

OSHA's Heat Injury and Illness Prevention Rulemaking

OSHA Directorate of Standards and Guidance

April 24, 2024

ACCSH Meeting

Occupational Heat Exposure

- Heat is the leading cause of death among all weather-related phenomena in the U.S.
- Excessive heat can cause a number of adverse health effects, including heat stroke and even death, if not treated properly
- Workers in both outdoor and indoor work settings are at risk

Occupational Heat Injuries, Illnesses, & Fatalities

- According to the Bureau of Labor Statistics (BLS):
 - Exposure to environmental heat resulted in 479 fatalities of U.S. workers from 2011-2022, an average of 40 fatalities per year in that time period
 - There have been 33,890 estimated work-related heat injuries and illnesses involving days away from work from 2011-2020, an average of 3,389 per year in that time period
- Statistics for occupational heat-related illnesses, injuries, and fatalities are likely vast underestimates for several reasons, including:
 - The varying nature of heat-related symptoms, including their impact on decision-making abilities
 - The definition of heat-related illnesses often varies by jurisdiction, leading to inconsistent reporting by medical professionals
 - Datasets heavily rely on self-reported outcomes from employers and employees

Heat Rulemaking Background

- On October 27th, 2021, OSHA published an Advance Notice of Proposed Rulemaking (ANPRM) for Heat Injury and Illness Prevention in Outdoor and Indoor Work Settings
- The ANPRM announced that OSHA is initiating the rulemaking process to consider a heat-specific workplace standard
- A standard specific to heat-related injury and illness prevention would more clearly set forth employer obligations and the measures necessary to effectively protect employees from hazardous heat
- OSHA received 965 unique comments, available for viewing at www.regulations.gov (Docket No. [OSHA-2021-0009](https://www.regulations.gov/docket/OSHA-2021-0009)).

Heat Rulemaking Background

- On May 3, 2022, OSHA held a virtual public stakeholder meeting on the Agency's Initiatives to Protect Workers from Heat-Related Hazards
- OSHA established a Heat Injury and Illness Prevention Work Group of the National Advisory Committee on Occupational Safety and Health (NACOSH) to help NACOSH provide recommendations on guidance materials and potential elements of a heat injury and illness prevention standard
 - On May 31, 2023, the Work Group presented its recommendations on potential elements of a proposed heat injury and illness prevention standard for consideration by the full NACOSH committee. After deliberations, NACOSH submitted its recommendations to OSHA.
 - Recommendations are available at www.regulations.gov (Document No. [OSHA-2023-0003-0012](https://www.regulations.gov/document/OSHA-2023-0003-0012))

SBREFA

- In August 2023, OSHA convened a Small Business Advocacy Review (SBAR) Panel, in accordance with the requirements of the Small Business Regulatory Enforcement Fairness Act (SBREFA), to hear comments from small entity representatives (SERs) on the impacts of a heat-specific standard
- The SBAR Panel was comprised of members from the Small Business Administration (SBA) Office of Advocacy, OSHA, and the Office of Management and Budget's Office of Information and Regulatory Affairs (OIRA)
- The SBAR Panel listened to SERs who would potentially be affected by a heat-specific standard

Materials for SERs

- SERs were sent the following materials for review:
 - Regulatory framework with potential options for various elements of a heat-specific standard
 - Background document containing a technical summary of the regulatory framework, industry profile, and estimate of unit costs
 - Open-ended questions to consider
- Each SER was asked to participate in a small-group videoconference with the SBAR Panel to discuss any concerns or other input relating to how these measures might affect the operations of their workplace
- OSHA hosted six 3-hour small-group SBAR Panel videoconferences with SERs in September 2023

SBAR Panel

- After hearing oral comments and reviewing written comments from the SERs, the SBAR Panel issued a Final Report to OSHA on November 3, 2023, thereby concluding SBREFA.
- The Final Report contains findings and recommendations on the following topics:
 - Flexibility and Scalability
 - Heat Triggers
 - Supporting Data
 - Recordkeeping
 - Injury and Illness Documentation
 - Temperature Measurement
 - Rest Breaks
 - Water
 - Acclimatization
 - Solo and Mobile Workers
 - Training
 - Heat Injury and Illness Prevention Programs
 - Cost/Time Estimates
 - Engineering and Administrative Controls
- The Final Report, as well as all materials shared with the SERs, is available on the OSHA Heat Injury and Illness SBREFA web page (www.osha.gov/heat/sbrefa) and at www.regulations.gov (Docket No. [OSHA-2021-0009](https://www.regulations.gov/docket/OSHA-2021-0009))

Heat Rulemaking Stages

Stage 1	Conducting Preliminary Rulemaking Activities
Stage 2	Developing the Proposed Rule
Stage 3	Publishing the Proposed Rule
Stage 4	Developing and Analyzing the Rulemaking Record
Stage 5	Developing the Final Rule
Stage 6	Publishing the Final Rule
Stage 7	Post-Promulgation Activities

- OSHA is currently in Stage 2 of the rulemaking process, Developing the Proposed Rule.

Basic Structure of a Heat Injury and Illness Proposed Rule

- OSHA envisions a programmatic standard that could require employers to create a plan to evaluate and control heat hazards in their workplace
- Potential elements of a heat standard:
 - Scope and application
 - Definitions
 - Heat Injury and Illness Prevention Plan (HIIPP)
 - Identifying heat hazards
 - Requirements at or above initial heat trigger
 - Requirements at or above high heat trigger
 - Heat illness and emergency response and planning
 - Training
 - Recordkeeping
 - No cost to workers

Scope and Application

- The standard could cover outdoor and indoor work in any/all General Industry, Construction, Maritime, and Agriculture sectors where OSHA has jurisdiction
- OSHA is considering possible exclusions for:
 - Short duration exposures
 - Emergency response
 - Indoor sites kept below 80°F
 - Telework
 - Indoor sedentary activities

Heat Injury and Illness Prevention Plan (HIIPP)

- All policies and procedures necessary to comply with the standard
- Designated heat safety coordinator
- Employee input
- Review and evaluation

Possible Requirements for Identifying Heat Hazards

- Outdoor work
 - Monitoring heat conditions by:
 - Tracking local heat index forecasts, or
 - Measuring heat index or wet bulb globe temperature (WBGT)
- Indoor work
 - Identifying work areas with hazardous heat exposure
 - Developing and implementing a monitoring plan
 - Seeking employee input

Initial Heat Trigger and High Heat Trigger

- Possible Heat Index Triggers:
 - **Initial heat trigger** - a heat index of 80°F or a WBGT equal to the NIOSH Recommended Alert Limit (RAL)
 - **High heat trigger** - a heat index of 90°F or a WBGT equal to the NIOSH Recommended Exposure Limit (RAL)

Possible Requirements at or above the Initial Heat Trigger

- Drinking water
- Break areas
- Indoor work area controls
- Acclimatization plan
- Rest breaks (if needed)
- Effective communication

Possible Additional Requirements at or above the High Heat Trigger

- Rest breaks (minimum 15 minutes every 2 hours)
 - Unpaid meal break may also serve as a rest break
- Observation/supervision
- Hazard alert

Heat Illness and Emergency Response and Planning

- Steps for an employer to take if an employee is experiencing signs and symptoms of a heat-related illness
- A heat emergency response plan with specific details to efficiently respond in a heat emergency

Possible Training and Recordkeeping Requirements

- Initial and annual refresher training for supervisors, heat safety coordinators, and employees
- Supplemental training after:
 - Changes in exposure to heat hazards
 - Policy and procedure changes
 - Occurrence of heat injury or illness at the work site
- Recordkeeping requirement specifying data retention policies for monitoring

State Rules and ANSI/ASSP A10.50-2024

- Several States have heat rules or proposed rules
- ANSI/ASSP A10.50 -2024 was approved on January 4, 2024
- OSHA is considering all of the above when developing the NPRM

Summary

Provision	All Covered Employers (See Scope)	At or Above Initial Heat Trigger	At or Above High Heat Trigger
Identifying heat hazards	●	●	●
Heat illness and emergency response procedures	●	●	●
Training for employees and supervisors	●	●	●
Heat injury and illness prevention plan(HIIPP)	●	●	●
Recordkeeping	●	●	●
Drinking water		●	●
Break area		●	●
Indoor work area controls		●	●
Acclimatization plan for new or returning workers		●	●
Rest breaks (if needed)		●	●
Effective communication means with employees		●	●
Rest breaks (minimum 15 min every 2 hours)			●
Supervisor or buddy system to observe for signs and symptoms			●
Hazard alert			●

Request for Recommendation

OSHA requests that ACCSH provide a recommendation on how the agency should proceed with respect to construction work if it publishes a Notice of Proposed Rulemaking (NPRM) on heat injury and illness prevention.

Next Steps

- OSHA is currently developing language and completing analysis required to issue an NPRM
- Updates on the rulemaking process will be provided on OSHA's heat rulemaking web page, available at:

www.osha.gov/heat-exposure/rulemaking

THANK YOU!