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# OSHA Provides Regulatory Framework for Heat Injury and Illness Prevention Standard

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Though heralded as one of the Occupational Safety and Health Administration's (OSHA) top priorities, the introduction of a heat injury and illness prevention standard has yet to happen. According to some reports, OSHA has yet to reach the halfway point in the process of establishing a heat standard.

## Quick Hits

- OSHA's regulatory framework for a heat injury and illness prevention standard provides an outline of potential options for various elements of a proposed heat standard in all industries where the agency has jurisdiction in indoor and outdoor workspaces.
- OSHA "envisions a programmatic standard that could require employers to create a plan to evaluate and control heat hazards in their workplace," but that would also allow employers to customize their plans.
- The framework also provides an indication of what OSHA may be looking at when it conducts an inspection where heat illness or injury is an issue.

OSHA recently released a document it described as providing "an outline of potential options for the various elements of a proposed [heat standard]." In the document, OSHA stated that it "envisions a programmatic standard that could require employers to create a plan to evaluate and control heat hazards in their workplace" while allowing employers "flexibility … to customize the plan to their workplace."

OSHA identified several options for control measures, based on the National Institute for Occupational Safety and Health (NIOSH) Criteria for a Recommended Standard, state plan standards, and comments/feedback from stakeholders. Many of these options look familiar to anyone who does business in a state plan state with a heat standard.

According to the document, the heat standard could cover both indoor and outdoor work in all industry sectors where OSHA has jurisdiction. Exceptions to the standard could include:

- “[s]hort duration exposures” (similar to what at least one state plan currently does);
- “[e]mergency operations”;
- work in climate-controlled locations where heating, ventilation, and air conditioning (HVAC) systems maintain a temperature at or below 80°F; and
- “[s]edentary or light activities performed indoors.”

A heat standard would likely require that employers create written heat injury and illness prevention programs containing several elements:

- “[p]rocedures to identify when heat hazards exist for employees”;
- “[p]rocedures for implementing engineering controls”;
- “[p]rocedures for implementing administrative controls”;
- procedures specific to high heat (above a certain higher threshold that triggers action under the plan);
- procedures for responding to an employee suffering from heat illness or injury;
- training for employees and managers; and
- a selection of employees or managers to oversee the implementation of the heat injury and illness prevention plan.

A few potential new factors could also be included in the heat standard, such as options for dry climates (e.g., lower than 30 percent relative humidity) and for employees who wear vapor-impermeable personal protective equipment (PPE). Similarly, while indoor heat illness and injury prevention standards are relatively new to the few state plans that have adopted heat standards, the new rule might include an indoor heat element.

“Employers could be required to conduct additional monitoring or a new hazard assessment whenever a change in production, process, equipment, or controls has the potential to increase heat exposure,” OSHA stated in the document.

Additionally, the document suggests that OSHA may be considering two “heat triggers”: an “initial heat trigger” and a “high-heat trigger.” The former would trigger the heat illness and injury prevention program whereas the latter would trigger “high-heat procedures.” The following table is included in the document:

| | Initial Heat Trigger | | | High-Heat Trigger | | |
|---|---|---|---|---|---|---|
| | Ambient | Heat Index | WBGT | Ambient | Heat Index | WBGT |
| When using a forecast | 78°F or higher | 76°F or higher | N/A | 86°F or higher | 83°F or higher | N/A |
| When measuring on-site | 82°F or higher | 80°F or higher | ACGIH AL or NIOSH RAL | 90°F or higher | 87°F or higher | ACGIH TLV or NIOSH REL |

*Source: Occupational Safety and Health Administration*

*Note:* The values in the table represent the minimum values currently being considered. The table also contains the following additional initialisms and acronyms: WBGT (“wet bulb globe temperature”); ACGIH (“American Conference of Governmental Industrial Hygienists”); AL (“action

limit"); TLV ("threshold limit value"); "RAL" ("recommended alert limit"); and REL ("recommended exposure limit").

According to the document, if an employer relies solely on the weather forecast, "OSHA [may] requir[e] controls to be implemented for the whole day when the forecasted daily maximum heat index or ambient temperature is at or above the forecast heat triggers." If on-site monitoring is used, "OSHA is considering requiring that controls be implemented only for the hours of the day when the monitored heat index or ambient temperature is at or above the heat triggers."

OSHA indicated that for both indoor and outdoor work sites, the provision of cool-down areas would be part of the heat standard. Other options under consideration as alternatives include the provision of shaded and air-conditioned spaces, though how those spaces are to be distinguished from cool-down areas is a bit vague.

For indoor spaces where there are heat-generating sources present in the work area, OSHA is considering a requirement that employers reduce employee exposure to heat generated by those sources by:

- installing local exhaust ventilation at the sources of that heat;
- erecting shielding or barriers that reflect or absorb heat and/or radiant heat;
- isolating the source of radiant heat from the workforce;
- increasing the distance of employees from those sources; and
- Modifying hot processes or other operations.

Administrative controls considered by OSHA include making available "suitably cool" drinking water as close to the work area as practicable, encouraging employees to drink water, and implementing the other regimen of actions seen in state plan heat injury and illness standards, including:

- "[a]ltering work schedules";
- "[w]hen the high-heat trigger … is met or exceeded, holding a pre-shift meeting or notifying employees of the following:
    - [h]igh-heat procedures are in effect
    - [e]ncouraging employees to drink plenty of water
    - [r]eminding employees of their rights to take rest breaks as needed
    - [l]ocation[s] of shade and/or cool-down areas, breaks, and water for mobile work sites
    - [d]esignating employees to call 9-1-1 in a medical emergency"; and
- "[i]n indoor environments, restricting access to excessively high heat areas (e.g., those with ambient temperatures at or above 120°F) by only allowing employees that have been trained to access these areas and placing warning signs outside or near these areas."

Acclimatization to heat of both new employees and employees returning to these environments would also be required.

OSHA indicated that the standard might "require employers to consider heat hazards specific to their work site and evaluate the potential use of cooling PPE (such as cooling vests and wetted garments)." Likewise, employers could be required to reconsider the use of certain types of PPE that trap heat.

Employee training, medical treatment, and heat-related emergency response procedures will likely be components of a heat standard. The emergency response components will likely impact other

employer responsibilities, including maintenance of emergency response plans that provide a method for employees to clearly identify where help is needed when calling first responders.

Finally, the proposed standard will likely include a variety of recordkeeping requirements, the majority of which would carry the obligation of maintaining them for the duration of an employee's employment, plus thirty years as exposure records.

Whether OSHA is able to finalize a heat standard before President Biden's first term expires remains to be seen, but this document provides employers with a bit of a road map for where OSHA may be going. It also provides a bit of a road map as to what OSHA may be looking at when it does an inspection where heat illness or injury is an issue.



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