Written Testimony of

Public Citizen

Before the

U.S. House of Representatives Committee on Education and Labor

Workforce Protections Subcommittee

On

"From the Fields to the Factories: Preventing Workplace Injury and Death from Excessive Heat"

July 11, 2019

Chairman Adams, Ranking Member Byrne, and Members of the Subcommittee:

Thank you for holding this hearing on the dangers of extreme heat in the workplace. Public Citizen is a national consumer advocacy and public interest organization with more than 500,000 members and supporters. Since 1971, Public Citizen has advocated for stronger health, safety and consumer protection measures, as well as curbs on corporate wrongdoing. Public Citizen is a part of a nationwide network of more than 130 organizations that have banded together to raise awareness around the growing impacts of climate change on workers, by advocating for occupational heat protections.

Heat is the leading weather-related killer in the U.S., and climate change is resulting in more days of extreme heat. Alarmingly, 18 of the last 19 hottest years on record have occurred since 2001.[1] With record-breaking summers becoming the norm, outdoor and indoor workers across a wide variety of workplaces are at greater risk for heat related illnesses. Despite this intensifying threat, the Occupational Safety and Health Administration (OSHA) has not developed a federal heat stress standard for workers. Inexcusably, approximately 130 million workers in the U.S. lack the protections of a heat stress standard.[2] Rather, OSHA polices heat-related injuries and deaths only by enforcing its general duty clause, a "catch all" provision that requires employers to provide safe workplaces. Enforcement is scarce and, by definition, reactive rather than preventive. Further, a recent court case may make it more difficult for OSHA to hold employers accountable for heat-violations under the general duty clause.[3]

In the absence of a federal standard, states and some municipalities are taking measures to protect workers from heat. Further, the U.S. military has implemented heat stress guidance for servicemembers. Existing programs have demonstrated that the solutions to heat stress are not only sensible, but cost-effective.

In July 2018, Public Citizen and a coalition of more than 130 labor, environmental, and public health organizations, as well as former OSHA officials, petitioned OSHA for a federal heat stress standard (see Appendix 1).[4] The petition builds on repeated recommendations by the National Institute for Occupational Safety and Health calling for OSHA to issue such a standard. Nearly a year after the submission of our petition, OSHA has yet to provide a formal response. In light of the agency's failure to act, Congress has a responsibility to require OSHA to protect workers from preventable heat-related injuries, illnesses and deaths.

The Asuncion Valdivia Heat Illness and Fatality Prevention Act, led by Representatives Judy Chu (D-CA) and Raul Grijalva (D-CA) in partnership with House Committee on Education and Labor Chairman Bobby Scott (D-VA) and members of the Committee, is commonsense legislation that fills this critical health and safety gap. The bill directs OSHA to develop a heat stress standard for indoor and outdoor workers. Specifically, the standard requires employers to develop a heat-illness prevention plan that includes the following components:

- develop and implement the standard with meaningful participation of covered employees, and their representatives when applicable, and tailor it to the specific hazards of the workplace;
- ensure it is written in a language understood by the majority of the employees;
- require that workers who are exposed to high heat have paid breaks in cool environments, access to water for hydration, and include limitations on how long workers can be in extreme heat areas;
- create emergency response procedures for employees suffering from heat illness;
- provide training for employers and employees on heat stress illness and prevention;
- include acclimatization plans to ensure workers can adjust to their working conditions;
- ensure engineering and administrative controls are used to limit heat exposure, i.e. ventilation and/or protective clothing;
- require employers to maintain records on heat-related illnesses and deaths, and other heat data; and
- prohibit retaliation against a covered employee for reporting violations of this standard or exercising any other rights under this bill.

I. Deadly Heat for Workers

The Occupational Safety and Health Act of 1970 declared a national policy to "assure . . . safe and healthful working conditions" for "every working man and woman."[5] The OSHA website cautions, "Every year, thousands of workers become sick from occupational heat exposure, and some are fatally injured. These illnesses and fatalities are preventable."[6] Given the gross inadequacies of the general duty clause in protecting workers from extreme heat, the agency has an obligation to prevent future heat-related injuries, illnesses, and fatalities by issuing a heat stress standard for outdoor and indoor workers.

Excessive heat can cause heat stroke and death if not treated properly. It also exacerbates existing health problems like asthma, heart disease and kidney failure. From 1992 through 2017, exposure to excessive environmental heat killed 815 U.S. workers and seriously injured over 70,000, according to the U.S. Bureau of Labor Statistics.[7] However, available data on heat-related injuries and deaths vastly understate the problem, especially in the sectors employing vulnerable and often undocumented workers.[8]

Many factors contribute to this problem. Undocumented workers face possible termination or deportation if they report a workplace injury. In addition, records of injuries and fatalities are based on incomplete employer self-reporting to OSHA, as employers attempt to hide the full extent of workplace hazards. Further, the data do not include significant worker populations that are impacted by extreme heat, including small farms with 10 or fewer employees. Lastly, heat is not always recognized as a cause of heat-related injuries or deaths. Many of the symptoms, such as headache, rash, and fatigue or sweating, overlap with other more common diagnoses.[9]

Heat-related illness and death can be expected to increase in the U.S. and globally as temperatures rise.[10] According to Fourth National Climate Assessment, released by the U.S. Global Change Research Program in 2018, the increase in deaths due to hotter temperatures is expected to be larger than the reduction in cold-related deaths in most U.S. regions by the end of the century. The available data suggest that the rate of heat-related fatalities has been on the rise since 1992 — the first year for which numbers are available — and has a positive correlation with the increase in average annual temperature.[11] Analyses of emergency room visits, emergency medical service calls, and hospital admissions further demonstrate an association between hot days and heat-related illnesses in the U.S.[12] Further, research based on data from Michigan hospitals between 2010 and 2016 found that large temperature spikes are associated with significantly more heart attacks.[13] As temperatures continue to rise, more workers will be exposed to dangerously hot working conditions for longer periods of time.

As climate change intensifies, excessive heat is becoming a problem over more months a year and in more parts of the country. A report by Public Citizen found that during the July 4, 2018 week, an average of more than 2.2 million construction and farm workers labored in extreme heat each day (see Appendix 2).[14] Another report by Public Citizen, Farmworker Association of Florida, and a researcher from Emory University showed that Florida outdoor workers labor in dangerous heat conditions a high proportion of the time and their health is suffering as a result (see Appendix 3).[15]

Laboring in these conditions harms workers' health and employers' bottom lines even when it falls short of directly causing illness. In excessive heat, people work less effectively due to "diminished ability for physical exertion and for completing mental tasks," which increases the risk of accidents, workers compensation costs, and hospital-related expenses.[16] Reduced productivity alone causes significant economic harm.[17] Rising temperatures have contributed to the loss of 1.1 billion labor hours in the U.S. between 2000 and 2017.[18] The costs of lower labor productivity under rising temperatures is estimated to reach up to $160 billion in lost wages per year in the U.S. by 2090 according to the 2018 National Climate Assessment.[19] Some regions will be disproportionally impacted. For instance, jobs with greater exposure to heat are projected to experience a three percent decline in labor productivity in Southeast and Southern Great Plains region states. By the end of the century, some Texas and Florida counties are projected to have more than six percent losses in annual labor hours due to rising temperatures.[20]

Given the health and economic impacts of extreme heat, states, cities, and some industries have taken concrete measures to protect their workers from rising temperatures. It's time for Congress to make sure that OSHA takes action to protect all workers from heat stress.

II. Existing Heat Prevention Programs and Benefits

In the absence of a federal rule, three states have implemented standards protecting workers from heat stress. California and Washington have standards that cover outdoor

workers, and Minnesota has a standard that covers indoor workers.[21] In addition, California is in the process of finalizing a rule for indoor workers.[22] These standards demonstrate that heat stress rules are not just feasible, but effective. From 2013 through 2017, California used its heat standard to conduct 50 times more inspections that resulted in heat-related citations than OSHA did nationwide under its general duty clause.[23]

Cities also have implemented successful heat prevention measures. For instance, in 2011, a central Texas municipality implemented a heat illness prevention program for outdoor municipal workers that not only resulted in a significant decrease in heat-related illnesses, but a decrease in worker's compensation costs by 50% per heat-related illness.[24]

In addition, different branches of the U.S. military have adopted heat policies. In 1973, the U.S. Navy developed heat exposure limits based on combined metabolic and environmental heat loads.[25] In addition, the Navy curtails training as wet bulb globe temperatures (WBGTs) rise. WBGT is a measure of heat stress in direct sunlight, accounting for temperature, humidity, wind speed, sun angle, and cloud cover.[26] In 2003, the U.S. Army and U.S. Air Force issued a technical bulletin on effective measures to prevent heat-related injury in soldiers in both outdoor and indoor workplaces.[27] The bulletin provides detailed instructions on acclimatization, with gradually increasing environmental heat exposure and workloads over a two-week period. A rigorous WBGT threshold is calculated for differing work intensities and environmental temperatures, with a recommended cycles of work and rest based on these values.[28] The U.S. Marines has issued heat guidance in the past, and since 2015 it has been following the Navy's guidance on an interim basis.[29]

Although laudable, these policies are not perfect. Weaknesses of the military guidelines include the absence of recordkeeping requirements to verify compliance, the lack of shade requirements, and the lack of exposure limits in any branch other than the Navy. Also, it is unclear on reading the military materials whether they are merely advisory and, if so, the extent of compliance. Nevertheless, the Navy's exposure limits and the Army and Air Force's work-rest cycle and acclimatization protocols represent rigorous and feasible model provisions on which to base a federal standard.[30]

Without a federal standard, some sectors have begun taking matters into their own hands. The Communication Workers of America negotiated with AT&T, Verizon, Century-Link, and Frontier Communications to institute comprehensive heat programs for its members in 2011. Since that time, the union has observed no heat-related fatalities, and heat-related health problems have significantly decreased. The United Steelworkers also has a collaborative heat program in place with positive results.

III. General Duty Clause Weaknesses

In the absence of a dedicated standard to address heat hazards, OSHA relies on its general duty clause to police hazardous heat exposure. This broad mandate requires employers to provide their employees with a workplace that is "free from recognized hazards that are causing or are likely to cause death or serious physical harm."[31] It is a poor substitute for

a standard. It fails to give employers guidance on precisely how to prevent heat illness; it requires a much higher burden of evidence than a specific standard; and it typically is used only in response to tragedies rather than preventatively.[32] OSHA recommends that employers voluntarily implement heat stress prevention programs, but most employers will not implement the recommended practices unless they are required to do so.[33]

Further, it is likely to become even more difficult to protect workers from heat stress under the general duty clause due to a recent decision by the Occupational Safety and Health Review Commission's decision in *Secretary of Labor v. A.H. Sturgill Roofing, Inc.* During a worker's first day as a temporary employee of A.H. Sturgill, he was admitted to the hospital with a core body temperature of 105 degrees after working in direct sunlight for five hours. He ultimately died from heat stroke. OSHA cited the company for failing to protect its workers from heat under the general duty clause. In a 2-1 decision, the Commission reversed the citation, finding that OSHA did not establish the existence of a hazard or feasible means of abatement and the Secretary of Labor "failed to meet his burden of proving a violation."[34] However, the majority also noted, "The Secretary's failure to establish the existence of an excessive heat hazard here illustrates the difficulty in addressing this issue in the absence of an OSHA standard."[35]

OSHA has a single acceptable course of action in response to this decision: Promulgate a heat standard to provide clear instructions on what employers must do to protect workers, and enforce the standard. Given OSHA's inaction, it's up to Congress to ensure workers are protected from extreme heat.

III. Conclusion

During this year's Workers Memorial Week, more than 100 organizations spanning the labor, environmental, and public health community followed up on the 2018 petition for rulemaking by writing a letter urging OSHA to issue a heat stress standard to protect workers from rising workplace temperatures (see Appendix 4). Still, OSHA has not moved. Today's hearing and introduction of The Asuncion Valdivia Heat Illness and Fatality Prevention Act are essential steps toward sensible workplace protections from rising heat.

For questions or for more information, please contact Shanna Devine, Worker Health and Safety Advocate of Public Citizen's Congress Watch Division, at sdevine@citizen.org, 202.454.5168, or David Arkush, Managing Director of Public Citizen's Climate Program, at darkush@citizen.org, 202.454.5132.

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[2] Petition by Public Citizen et al. to Loren Sweatt, Acting Assistant Secretary of Labor for Occupational Safety and Health, U.S. Department of Labor, for heat stress standard 1 (July 17, 2018), https://bit.ly/2wjJSzy [hereinafter 2018 Petition by Public Citizen et al. to Loren Sweatt].
[3] *Secretary of Labor v. A.H. Sturgill Roofing, Inc*. 21 No. 13-0224 (OSHRC Feb. 28, 2019), https://bit.ly/2IIteSe.
[4] 2018 Petition by Public Citizen et al. to Loren Sweatt.
[5] The Occupational Safety and Health Act, 29 U.S.C. § 651(2)(b) (1970) https://bit.ly/2B1tB5t.
[6] *Occupational Heat Exposure*, U.S. DEPARTMENT OF LABOR (viewed on July 8, 2019) https://bit.ly/1wVAwUN.
[7] *Occupational Injuries/Illnesses and Fatal Injuries Profiles*, BUREAU OF LABOR STATISTICS, https://bit.ly/2VVCGW6 (viewed on July 8, 2019). Serious injuries are defined as those resulting in at least one day away from work.
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[15] DAVID ARKUSH, VALERIE MAC ET AL., PUBLIC CITIZEN, FARMWORKER ASSOCIATION OF FLORIDA, UNWORKABLE: DANGEROUS HEAT PUTS FLORIDA WORKERS AT RISK (2018) https://bit.ly/2WY97Yu.
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