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Re: Advanced notice of proposed rulemaking Heat Injury and Illness Prevention in Outdoor and Indoor Work Settings OSHA-2021-0009

Thank you for the chance to comment on the questions you ask in pursuit of worker protections from heat-related injury and illness, we look forward to a timely path toward a meaningful heat standard to protect workers in a rapidly changing climate.

We see the work on this standard as an important starting point, but also know that the standard will not be enough to prevent workers from being harmed by the increasing heat due to climate change. We commend President Biden's decision to place this effort by OSHA in the context of a whole-of-government approach to protect workers and communities from recent heat.¹ Recent analysis shows that even workers who themselves do not labor in excessive heat are at greater workplace risk when temperatures rise; simply living in a hotter world has impacts on overall health and mental capacities that may result in increased injuries in all workplaces.²

The historical practice of redlining means that in more than 96 percent of the nation's largest cities, people of color live with higher summer daytime surface temperatures than non-Hispanic white residents;³ while occupational segregation—in effect, redlining in the workplace—places Black, Indigenous, Latinx, Asian, and immigrant workers into occupations and industries where relief from the heat at work is not a given. We read OSHA's commitment to establish a heat standard in the context of the EPA's recent work on socially vulnerable groups,⁴ and we urge OSHA and the Department of Labor to craft a standard that keeps these populations at the center.

The National Employment Law Project (NELP) is a national nonprofit advocacy organization that for more than 50 years has sought to build a just and inclusive economy where all workers have expansive rights and thrive in good jobs. We work extensively with worker centers, labor unions, and other worker organizing groups. With these partners we have created policy solutions to ensure that all workers have safety and health protections, especially in dangerous low-paying jobs where workers of color are disproportionately

represented. We recognize that a serious injury or workplace fatality can force workers and their families into poverty and takes an emotional and physical toll on entire communities, thus we see the fight for strong health and safety standards as part of our mission to build Black, immigrant worker power and advance transformative solutions to achieve racial and economic justice.

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A heat standard must be designed and implemented in a timely manner

In response to workers and advocates organizing, fifty years ago, the National Institute for Occupational Safety and Health called for a heat standard to protect workers from heat stress.⁵ This recommendation was repeated several times, underscored by analyses of OSHA citations absent a standard, and amplified by public petitions.⁶ Nonetheless, for decades the media has covered one terrible story after another of workers who suffer permanent health effects and even death from heat exposure on the job.⁷

We commend the Biden Administration for calling for a whole of government approach to protections from heat, and in particular for launching this rulemaking process to develop a workplace heat standard to protect both outdoor and indoor workers.⁸ Labor Secretary Marty Walsh has observed, “Amid changing climate, the growing frequency and intensity of extreme heat events is increasing the dangers workers face, especially for workers of color who disproportionately work in essential jobs in tough conditions.”⁹

However, we urge policymakers to keep at top of mind the systemic racism that shaped our economy by segregating Black and immigrant workers into occupations that expose them to extreme heat. We urge policymakers to recognize that the systems and practices established in those occupations expose workers to heat specifically *because* they are so often Black and immigrant workers. The business models of agriculture, construction, waste remediation, landscaping, food production, laundry services, warehousing, and transportation are built on the founding principle that Black and immigrant workers are both essential and expendable, and the dangers faced by workers of color from excessive heat are built into the provision of goods and services.¹⁰

At the same time, we know that the pace of workplace fatalities generally is increasing too quickly for all workers, especially Black, Indigenous, Latinx, Asian, and immigrant workers.¹¹ Even if heat-related workplace illness is not fatal, for underpaid workers it is expensive. Under any climate action scenario, Black outdoor workers are likely to lose \$5.2 to \$7.5 billion in earnings due to excessive heat and Latinx outdoor workers would lose \$11.2 to \$16.1 billion in pay by mid-century.¹²

Estimates for the average time to a new OSHA standard range from 7 years to 20; this is not acceptable for protections for workers from fast moving environmental shifts under climate change.¹³ The harms to workers from heat are preventable, and they have already been taking their toll for too long. Since the early 1990s, the average number of workers killed by workplace heat stress in any three-year period has doubled.¹⁴

We urge all stakeholders to hold the moral imperative of demonstrating to Black, Indigenous, Latinx, Asian, and immigrant workers that they are not expendable; that irreparable harm to their health is not an acceptable cost of doing business. As former Assistant Secretary of Labor for Occupational Safety and Health David Michaels has testified, talk about the cost of regulations to employers erases the cost to workers, their families, and their communities of not creating protections. “These costs are enormous, and they are paid not just in dollars,” he said. “They are paid in lives.”¹⁵

Extreme heat and the root causes of disposable labor

Work in the heat has always been strongly coded by race and class in the United States. European settlers formed their North American colonies by using the forced labor of indentured servants and enslaving indigenous and African people in extreme heat and brutal conditions. When the United States was formed by land-owning settlers, they designed a labor market that was dependent on cheap, disposable labor to do mainly agricultural work. It took nearly 150 years following the Declaration of Independence to create federal labor standards. However, these standards exempted agricultural workers. This long history of forcing workers to endure extreme outdoor working conditions without government oversight is the underlying reason that injuries and lasting bodily damage from heat does not already get the type of protection that slips, falls, and machinery-caused injuries do.

Over hundreds of years, beginning under the practice of enslavement and continuing to this day, supremacist notions of race and work have asserted that white workers are uniquely vulnerable to heat and must be protected while claiming that Black workers are invulnerable to heat, Asian workers easily and rapidly assimilate to heat and become protected from it, and that workers from Central and South America are naturally suited to heat and thrive in it.¹⁶

After the Civil War ended the legal enslavement of Black workers, anti-vagrancy laws designed to “drive Negro loafers into the fields” was coupled with the false pretense law that levied criminal charges for perceived Black violations of contracts and extralegal lynching to argue that Black workers should remain in the fields but be voiceless while there.¹⁷ The need to scale up agricultural production to industrial levels meant developing systems to continue exploitative labor systems and the creation of new hazards in the form of pesticides and mechanization to wring productivity out of the land. Political arguments for these efforts explicitly linked these workplace dangers to modernity and the need for a resource-rich lifestyle for mostly white consumers while denigrating the needs of the workers who shouldered the risks of those dangers.¹⁸

In the 20th century, New Deal labor legislation excluded agricultural work and other work segregated for Black workers, including the Fair Labor Standards Act, the National Labor Relations Act, the Social Security Act, and the Agricultural Adjustment Act. As Juan Perea notes, these efforts to preserve white supremacy couched in race-neutral language were strongly coded to placate both Southern white desires to oppress Black workers and Northern white desires to feel comfortable with it. “An occupational classification like agricultural and domestic employees, excluding most blacks without saying so, was just such race-neutral language.”¹⁹

Despite progress during the Civil Rights era of the mid-20th century, Black, Indigenous, Latinx, Asian, and immigrant workers continue to be forced into occupational segregation that can result in increased exposure to heat stress. Since 2010, Latinx workers comprise one third of heat fatalities in the United States.²⁰ Even in the same jobs, research finds that Black and Mexican-born workers are significantly more likely to suffer heat-related fatalities than white workers.²¹ More than half of home health aides are Black and Latinx women, working while wearing the kind of personal protective equipment (PPE) known to exacerbate heat stress in the unregulated environments of clients’ homes.²² Industrial kitchens, including those in schools, routinely exceed recommended heat hazard levels for workers doing even light physical activity.²³

Exposure to heat stress is also a physical manifestation of the gap between rich and poor; one that will become increasingly obvious as climate change drives higher temperatures and greater frequency of days with those temperatures. Research has shown that the impact of increased incidence of heat will weigh most heavily on poorer counties in the US South, putting residents in danger and resulting in significant damage to local economies.²⁴

The fact that it has taken decades to start work on a heat standard reflects the racist underpinnings of how we define what is and is not an occupational hazard. Addressing heat-related dangers will require an intentionality to address systemic racism and its lasting impacts. We need to start from a recognition that Black, Indigenous, Latinx, Asian, and immigrant workers are, by design, segregated into industries that force them to work in extreme heat and other environmental dangers in order to make a living. Occupational segregation does not occur incidentally; it is a systemic problem rooted in a racialized belief system that purports that Black, Indigenous, Latinx, Asian, and immigrant workers are naturally more capable of enduring harsh working conditions and therefore do not deserve protection from those dangers.

The industries and occupations implicated in excessive heat exposure are expansive

You asked several questions regarding which industries, occupations, and groups of workers should be considered in crafting protections for the health and safety hazards of heat exposure in the workplace. Specifically, “*Are there industries, occupations, or job tasks that should be considered when evaluating the health and safety impacts of hazardous heat exposure in indoor and outdoor work environments?*” (Question 8); “*Are there any industries, occupations, or job tasks that are facing changes in the rate or frequency of occupational heat-related illness?*” (Question 9); and “*Are there specific populations facing disproportionate exposure to or outcomes from hazardous heat in indoor or outdoor work settings?*” (Question 19)

As you note in the text of the advanced notice of proposed rulemaking, OSHA enforcement investigations and the Census of Fatal Occupational Injuries can provide some indication of particular workplaces and jobs that merit special attention, including agriculture, multiple types of construction, postal and delivery services, waste management, and landscaping. However, researchers who have used this data have noted that it likely underrepresents the number of heat-related incidences since it tends to capture injuries that led to hospitalization, but not all those treated on site may not include all data from the states that administer their own health and safety programs and may miss cases that employers choose not to report “to escape the cost of reporting.”²⁵

One meta-study of global research on occupational heat stress found 88 studies assessing nearly 159,000 workers including workers in manufacturing, mining, agriculture and farm work, construction, electrical utilities, boilers, brick manufacturing, housekeeping, kitchens, firefighting, wool shearing, laundry, bakery, retail, stockmen, and forestry.²⁶ In Australia, an analysis of worker calls into a workplace safety hotline found that most of the calls regarding heat exposure came from indoor work environments, including kitchens, factories, and warehouses.²⁷

There are other challenges to quantifying the impacted population of workers. Fear of retaliation for reporting unsafe practices (which we address further below) and the time it may take for workplace health and safety investigations to unfold, mean that many workers choose to inform the media about heat-related safety hazards first. Thus, much of the evidence about workers suffering from excessive heat is anecdotal. However, taken together, it can reveal a disturbing picture of the wide-ranging effect of increasing heat on a variety of workplaces.

- Healthcare workers can be at high risk for heat-related health problems when they are wearing PPE to care for patients.²⁸ In a recent survey of German nurses and nursing assistants, 99.5 percent of respondents said that on hot days PPE use resulted in more sweating, and more than half strongly or somewhat agreed that they experienced shortness of breath, headaches, irritability, fatigue, and exhaustion.²⁹ In addition to doctors and nurses, healthcare occupations that may experience heat-related illness include nursing aides, therapists, social workers, orderlies, and cleaning staff among others.
- Similarly, in a study of oil spill cleanup workers, researchers found that workers had an average shift of more than 11 hours, often doing strenuous physical labor while wearing PPE, a respirator, and a personal floatation device. Roughly one quarter reported symptoms of heat stress, including heat cramps, heat rash, and accidents related to fogged-up safety glasses. Small businesses said they could not afford water-cooled and air-cooled garments, and most workplaces did not include acclimatization plans.³⁰

- In 2019, UPS drivers shared photos and videos with NBC News showing temperatures in cargo areas of delivery trucks reaching 114 degrees. The news agency compiled agency records and filed FOIA requests, concluding that between 2015 and 2019 “at least 107 UPS workers in 23 states have been hospitalized for heat illnesses.”³¹
- Workers in full- and limited-service establishments can be affected. In Portland, Oregon, workers at Voodoo Donuts walked off the job after temperatures inside the facility topped 100 degrees Fahrenheit, as did workers at a McDonald’s in Detroit, Michigan, at a Jack in the Box in Sacramento, California, and a Hooters in Houston, Texas.³²
- While public school teachers are not typically covered by federal OSHA standards, private schools are subject to federal OSHA jurisdiction as well as some charter schools. In 2019, Teachers in Denver protested requirements to work in classrooms located in 60 district schools that did not have functioning air conditioning.³³ A 2019 report found that in New York State, 15 percent of surveyed teachers reported classrooms that were too hot, while 13 percent said they could not open their classroom windows, and more than three-fourths reported having no thermostat control over classroom temperatures.³⁴
- Warehouse workers have been raising the alarm about excessive heat in their workplaces for decades. A report published by UCLA ten years ago used commercial real estate sales data to find that only 18 percent of large warehouses in California’s Inland Empire had air conditioning, and that employer-provided amenities like shared drinking fountains are of little help in a work culture that does not include adequate breaks and in spaces where water fountains may be located long distances from work stations.³⁵ Workers in Amazon warehouses have complained of excessive heat and requirements to continue strenuous work while experiencing heat-related illnesses. In July of 2021, Staten Island based workers told the media about high internal temperatures, inadequate cooling measures, and a lack of water.³⁶ During the 2021 Pacific Northwest heatwave, workers in the Seattle area reported inconsistent measures to protect against heat in various facilities, with one warehouse even continuing “power hours” policies during which workers are told to move as quickly as they can to boost productivity.³⁷ In 2019, Amazon workers in Chicago workers conducted a public campaign to win relief from heat in their facilities.³⁸

Other research notes that even within industries, some occupations may present a greater risk than others due to a combination of typical exposures to temperature, humidity, radiation, and work-load. Thus, for example, within agriculture a “farm hand” or a “semiskilled grain farm worker” may have a critical risk of heat stress due to heavy work-loads, exposure to high levels of temperature and humidity, and sun radiation, while a “poultry farm worker” may perform equally heavy work but have some protection from direct sun. Similarly, within construction a “roofer,” who generally must work during clear and dry weather in often restrictive physical positions, may face greater dangers than a worker using a forklift will.³⁹ This type of assessment of the matrix of risks faced by workers in specific occupations and regions may be a valuable way to identify at-risk workers not just now, but also into the future as increasing temperatures due to climate change create dangers in unforeseen occupations.

Temporary workers and those in non-standard employment relationships must be protected

Your question 69 asks, “*What are the challenges with acclimatizing workers, including workers in non-traditional/multi-employer work arrangements (e.g. temporary workers)?*” NELP believes this is an important consideration given the significant overlap between the industries and occupations listed as being most at risk for excessive-heat injuries and companies in those same industries that

increasingly use fissured employment relationships or temporary agencies. These include crop production; laborers and freight, stock, and material movers; production workers; janitors and cleaners, packers and packagers, and retail sales. And too often companies that use temp or staffing or other subcontracted labor arrangements do not take responsibility for their workers. In fact, studies have found that the current assignment of legal responsibilities in a fissured work arrangement can create disincentives for temporary staffing firms to provide a safe workplace.⁴⁰

Temporary workers may be put into the most dangerous jobs with little or no heat protection training

According to the CDC, “new employees are at the highest risk for heat illness,” and the agency recommends a 1–2-week process of gradually getting workers accustomed to hot conditions through shorter working hours. The CDC warns that just one week away from working in the heat can be enough to lose the acclimatization to high temperatures.⁴¹ Advocates note that heat acclimatization programs need to be tailored to the demands of the job—including the use of PPE or other safety equipment if necessary—and that workers should receive annual training on the benefits of heat acclimatization and the maintenance of acclimatization.⁴²

OSHA has known for some time that temporary workers have an increased risk of work-related injury and illness, launching a Temporary Worker Initiative in 2013 to address harms to these workers. The safety of these workers should be of increasing concern as the use of temporary workers rises: during the recovery from the Great Recession until the COVID-related labor market contractions, temporary jobs grew by 75 percent; consolidation in the agriculture industry is resulting in ever-larger acreage and increasing motivations to use contracted-out labor in all phases of the work.⁴³ OSHA noted that companies using temporary workers place their workers into the most hazardous jobs without adequate safety and health training. Indeed, nearly a decade’s data available from OSHA on exposures to heat include information on the length of service with the employer. Just over 41 percent of injuries were among workers with less than 1 year on the job, and of that almost 20 percent was among workers with less than 3 months’ tenure.⁴⁴

While not all these shorter-tenure workers are placed via temporary and staffing agencies, this data is revealing of the dangers that workers of a precarious duration face. A 2013 analysis of workers’ compensation claims in five states found that temporary workers had between a 36 and 72 percent greater risk of being injured on the job. They note that in California, temps were twice as likely as permanent workers to get heat exhaustion.⁴⁵ A 2015 OSHA white paper said lack of safety training, multiple new assignments, less training or investment by host employers, and workers’ fear of reporting all combine to place temporary workers in more dangerous positions.⁴⁶

Indeed, multiple studies find that workers in non-standard employment relationships lack the familiarity with safety measures coupled with a strong reluctance to miss work even while they may be given more dangerous assignments than permanent and direct-hire counterparts.⁴⁷ An analysis of workers’ compensation claims in Washington State found that in nearly all industries, workers hired by temporary and staffing agencies filed claims at a higher rate than direct-hire workers did (a ratio of 1.44 overall, with very significant differences in rates in agriculture, machine operation, manufacturing laborers, vehicle operation, and construction). Similarly, the average days lost from work was higher among temporary workers. Follow up interviews found that temporary workers did not report significantly higher exposure to hazards, including heat, but an alarming number said they had frequent changes in their job duties and 40 percent said they never got safety training from

either their agency or their host employer. The study notes that brief tenure on a job coupled with a lack of training due to employer neglect can leave temporary workers unaware of what workplace hazards exist, let alone knowing how to protect themselves adequately.⁴⁸

Because temporary workers may be shifting from worksite to worksite, it can be impossible to track their exposure to consecutive days of heat exposure. Therefore, implementing these procedures for temporary workers and other subcontracted workers who may be assigned to work briefly at any one job site with potential for heat exposure will require additional commitment from employers. Additionally, companies using temporary agencies and labor agencies to staff their jobs should all be required to record and track workers' assignments to ensure appropriate and adequate acclimatization is taking place across assignments.

Hundreds of thousands of incarcerated workers are in industries with high possibility of excessive heat, but no protections

In 2019, virtually all prisons—public and private—ran some sort of work program. Approximately 1.2 million incarcerated people worked doing facility support services, although many carceral facilities lack adequate infrastructure to protect residents from extreme heat (or cold, or exposure to smoke and other airborne toxins) so that virtually any inmate working in the facility doing janitorial work, laundry, food preparation, or food service, may be exposed to dangerous heat stresses in their workplace.⁴⁹ Roughly 558,000 were assigned to public works projects, which may include landscaping, trash collection, and other outdoor activities, while 374,000 performed farming or agricultural work. Prison industries, which can include manufacturing work, employed 800,000 workers.⁵⁰

Occupational data for these workers, including information about occupational safety, is difficult to get; as an example, the CDC's National Institute for Occupational Safety and Health's Worker Charts specify that they are limited to non-institutionalized populations.⁵¹ But anecdotally we find that the occupations and industries cover a wide spectrum: metal manufacturing and packaging canned goods in North Carolina;⁵² working in an industrial egg-laying facility in Georgia;⁵³ in Ohio, incarcerated workers butcher high-end Wagyu steak for sale at gourmet markets;⁵⁴ in Alabama and six other states, incarcerated workers are sent to work in poultry plants;⁵⁵ in Mississippi, the Department of Corrections runs a temporary service that places incarcerated workers into positions in a variety of industries, including fast food franchises, meatpacking plants, garbage collection, construction, and landscaping;⁵⁶ and in California and Arizona they work to put out wildfires.⁵⁷

In some of these instances, incarcerated workers are laboring side-by-side with direct employees or private-sector temporary workers for private employers. Section 3 of the Occupational Safety and Health Act does not define incarcerated people as "employees," but in federal prisons, if the work performed by incarcerated workers has them "working in conditions similar to those outside prisons," they can file an OSHA complaint. However, the inspection process is largely controlled by prison officials including the timing of inspections and access to workers for interviews. (For instance, the instruction that: "Proposed discussion with inmates should be reviewed with Bureau [of Prisons] officials prior to initiating discussion with inmates.") Additionally, facilities can refuse OSHA actions, including even the inspection itself opting to instead conduct their own inspection of alleged dangers.⁵⁸ As one expert notes, we have "precisely zero medical and public health articles dealing with inmate occupational health" from which to draw an analysis of the extent to which these

workers are exposed to excessive heat or what, if any, practices employers use to mitigate the dangers.⁵⁹

Results from complaints of incarcerated workers are few and far between. One notable exception was a report by the Office of the Inspector General (OIG) on health, safety, and environmental compliance by Federal Prison Industries (known as UNICOR) in its electronic waste recycling program. Investigations found that in addition to exposure to dangerous chemicals, workers were exposed to excessive heat. The OIG found that none of the UNICOR factories had even conducted heat exposure assessments.⁶⁰ For those doing facilities work within prisons themselves, their supervisors may be suffering from “fatigue and decreased observation skills” due to chronic correctional officer understaffing.⁶¹ In a system that is inadequately staffed, who is ensuring that incarcerated workers receive proper training or treatment when their workplaces become excessively hot?

These workers also face additional structural barriers to reporting health and safety violations, both while incarcerated and once they are released. In some cases, participation in work programs while incarcerated can be a path to an earlier release making reporting risky; and once released, parole and other court-surveillance structures can require work as a condition to staying out of jail, tying formerly-incarcerated workers to labor brokers or employers who maintain dangerous workplaces.⁶²

The vast majority of incarcerated people are in state- or county-run facilities, and Section 3(5) of the OSHA Act specifically excludes a State or any political subdivision of a State from coverage. While California’s occupational health and safety regulations include a provision to protect incarcerated workers and improve the safety of working conditions and working areas, this type of protection remains too rare.⁶³ OSHA should revisit the FAP with the DOJ to make the process of investigating allegations of dangerous heat exposure by incarcerated workers more worker-centered with strong whistleblower protections, and when prison-run labor programs provide workers to private-sector employers, those companies should be responsible for recordkeeping, reporting, and training to protect the workers from heat-related dangers.

Workers who fear retaliation are less likely to report employer violations

You ask several questions about the underreporting of illnesses, injuries, and fatalities due to heat. Specifically, question 5 (*Are there quantitative estimates or other quantitative or non-quantitative examinations of the magnitude of underreporting of occupational illnesses, injuries, and fatalities related to hazardous heat?*) and question 6 (*What factors lead to the underreporting of occupational heat-related illness, injuries, and fatalities of which OSHA should be aware?*).

Unionized workers are more likely to report health and safety violations, but union density in industries likely to experience excessive heat conditions is low

In some industries, we have data that shows unionized workplaces are safer than non-unionized ones; the vast majority of construction workers who suffered fatalities in New York State, for instance, were on non-union worksites.⁶⁴ We know that unionized workplaces are more likely to generate employee complaints over health and safety and, as a result, government inspections; with the protection of a union, workers are more likely to know their workplace rights and feel safer

raising red flags when they experience violations.⁶⁵ However, in many of the industries under consideration in this standard, union density is relatively low. According to the Bureau of Labor Statistics (BLS), transportation and warehousing with a 17 percent union density is fairly high when compared to construction at 12.7 percent, mining and oil and gas extraction at 5.6 percent, and food services at 1.2 percent.⁶⁶ In agriculture, of course, workers are exempted from the National Labor Relations Act (though some states have amended state laws to allow for union organizing) and only 1.9 percent of agricultural workers are represented by a union.

Workers who would raise or report concerns about heat hazards must be protected by strong whistleblower protections, and allegations of retaliation must be investigated swiftly and thoroughly. The 2021 interpretive rule to section 11(c) of the OSH act created a “but-for” standard for causation when a worker is retaliated against for reporting health and safety violations; a high standard to meet for workers employed by companies that build high turnover or significant temporary workforces as a business model. OSHA needs to remain cognizant of the connections between physical manifestations of heat stress and workers’ abilities to maintain established benchmarks for productivity as well as the impacts of heat exposure to mental functioning, and train investigators to consider these connections when establishing whether discipline or termination was “substantially” due to filing a complaint.

Workers, particularly immigrant and undocumented workers, often fear retaliation and may not file health and safety complaints

Workers experience and witness rampant retaliation across industries. A 2009 survey of workers in low-wage industries in four major cities, for example, found that of the 1 in 5 workers who had made a complaint to their employer or attempted to form a union in the previous year, almost half (43 percent) experience some form of illegal retaliation.⁶⁷ A study of workers in Alabama’s poultry industry based on interviews with over 300 workers found that 40 percent of injuries were not reported to the employer, and “fear of being fired or disciplined for reporting the injury, missing work to heal, or seeking medical treatment” accounted for almost one-fourth of those unreported injuries (24 percent).⁶⁸ In addition, almost 1 in 10 workers who did report an injury (9 percent) experienced retaliation.⁶⁹ A range of recent studies of workers’ experience during the COVID-19 pandemic also underscore how workers often see and experience retaliation when they seek to protect their health and safety.⁷⁰ OSHA itself has seen retaliation complaints increase significantly during the COVID-19 pandemic.⁷¹ Reflecting the legacies of systemic racism and exploitation, studies of retaliation also routinely find that Black, Indigenous, Latinx, Asian, and immigrant workers experience it at higher rates than white counterparts.⁷²

Immigrant workers fill some of the most physically taxing and most exposed occupations within the industries tagged as likely to experience excessive heat conditions. For example, they comprise almost 23 percent of healthcare support occupations; 28 percent of cooks, almost 24 percent of food preparation workers, and 25 percent of dishwashers; 34 percent of landscaping workers; 30 percent of carpenters, 39 percent of construction laborers, 44 percent of roofers, and almost 63 percent of stucco masons and plasterers; 33.7 percent of food processing workers; 38.6 percent of laundry workers; 49 percent of taxi drivers, and 34 percent of parking attendants.⁷³ These disparities can be exacerbated by fears about immigration status and documentation. We know that several industries that pose the greatest risk of heat exposure for workers are too often characterized by employers who hire and then neglect undocumented workers.

These workers may be particularly challenged in reporting workplace safety violations: low pay creates economic insecurity that puts families in peril if work hours are cut, particularly when pay is calculated by the piece as in agricultural work; threats of retaliation by employers or fear of immigration authorities can diminish a worker's determination to challenge unsafe conditions; and language barriers may mean that foreign-born or undocumented workers do not know what their rights are or how to contact health and safety officials.

In 2018, researchers used multiple government data sets to estimate that heat-related deaths accounted for 2.23 percent of deaths among workers who were not US citizens, but 0.02 percent of deaths among US citizens. Fatalities were especially high for non-US citizen workers aged 18-44, and researchers noted that non-US citizens are 52 percent less likely to have health insurance than US-citizen counterparts.⁷⁴ In addition, foreign-born workers account for only 6 percent of the unionized private sector workforce nationwide, with non-US citizens constituting only 4 percent of private sector unionized workers.⁷⁵

The final heat standard must include robust protections from retaliation, including availability to workers in a language they understand, ideally by a native speaker of that language so that workers can receive immediate answers to questions. It must be strongly and repeatedly communicated that workers are covered by OSHA regardless of their immigration status.

A stakeholder approach is key to mitigation

One challenge in creating workplace standards is the possibility of unintended consequences, therefore it is critically important to engage workers and worker advocates in the process of mitigation of unsafe practices. In employment situations with such deeply unequal power structures, a failure to bring workers to the table could mean that measures to avoid heat exposure result in other legal violations. A United Farm Workers advocate has noted that during recent heat waves in Oregon and Washington, nocturnal harvests were taking place to avoid heat exposure, but that with no childcare available for shifts that start at two o'clock in the morning workers had to bring their children with them. "So we are seeing more 9, 10, and 11-year-olds working in these really dangerous workplaces," she told reporters.⁷⁶

Workers in Rite Aid warehouses in California's Inland Empire have publicly stood up against excessive heat in their workplace for a decade. Although they have filed three different complaints to Cal/OSHA, there have been no penalties levied as a result. And while company spokespeople have said they are shifting work schedules to avoid the hottest parts of the day, workers say these shifts come with mandatory overtime.⁷⁷

A national heat standard will need to include worker training that includes recognizing the dangers of heat stress for themselves but also in colleagues, and which protects workers who are showing signs of heat stress from dangerous pressures from employers or retaliation. Industries where injuries and fatalities due to heat stress are high should come under additional scrutiny from regulators and consideration should be given to how best to use tools like National Emphasis Programs and Strategic Partnership Programs to expand OSHA's capacity to identify and investigate violations. Furthermore, while some recommend methods of measuring environmental dangers of excessive heat (for example, using the Wet Bulb Globe Temperature measure, the National Weather Service Heat Index, or the Thermal Work Limit) to truly protect workers a standard must also recognize the wide-ranging variability in physical reactions to these environments.⁷⁸ Environmental

measurements should be taken on the worksite, and in proximity to where workers will be performing labor and designated workers should be trained on how to read and interpret the results of those measurements in order to communicate best practices to colleagues and co-workers.

We also strongly recommend the collection of robust data to help drive implementation and enforcement of an eventual heat standard. We support the proposal to amend recordkeeping regulations to reinstate requirements for employers to electronically submit both the OSHA Form 300 (Log of Work-Related Illnesses and Injuries) and OSHA Form 301 (Injury and Illness Incident Report) reports. Furthermore, OSHA should consider rescinding some exemptions to keeping the OSHA Form 300. Given the heat dangers that workers face in eating and drinking establishments, transportation industries, and some occupations related to pipeline industries, OSHA should evaluate the implications of allowing these employers to forgo reporting requirements. All OSHA Form 300 logs should be made readily and easily available to all workers and their chosen advocates. While it may not be practicable to keep and file all records in multiple languages, an annual summary of the Form 300 logs should be produced in the language spoken and understood by the majority of the workforce.

Conclusion

A generation has passed since the first suggestion that OSHA draft a heat standard to protect workers. The industries that most often exposed workers to heat-related dangers during that time have become increasingly reliant on Black, Indigenous, Latinx, Asian, and immigrant workers, temporary workers, and undocumented workers. Unlike other types of workplace illnesses and injuries, we have not made addressing this workplace danger a priority because of the composition of these workforces. Building on centuries of racist stereotypes about ability to withstand heat and an ability to cast a segregated workforce aside, we have allowed too many workers to suffer acute and chronic health effects and fatalities due to excessive heat exposure. As climate change drives environmental shifts, these dangers will become ever more pressing and thus we must be deliberative but also move with urgency to protect workers.

We also need to see the process of developing this standard as an opportunity to address other longstanding biases and unjust workplace structures that impede workers learning of and exercising workplace protections across a variety of employment relationships and occupations. Too many private companies use labor brokers, temporary staffing firms, and incarcerated labor in ways that expose these workers to environmental harms and exploit loopholes in the law. Too often we depend on underpaid workers with little workplace power to alert regulators to their employers' law-breaking behavior without adequate whistleblower protections. NELP hopes that in addition to strengthening the anti-retaliation provisions of the OSH Act that other policymakers will support measures like just cause termination policies and a ban on forced arbitration that will enable more workers to raise alarms about dangerous corporate practices.

Finally, we recognize that in order to make an OSHA federal heat standard as effective as possible, the Department of Labor needs increased capacity. We commend Secretary Walsh's commitment to hire more inspectors as budgets allow, and we urge OSHA officials to think expansively and creatively about how to engage workers more deeply and depend on other advocacy groups and stakeholders to aid in identifying dangerous exposures to excessive heat and to ensure that workers know their rights, in a language they understand, in a place where they feel safe to raise concerns. We further recommend robust employer reporting and public access to that data in order to understand

how exposure to excessive heat grows in a changing climate and to help quickly and effectively design data-informed refinements when they are needed.

Thank you again for the opportunity to submit comments as part of the critical work of designing and implementing a meaningful heat standard protection for worker.

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