



Introduction

The most recent decade was the warmest on record (2020 Global Climate Report) and 2023 saw the highest number of deaths from heat exposure in the U.S. in 45 years of record keeping (Associated Press analysis of CDC data). Given rising average temperatures, more heat waves each year, and longer periods of extreme heat (U.S. Global Change Research Program), heat represents an increasingly important factor in the work lives of people in the U.S. and globally. As a result, the intensity of heat exposure for workers who already experience extreme heat at work may increase, and the number of workers newly exposed to heat as part of their jobs may also increase (Kjellstrom et al. 2016). Workers are less efficient and productive when working in extreme heat. A

2012 report estimated the loss of global GDP due to declines in heat-related labor productivity at \$300 billion per year and suggested that the number will be \$2.5 trillion per year by 2030 (DARA 2012). Exposure to heat at work also poses serious health risks for workers, both because of the direct effects of heat on the body (Flouris et al. 2018), and because exposure to heat increases the frequency of other workplace injuries (Park, Pankratz, and Behrer 2021). Bureau of Labor Statistics data recorded 479 occupational environmental heat fatalities from 2011 to 2022 and 33,890 estimated work-related heat injuries and illnesses from 2011 to 2020; these numbers are widely considered vast underestimates (U.S. Bureau of Labor Statistics, Census of Fatal Occupational Injuries).



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Kristen Harknett UC, San Francsico To date, most research about heat exposure at work has focused on people who work outside, as well as on individuals who are regularly exposed to indoor heat sources, such as in kitchens. However, both the physical infrastructure of certain workplaces and employer practices and policies may not yet be calibrated to more frequent and longer extreme heat events, subjecting a broader group of indoor workers to the effects of heat at work. Novel evidence collected as part of the Shift Project, which regularly surveys retail and food service workers across the U.S., indicates that exposure to heat at work is also an issue for those who work indoors in the service sector. We asked workers to report on their experiences of heat in the workplace in the summer of 2024, a period in the U.S. during which 26 cities had at least one dangerous heat wave and 91 million people experienced 30 or more days above 90th percentile temperatures (Climate Central). Based on data from 3,514 service sector employees at 357 employers (2,956 of whom work indoors), collected between September 28 and November 25, 2024, we find widespread reports of indoor service sector workers feeling overheated and regularly experiencing temperatures over 80°F.

As of today, there is no federal regulation specifically addressing heat standards in the workplace, though OSHA is actively working toward establishing a federal heat standard. The proposed regulation would create comprehensive, enforceable requirements to protect approximately 36 million workers from hazardous heat exposure, including measures like access to water, rest breaks, acclimatization plans, and training. Occupational Safety and Health Administration (OSHA) currently relies solely on its General Duty Clause (Section 5(a)(1) of the OSH Act) to address workplace heat hazards, requiring employers to provide workplaces free from recognized hazards likely to cause death or serious harm. However, enforcement under this clause has proven limited.

This gap has prompted several states, including California, Colorado, Oregon, Washington, and Minnesota, to implement their own OSHA-approved heat standards. Notably, California's state heat standard resulted in 50 times more heat-related citations than OSHA achieved nationwide under the General Duty Clause from 2013 to 2017 (Office of Information and Regulatory Affairs). State regulations vary in their specifications and coverage, especially for

indoor workers. For example, Colorado only covers the agricultural industry and Washington's standards are largely restricted to outdoor work. California and Oregon's heat standards address both outdoor and indoor heat exposure. Both states require employers to implement written plans outlining procedures for water, shade, rest periods, emergency response, acclimatization for new and returning workers, and training for employees and supervisors. For indoor workplaces, these state laws activate protections when temperatures exceed 82°F in California, and 80°F in Oregon.

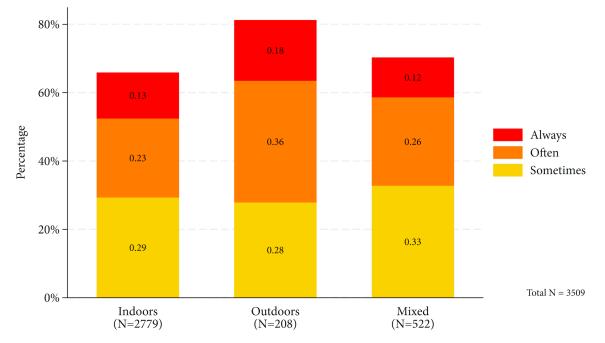
This report provides data on the experience of heat for indoor workers, documenting the prevalence of exposure; the symptoms experienced in the context of heat exposure; and the extent to which workers have access to mitigation strategies to protect against heat illness and injury. We show that heat exposure indoors is the norm rather than the exception. Many workers experience heat-related health consequences and have extremely limited access to effective mitigation strategies.

Heat Exposure

Figure 1 compares summer heat exposure at work for workers in the sample whose job is indoors, outdoors, or a mixture of the two. Not surprisingly, exposure to heat is greatest for those who work outdoors, with 82 percent of outdoor workers reporting feeling overheated at work in the summer. More surprising is the high prevalence of heat exposure for indoor workers. Among workers employed in retail or food service who work indoors, 65 percent report feeling uncomfortably hot or overheated at work "sometimes," "often," or "always" and 36 percent report experiencing uncomfortable heat at work "often" or "always."

The proposed OSHA heat standard uses a threshold of 80°F to define workplace heat exposure. Figure 2 shows how common it is for retail and food service workers to experience temperatures exceeding 80°F while working indoors. Close to half of workers (45 percent) report at least "sometimes" experiencing temperatures over 80°F while working indoors. Almost one-quarter of indoor service sector workers in this sample report exposure to this level of heat "often" or "always."

Figure 1. Percentage of Service Sector Workers Feeling Uncomfortably Hot or Overheated at Work in the Summer



Source: Shift Project survey data, Fall 2024. "Indoors" includes workers who report working inside at least 90% of the time. "Outdoors" includes those who work outside at least 50% of the time. "Mixed" includes those who work indoors more than 50% but less than 90% of the time.

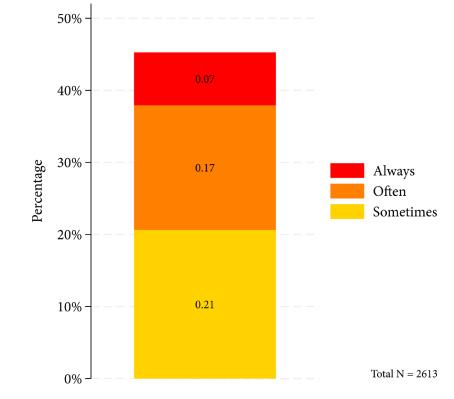


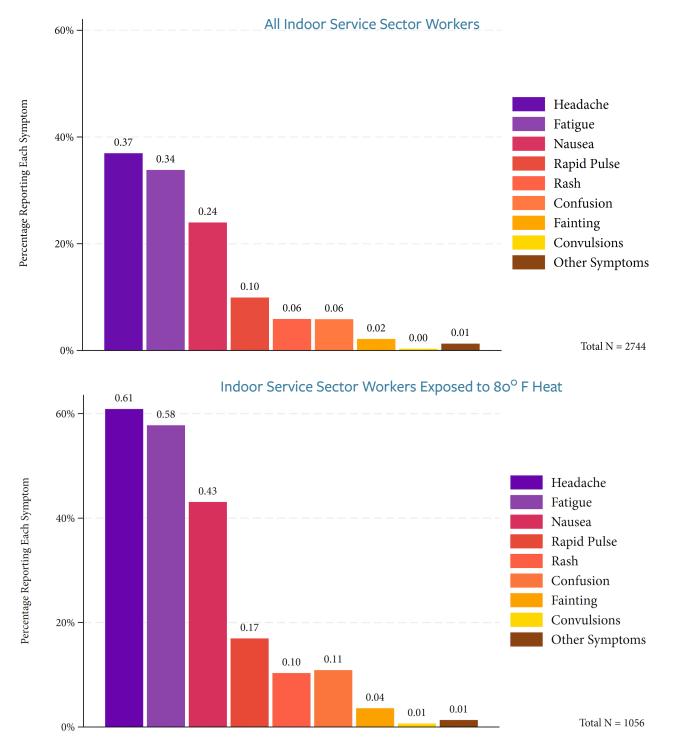
Figure 2. Percentage Experiencing Indoor Temperatures Over 80°F at Work in the Summer

Source: Shift Project survey data, Fall 2024. Omits workers who work outdoors or in a delivery vehicle.

Short-Term Health Consequences of Workplace Heat Exposure

Indoor service sector workers report a variety of physical symptoms related to exposure to heat. Figure 3 displays the percentage of workers experiencing heat-related symptoms in the last year. Among retail and food service workers who work indoors, 37 percent had a heat-related headache; 34 percent experienced heat-related fatigue; and 24 percent had heat-related nausea in the past year. These percentages average responses from workers both with and without heat exposure. Focusing only on those regularly exposed to heat reveals much higher reports of heat-related

Figure 3. Experience of Symptoms Due to Heat During Indoor Service Sector Work in the Last Year



Source: Shift Project survey data, Fall 2024. Omits workers who work outdoors or in a delivery vehicle. Among remaining indoor workers, those "experiencing 80°F heat" is defined as reporting these conditions "sometimes", "often", or "always".

symptoms and illnesses. Among those indoor retail and food service workers who sometimes, often, or always work in 80°F or more heat, 61 percent had a headache, 58 percent had fatigue, and 43 percent had nausea related to the heat in the past year. A sizable minority experienced more severe health-related consequences of heat exposure: 17 percent reported increased heart rate, 11 percent experienced confusion, and 4 percent had fainted.

Variation in Exposure to Indoor Heat in Service Sector Jobs

There are several factors that might produce variation in how much exposure to heat indoor service sector workers experience, including their type of workplace, their geographic region, or other circumstances that overlap with demographic characteristics.

Types of Workplaces

The experience of heat stress in some indoor workplaces, such as kitchens, manufacturing, or warehouses, is well-established (OSHA: Heat). We expect that indoor service sector workers in restaurants, fast food establishments, or warehouses disproportionately experience heat at work, reflecting these known patterns. To examine whether indoor retail workers in these types of workplaces account for the majority of the reports of indoor heat exposure, we compared the frequency of working in at least 80°F by type of workplace (Figure 4).

As expected, Figure 4 shows that the proportion of indoor retail workers reporting regular exposure to heat at work was greatest among warehouse workers (63 percent), fast food workers (58 percent), and restaurant workers (52 percent). Importantly, however, 40 percent of indoor workers in stores – a group historically omitted from heat standards and regulations – regularly experience at least 80°F temperatures at work, similar to the percentage of those working in coffee shops (41 percent) (Fig. 4). Given that this subgroup is the largest portion of the sample, the number of people working in stores who regularly experience temperatures over 80°F is greater than the number of people in other retail workplaces experiencing these temperatures.

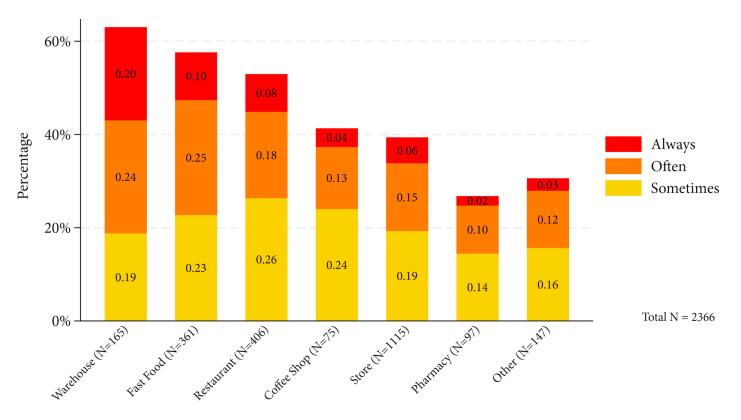


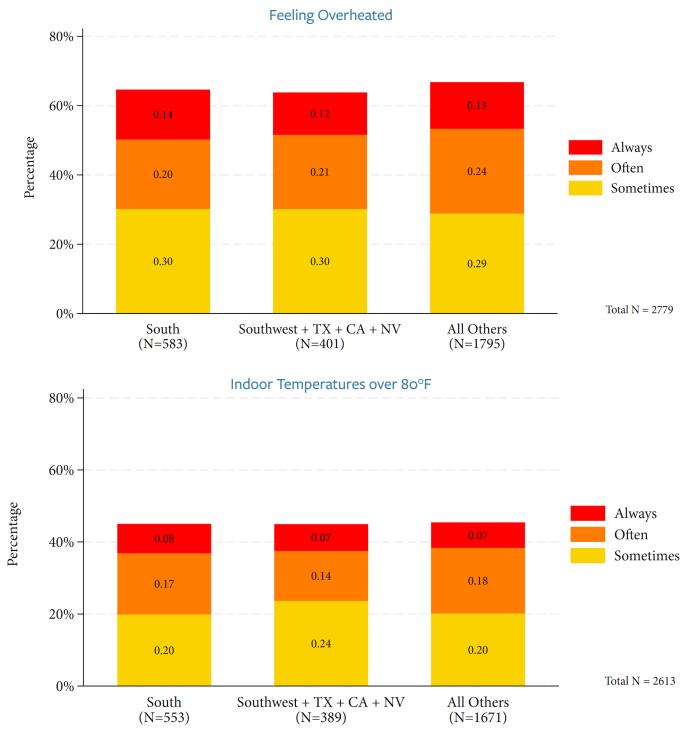
Figure 4. Frequency of Indoor Temperatures Over 80°F at Work during Summer by Subsectors

Source: Shift Project survey data, Fall 2024. Omits workers who work outdoors, in offices, or in a delivery vehicle.

Geographical Region

Given regional variation in summer temperatures, indoor service sector workers in historically hot regions like the South, or the Southwest and parts of the West, might experience disproportionately more heat at work. On the other hand, regions with historically high summer temperatures might be more adapted to those temperatures than regions where regular, extreme summer heat is relatively novel. In general, the rates of being overheated or regularly experiencing temperatures over 80°F inside at work are relatively similar across the South, the Southwest, and other regions (Fig. 5).



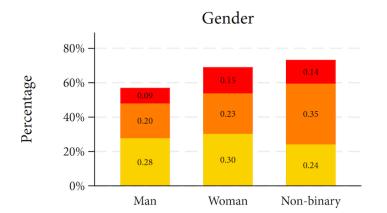


Source: Shift Project survey data, Fall 2024. Omits workers who work outdoors or in a delivery vehicle. South includes AL, AR, DE, DC, GA, LA, MS, NC, SC, TN, TX, and VA. Southwest includes AZ and NM.

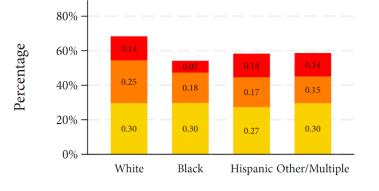
Demographic Characteristics

Exposure to heat in indoor retail work is also concentrated among various social groups. Women and non-binary individuals feel overheated more than men (68 and 74 percent respectively, compared to 57 percent for men); White people report more exposure (both feeling overheated and temperatures over 80°F) than other racial and ethnic groups; and people who report more difficulty covering their basic expenses report more regular heat exposure at work than those with less difficulty (Fig. 6). Heat exposure is not strongly patterned by age.

Figure 6. Experience of Being Overheated or Temperatures Over 80°F at Work for Indoor Service Sector Workers by Gender, Age, Race, and Economic Precarity

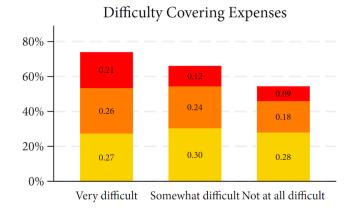






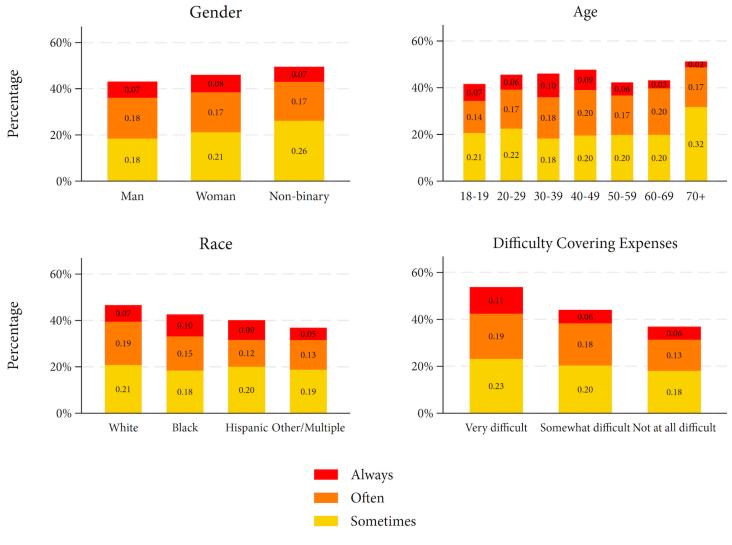


Age 80% 60%).23 0.25 0.22 0.20 0.21 40% 20% 0.34 0.34 0.31 0.31 0.32 0.30 0% 18-19 20-29 30-39 40-49 50-59 60-69 70 +



Feeling Overheated

Indoor Temperatures over 80°F



Source: Shift Project survey data, Fall 2024. Omits workers who work outdoors or in a delivery vehicle. Sample sizes of all demographic subcategories can be found in Appendix Table 2.

Employee Access to Heat Mitigation Strategies

As workplace heat exposure becomes increasingly common, understanding how workers can manage their exposure is important. We turn to evidence on how well workers are equipped to manage these conditions through strategies like taking water breaks or accessing air conditioning.

As shown in Figure 7, most workers (84 percent) have access to water, but most lack access to other

mitigation strategies. Almost 40 percent of workers report being able to use a fan, and about 30 percent can move to a cooler location or take a paid rest break. However, only about 12 percent can turn up the air conditioning by themselves; only 14 percent can ask a manager to do so; and fewer than 10 percent were allowed to leave their shift early when exposed to extreme heat. This evidence clearly shows that workers have very little access to the most effective strategy for controlling heat levels indoors through air conditioning systems.

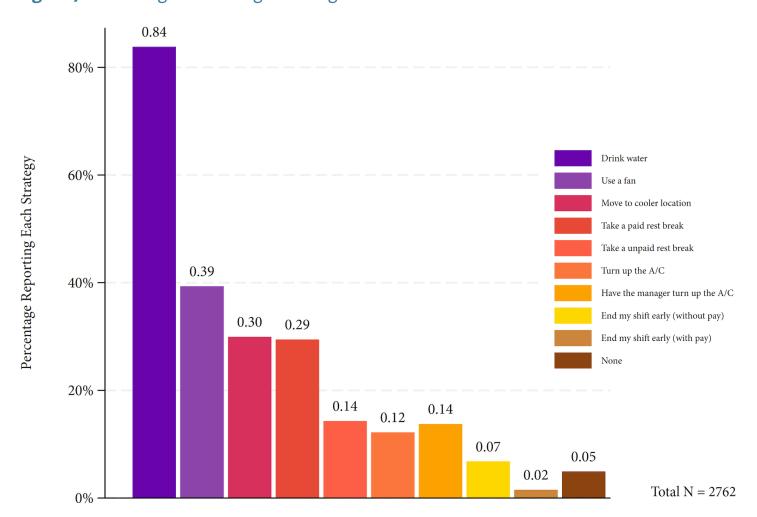


Figure 7. Heat Mitigation Strategies among Indoor Service Workers

Source: Shift Project survey data, Fall 2024. Omits workers who work outdoors or in a delivery vehicle.

Additional Strategies for Dealing with Heat at Work

More than 50 workers shared open text responses to describe other strategies they used for coping with heat exposure at work. The most frequently mentioned strategies for mitigating heat, cited over twenty times, involved seeking temporary relief in refrigerated areas or personal vehicles. Some workers described stepping into walk-in coolers or freezers to cool down. For example, one worker shared that they "Go into the cafe walk-in fridge or freezer" and another worker stated that they "Put my head in the freezer". Some workers retreated to their vehicles during breaks to run the air conditioning: "On my lunch, go to my car and run my AC on high". As seen in Figure 7, air conditioning systems often fall outside the direct control of workers. However, the open text responses show that they can also be beyond the control of the local store managers. In some workplaces, respondents report that air conditioning is regulated centrally by corporate offices. Workers understood that they had to contact corporate directly or rely on store managers to escalate issues relating to adequate air conditioning. For instance, one worker wrote that their "Store manager has to ask corporate in Texas for permission to turn on AC". In other cases, air conditioning functionality depends on external maintenance teams or technicians. Workers submit tickets or call maintenance directly, for example, they: "Call the maintenance line and put in a ticket for air to be adjusted".

Employer Policies regarding Heat Exposure

We asked workers to report on the existence of formal guidelines or policies for addressing heat exposure in their workplace. Only 24 percent of indoor workers reported that their employers had such a policy, and an additional 41 percent reported that they did not know whether their employer had one. Even among outdoor workers, only 42 percent reported that their employer had a policy for addressing heat; 30 percent did not know whether or not their employer had a policy.

For those workers who reported a workplace heat policy, we asked them to describe the policy in an open text response. The most common components of employer heat policies were stipulated break time, temperature thresholds, hydration and cooling, and safety training.

Types of Employer Workplace Heat Policies

Breaks. Workers most consistently mentioned access to breaks as their employer's policy for managing heat exposure. Some workers are allowed more frequent breaks during extreme heat, such as 10-minute breaks each hour or 15-minute breaks every two hours. Rotational policies, where workers alternate between outdoor and indoor tasks, are also common. These various break policies are particularly emphasized for outdoor roles, such as cart attendants or delivery personnel, and are sometimes extended to indoor workers in uncooled facilities.

Temperature Thresholds. Workers report that temperature-based thresholds for work cessation or modification (such as taking cooling breaks) are common among their employers, but they also report that they are infrequently enforced. Common thresholds for outdoor work range from 85°F to 100°F, with some workplaces closing operations entirely when temperatures exceed these levels. Indoor thresholds often hover around 80°F to 85°F, at which point break policies and even store closures are triggered.

Hydration and Cooling. Access to water is nearly universal in worker comments about the heat-

related policies of their employers. Employer policies frequently state that they provide free bottled water, electrolyte drinks, and access to shaded areas or air-conditioned spaces. Cooling devices such as fans, cooling vests, and portable air conditioners are sometimes available, particularly in extreme conditions.

Heat Safety Training. Many workplaces engage in training programs to educate workers on the signs of heat exhaustion, dehydration, and related illnesses. Posters, videos, and periodic updates serve as formal reminders of the risks associated with heat. These initiatives often emphasize individual responsibility—hydration, self-monitoring, and seeking breaks—as the primary mitigation strategy.

Barriers to Implementing Employer Policies

A recurring theme in workers' accounts of their employers' policies is that such policies are regularly not implemented. Policies outlining break schedules, temperature thresholds, and hydration access are often disregarded during peak workloads or under unsupportive management. For instance, workers reported that operations often continue beyond defined temperature limits even when cooling resources are inadequate, leaving workers vulnerable to heat-related illnesses. As one worker shared: "Our temps cannot exceed 82°F, we close down. But most of the time, they will not let us [close down]".

The comments reflect multiple barriers to effective policy implementation: One type of barrier is the individualization of risk, emphasizing personal responsibility for hydration and self-monitoring, which shifts the burden of heat management from the organization to the individual. In one stark example, a worker shared: *"Cooling solutions basically instruct you that it's* YOUR responsibility to stay cool... unfortunately that's not possible in a 120-degree truck all day and an ice machine they won't fix".

A second barrier to effective employer heat policies stems from workplace norms, which stigmatize breaks or prioritize output over safety, thereby undermining formal policies and exacerbating health risks. As an example, one worker shared the mixed messages they received from their employer, which pitted heat mitigation against productivity goals: "On paper it looks compassionate, but in reality, management will tell you to suck it up unless you pass out on the floor".

Worker comments also highlighted resource barriers. In particular, understaffing of workplaces regularly prevents managers from following heat-related guidelines. For instance, one worker shared that the employer heat policy stipulated: "*Breaks every 30 min if 80 and above, if we had the staff to do so, which is never*".

Discussion

The number and type of workers experiencing the effects of heat at work is growing and will continue to grow. Existing regulations have focused on protecting outdoor workers and indoor workers in particular sectors from exposure to extreme heat. However, given current and future changes in climate patterns, it is important to update evidence and assumptions about the types of workers that are impacted by heat. In this research brief, we have presented novel evidence of the widespread impact of extreme heat on indoor service sector workers employed in big box stores, grocery stores, fast food restaurants, cafes, pharmacies, and related industries. This includes indoor service sector workers in workplaces that have already been identified as subject to the effects of heat - such as warehouses, fast food, and restaurants - but also workplaces like retail stores, which have received less attention for heat exposure. Furthermore, exposure to indoor heat in the service sector has consequences for workers: in this sample, 49 percent of workers reported at least one physical symptom resulting from heat exposure at work in the past year. Among those exposed to 80°F at least sometimes, that number rises to 78 percent.

While we find some differences in reports of exposure to heat by gender and race/ethnicity, the patterns of exposure are broadly similar in this sample. One dimension of difference in exposure that emerges is based on economic precarity: those workers who report more economic precarity also report more exposure to heat at work. This corroborates existing research illustrating how the consequences of climate change are disproportionately experienced by those who are economically disadvantaged (e.g., Benz and Burney 2021).

Strikingly, the mitigation strategies that most indoor service sector workers currently have access to are not sufficient. The vast majority of indoor retail workers (88 percent) do not have direct access to the most effective method for controlling heat at work – being able to turn up the air conditioning in their workplace – and only 23 percent can either turn up the air conditioning themselves or request that their manager do so. Indoor service sector workers often must resort to a variety of strategies for cooling off, some of which – like entering a freezer – may themselves create new risks.

While existing federal and state regulations regarding heat standards are largely inadequate for addressing exposure to indoor heat at work, service sector workers in our sample report that employer policies – when they exist – are also not sufficient. For most indoor service sector workers, their employer does not have a heat-related policy, or they are not aware of such a policy. For those working for employers with a policy, policies often place the burden of mitigating heat exposure on employees themselves, or they fail to be implemented at all. Norms about finishing tasks and working hard despite the conditions, or pressure to finish tasks despite resource shortages like inadequate staffing, regularly interfere with the execution of employer policies.

This evidence points to a clear need for updated federal and state regulations and enforcement regarding standards and procedures for evaluating and mitigating exposure to heat in indoor work. It also demonstrates an overwhelming need for employers to provide consistent, effective ways for employees to reduce their exposure to heat at work; overhaul their heat-related policies; and create the workplace conditions that allow for the consistent implementation of those policies.

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References

Benz, Susanne Amelie, and Jennifer Anne Burney. "Widespread race and class disparities in surface urban heat extremes across the United States." Earth's Future 9, no. 7 (2021): e2021EF002016.

Borenstein, Seth, Mary Katherine Wildeman, and Anita Snow. May 31, 2024. "2023 set a record for U.S. heat deaths. Why 2024 could be even deadlier." Associated Press, retrieved on January 10, 2025 from https://www.pbs.org/newshour/nation/2023-set-a-record-for-u-s-heat-deaths-why-2024-could-be-even-deadlier#:~:text=%E2%80%9CIt%20was%20crazy%2C%E2%80%9D%20said,THE%20DEATHS.

Climate Central. September 18, 2024. "People Exposed to Climate Change: June-August 2024 A Climate Central seasonal analysis of how climate change boosted temperatures worldwide between June-August 2024."

https://assets.ctfassets.net/cxgxgstp8r5d/47T3SeXG9B40B12GhHW89h/16ed6591ea594637867cc9d7acf0720a/ Climate_Central_People_Exposed_to_Climate_Change_June-August_2024.pdf

DARA 2012. Climate Vulnerability Monitor 2012: A Guide to the Cold Calculus of a Hot Planet Madrid: Fund. DARA Int, 2nd. <u>http://www.daraint.org/wp-content/uploads/2012/10/CVM2-Low.pdf</u>

Flouris, Andreas D., Petros C. Dinas, Leonidas G. Ioannou, Lars Nybo, George Havenith, Glen P. Kenny, and Tord Kjellstrom. 2018. "Workers' health and productivity under occupational heat strain: a systematic review and meta-analysis." The Lancet Planetary Health 2 (12): e521-e531.

Kjellstrom, T., Briggs, D., Freyberg, C., Lemke, B., Otto, M., & Hyatt, O. 2016. Heat, Human Performance, and Occupational Health: A Key Issue for the Assessment of Global Climate Change Impacts. Annual Review of Public Health, 37(Volume 37, 2016), 97–112. https://doi.org/10.1146/annurev-publhealth-032315-021740

Office of Information and Regulatory Affairs. Office of Management and Budget. Department of Labor/OSHA RIN 1218-AD39. "Heat Illness Prevention in Outdoor and Indoor Work Settings." Available at <u>https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202104&RIN=1218-AD39</u>

OSHA. "Heat." Retrieved on January 10, 2025 from https://www.osha.gov/heat-exposure

NOAA National Centers for Environmental Information, Monthly Global Climate Report for Annual 2020, published online January 2021, retrieved on January 10, 2025 from <u>https://www.ncei.noaa.gov/access/monitoring/monthly-report/global/202013</u>.

Park, R. Jisung, Nora Pankratz, and A. Patrick Behrer. July 2021. "Temperature, Workplace Safety, and Labor Market Inequality." IZA Institute of Labor Economics Discussion Paper Series, No. 14560. <u>http://dx.doi.org/10.2139/ssrn.3892588</u>

U.S. Bureau of Labor Statistics 2024, Census of Fatal Occupational Injuries

U.S. Global Change Research Program. "Heat Waves." Retrieved on January 10, 2025 from <u>https://www.globalchange.gov/indicators/heat-waves#:~:text=These%20bar%20graphs%20and%20maps,trend%20is%20</u>not%20statistically%20significant_

Methods

The Shift Project has collected survey data from hourly service-sector workers employed at large retail and food establishments since the fall of 2016. In the spring and fall of each year 2017-2024, the Shift Project has recruited survey respondents using online Facebook and Instagram advertisements, targeted to workers employed at large retail and food service employers. Those who respond to the Shift survey invitation are automatically routed to a survey landing page where they are asked to consent to participate in the study, then begin the online self-administered survey using the Qualtrics platform. As an incentive, those who completed the survey and provided contact information are entered into a lottery for a \$500 gift card. To screen out invalid survey responses, we used an attention filter (a question that instructed respondents to select a particular response category to verify the accuracy of their responses). For a detailed discussion of The Shift Project data collection, methodology, and data validation, see <u>Schneider and Harknett (2022)</u>.

This brief has used data from the most recent wave of data collection in Fall 2024, the first time the survey has included a module on heat in the workplace. The data collection period ran from September 28 through November 25, 2024. It includes responses from 3,514 retail workers at 357 unique employers, 2,782 of whom worked indoors. We identify respondents as being service sector workers if they are employed at any of 357 recognized retail and food service employers and identify respondents as indoor workers if they report spending at least 90% of their working hours indoors. See Appendix Tables 1 and 2 for a list of common included employers and a demographic breakdown of the indoor worker sample.

McDonald's	Petco	IHOP	
Home Depot	Advance Auto Parts	Safeway	
Walgreens	Whole Foods	Family Dollar	
Subway	Costco	Kroger/Qfc	
Dollar General	Pizza Hut	Dick's Sporting Goods	
Walmart	PetSmart	Chick-Fil-A	
Target	T.J. Maxx	Papa John's	
Taco Bell	Applebee's	Michaels	
Publix Super Markets	Wendy's	Old Navy	
Cracker Barrel	Aldi	JCPenney	
Domino's	Barnes & Noble	Best Buy	
Arby's	AutoZone	Hobby Lobby	
Lowe's	Bath & Body Works	In-N-Out Burgers	
Starbucks	Marshalls	QuikTrip	
Amazon	Buffalo Wild Wings	Trader Joe's	
UPS	Chipotle	Fred Meyer	
CVS	Ulta Beauty	Victoria's Secret	
Burger King	Waffle House	Abercombie & Fitch	
FedEx	Dollar Tree	Urban Outfitters	
Dunkin Donuts	Ross	Gap	
Express	Wegmans	-	

Appendix Table 1: List of Included Employers in Order of Frequency (min. 5 responses)

Total: 357 (62 with min. 5 responses)

Appendix Table 2: Breakdown of Indoor Service Sector Worker Sample by Demographic Group (as in Figure 6)

Demographic	Category	Feeling Overheated (N)	Indoor Temperatures Over 80°F (N)
Gender	Men	771	759
	Women	1878	1733
	Non-binary	116	107
	Total	2765	2599
Age	18-19	238	233
-	20-29	712	708
	30-39	725	704
	40-49	564	559
	50-59	430	416
	60-69	130	130
	70+	41	41
	Total	2759	2595
Race	White	1717	2033
	Black	331	186
	Hispanic	278	209
	Other/Multiple	162	149
	Total	2748	2587
Difficulty Covering Expenses	Very Difficult	776	721
	Somewhat Difficult	1366	1303
	Not at All Difficult	573	536
	Total	2715	2560
Total		2779	2366