

OCTOBER 2, 2024 | STATE OSH PLANS

Maryland OSHA's New Heat Stress Standard

By [Anthony Casaletta](#)

Big news out of Maryland this week, and no we're not talking about the Raven's win over the undefeated Buffalo Bills. Rather, the Maryland Occupational Safety and Health Administration ("MOSH") is now the first State Plan on the East Coast, to develop and enact a specific [Heat Stress Standard](#), which went into effect on, September 30, 2024.

As of August 2024, only five States – California, Minnesota, Oregon, and Washington – had promulgated specific heat standards. State standards differ in the scope of coverage. For example, Minnesota's standard covers only indoor workplaces. Washington's standard covers only outdoor workplaces. California similarly covered only outdoor workplaces until June of this year, when it promulgated a companion indoor heat illness standard, like the State of Oregon. State rules also differ in the methods used for triggering protections against hazardous heat. Minnesota's standard considers the exertion-level of the work being performed (light, moderate, or heavy) and provides Wet Bulb Globe Temperature thresholds based on the type of work activity. California's heat-illness prevention protections go into effect at an ambient temperature of 80°F. Washington's rule also relies on ambient temperature readings combined with considerations for the breathability of workers' clothing. Oregon's rule sets a trigger based on heat index at 80°F. California, Washington, Colorado, and Oregon all have additional protections that are triggered by high heat. However, they differ as to the trigger for these additional protections. In California and Colorado, high heat protections are triggered at an ambient temperature of 95°F (only applicable in certain industries). In Washington and Oregon, high heat protections are triggered at an ambient temperature or heat index of 90°F.

All the State standards require training for employees and supervisors, and all the State standards, except for Minnesota's, require employers to provide at least one quart of water per hour for each employee, and implement emergency response plan, acclimatization protocols, and provide access to shaded or cooled break areas.

Federal OSHA is not too far behind on their implementation of its Heat Injury and Illness Prevention in Outdoor and Indoor Work Settings standard. In July of this year, OSHA released its unofficial version of its Indoor and Outdoor Heat Illness Prevention Notice of Proposed Rulemaking ("NPRM"). An official version was published in the Federal Register on [August 30, 2024](#). The regulated community has 120-days to submit public comments to OSHA's rulemaking docket which is open until December 30, 2024. Please see our recent [blog article](#) on OSHA's Notice of Proposed Rulemaking being published in the Federal Register.

Maryland Occupational Safety and Health's New Heat Stress Standard

In 2020, the Maryland Legislature passed a [bill](#) directing MOSH to establish a heat illness rule by October 1, 2022. MOSH issued a draft rule in 2022, and after new leadership was appointed to the Department of Labor and Industries, a newly drafted proposed rule was developed and published in the Maryland Register on July 26, 2024 and finalized last week. Here is a detailed overview of the key elements of the MOSH rule:

Scope of MOSH's Heat Stress Standard

MOSH's rule is broad in scope, as it applies to any employer with employees whose employment activities, indoor or outdoor, expose employees to a heat index in the work area that equals or exceeds 80°F. MOSH has limited exceptions in which the rule does not apply to emergency operations and essential services, incident exposures when an employee is not required to perform work activities for more than 15 consecutive minutes per hour, and buildings, structure, and vehicles that have a mechanical ventilation system or fan that maintains the heat index below 80 degrees.

Like other states, the rule also addresses specific requirements related to written program elements, temperature monitoring, water provisions, access to shade, acclimatization, high heat protocols, emergency response, training, and recordkeeping.

Temperature Monitoring

Covered employers must monitor the heat index throughout the work shift in area(s) where employees perform work using one of the following methods:

- direct measurement of the temperature and humidity at the same time and location in the area(s) where employees perform work;
- use of local weather data reported by the National Weather Service or other recognized source to determine the heat index; or
- use of the National Institute for Occupational Safety and Health's Heat Safety Tool application to determine the heat index.

For employers whose employees work in buildings and structures that do not have a mechanical ventilation system must directly measure the temperature and humidity at the same time and location in area(s) where employees perform work.

Written Program

Employers must develop and implement a written heat illness prevention program that is available and accessible to employees. The written program must address each of the following elements:

- how sufficient amounts of drinking water will be provided;
- how employees will be provided sufficient opportunities and encouragement to stay hydrated by drinking water;
- how to recognize the symptoms of heat-related illnesses, including heat exhaustion and heat stroke;
- how to respond to suspected heat-related illnesses, including heat exhaustion and heat stroke;

- how employees will be provided with sufficient time and space to rest in a shaded or cool, climate-controlled area(s) to cool off;
- how the employer will implement rest break schedules as necessary;
- how the employer will consider environmental conditions, workload, required clothing, personal protective equipment, and alternative cooling and control measures when determining rest break schedules;
- how employees will be encouraged to take rest breaks as needed to prevent heat-related illness;
- how employees will be trained on the hazards of heat exposure and the necessary steps to prevent heat-related illnesses;
- the use and maintenance of alternative cooling and control measures used to manage heat;
- procedures for heat acclimatization;
- procedures for high heat conditions; and
- emergency response plan and protocols

Initial Heat Trigger Requirements

When the heat index is 80°F (initial heat trigger), employer must provide:

- ***Water***

Employers must provide drinking water at no cost to exposed employees as close to the work areas as practicable and make available at least 32 ounces of drinking water per hour to each exposed employee per workday.

- ***Break Areas***

Employers must provide shaded areas to exposed employees as close to the work area as practicable. Shaded areas must be:

- Outside, open and exposed to air on at least three sides;
- Prevent contributing heat sources from reducing effectiveness;
- Be sufficiently sized for the number of employees utilizing the shaded area;
- Be arranged in a configuration that allows employees to sit in normal posture; and
- Accommodate the removal and storage of personal protective equipment during periods of use.

If it is infeasible or unsafe to create outdoor shade, employers must implement alternative cooling and control measures that provide equivalent protection to shade.

- ***Acclimatization***

Employers will be required provide for acclimatization of exposed employees for a period of up to 14 days when an employee is newly exposed to heat in the workplace and whenever an employee returns to work after seven or more consecutive days of absence from work.

Employers must develop and implement an acclimatization schedule which complies with one of the following:

- a schedule which gradually increases exposure time over a 5-14 day period, with a maximum 20% increase each day;
- a schedule which uses the current National Institute for Occupational Safety and Health's recommendations for acclimatization; or
- a schedule which uses a combination of gradual introduction and alternative cooling and control measures that acclimate an employee to the heat.

The gradual acclimatization schedule for new workers shall be in writing and consider the following elements:

- acclimated and unacclimated employees;
- the environmental conditions and anticipated workload;
- the impact of required clothing and personal protective equipment to the heat burden on employees;
- the personal risk factors that put an employee at a higher risk of heat-related illness;
- re-acclimatizing employees as necessary; and
- the use of alternative cooling and control measures

Employers must also monitor employees during the acclimatization period for signs of heat-related illnesses through regular communication via phone or radio; a buddy system; or other effective means of observation.

High Heat Protocols

In addition to all the requirements above under the initial heat trigger, employers must implement high heat procedures when the heat index reaches or exceeds 90 degrees Fahrenheit in the area where the work is being performed. Employers must provide (unless effective heat management and protection from heat illness through alternative cooling/control measures is feasible):

- **Mandatory Rest Breaks:**
 - a minimum rest period of 10 minutes for every 2 hours worked where employees are exposed to a heat index above 90 and below 100 degrees Fahrenheit; and
 - a minimum rest period of 15 minutes for every hour worked where employees are exposed to a heat index above 100 degrees Fahrenheit; or
 - a rest period as provided for in the current National Institute for Occupational Safety and Health recommendations for work and rest schedules to manage heat exposures.
- **Observation:**
 - Employers must also monitor employees for signs of heat-related illness when the high heat procedures are in effect with regular communications via phone or radio; a buddy system; or other effective means of observation.

The rest breaks can coincide with scheduled rest or meal breaks, but they must be taken in the shade.

If an employer utilizes alternative cooling and control measures to address heat, such that the rest breaks above are not required, the measures must always be readily available and accessible to employees when work is being performed and be documented in writing.

Emergency Response

Employers must develop an emergency response plan that includes procedures for:

- ensuring effective and accessible means of communication at all times at the worksite to enable an employee to contact a supervisor or emergency medical services;
- responding to signs and symptoms of possible heat-related illness in employees;
- monitoring and providing care to employees who are exhibiting symptoms of heat-related illness; and
- contacting emergency medical services and, if necessary, transporting employees to a location accessible to emergency medical services.

Training

Employers must provide initial heat stress training to employees and supervisors in a language they can understand prior to an employee's first exposure to heat. Employees and supervisors must also be re-trained annually prior to exposure and immediately following any incident involving a suspected or confirmed heat-related illness.

The training must include at least the following:

- the work and environmental conditions that affect heat illness;
- the personal risk factors that affect heat illness;
- the concept, importance, and methods of acclimatization;
- the importance of frequent consumption of water and rest breaks in preventing heat-related illness;
- the types of heat illnesses, signs and symptoms of heat illnesses, and the appropriate first aid and emergency response measures;
- the importance of and procedures for employees immediately reporting to the employer signs and symptoms of heat illness; and
- the employer's procedures and the requirements for complying with MOSH's heat illness rule.

Recordkeeping

Employers must maintain training records for one year from the date on which the training occurred. The training records must include the following information:

- names of the persons trained
- dates of the training sessions; and
- a summary or outline of the content of the training sessions.

We at Conn Maciel Carey LLP are here to assist you. [Do not hesitate to reach out](#) with any questions or for

further guidance on MOSH’s new Heat Stress Standard and other State-Plan and Federal OSHA developments!