

Oregon OSHA
Rules Advisory Committees
Excessive Heat
and
Wildfire Smoke

March 4, 2021 Meeting
Introductory Rulemaking Presentation



Agenda

- Participant introductions
- Speaker introductions
- Meeting ground rules
- Rule Advisory Committee member roles
- Executive order 20-04
- Proposed meeting dates
- Future meeting goals
- Wildfire Smoke overview and Q&A
- Break
- Excessive Heat overview and Q&A

Oregon OSHA speakers

Wildfire Smoke and Excessive Heat:

Theodore (Ted) Bunch, Jr.
Technical Specialist

Wildfire Smoke:

Tom Bozicevic
Appeals and Technical Specialist

Excessive Heat:

Gary Robertson
Technical Specialist

Meeting ground rules

- Everyone participates.
- One person speaks at a time. Mute your microphone or phone when not speaking.
- Kindly come prepared and on time. The meetings will start and end on time.
- If there is something that you don't understand, please ask for clarification. If you don't understand the issue or solution, then there are probably others that also don't understand.
- Be respectful and stay on point (Wildfire Smoke vs. Excessive Heat).

Role of Rules Advisory Committee (RAC) members

- Provide constructive information.
- Provide recommendations and suggestions for rule requirement considerations within the scope, not specific rule language.
- ALL recommendations and suggestions may or may not be incorporated in the proposed rules.

Executive Order 20-04

- Issued March 10, 2020
- Directs the Oregon Health Authority (OHA) and the Oregon OSHA to jointly develop a proposal for standards to protect workers from exposures to excessive heat and wildfire smoke.
- Deadline was June 30, 2021.
- OHA requested an extension; the extension was granted until September 30, 2021.

Proposed 2021 RAC meeting dates

- March 4 and 25
- April 15
- May 6 and 27
- June 17
- July 8 and 29
- August 19
- September 9

Additional meetings may be added if needed.

Future meeting objectives

- Identify determining factors and action levels for worker protections.
- Identify engineering, administrative, and personal protection equipment (PPE) controls appropriate for action levels.
- Establish employer and employee training and instruction.
- Determine potential fiscal impacts of proposed rule requirements.

Questions on RACs or
rulemaking process?

Wildfire Smoke

Wildfire Smoke Overview

- Scope of Oregon rulemaking
- 2020 Oregon wildfires
- Air Quality Index (AQI)
- US AQI Standards
- California rule (§5141.1 Protection from Wildfire Smoke)

Scope of Oregon Wildfire Smoke rulemaking (workplaces)

Included:

- To be determined

Not included:

- Enclosed buildings or structures in which the air is filtered by a mechanical ventilation system and the employer ensures that windows, doors, bays, and other openings are kept closed to minimize contamination by outdoor or unfiltered air.
- Enclosed vehicles in which the air is filtered by a cabin air filter and the employer ensures that windows, doors, and other openings are kept closed to minimize contamination by outdoor or unfiltered air.
- Labor housing – not because housing is “indoors” but because housing is a distinct standard within our rules and already has an active rulemaking project to address housing issues

2020 Oregon wildfires

2020 Oregon wildfires

- 2,027 fires across all Oregon Department of Forestry (ODF) jurisdictions in Oregon in 2020
- 1,221,324 acres burned in 2020
- In the past 10 years the average number of acres burned on lands protected by ODF has been 41,426
- More than 13 times that amount – 551,816 acres – burned in 2020

Air Quality Index

Air Quality Index (AQI)

- The AQI is a daily index of how clean (or not) the air is.
- [AirNow](#) is a partnership of the U.S. Environmental Protection Agency, National Oceanic and Atmospheric Administration (NOAA), National Park Service, NASA, Centers for Disease Control, and tribal, state, and local air quality agencies.
- The [National Weather Service](#) also provides.
- The [Oregon Department of Environmental Quality](#) also provides.
- Some states have their own AQI e.g. [Washington](#).
- Different countries have their own air quality indices.

US AQI Standards

- [U.S. National Ambient Air Quality Standards](#) (NAAQS) are limits on atmospheric concentration of six pollutants that cause smog, acid rain, and other health hazards and are established by the United States Environmental Protection Agency (EPA) under authority of the Clean Air Act: NAAQS is applied for outdoor air throughout the country.
- The six criteria air pollutants for which limits are set in the NAAQS are ozone (O₃), atmospheric particulate matter, lead, carbon monoxide (CO), sulfur oxides (SO_x), and nitrogen oxides (NO_x).
- US Environmental Protection Agency establishes an AQI for five major air pollutants regulated by the Clean Air Act.
- Ground-level ozone, particle pollution (also known as particulate matter, including PM_{2.5} and PM₁₀), carbon monoxide, sulfur dioxide, and nitrogen dioxide.






US AQI Standards ([Table 2 of Title 40 Code of Federal Regulations, Part 58, Appendix G](#))

EPA Air Quality Index	Levels of Health Concern	Cautionary Statements	
		PM _{2.5}	PM ₁₀
0 - 50	Good	None	None
51 - 100	Moderate	None	None
101 - 150	Unhealthy for Sensitive Groups	People with respiratory or heart disease, the elderly, and children should limit prolonged exertion.	People with respiratory disease, such as asthma, should limit outdoor exertion.
151 - 200	Unhealthy	People with respiratory or heart disease, the elderly, and children should avoid prolonged exertion; everyone else should limit prolonged exertion.	People with respiratory disease, such as asthma, should avoid outdoor exertion; everyone else, especially the elderly and children, should limit prolonged outdoor exertion.
201 - 300	Very Unhealthy	People with respiratory or heart disease, the elderly, and children should avoid any outdoor activity; everyone else should avoid prolonged exertion.	People with respiratory disease, such as asthma, should avoid any outdoor activity; everyone else, especially the elderly and children, should limit outdoor exertion.
301 - 500	Hazardous	Everyone should avoid any outdoor exertion; people with respiratory or heart disease, the elderly, and children should remain indoors.	Everyone should avoid any outdoor exertion; people with respiratory disease, such as asthma, should remain indoors.

2020 Labor Day wildfires in Oregon

- Between September 10 and Sept 17, the Air Quality Index (AQI) was over 293 (very unhealthy) for six straight days in Portland, Oregon.
- The AQI was over 341 (hazardous) in both Roseburg and Sisters, Oregon between September 10 and Sept 17 (eight days).
- In Albany, Oregon, the AQI was over 219 (very unhealthy) beginning September 9th for ten straight days.

Air Quality and Outdoor Activity Guidance for Schools (Airnow.gov)

Air Quality Index	Outdoor Activity Guidance
 green GOOD	Great day to be active outside!
 yellow MODERATE	Good day to be active outside! Students who are unusually sensitive to air pollution could have symptoms.*
 orange UNHEALTHY FOR SENSITIVE GROUPS	It's OK to be active outside, especially for short activities such as recess and physical education (PE). For longer activities such as athletic practice, take more breaks and do less intense activities. Watch for symptoms and take action as needed.* Students with asthma should follow their asthma action plans and keep their quick-relief medicine handy.
 red UNHEALTHY	For all outdoor activities , take more breaks and do less intense activities. Consider moving longer or more intense activities indoors or rescheduling them to another day or time. Watch for symptoms and take action as needed.* Students with asthma should follow their asthma action plans and keep their quick-relief medicine handy.
 purple VERY UNHEALTHY	Move all activities indoors or reschedule them to another day.

Oregon School Activities Association (OSAA; 2017)

24-hr Average PM _{2.5}	Air Quality Index	5-3-1 Visibility Index	Required Actions for Outdoor Activities
16-35 µg/m ³	51 -100	5-15 Miles	Athletes with asthma should have rescue inhalers readily available and pretreat before exercise or as directed by their healthcare provider. All athletes with respiratory illness, asthma, lung or heart disease should monitor symptoms and reduce/cease activity if symptoms arise. Increase rest periods as needed.
36-55 µg/m ³	101 -150	3-5 Miles	Because they involve strenuous activity for prolonged periods of time, all outdoor activities (practice and competition) shall be canceled or moved to an area with a lower 24-hr. PM _{2.5} level or AQI. Move practices indoors if indoor venues are available in your community.
56-150 µg/m ³	151 -200	1-3 Miles	Because they involve strenuous activity for prolonged periods of time, all outdoor activities (practice and competition) shall be canceled or moved to an area with a lower 24-hr. PM _{2.5} level or AQI. Move practices indoors if indoor venues are available in your community.
>151 µg/m ³	>200	1 Mile	Because they involve strenuous activity for prolonged periods of time, all outdoor activities (practice and competition) shall be canceled or moved to an area with a lower 24-hr. PM _{2.5} level or AQI. Move practices indoors if indoor venues are available in your community.

Example: California rule (§5141.1
Protection from Wildfire Smoke)

Neighboring states to Oregon have promulgated related rules.

California rule (§5141.1 Protection from Wildfire Smoke)

- **Scope** - applies to workplaces where the current Air Quality Index (current AQI) for PM2.5 is 151 (unhealthy) or greater, regardless of the AQI for other pollutants
- **Exceptions** - Enclosed buildings or structures in which the air is filtered by a mechanical ventilation system and the employer ensures that windows, doors, bays, and other openings are kept closed to minimize contamination by outdoor or unfiltered air.
- Enclosed vehicles in which the air is filtered by a cabin air filter and the employer ensures that windows, doors, and other openings are kept closed to minimize contamination by outdoor or unfiltered air.

California rule (§5141.1 Protection from Wildfire Smoke)

- **Exceptions** (cont) - the employer demonstrates that the concentration of PM2.5 in the air does not exceed a concentration that corresponds to a current AQI of 151 ([Appendix A](#)).
- Employees exposed to a current AQI for PM2.5 of 151 (unhealthy) or greater for a total of one hour or less during a shift.
- Firefighters engaged in wildland firefighting.

California rule (§5141.1 Protection from Wildfire Smoke)

- **Communication** - the employer shall establish and implement a system for communicating wildfire smoke hazards in a form readily understandable by all affected employees.
- Informing employees of the current AQI for PM2.5 and the protective measures available to employees to reduce their wildfire smoke exposures.
- Encouraging employees to inform the employer of worsening air quality and any adverse symptoms that may be the result of wildfire smoke exposure.

California rule (§5141.1 Protection from Wildfire Smoke)

- **Training and instruction** - the employer shall provide employees with effective training and instruction ([Appendix B](#))
 - The health effects of wildfire smoke.
 - The right to obtain medical treatment without fear of reprisal.
 - How employees can obtain the current Air Quality Index (AQI) for PM2.5.
 - The requirements in Title 8, section 5141.1 about wildfire smoke.
 - The employer's two-way communication system.
 - The employer's methods to protect employees from wildfire smoke.
 - The importance, limitations, and benefits of using a respirator when exposed to wildfire smoke.
 - How to properly put on, use, and maintain the respirators provided by the employer.

California rule (§5141.1 Protection from Wildfire Smoke)

- **Control of harmful exposures to employees**
- **Engineering Controls** - The employer shall reduce employee exposure to PM2.5 to less than a current AQI of 151 (unhealthy) by engineering controls whenever feasible, for instance by providing enclosed buildings, structures, or vehicles where the air is filtered. If engineering controls are not sufficient to reduce exposure to PM2.5 to less than a current AQI of 151, then the employer shall reduce employee exposures as much as feasible.

California rule (§5141.1 Protection from Wildfire Smoke)

- **Control of harmful exposures to employees**
- **Administrative Controls.** Whenever engineering controls are not feasible or do not reduce employee exposures to PM_{2.5} to less than a current AQI of 151 (unhealthy), the employer shall implement administrative controls, if practicable, such as relocating work to a location where the current AQI for PM_{2.5} is lower, changing work schedules, reducing work intensity, or providing additional rest periods.

California rule (§5141.1 Protection from Wildfire Smoke)

- **Control by Respiratory Protective Equipment.**
- Where the current AQI for PM2.5 is equal to or greater than 151 (unhealthy), but does not exceed 500 (maximum value of 'hazardous' AQI) , the employer **shall provide respirators** to all employees for **voluntary use** in accordance with section 5144 and encourage employees to use respirators.
- Where the current AQI for PM2.5 exceeds 500, respirator use is **required**.

Questions on Wildfire Smoke?

Break time

Excessive Heat

Excessive Heat Overview

- Scope of rulemaking
- Heat related illnesses (HRI)
- Heat Illness Prevention in Outdoor Places of Employment (California)
- Outdoor heat exposure (Washington)
- Oregon OSHA's Local Emphasis Program (LEP): Preventing Heat Related Illness

Scope of Excessive Heat rulemaking (workplaces)

Included:

- Workplaces directly affected by outdoor weather conditions, including indoor workplaces such as warehouses and processing operations that do not have climate control systems that insulate them from outside weather conditions

Not included:

- Indoor workplaces where the work (hot process) or the indoor environment is itself the source of the heat (e.g., foundries, kilns, plastic injection molding, etc.).
- Labor housing – not because housing is “indoors” but because housing is a distinct standard within our rules and already has an active rulemaking project to address housing issues, which will include heat and heat stress.

Heat related illnesses (HRI)

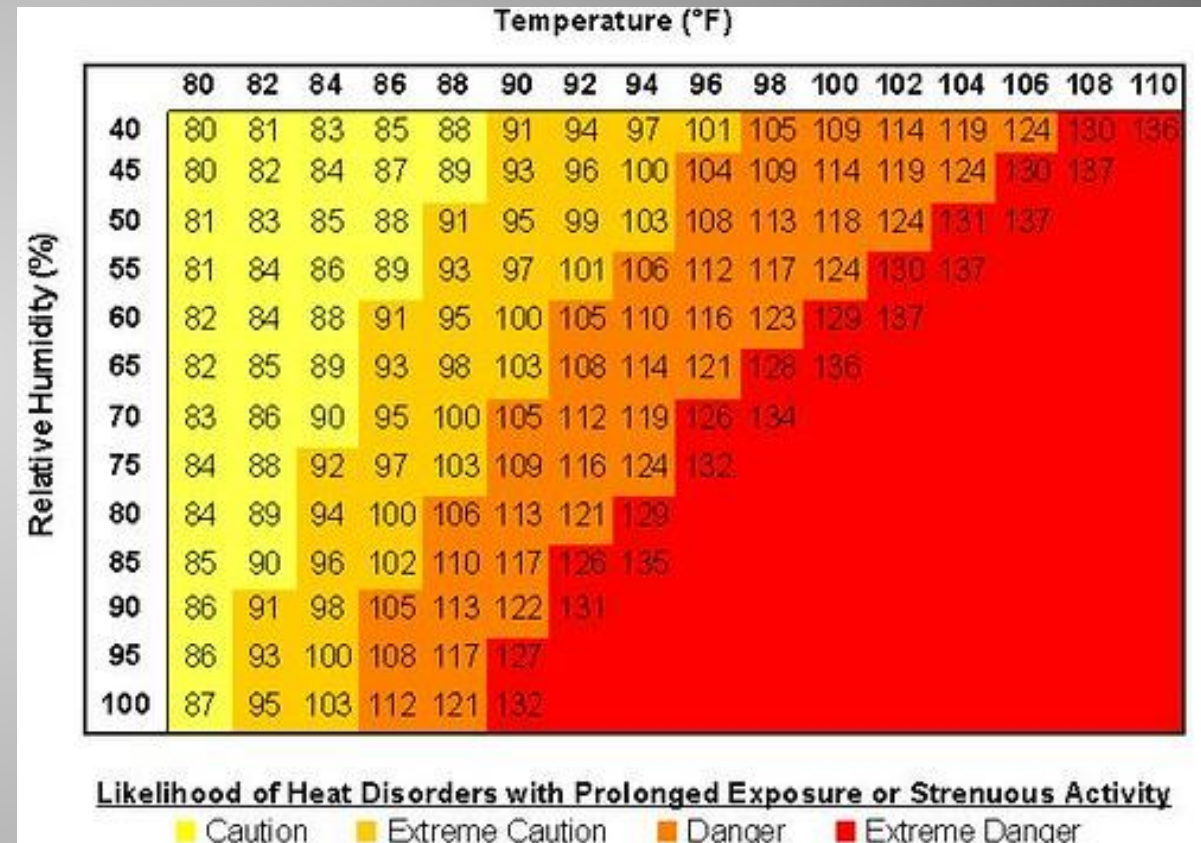
Heat related illnesses (HRI)

- **Heat Rash** is a skin irritation caused by excessive sweating during hot, humid weather.
- **Heat cramps** usually affect workers who sweat a lot during strenuous activity. Low salt levels in muscles cause painful cramps.
- **Heat syncope** is a fainting episode or dizziness. Factors that may contribute to heat syncope include dehydration and lack of acclimatization.
- **Rhabdomyolysis** is a medical condition associated with heat stress and prolonged physical exertion, resulting in the rapid breakdown, rupture, and death of muscle.
- **Heat exhaustion** is the body's response to an excessive loss of the water and salt, usually through excessive sweating.
- **Heat stroke** is the most serious heat-related illness. It occurs when the body becomes unable to control its temperature: the body's temperature rises rapidly, the sweating mechanism fails, and the body is unable to cool down. Heat stroke can cause death or permanent disability if emergency treatment is not given.

<https://www.cdc.gov/niosh/topics/heatstress/heatrelillness.html>

Heat related illnesses (HRI)

- HRIs may occur at almost any outdoor temperature.
- Individuals should be aware of their own personal risk factors that may lead to a HRI e.g. high blood pressure, BMI, hydration status, alcohol consumption, medication use, etc.



Example: Heat Illness Prevention
in Outdoor Places of Employment
(California)

Neighboring states to Oregon have promulgated related rules.

Heat Illness Prevention in Outdoor Places of Employment (California)

- **Scope** - shall apply to all outdoor places of employment.
- **Exemptions** – industries not listed (e.g. wildland firefighters; specifically high-heat procedures)
- List of industries subject to all provisions of this standard
 - Agriculture
 - Construction
 - Landscaping
 - Oil and gas extraction
 - Transportation or delivery of agricultural products, construction materials or other heavy materials (e.g. furniture, lumber, freight, cargo, cabinets, industrial or commercial materials), except for employment that consists of operating an air-conditioned vehicle and does not include loading or unloading.

Heat Illness Prevention in Outdoor Places of Employment (California)

- **Access to shade** - Shade shall be **present** when the temperature exceeds 80 degrees Fahrenheit. When the outdoor temperature in the work area exceeds 80 degrees Fahrenheit, the employer shall have and maintain one or more areas with shade at all times while employees are present that are either open to the air or provided with ventilation or cooling.
- Shade shall be **available** when the temperature does not exceed 80 degrees Fahrenheit.
- Employees shall be allowed and encouraged to take a preventative cool-down rest in the shade when they feel the need to do so to protect themselves from overheating.
- If an employee exhibits signs or reports symptoms of heat illness while taking a preventative cool-down rest or during a preventative cool-down rest period, the employer shall provide appropriate first aid or emergency response.

Heat Illness Prevention in Outdoor Places of Employment (California)

- **Shade exceptions** - Where the employer can demonstrate that it is infeasible or unsafe to have a shade structure, or otherwise to have shade present on a continuous basis, the employer may utilize alternative procedures for providing access to shade if the alternative procedures provide equivalent protection.
- Except for employers in the agricultural industry, cooling measures other than shade (e.g., use of misting machines) may be provided in lieu of shade if the employer can demonstrate that these measures are at least as effective as shade in allowing employees to cool.

Heat Illness Prevention in Outdoor Places of Employment (California)

- **High-heat procedures** - The employer shall implement high-heat procedures when the temperature equals or exceeds 95 degrees Fahrenheit.
- Ensuring that effective communication by voice, observation, or electronic means is maintained so that employees at the work site can contact a supervisor when necessary. An electronic device, such as a cell phone or text messaging device, may be used for this purpose only if reception in the area is reliable.

Heat Illness Prevention in Outdoor Places of Employment (California)

- **High-heat procedures** (cont) –
- Observing employees for alertness and signs or symptoms of heat illness. The employer shall ensure effective employee observation/monitoring by implementing one or more of the following:
 - Supervisor or designee observation of 20 or fewer employees, or
 - Mandatory buddy system, or
 - Regular communication with sole employee such as by radio or cellular phone, or
 - Other effective means of observation.

Heat Illness Prevention in Outdoor Places of Employment (California)

- **High-heat procedures** (cont) - Designating one or more employees on each worksite as authorized to call for emergency medical services, and allowing other employees to call for emergency services when no designated employee is available.
- Reminding employees throughout the work shift to drink plenty of water.
- Pre-shift meetings before the commencement of work to review the high heat procedures, encourage employees to drink plenty of water, and remind employees of their right to take a cool-down rest when necessary.

Heat Illness Prevention in Outdoor Places of Employment (California)

- **High-heat procedures** (cont) - For employees employed in agriculture, the following shall also apply:
- When temperatures reach 95 degrees or above, the employer shall ensure that the employee takes a minimum ten minute net preventative cool-down rest period every two hours.
- If the workday will extend beyond eight hours, then an additional preventative cool-down rest period will be required at the conclusion of the eighth hour of work; and if the workday extends beyond ten hours, then another preventative cool-down rest period will be required at the conclusion of the tenth hour and so on.

Heat Illness Prevention in Outdoor Places of Employment (California)

- **Emergency Response Procedures** - Ensuring that effective communication by voice, observation, or electronic means is maintained so that employees at the work site can contact a supervisor or emergency medical services when necessary.
- Responding to signs and symptoms of possible heat illness, including but not limited to first aid measures and how emergency medical services will be provided.

Heat Illness Prevention in Outdoor Places of Employment (California)

- **Emergency Response Procedures (cont)** - If a supervisor observes, or any employee reports, any signs or symptoms of heat illness in any employee, the supervisor shall take immediate action commensurate with the severity of the illness.
- If the signs or symptoms are indicators of severe heat illness (such as, but not limited to, decreased level of consciousness, staggering, vomiting, disorientation, irrational behavior or convulsions), the employer must implement emergency response procedures.
- An employee exhibiting signs or symptoms of heat illness shall be monitored and shall not be left alone or sent home without being offered onsite first aid and/or being provided with emergency medical services in accordance with the employer's procedures.

Heat Illness Prevention in Outdoor Places of Employment (California)

- **Acclimatization** - All employees shall be closely observed by a supervisor or designee during a heat wave. For purposes of this section only, “heat wave” means any day in which the predicted high temperature for the day will be at least 80 degrees Fahrenheit and at least ten degrees Fahrenheit higher than the average high daily temperature in the preceding five days.
- An employee who has been newly assigned to a high heat area shall be closely observed by a supervisor or designee for the first 14 days of the employee's employment.

Heat Illness Prevention in Outdoor Places of Employment (California)

- **Training** - Effective training in the following topics shall be provided to each supervisory and non-supervisory employee before the employee begins work that should reasonably be anticipated to result in exposure to the risk of heat illness:
- The environmental and personal risk factors for heat illness, as well as the added burden of heat load on the body caused by exertion, clothing, and personal protective equipment.
- The employer's procedures for complying with the requirements of this standard, including, but not limited to, the employer's responsibility to provide water, shade, cool-down rests, and access to first aid as well as the employees' right to exercise their rights under this standard without retaliation.
- The importance of frequent consumption of small quantities of water, up to 4 cups per hour, when the work environment is hot and employees are likely to be sweating more than usual in the performance of their duties.
- The concept, importance, and methods of acclimatization pursuant to the employer's procedures under subsection (i)(4).
- The different types of heat illness, the common signs and symptoms of heat illness, and appropriate first aid and/or emergency responses to the different types of heat illness, and in addition, that heat illness may progress quickly from mild symptoms and signs to serious and life threatening illness.

Heat Illness Prevention in Outdoor Places of Employment (California)

- **Training** (cont) - Effective training in the following topics shall be provided to each supervisory and non-supervisory employee before the employee begins work that should reasonably be anticipated to result in exposure to the risk of heat illness:
- The importance to employees of immediately reporting to the employer, directly or through the employee's supervisor, symptoms or signs of heat illness in themselves, or in co-workers.
- The employer's procedures for responding to signs or symptoms of possible heat illness, including how emergency medical services will be provided should they become necessary.
- The employer's procedures for contacting emergency medical services, and if necessary, for transporting employees to a point where they can be reached by an emergency medical service provider.
- The employer's procedures for ensuring that, in the event of an emergency, clear and precise directions to the work site can and will be provided as needed to emergency responders. These procedures shall include designating a person to be available to ensure that emergency procedures are invoked when appropriate.

Heat Illness Prevention in Outdoor Places of Employment (California)

- **Heat Illness Prevention Plan** - The Heat Illness Prevention Plan shall, at a minimum, contain:
 - Procedures for the provision of water and access to shade.
 - The high heat procedures covered in previous slides.
 - Emergency Response Procedures covered in previous slide.
 - Acclimatization methods and procedures.

Example: Outdoor heat exposure (Washington)

Neighboring states to Oregon have promulgated related rules.

Outdoor heat exposure (Washington)

- **Scope and purpose** - WAC 296-62-095 through 296-62-09560 applies to all employers with employees performing work in an outdoor environment.
- The requirements of WAC 296-62-095 through 296-62-09560 apply to outdoor work environments from May 1 through September 30, annually, only when employees are exposed to outdoor heat at or above an applicable temperature listed in Table 1.
- Outdoor Temperature Action Levels – Table 1
 - All other clothing – 89°
 - Double-layer woven clothes including coveralls, jackets and sweatshirts – 77°
 - Nonbreathing clothes including vapor barrier clothing or PPE such as chemical resistant suits – 52°

Outdoor heat exposure (Washington)

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

Outdoor heat exposure (Washington)

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

Outdoor heat exposure (Washington)

- **Drinking water** - When employee exposure is at or above an applicable temperature listed in WAC 296-62-09510(2) Table 1: (a) Employers must ensure that a sufficient quantity of drinking water is readily accessible to employees at all times employers must ensure that all employees have the opportunity to drink at least one quart of drinking water per hour.
- Employers are not required to supply the entire quantity of drinking water needed to be supplied for all employees on a full shift at the beginning of the shift. Employers may begin the shift with smaller quantities of drinking water if effective procedures are established for replenishment during the shift.

Outdoor heat exposure (Washington)

- **Responding to signs and symptoms of heat-related illness** - Employees showing signs or demonstrating symptoms of heat-related illness must be relieved from duty and provided with a sufficient means to reduce body temperature.
- Employees showing signs or demonstrating symptoms of heat-related illness must be monitored to determine whether medical attention is necessary.

Outdoor heat exposure (Washington)

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

Outdoor heat exposure (Washington)

- **Employee training** - Training on the following topics must be provided to all employees who may be exposed to outdoor heat at or above the temperatures listed in WAC 296-62-09510(2) Table 1:
- The environmental factors that contribute to the risk of heat-related illness;
- General awareness of personal factors that may increase susceptibility to heat-related illness.
- The importance of removing heat-retaining personal protective equipment such as nonbreathable chemical resistant clothing during all breaks.

Outdoor heat exposure (Washington)

- **Employee training** (cont) - The importance of frequent consumption of small quantities of drinking water or other acceptable beverages.
- The importance of acclimatization.
- The different types of heat-related illness, the common signs and symptoms of heat-related illness.
- 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.

Outdoor heat exposure (Washington)

- **Supervisor training** - Prior to supervising employees working in outdoor environments with heat exposure at or above the temperature levels listed in WAC 296-62-09510(2) Table 1, supervisors must have training on the following topics:
- The information required to be provided to employees listed in subsection (1) of this section (previous two slides).
- The procedures the supervisor must follow to implement the applicable provisions of WAC 296-62-095 through 296-62-09560;
- The procedures the supervisor must follow if an employee exhibits signs or symptoms consistent with possible heat-related illness, including appropriate emergency response procedures.
- Procedures for moving or transporting an employee(s) to a place where the employee(s) can be reached by an emergency medical service provider, if necessary.

Oregon OSHA's Local Emphasis
Program (LEP): Preventing Heat
Related Illness

Local Emphasis Program (LEP): Preventing Heat Related Illness

- **Purpose** – to inform Oregon OSHA’s enforcement staff heat stress prevention campaign
- The goal of the campaign is to prevent heat-related illnesses and deaths in Oregon by raising awareness among workers and employers about the health risks associated with working in hot environments.
- The primary focus of the campaign will be on compliance assistance and outreach among employers with indoor hot processes and employers of outdoor workers in the construction, agriculture, and forestry industries.
- Outdoor operations typically affected by hot weather include most crop production agriculture, landscape construction and maintenance, wild land firefighting, forest activities, most construction, and demolition.

Local Emphasis Program (LEP): Preventing Heat Related Illness

Elements of an effective heat illness prevention program

- Training employees about the hazards of heat, steps to prevent heat-related illnesses, how to recognize the symptoms of dehydration, and how to respond to suspected heat-related illnesses in others.
- Providing adequate amounts of cool, potable water in work areas.
- Providing employees frequent opportunities and encouragement to stay hydrated by drinking water.

Local Emphasis Program (LEP): Preventing Heat Related Illness

Elements of an effective heat illness prevention program (cont)

- Providing a cool, climate-controlled area where heat-affected employees may take their breaks and for recovery when signs and symptoms of heat-related illnesses are recognized.
- Providing adequate space in shaded areas for affected employees at hot worksites where they may take their breaks and cool off.

Local Emphasis Program (LEP): Preventing Heat Related Illness

Elements of an effective heat illness prevention program (cont)

- Implementing a work/rest regimen if necessary to keep employees safe.
- Implementing a heat acclimatization program for new employees or employees returning to work from absences of three or more days.

Local Emphasis Program (LEP): Preventing Heat Related Illness

Elements of an effective heat illness prevention program (cont)

- Acclimatization and training about health conditions aggravated by heat Implementing a work/rest regimen if necessary to keep employees safe.
- Implementing specific procedures to be followed for heat-related emergency situations and training on the first aid to be administered immediately to employees who show symptoms of heat-exhaustion or heat stroke.

Questions on Excessive Heat?

Next meeting date

March 25, 2021

1:00 PM