University of New Mexico

May 29, 2025

Dear Occupation Health and Safety Bureau:

The University of New Mexico submits this comment on the proposed Heat Injury and Illness Prevention Rule. UNM is committed to the health of all New Mexicans and appreciates the newly considered heat rule as a step to protecting New Mexicans at work. As a large employer with operations that require work in high heat conditions, I submit the following proposed changes and requests for clarification regarding OHSB's proposed rule.

Proposed Changes

1. Heat Index and Wet-Bulb Globe Temperature

The heat index chart in Appendix I, Table 2, from the National Weather Service (NWS), is not generally applicable to much of New Mexico. New Mexico is a generally arid and therefore has low relative humidities. The chart only includes relative humidities 40% or greater, however it is quite rare specifically in the Albuquerque metro for temperatures to reach over 100°F with relative humidities above 10% and this is generally true across the state. At these low relative humidities, the heat index temperature is below the measured dry bulb temperature, reflecting the cooling effects of low humidities. Furthermore, using the full heat index would match what is reported by the NWS and other weather providers, creating consistency in communication of hazards. Table 2 in Appendix I should include a table that incorporates low relative humidity.

Additionally, the rule should allow employers to the use of the wet-bulb globe temperature (WBGT) as an alternative to the heat index with adjustments for direct sun. The WBGT is suggested by the National Institute of Occupational Safety and Health (NIOSH) in their Criteria for a Recommended Standard1 as the most accurate way to measure external heat load. By considering the temperature, humidity, sun, and wind speed, WBGT accurately reflects the external heat load on the body. Furthermore, New Mexico often has low humidity and high wind conditions that allow the human body to cool more effectively while working, naturally lowering body temperature and therefore the potential risk of heat illness. Lastly, measuring WBGT on site is relatively inexpensive with devices costing as little as $50 each. For these reasons the rule should allow for the use of WBGT in lieu of heat index.

2. Work and Rest Schedules - Appendix I Table 3

This rule should use a simple work and rest schedule that does not depend on work rate. The proposed work and rest schedules are complex and difficult to implement. If implemented as proposed, determining the work rate of an individual would be either guess work or quite onerous due to the lack of definitions for work rate levels or normal work clothing. Furthermore, the table is taken from the NIOSH Criteria for a Recommended Standard1 which is based on the amount of energy a worker is expending during an activity in watts. Measuring work rate in watts is impossible to implement at scale and therefore an impractical basis for a work rest schedule. In contrast,

Occupational Safety and Health Administration (OSHA) proposed a federal rule2 which rejected the NIOSH table in favor of a much simpler work rest schedule, due largely to implementation concerns. Furthermore, other states have forgone a work rate-based rest schedule in favor of an implementable work rest schedule. Work/rest schedules used in California, Oregon, and Washington, require 10 minutes of rest every 2 hours of work when conditions exceed the high heat trigger. NMED should follow the lead of California, Oregon, Washington, and Federal OSHA in using a work rest schedule that is easy to understand and implement.

3. Intermittent Schedules

UNM field researchers, media production crews, and repeater tower repair teams intermittently work in the heat. For example, in any given hot season, they may spend one (1) full day a month in the field collecting data, producing media, or repairing towers. The current acclimatization schedule would require these workers to spend four days each month acclimatizing before they could spend a single full day in the field. Full days are required for researchers to ensure data validity when samples must all be collected in a single 24hr period or for time sensitive operations such as live animal studies. Media crews are often on a tight timeline to report a story or finish production for scheduled release. Tower repair crews must work quickly to repair towers and get them working when they malfunction regardless of acclimatization. Creating an allowance for intermittent workers in high heat conditions to bypass acclimatization or use an alternative method would allow these types of crews to maximize their limited field time without burden.

4. Target industries with highest risk

The revised rule could mirror those in California or Colorado, only focusing on high-risk industries such as agriculture while allowing low risk work to avoid acclimatization and work rest schedules that would impact productivity. The OSHB has access to OSHA 300 logs which would detail heat injuries at work. By analyzing this information, the rule could be targeted to industries that regularly have heat injuries without burdening lower risk operations.

Clarifications

1. Section 11.5.7.10(A)(b). "A work schedule must be no more than 20% of the usual duration of work in the heat on day one and a no more than 20% increase on each additional day."
The description of the acclimatization schedule is not clear. The 20% increase each day could refer to either 20% over the previous day or 20% of the usual duration of work in the heat. This creates drastically different timelines for an employee to begin a full day in the heat, either five (5) or twelve (12) days. Please clarify this section of the rule. We suggest using the work schedule wording in the proposed federal OSHA rule2:
Gradual acclimatization to heat in which the employee's exposure to heat is restricted to no more than: "20% of normal work shift exposure duration on the first day of work, 40% on the second day of work, 60% on the third day of work, and 80% on the fourth day of work"

2. Acclimatization Frequency

It is unclear when acclimatization methods are required by the controls section. Many of UNM's employees that would be subject to this rule work outdoors during the spring when the temperature is gradually increasing. Please clarify if this type of de facto acclimatization schedule is allowable

and if it needs to be recorded every year as part of the required record keeping.

I would like to thank the Occupational Health and Safety Bureau for its work keeping New Mexicans safe and healthy. Thank you for your consideration of these comments.

Sincerely,

Casey B. Hall
Director of UNM Environmental Health & Safety

References:
1. United States, National Institute for Occupational Safety and Health, "Criteria for a Recommended Standard: Occupational Exposure to Heat and Hot Environments". DHHS (NIOSH) Publication Number 2016-106. (Feb. 2016).
2. United States, Occupational Safety and Health Administration. "Heat Injury and Illness Prevention in Outdoor and Indoor Work Settings." 89 Fed. Reg. 70,698 (Aug. 30, 2024).

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