



Date: December 23, 2024

Re: Docket ID No. OSHA–2021–0009, Heat Injury and Illness Prevention Notice in Outdoor and Indoor Work Settings

TO: Mr. Andrew Levinson, MPH, Director, Directorate of Standards and Guidance, Occupational Safety and Health Administration (OSHA), U.S. Department of Labor

FROM: Jill Rosenthal, Director of Public Health Policy  
Rosa Barrientos-Ferrer, Senior Policy Analyst  
Kate Petosa, Administrative and Operations Associate, Energy and Environment

On behalf of the Center for American Progress (CAP), we submit these comments in support of the proposed rulemaking on Heat Injury and Illness Prevention Notice in Outdoor and Indoor Work Settings. CAP – an independent, nonpartisan policy institute dedicated to improving the lives of all Americans – is committed to advancing policies that strengthen health, promote equity, and tackle environmental and racial injustice. We commend efforts of the U.S. Department of Labor’s Occupational Safety and Health Administration to protect the rising number of workers who are exposed to extreme heat conditions that cause injury, illness, and death across the United States.

Extreme heat is the [leading cause of weather-related deaths](#) in the United States. It poses significant [risks](#) for indoor and outdoor workers from [heat-related illness](#), including heat exhaustion and heat stroke; [occupational injuries](#) such as burns and falls; and risks [exacerbation of preexisting conditions](#), such as asthma, kidney disease, and heart disease. These well-documented health consequences also have [economic impacts](#), including [lost worker productivity](#), [increased health care costs](#) and [worker compensation claims](#), and [threats to workers’ financial stability](#) from heat-related illnesses that lead to work absences. [Heat-induced declines in labor productivity](#) are rising as extreme heat worsens, averaging \$100 billion annually in the United States, and potentially reaching \$200 billion by 2030 and \$500 billion by 2050.

As the proposed standard notes, heat-related illness has been recognized as an occupational hazard for [decades](#). In fact, health and safety experts first recommended a federal heat standard more than 50 years ago. The National Institute for Occupational Safety and Health (NIOSH), charged under the Occupational Safety and Health Act of 1970 with recommending occupational safety and health standards, developed its first criteria document that analyzed the hazards and methods of control of occupational extreme heat risks in 1972. Yet despite statutory authority and compelling scientific evidence, including the [increasing frequency of extreme heat conditions](#) and greater exposure of workers to unsafe conditions, no heat-specific federal law exists to protect workers in America from extreme heat.

State action is insufficient to protect workers from the hazards of extreme heat. Although seven states (California, Colorado, Maryland, Minnesota, Nevada, Oregon, and Washington) have already taken action to protect a subset of workers, these states [vary in the scope of protections offered](#). For example, some state occupational heat standards cover only outdoor workers. In the twenty-three states and the District of Columbia, where there are no state occupational safety plans, workers are reliant on federal government protections. And in Florida and Texas, legislators have blocked communities from enacting local regulations that offer stronger worker protection than the state. The significant risk of extreme heat in the workplace and the ability of a standard to substantially reduce the risk demonstrates the need for federal action.

The proposed rule is a strong standard that will save lives and protect the health of both outdoor and indoor workers, many of whom face health and safety risks from lack of or inadequate access to shade, water, air conditioning, and other cooling mechanisms. The inclusion of several heat trigger levels; requirements for written heat injury and illness prevention plans developed with worker input to evaluate and control heat hazards; mandatory worker training and education on signs of heat stress; employer mitigation policies; the right to protections in the language that workers understand and at appropriate literacy levels; and paid rest breaks at high-heat triggers are critical components of the proposal.

CAP recommends the following modifications to the proposed standard to clarify and ensure that the standard offers appropriate protections for workers:

### **1. Heat injury and illness prevention plans for all employers**

CAP supports OSHA's proposed requirement for employers to develop and implement a written work site heat injury and illness prevention plan (HIIP) to address heat hazards. However, the proposed standard excludes workplaces with fewer than 20 employees and sedentary work activities.

Because employees working for small employers are at equal or greater risk of heat-related illness as any other employee, small employers should not be excluded from this requirement. In construction—identified as a core industry with high exposure to heat-related hazards—the majority of enterprises have [fewer than 5 employees](#), as highlighted in a 2021 study. Excluding smaller workplaces also disproportionately impacts workers in low-wage jobs, who are frequently employed in settings with extreme heat risks and already face limited workplace protections. It is essential for the standard to adopt [Regulatory Option One](#), ensuring that all workplaces, regardless of size, implement a written HIIP to protect workers, prioritizing worker safety over cost savings and acknowledging that the long-term costs of heat-related injuries significantly outweigh the costs of compliance.

In addition, the standard should not exempt indoor or outdoor sedentary work activities. Even sedentary work at high heat can be a hazard to workers, for instance for workers who are exposed to prolonged sun exposure. Given the hazards, CAP recommends that settings with sedentary workers be required to fulfill the obligations of developing a HIIP, identifying potential heat exposure areas and implementing monitoring plans, and providing control measures at an identified high heat trigger.

## 2. Identification of a heat hazard using Wet Bulb Globe Temperature (WBGT)

CAP recommends that proposed heat triggers be linked to the [National Weather Service WetBulb Globe Temperature](#) (WBGT). Unlike the heat index, which includes only temperature and humidity and is measured in the shade, WBGT takes into account wind speed and sun exposure, including solar radiation, in calculating heat. The heat index may underestimate risk; according to the National Weather Service, full sunshine can increase the heat index up to [15 degrees Fahrenheit](#).

CAP also recommends that triggers for employer responses to rising temperatures be based on on-site actual heat measurement throughout the day as opposed to estimates or forecasts from websites or weather stations, since heat fluctuates and is dependent on factors such as ground surface composition (for example, an employee working on an asphalt surface will experience a hotter working environment as asphalt absorbs and retains heat, than one working on a bright concrete surface that reflects heat). As stated in the proposed rule, among the consensus heat safety recommendations, experts identified environmental heat monitoring using measurements as close to the work site as possible to protect workers and to avoid productivity losses associated with occupational heat stress. With this in mind, identification of heat hazards based on WBGT at the worksite would be more accurate than heat index forecasts.

## 3. Acclimatization

OSHA has found that most worker [fatalities](#) from heat illness occur within the first three days of working in a hot environment. As a result, it is critically important to protect new and returning indoor and outdoor workers from hazardous heat with an acclimatization period, which allows the body to build tolerance to working in the heat. CAP supports OSHA's proposal to require employees to follow acclimatization procedures for the first week of work for all new employees and for returning employees who have been away from work for more than two weeks.

The proposed rule provides two options for acclimatization: implementing a plan that includes high-heat requirements at the initial heat trigger or following a schedule that gradually increases new and returning workers' exposure to heat over time. However, it may be ineffective to use an initial heat trigger to assess the need to implement a heat acclimatization protocol because heat exposure may depend on a variety of factors in addition to the [heat index](#), such as wind speed and sun exposure, work load, and [individual factors](#) such as wearing heavy protective clothing or working in areas with limited ventilation. Therefore, CAP encourages OSHA to require the implementation of heat acclimatization rather than the option to forgo a heat acclimatization protocol by incorporating controls for the high heat trigger during workers' first week. To ensure workers are protected through effective acclimatization, CAP recommends OSHA require employers follow the [20% Rule](#) to gradually increase the workload and heat exposure to build workers' tolerance to heat. The 20% Rule directs employers to begin with a 20 percent exposure on the first day, increasing by no more than 20 percent each following day, reaching full acclimatization over the course of two weeks.

#### **4. Monitoring heat risk using a buddy system**

OSHA should consider removing the monitoring exemption for employers that would rather assume their workplace is at or above both heat triggers. Instead, OSHA should require all employers to monitor for signs and symptoms of heat-related illness at the initial heat trigger, which is particularly critical for new or returning workers who have not acclimatized to the heat. In addition, a formal buddy system for workers to monitor for signs and symptoms of heat-related risks should be mandated at the initial heat trigger rather than the high heat trigger.

#### **5. Paid breaks**

CAP supports OSHA's proposal to provide paid breaks for workers under high-heat conditions and urges the agency to extend this protection to all employees, including non-union and piece rate workers, who are currently [most vulnerable](#) to extreme heat health hazards. A paid break standard would ensure consistent protection, address existing gaps, and safeguard worker health, especially in states without heat standards or paid break laws. It aligns with fair labor standards that require compensation for safety procedures critical to core job duties, such as putting on and taking off protective gear.

However, we are concerned that OSHA's current rule only mandates paid rest breaks at the higher temperature threshold and allows for breaks "as needed" at the lower temperature, placing too much reliance on employers' voluntary actions. This approach, which depends heavily on employer "encouragement" for workers to take breaks, may not be sufficient to protect workers from heat-related illnesses.

In line with the National Institute for Occupational Safety and Health [recommendations](#), we recommend that OSHA require more frequent breaks, including at the lower temperature threshold, and longer rest breaks as heat conditions increase to prevent heat-related illnesses. In addition, heat safety plans and worker training materials should clearly emphasize that workers have the right to take rest breaks and that employers must support them in taking these breaks, particularly as temperatures rise.

These measures will help ensure all workers are protected from extreme heat and their rights are fully communicated and respected.

#### **6. Training materials - language accessibility**

Ensuring language accessibility in training materials and written signs is critical for maintaining safety across the workforce. Studies have shown that failure to account for language equity can lead to [workers' lack of understanding of critical safety protocols](#). Language accessibility includes addressing the diverse educational backgrounds, literacy levels, and language skills of employees as outlined by the OSHA proposed rule.

While we commend efforts to expand training materials and presentations to all languages spoken in the workplace, it is equally important to include and acknowledge Indigenous languages. In industries such as farmwork, Indigenous workers make up a significant portion of the labor force. A 2017-2018 National Agricultural Worker Survey (NAWS) found that [6 percent of farmworkers](#), located primarily in California, are Indigenous. These workers often speak languages such as [Mixteco, Zapoteco, and Triqui](#), and a small number spoke Nahuatl or Chatino. However, these are not the only Indigenous languages spoken by workers. Employers should make efforts to identify and address the specific languages present in the workforce. To protect worker safety, particularly in relation to extreme heat, OSHA must ensure that these languages and the needs of Indigenous workers, who are often overlooked, are explicitly recognized and addressed in their safety protocols. OSHA should consider using the [Susan Harwood Training Grant program](#) to fund education for workers who are likely to be cautious about exercising their rights to a safe and healthy work environment.

## **7. Emergency response**

Treatment for heat stroke must [restore normal body temperature](#) within 30 minutes of collapse to avoid cell damage. While the proposed rule requires immediate action to reduce body temperature in the case of an emergency, the language should be clarified to require the use of effective whole body cooling equipment such as cold water immersion tubs and tarps with ice and water. It should also specify that employers need to provide the equipment to treat heat illnesses and heat emergencies. This is particularly critical in rural areas where it may take more than 30 minutes for emergency services to arrive.

CAP greatly appreciates the opportunity to comment on the proposed rule, and it strongly supports its implementation to protect indoor and outdoor workers from heat-related illnesses and injury. By enacting this rule, the Department of Labor will protect the health and safety of many American workers exposed to dangerous extreme heat on the job.

If you have any questions or would like to speak further about this issue, please reach out to Madeline Shepherd, Senior Director of Government Affairs, at [mshepherd@americanprogress.org](mailto:mshepherd@americanprogress.org).