## **CONCISE EXPLANATORY STATEMENT**

WAC 296-62-095 through 296-62-09560, General Occupational Health Standards – Outdoor heat exposure, and WAC 296-307-097 through 296-307-09760, Safety Standards for Agriculture – Outdoor heat exposure

Public Hearing/s: April 25, 26, 27, May 2, 3, 4 and 9, 2023

Adoption: June 27, 2023 Effective: July 17, 2023

## Table of Contents

I.	Purpose of Rulemaking	page #2
	A. Background	page #2
	B. Summary of the Rulemaking Activities	page #2
II.	Changes to the Rules	page #3
III.	Comments on Proposed Rule	page #3
	A. Comment Period	page #3
	B. Public Hearing/s	page #3
	C. Summary of Comments Received and L&I's Response	page #4
	<ul> <li>WAC 296-62-09510 and 296-307-09710 Outdoor heat exposure</li> </ul>	page #4
	• WAC 296-62-09520 and 296-307-09720 Definitions	page #6
	<ul> <li>WAC 296-62-09530 and 296-307-09730 Employer and</li> </ul>	
	employee responsibility	page #7
	• WAC 296-62-09535 and 296-307-09735 Access to shade	page #19
	<ul> <li>WAC 296-62-09540 and 296-307-09740 Drinking water</li> </ul>	page #23
	• WAC 296-62-09545 and 296-307-09745 Acclimatization	page #24

### I. Purpose of Rulemaking

On June 28, 2021, the Department of Labor and Industries (L&I) received a petition for rulemaking requesting changes to L&I's rules to include more specific requirements to prevent heat-related illness and injury. The petition for rulemaking was accepted recognizing the need to reexamine the current rules, especially in light of information suggesting the occurrence of heat illnesses below the current trigger temperatures and the increasing temperatures experienced in our state since the rule was first established in 2008.

#### A. Background

L&I filed emergency rules related to outdoor ambient heat in the summer of 2021 and 2022 to protect outdoor workers from heat-related illnesses due to outdoor heat exposure. The current rules do not affirmatively address preventative measures to avoid overheating other than access to drinking water. The hazards of heat are well documented and research suggests the occurrence of heat-related illnesses below the current trigger temperatures. Research also documents increased temperatures in Washington since the rule was first established.

#### B. Summary of the rulemaking activities

The rule development team included the Division of Occupational Safety and Health (DOSH) and the Government Affairs and Policy Division (GAPD). Drs. David Bonauto and June Spector of SHARP (Safety and Health Assessment & Research for Prevention) were consulted on research regarding workers' compensation claims for heat-related illness and injury, research on occupational health effects of heat exposure, and research on heat prevention measures. The team began with a survey sent via Gov-Delivery requesting information regarding shade, rest breaks, how temperature was measured and how often, etc. DOSH received over 60 responses and that data was used to create a first draft that was presented to stakeholders in a virtual meeting on March 17, 2022.

Subsequent stakeholder meetings were held virtually on May 4, 2022, August 4, 2022, and again on August 31, 2022. Stakeholder feedback was extremely valuable and used to update draft language after each stakeholder meeting.

## II. Changes to the Rules (Proposed rule versus rule adopted)

**WAC 296-62-09510 and 296-307-09710 Outdoor heat exposure.** Scope no longer supplements or applies to chapter 296-305 WAC, Safety standards for firefighters.

WAC 296-62-09520 and 296-307-09720 Definitions. Definition of "Engineering controls" now clarifies this does not include wearable items.

**WAC 296-62-09530 and 296-307-09730 Employer and employee responsibility**. Clarified the preventative cool-down rest period must be paid unless taken during a meal period that is not otherwise required to be compensated.

**WAC 296-62-09547 and 296-307-09747 High heat procedures.** Provides an exemption for emergency response operations from mandatory cool-down rest periods in Table 2 when aiding firefighting, protecting public health and safety, or restoring or maintaining critical infrastructure at risk. Employees under this exemption must still be permitted to take preventative cool-down rest periods when they think they need to. Clarified the mandatory cool-down rest period must be paid unless taken during a meal period that is not otherwise required to be compensated.

**WAC 296-62-09560 and 296-307-09760 Information and training.** Added training must include appropriate first aid as well as emergency response procedures.

#### III. Comments on Proposed Rule

#### A. Comment Period

The comment period for this rulemaking was open from March 21, 2023, when the CR-102 (Proposed Rule Making) was filed through 5:00 p.m. on May 11, 2023. A total of 82 written comments were received.

#### **B.** Public Hearings

Date:	Time:	Location:	Attendance	Testified:
April 25, 2023	10:00 a.m.	SpringHill Suites by Marriott, Bellingham	8 people	3 people
April 26, 2023	10:00 a.m.	SpringHill Suites by Marriott, Kennewick	17 people	4 people
April 27, 2023	10:00 a.m.	Hampton Inn by Hilton, Spokane	7 people	5 people
May 2, 2023	10:00 a.m.	Dept. of Labor and Industries, Tukwila	15 people	2 people
May 3, 2023	10:00 a.m.	Clark College at Columbia Center, Vancouver	4 people	1 person

May 4, 2023	2:00 p.m.	Virtual via Zoom	152 people	2 people
May 9, 2023	10:00 a.m.	Holiday Inn Express, Yakima	32 people	10 people

# C. Summary of Comments Received and L&I's Responses

Below is a summary of the comments L&I received and the responses. Comments received are summarized by topic in order to provide clarity for response, and not a verbatim accounting of each individual comment.

Topic	Comment	Responses			
	WAC 296-62-09510 and 296-307-09710 Outdoor heat exposure.				
Rule Application	Please consider a change in the heat exposure requirements in situations where an employee is not exposed to the heat consistently throughout a sixty-minute window, has constant access to shade to reduce body temperatures, and has the opportunity for immediate engineered relief between tasks and exposures.	Thank you for your comment.  Incidental exposures are addressed in WAC 296-62-09510(3) which states the rule "Does not apply to incidental exposure. Incidental exposure means 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."  When the 2008 rule was adopted, it was not intended to include workers that only went outside for short durations during their work shift, such as individuals collecting shopping carts at stores or forklift drivers that occasionally go outside to unload a truck. The 15-minute per-hour exemption, which can be accumulated through the hour, was based on the amount of time employees could be expected to conduct very heavy work in the heat without ill effects. That said, the scenario described in this comment would not meet the incidental exposure scenario, as time in the shade is still work outdoors if done for more than 15 minutes per hour.  High heat requirements for mandatory cool-down rest and close observation specifically apply			
		when the temperature is at or above 90°F "unless engineering or administrative controls, such as air-conditioning or scheduling work at cooler times of the day, are used to lower employees' exposure below 90°F. If engineering or administrative controls bring the temperatures in the work area below the high heat levels, then the mandatory rest periods are not required.			

		This comment did not result in a change to the adopted rule language.
Year Round Standard	This rule should not be applied year-round. Keep the scope of the original rule.	Thank you for your comment.  Temperature action levels may not always occur within specified seasons throughout the State of Washington. As such, the scope was changed to apply year-round. Additionally, action level temperatures have been moved out of the Scope WAC 296-62-09510, and are now applicable to specific sections of the rule.  Regardless of the season, requirements are only applicable if action level temperatures are reached or exceeded.  This comment did not result in a change to the adopted rule language.
Year Round Standard	We support the proposed amendments that would make the outdoor heat exposure standard effective year-round. A year-round standard will be more protective of farmworkers and is supported by expected climate trends.	Thank you for your comment.  This comment did not result in a change to the adopted rule language.  This comment did not result in a change to the adopted rule language.
Year Round Standard	Please limit the scope of the "all other clothing" to a particular time of the year not the full calendar year.	Thank you for your comment.  The action level of 80°F for all other clothing may not always occur within specified seasons throughout the State of Washington. As such, the scope was changed to apply year-round. Additionally, action level temperatures have been moved out of the Scope WAC 296-62-09510, and are now applicable to specific sections of the rule.  Regardless of the season, requirements are only applicable if action level temperatures are reached or exceeded.  This comment did not result in a change to the adopted rule language.

	WAC 296-62-0	09520 and 296-307-09720 Definitions.
Definition	Please add a definition for the term "ensure" where its used in the rule to say "Employers must ensure to", it would be helpful to understand what L&I means by that term.	Thank you for your comment.  L&I applies the common dictionary definition of the term "ensure" – which is to make sure or make certain. Given this is a common word and there is no intent to apply a different definition, a definition does not need to be added to the rule.
Definition	Please add a definition for the term "close supervision".	Thank you for your comment.  The term "close supervision" is not used in the rule. The rule requires the "employer" "closely observe" employees who fall under the acclimatization requirements under WAC 296-62-09545/WAC 296-307-09745 and all employees under the high heat requirements under WAC 296-62-09547/WAC 296-307-09747.  Employers already have an obligation to monitor employees for signs and symptoms of heat-related illness under WAC 296-62-09547/WAC 296-307-09747, and the purposes of the requirements to "closely observe" is to provide an additional safeguard for the detection of signs and symptoms of heat related illness when there is heightened risk. High Heat Procedures WAC 296-62-09547(2)/WAC 296-307-09747(2) identifies options for close observation that employers can use, including: regular communication with employees working alone, such as by radio or cellular phone; a mandatory buddy system; or other effective means of observation. Under these identified methods, the close observation does not necessarily have to be done by a supervisor or a manager, however WAC 296-62-09560/WAC 296-307-09760 requires employees and supervisors to be trained on the employer's procedures for close observation.  This comment did not result in a change to the adopted rule language.
Definition	Nonbreathable clothing needs to be defined in WAC 296-62-09520 Definitions. The definition should be narrow and only include PPE such as the examples listed in Table 1 of the proposed rule change.	Thank you for your comment.  Non-breathable clothing refers to "Vapor barrier clothing" which is defined under Definitions WAC 296-62-09520(9)/296-307-09720(9).  This comment did not result in a change to the adopted rule language.

Definition	Request the following definitions to be changed, risk factors for heat related illness. We request that medications and physical condition be removed due the fact that employees are not required to share what medications they take and physical condition cannot be identified without personal bias and judgement and could put employers in position to violate the Americans with Disabilities Act.	Thank you for your comment.  The employer is not expected to monitor employees' personal risk factors. WAC 296-62-09530(2) states in part "Employees are responsible for monitoring their own personal factors for heat-related illness"  This comment did not result in a change to the adopted rule language.
	WAC 296-62-09530 and 296	5-307-09730 Employer and employee responsibility.
Definition	For purposes of the preventative cool-down breaks when an employee is overheating, how do we define overheating?	Thank you for your comment.  Preventative cool-down rest periods are to prevent an employee from overheating. That means to prevent heat-related illness.  This comment did not result in a change to the adopted rule language.
APP Translation	The rule implies that an APP must be made available to employees in a language they understand, meaning the full APP would have to be translated. We believe the language in (1)(a) should be moved to (1)(c) this change would mean that outdoor heat exposure safety programs would be included in the APPand that outdoor heat exposure safety programs (separate from the APP) would be available to employees in a language they understand.	Thank you for your comment.  The requirement under WAC 296-62-09530(1)(a) for a written program to be "in a language that employees understand" specifically refers to the written outdoor heat exposure safety program that is required per the Outdoor Heat Exposure rule. Employers may have their written outdoor heat exposure safety program as a stand alone document but still be part of their overall accident prevention program (APP).  This comment did not result in a change to the adopted rule language.

APP Translation	We request that a written accident prevention plan be required to be in a	Thank you for your comment.
	"language or form readily understood" by employees. This small but impactful change allows flexibility for employers to use additional forms of communication (i.e. pictures, graphics).	The adopted rule requires that the written outdoor heat exposure safety program be "in a language that employees understand." The intent of the requirement is for employees to be able to understand the written program. Given that, an employer may use pictures or graphics as part of their written communication with employees.  This comment did not result in a change to the adopted language.
Availability of OHESP	We have concerns with the language of section (1)(c) and object to requiring the	Thank you for your comment.
	Outdoor Heat Exposure Safety Plan to be given to an employee's authorized	We rely on the definition of an authorized representative or "designated representative" in Safety & Health Core Rules WAC 296-800-099 is:
	representative. The term is not defined, and employers should not be required to give information to someone they don't have	- Any individual or organization to which an employee gives written authorization; or - A recognized or certified collective bargaining agent without regard to written authorization; or
	agreement with.	- The legal representative of a deceased or legally incapacitated employee.
		This comment did not result in a change to the adopted rule language.
Break Notification	We feel it is important under this rule that employees, notify their supervisor when	Thank you for your comment.
	they start and end their cool down period.	L&I would not object to employers requiring employees to notify supervisors of cool down
	This allows supervisors the ability to monitor work conditions and overall safety.	breaks as part of their own company policy.
		This comment did not result in a change to the adopted rule language.

Employee Responsibility	Employers provide water, encourage hydration, and taking breaks in vehicles to cool down, but employees do not always follow those directions. The rule lacks guidance for these circumstances where employees make decisions that are not supported by the employer mandates in the rule.	Thank you for your comment.  The rule requires employers to provide water and encourage hydration. Employers must train employees on drinking water, including on the importance of staying hydrated, recommended quantities of drinking water to stay hydrated, and how to access the drinking water. However, employees are responsible for monitoring their own consumption of water to ensure hydration under WAC 296-62-09530(2)/ WAC 296-307-09730(2).  Training on shade and cool-down rest periods is also required, including what is sufficient shade, how to access it, and the importance of using shade or other cooling methods to reduce body temperature. Employers are also required to provide access to shade, or other means for employees to cool themselves, for preventative cool down rest periods.  Under the high heat procedures, employers must provide mandatory cool-down rest periods in the shade or other means to cool. The mandatory cool-down rest periods can occur concurrently with any meal or rest period required under WAC 296-126-092/WAC 296-131-020 and must be paid unless taken during a meal period that is not otherwise required to be compensated. However, an employer is not expected to monitor employees who are on a rest break or meal break under WAC 296-126-092/WAC 296-131-020, whether being used concurrently with the requirement for mandatory preventative cool-down breaks or not. Rather, employers are required to ensure employees have access to use shade during these times, or access to a vehicle with air conditioning and the means to use the air conditioning if it is the method the employer is using in lieu of shade.
Employer Responsibility - Monitoring HRI Symptoms	We are concerned that if an employer has a buddy system that looks good on paper, employers could blame employees for failing to carry out the system in the event of heat-related illness or death. Employees cannot carry the sole burden of observing and reporting each other's heat-related illness symptoms. The rule should specify	Thank you for your comment.  The adopted rule states that employers must closely observe employees who fall under the acclimatization requirements under WAC 296-62-09545 / WAC 296-307-09745 and all employees under the high heat requirements under WAC 296-62-09547/WAC 296-307-09747. A buddy system is one option for close observation, other options are also available to the employer.

	that employer observation is still necessary, and that the employer is ultimately responsible.	Employers already have an obligation to monitor employees for signs and symptoms of heat-related illness under WAC 296-62-09547/WAC 296-307-09747.  WAC 296-62-09560/WAC 296-307-09760 requires employees and supervisors be trained on the employer's procedures for close observation as well as trained on heat-related illness symptoms, and 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. The requirement is not intended to put the sole burden on employees under the buddy system, but rather to provide an additional safeguard to detect signs and symptoms of heat-related illness when there is a heightened risk.  The use of a buddy system as an option for close observation during high heat is also included in California's outdoor rules.
Preventative Cool	The proposed requirements for	This comment did not result in a change to the adopted rule language.  Thank you for your comment.
Down Breaks	preventative cool-down periods "as- necessary" causes significant concern. Without limits and having requirements for this time to be paid there is no protection for the employer to ensure employees appropriately take these breaks. As written this opens the door for excessive, unlimited preventative cool down periods if an employee claims to need them.	The Department of Labor & Industries would expect employers to work with their employees on taking breaks when necessary. The current rule already requires employers to monitor employees for signs and symptoms of heat-related illness and if a worker is showing signs or symptoms of heat-related illness, the existing rule already requires workers to be relieved of duty and provided sufficient means to reduce body temperature.  As such, it is expected that an employer is monitoring workers who are taking excessive cooldown breaks to ensure they are not experiencing symptoms. If an employer is monitoring as required by the rules, it does not prevent employers from addressing misuse of preventative cool-down rest in the same manner the employer addresses other misuse of authorized breaks or safety issues.
		This comment did not result in a change to the adopted rule language.

Preventative Cool Down Periods - Recordkeeping on Breaks	Recordkeeping of paid elective cool-down periods will be unusually difficult to keep track of as individual employees take breaks on their own whenever they feel too uncomfortable to work because of heat, or if they feel they need to cool down.	Thank you for your comment.  The adopted rule does not include a separate requirement to document preventative or mandatory cool-down rest periods apart from the recordkeeping requirements for rest and meal breaks provided under existing laws, but employers are responsible for ensuring preventative and mandatory cool-down rest periods occur.  Mandatory cool-down rest periods may occur concurrently with any meal or rest period required under the applicable break rule - WAC 296-126-092 or WAC 296-131-020. They must be paid unless taken during a meal period that is not otherwise required to be compensated and they must be paid appropriately. For example, agricultural workers paid on a piece-rate basis must be separately compensated for rest breaks and piece-rate down time apart from their piece-rate earnings. See Lopez Demetrio v. Sakuma Brothers Farms Inc., 183 Wn.2d 649, 355 P.3d 258 (2015); Carranza v. Dovex Fruit Company, 190 Wn.2d 612, 416 P.3d 1205 (2018). For more information, see L&I Employment Standards Administrative Policy ES.C.6.2 at <a href="https://lni.wa.gov/workers-rights/docs/esc6.2.pdf">https://lni.wa.gov/workers-rights/docs/esc6.2.pdf</a> Because employers have recordkeeping requirements related to meal and rest breaks under certain circumstances, employers must ensure that they are meeting recordkeeping requirements otherwise provided by law.
Trigger Temperature	The trigger temperature of 80 degrees is too restrictive.	This comment did not result in a change in the adopted language.  Thank you for our comment.  In determining the temperature action levels, L&I reviewed the best available evidence on heat-related illness, including Washington state workers' compensation heat-related illness and injury claims data, and national heat-related injury and illness data. Peer-reviewed research was also reviewed by L&I to understand the current best evidence on the heat exposure hazards and controls, including studies regarding the relationship between outdoor heat exposure and traumatic injuries, such as falls from ladders. L&I also reviewed standards and recommendations from the American Conference of Governmental Industrial Hygienists (ACGIH) and the National Institute for Occupational Safety and Health (NIOSH), regulations from other state agencies, and guidance and enforcement policies from federal OSHA.

The information reviewed supported lowering the temperature action level from  $89^{\circ}F$  to  $80^{\circ}F$ . By lowering the temperature action level to  $80^{\circ}F$ , it not only reduces the risk of heat-related illness that can occur at temperatures below  $89^{\circ}F$ , but requirements for water and shade at  $80^{\circ}F$  reduce the impact of heat exposures at higher temperatures. These preventative efforts also reduce the risk of traumatic injuries, such as falls from ladders that are associated with heat exposure. It is also important that workers are monitored for symptoms of heat-related illness when temperatures are at or above  $80^{\circ}F$ , as well as addressing acclimatization. However, not all provisions of the proposed rule are activated at  $80^{\circ}F$ ; additional preventative measures begin at  $90^{\circ}F$  and  $100^{\circ}F$ .

The Cost-Benefit Analysis includes the information and data L&I considered in making determinations on the rules, including the rationale for the requirements discussed on pages 11-12. The final Cost-Benefit Analysis can be found here: <a href="https://www.lni.wa.gov/safety-health/safety-rules/rulemaking-stakeholder-information/ambient-heat-exposure-rulemaking#rule-drafts-and-documents">https://www.lni.wa.gov/safety-health/safety-rules/rulemaking-stakeholder meetings, in particular the March 17, 2022, meeting presentation found on the <a href="https://www.lni.wa.gov/safety-health/safety-rules/rulemaking-stakeholder-information/ambient-heat-exposure-rulemaking#rule-drafts-and-documents">https://www.lni.wa.gov/safety-health/safety-rules/rulemaking-stakeholder-information/ambient-heat-exposure-rulemaking#rule-drafts-and-documents</a>.

Additional scientific data that was presented during stakeholdering can be found on the <u>Outdoor Heat Resource</u> page; or can be found in the final <u>Cost Benefit Analysis</u>.

This comment did not result in a change to the adopted rule language.

Trigger	We urge you to have stronger protections	Thank you for your comment.
Temperature	in place and have the rule triggered at 75	
	degrees rather than 80 or 90 degrees.	In determining the action level temperatures, L&I reviewed information on heat-related illness
		and injuries, including Washington state workers' compensation heat-related illness and injury
		claims data, and national heat-related injury and illness data. Peer-reviewed research was also
		reviewed by L&I to understand the current best evidence on heat exposure hazards and
		controls, including studies regarding the relationship between outdoor heat exposure and
		traumatic injuries, such as falls from ladders. L&I also reviewed standards and recommendations from the American Conference of Governmental Industrial Hygienists
		(ACGIH) and the National Institute for Occupational Safety and Health (NIOSH), regulations from
		other state agencies, and guidance and enforcement policies from federal OSHA.
		other state agencies, and gardance and emoreement poneres from reactar obtain
		The information reviewed supported lowering the temperature action level from 89°F to 80°F.
		The trigger temperature for workers wearing nonbreathable clothing remains at 52°F.
		However, in lowering the temperature action level, L&I determined maintaining the separate
		temperature action level for double-layer clothing of 77°F would present a burden to employer
		so the least burdensome alternative was to repeal the action level at 77°F and incorporate it into one action level (80°F).
		one action level (ou 1).
		The Cost-Benefit Analysis includes the information and data L&I considered in making
		determinations on the rules, including the rationale for the requirements discussed on pages 11
		12. The final Cost-Benefit Analysis can be found here: <a href="https://www.lni.wa.gov/safety-">https://www.lni.wa.gov/safety-</a>
		health/safety-rules/rulemaking-stakeholder-information/ambient-heat-exposure-
		rulemaking#rule-drafts-and-documents. There is also information on supporting evidence for
		the rules presented during stakeholder meetings, in particular the March 17, 2022, meeting
		presentation found on the <u>Outdoor Heat Stakeholder Resource</u> page; or can be found in the final Cost-Benefit Analysis page at <a href="https://www.lni.wa.gov/safety-health/safety-rules/rulemaking-">https://www.lni.wa.gov/safety-health/safety-rules/rulemaking-</a>
		stakeholder-information/ambient-heat-exposure-rulemaking#rule-drafts-and-documents.
		Additional scientific data that was presented during stakeholdering can be found on the Outdoo
		<u>Heat Resource</u> page; or can be found in the final <u>Cost Benefit Analysis</u> .
		This comment did not result in a change in the adopted language.

Trigger Temperature	The lowering of the temperature down to all other clothing for 80 degree Fahrenheit. At any given time the temperatures can raise to 80 degrees early before noon. When that happens, we don't have room for a large amount of employees to be taken from the field and moved into indoor facilities to do any type of work on there; therefore, causing us to send them home early. The trigger temperature should stay at 89 degrees.	Thank you for your comment.  Requirements under the action level of 80°F for all other clothing do not include employers stopping work and sending employees home or moving activities indoor. Rather, under this action level when the temperature is between 80°F to 89°F, the employer must ensure the workers have access to drinking water and shade, allow workers to take preventative cool down rest periods when they feel they need to do so to prevent overheating, and monitor workers for heat related illness, and closely observe employees who fall under the acclimatization requirements. Other requirements, such as training and a written outdoor heat exposure safety program also apply. The high heat requirements for close observation of all employees and mandatory cool down rest periods are not in effect until 90°F.
Trigger Temperature	I am an outdoor worker, every day. I'm also a single mother who depends on my job to pay the bills. The rule is problematic in that sometimes it's already 80 degrees in the morning when I'm starting work. Does that mean my employer will send me home? If my employer does that reduces my pay. I don't agree with changing the trigger temperature to 80.	This comment did not result in a change to the adopted rule language.  Thank you for your comment.  Neither WAC 296-62-095, General Occupational Health Standards – Outdoor Heat Exposure nor WAC 296-307-097, Safety Standards for Agriculture – Outdoor Heat Exposure contain a requirement to stop work at any temperature.  Rather, when the temperature is between 80°F to 90°F, the employer must ensure the workers have access to drinking water and shade, allow workers to take preventative cool down rest periods when they feel they need to do so to prevent overheating, and monitor workers for heat related illness, and closely observe employees who fall under the acclimatization requirements. Other requirements, such as training and a written outdoor heat exposure safety program also apply. The high heat requirements for close observation of all employees and mandatory cool down rest periods are not in effect until 90°F.  This comment did not result in a change to the adopted rule language.
Trigger Temperature	What science and data did the Department use to determine that 80 degrees is the correct temperature to apply to outdoor workers in Eastern Washington? Eastern Washington can have over 90 days of 80-	Thank you for your comment.  L&I reviewed information on heat-related illness and injuries, including Washington state workers' compensation heat-related illness and injury claims data, and national heat-related injury and illness data. Peer-reviewed research was also reviewed by the Department to

degree temperature, some years it can be over 100 degrees for more than 30 days of the year. If mandatory breaks happen at 80 degrees work time will be lost.

understand the current best evidence on heat exposure hazards and controls, including studies regarding the relationship between outdoor heat exposure and traumatic injuries, such as falls from ladders. The Department also reviewed standards and recommendations from the American Conference of Governmental Industrial Hygienists (ACGIH) and the National Institute for Occupational Safety and Health (NIOSH), regulations from other state agencies, and guidance and enforcement policies from federal OSHA. The information reviewed supported lowering the temperature action level from 89°F to 80°F.

However, the requirements for mandatory cool-down rest periods are not in effect until temperature reach or exceed 90°F.

When the temperature is between 80°F to 90°F, the employer must ensure the workers have access to drinking water and shade, allow workers to take preventative cool down rest periods when they feel they need to do so to prevent overheating, and monitor workers for heat related illness, and closely observe employees who fall under the acclimatization requirements. Other requirements, such as training and a written outdoor heat exposure safety program also apply.

The Cost-Benefit Analysis includes the information and data L&I considered in making determinations on the rules, including the rationale for the requirements discussed on pages 11-12. The final Cost-Benefit Analysis can be found here: <a href="https://www.lni.wa.gov/safety-health/safety-rules/rulemaking-stakeholder-information/ambient-heat-exposure-rulemaking#rule-drafts-and-documents">https://www.lni.wa.gov/safety-health/safety-rules/rulemaking-stakeholder meetings, in particular the March 17, 2022, meeting presentation found on the Outdoor Heat Stakeholder Resource page; or can be found in the final Cost-Benefit Analysis page at <a href="https://www.lni.wa.gov/safety-health/safety-rules/rulemaking-stakeholder-information/ambient-heat-exposure-rulemaking#rule-drafts-and-documents">https://www.lni.wa.gov/safety-health/safety-rules/rulemaking-stakeholder-information/ambient-heat-exposure-rulemaking#rule-drafts-and-documents</a>.

This comment did not result in a change in the proposed language.

Trigger Temperature - Other	At 80f degrees the rules should also include hazard pay. At 90f degrees there should be complete work stoppage and if hours are cut due to weather then there should be compensation to the workers.	Thank you for your comment.  The purpose of these rules are to address requirements to protect workers from hazardous exposures to outdoor heat. WISHA mandates that the Director of L&I shall "[p]rovide for the promulgation of health and safety standards and the control of conditions in all work places concerningharmful physical agents which shall set a standard which most adequately assures, to the extent feasible, on the basis of the best available evidence, that no employee will suffer material impairment of health or functional capacity." As such, \hazard pay is outside of the scope of the outdoor heat exposure rule and L&I's authority under WISHA.  Similarly, neither WAC 296-62-095, General Occupational Health Standards – Outdoor Heat Exposure nor WAC 296-307-097, Safety Standards for Agriculture – Outdoor Heat Exposure contain a requirement to stop work at any temperature. But in recognition of the hazards associated with working in temperatures at or above 90°F, the rule includes specific requirements for protecting workers in these circumstances when there is higher risk of heat related illness. In particular, the high heat requirements at 90°F including mandatory cooldown rest breaks that must be paid unless taken during a meal break that is not otherwise required to be compensated.
		Employers always have the option to decide when stop operations. In some industries, employers may make the decision not solely on issues related to worker protection, such in agriculture where heat can impact the harvesting of crops.  This comment did not result in a change in the adopted language.
Trigger	The 52-degree, year-round requirement for	Thank you for your comment.
Temperatures	clothing is not supported by any science and does not comply with OSHA or California code. The minimum for heat standards should be 80 degrees or above.	The action levels in the 2008 outdoor heat exposure rule, including 52°F for non-breathable or vapor-barrier clothing, were developed to specifically apply to Washington State. They were derived using wet bulb globe temperature (WBGT) methods in consultation with a national expert in heat, Tom Bernard, Ph.D., who at the time was chair of the American Conference of Governmental Industrial Hygienists (ACGIH) Physical Agents Committee. The WBGT takes into account air temperature, humidity, wind, and solar radiation, and is used by ACGIH as the heat stress assessment metric, while taking into account the breathability of different clothing and their effect on heat stress. Compared to regular work clothes, non-breathable (vapor-barrier)

		clothing restricts heat removal from the body and raises the effective (or experienced) WBGT.
		Dr. Bernard's approach was to determine the temperature corresponding to the ACGIH WBGT action limit for three different kinds of clothing (regular work clothes, double layer woven, and vapor-barrier clothing) assuming moderate metabolic work rate in the sun with some air movement. A dew point of 50°F was assumed as per a review of humidity across Washington State assessed by dew point temperatures.
		Dew point observations were not expected to change substantially since the prior assessment and more recent dew point data from across Washington state indicated that a dew point of 50°F remains a reasonable assumption. Moderate work rate in the sun with some air movement were also determined to continue to be reasonable assumptions, and current evidence continues to support that vapor-barrier clothing restricts heat removal and raises the effective WBGT. As such, L&I decided to keep the 52°F action level for non-breathable or vapor-barrier clothing.
		This comment did not result in a change to the adopted rule language.
Trigger Temperatures	The main objection coming from city employers is that the action level temp of	Thank you for your comment.
	80 degrees is too low. This is mostly coming from workgroups that are working outdoors, but not necessarily performing strenuous work. Some examples might be day camp leaders, Farmers' Market employees, inspectors. In some cases, the work may be completed mostly in the shade or under a pop-up canopy. In those cases, if the temp is over 90, would cool-	Mandatory cool-down rest periods are required when employees perform outdoor work, even in the shade, at a temperature that reaches or exceeds 90°F "unless engineering or administrative controls, such as air-conditioning or scheduling work at cooler times of the day, are used to lower employees' exposure below 90°F". If engineering or administrative controls bring the temperatures in the work area below the high heat levels, then the mandatory rest periods are not required. Shade, such as a pop up canopy, is one type of engineering controls that might lower the temperature where the employees are working.
	down periods still be required since employees are working in the same place where their cool-down period would be?	shaded or cool area doing very little to no physical activity so the body can cool and rest.  Examples of work with very little to no physical activity are reading or writing while sitting in the shade or in an indoor environment with air conditioning.
		This comment did not result in a change to the adopted rule language.

For nonbreathable clothing the	Thank you for your comment.
<u> </u>	
breathable clothes its 80, then you have	L&I considered requiring distinct mandatory cool-down rest periods for vapor barrier clothing
mandatory breaks at 90 and 100 degrees.	and all other clothing, as well as employer-established work-rest schedules for vapor barrier
Why is there not a mandatory break or	clothing and all-other clothing based on NIOSH and ACGIH methods. L&I did not include
•	requirements for these work-rest options in the adopted rule at this time. However, the
for nonbreathable clothing?	Department will review work-rest periods within 3 years after the Outdoor Heat Exposure rule
	goes into effect. We will review applicable data including but not limited to heat-related illness
	claims, inspections, other national and state regulations, peer-reviewed publications and
	nationally recognized standards.
	This comment did not result in a change to the adopted rule.
Washington is not a homogeneous climate.	Thank you for your comment.
There is a marked difference between the	
	Wet bulb globe temperature (WBGT) methods were used in determining the action levels in the
	adopted rule and in the initial 2008 outdoor heat exposure rule.
	In the 2008 determination, humidity levels across Washington State were reviewed, as assessed by dew point temperatures, and a dew point of 50°F was assumed. Dew point observations were
-	not expected to change substantially since that assessment and more recent dew point data
	from across Washington state indicated that a dew point of 50° F remains a reasonable
	assumption. As such, L&I decided to continue using these assumptions to develop ambient
	temperature triggers for the rule.
	Maintaining the use of ambient air is easier for employers and employees to use and removes
	the burden of employers having to used specialized equipment (WBGT), separately consider
	humidity levels, and conduct complex calculations. L&I found that keeping ambient
	temperature was the least burdensome option.
	This comment did not result in a change to the adopted rule language.
	mandatory breaks at 90 and 100 degrees. Why is there not a mandatory break or similar requirement at a lower temperature for nonbreathable clothing?  Washington is not a homogeneous climate.

Vulnerable or Different workers	Workers must have a role in asking for rest periods, beyond the rule's prescribed 10 minute break every two hours. That is, especially for workers with pre-existing conditions, there needs to be support and protection for workers who experience debilitating conditions.  The rule would be stronger if it acknowledged the varied heat and working conditions of different groups of workers.	Thank you for your comment.  WAC 296-62-09560(2)(a)/296-307-09760(2)states in part that employee training must include "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."  Additionally, the employer responsibilities section of the adopted rule incudes the requirement that employers "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"  This comment did not result in a change in the adopted rule language.
	WAC 296-62-09	1 535 and 296-307-09735 Access to shade.
Cool Down Alternatives	Misting stations to cool body temperature are proposed as an alternative to shade.  More guidance on the design of misting stations should be provided.	Thank you for your comment.  An employer may use misting stations as an alternative to shade when they are equally or more effective than shade to allow the body to cool. Our Education & Outreach team provides guidance on how to most effectively implement DOSH rules, as well as best practices for keeping workers safe. We will share this input with the team for incorporation into future Outreach efforts.  This comment did not result in a change in the adopted rule language.
Proximity to Shade	When providing shade for workers, how close does the shade need to be to the actual work site or location of workers?	Thank you for your comment.  The adopted rule does not specify a measure of distance required for shade from the work area. The requirement is that shade be provided "as close as practicable from to the areas where employees are working." This provides flexibility to accommodate the variety of worksites across the State of Washington.  This comment did not result in a change in the adopted rule language.

Shade	In the shade section the proposed rule discusses having a space large enough to have workers be able to sit in a normal posture. How is that defined or how will it be enforced?	Thank you for your comment.  Requirements for shade include that shade is large enough to accommodate the number of employees on a meal or rest break so that they "can sit in a normal posture fully in the shade." This does not require that employees sit in a specific posture. Rather, it requires that shade is large enough so that all employees who need access to it at the same time do not have to assume awkward postures in order to be fully covered by the shade and that they can sit and rest to recover from the heat.  This comment did not result in a change in the adopted rule language.
Shade	L&I should have flexibility on how shade can be provided for workers since canopies or tents will not necessarily work for all employee environments.	Thank you for your comment.  The rules do allow flexibility in how shade is provided. The adopted rules define shade as "a blockage of direct sunlight." They further state that shade is not adequate when heat in the area of shade defeats the purpose of shade, which is to allow the body to cool, and that shade may be 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.  In addition, WAC 296-62-09535(3)/296-307-09735(3) states "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."  This comment did not result in a change in the adopted rule language.
Cool down alternative	The proposed rules state that employers may forego providing shade if they can "demonstrate" that something provided in lieu of shade, like water misters, is "equally or more effective" than shade. This standard is vague and lacking clarity. First, it is not clear what data LNI is relying on to determine what kinds of protections are	The adopted rule indicates that the intent of shade is to provide a means to cool the body, and that alternative means to reduce body temperature may be used when the employer "demonstrates that such means are equally or more effective than shade" in reducing body temperature. This is a performance-based requirement where it is the employer's responsibility to determine that their chosen alternative meets this requirement. This allows flexibility for employers to choose an appropriate alternative for their specific worksite. Employers can utilize

	"equally or more effective" than shade. Further, it is not clear to whom is the equal effectiveness is intended to be demonstrated, and at what point – before or after a report of heat-related illness or death.	free L&I consultation services if they have concerns with the effectiveness of any alternatives to shade.  This comment did not result in a change in the adopted rule language.
Shade - Cost of Rule	The process of providing shade for a substantial portion of the year will be more burdensome and costly than assumed in the impact statement. The new rule requires shade to be provided beginning at 52° for non-breathable clothing and 80° for all other clothing. Portable shade structures would be deployed for the entire day, moved frequently, and subject to wind damage. These low thresholds will be in effect year-round and the costs of providing, moving, and replacing this shade providing equipment will be far exceed the \$183,000-\$401,000 annual estimated cost for all outdoor workplaces in the agency's economic impact study according to many growers.	Thank you for your comment.  As part of the rulemaking process, L&I conducted a cost-benefit analysis in order to determine the effects of the rule on workers, the public and the regulated community. L&I relied upon the following assumptions to calculate the cost of this provision:  • A typical employer would choose pop-up canopies for shade;  • The average time to set up a simple pop-up canopy is 5 minutes;  • Only a proportion of workers would be working outdoors at any single point in time, and of those who are out, some would avoid exposure to outdoor heat as a result of engineering or administrative controls, so they do not require shade.  The rule only requires shade to be provided when action levels are reached. The assessment in the report has more details about our estimates of the frequency of the days when each specific temperature threshold is reached, and the number of workers in specific clothing group. It also assumes a single (one-time) set up and disassembly of a shade at worksites, and factors in the typical lifetime of a shade based on typical use. The adopted rule also allows for flexibility in the selection of shade to accommodate variable worksite conditions. Specifically, the rule states that "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."  Employers are expected to select appropriate shade structures or alternatives for their specific worksite conditions.

Wind & Shade	L&I needs to take into account what wind	Thank you for your comment.
	can do to shade canopies or tents that L&I is	
	recommending be used to provide shade to	L&I recognizes that employers work in diverse worksite conditions, including wind and rain,
	workers.	which influence the selection of appropriate shade structures. The adopted rule allows for
		flexibility in the selection of shade to accommodate variable worksite conditions. Specifically, the rule states that "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."
		Employers are expected to select appropriate shade structures or alternatives for their specific worksite conditions.
		During excessive wind, it is advised that employers use means to secure the tents or canopies in order to ensure that they do not become a hazard.
		This comment did not result in a change in the adopted rule language.

WAC 296-62-09540 and 296-307-09740 Drinking water.		
Drinking Water	This regulatory text should also be unified with the drinking water definition and reference the phrase "other acceptable beverages."	Thank you for your comment.  The definition of "drinking water" provided in the rule applies to all drinking water references in the rule. "Drinking water" and "other acceptable beverages" are not used or defined separately. Rather, the definition of drinking water incorporates "Other acceptable beverages include drinking water packages 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."  This comment did not result in a change in the adopted rule language.
Drinking Water	Is it unreasonable for the city to require employees to provide their own water bottle to fill with the City's ice and water? Shared water coolers/jugs require a lot of cleaning and disinfecting, and many employees won't use them (since Covid). Cities are concerned because they don't want to buy a bunch of disposable plastic water jugs.	Thank you for your comment.  Providing water and the means in which to drink it is an employer requirement. Much like other protective measures under safety and health rules, the costs must not be passed on to workers.  While many workers may already bring their own water bottles to work to fill during the day, not all job tasks allow for workers to keep their own water bottles with them at all time and transport through the different tasks they do. In addition, workers sometimes do not bring their own water bottles.  Employers are required ready access to drinking water at all time, however they have flexibility in determining how this is accomplished.  Employers are expected to follow other applicable safety and health rules, including WAC 296-800-23005 and WAC 296-307-095, that specify requirements for maintaining sanitary conditions of drinking water dispensers, containers and cups.  This comment did not result in a change to the adopted rule language.

Drinking Water	We ask that the meaning of "suitably cool" in WAC 296-307-09720 (<59°F, as recommended above) be clarified, and that employers are providing the water free of cost.	Thank you for your comment.  Drinking water under WAC 296-307-09720 is defined as "Potable water that is suitable to drink and suitably cool in temperature." Suitably cool means cool enough in temperature such that it will not discourage employees from drink water. In drafting the proposed rule, L&I wanted to avoid the burden of requiring employers to measure the temperature of the water and instead focus on the intent, which is to avoid providing warm/hot water such that it will discourage employees from drinking it. Based on guidance from NIOSH and OSHA, a temperature of 50-60°F is recommended for drinking water.  Per WAC 296-307-09740, Employers are required to supply drinking water to employees. That requirement implies that drinking water is to be provided free of charge.  This input will be shared with the DOSH Education and Outreach team for incorporation of this message into future Outreach efforts.
	WAC 296-62-09!	This comment did not result in a change to the adopted rule language.  545 and 296-307-09745 Acclimatization.
Acclimatization	The section on acclimated workers, a 2022 report from the CDC clearly states that studies on acclimatization is variable, incomplete, and therefore, inconclusive, with too many variables to be setting the standard, while OSHA implemented the rule 20 percent per day exposure for new hires. It fails to consider the existing exposure to heat and is not based on science. Yet Labor and Industries is fully embracing it, wanting to make it laws, backed by no substantiating studies.	Acclimatization requirements in the adopted rule do not include acclimatization schedules such as the "Rule of 20 Percent" referenced by OSHA. Requirements specifically focus on closely

Acclimatization	In addition to our own employees, the proposed rule does not appear to have consideration for contractors who, in the event of a major power outage, may come from other states or Canada, and will likely not be acclimatized. In the effort to restore energy to our customers so they may resume operations, as well as ensure individuals or business have the energy needed to run air conditioning locally, some provisions or changes must be made to the rule, that allow us so address the hazard without also having to sideline contractors and delay work.	Thank you for your comment.  Acclimatization was considered in developing the rule. The adopted rule includes an acclimatization section with requirements to closely observe employees for signs and symptoms of heat-related illness at times during which they would not have had a chance to become acclimatized.  The close observation can be done via regular communication with employees working alone such as by radio or cellular phone; a mandatory buddy system; or other effective means of observation. As such, the acclimatization requirements should not result in having to "sideline" contractors or delay work.  This comment did not result in a change to the adopted rule language.
Acclimatization	The acclimatization process requires a lot of close monitoring of employees, to make sure that employees are adjusting to the heat. The threshold temperatures for beginning this monitoring should be increased at least 5 degrees because it seems unlikely that heat problems will start at these lower temperatures. Close observation of employees during an acclimatization period should not be required from 80-85 degrees. The burden of close monitoring is not justified at these lower temperatures.	Thank you for your comment.  In determining the temperature action levels and other requirements in the adopted rule including those for acclimatization, L&I reviewed the best current evidence on heat-related illness. This included research on Washington State worker's compensation heat-related illness claims and national heat-related injury and illness data. Also reviewed was peer-reviewed research, standards and recommendations from the American Conference of Governmental Industrial Hygienists (ACGIH) and the National Institute for Occupational Safety and Health (NIOSH), and regulations from other state agencies, and guidance and enforcement policies from federal OSHA. Among the data reviewed is a technical report by the L&I SHARP Stats: Heat Related Illness in New Workers, Technical Report 76-31-2022.  The acclimatization section in the adopted rule requires close observation of employees for signs and symptoms f heat-related illness only for a specified amount of time:  - 14 consecutive days for employees newly assigned or returning to working in the heat - During a heat wave

		A cost-benefit analysis was conducted which assesses the costs of implementing the adopted rule. The cost-benefit analysis determined that the benefits outweighed the costs of the adopted outdoor heat rule.  This comment did not result in a change to the adopted rule language.
Acclimatization	The process provided for in WAC 296-62-09545, "Acclimatization," is not a process at all, but only an observation requirement. LNI should recommend that employers adopt the NIOSH procedures without requiring something substantially similar, if those procedures are known to be effective.	Thank you for your comment.  For employees newly assigned and those returning from absence of seven days or more, L&I considered requiring employers to follow an acclimatization schedule based on the National Institute for Occupational Safety and Health's (NIOSH) Criteria for a Recommended Standard for Occupational Exposure to Heat and Hot Environments. According to the acclimatization schedule, an employer would slowly increase the amount of work and employee performs in the heat over the course of 4-5 days depending on whether the employee is new or returning to working in the heat. However, the duration of the benefits gained from acclimatization depends on the length of the initial acclimatization period. The benefits of a four to five day short-term acclimatization period may be lost more quickly than if acclimatization was done during a longer period. Additionally, the overall scientific literature shows that the extent to which an individual acclimatizes not only depends on the amount of work performed in the heat, but on individual characteristic. An acclimatization schedule was not included in the proposed rules due to the potential false sense of security stakeholders might experience from a short-term acclimatization schedule; and the impact that employers would experience tracking each employee's percentage of work performed in the heat for up to 5 days. As such, requiring close observation was determined to be the least burdensome alternative.  Also for acclimatization for all employees in a heat wave, close observation was determined to be the least burdensome alternative option of employers implement work-rest cycles based on ACGIH or NIOSH or requiring employer's implement a Heat Alert Program based on NIOSH was rejected as too burdensome.  For more information on the research used in making these decisions and on the least burdensome analysis, see the Cost Benefit Analysis pages 25-30.

		This comment did not result in a change to the adopted rule language.
Acclimatization	Adopt the NIOSH acclimatization schedule, as per below, and consider risk factors that affect acclimatization:  • Workers who have previous experience in the job: no more than 50% of the usual duration of work in the heat on day 1, 60% on day 2, 80% on day 3, and 100% on day 4.  • New workers: no more than 20% of the usual duration of work in the heat on day 1, increasing by no more than 20% each day.  • Allow 50% more acclimatization time for workers who are not physically fit.  • When acclimatizing workers, the employer must also consider each person's personal risk factors, the type of clothing they wear at work, and changes in weather.	Thank you for your comment.  For employees newly assigned and those returning from absence of seven days or more, L&I considered requiring employers to follow an acclimatization schedule based on the National Institute for Occupational Safety and Health's (NIOSH) Criteria for a Recommended Standard for Occupational Exposure to Heat and Hot Environments. According to the acclimatization schedule, an employer would slowly increase the amount of work and employee performs in the heat over the course of 4-5 days depending on whether the employee is new or returning to working in the heat. However, the duration of the benefits gained from acclimatization depends on the length of the initial acclimatization period. The benefits of a four to five day short-term acclimatization period may be lost more quickly than if acclimatization was done during a longer period. Additionally, the overall scientific literature shows that the extent to which an individual acclimatizes not only depends on the amount of work performed in the heat, but on individual acclimatizatio. An acclimatization schedule was not included in the proposed rules due to the potential false sense of security stakeholders might experience from a short-term acclimatization schedule; and the impact that employers would experience tracking each employee's percentage of work performed in the heat for up to 5 days. As such, requiring close observation was determined to be the least burdensome alternative.  Also for acclimatization for all employees in a heat wave, close observation was determined to be the least burdensome alternative.  Also for acclimatization for all employees in a heat wave, close observation was determined to be the least burdensome alternative. The alternative option of employers implement work-rest cycles based on ACGIH or NIOSH or requiring employer's implement a Heat Alert Program based on NIOSH was rejected as too burdensome.  For more information on the research used in making these decisions and on the least burdensome analysis, see

Acclimatization	No consideration in the rule for individuals	Thank you for your comment.
	already acclimatized prior to starting a job.	
	Workers who live in Yakima already are used to 80-plus degree temperatures	The adopted rule specifically addresses workplace exposures to outdoor heat. This refers to work an employee performs in their workplace required by their employer.
	because they live it every day.	work an employee performs in their workplace required by their employer.
	• Why would these workers need 14-day	In determining the adopted rule, L&I reviewed and considered the scientific literature and
	monitoring?	current best evidence for individuals' ability to develop tolerance to working in the heat,
	Why would a person who left a job for	including influencing factors such as the amount of work performed in the heat which varies
	seven days, but stayed in the same climate zone need to be re-acclimatized?	depending on the tasks that employees are required to perform at work.
	How are employers supposed to recognize whether an employee has become acclimatized? They are not medical experts.	With that, L&I determined that the definition of acclimatization would incorporate how long it takes to become acclimatized (7-14 days) and how long it takes to lose acclimatization (7 days). The close observation period requirement of 14 days is consistent with the definition of acclimatization in the adopted rule.
	What happens when an employer believes that a worker is acclimatized, but the	Employers are not required to acclimatize employees or to recognize whether someone has
	employee disagrees?	become sufficiently acclimatized. Employers are required to closely observe employees for signs and symptoms of heat-related illness for a specified amount of time.
		This comment did not result in a change to the adopted rule language.
Acclimatization -	Recommend striking the acclimatization	Thank you for your comment.
Documentation	methods and procedures requirement. The	
	rule does not specify how employers are to track observation of acclimatization or	The adopted rule does not include a requirement to document the observation or acclimatization of employees.
	acclimatization itself. Documenting	accimiatization of employees.
	observation of acclimatization and	This comment did not result in a change to the adopted language.
	documenting acclimatization are two	
	separate issues that will each create	
	administrative work for the employer	
	without providing any clear safety advantage to the employee.	
	auvantage to the employee.	

Acclimatization	The acclimatization rules provide no pathway for a worker to self-attest their capacity to work during a high-heat event or those who may transfer their work skills from a neighboring farm.	Thank you for your comment.  The acclimatization section only includes a requirement for close observation of employees while they work, with the intent to promptly detect signs and symptoms of heat related illness.  The adopted rule incorporates employee responsibilities. Specifically, "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."  Regardless of employees' previous work experience, employers are required to provide training to their employees that is specific to their worksite. Training includes topics for drinking water provisions, preventative cool-down rest periods, acclimatization, etc.  This comment did not result in a change to the adopted rule language.
Acclimatization - Personal Risk Factors	Due to a number of privacy laws, employers will not know or account for personal risk factors when determining if an employee is sufficiently acclimatized or at a higher risk of heat injury after acclimatization.  Concerned how the rule will be enforced if an employee suffers an HRI due to their condition.	Thank you for your comment.  The adopted rule does not require that employers know whether an employee is sufficiently acclimatized. WAC 296-62-09530(2)/296-307-09730(2) states in part "Employees are responsible for monitoring their own personal factors for heat-related illness" The employer is not expected to monitor employees' personal risk factors.  Employers are expected to comply with all other applicable requirements under the adopted rule including but not limited to close observation of signs and symptoms of heat-related illness and response to heat-related illness.  This comment did not result in a change to the adopted rule language.

Heat Wave - Communication	Most of our field operations staff work alone, and work sites significantly vary, from large, busy suburban water system locations to small, isolated rural pumphouses. There are locations with very limited radio/cellular coverage which would create a challenge in communicating with our field operations staff as defined by the proposed rulemaking.	Thank you for your comment.  Close observation of employees refers to monitoring employees in a way such that there is prompt recognition and response to an employee experiencing heat-related illness symptoms.  Under the adopted rule, employers have the option to closely observe employees with "other effective means of observation." This allows flexibility for employers to establish observation methods that are specific to their worksite and industry that are effective in promptly recognizing and responding to signs and symptom of heat-related illness.
		This comment did not result in a change to the adopted rule language.
	WAC 296-62-09547	and 296-307-09747 High heat procedures.
High Heat	Are cooling vests considered engineering controls?	Thank you for your comment.  Cooling vests are designed to be worn by employees similarly to other personal protection equipment and are not considered engineering controls for outdoor heat. The definition of engineering controls was clarified.  This comment resulted in a change to the adopted language.
High Heat	This proposed work rule contradicts many existing work rules including recently passed ESHB 1329 relating to the prevention of disconnecting services during extreme heat events.	Thank you for your comment.  The Department has added an exemption to mandatory cool-down rest periods during emergency response activities. Employees performing activities exempt from the mandatory cool-down rest periods must still be able to take preventative cool-down rest periods when they feel the need to prevent overheating.  This comment resulted in a change to the adopted language.

High Heat - Mandatory Breaks	Mandating breaks based on temperature is not an effective means of preventing heat related injuries or illnesses. There are times when more breaks than those stipulated in this proposed rule may be needed and other times when less breaks will be needed. This issue is best addressed through education and open communication between employers and employees. Strike the mandatory cooldown rest periods.	Thank you for your comment.  The Department recognizes that training and education of employees on outdoor heat exposure is one important element in preventing heat-related illness. As such, the adopted rule has incorporated training requirements.  Employers are responsible for ensuring that employees take mandatory cool-down rest periods, at minimum, at the specified threshold temperatures. Employers may choose to provide additional or longer cool-down rest periods at times when they believe they are necessary to prevent heat-related illness.  This comment did not result in a change in the adopted language.
High Heat - Mandatory Breaks	Section (1) mandates mandatory cool-down rest periods of 10 minutes every two hours at or above 90 degrees and 15 minutes each hour at or above 100 degrees. We are concerned that these standards are unreasonably excessive and costly. Also, according to the note under Table 2, "The department will review work-rest periods within three years after the outdoor heat exposure rule goes into effect. We will review applicable data including, but not limited to, heat-related illness claims, inspections, other national and state regulations, peer-reviewed publications, and nationally recognized standards." This type of evaluation needs to be done before rule adoption, not afterward. We recommend deleting all of section (1) of proposed WAC 296-307-09747.	Thank you for your comment.  During the process of the rulemaking, L&I reviewed information on heat-related illness and injuries, including Washington state workers' compensation heat-related illness and injury claims data, and national heat-related injury and illness data. Peer-reviewed research was also reviewed to understand the current best evidence on heat exposure hazards and controls, including studies regarding the relationship between outdoor heat exposure and traumatic injuries, such as falls from ladders. L&I also reviewed standards and recommendations from the American Conference of Governmental Industrial Hygienists (ACGIH) and the National Institute for Occupational Safety and Health (NIOSH), regulations from other state agencies, and guidance and enforcement policies from federal OSHA. Once the rule has been in effect for 3 years, additional data will be reviewed to determine if changes to the work-rest period provisions should be considered.  The required mandatory cool-down breaks required were based on the best available evidence and set minimum standards that apply to all covered workplaces to make it easier for employers to comply and provide certainty for workers regarding their rights to these critical cool-down periods. The note on the 3 year review period was added to document our intent to review the work-rest periods.

		As part of the permanent rulemaking process, L&I conducted a cost-benefit analysis (CBA), which assesses the societal costs and societal benefits associated with the implementation of the adopted rule. The CBA determined that the benefits outweighed the costs of the adopted outdoor heat rule.  This comment did not result in a change in the adopted language.
High Heat - Mandatory Breaks - Documentation	How are employers to document mandatory cooldown rest periods work when an individual works alone and in a remote location?	Thank you for your comment.  The adopted rule does not include a requirement to document mandatory cool down rest periods.
		However, mandatory cool-down rest periods to occur concurrently with any meal or rest period required under WAC 296-126-092/WAC 296-131-020 must be paid unless taken during a meal period that is not otherwise required to be compensated. Employers may have recordkeeping requirements related to meal and rest breaks under WAC 296-126-092/WAC 296-131-020.
		While the adopted rule does not include a requirement to document mandatory cool-down rest periods, employers are responsible for ensuring they occur and that workers are appropriately paid. Employers may have existing requirements for documentation related to pay under existing Employment Standards laws.
		This comment did not result in a change in the adopted language.
High Heat - Observation	The draft rule states that an employer will need to observe employees for signs and symptoms of heat-related illness by implementing an observation system. One of those options would be to "regularly" communicate with an employee who is working alone. The current use of "regularly" is vague and is subject to interpretation. It would be helpful if the	Thank you for your comment.  "Regular" communication can be different depending on the industry and the specific worksite. The intent of the requirements is that employees are monitored in a way such that there can be prompt recognition and response to signs and symptoms of heat-related illness. It is the Department's expectation that the employer establish their worksite-specific regular communication plan for employees working alone, and include it in the required written outdoor heat exposure safety program.

	Department could define what "regularly" means.	This comment did not result in a change in the adopted language.
High Heat – Close Observation	Specify methods for observation of symptoms. The proposed rule states that employers "must closely observe employees for signs and symptoms of HRI" and lists one of these methods as "other effective means of observation" without defining what those might be.	Thank you for your comment.  Close observation of employees is monitoring employees in a way such that there is prompt recognition and response to signs and symptoms of heat-related illness. The option for employers to use "other effective means of observation" allows flexibility for employers to establish observation methods that are specific to their worksite and are effective in promptly recognizing and responding to heat-related illness signs and symptoms.  This comment did not result in a change in the adopted rule language.
High Heat - Training	L&I needs to add pathways to partnerships for employer/employee high heat training.	Thank you for your comment.  The Department of Labor and Industries provides education and training materials for employers. You can find these materials at <a href="https://lni.wa.gov/safety-health/safety-training-materials/training-kits">https://lni.wa.gov/safety-health/safety-training-materials/training-kits</a> .  This comment did not result in a change in the adopted language.

High Heat - Mandatory Breaks	The mandatory breaks conflict with other Labor and Industries policies. One woman at testimony in Yakima, a farm worker, complained that you will reduce her income. This in reference to the mandatory 15-minute breaks every hour for employees paid by how much they pick. Even the people you think you are trying to help don't like this rule. A simple reference to when and how much to drink as was in the original emergency rules was adequate.	Thank you for your comment.  This rule allows for mandatory cool-down rest periods to occur concurrently with existing meal and rest period under wage and law (WAC 296-126-092 and 296-131-020). Mandatory and preventative cool-down rest periods are required to be paid unless taken during a meal period which is not otherwise required to be compensated.  Specific to agricultural workers paid on a piece-rate basis, they must be separately compensated for rest breaks and piece-rate down time. See <i>Lopez Demetrio v. Sakuma Brothers Farms Inc.</i> , 183 Wn.2d 649, 355 P.3d 258 (2015); <i>Carranza v. Dovex Fruit Company</i> , 190 Wn.2d 612, 416 P.3d 1205 (2018). For more information, see L&I Employment Standards Administrative Policy ES.C.6.2 at <a href="https://lni.wa.gov/workers-rights/docs/esc.6.2.pdf">https://lni.wa.gov/workers-rights/docs/esc.6.2.pdf</a> .  When the temperature reaches high heat thresholds, simply drinking more water will not be adequate to prevent HRI in the absence of other preventative measures.  This comment did not result in a change in the adopted language.
High Heat – Mandatory Breaks	Adopt an adjustable work/rest schedule to ensure that the recommended periods of rest are appropriate for the weather conditions and the workloads of employees. For employees who work in enclosed or partially enclosed structures such as greenhouses, high tunnels or hoophouses, the employer must measure the temperature and humidity inside these structures and use these measurements when determining the adjusted work/rest schedule.	Thank you for your comment.  During the process of the rulemaking, L&I reviewed information on heat-related illness and injuries, including Washington state workers' compensation heat-related illness and injury claims data, and national heat-related injury and illness data. Peer-reviewed research was also reviewed to understand the current best evidence on heat exposure hazards and controls, including studies regarding the relationship between outdoor heat exposure and traumatic injuries, such as falls from ladders. L&I also reviewed standards and recommendations from the American Conference of Governmental Industrial Hygienists (ACGIH) and the National Institute for Occupational Safety and Health (NIOSH), regulations from other state agencies, and guidance and enforcement policies from federal OSHA.  The required mandatory cool-down rest periods required were based on the best available evidence and set minimum standards that apply to all covered workplaces to make it easier for

		employers to comply and provide certainty for workers as to their rights to these critical cool down periods.  In addition, L&I will review work-rest periods within 3 years after the Outdoor Heat Exposure rule goes into effect. We will review applicable data including but not limited to heat-related illness claims, inspections, other national and state regulations, peer-reviewed publications and nationally recognized standards. This statement is currently included in the adopted rule.  Employers may choose to require longer or more frequent cool-down rest periods in addition to those required by the adopted rule.  This comment did not result in a change to the adopted rule language.
High Heat – Mandatory Breaks - PUD Exemption for Emergencies	There is no exemption for utility work in regards to critical electrical and gas infrastructure. In the event of a major storm, wildfire, or other outage, our employees may be responsible for restoring energy to our customers, including commercial businesses, emergency response sites, and medical facilities. It is critical that we have the ability to allow our workers to make the necessary repairs to keep these facilities functional, which will be negatively impacted with the proposed state of the rule.	Thank you for your comment.  The Department has added an exemption from the mandatory cool down rest periods during emergency response activities. Employees performing activities exempt from the mandatory cool-down rest periods must still be able to take preventative cool-down rest periods when they feel they need to prevent overheating.  This comment resulted in a change to the adopted language.

	WAC 296-62-09550 and 296-307-097	750 Responding to signs and symptoms of heat-related illness.
Communication System	Specify guidelines for an appropriate and adequate communication system. While the	Thank you for your comment.
	rule makes it clear that cell phones are not an adequate communication tool at jobsites without reception, it does not affirmatively state what constitutes adequate communication.	An effective communication system to respond to signs and symptoms of heat-related illness (HRI) is one that allows for communication as soon as it is needed. If an employee or supervisor cannot be reached to report HRI or get medical attention, then that method of communication is not effective.
	Require the employer to designate and	This comment did not result in a change in the adopted rule.  Thank you for your comment.
	equip one or more employees at each worksite as authorized to call for emergency medical services, and allow other employees to call for emergency services when designated employees are not immediately available.	Under the adopted language, an "Employer must ensure that effective communication by voice, observation, or electronic means is maintained so that employees at the worksite and their supervisor can contact each other to report signs and symptoms of heat-related illness and get medical attention when necessary." This allows some flexibility so that employers may establish procedures tailored to their worksite to ensure effective communication is maintained. If getting medical attention is not possible when needed, then effective communication to get medical help was not maintained. This adopted rule language is in concurrence with WAC 296-800-15005 which requires employers make sure that first-aid trained personnel are available to provide quick and effective first aid.
		In addition, the rule maintains the existing requirement that supervisors be trained on the procedures to follow if an employee exhibits signs or symptoms consistent with possible heat-related illness, including appropriate first aid and emergency response procedures; and procedures for moving or transporting an employee to a place where the employee can be reached by an emergency medical service provider, if necessary.
		This comment did not result in a change in the adopted language.

Medical Monitoring	Establish a requirement that an employer's outdoor heat exposure safety program include means and procedures to ensure that, if a worker is in need of emergency medical assistance in area that may be difficult for first responders to find or access, the employee can be quickly transported—if it is possible to do so safely—to a place where they can be reached by first responders. In the alternative, the employer must be required to have procedures to ensure that first responders are immediately directed to the site of the emergency upon arrival.  Medical monitoring is not effective. Rather than putting the requirement on supervisors to watch employees. Enforcing a water standard should happen instead. For 90 degrees and below, it's a quart of water every other hour; over 90 it's one quart an hour. This is the science-based refilling of hydration for the body.	Thank you for your comment.  The adopted rule incorporates requirements for response to heat-related illness, including an effective means of communication to obtain medical attention when necessary, and a written outdoor heat exposure safety program that specifies emergency response procedures for heat-related illness. This requirement is in concurrence with WAC 296-800-140 which requires an employer to establish, supervise and enforce an accident prevention program that includes what to do in an emergency and is effective in practice.  In addition, the rule maintains the existing requirement that supervisors be trained on the procedures to follow if an employee exhibits signs or symptoms consistent with possible heat-related illness, including appropriate first aid and emergency response procedures; and procedures for moving or transporting an employee to a place where the employee can be reached by an emergency medical service provider, if necessary.  This comment did not result in a change in the adopted language.  Thank you for your comment.  The rule includes requirements for both drinking water and monitoring of employees for heat-related illness. However, hydration alone does not guarantee that heat-related illness will be prevented. In the case that heat illness is experienced by employees, appropriate response is required under the rule. The adopted rule language is in concurrence with WAC 296-800-15005 which requires employers make sure that first-aid trained personnel are available to provide quick and effective first aid.  This comment did not result in a change to the adopted rule language.
		This comment did not result in a change to the adopted rule language.

	WAC 296-62-09560 and 296-307-09760 Information and training.		
Documentation	Workers still report they do not receive adequate training on heat related illness.	Thank you for your comment.	
	Without a requirement for documenting that training occurred or a curriculum review by L&I, the rule is unenforceable.	L&I provides guidance to DOSH Compliance staff on how to enforce requirements for effective training.	
		Employees may submit a safety and health complaint to L&I if they believe they are not provided with effective training for outdoor heat exposure. Information on how to submit a complaint is available at <a href="https://www.lni.wa.gov/workers-rights/workplace-complaints/safety-complaints">https://www.lni.wa.gov/workers-rights/workplace-complaints/safety-complaints</a>	
		This comment did not result in a change in the adopted rule language.	
Training	The training provisions of the proposed rules also suffer from vagueness: The	Thank you for your comment.	
	proposed rules state that employers are required to be trained in "the importance of considering the use of" administrative controls such as providing air conditioning and scheduling work during cooler hours.	Per the training section in the adopted rule, employers are required to provide training that covers the topic of "the importance of considering the use of engineering or administrative controls" This provision is not a requirement for employers to establish such controls or to "sufficiently" consider them.	
	This is meaningless language because it is impossible to prove, or for a judge or hearing officer to determine, whether an employer sufficiently "considered" administrative controls.	For example, employers may choose -but are not required- to use such controls to reduce employee exposures below the temperature thresholds for mandatory cool-down rest periods. This comment did not result in a change in the adopted language.	

Training - Frequency	Require more frequent ongoing training. The proposed rule requires all employees be trained prior to working outdoors and once a year after that. We agree that training is needed on an ongoing basis and believe training twice annually would be appropriate.	Thank you for your comment.  The training frequency requirement in the adopted rule is consistent with that of other safety and health rules. Employers can always have more frequent trainings than what is required in the rule.  This comment did not result in a change in the adopted language.
	We recommend that DOSH adopt these amendments, but we also recommend including an explicit mention of first aid, as well as training in how to contact first responders. When a person is experiencing a serious case of HRI, a few minutes can make the difference between life and death. While some employers already understand that administering first aid while awaiting the arrival of first responders is a necessary part of the emergency response, explicitly requiring that employees and supervisors be trained in first aid procedures will promote wider implementation of first aid training.  Recommendations: (1) Include a mention of first aid in WAC 296-307-09760(2)(j) and (3)(d) (both as renumbered) as follows "including appropriate first aid and emergency response procedures";	Thank you for your comment.  L&I agrees that it could be helpful to specify training in first aid as well as emergency response procedures needs to occur for employees and supervisors to know how to respond when someone is showing signs or experience heat-related illness.  This comment resulted in a change in the adopted language to clarify that employee and supervisor training on response to heat-related illness incorporates first aid measures

	General Comments		
General	We believe the language in the rule should be definitive and not leave room for ambiguity or vagueness. Words like effectiveness, recommendation, encourage leave room for employers to use their own interpretations.	Thank you for your comment.  The adopted rule includes provisions that provide flexibility for employers to accommodate the variety of worksites and industries across the State of Washington.  This comment did not result in a change to the adopted rule language.	
General	We want Labor and Industries to opt in to the HEAL Act and use it as a reference when making and proposing rules.	Thank you for your comment.  The Healthy Environment for All Act, known as the HEAL Act, is a 2021 Washington law under chapter 70A.02 RCW. The purpose of the HEAL Act is to reduce environmental and health disparities in Washington state and improve the health of all Washington state residents and creates a coordinated state agency approach to environmental justice. According to the definition of in the HEAL Act, "environmental justice" includes "addressing disproportionate environmental and health impacts in all laws, rules, and policies with environmental impacts by prioritizing vulnerable populations and overburdened communities, the equitable distribution of resources and benefits, and eliminating harm." Workers experiencing environmental harms are identified as one of the vulnerable populations.  While there are intersections, L&I's role as the regulator of workplace safety and health standards and its mandates under WISHA, do not easily fit into the HEAL Act framework. L&I supports the intention and goals of the HEAL Act and is committed to its principles. For us, this includes ensuring meaningful engagement with and participation from impacted stakeholders; protecting, identifying and addressing disproportionate workplace safety and health effects for vulnerable populations; and incorporating these principles into our strategic plans and agency significant actions. L&I has had conversations with stakeholders on L&I's role in the HEAL Act implementation efforts and agree that there may be a role outside of being a covered agency. L&I's focus will be on incorporating the intentions of the HEAL Act into our work, this includes	

		working with the Environmental Justice task force and other covered and participating agencies.  L&I has had initial conversations with the DOH staff who support the Environmental Justice  Task Force and will be working to further define our role and participation.
General	How do the proposed rules apply for heavy equipment operators with cabs and air conditioning?	This comment did not result in a change to the adopted rule language.  Thank you for your comment.  The current and adopted rules apply to employees performing work in an "outdoor environment", defined as "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." As such, work in a vehicle with air conditioning is not itself considered work in an outdoor environment. However, employees who work in air conditioned vehicle cabs, such as equipment operators, may have work activities that are performed outside the vehicle cab. In this case, they would covered by the rule unless they fall under the incidental exposure exemption, which is in the current rules and updated only for formatting purposes.  WAC 296-62-09510(3) of the adopted language states "Does not apply to incidental exposure. Incidental exposure means 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."  This comment did not result in a change to the adopted rule language.

General	The reason I am reaching out about this now is that I feel with every change in regulation that adds a new burden onto companies, owners and managers should be easily warranted and explainable using data and basic reasoning.	Thank you for your comment.  L&I reviewed information on heat-related illness and injuries, including Washington state workers' compensation heat-related illness and injury claims data, and national heat-related injury and illness data. Peer-reviewed research was also reviewed to understand the current best evidence on heat exposure hazards and controls, including studies regarding the relationship between outdoor heat exposure and traumatic injuries, such as falls from ladders. L&I also reviewed standards and recommendations from the American Conference of Governmental Industrial Hygienists (ACGIH) and the National Institute for Occupational Safety and Health (NIOSH), regulations from other state agencies, and guidance and enforcement policies from federal OSHA.  The Cost Benefit Analysis summarizes the basis for the changes in the rule, see pages 9 through 15.  This comment did not result in a change to the adopted rule language.
General	There are other medical conditions that can occur on the job, a heart attack or diabetic blood sugar episode. There is not proper training on how to differentiate between these issues, and mistakes could be make in treating a worker.	Thank you for your comment.  The adopted outdoor heat exposure rule specifically addresses the recognition and response to signs and symptoms of heat-related illness. It does not address recognition of other medical conditions. Other safety and health rules such as Safety and Health Core rules WAC 296-800-15005 require employers make sure that first-aid trained personnel are available to provide quick and effective first aid.  This comment did not result in a change to the adopted language.

General	Wants to make sure that there is	Thank you for your comment.
	psychological support for when a co- worker dies and that employers are provided training on what to do when an	The comment suggestion is outside of the scope the outdoor heat exposure rule.
	employee dies.	This comment did not result in a change in the adopted language.
General	Want to see Washington align its heat rules with at least California and Oregon since	Thank you for your comment.
	farmworkers travel across state lines, consistency would help them know their rights better.	In developing the adopted rule, L&I considered the outdoor heat exposure regulations from California and Oregon as well as guidance and enforcement policies from OSHA, and the current best evidence on heat-related illness and controls.
		This comment did not result in a change in the adopted language.
General - Cost of	In a NIOSH study it was revealed that in an	Thank you for your comment.
Rule	"11-year period of 1995-2005 Washington State had 480 heat-related compensation". L&I is saying that employers have to spend hundreds of thousands just to support 44	A more recent study has been published here: <u>SHARP Stats: Heat-related illness (wa.gov)</u> . In recent hot years such as 2021, the number of SF HRI claims was 84.
	claims a year. The outside estimates from the Small Business Economic Impact Statement places costs upwards to a million dollars. As a large grower testified in Yakima, the estimates are grossly under reality, he estimates a million a year.	As part of the permanent rulemaking process, L&I conducts a cost-benefit analysis (CBA), which assesses the societal costs and societal benefits associated with the implementation of the adopted rule. The proposed rule has a broader impact beyond addressing the reported nonfatal claims, which is only one aspect of the assessment. The underreporting and/or improper reporting of heat-related claims result in an inaccurate representation of the burden of heat-related occupational illness. This implies that the estimates in the analysis are a bit conservative.
		Also, societal benefits of the rule extend to reducing heat-related fatalities, and preventing heat-related productivity loss, which are substantial components of the monetized benefits that are not quantified but addressed in the rule analysis. Taking all of these into consideration, the CBA determined that the benefits outweighed the costs of the adopted outdoor heat rule.
		L&I also conducts an SBEIS (Small Business Economic Impact Statement). The costs and benefits analyzed represent the statewide average impact that businesses across industries would incur. The actual impact of the rule to individual businesses may vary greatly depending on the

		geographic location, the industry, the type of business activities, the employment size and other factors. Therefore, the individual impact may be smaller or larger than the average impact assessed in the SBEIS.
		This comment did not result in a change in the adopted language.
General - Education,	Large companies do a decent job of	Thank you for your comment.
Outreach &	providing protections discussed in the rule.	
Compliance	Concerned about smaller entities being able	The Department can assist employers with compliance of the outdoor heat exposure rule
	to comply. It seems like the rules are too	through our free DOSH consultation services. Please see <a href="https://lni.wa.gov/safety-">https://lni.wa.gov/safety-</a>
	restrictive and whether the rule will result	health/preventing-injuries-illnesses/request-consultation/ for more information.
	in the desired outcome. Suggest focusing on	Additionally, DOSH Education and Outreach services provides guidance material, such as
	education outreach and then compliance.	training tool kits and written program templates, to assist employers comply with safety and
		health regulations. This guidance material is available to employers on the L&I website:
		https://lni.wa.gov/safety-health
		integration in the state of the
		This comment did not result in a change to the adopted rule language. This comment did not
		result in a change to the adopted rule language.
General - Effective	It is currently building season, and	Thank you for your comment.
Date Timing	preventing heat-related-illness is very	
	important to our members since our	Guidance for preventing heat related illness (HRI) is available for employers on the L&I website:
	members work outside building housing.	https://lni.wa.gov/safety-health/safety-training-materials/workshops-events/beheatsmart
	We disagree with some of the mandates in	This includes L&I also model Outdoor Heat Exposure Safety Programs and training materials
	the rule especially without a guideline. We	covering the new rules.
	feel the rule is an overreach and that it	
	should be reconsidered. We especially ask	The rule will become effective July 17, 2023.
	that the rule not be mandatory on the 15th,	This comment did not recall in a shaper to the adverted and burners
	that is too short of a timeframe for the	This comment did not result in a change to the adopted rule language.
	industry to address any matters it needs to comply with the rule.	
	compry with the rule.	

General - Effective	Orchards have a lot of issues to manage, not	Thank you for your comment.
Date Timing	just heat. We take all requirements very seriously. We feel the cost of the rule is going to be more than what was shown in the economic analysis, closer to \$1 million a season. We recommend taking a step back from this rule and regrouping to determine the best way to move forward. June is too soon of a timeline for this rule to be put in place.	As part of the permanent rulemaking process, L&I conducts a cost-benefit analysis (CBA), which assesses the societal costs and societal benefits associated with the implementation of the adopted rule. The CBA determined that the benefits outweighed the costs of the adopted outdoor heat rule. The rule is based on the best available evidence.  The rule will become effective July 17, 2023.  This comment did not result in a change to the adopted rule language.
General -	You are implementing an "emergency	Thank you for your comment.
Emergency Rule	ruling." This year is no different than the last 50, why is it an emergency now? We have bid jobs that are under contract and now we will be losing money to complete them due to your "emergency ruling."  Jobs that are currently being bid now we will be way more expensive in order to accommodate your ruling.	L&I did adopt emergency rules in 2021 and 2022. L&I reviewed information on heat-related illness and injuries, including Washington state workers' compensation heat-related illness and injury claims data, and national heat-related injury and illness data. Peer-reviewed research was also reviewed to understand the current best evidence on heat exposure hazards and controls, including studies regarding the relationship between outdoor heat exposure and traumatic injuries, such as falls from ladders. L&I also reviewed standards and recommendations from the American Conference of Governmental Industrial Hygienists (ACGIH) and the National Institute for Occupational Safety and Health (NIOSH), regulations from other state agencies, and guidance and enforcement policies from federal OSHA.
General - Enforcement	How will these standards be cited and enforced?	This comment did not result in a change to the adopted rule language.  Thank you for your comment.  This standard will be enforced like other safety and health standards regulated by the Department of Labor & Industries. For more information please see the DOSH Compliance Manual at <a href="https://lni.wa.gov/safety-health/safety-rules/enforcement-policies/DOSHComplianceManual.pdf">https://lni.wa.gov/safety-health/safety-rules/enforcement-policies/DOSHComplianceManual.pdf</a> .  This comment did not result in a change to the adopted rule language.

General -	Outdoor workers need a complaint system	Thank you for your comment.
Enforcement	that protects workers. L&I heat rules must	
	be enforced by regular assessments	Workers can file complaints with L&I if they are concerned about any workplace hazard,
	conducted by the L&I: employees who	including concerns with heat hazards or concerns that their employer is not following the
	report to L&I can be exposed to retaliation.	Outdoor heat rule requirements. Workers have the right to request L&I keep their name
		confidential when filing complaints. Information on how to submit a complaint is available at
		https://www.lni.wa.gov/workers-rights/workplace-complaints/safety-complaints
		In addition, chapter 296-360 WAC prohibits retaliation against employees for exercising their safety and health rights afforded by WISHA, including rights related to outdoor heat exposure hazard protections and complaints about outdoor heat exposure hazards. Employees have 90 days from when the retaliatory action occurred to file a complaint with L&I DOSH and/or Federal OSHA. Information on how to file a discrimination complaint is available at
		http://www.lni.wa.gov/WorkplaceDiscrimination
		The adopted rule will be enforced like other safety and health standards regulated by the Department of Labor & Industries. For more information please see the DOSH Compliance Manual at <a href="https://lni.wa.gov/safety-health/safety-rules/enforcement-">https://lni.wa.gov/safety-health/safety-rules/enforcement-</a>
		policies/DOSHComplianceManual.pdf.
		This comment did not result in a change to the adopted rule language.
General – Enforcement &	Appreciates the rule changes, but concerned that information does not get to	Thank you for your comment.
Consultation	the employee. Would recommend have someone go to camp sites to ensure the rules are being applied correctly and so employees can be made generally aware of	L&I DOSH offers free consultation services as well as education and outreach materials to employers. Education and Outreach material can be accessed by employees through the L&I website.
	the requirements.	L&I also has Community Relations Outreach staff located across the state who meet directly with workers at farms, warehouses, and community events on a regular basis. These staff provide information on rules in place to protect workers, including the outdoor heat exposure rule, and provide information on how workers may exercise their rights and advocate for their protections.

		This comment did not result in a change to the adopted rule language.
General - Heat & Smoke	The heat rule would be stronger if it were to acknowledge and account for the	Thank you for your comment.
	interaction of heat and smoke, the obvious intersecting hazards of the climate crisis.  Elevated temperatures and elevated particulate exposure together pose	The rulemaking teams for outdoor heat and wildfire smoke have been in contact with one another throughout the rulemaking processes and considered the intersection of both hazards. The adopted rules reflect that consideration.
	respiratory and circulatory risks – especially for those with pre-existing condition. The heat-rule needs to function in real-time with the intersecting risks of the climate crisis.	This comment did not result in a change to the adopted rule language.

General – Opposed to Rule	The new rules are arbitrary and not science based. I am disappointed that you	Thank you for your comment.
to Rule	disregarded the input from stakeholders, especially the Washington State Farm Bureau.	The Department reviewed information on heat-related illness and injuries, including Washington state workers' compensation heat-related illness and injury claims data, and national heat-related injury and illness data. Peer-reviewed research was also reviewed to understand the current best evidence on heat exposure hazards and controls, including studies regarding the relationship between outdoor heat exposure and traumatic injuries, such as falls from ladders. L&I also reviewed standards and recommendations from the American Conference of Governmental Industrial Hygienists (ACGIH) and the National Institute for Occupational Safety and Health (NIOSH), regulations from other state agencies, and guidance and enforcement policies from federal OSHA.
		L&I considered all input provided by stakeholders during the rule development process. We recognize that one concern with the agricultural associations and employers has been the acclimatization of newly assigned workers given the fact some agriculture workers move between employers without breaks in employment. While no change was made in the rule, L&I will be addressing this issue in an update to DOSH Directive 10.15.
		The Cost-Benefit Analysis includes the information and data L&I considered in making determinations on the rules, including the rationale for the requirements discussed on pages 11-12. The final Cost-Benefit Analysis can be found here: <a href="https://www.lni.wa.gov/safety-health/safety-rules/rulemaking-stakeholder-information/ambient-heat-exposure-rulemaking#rule-drafts-and-documents">https://www.lni.wa.gov/safety-health/safety-rules/rulemaking-rulemaking#rule-drafts-and-documents</a> . There is also information on supporting evidence for the rules presented during stakeholder meetings, in particular the March 17, 2022, meeting presentation found on the <a href="Outdoor Heat Stakeholder Resource">Outdoor Heat Stakeholder Resource</a> page; or can be found in the final Cost-Benefit Analysis page at <a href="https://www.lni.wa.gov/safety-health/safety-rules/rulemaking-stakeholder-information/ambient-heat-exposure-rulemaking#rule-drafts-and-documents">https://www.lni.wa.gov/safety-health/safety-rules/rulemaking-stakeholder-information/ambient-heat-exposure-rulemaking#rule-drafts-and-documents</a> .

This comment did not result in a change to the adopted language.

General – Opposed to Rule

The Department is proposing additional heat exposures rules when the need for additional rules has not been sufficiently demonstrated. The recent heat-related illness events and fatalities may seem like a justification for additional protection, until one looks closer and realizes that these events were due to the existing rules not being properly followed.

The Department has not incorporated many of suggested changes submitted by WSTFA and other stakeholder groups. Please hear our voices. The rule you make must work for the employer and the employees. The ramifications of the proposed rules on the few remaining small family farms will be devastating.

Thank you for our comment.

L&I reviewed Information on heat-related illness and injuries, including Washington state workers' compensation heat-related illness and injury claims data, and national heat-related injury and illness data. Peer-reviewed research was also reviewed to understand the current best evidence on heat exposure hazards and controls, including studies regarding the relationship between outdoor heat exposure and traumatic injuries, such as falls from ladders. L&I also reviewed standards and recommendations from the American Conference of Governmental Industrial Hygienists (ACGIH) and the National Institute for Occupational Safety and Health (NIOSH), regulations from other state agencies, and guidance and enforcement polices from federal OSHA.

L&I considered all input provided by stakeholders during the rule development process. We recognize that one concern with the agricultural associations and employers has been the acclimatization of newly assigned workers given the fact some agriculture workers move between employers without breaks in employment. While no change was made in the rule, L&I will be addressing this issue in an update to DOSH Directive 10.15.

The Cost-Benefit Analysis includes the information and data L&I considered in making determinations on the rules, including the rationale for the requirements discussed on pages 11-12. The final Cost-Benefit Analysis can be found here: <a href="https://www.lni.wa.gov/safety-health/safety-rules/rulemaking-stakeholder-information/ambient-heat-exposure-rulemaking#rule-drafts-and-documents">https://www.lni.wa.gov/safety-health-heat-exposure-rulemaking#rule-drafts-and-documents</a>. There is also information on supporting evidence for the rules presented during stakeholder meetings, in particular the March 17, 2022, meeting presentation found on the <a href="https://www.lni.wa.gov/safety-health/safety-rules/rulemaking-stakeholder-information/ambient-heat-exposure-rulemaking#rule-drafts-and-documents">https://www.lni.wa.gov/safety-health/safety-rules/rulemaking-stakeholder-information/ambient-heat-exposure-rulemaking#rule-drafts-and-documents</a>.

This comment did not result in a change to the adopted rule language.

## General – Opposed to Rule

The proposed rules are not workable for our company, we do not have the resources to hire additional employees to monitor and implement the rules. I figure we would have to hire 4 or 5 additional employees to comply with the rules and litigation. We have a large farm so it is hard to know what is going on with the weather in all areas during busy season. We take heat stress seriously and always encourage our employees to take breaks when necessary, but the rules L&I are putting forth are arbitrary and almost impossible to monitor. I would strongly recommend not proceeding with the rule making as proposed.

Thank you for your comment.

L&I reviewed information on heat-related illness and injuries, including Washington state workers' compensation heat-related illness and injury claims data, and national heat-related injury and illness data. Peer-reviewed research was also reviewed to understand the current best evidence on heat exposure hazards and controls, including studies regarding the relationship between outdoor heat exposure and traumatic injuries, such as falls from ladders. L&I also reviewed standards and recommendations from the American Conference of Governmental Industrial Hygienists (ACGIH) and the National Institute for Occupational Safety and Health (NIOSH), regulations from other state agencies, and guidance and enforcement polices from federal OSHA.

The rules provide flexibility in how employers closely observe employees falling under the acclimatization requirements and the during the high heat requirements.

This comment did not result in a change to the adopted rule language.

General - Noise Ordinances	Alternative work schedules conflict with local noise ordinances. The department suggests construction companies consider alternative work schedules to avoid working during the hottest part of the day. Many jurisdictions, noise ordinances will prevent work being done before 8 a.m. We propose working with local governments to allow early work on days when a company expects temperatures to exceed trigger levels. This should supersede any local ordinance if worker safety is a priority.	Thank you for your comment.  The Department of Labor & Industries has no authority for providing guidance on policy from municipal or county governments. The Department can assist employers with compliance of the outdoor heat exposure rule through our free DOSH consultation services. Please see <a href="https://lni.wa.gov/safety-health/preventing-injuries-illnesses/request-consultation/">https://lni.wa.gov/safety-health/preventing-injuries-illnesses/request-consultation/</a> for more information.  This comment did not result in a change to the adopted rule language.
General - Over regulation	In conclusion, safety laws are necessary for unsafe conditions. The first version of new rules is typically sensible and advocated by both employers and employees. After that, special interests get involved and want to go so far that the workplace becomes impossible. These rules set employers up for legal failure with rules not based on science.  The previous '21 and '22 emergency rules were those moderate rules that made sense. This round is just unjustified overkill. It's a minor claims issues that needed a little attention but not nearly what they're doing in this realm.	Thank you for your comment.  L&I reviewed information on heat-related illness and injuries, including Washington state workers' compensation heat-related illness and injury claims data, and national heat-related injury and illness data. Peer-reviewed research was also reviewed to understand the current best evidence on heat exposure hazards and controls, including studies regarding the relationship between outdoor heat exposure and traumatic injuries, such as falls from ladders. L&I also reviewed standards and recommendations from the American Conference of Governmental Industrial Hygienists (ACGIH) and the National Institute for Occupational Safety and Health (NIOSH), regulations from other state agencies, and guidance and enforcement policies from federal OSHA.  This comment did not result in a change to the adopted rule language.

General - Over regulation	As a farmer on the east side heat has always been a factor in our work. High temperatures are a regular occurrence, and a majority of the workers are accustomed to working in high temperatures. In fact workers get frustrated when we send them home for the day at 92 degrees because they want to work more and are accustomed to working hard in the heat. The rule seems to add several new requirements that may be more than necessary like medical evaluations, which could be hard legally.	Thank you for your comment.  Neither WAC 296-62-095, General Occupational Health Standards – Outdoor Heat Exposure or WAC 296-307-097, Safety Standards for Agriculture – Outdoor Heat Exposure contain a requirement to stop work at any temperature.  The adopted rule does not contain a requirement that employers perform medical evaluations. The adopted rule includes requirements that address the recognition of signs and symptoms of heat-related illness and establishing emergency procedures for getting medical attention when needed.  This comment did not result in a change to the adopted rule language.
General - Process	I would like to thank L&I for coming here today. I know that this (Yakima) was an add-on for your schedule.	Thank you for your comment.  This comment did not result in a change to the adopted rule language.
General - Process	Recommend L&I holds public hearings at a time other than 10 a.m. for more people to attend.	Thank you for your comment.  L&I appreciates the feedback regarding availability of public hearings and will consider this for future rulemakings.  This comment did not result in a change to the adopted rule language.

General – Process	KDNA public radio is not the most effective	Thank you for your comment.
Communication of	method for communication that L&I could	
Rulemaking	use. While it is used by some farmworkers,	L&I DOSH has an Education & Outreach team that works to find the most effective ways to
	it's often more elderly people who listen to	engage with stakeholders in order to get the safety message out to all who need to hear it. L&I
	the station. L&I needs to look into other	does work with several different radio stations and TV stations. L&I also has Community
	means of communicating to farmworkers	Relations Outreach staff located across the state who meet directly with workers at farms,
	and the Latino community regarding	warehouses, and community events on a regular basis. These staff provide information on rules
	rulemaking. L&I should consider holding	in place to protect workers, including the outdoor heat exposure rule, and provide information
	hearings like this after 5:00 p.m. for workers to be able to come.	on how workers may exercise their rights and advocate for their protections.
	workers to be able to come.	L&I appreciates the feedback regarding availability of public hearings and will implement some
		of the suggestions for future rulemakings.
		g-
		This comment did not result in a change to the adopted rule language.
General - PPE	These amendments must be supplemented	Thank you for your comment.
Removal for Cool	with some provisions concerning PPE and	
Down	employer retaliation. Continuing to wear	The adopted rule requires that employers train their employees on "the importance of removing
	PPE during periods when the body is	heat-retaining personal protective equipment such as non-breathable chemical resistant
	supposed to be cooling down at least partly	clothing during all breaks."
	defeats the purpose of rest periods, even in	
	the shade, and puts workers at risk. As	The cool-down rest periods are to provide the body a break both from performing work and the
	stated by NIOSH, "wearing impermeable	ambient temperature. The assumption in setting the cool-down rest periods was that workers
	clothing (e.g., PPE) effectively prevents heat	would be in a cool area doing very little to no physical activity so the body can cool and rest.
	exchange (i.e., conduction, convection,	Examples of work with very little to no physical activity are reading or writing while sitting in
	radiation, and sweat evaporation) from the	the shade or in an indoor environment with air conditioning. As such, time spent taking off and
	body to the external environment." Add a	putting on PPE is not considered time for the mandatory cool-down rest periods.
	provision stating that employees must	
	remove any heat-retaining PPE during rest	Chapter 296-360 WAC prohibits retaliation against employees for exercising their safety and
	periods. Also state that time spent by	health rights afforded under WISHA. Any employee who feels they may have been retaliated
	workers taking off and putting on their PPE	against may submit a complaint as detailed in https://lni.wa.gov/forms-publications/F416-011-
	must not be counted toward the length of	000.pdf.
	their rest periods.	
		This comment did not result in a change to the adopted rule language.

## General - Proximity

Add a proximity requirement and further definition for drinking water and shade requirements. Workers may not be able to access needed shade and drinking water they are far away. L&I should specify proximity to workers, for example 50 feet away.

Additionally, a maximum temperature should be specified for sufficiently cool drinking water; and the rule should specify that shade provided by trees or a portable bathroom structure does not qualify as adequate protection.

Thank you for your comment.

Neither the current or adopted outdoor heat rule specifies exact distances at which shade or drinking water must be present relative to the work area. Rather, drinking water must be "readily accessible at all times" and shade located "as close as practicable to the areas where employees are working." This provides flexibility to accommodate the variety of worksites across the State of Washington.

Under the existing DOSH Directive 10.15, Outdoor Heat Exposure, states the following enforcement policy regarding ready access to drinking water:

Ready access to drinking water generally means that employees can drink when thirsty and without undue delay (within a few minutes). However, in certain circumstances (e.g. performing work in restricted areas) an employee may not be able to stop working on particular tasks in order to drink. In these circumstances, the employer must have provisions in place to ensure that employees are adequately hydrated. This may include providing the opportunity for employees to drink water prior to beginning the assignment and/or limiting work time.

DOSH Directive 10.15 can be found here: <a href="https://lni.wa.gov/dA/7cc0ed3815/DD1015.pdf">https://lni.wa.gov/dA/7cc0ed3815/DD1015.pdf</a>. It is currently in the process of being updated to reflect changes under the adopted rule.

A specific temperature for drinking water was not required in the adopted rule in order to avoid the burden of employers having to measure the temperature of the water, allowing them to focus on the intent which is to avoid providing warm or hot drinking water such that it will discourage employees from drinking it. Employers may choose to follow the temperature range of 50-60°F based on NIOSH and OSHA recommendations.

The definition of shade in the rule clarifies that appropriate shade is that which "does not exposure employees to unhealthy conditions and that does not deter or discourage access or use." Shade provided by portable bathrooms structures may discourage use.

The definition of shade also clarifies that "shade may be provided by any natural or artificial means..." and that "shade is not adequate when heat in the area defeats the purpose" which is to allow the body to cool. In addition, the amount of shade present must be large enough to

		accommodate the number of employees on a meal or rest period, so they can sit in a normal posture fully in the shade. As such, shade provided by trees may be appropriate depending on whether it meets the definition and requirements in the adopted rule.
		This comment did not result in a change in the adopted rule language.
General – Proximity	Add a proximity requirement for bathrooms. With workers being required to	Thank you for your comment.
	drink more water in the heat, there will be	This adopted rule addresses outdoor heat and focuses on preventing heat-related illness (HRI).
	greater need for bathrooms. Bathrooms should be in close	Bathroom access is regulated under WAC 296-307-09518 and WAC 296-800-23020.
	proximity to the workers as well.	This comment did not result in a change to the adopted rule language.
General – Support	As a nurse, I've seen firsthand how harmful	Thank you for your comment.
for Rule	extreme heat can be towards the health and	
	safety of my patients. The risks of developing heat illness are greater when spending long periods of time outside.	This comment did not result in a change to the adopted rule language.
	These new rules will protect agricultural, construction, and other workers who labor	
	outside. Please implement the current proposed rules and continue to push for	
	even greater protections in the future.	

General – Support	I'm writing in support of the new proposed	Thank you for your comment.
of Rule	Labor & Industries heat rules, which	
	include year-round and permanent	
	protections, adjusted trigger temperatures,	This comment did not result in a change to the proposed rule language.
	and mandatory cool down breaks. I believe	
	that outdoor workers must be protected	
	from unreasonable and dangerous work	
	conditions. Protecting agricultural,	
	construction, and other workers who labor	
	outside is critical for health and safety.	
	Please implement these current proposed	
	rules, and continue to push for protections	
	for these workers in the future.	
General - Support	We strongly urges Washington state to	Thank you for your comment.
of Rule	adopt permanent comprehensive heat	
	standards for outside workers, as it has	This comment did not result in a change to the adopted rule language.
	done in an emergency capacity for the past	
	several years. According to a text message	
	survey relating to heat illness protections	
	that the UFW Foundation sent to more than	
	2,100 self-identified agricultural workers in	
	Washington, on June 29th, 2021, 40.39% of	
	farm workers shared that their employer	
	has not provided them access to shade;	
	18% were provided only one break per day;	
	and only 37% were provided two breaks.	
	And, 97% of workers said heat regulations	
	should be improved within the state of	
	Washington. Heat illnesses and deaths are	
	easily preventable. Providing workers with cool water, breaks, and shade during times	
	of extreme heat go a long way towards	
	protecting workers and improving working	

	conditions. Failure to enact these simple and basic standards is a failure to protect the lives of themen and women who feed this nation. We urge you to do the right thing and make these heat rules permanent.	
General – Support of Rule	Illness and mortality from exposure to heat is preventable with proper heat protection measures. Still, every year, outdoor workers disproportionately become sick and even die due to occupational heat exposure. Accordingly, the WSMA reiterates its support of the proposed rule and urges its passage.	Thank you for your comment.  This comment did not result in a change to the adopted rule language.
General – Support for Rule	As a family doctor, member of Washington Physicians for Social Responsibility, and concerned about the health of all workers, especially farmworkers, I thank you for andstrongly support the proposed worker Extreme Heat protections. It will be important to monitor their effectiveness, and strengthen or improve them, based on worker health and safety. It will also be important to make sure they are communicated to all affected workers and employers, in the languages and means that are most effective.	Thank you for your comment.  WAC 296-62-09530(1)(a)/296-307-09730(1)(a) states in part that employers must address their outdoor hear exposure safety program in a language that employees understand. WAC 296-62-09560(1)/296-307-09760(1) require that employee and supervisor training be in a language and manner the employee or supervisor understands.  L&I has a number of educational and training resources available at <a href="https://lni.wa.gov/safety-health/safety-training-materials/training-kits">https://lni.wa.gov/safety-health/safety-training-materials/training-kits</a> . L&I also has Community Relations Outreach staff located across the state who meet directly with workers at farms, warehouses, and community events on a regular basis. These staff provide information on rules in place to protect workers, including the outdoor heat exposure rule, and provide information on how workers may exercise their rights and advocate for their protections.
		This comment did not result in a change to the adopted rule language.