



August 15, 2022

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Carmyn,

Washington State Department of Transportation, WSDOT, would like to make the following comments on the Ambient Heat Exposure rulemaking update (WAC 296-62-095, discussion draft of August 2022). It is WSDOT's goal to prevent illnesses and we are in support of efforts to eliminate and reduce hazards to employees.

We will first answer the three questions for which you solicited comments. We have additional comments we hope you will consider as part of making an effective rule.

Q. What is important to take into consideration when establishing work/rest cycles for high heat procedures?

A. Employers should take into consideration the following: temperature in the area, intensity of work, or other essential criteria as supported by the best available scientific evidence.

Q. What methods have you used to reduce exposure to heat stress that you have found successful and when (e.g., scheduling work at off peak hours, lower work intensity, use of swamp coolers)?

A. Our experiences in changing scheduled hours of work to times that the temperatures are more conducive to perform the work activity are the most valuable tool that we have available to us. Job rotation, availability of shade and suitably cool water, availability of air-conditioned vehicles for the employees to lower core body temperatures, are also valuable tools for us to be able to use.

Q. What concerns do you have regarding worker protection from heat?

A. How is LNI going to determine the appropriate rest period (as proposed in the discussion draft under WAC 296-62-09530 [5])? What data are you going to use to develop these criteria? "Taking preventative cool-down rest periods when they feel the need to do so to prevent from overheating." This statement is very open ended and is not objective. Objective, and well-established scientific criteria is needed. Objective and reliable criteria ensures employers have fair notice for compliance, better assures employee safety, and seems essential for required cost and technical feasibility requirements for rule promulgation as well as cost benefit analysis required under the Administrative Procedures Act. Undefined, subjective criteria undermines all such goals. Data as to when the employee must take a rest or cool down period would be more appropriate.

Supplemental comments:

Please provide evidence indicating the existing permanent rule is insufficient and requires additional rules. Does DOSH have evidence of heat related illnesses when employers were in complete compliance with existing rules? If there are instances where existing rules are insufficient, are they limited to certain sectors of industry and if so do they need to be applied to all sectors of industry?

**For example, in WAC 296-62-095 (3):** If an employee is performing a work activity for 20 minutes outdoors above 90 degrees and then spends 40 minutes inside of air-conditioned facility or vehicle the rule is indicating that the employee would be subject to the entirety of the rule. The idea behind the rule is to allow the employees core body temperature to reduce to normal levels and that is why they are to take breaks when they are working constantly outdoors but there is no accounting for the transient outdoor worker.

**Definition of Engineering controls:** Are you indicating that air conditioning is the only acceptable engineering control that can be applied? Or are you indicating that for example (e.g., air conditioning not i.e.)

**Definition of acclimatized** is vague and ambiguous, how is the employer to determine if the employee meets this definition when vague statements such as “depending on the amount of recent work in the heat and individual factors” are inserted into the definition with no explanation as to their meaning. What kind of work?, at what intensity level?, at what temperatures?, what individual factors?

**Definition of risk factors for heat related illness** is vague and ambiguous, how is the employer to determine if the employee meets this definition when vague statements such as, “and personal factors (e.g., age, medications, physical condition, pregnancy)” are inserted into the definition without explaining their meaning. How does age effect the worker, is there a too young or too old threshold? What medications would place the employee at higher risk to heat illness? How does an employer determine an employee’s physical condition as it pertains to this rule? At what point does an employee’s physical condition remove them from the work they are supposed to be doing? Is LNI indicating that pregnant employees at any point in their pregnancy cannot work in the heat?

**Definition of outdoor environment:** By limiting acceptable engineering controls to air conditioning only, you are preventing the employer from establishing other feasible control methods. (Swamp coolers, misting fans, etc.) We have a number of sheds that utilize swamp coolers in the vehicle repair shop are you indicating that this is not an adequate engineering control?

**Definition of drinking water:** Please provide a definition for suitably cool water. Provide the evidence for the necessity, as well as evidence of the technical and economic feasibility.

**Definition of shade:** “A blockage of direct sunlight. One indicator that blockage is sufficient is when objects do not cast a shadow in the area of blocked sunlight.

Shade is not adequate when heat in the area of shade defeats the purpose of shade, which is to allow the body to cool. For example, a car sitting in the sun does not provide acceptable shade to a person inside it, unless the car is running with air conditioning.”, How is a pop-up tent different from a car sitting in the sun with the windows down? In both cases the employee is provided shade. If the employee was in a vehicle with the windows up and no air conditioning of course that would make sense. If it is 110°F outside is shade provided by a pop-up tent sufficient as it may not allow the body to cool?

We hope that these comments help you to provide a more effective rule that is easily understood and not open to interpretation due to vague statements.

Sincerely,

John Gancel  
WSDOT Safety Program Manager

cc: Corey Lane, CIH, WSDOT  
Steve Rockwell, OR Safety Manager  
James McWiggins, NCR Safety Manager