

DOSH DIRECTIVE

Department of Labor and Industries
Division of Occupational Safety and Health
Keeping WA workers safe.

10.15 OUTDOOR HEAT EXPOSURE ENFORCEMENT PROCEDURES

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I. Purpose

This directive establishes statewide DOSH enforcement policy for WAC 296-62-095 through 296-62-09560, Outdoor Heat Exposure.

II. Scope and Application

- A. This directive applies to all DOSH staff and operations statewide. It replaces all previous directives, instructions and guidance on this issue, whether formal or informal. In the event any direction in this WRD differs or conflicts with the DOSH Compliance Manual, the instructions and guidance contained in this directive take precedence.
- B. This directive applies to all employers with employees who perform work in an outdoor environment and who are covered by the scope and purpose of the rule. See WAC 296-62-09510 (1) through (4).

III. Background

Heat-related illness (HRI) is a well recognized hazard in the outdoor work environment. According to the U.S. Department of Labor, Bureau of Labor Statistics, nationally there were 44 deaths¹ and 960 cases of occupational HRI² in the United States in 2006. In two years, 2005-2006, Washington State

¹ Bureau of Labor Statistics. The National Census of Fatal Occupational Injury, 2006. US Department of Labor, Washington DC.

² Bureau of Labor Statistics. Survey of Occupational Injury and Illness, 2006. US Department of Labor, Washington DC.

experienced three heat-related occupational fatalities. In the last twelve years there have been more than 580 workers requiring medical attention for heat-related illness. HRI includes heat fatigue, heat rash, fainting, heat cramps, heat exhaustion, and heat stroke. Excessive heat exposure is also linked to injuries from falls, equipment operation accidents and other on-the-job incidents due to fatigue, dizziness, and disorientation.

Washington workers having outdoor heat exposure are at risk for HRI. The outdoor heat exposure rule has been adopted to establish simple, common sense, requirements for addressing the heat hazard at or above prescribed temperatures between May 1st and September 30th of each year and where temperatures are at or above those specified in Table 1 of WAC 296-62-09510.

During all times of the year and regardless of temperature, employers through requirements in either general rules or vertical standards, are required to have Accident Prevention Programs, supply potable drinking water, have first aid trained staff and/or appropriate access to medical assistance, and must train employees on the hazards identified for their respective workplaces. The Outdoor Heat Exposure rule has been put in place to help ensure that the necessary elements of a hot weather worker protection program are in place.

IV. Enforcement Policy

A. Citing and classifying violations.

Only the following sections and requirements of the outdoor heat exposure rule may be cited. Other sections or aspects of the rule such as WAC 296-62-09510 which pertain to scope and purpose or WAC 296-62-09520 which provides definitions must not be cited. Additionally, this directive designates which sections of the outdoor heat exposure rule must be classified “serious” and cited as such; associated penalties must be issued. For purposes of calculating penalties for serious violations cited under the outdoor heat exposure rule, good faith and history shall be considered “average” unless sufficient documentation is provided to justify an alternate calculation. Severity and probability will be 6 and 3 respectively unless an alternate choice is justified and documented. These default values are appropriate since heat-related illness can cause death or serious physical harm and the probability of a problem occurring is reasonably likely in the absence of proper hydration and subsequent appropriate response if needed.

- Between May 1st through September 30th of each year, the outdoor heat exposure rule applies to all employers with employees performing work in an outdoor environment when employees are exposed to temperatures at or above those in Table 1 of WAC 296-62-09510(2). An exception is provided for those with “incidental” exposure as defined in WAC 296-62-09510(3).
- Employees occupying transportation road vehicles, such as delivery vans, trucks or other vehicles, are not considered to be “working

outdoors” while driving or occupying the vehicles if the vehicles are able to maintain airflow throughout the vehicle by use of fans, vents, open windows, etc.

- Work performed within outdoor containment areas such as on lead removal projects on bridges, or where an employee must enter a manhole, tunnel, or outdoor vault are considered “outdoor” work activities for purposes of the outdoor heat exposure rule.
- Reasonable application of Table 1 with respect to clothing or PPE types should be based on using the temperature category that best fits the garment in use. For example, light weight mesh high visibility safety vests and similar clothing are not substantive enough to use the “double layer” temperature category; use category 1 for regular clothing at 89 degrees instead. Common extra attire such as rain gear and sweatshirts are considered “double layer”; do not apply the non-breathable clothing category and instead use category 2 at 77 degrees. When considering whether or not clothing is “double layer”, do not count underwear as a layer.
- If an employer implements all elements of the outdoor heat exposure rule, he/she can avoid either making temperature measurements or identifying temperature at their respective worksites by other appropriate means.
- On days expected to have temperatures at or above the action levels in Table 1 of WAC 296-62-09510(2), employers must determine if the requirements of the outdoor heat exposure rule apply. If the need to comply is not presumed as in the bullet point above, employers are expected to determine (e.g. measure) the temperature at the actual worksite at least every two hours. **Note:** as indicated in the rule, temperature tracking or record keeping is not required.
- DOSH CSHO’s must include documentation that worksite temperature was at or above the temperature(s) listed in Table 1 of WAC 296-62-09510(2) by use of temperature instruments (check with Laboratory if you need assistance) or by obtaining documented evidence that such temperature(s) was met or surpassed at the worksite for use in documenting a serious violation.
- Consultation staff must categorize identified hazards as general or serious using the same citation policy defined for compliance inspections.

Citation Policy

WAC Section 296-62-	Subject	Classification
09530(1)(a)	Employer responsibility	General
09540(1)(a)	Drinking water	Serious w/penalty
09540(1)(b)	Drinking water	Serious w/penalty
09550(1)	Responding to heat-related illness	Serious w/penalty
09550(2)	Responding to heat-related illness	Serious w/penalty
09560(1)	Employee training	General
09560(1)(a)	Environmental factors	General
09560(1)(b)	Personal factors	General
09560(1)(c)	Importance of removing PPE	General
09560(1)(d)	Frequent consumption of water	General
09560(1)(e)	Acclimatization	General
09560(1)(f)	Information on heat-related illnesses	General
09560(1)(g)	Importance of reporting HRI	General
09560(2)	Supervisor training	General
09560(2)(a)	Information provided employees	General
09560(2)(b)	Procedures to follow	General
09560(2)(c)	Response procedures for HRI	General
09560(2)(d)	Moving/transporting employee	General

B. Employer and Employee Responsibility - WAC 296-62-09530

All employers affected by this rule must identify and address outdoor heat exposure as a hazard in their written accident prevention program (APP) when employees are exposed at or above temperatures listed in Table 1 of WAC 296-62-09510(2). A separate written program is not required although an employer may choose to have a separate written program. As part of their safety program, employers are required to encourage employees to frequently consume water or other appropriate beverages; employees must be interviewed to determine if the employer has fulfilled this obligation.

Employers will be cited under WAC 296-62-09530(a) between May 1st and September 30th of each year when the temperature action levels are met. The normal provisions of an APP are in effect all twelve months of the year. If WAC 296-62-09530 cannot be cited and an employer's employees are reasonably expected to be exposed to the action temperatures of Table 1, the employer must

address their employee protection program in their regular APP. CSHO's will cite the applicable APP regulation as appropriate if employees are reasonably likely to be exposed at or above the temperatures listed in Table 1 of WAC 296-62-09510(2) at any time during the year.

Employees have an obligation to monitor their own personal factors and need to consume sufficient liquids to stay hydrated; employees must be interviewed to determine if they understand their responsibilities. This can be done when employee training is evaluated through interviews.

C. Drinking Water WAC 296-62-09540

Drinking water as defined in WAC 296-62-09520(3) is critical to preventing HRI and keeping employees hydrated; all violations of this section will be cited as serious with appropriate penalties calculated. The compliance emphasis is to ensure the employer provides sufficient water or other appropriate beverages when temperatures reach or exceed those in Table 1, so that each employee has:

- Ready access to drinking water at all times;
- The opportunity to drink at least one quart of drinking water per hour; and
- Drinking water or other appropriate beverages which are suitable to drink (WAC 296-62-09520). [Note: "suitable" includes cool enough to be readily drinkable. Water or other beverages left sitting in the sun will easily become too hot to drink.]
- The quantity of drinking water required for an entire shift is not required to all be provided at the beginning of the shift. However, the employer must have sufficient procedures in place to replenish the water supply throughout the day, as needed.

Employees may voluntarily bring their own drinking water or other appropriate beverages to work, however, the employer is still responsible for ensuring that a sufficient quantity of drinking water is available at the worksite so that each employee has the opportunity to drink at least one quart per hour. Compliance with this section will be documented through employee interview(s), review of the employer's program and practice, as well as observation of drinking water supplied. Drinking water may be supplied from on-site potable water sources such as a hose bib on the outside of a residence, or other water outlet if the water is potable, single use, or personal containers are used, or a sanitary water container. Multi-use cups and or use of hoses to deliver water are unsanitary and not acceptable. Water sources used for drinking water at worksites should have backflow preventers.

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.

D. Responding to Signs and Symptoms of HRI – WAC 296-62-09550

All violations of this section will be cited as serious and have a penalty.

- Both employers and employees must be interviewed to determine awareness of response procedures and how to secure medical assistance in an emergency.
- Employees with HRI signs or demonstrating symptoms must be removed from duty and immediate action taken to reduce body temperature.
- Employees affected by HRI (see above bullet) must be monitored by the employer to determine if medical attention is necessary.

E. Information and Training - WAC 296-62-09560

All required training for employees and supervisors must be provided prior to exposure to temperatures at or above those listed in Table 1 of WAC 296-62-09510(2). Employee interviews, review of training records if available, review of training materials and information used by an employer, and interviews of employers are to be used to determine compliance with this section. Employee and supervisor training must be provided in a language the employee or supervisor understands.

F. File Review and Tracking

Because the outdoor heat exposure rule is new, it is important that it is applied and enforced in a consistent, fair and equitable manner. The following guidance shall be used by compliance and consultation staff, as appropriate, to ensure effective and meaningful application of the rule:


- Compliance staff must select in WIN, the Special Tracking Information box, “HRI Inspection Outdoor” when evaluating a worksite under the outdoor heat exposure rule.
- Consultation staff must select in WIN, the Emphasis Information box, “HRI Evaluation Outdoor” when providing an onsite consultation pertaining to the outdoor heat exposure rule.
- Regional Compliance and Regional Consultation Managers must review and approve all inspection and consultation reports in their respective regions prior to the reports being submitted to the Central Office through WIN.
- Prior to a compliance report being issued to an employer, there must be a final review conducted on each report by the Office of the Statewide Compliance Manager.

- During compliance and consultation field activities or regional and central office review of these activities or associated reports, if technical assistance is needed, the technical industrial hygienist in the Central Office for outdoor heat exposure must be contacted.

G. Questions or Problems – Who to Call

If questions, problems or concerns arise, compliance officers and consultants should contact their respective supervisors and beyond that, their regional managers, as appropriate.

For further technical information or assistance with the rule or with this directive, please contact Terry Walley, Industrial Hygienist, at (360) 902-5478 or wate235@lni.wa.gov. You also may review policy and helpful outreach information on the DOSH website (<http://www.lni.wa.gov/Safety/>).

Approved: 
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