



Oregon

Kate Brown, Governor

Department of Consumer and Business Services
Oregon Occupational Safety & Health Division (Oregon OSHA)
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July 8, 2021

[Text of rules](#)

Adoption of Temporary Rules to Address Employee Exposure to High Ambient Temperatures

In 2021, a deadly heat event in the Pacific Northwest set record-breaking temperatures in Oregon. On June 28th, Portland International Airport reached 116 °F and other parts of the state were even hotter. This extreme hot weather may happen again, and it has made it necessary to enact protections to ensure the health and safety of workers.

Oregon OSHA had already begun a robust permanent rulemaking process, engaging over 100 stakeholders from Labor and Business interests on a Rules Advisory Committee beginning February 2021. [Executive Order 20-04](#), directed Oregon OSHA to initiate this process, and that rulemaking activity will continue. However, the unprecedented weather has highlighted the immediate risks, making it necessary to adopt a temporary rule while the permanent rulemaking process continues.

Oregon OSHA is adopting these Heat Illness Prevention rules in Division 2 - General occupational safety and health and Division 4 - Agriculture. These rules offer protections in both indoor and outdoor environments, with exceptions for heat generated from a work process (such as occurs in foundries).

When the heat index temperature in the work area equals or exceeds 80 °F, the rule provides provisions for access to shade and drinking water for workers. In addition, by August 1, 2021, the rule calls for employers to ensure that employees exposed to such conditions have training on heat-related illness and how to prevent it.

The rule specifies additional high-heat practices that employers must follow once the ambient heat index exceeds 90 °F. They must also have an emergency medical plan in place describing procedures to be followed if a heat illness happens. Lastly, employers must develop and implement effective acclimatization practices.

Please visit our website osha.oregon.gov/rules to view our adopted rules, or select other rule activity from this page.

This is Oregon OSHA Administrative Order 6-2021, adopted and effective July 8, 2021.

Oregon OSHA contacts:

For the Division 2 rule, contact Theodore Bunch, Salem Central Office @ 503-378-3272, or email Theodore.BUNCH@oregon.gov.

For the Division 4 rule, contact Gary Robertson, Salem Central Office @ 503-378-3272, or email Gary.L.Robertson@oregon.gov.

Note: In compliance with the Americans with Disabilities Act (ADA), this publication is available in alternative formats by calling 503-378-3272.

STATEMENT OF NEED AND JUSTIFICATION

A Certificate and Order for Filing Temporary Administrative Rules accompanies this form.

Department of Consumer and Business Services- Oregon OSHA
Agency and Division

437-002-0155, 437-004-1130
Administrative Rules Chapter Number

In the Matter of:

Adoption of OAR 437-002-0155 and OAR 437-004-1130 - Rules to Address Employee Exposure to High Ambient Temperatures

Rule Caption:

Rules to Address Employee Exposure to High Ambient Temperatures

(Not more than 15 words that reasonably identifies the subject matter of the agency's intended action.)

Statutory Authority: ORS 654.025(2), 654.035, 656.726(4)

Stats. Implemented: ORS 654.001 through 654.295

Need for the Temporary Rule(s):

In 2021, a deadly heat event in the Pacific Northwest set record-breaking temperatures in Oregon. On June 28th, Portland International Airport reached 116 °F and other parts of the state were even hotter. This extreme hot weather may happen again, and it has made it necessary to enact protections to ensure the health and safety of workers.

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The rule specifies additional high-heat practices that employers must follow once the ambient heat index exceeds 90 °F. They must also have an emergency medical plan in place describing procedures to be followed if a heat illness happens. Lastly, employers must develop and implement effective acclimatization practices.

Documents relied upon, and where they are available:

Oregon Executive Order 20-04 - Directing State Agencies to Take Actions to Reduce and Regulate Greenhouse Gas Emissions, available at: <https://www.oregon.gov/bcd/Documents/eo-energy-20-04.pdf>

Oregon OSHA website, Heat stress topic page: <https://osha.oregon.gov/OSHARules/pd/pd-299.pdf>

Oregon OSHA Program Directive – Local Emphasis Program (LEP): Preventing Heat Related Illness, available at: <https://osha.oregon.gov/Pages/topics/heat-stress.aspx#:~:text=Local%20Emphasis%20Program%20%28LEP%29%3A%20Preventing%20Heat%20Related%20Illness,Oregon%20OSHA%E2%80%99s%20heat%20stress%20prevention%20campaign.%20A-299%2006%2F06%2F2019>

California OSHA Heat Illness Prevention standard T8CCR 3395, available at: <https://www.dir.ca.gov/title8/3395.html>

Washington State Department of Labor & Industries General Occupational Health Standards WAC 296-62-095
Outdoor heat exposure rule, available at:
https://lni.wa.gov/safety-health/safety-rules/chapter-pdfs/WAC296-62.pdf#WAC_296_62_095

Newspaper article, Capital Press, June 29, 2021 - " Oregon OSHA investigates death of farmworker", available at:
https://www.capitalpress.com/ag_sectors/nursery/oregon-osh-a-investigates-death-of-farmworker/article_ff07025c-d942-11eb-b028-c38f285735b4.html

NIOSH [2016]. NIOSH criteria for a recommended standard: occupational exposure to heat and hot environments. By Jacklitsch B, Williams WJ, Musolin K, Coca A, Kim J-H, Turner N. Cincinnati, OH: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, DHHS (NIOSH) Publication 2016-106, available at: <https://www.cdc.gov/niosh/docs/2016-106/pdfs/2016-106.pdf>

Justification of Temporary Rule(s) (1) Describe the specific consequences that result from the failure to immediately adopt, amend or suspend the rule(s); (2) who would suffer these consequences; (3) why or how failure to immediately take rulemaking action would cause these consequences; (4) how the temporary action will avoid or mitigate those consequences.:

If Oregon OSHA does not pursue temporary adoption of rules to address employee exposure to high ambient temperatures, workers will be left without specific protections to prevent heat illness. Without explicit rules, both employers and workers may not clearly understand Oregon OSHA's expectations of what must be done to prevent heat illness. This is especially concerning given Oregon's recent record-setting heat in June 2021, and a predicted summer of high-heat and drought. The recent record-breaking heat appears to have contributed to multiple workplace hospitalizations and fatalities, underscoring the need to take action on rules to protect workers against the risk of heat illness. These rules more clearly articulate the practices to be followed to prevent heat illness and thus protect workers in the face extreme heat.



Authorized Signer

Michael D. Wood

Printed name

7/8/2021

Date



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HOUSING COST IMPACT STATEMENT

FOR ESTIMATING THE EFFECT OF A PROPOSED RULE OR ORDINANCE ON THE COST OF DEVELOPING
A *TYPICAL 1,200 SQ FT DETACHED SINGLE FAMILY DWELLING ON A 6,000 SQ FT PARCEL OF LAND.
(ORS 183.534)
FOR ADMINISTRATIVE RULES

AGENCY NAME: DCBS/Oregon OSHA

PERMANENT:

HEARING DATE:

ADDRESS: 350 Winter Street NE

CITY/STATE: Salem OR 97301-3882

PHONE: 503-947-7449

TEMPORARY:XX

EFFECTIVE DATE: July 8, 2021

BELOW PLEASE PROVIDE A DESCRIPTION OF THE ESTIMATED SAVINGS OR ADDITIONAL COSTS THAT WILL RESULT FROM THIS PROPOSED CHANGE.

PROVIDE A BRIEF EXPLANATION OF HOW THE COST OR SAVINGS ESTIMATE WAS DETERMINED.

IDENTIFY HOW CHANGE IMPACTS COSTS IN CATEGORIES SPECIFIED

Description of proposed change: (Please attach any draft or permanent rule or ordinance)

See attached Statement of Need and Justification and Certificate and Order for Filing.

Description of the need for, and objectives of the rule:

See attached Statement of Need and Justification and Certificate and Order for Filing.

List of rules adopted or amended:

ADOPT: 437-002-0155, 437-004-1130

Materials and labor costs increase or savings:

Since Oregon OSHA already expects employers to address the hazards of ambient heat in the workplace in compliance with the general provisions of the Oregon Safe Employment Act and various general Oregon OSHA rules, the implementation of the specific protocols encompassed in the rule should have only a modest impact on materials and labor costs. Given the current volatility of the construction market and the recent increases in the costs of construction materials, any increase in costs as a result of these rules is likely to be imperceptible.

Estimated administrative construction or other costs increase or savings:

Since Oregon OSHA already expects employers to address the hazards of ambient heat in the workplace in compliance with the general provisions of the Oregon Safe Employment Act and various general Oregon OSHA rules, the implementation of the specific protocols encompassed in the rule, and because the rule provides clearer guidance, Oregon OSHA does not expect this rule to have a material impact on administrative construction costs.

Land costs increase or savings:

None.

Other costs increase or savings:

None.

*Typical-Single story 3 bedrooms, 1 1/2 bathrooms, attached garage (calculated separately) on land with good soil conditions with no unusual geological hazards.

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SECRETARY OF STATE

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800 SUMMER STREET NE
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TEMPORARY ADMINISTRATIVE ORDER
INCLUDING STATEMENT OF NEED & JUSTIFICATION

OSHA 6-2021

CHAPTER 437
DEPARTMENT OF CONSUMER AND BUSINESS SERVICES
OREGON OCCUPATIONAL SAFETY AND HEALTH DIVISION

FILED
07/08/2021 9:23 AM
ARCHIVES DIVISION
SECRETARY OF STATE
& LEGISLATIVE COUNSEL

FILING CAPTION: Rules to Address Employee Exposure to High Ambient Temperatures

EFFECTIVE DATE: 07/08/2021 THROUGH 01/03/2022

AGENCY APPROVED DATE: 07/08/2021

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350 Winter Street NE
Salem, OR 97301

Filed By:
Lisa Appel
Rules Coordinator

NEED FOR THE RULE(S):

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JUSTIFICATION OF TEMPORARY FILING:

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DOCUMENTS RELIED UPON, AND WHERE THEY ARE AVAILABLE:

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Newspaper article, Capital Press, June 29, 2021 - "Oregon OSHA investigates death of farmworker", available at: https://www.capitolpress.com/recorded/article_ff07025c-d942-11eb-b028-c38f285735b4.html

NIOSH [2016]. NIOSH criteria for a recommended standard: occupational exposure to heat and hot environments. By Jacklitsch L, et al. Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health. <https://www.cdc.gov/niosh/docs/2016-106/pdfs/2016-106.pdf>

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RULES:

437-002-0155, 437-004-1130

ADOPT: 437-002-0155

RULE TITLE: Heat Illness Prevention

RULE SUMMARY: In 2021, a deadly heat event in the Pacific Northwest set record-breaking temperatures in Oregon. On June 28th, Portland International Airport reached 116 °F and other parts of the state were even hotter. This extreme hot weather may happen again, and it has made it necessary to enact protections to ensure the health and safety of workers.

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The rule specifies additional high-heat practices that employers must follow once the ambient heat index exceeds 90 °F. They must also have an emergency medical plan in place describing procedures to be followed if a heat illness happens. Lastly, employers must develop and implement effective acclimatization practices.

RULE TEXT:

(1) Scope and Application. This standard applies whenever an employee performs work activities and the heat index (apparent temperature) equals or exceeds 80 degrees Fahrenheit. It does not apply to incidental exposure that exists when an employee is not required to perform covered work activity for more than 15 minutes in any sixty-minute period, nor does it apply to the transportation of employees inside vehicles when they are not otherwise performing work. When any other applicable standard addresses other hazards that may be present, employers must comply with the provisions of that standard and this standard. Where the requirements of one standard are more restrictive than the other, employers must follow the more stringent requirements. Employers subject to other activity-specific standards, such as OAR 437-007-1300 et seq (Wildland Fire Suppression and Prescribed Fire), must comply with the standards to the degree feasible without interfering with the ability of employers and employees to complete the necessary work.

Exception: Exposure to heat that is generated only from the work process – such as occurs in foundries – is not subject to this standard. In such cases, employers must follow the requirements of OAR 437-002-0144(2).

Note: Based on guidance from federal OSHA, the National Institute for Occupational Safety and Health, and the National Oceanic and Atmospheric Administration's National Weather Service (NOAA/NWS), Oregon OSHA has determined that a workplace hazard exists whenever the heat index reaches 80 degrees (the "caution" level based on NOAA/NWS) and that a more serious hazard exists whenever the heat index exceeds 90 degrees (the "extreme caution" level based on NOAA/NWS).

Note: Employees are protected from discrimination or retaliation under ORS 654.062(5). This includes protections for actions against employees for opposing any practice forbidden under the Oregon Safe Employment Act and related statutes and rules (including this rule), making a complaint or causing any proceeding to be instituted under the Oregon Safe Employment Act, or exercising any rights under the law, including those conferred by this rule.

(2) Definitions.

(a) Acclimatization – temporary adaptation of the body to work in the heat that occurs gradually when a person is exposed to it.

(b) Drinking water – Potable water that is suitable to drink and that is cool (66°F - 77°F) or cold (35°F - 65°F). Drinking water packaged as a consumer product and electrolyte-replenishing beverages that do not contain caffeine (for example, sports drinks) are acceptable substitutes, but should not completely replace the required water.

(c) Feasibility – refers to the ability of an employer to implement any requirement in a rule. Oregon OSHA rules never prohibit work. Whether feasibility is mentioned in a provision of the rule or not, if the employer can demonstrate that it is functionally impossible to comply or if doing so would prevent completion of the work, the employer need not comply, but must take any available reasonable alternative steps to protect the employees involved.

(d) Heat Illnesses – medical conditions resulting from the body's inability to cope with a particular heat load, and includes heat cramps, heat exhaustion, heat syncope and heat stroke.

(e) Heat Index – The heat index, also known as the apparent temperature, is what the temperature feels like to the human body when relative humidity is combined with the air temperature. The heat index is calculated using equations published by the National Oceanic and Atmospheric Administration's National Weather Service. It can be readily determined using the OSHA-NIOSH Heat Safety Tool App (<https://www.cdc.gov/niosh/topics/heatstress/heatapp.html>) or the online calculator available from the National Weather Service (<https://www.wpc.ncep.noaa.gov/html/heatindex.shtml>). For the purposes of this rule, the heat index in an indoor space can be calculated by substituting the measured indoor temperature in the calculation and leaving the humidity unchanged OR by substituting both the measured indoor temperature and the measured indoor humidity.

(f) Relative humidity – the amount of water vapor present in air expressed as a percentage of the amount needed for saturation at the same temperature.

(g) Shade – blockage of direct sunlight. One indicator that blockage is sufficient is when objects do not cast a shadow in the area of blocked sunlight. Shade is not adequate when heat in the area of shade defeats the purpose of shade, which is to allow the body to cool. For example, a car sitting in the sun does not provide acceptable shade to a person inside it, unless the car is running with working air conditioning.

(3) Access to shade. Employers whose work activities are covered by this rule must establish and maintain one or more shade areas when the heat index temperature in the work area equals or exceeds 80 degrees Fahrenheit.

(a) Shade may be provided by any natural or artificial means that does not expose employees to unsafe or unhealthy conditions and that does not deter or discourage access or use. A shade area must meet the following:

(A) The shade area must either be open to the air or provide mechanical ventilation for cooling.

(B) The amount of shade present must be at least enough to accommodate the number of employees on recovery or rest periods, so that they can sit in a normal posture fully in the shade.

(C) The shade must be located as close as practical to the areas where employees are working.

(D) Shade present during meal periods must be large enough to accommodate the number of employees on the meal period that remain onsite.

(b) When the employer can demonstrate that providing access to shade is not safe or feasible in a particular situation

(for example, during high winds or when an employee is walking through range land), employers must identify and implement alternative cooling measures that provide equivalent protection.

(4) Drinking water. Employers whose work activities are covered by this rule must ensure that an adequate supply of additional drinking water is readily accessible to employees at all times and at no cost when the heat index in the work area equals or exceeds 80 degrees Fahrenheit.

(a) Employers must supply each employee enough water to enable them to consume 32 ounces per hour.

(b) 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 to replenish the water consumed during the shift.

(c) Employers must ensure that employees have ample opportunity to drink water supplied under this section.

(5) Supervisor and employee training. Beginning no later than August 1, 2021, the employer must ensure that all employees, including new employees, supervisory, and non-supervisory employees are trained in the following topics, in a language readily understood, before employees begin work that can reasonably be anticipated to expose employees to a heat index equal to or in excess of 80 degrees Fahrenheit:

(a) 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.

(b) The procedures for complying with the requirements of this standard, including, but not limited to, the employer's responsibility to provide water, provide daily heat index information, shade, cool-down rests, how to report symptoms of heat-related illness, and access to first aid as well as the employees' right to exercise their rights under this standard without fear of retaliation.

(c) The concept, importance, and methods of acclimatization.

(d) The importance of employees immediately reporting symptoms or signs of heat illness in themselves, or in co-workers.

(e) The effects of nonoccupational factors (medications, alcohol, obesity, etc.) on tolerance to occupational heat stress.

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

(6) High Heat Practices. Employers must implement the following additional high heat practices when the ambient heat index exceeds 90 degrees Fahrenheit.

(a) Employers must ensure 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.

(b) Employers must ensure that employees are observed for alertness and signs and symptoms of heat illness and monitored to determine whether medical attention is necessary by implementing one or more of the following:

(A) Regular communication with employees working alone, such as by radio, cellular phone, or other alternative means, or

(B) Create a mandatory buddy system, or

(C) Implement other equally effective means of observation or communication.

(c) Employers must designate and equip one or more employees on each worksite as authorized to call for emergency medical services, and must allow other employees to call for emergency services when designated employees are not immediately available (such a practice supplements existing requirements to ensure that emergency medical care is immediately available in all workplaces).

(d) Employers must ensure that each employee takes a minimum ten-minute preventative cool-down rest period in the shade at least every two hours, regardless of the overall length of the shift.

Note: The preventative cool-down rest period required by this paragraph may be provided concurrently with any other meal or rest period required by policy, rule or law if the timing of the preventative cool-down rest period coincides with the otherwise required meal or rest period. Except when such a rest period coincides with the existing unpaid meal

break, the preventative cool-down rest period is a work assignment and must be compensated accordingly.

(7) Emergency Medical Plan. Employers must develop and implement an effective emergency medical plan in compliance with OAR 437-002-0161 when the ambient temperature exceeds the heat index of 90 degrees Fahrenheit.

In addition to the requirements of emergency medical plan, the procedures must include and address the following:

(a) 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 if a supervisor observes, or any employee reports, any signs or symptoms of heat illness in any employee, the supervisor must take immediate action appropriate to the severity of the illness. (A) If a supervisor observes signs or an employee reports symptoms of heat illness, the employee must be relieved from duty and provided with a sufficient means to reduce body temperature. Examples include, but are not limited to: cooling blankets, cooling vests, and fans.

(B) 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), immediately implement the emergency response procedures.

(C) An employee exhibiting signs or symptoms of heat illness must be monitored and must 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.

(b) Contacting emergency medical services and, if necessary and instructed to do so by the medical professionals, transporting employees to a place where they can be reached by an emergency medical provider.

(c) Ensuring that, in the event of an emergency, clear and precise directions to the work site is provided for first responders to quickly navigate to the location of the affected worker.

(8) Acclimatization. Employers must develop and implement effective acclimatization practices when the ambient heat index exceeds 90 degrees Fahrenheit.

STATUTORY/OTHER AUTHORITY: 654.025(2), 654.035, 656.726(4)

STATUTES/OTHER IMPLEMENTED: 654.001 through 654.295

ADOPT: 437-004-1130

RULE TITLE: Heat Illness Prevention

RULE SUMMARY: In 2021, a deadly heat event in the Pacific Northwest set record-breaking temperatures in Oregon. On June 28th, Portland International Airport reached 116 °F and other parts of the state were even hotter. This extreme hot weather may happen again, and it has made it necessary to enact protections to ensure the health and safety of workers.

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(2) Definitions.

(a) Acclimatization – temporary adaptation of the body to work in the heat that occurs gradually when a person is exposed to it.

(b) Drinking water – Potable water that is suitable to drink and that is cool (66°F - 77°F) or cold (35°F - 65°F). Drinking water packaged as a consumer product and electrolyte-replenishing beverages that do not contain caffeine (for example, sports drinks) are acceptable substitutes, but should not completely replace the required water.

(c) Feasibility – refers to the ability of an employer to implement any requirement in a rule. Oregon OSHA rules never prohibit work. Whether feasibility is mentioned in a provision of the rule or not, if the employer can demonstrate that it is functionally impossible to comply or if doing so would prevent completion of the work, the employer need not comply, but must take any available reasonable alternative steps to protect the employees involved.

(d) Heat Illnesses – medical conditions resulting from the body's inability to cope with a particular heat load, and includes heat cramps, heat exhaustion, heat syncope and heat stroke.

(e) Heat Index – The heat index, also known as the apparent temperature, is what the temperature feels like to the human body when relative humidity is combined with the air temperature. The heat index is calculated using equations published by the National Oceanic and Atmospheric Administration's National Weather Service. It can be readily determined using the OSHA-NIOSH Heat Safety Tool App (<https://www.cdc.gov/niosh/topics/heatstress/heatapp.html>) or the online calculator available from the National Weather Service

(<https://www.wpc.ncep.noaa.gov/html/heatindex.shtml>). For the purposes of this rule, the heat index in an indoor space can be calculated by substituting the measured indoor temperature in the calculation and leaving the humidity unchanged OR by substituting both the measured indoor temperature and the measured indoor humidity.

(f) Relative humidity – the amount of water vapor present in air expressed as a percentage of the amount needed for saturation at the same temperature.

(g) Shade – blockage of direct sunlight. One indicator that blockage is sufficient is when objects do not cast a shadow in the area of blocked sunlight. Shade is not adequate when heat in the area of shade defeats the purpose of shade, which is to allow the body to cool. For example, a car sitting in the sun does not provide acceptable shade to a person inside it, unless the car is running with working air conditioning.

(3) Access to shade. Employers whose work activities are covered by this rule must establish and maintain one or more shade areas when the heat index temperature in the work area equals or exceeds 80 degrees Fahrenheit.

(a) Shade may be provided by any natural or artificial means that does not expose employees to unsafe or unhealthy conditions and that does not deter or discourage access or use. A shade area must meet the following:

(A) The shade area must either be open to the air or provide mechanical ventilation for cooling.

(B) The amount of shade present must be at least enough to accommodate the number of employees on recovery or rest periods, so that they can sit in a normal posture fully in the shade.

(C) The shade must be located as close as practical to the areas where employees are working.

(D) Shade present during meal periods must be large enough to accommodate the number of employees on the meal period that remain onsite.

(b) When the employer can demonstrate that providing access to shade is not safe or feasible in a particular situation (for example, during high winds or when an employee is walking through range land), employers must identify and implement alternative cooling measures that provide equivalent protection.

(4) Drinking water. Employers whose work activities are covered by this rule must ensure that an adequate supply of additional drinking water is readily accessible to employees at all times and at no cost when the heat index in the work area equals or exceeds 80 degrees Fahrenheit.

(a) Employers must supply each employee enough water to enable them to consume 32 ounces per hour.

(b) 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 to replenish the water consumed during the shift.

(c) Employers must ensure that employees have ample opportunity to drink water supplied under this section.

(5) Supervisor and employee training. Beginning no later than August 1, 2021, the employer must ensure that all employees, including new employees, supervisory, and non-supervisory employees are trained in the following topics, in a language readily understood, before employees begin work that can reasonably be anticipated to expose employees to a heat index equal to or in excess of 80 degrees Fahrenheit:

(a) 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.

(b) The procedures for complying with the requirements of this standard, including, but not limited to, the employer's responsibility to provide water, provide daily heat index information, shade, cool-down rests, how to report symptoms of heat-related illness, and access to first aid as well as the employees' right to exercise their rights under this standard without fear of retaliation.

(c) The concept, importance, and methods of acclimatization.

(d) The importance of employees immediately reporting symptoms or signs of heat illness in themselves, or in co-workers.

(e) The effects of nonoccupational factors (medications, alcohol, obesity, etc.) on tolerance to occupational heat stress.

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

(6) High Heat Practices. Employers must implement the following additional high heat practices when the ambient heat index exceeds 90 degrees Fahrenheit.

(a) Employers must ensure 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.

(b) Employers must ensure that employees are observed for alertness and signs and symptoms of heat illness and monitored to determine whether medical attention is necessary by implementing one or more of the following:

(A) Regular communication with employees working alone, such as by radio, cellular phone, or other alternative means, or

(B) Create a mandatory buddy system, or

(C) Implement other equally effective means of observation or communication.

(c) Employers must designate and equip one or more employees on each worksite as authorized to call for emergency medical services, and must allow other employees to call for emergency services when designated employees are not immediately available (such a practice supplements existing requirements to ensure that emergency medical care is immediately available in all workplaces).

(d) Employers must ensure that each employee takes a minimum ten-minute preventative cool-down rest period in the shade at least every two hours, regardless of the overall length of the shift.

Note: The preventative cool-down rest period required by this paragraph may be provided concurrently with any other meal or rest period required by policy, rule or law if the timing of the preventative cool-down rest period coincides with the otherwise required meal or rest period. Except when such a rest period coincides with the existing unpaid meal break, the preventative cool-down rest period is a work assignment and must be compensated accordingly.

(7) Emergency Medical Plan. Employers must develop and implement an effective emergency medical plan in compliance with OAR 437-004-1305 when the ambient temperature exceeds the heat index of 90 degrees Fahrenheit. In addition to the requirements of emergency medical plan, the procedures must include and address the following:

(a) 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 if a supervisor observes, or any employee reports, any signs or symptoms of heat illness in any employee, the supervisor must take immediate action appropriate to the severity of the illness.

(A) If a supervisor observes signs or an employee reports symptoms of heat illness, the employee must be relieved from duty and provided with a sufficient means to reduce body temperature. Examples include, but are not limited to: cooling blankets, cooling vests, and fans.

(B) 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), immediately implement the emergency response procedures.

(C) An employee exhibiting signs or symptoms of heat illness must be monitored and must 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.

(b) Contacting emergency medical services and, if necessary and instructed to do so by the medical professionals, transporting employees to a place where they can be reached by an emergency medical provider.

(c) Ensuring that, in the event of an emergency, clear and precise directions to the work site is provided for first responders to quickly navigate to the location of the affected worker.

(8) Acclimatization. Employers must develop and implement effective acclimatization practices when the ambient heat index exceeds 90 degrees Fahrenheit.

STATUTORY/OTHER AUTHORITY: 654.025(2), 654.035, 656.726(4)

STATUTES/OTHER IMPLEMENTED: 654.001 through 654.295