January 26, 2022

Submitted via Regulations.gov

Re: OSHA’s Advance Notice of Proposed Rulemaking On Heat Injury and Illness Prevention in Outdoor and Indoor Work Settings - Docket No. OSHA-2021-0009

Centro de los Derechos del Migrante, Inc. (CDM) is the first binational workers’ rights organization based in Mexico and the United States. Throughout our sixteen years of advocacy, CDM has published quantitative and qualitative research on migrant workers’ experiences in the United States—research that has helped shape state and federal policies on labor migration and workers’ rights.1 Our recommendations reflect our direct experiences with migrant workers across various temporary visa programs and include experiences and suggestions from Alianza Nacional de Campesinas (Alianza). Alianza is the first national women farmworkers’ membership organization made up of dozens of farmworker women-serving organizations across the U.S. Alianza focuses on four main priority areas: immigration, labor rights, violence against women, and pesticides.2

CDM and Alianza are submitting this comment in response to the Occupational Safety and Health Administration’s (OSHA) October 27, 2021, Advance Notice of Proposed Rulemaking (ANPRM) for Heat Injury and Illness Prevention in Outdoor and Indoor Work Settings. In the face of rising global temperatures, which directly threaten essential workers, such as agricultural workers and seafood processing workers, a federal heat stress standard that protects all workers regardless of immigration status is urgently needed.

The three-year average of workers’ deaths caused by heat exposure “has doubled since the early 1990s.”3 According to Centers for Disease Control (CDC) data, farmworkers are 20 times more likely to die from heat-related causes than workers in other industries.4 Furthermore, non-U.S. citizens are at risk of heat-related mortality at a rate of 3.4 times greater than U.S. citizens.5 Of reported heat-related deaths, Hispanic workers account for one-third of the heat fatalities, despite accounting for 17% of the U.S. workforce.6 The threat of

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extreme heat due to climate change will only exacerbate these grave and often disproportionate numbers.\textsuperscript{7} Illness and injuries due to heat stress are preventable, making the current statistics unacceptable.

Without a heat stress standard, workers exposed to heat are in constant worry for their safety. Such is the case for a California farmworker, Myriam, who has worked as a farmworker for over 20 years. She describes her experience working in the Coachella Valley, where she endures months of heat exposure:

\textit{During the hot months here, it is very challenging to manage working in these temperatures. The feeling of a heatstroke is very intense because you feel as if you’re going to fall over with nausea and strong headaches. It’s worse knowing that it doesn’t matter how you feel because you have to get the job done.}

Myriam and all other workers exposed to heat deserve protection. Accordingly, we commend the Occupational Safety and Health Administration for promulgating a long-awaited heat stress standard, that will also cover workers in state plans like Myriam. A federal heat stress standard will begin to protect vulnerable workers from the hazard of high heat across the U.S. Based on our experience working with migrant and agricultural workers and their direct input on this comment, we recommend that OSHA draft a standard with the following measures:

1. **Employers must be mandated to provide employees with shaded cool-down periods.** Workers must have regular cool-down periods to protect themselves from the hazard of high heat. The ability to cool off is an essential method of preventing heat stress.\textsuperscript{8} In fact, according to the CDC, it is currently one of the most consistently recommended methods to prevent and treat different types of heat illnesses.\textsuperscript{9} A heat stress standard must also establish a framework that directs the length and frequency of cool-down periods based on weather conditions and work activities. We recommend a graduated framework that considers weather conditions and the difficulty of work to calculate cool-down periods. We further recommend that the OSHA standard be more comprehensive than California’s heat standard, which, in part, requires a ten-minute break every two hours when temperatures reach 95 degrees or higher.\textsuperscript{10}

Additionally, cool-down periods are vital to agricultural workers because many regularly use personal protective equipment (PPE). For example, many workers that handle pesticides must wear PPE, like protective suits, which can impact the body’s natural ability to cool off. Accordingly, employers may need to provide additional cool-down periods for workers who use or wear insulated or heat retaining gear in high temperatures.\textsuperscript{11} Additionally, considering the prevalence and importance of mask usage

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\textsuperscript{10} \textit{See Id.; see also} Cal. Lab. Code 226.7(a).

\textsuperscript{11} Sarah Goldman, Anna Aspenson, Prashasti Bhatnagar, and Robert Martin, \textit{Essential and in Crisis: A Review of the Public Health Threats Facing Farmworkers in the U.S.}, at 31, (May 2021), https://clf.jhsph.edu/sites/default/files/2021-05/essential-and-in-crisis-a-review-of-the-public-health-threats-facing-farmworkers-in-the-us.pdf (stating that high temperatures lead to higher pesticide application rates because heat reduces the efficacy of pesticides, therefore workers are more vulnerable to heat exposure when they are applying pesticides); \textit{see also MONTANA STATE UNIVERSITY, Pesticide Education Program: Heat Stress and Other Heat Related Injuries} (2008),
due to the COVID-19 pandemic, workers need a heat stress standard with cool-down periods now more than ever so that they can be protected from the compounding threats of heat and the virus causing COVID-19.

Next, a heat standard should require employers to provide employees with shaded cool-down areas close to where workers are performing work. Requiring workers to trudge through the hot sun to cool off is self-defeating and could exacerbate heat hazards to workers. As a result, the heat standard could require employers to provide workers with transportation to a cool-down area or tents or canopies with fans if workers are unable to reasonably walk to a shaded cool-down zone.

A lack of shaded cool-down areas and close proximity to restrooms and water is a harsh reality faced by farmworker women. Such is the case of Martha, a farmworker in Florida, who states:

*Sometimes we suffer working in the heat when the bathrooms are far, and the sun is strong. We work in high temperatures and we need help. We need bathrooms to be closer, we need shade, and water. It is incredibly difficult for us to work in the heat when we have to go far to the bathrooms to get water and worry about losing time.*

The federal heat standard must also require employers to provide employees with cool water during their cool-down periods. Notably, under California’s heat stress standard, employers must provide workers with enough water for the day if access to a water source is unavailable. The California heat standard requires employers to ensure workers have one quart of water per hour throughout their shift.12 Because a federal heat standard would create a regulatory floor for all states, OSHA’s standard must consider the weather conditions of humid climates, which may have greater liquid replacement needs. Employers should also be required to train employees on how much water they need to drink to work safely in hot and humid conditions. Sara, a farmworker from Florida, shares what it is like to work without these essential heat stress protections:

*I work in the fields and sometimes when I feel heat exhaustion while I work, I feel sick, dizziness, nausea, and at times feel like I am blacking out from the heat and sometimes when I ask for water, they don’t give us any. We need periods to rest when we are exhausted during the work day because we are not given time to rest. As farmworker women, we need change. We need our employers to change and give us periods to rest and they need to comprehend that we cannot keep working and working like this because it’s not good when women are fainting while working in the heat. We need rest periods. We are not animals. We are humans and we need time to recover.*

The tragic story of twenty-four-year-old Miguel Angel Guzman also illustrates exactly why cool-down periods are a necessary element of a national heat stress standard. Miguel Angel Guzman, a former migrant agricultural worker in Georgia, suffered a heatstroke in 2018 that led to his death. Guzman had been in the U.S. working on a tomato farm for less than a week when he experienced heatstroke after working long hours in high temperatures without periodic breaks and without being allowed to acclimatize.13 Five days into his season, Guzman’s body began to shut down and he was unable to stand.

https://pesticides.montana.edu/reference/heat-stress.html, (warning that PPE equipment can cause workers to overheat quickly).

12 *See* Cal. Code Regs. tit. 8, § 3395.

13 Maria Perez, *What Led to a Migrant Worker’s Heat Stroke?*, USA TODAY NEWS (Jan. 6, 2022), https://www.usatoday.com/in-depth/news/investigations/2022/01/06/trabajadores-migrantes-con-visa-sufren-riesgos-manos-de-contratistas/9084314002/?fbclid=IwAR1G1l1cgUbBLkAdt3964KZyKvleBpw0GrD1p4E-avSQWhfU2A_WoCl5ChFo.
By the time he received medical attention, Guzman had gone into cardiac arrest from experiencing heatstroke. Guzman’s death was preventable. Like most agricultural employers, Guzman’s employer did not provide shaded, cool-down periods, preventing Guzman from properly acclimatizing and cooling down. Deaths like Guzman’s should not occur and can be prevented through a federally mandated heat standard that requires employers to include shaded cool-down periods in workers’ schedules, especially during their acclimatization period.

2. **Employers must compensate employees during cool-down periods.** The heat stress standard must ensure that cool-down periods are paid. This is necessary because workers often feel pressured to work through high temperatures to avoid losing wages. Often, workers in low-wage industries are paid on a piece-rate basis or through a quota system and feel discouraged or disincentivized from taking cool-down periods. Because many farmworkers are the sole earners in their families, they cannot afford to take unpaid breaks. For example, Nezahualcoyotl Xiuhtecutli, the general coordinator of the Farmworker Association of Florida, told *The Guardian*:

> It’s extremely hot out there and it’s getting worse every year . . . One of the biggest problems is the way that farmworkers are paid. When they’re paid by the piece rate, that encourages workers to exert themselves even more. When they’re part of a crew, the person who slows down because he has to take a water break or use the restroom, then becomes the guy who slows down the crew.14

Similarly, indoor workers experience heat stress from heat sources and poor ventilation. For example, crabworkers on the Eastern shore of Maryland report working in close proximity to their coworkers with poor ventilation while picking crabmeat that is cooked and steamed in the same room.15 Furthermore, similar to agricultural workers who work outside, indoor seafood processing workers also often get paid by a piece rate rather than by the hour, creating a similar pressure to continue working while experiencing heat stress symptoms.

To avoid these scenarios, employers must be required to pay employees during cool-down periods. Such an approach is not without precedent. The Healthcare Emergency Temporary Standard (Healthcare ETS) required covered employers to provide paid leave to workers that received a COVID-19 vaccine during typical working hours. Because vaccines are a safe, effective way to limit the spread of COVID-19 in healthcare settings, OSHA reasoned that certain barriers to accessing the vaccine, such as unpaid time away from work, should be eliminated. OSHA should apply similar reasoning in this standard by requiring employers to provide paid time off for periodic cool-downs.

Next, the OSHA standard should specifically address how paid breaks should be calculated for workers who are paid on a piece-rate, as piece-rate work is directly linked to a worker’s productivity. California’s standard provides an example of how to address this issue. Because employers in California are required to provide paid “recovery breaks” to workers, they must calculate a special hour premium rate for that time.16 The California formula requires employers to calculate the piece rate

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excluding the recovery period time and then use that rate to calculate the rest-recovery time rate.\textsuperscript{17} If employers fail to pay workers their premium rate for the mandated recovery time, employers are required to pay employees an additional hour of work.\textsuperscript{18} We recognize that California’s calculation of paid recovery time for piece-rate workers is state-law specific, however, it provides OSHA with an example of how piece-rate work can be incorporated into a final standard.

3. **Employer-provided housing must have adequate cooling measures.** Employers must ensure that the housing they provide to workers has adequate cooling measures to prevent heat illness. One of the CDC’s recommendations for preventing and treating heat stress is to provide recovery time in a cool environment.\textsuperscript{19} However, when workers return home to sweltering indoor temperatures after laboring in high temperatures all day, they are not able to truly recover or properly cool off. Workers who are exposed to high temperatures during the workday need to be able to cool off to avoid heat stress. Unfortunately, current agricultural standards do not require employer-provided housing to maintain a certain temperature, be equipped with air conditioning, or have other cooling measures to ensure workers are not exposed to further heat stress in employer-provided housing in their off-hours. A federal regulation must address this deficiency.

This is an issue that particularly impacts migrant workers in the H-2 visa program. Because workers in the H-2 visa program come to work in the U.S. temporarily and in often remote areas, they depend on employer-provided housing. Quite often, workers on these visas are housed in crowded barracks, hotel rooms, or houses, where cooling measures are insufficient. These issues are especially prevalent in the H-2A visa program, where employers are required to provide housing at no cost to the workers, often leading employers to provide cost-effective but inadequate conditions. Victor Omar Lopez, a H-2A worker, unfortunately, suffered this experience. Lopez, a migrant worker from Georgia, spoke of his experience with heat stress in a USA Today news article.\textsuperscript{20} Lopez worked in high temperatures on a tomato farm but was unable to cool down properly even after work hours. Lopez described taking cold showers to try to cool down only to immediately sweat again because his body temperature remained high. His living situation was “unbearable.”\textsuperscript{21} Lopez and his co-workers had to purchase their own fans because their employers did not provide them with any.\textsuperscript{22} A federal heat standard requiring cooling measures in employer-provided housing would improve both working and living conditions and avoid workers’ experiencing prolonged heat stress from hot housing environments.

Historically, not all areas in the U.S. where agricultural workers work outside have experienced consistently high temperatures, but as days and nights are consistently hotter and remain hot for longer periods, all employer-provided housing must be equipped with the cooling abilities so workers can

\textsuperscript{17} **CALIFORNIA DEP’T OF INDUS. REL., Frequently Asked Questions: Piece Rate Compensation** - Labor Code §226.2(a)(3)(i), https://www.dir.ca.gov/pieceratebackpayelection/AB_1513_FAQs.htm, ("The formula for determining the average hourly rate to be paid for rest and recovery periods is set forth in the statute as follows: Divide the total compensation for the workweek, exclusive of compensation for rest and recovery periods and any premium compensation for overtime, by the total hours worked during the workweek, exclusive of rest and recovery periods.").

\textsuperscript{18} **Id.; Cal. Lab. Code** §226.7.


\textsuperscript{20} Maria Perez, *What Led to a Migrant Worker’s Heat Stroke?*, USA TODAY NEWS (Jan. 6, 2022), https://www.usatoday.com/in-depth/news/investigations/2022/01/06/trabajadores-migrantes-con-visa-sufren-riesgos-manos-de-contratistas/9084314002/?fbclid=IwAR1G1lcgUbBLkAdt3964KZyKvleBpw0GrDIp4EmvSQWhfU2AEWoC15ChFo.

\textsuperscript{21} Id.

\textsuperscript{22} Id.
recover from their daily heat exposure. An example of temperatures rising to unprecedented highs occurred during the summer of 2021 in the Pacific Northwest, where areas of Oregon experienced weeks of intense heat that resulted in deaths and damaged infrastructure, including buckled roads and melted power cables.4 This extreme heat created health hazards for homes without air conditioning. Sadly, even the evenings did not bring respite from oppressive temperatures.25 The state of Oregon is not the only state that has been experiencing more heatwaves in the U.S. According to the Environmental Protection Agency, the average heatwave seasons across 50 U.S. metropolitan areas are now 47 days longer than they were 50 years ago, which means heat waves are occurring more often and at unexpected times of the year, thereby increasing the need for employers to provide housing with cooling measures to workers.26

Requiring employers to provide housing with cooling measures is not without precedent. Oregon’s temporary rulemaking on agricultural housing and related facilities requires employers to provide a cooling area in the housing, have air conditioning, or install other cooling measures in the bedrooms whenever there is a heat index of 80 degrees Fahrenheit or higher outside.27 If the workers’ bedrooms cannot be cooled to a temperature of 78 degrees Fahrenheit or lower, then the employer-provided housing must include a communal cooling area that can fit at least 50% of the workers occupying the housing. Additional measures under the Oregon standard include making sure windows are protected from direct sunlight by providing coverings that deflect rather than absorb heat. Lastly, the federal heat standard could require employers to equip each bedroom with fans, at no cost to the workers.

4. **Employers Must be Required to Ensure that Employees Are Acclimatized.** It is critical for a federal heat standard to include acclimatization measures, which is an adaptation process to working in hot environments with repeated but measured exposure to heat.28 Acclimatization is an important preventative measure for heat stress because it reduces the risk of workers experiencing sudden extreme heat exposure that can cause heatstroke or even death. According to OSHA, half of the heat-related deaths occur on a worker’s first day on the job and over 70% of heat-related deaths occur during a worker’s first week.29 Employers should be required to follow The National Institute for Occupational Safety and Health (NIOSH) recommended acclimatization practices, which recommends that an unacclimatized worker’s schedule not account for more than 20% exposure on day one or two hours, which can be broken into two one-hour periods. NIOSH further recommends no more than 20% additional exposure on each day after day one or an increase of two hours per day.30 It is recommended

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27 Or. Admin. R. 437-004-1120(27).


to follow this schedule to gradually increase workers’ exposure to hot environments over a 7-14-day period. This 7-14-day acclimatization window is crucial for migrant workers or other unacclimatized workers, and many workers arrive from different environments and climates and need 7-14 days to safely acclimate to their new work and environment. Additionally, OSHA’s current guidance recommends acclimatization procedures for workers who have been on leave for more than a week. This is especially important at this moment as many workers may be out of the workplace for extended periods due to COVID-19 exposures or illness. Accordingly, the heat stress standard must incorporate mandatory acclimatization periods.

5. **Employers must develop comprehensive heat illness prevention plans and include risk assessment training for all employees.** The heat standard must require employers to develop a comprehensive heat illness prevention plan that addresses health and safety hazards created by high temperatures. These plans must include a system to prevent and monitor heat illness, acclimatization policies, emergency response protocols, and annual or seasonal training, including refresher training, on heat stress for all supervisors and workers. Specific prevention measures include the provision of clean and cool water at an accessible distance to workers, access to shade, mandatory acclimatization, monitoring heat stress symptoms, monitoring heat stress symptoms for indoor worksites with heat sources or poor ventilation, and a procedure for contacting emergency medical services. Additionally, heat illness prevention plans must specifically address how heat stress affects high-risk workers. For example, NIOSH has found that workers at greater risk of heat stress include those over the age of 65 and those who have high blood pressure, heart disease, are overweight, or are taking medication that could be affected by extreme heat. Also, in our experience, pregnant workers often report symptoms of heat stress and should be considered as high-risk workers for heat stress prevention purposes. For example, an Alianza member shared that her working conditions were particularly challenging during high temperatures while she was pregnant. She worked in a Florida plant nursery during two pregnancies and explained that her employer never gave any specific instructions on how to protect herself from heat exposure or to take precautions such as breaks or cool down periods to prevent heat stress. During her time working while pregnant in high temperatures, she experienced shortness of breath, swelling, and low blood pressure. She also shared that she typically worked alone even while she was pregnant, which made her worry that she might fall ill alone, and no one would be aware.

Additionally, employees, including supervisors, must receive comprehensive training on their employer’s heat illness prevention plans. Training should be provided at the start of employment and at specific intervals thereafter covering every element of the heat illness prevention plan. Additionally, the training should equip workers with the tools to understand how heat affects their bodies so that they know how much water to drink and when to seek cool down periods. For example, workers could receive training on how to use the OSHA Heat Stress Safety Tool, which reminds workers to drink water, cool off, and rest. Finally, employers must train employees in a language they understand. Many employers assume that workers from Mexico or Central America speak Spanish, but that is not always the case. Many workers speak indigenous languages. As a result, employers must provide all training in the languages that the workers understand.

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31 Id.
33 Cal Lab, Code §142.3.
6. **Employers must be prohibited from retaliating against workers.** Finally, and most importantly, a heat stress standard must include anti-retaliation protections. When workers cannot seek cool down periods or drink water because they fear retaliation, regulations are rendered meaningless. For example, many workers do not take necessary breaks to cool off because they fear employer retaliation—being fired, threatened with immigration enforcement, blacklisted from future hiring, or otherwise harmed. Over half of farmworkers in the United States are either undocumented or on migrant visas sponsored by their employers, making them highly vulnerable to retaliation in the workplace. Finally, anti-retaliation protections are particularly important for agricultural workers because they are often isolated from healthcare professionals and medical resources and are often forced to rely on their employers to access medical care.

OSHA incorporated anti-retaliation protections in the Healthcare ETS, which set forth that employers could not retaliate against employees by discharging or discriminating against employees who exercised their rights and obligations relating to the COVID-19 pandemic.

In making these recommendations, Centro de los Derechos del Migrante and Alianza draw on years of experience working closely with migrant agricultural workers and on experience working as agricultural workers ourselves. In fact, before submitting this comment, CDM and Alianza conducted discussion sessions with agricultural workers and workers in seafood processing plants to gather feedback. We know firsthand the urgent need for OSHA to establish a national heat standard and commend OSHA in taking this step to ensure that employees are better protected from heat stress.

Sincerely,

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Alianza Nacional de Mujeres Campesinas:
Colonias Development Council
Campesinos Sin Fronteras
Centro de los Derechos del Migrante, Inc.
Farmworker Association of Florida, Inc.
Grupo A.M.O.R.
La Mujer Obrera
Lideres Campesinas
Multicultural Efforts to end Sexual Assault (MESA)
Mujeres Campesinas Unidas de Florida
Mujeres Divinas
Mujeres Luchadoras Progresistas
Rural Coalition
PCUN- Pineros y Campesinos Unidos del Noroeste
Worker’s Center of Central New York
Worker Justice Center of New York

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35 Alianza members from their California chapter report that as farmworkers, they were aware they had the right to a break during high temperatures but did not take these breaks because their employers explicitly discouraged them from doing so.


37 29 C.F.R 1910.502(o).