel the need to do so to prevent from overheating.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060. WSR 08-12-109, § 296-62-09530, filed 6/4/08, effective 7/5/08.]

NEW SECTION

**WAC 296-62-09535 Access to shade.** ~~(1)~~ Employers of employees exposed at or above temperatures listed in Table 1 of WAC 296-62-09530 ~~The employer~~ must:

(1) ~~P~~rovide 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 shade must be located as close as practicable to the areas where employees are working.

(2) ~~The employer must~~ Ensure the amount of shade present is ~~largeat least~~ enough to accommodate the number of employees on a meal or rest period, so that they can sit in a normal posture fully in the shade.

(3) In lieu of shade, employers may use other means to reduce body temperature if they can demonstrate such means are equally or more effective than shade.

**Note:** Some alternatives to shade may include the provision of misting stations, cooling vests, and air-conditioned areas.

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AMENDATORY SECTION (Amending WSR 08-12-109, filed 6/4/08, effective 7/5/08)

**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 296-62-095~~3010(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.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060. WSR 08-12-109, § 296-62-09540, filed 6/4/08, effective 7/5/08.]

NEW SECTION

**WAC 296-62-09545 Acclimatization.** Employers must closely observe eEmployees\_who are newly assigned to working at or

~~above the temperatures listed in WAC 296-62-09510(2) Table 1 must be closely observed by a supervisor or designee for signs and symptoms of heat-related illness the first 14 days of work by implementing one or more of the close observation monitoring options under WAC 296-62-09555(3).~~

(1) For 14 days when employees:

a. Are newly assigned to working at or above the applicable temperatures listed in Table 1 of WAC 296-62-09530;

b. Return to work at the applicable temperatures listed in Table 1 of WAC 296-62-09530 after an absence of 7 days or more;

~~(1)(2)~~ During a heat wave. For purposes of this section only, "heat wave" means any day in which the predicted high temperature for the day will be at least the temperatures listed Table 1 of WAC 296-62-09530 and at least 10 degrees Fahrenheit higher than the average high daily temperature in the preceding five days.

**Note** ~~When temperatures are at or exceed 89 degrees Fahrenheit, the requirements under WAC 296-62-09555(3) will meet the requirements of this section.~~ Employers may also consider additional acclimatization procedures recommended by NIOSH:

- NIOSH Heat Stress: Acclimatization.  
<https://www.cdc.gov/niosh/mining/userfiles/works/pdfs/2017-124.pdf>
- NIOSH Criteria for a Recommended Standard for Occupational Exposure to Heat and Hot Environments:  
<https://www.cdc.gov/niosh/docs/2016-106/pdfs/2016-106.pdf?id=10.26616/NIOSH PUB2016106>

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

(1) Ensure that effective communication by voice, observation, or electronic means is maintained so that employees at the work site and their supervisor can contact each other to report signs and symptoms of heat-related illness and get medical attention when necessary. An electronic device, such as a cellular phone or text messaging device, may be used for this purpose only if reception in the area is reliable.

(2) 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.

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

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060. WSR 08-12-109, § 296-62-09550, filed 6/4/08, effective 7/5/08.]

NEW SECTION

**WAC 296-62-09555 High Heat Procedures~~Additional~~**  
**~~requirements when outdoor temperatures meet or exceed 89 degrees~~**  
**~~Fahrenheit.~~** When the temperature is at or above 90 degrees Fahrenheit, the employer must implement the following high heat procedures, unless engineering or administrative controls are used to lower employees' exposure below 90 degrees Fahrenheit.

(1) Work/rest cycles (to be discussed during stakeholder meeting)~~The employer must ensure that employees take mandatory cool-down rest periods of at least 10 minutes every two hours. The mandatory cool-down rest period 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.~~

~~(2) Ensure that effective communication by voice, observation, or electronic means is maintained so that employees at the work site and their supervisor can contact each other when necessary. An electronic device, such as a cellular phone or text messaging device, may be used for this purpose only if reception in the area is reliable.~~

(23) ~~Closely~~Effectively observe employees for signs and symptoms of heat-related illness by implementing one or more of the following:

- (a) Regular communication with employees working alone, such as by radio or cellular phone; or
- (b) A mandatory buddy system; or
- (c) Other effective means of observation.

~~††~~Note: The employer may use engineering or administrative controls such as air conditioning or scheduling work at cooler times of day to reduce employees' exposure to a temperature below 90 degrees Fahrenheit.

AMENDATORY SECTION (Amending WSR 08-12-109, filed 6/4/08,  
effective 7/5/08)

**WAC 296-62-09560 Information and training.** All training must be provided to employees and supervisors, in a language and manner the employee or supervisor understands, prior to outdoor work where occupational exposure might occur and least annually thereafter ~~which exceeds a temperature listed in WAC 296-62-09510(2) Table 1, and at least annually thereafter.~~

(1) Employee training. Effective 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 and other work conditions (i.e. workload, work duration, personal protective equipment, clothing) 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, physical fitness, degree of acclimatization, medical conditions, drinking water consumption,



alcohol use, previous heat-related illness, pregnancy, 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 importance of removing heat-retaining personal protective equipment and clothing such as nonbreathable chemical resistant clothing during all breaks;

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

(e) The ~~importance of acclimatization and the~~ acclimatization requirements under WAC 296-62-09545, the concept of acclimatization, and the importance of the following considerations:†

ii) Frequent cool-down rest periods

iii) Gradual increase of work duration in the heat

iv) Employees are unable to build tolerance to working in the heat during a heat wave

(f) The importance of taking preventative cool-down rest periods when employees feel the need to do so in order to protect themselves from overheating;

~~(g) The mandatory cool-down rest periods under WAC 296-62-09555 when the outdoor temperature reaches or exceeds 89 degrees Fahrenheit;~~

(gh) The employer's procedures for providing shade or other sufficient means to reduce body temperature, including the location of such means and how employees can access them;

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

~~(g))~~ (ij) 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;  
and

~~(jk) The work/rest cycles under WAC 296-62-09555 when the outdoor temperature reaches or exceeds 90 degrees Fahrenheit;~~

(k) The employer's procedures for ~~closeensuring effective~~ observation ~~and communication withof~~ employees for signs and symptoms of heat-related illness.

(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 importance of considering the use of engineering or administrative controls such as air conditioning and scheduling work during the cooler hours of the day in order to reduce employees' exposure to heat.

(de) 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

(~~ee~~) 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.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060. WSR 08-12-109, § 296-62-09560, filed 6/4/08, effective 7/5/08.]