

Ambient Heat Exposure Stakeholder Meeting

L&I Division of Occupational Safety and Health (DOSH)

August 31, 2022



Washington State Department of
Labor & Industries

Division of Occupational Safety and Health

Ambient Heat Stress Stakeholder Meeting

- Heat exposure rules have generated significant public interest with recent high temperatures across Washington. Today's stakeholder meeting, which is open to the public, will also be streamed live on TVW at tvw.org.

Intro to the Zoom Platform

■ Online

- Controls at the bottom
- Interpreter Channel or Globe Icon (EN or ES)
- Q&A feature/tool: Technical questions regarding presentation
- Chat feature/tool: Zoom issues/general info
- Raise Hand Option: For live questions

■ Phone

- To raise/lower hand use *9
- To mute/unmute use *6

NOTE: Speakers will be speaking slowly because of concurrent interpretation. Please be patient.

Agenda for Today's Meeting

- Historical timeline of rulemaking
- Next steps for permanent rulemaking
- Review of draft rule
- Question & answer session after each section

L&I Rulemaking Timeline

- CR-101 filed on August 17th 2021
- Emergency Rule Filed
 - July 9th 2021 and June 1st 2022
- Stakeholder meetings were held on:
 - March 17th 2022
 - May 4th 2022
 - August 4th 2022
- Comment Period after todays meeting:
 - Comments Due September 26th 2022

Draft Rule Content

- We will go through the draft rule and cover all sections.
- Language in **RED** on the slides are new additions from the previously adopted 2008 rule.
- Some of these changes in **RED** will be consistent with the last two emergency rules that were issued in 2021 and 2022.
- Comments have been posted on our website along with the Q&A from the last stakeholder meeting.
 - <https://lni.wa.gov/safety-health/safety-rules/rulemaking-stakeholder-information/ambient-heat-exposure-rulemaking#overview>

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.
- 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.

WAC 296-62-09510 Scope and purpose

- (2)The requirements of WAC 296-62-095 through 296-62-09560 apply to outdoor work environments when employees are exposed to outdoor heat.
- Removed – *from May 1 through September 30, annually, only*
- Removed – Table 1

WAC 296-62-09510 Scope and purpose

- (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 15 minutes in any 60-minute period. This exception may be applied every hour during the work shift.

WAC 296-62-09510 Scope and purpose

Comments or Questions on Scope and Purpose

Raise your hand icon to speak or type your comment/question into the Q&A

WAC 296-62-09520 Definitions

- **(1) Acclimatization.** The body's gradual temporary adaptation to work in heat that occurs as a person is exposed to it over a period of seven to 14 days depending on the amount of recent work in the heat and individual factors. Acclimatization can be lost after seven consecutive days away from working in the heat.

WAC 296-62-09520 Definitions

- **(2) 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.
- **(3) Drinking water.** Potable water that is suitable to drink **and suitably cool in temperature**. Other acceptable beverages include 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**.

WAC 296-62-09520 Definitions

- **(4) Engineering controls.** The use of devices to reduce exposure and aid cooling (i.e., air conditioning).
- **(5) Risk factors for heat-related illness.** 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., **light, moderate, or heavy**) and **work** duration, personal protective equipment (**PPE**) and clothing worn by employees, **and personal factors** (e.g. age, medications, physical fitness, pregnancy).

WAC 296-62-09520 Definitions

- **(6) 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.
- **(7) 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.

WAC 296-62-09520 Definitions

- **(8) 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.

WAC 296-62-09520 Definitions

- **(9) 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 non-breathable clothing.

WAC 296-62-09520 Definitions

Comments or Questions on Definitions

Raise your hand icon to speak or type your comment/question into the Q&A

WAC 296-62-09530 Employer and employee responsibilities

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

WAC 296-62-09530 Employer and employee responsibilities

- (2) Ensure the outdoor heat exposure safety 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.
 - (c) Emergency response procedures for employees demonstrating signs or symptoms of heat related illness.
 - (d) Acclimatization methods and procedures.
 - (e) High heat procedures.
 - (f) The specific method used by the employer to closely observe employees for signs and symptoms of heat-related illness as required under WAC 296-62-09545 and WAC 296-62-09555(2).

WAC 296-62-09530 Employer and employee responsibilities

- (3) Ensure a copy of the outdoor heat exposure safety 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

WAC 296-62-09530 Employer and employee responsibilities

- (5) 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.

WAC 296-62-09530 Employer and employee responsibilities

- 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.

WAC 296-62-09530 Employer and employee responsibilities

- (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.

WAC 296-62-09530 Employer and employee responsibilities

Comments or Questions on Employer and employee responsibilities

Raise your hand icon to speak or type your comment/question into the Q&A

WAC 296-62-09535 Access to shade

- Employers of employees exposed at or above temperatures listed in Table 1 of WAC 296-62-09530 must:
 - (1) Provide 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.

WAC 296-62-09535 Access to shade

- (2) Ensure the amount of shade present is large 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.

WAC 296-62-09535 Access to shade

Comments or Questions on Access to Shade

Raise your hand icon to speak or type your comment/question into the Q&A

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 296-62-09530 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.

WAC 296-62-09540 Drinking water

- (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 296-62-09540 Drinking water

Comments or Questions on Drinking Water

Raise your hand icon to speak or type your comment/question into the Q&A

WAC 296-62-09545 Acclimatization

- Employers must closely observe employees for signs and symptoms of heat-related illness by implementing one or more of the close observation 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 seven days or more.

WAC 296-62-09545 Acclimatization

- (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 in Table 1 of WAC 296-62-09530 and at least 10 degrees Fahrenheit higher than the average high daily temperatures in the preceding five days.

Note: 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 296-62-09545 Acclimatization

Comments or Questions on Acclimatization

Raise your hand icon to speak or type your comment/question into the Q&A

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.

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

Comments or Questions on Responding to signs and symptoms of heat related illness

Raise your hand icon to speak or type your comment/question into the Q&A

WAC 296-62-09555 High heat procedures

- 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) Ensure that employees take mandatory cool-down rest periods of at least 10 minutes every two hours in the shade or using other equally or more effective means to reduce body temperature. 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.

WAC 296-62-09555 High heat procedures

- Under Discussion/Consideration –
- When ambient temperature is 100 degrees Fahrenheit or greater further break times to be established.
 - Example - 15 minutes rest break every hour
- For this rulemaking, the Department is looking to set minimum requirements that are applicable to all work places and work activities. Moving forward, the Department will continue to review information and engage with stakeholders on further development of feasible and protective work/rest cycles

WAC 296-62-09555 High heat procedures

- (2) Closely 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.

WAC 296-62-09555 High heat procedures

Comments or Questions on High Heat Procedures

Raise your hand icon to speak or type your comment/question into the Q&A

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 at least annually thereafter.

WAC 296-62-09560 Information and training

- (1) Employee training. Training on the following topics must be provided to all employees who may be exposed to outdoor heat.
 - (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**, 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 non-breathable chemical resistant clothing during all breaks;

WAC 296-62-09560 Information and training

- (d) The importance of frequent consumption of small quantities of drinking water or other acceptable beverages;
- (e) The acclimatization requirements under WAC 296-62-09545, the concept of acclimatization, and the importance of the following considerations:
 - (i) Frequent cool-down rest periods;
 - (ii) Gradual increase of work duration in the heat;
 - (iii) Employees are unable to build tolerance to working in the heat during a heat wave.

WAC 296-62-09560 Information and training

- (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 90 degrees Fahrenheit;
- (h) 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;

WAC 296-62-09560 Information and training

- (i) The different types of heat-related illness, the common signs and symptoms of heat-related illness;
- (j) 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
- (k) The employer's procedures for close observation of employees for signs and symptoms of heat-related illness.

WAC 296-62-09560 Information and training

- (2) Supervisor training. Prior to supervising employees working in outdoor environments with heat exposure. 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;

WAC 296-62-09560 Information and training

- (d) 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
- (e) 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.

WAC 296-62-09560 Information and Training

Comments or Questions on Information and Training

Raise your hand icon to speak or type your comment/question into the Q&A

Summary

- Effective dates of May 1 to September 30 have been removed.
- Trigger temperature moved to 80 Degrees Fahrenheit (Except for non-breathable clothing)
 - Access to shade
 - Drinking water
 - Encourage and allow preventative cool down rest periods
 - Acclimatization
- High Heat procedures starting at 90 Degree Fahrenheit
 - Mandatory cool down rest period of at least 10 minutes every two hours
 - Close observation

Thank you!

Please send comments by September 26th to:

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