May 18, 2023

David Thomas, Chair
Occupational Safety and Health Standards Board
2520 Venture Oaks Way, Suite 350
Sacramento, CA 95833

By email: oshsb@dir.ca.gov

Re: Heat Illness Prevention in Indoor Places of Employment

Dear Chair Thomas and members of the Occupational Safety and Health Standards Board:

The undersigned organizations respectfully write in strong support of the proposed new Heat Illness Prevention in Indoor Places of Employment standard, which is overdue and urgently
needed to protect California workers from current and increasing conditions of high heat in
their indoor workplaces. We acknowledge and appreciate the work contributed by Division staff,
Board members and stakeholders to develop a strong and effective standard.

At the same time, we have concerns about key elements of the proposal that, if not
strengthened, will continue to leave workers exposed to serious and well-known dangers. While
we very much believe the standard should do more to protect workers, we also stress the need
to avoid further significant delays. SB 1167 (Mendoza, 2016) directed this regulation to be
presented to the Board four and half years ago, and during that time, countless workers have
suffered unnecessarily. We urge Cal/OSHA and the Board to improve the standard without any
delays that would require missing the one-year APA deadline and withdrawing the current
proposal.

It is important to underscore a well known central fact that is not well understood: high heat is a
hazard that leads to a wide array of workplace injuries far beyond just heat illness itself. In a July
2021 study, public health researchers collected 18 years of California workers’ compensation
injury reports and built a database of more than 11 million injuries, each of them
cross-referenced with the temperature for each day and place.¹ (The Statement of Reasons cites
similar research done by Dr. Amy Heinzerling in 2019.) Worksafe submitted this study to the
Board in September 2022.

The researchers found that on days when the temperature was between 85 and 90 degrees, the
overall risk of workplace injuries was 5 to 7 percent higher than days when the temperatures
were in the 60s. When temperatures were over 100 degrees, the overall risk of injuries was 10
to 15 percent greater. They concluded that extreme heat is likely to have caused about 20,000
extra workplace injuries of all kinds every year, or 360,000 extra injuries to CA workers between
2001 and 2018 - nineteen times the annual number of workplace injuries shown in the worker
compensation records as caused by extreme temperatures.

The researchers also reported that lower income workers are at least 5 times more likely to be
hurt on the job due to heat than high income workers, “In part because lower income workers
tend to work in more dangerous occupations, and to live and work in places that experience
more dangerous heat.”

This study suggests that the SRIA estimate by the RAND Corporation -- that over the first ten
years the proposed indoor heat regulation would result in approximately 2,029 fewer non-fatal

injuries and 10 fewer fatalities -- is a significant underestimate of the impact of this important Indoor Heat Standard.

As detailed below, several sections of this proposal include revisions or maintain provisions from prior drafts that do not provide sufficient protection or clarity and threaten to undermine the standard’s effectiveness in preventing heat illness, especially as heat and humidity increases in California.

**Areas of Concerns**

1. **82°F and 87°F is too high for the application thresholds**

   The application threshold of 82°F increases the exposure risk for many workers and will cause unnecessary confusion. We suggest that the application threshold be lowered to 78°F, for the following reasons.

   The Division’s May 2018 draft proposed an application threshold of 80°F for workers at higher risk – those wearing clothing that restricts heat removal, working in high radiant heat work areas, or employed in a designated list of industries where heavy work is common. There is strong evidence that the 80°F application threshold was already too high to adequately protect some of these workers, and the risk will only increase with the 82°F threshold.

   For example, the ACGIH recommends implementing general controls at 75.2°F WBGT for employees performing heavy work (assuming only a 50-75% allocation of work in a work/rest cycle), and at 71.6°F WBGT for employees performing moderate work while wearing double layer woven clothing. An 82°F application threshold is thus inadequate to protect workers in these more hazardous conditions. The standard needs to adequately protect all workers, including especially workers in dangerous yet relatively common conditions such as performing heavy work, repetitive motions duties, poor cool air circulation or wearing clothing that restricts heat removal.

   The 82°F threshold may also confuse employers and employees, because the threshold for the outdoor heat standard in Section 3395 for shade requirements is 80°F. While we feel we have demonstrated why the threshold should be set at 78°F, it would provide greater clarity to keep the threshold for general controls the same for both the indoor and outdoor heat standards, even if they differ in some of their more specific requirements. 80°F as the default application

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threshold for all industries would better follow scientific guidelines for when to apply general controls and would simplify the standard.

Likewise, the threshold temperature at which section (e) control measures must be implemented is also too high. Empirical data on heat illness incidents further demonstrate the need for control measure interventions below 87°F. For instance, a recent OSHA study of recorded occupational heat incidents recommended a heat index of 85°F as a screening threshold for hazardous workplace heat conditions, based in part on the fact that a substantial portion of incidents occurred in heat indices below 87°F.\(^3\)

In accordance with scientific guidelines, occupational heat illness data, we suggest that a heat index of 85°F would be a more appropriate threshold than 87°F.

2. The definition of “clothing that restricts heat removal” is too narrow

The definition of “clothing that restricts heat removal” is overly restrictive and as written will likely exclude clothing that poses significant heat illness risks. Especially when considering the facts that most workers wear jeans and t-shirts and cannot afford special clothing that restricts heat removal.

It is important to note that a worker’s required movements in the workplace add to the accumulated unhealthy effects of heat and humidity. Any heavyweight clothing can greatly restrict heat removal, even if it is not waterproof, designed to protect from environmental hazards, or designed to protect the wearer or work processes from contamination. Additionally, although the COVID-19 mask mandate is currently lifted, many workers still choose to wear masks while working. Likewise, many jobs require the use of respirators. Masks and respirators - while they are effective safety tools - are restrictive breathing apparatuses that interfere with the body's thermoregulatory processes and can significantly increase the wearer’s risk of overheating. The definition for “clothing that restricts heat removal” should reflect this reality.

We suggest reworking the definition to include, masks, respirators, regular heavy coveralls, work uniforms, multiple layers of clothing even if not full-body, and heavy or fluid resistant and impermeable aprons and gowns, for example.

3. Mandated Minimum Rest Breaks Schedule and Cool-Down Areas

The current standard leaves the determination of when or whether to take a cool-down break to the workers. However, this can lead to workers not feeling empowered to or comfortable requesting a break, or not requesting a break due to work quota demands or pressure or retaliation from managers or other employees, etc. To avoid this, the standard should include mandatory rest break language during high heat periods. For example:

Employers will require one (1) ten (10) minute cool-down rest break every 90 minutes when the threshold application applies.

These breaks shall not interfere with an employee's right to take any other mandated, scheduled or requested breaks.

In addition, cool-down areas should be required to be located indoors if feasible, since the temperature in indoor spaces is generally easier to control with a required indoor heat standard. Placing cool-down areas outdoors should not be permitted by the standard, unless it is absolutely not feasible to have indoor areas. Likewise, the maximum temperature in indoor cool-down areas should be 78°F rather than 82 F.

4. The Definition of “Union Representative” Restricts the Rights of Non-Unionized Employees and is Inconsistent with Other Standards

The definition for "union representative" in subsection (b), and the limitation on the right of participation in developing a heat prevention plan to a “union representative” in subsection (e)(1)(D), is detrimentally restrictive to non-unionized employees -- who make up the great majority of California workers and of workers at risk from high heat.

According to the Bureau of Labor Statistics approximately 18.4 million Californias were employed in 2022. However, the BLS also reports that only 2.6 million of workers in California were members of a union during the same year. We have long advocated for the right of non-unionized employees to have the ability to designate a representative of their choice to assist with their involvement in workplace safety. Neither the California nor federal OSH Acts limit this type of representation to unions.

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"Designated representative," "authorized representative," or "employee representative" are all well-understood terms used in other state and federal OSH standards and in the Labor Code, and this standard should not conflict with these existing code sections. We urge deletion of the reference to “union representative” in favor of established terminology.

5. **Training Requirements Should Ensure that Common-Sense best Practices are Followed**

It is critical that any training under this standard be in a language workers can read and understand and also in-person and interactive. These training principles are not new and have been incorporated into other recent standards such as in section 3342(f), Violence Prevention in Health Care. For training to be effective, there should also be requirements for refresher courses at least annually, and whenever there is a change in workplace conditions or procedures that affect the risk of heat illness. Lastly, there should be a trigger for refresher trainings anytime there is a high heat advisory.

6. **Inadequate recordkeeping requirements**

The proposed recordkeeping requirements in subsection (e) overall weaken this aspect of the standard, and shortcomings from prior drafts remain that undermine compliance, workplace transparency, and enforcement related to control measures in the standard. Most importantly, there is no requirement for employers to establish or maintain records of evaluations of environmental risk factors for heat illness. Subsection (e) requires employers to perform these evaluations, and doing so is necessary to implement an effective heat illness prevention plan. But the standard only requires records of temperature and heat index measurements to be maintained. Without a recordkeeping requirement for the environmental risk factor evaluation, some employers will be less likely to perform the evaluation, workers will lack this critical information about their exposure to risk factors, and the Division will miss important information to help establish whether an employer adequately assessed environmental risk factors and implemented appropriate control measures.

Other Cal/OSHA standards make reference to the employee access provisions of CCR Title 8, Sec. 3204(e), which require access to records in a reasonable, time, place, and manner no later than 15 days after the request is made (e.g., in the workplace violence prevention standard for health care settings, safe patient handling, and ATD standard). Good regulatory drafting practices demand consistency where there is no need to use new or different terminology that

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could create confusion or conflict. As such, it would make sense to also incorporate this reference into the heat illness prevention standard’s recordkeeping section as well.

The standard should require longer verifiable record maintenance and a more specific set of rights for employee access to records, to ensure that employers could not impede access by delaying or charging for copies, a tactic we have unfortunately seen some employers use to discourage worker action on health and safety.

**Conclusion**

We greatly appreciate the opportunity to comment on the proposed Heat Illness Prevention in Indoor Places of Employment standard, and all of the work contributed by Division staff and stakeholders to develop a strong and effective standard. As noted at the outset of our letter, workers cannot be made to face further significant delay; real protections must be put immediately in place through emergency measures if there is any further extended delay. While we find the aforementioned suggestions would provide for a more effective standard, the proposal represents the basis for an effective standard to start protecting California workers from the dangers of indoor heat.

Sincerely,

California Conference of Machinists
California Conference Board of the Amalgamated Transit Union
California Labor Federation
California Teamster Public Affairs Council
Climate Resolve
CRLA Foundation
CLEAN Carwash Worker Center
CA Healthy Nail Salon Collaborative
California Nurses Association
California Teachers Association
Engineers and Scientists of California, IFPTE Local 20
East Bay Alliance for a Sustainable Economy (EBASE)
Fight for 15 and a Union
Glenn Shor, former Manager, Census of Fatal Occupational Injuries, Cal/OSHA
Koreatown Immigrant Worker Alliance (KIWA)
Legal Aid at Work
Líderes Campesinas
Luisa Gratz - President, Local 26 ILWU
National Union of Healthcare Workers
Natural Resources Defense Council (NRDC)
Northern California District Council of the International longshore and Warehouse Union
Pilipino Association of Workers and Immigrants (PAWIS)
Restaurant Opportunities Center United
Santa Clara County Wage Theft Coalition
San Mateo Labor Council
SoCalCOSH
SEIU California
Teamsters Local 572
The California School Employees Association (CSEA)
UFCW Western States Council
USW Local 675
UNITE HERE
Warehouse Worker Resource Center
Worksafe