RESEARCH BRIEF

CENTER FOR URBAN ECONOMIC DEVELOPMENT
UIC

MONITORING, HEALTH,

& ECONOMIC INSECURITY

AMONG WALMART

WAREHOUSE WORKERS

September 2024

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Research Brief
Monitoring, Health, and Economic Insecurity Among Walmart Warehouse Workers

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Executive Summary

The country's largest private employer, Walmart's workplace practices have a direct impact on hundreds of thousands of workers, and indirect effects on millions more given the ways the company shapes labor markets in retail and logistics. While critiques of working conditions in Walmart's retail stores are familiar, the experiences of workers in the company's warehouses have received far less attention. Based on a national survey of 444 Walmart warehouse workers across 120 facilities and 35 states, we found:

- 45% of Walmart warehouse workers said they always/most of the time have a sense of being monitored or watched on the job
- 58% said the level of monitoring at Walmart is higher than at their previous job
- 56% said keeping up with Walmart's pace of work is hard
- 28% reported being injured on the job
- 50% reported feeling burned out
- Nearly half (48%) of workers had trouble paying bills in the past 3 months

Together, the data suggest that Walmart's focus on low-cost, high-efficiency retailing comes at the expense of worker well-being. The introduction of new monitoring technologies results in many Walmart warehouse workers feeling constantly under watch and compelled to work at unsustainable rates. Many also experience adverse physical and mental health impacts, with the pace of work a leading factor in high rates of injury. And large proportions of Walmart warehouse workers experience different forms of economic insecurity that worsen the toll on health and wellbeing. Both at Walmart and other employers, new laws and policies could curb the destructive impacts of workplace monitoring, limit work pace and intensity to more manageable levels, and afford workers the choice to bargain collectively over their working conditions.

Background

Walmart is a behemoth in the U.S. retail sector, responsible for more than $440 billion in sales nationally in 2024.[1] Historically, the company has occupied a position as the industry's low-price leader, gaining market share by offering consumers low-cost goods at its ever-expanding network of retail locations. This strategy has proved successful: according to Walmart, 90% of Americans shop at the company each year.[2] To achieve this place in the crowded retail landscape, Walmart has built its competitive strategy around supply-chain efficiency and innovation, leading the development of inventory tracking and just-in-time logistics systems enabled by new technologies.[3]

In the face of changing consumer preferences—namely, the rise of online shopping—Walmart now aims to retain its market-leading position while adapting to new modes of selling and delivering products. In addition to traditional retail stores, the company has developed a sophisticated online shopping platform that relies on both stores and distribution centers for order fulfillment—in industry parlance, an "omnichannel" system. In an effort to compete with Amazon, Walmart has increasingly expanded and optimized its ecommerce infrastructure, making efficiency its top priority—a development evidenced by its growing investments in automation.[4] In its warehouses, Walmart has focused on retrofitting existing distribution centers with advanced technology (including AI, robotics, and automated forklifts) as well as building new, highly automated facilities.[5]

Today, Walmart operates 150 million square feet of warehouse space[6] and employs roughly 113,000 workers in 225 facilities.[7] By contrast, the company's brick-and-mortar footprint is vastly larger, comprising 4,606 stores[8] totaling nearly 700 million square feet,[9] with a workforce of almost 1.6 million.[10] Working conditions for Walmart's retail associates have been the subject of considerable attention by media, advocates, and government agencies. Issues of concern include low pay (compelling workers to rely on public benefits),[11] limited raises and promotion opportunities,[12] a

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[1] https://corporate.walmart.com/content/dam/corporate/documents/newsroom/2024/04/25/walmart-releases-2024-annual-report-and-proxy-statement/walmart-inc-2024-annual-report.pdf.

[2] https://corporate.walmart.com/news/2022/03/30/walmart-connect-building-meaningful-shopping-experiences-between-suppliers-our-customers.

[3] Lichtenstein, N. (2006). *Wal-Mart : the face of twenty-first-century capitalism.* New York: New Press.

[4] https://www.cnbc.com/2023/04/11/walmart-warehouse-automation-powers-higher-profits.html.

[5] https://www.warehouseautomation.ca/news/walmart-automation-master-plan.

[6] https://mwpvl.com/html/walmart.html..

[7] Based on self-reported OSHA Injury Tracking Application Data 2023. Accessed from https://www.osha.gov/Establishment-Specific-Injury-and-Illness-Data.

[8] https://stock.walmart.com/financials/unit-counts-and-square-footage/default.aspx.

[9] https://s201.q4cdn.com/262069030/files/doc_earnings/2024/q4/generic/Unit-Count-Website-Disclosure-FY24-Q4.pdf.

[10] https://corporate.walmart.com/askwalmart/how-many-people-work-at-walmart.

[11] https://www.gao.gov/assets/d2145.pdf.

[12] https://www.theguardian.com/business/2021/oct/28/walmart-pay-hourly-low-wages-working-conditions.

punitive attendance system,[13] workplace health and safety problems,[14] discrimination,[15] and wage theft.[16] Taken together, previous accounts point to a model of brick-and-mortar retail that compromises job quality in order to deliver low prices to consumers.

Far less is known about conditions in Walmart's warehouses, where the workforce is more male (76%) and BIPOC (59%) than in its retail stores (43% and 52% respectively).[17] However, there is some research showing that Walmart's preoccupation with squeezing costs out of its supply chain has contributed to poor job quality in its distribution network.[18] Long before the spread of today's advanced digital technologies, the company's just-in-time retail strategies—considered pioneering from the standpoint of cost containment—have been implemented in concert with increased contingent employment, racialized labor exploitation, and attacks on attempts to form unions.[19] Today, compounding these challenges, new technologies and the operational shifts that accompany their introduction appear to be ratcheting up the monitoring and intensity of work at Walmart warehouses, creating new potential hazards.[20]

To better understand the experiences of frontline workers at Walmart distribution facilities, we conducted a national survey of Walmart warehouse workers in 2023. This research brief focuses on findings related to monitoring and intensity, health and safety, and economic insecurity. We begin by describing the survey methodology, followed by a discussion of key findings. We conclude by considering how conditions for warehouse workers at Walmart and other employers might be improved.

Methods

The National Survey of Walmart Warehouse Workers recruited current frontline warehouse workers from across the United States to complete a 107-question survey covering a range of topics including

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[13] https://www.abetterbalance.org/pointingout/.
[14] https://violationtracker.goodjobsfirst.org/?parent=walmart.
[15] Ibid.; https://time.com/5586423/walmart-gender-discrimination/;
https://www.forbes.com/sites/edwardsegal/2022/02/11/walmart-is-sued-for-gender-and-race-discrimination-by-eeoc/;
https://www.eeoc.gov/newsroom/eeoc-sues-walmart-disability-discrimination-6.
[16] https://violationtracker.goodjobsfirst.org/?parent=walmart;
https://www.robertabelllaw.com/blog/wage-theft-187-million-verdict-against-walmart-upheld.cfm.
[17] https://s201.q4cdn.com/262069030/files/doc_downloads/OtherFilings/2024/eeo1_2023-submission.pdf.
[18] Bonacich, E., & Wilson, J. B. (2008). *Getting the Goods: Ports, Labor, and the Logistics Revolution* (1st ed.). Cornell University Press. http://www.jstor.org/stable/10.7591/j.ctt7v8p3.
[19] Bonacich, E., & Wilson, J. B. (2005). Hoisted by Its Own Petard: Organizing Wal-Mart's Logistics Workers. *New Labor Forum*, *14*(2), 67–75. https://doi.org/10.1080/1095760590934788. The move to contingent working arrangements includes increased reliance on part-time work and hiring through temporary staffing agencies, where pay and other standards are often worse than for full-time employees; the racialization of work entails the use of markers of social difference to exploit workers' differential vulnerability to labor standards violations; and blocking workers' access to collective bargaining through well-known union avoidance tactics makes it harder to push for improved working conditions.
[20] Gutelius, B. & Theodore, N. (2019). The future of warehouse work: Technological change in the U.S. logistics industry. Berkeley, CA: UC Berkeley Labor Center. https://laborcenter.berkeley.edu/future-of-warehouse-work/.

employment and personal background, work intensity and worker monitoring, health and safety, workplace fairness, worker voice and input, and economic security. The research protocol was approved by the University of Illinois Chicago (UIC) Institutional Review Board and the survey was fielded between July and December of 2023. Participants filled out the survey on Qualtrics, a survey fielding program, using their computers or smartphones. They were recruited into the survey using the Meta/Facebook targeting approach refined by Schneider and Harknett,[21] which has been established as a proven method for reaching a relatively wide cross-section of workers in specific companies, industries, or geographic areas.

Surveys were considered complete if respondents reached the gender, ethnicity, and race questions situated at the midpoint of the survey instrument. To provide a more demographically representative picture, we reweighted survey responses using data on race and gender composition that Walmart reported to the EEOC in 2023.[22] The results reported below are based on responses from the 444 individuals who provided sufficient information to be included in the weighting variable.[23]

Findings

Work Monitoring and Intensity

Data from the National Survey of Walmart Warehouse Workers indicate that many within this workforce feel the impacts of technology-enabled workplace monitoring. Forty-five percent of workers said they always or most of the time have a sense of being watched or monitored in their work at the company, and 33% said they sometimes do.[24] A majority—58%—said the level of monitoring or surveillance exceeded what they experienced in previous jobs, while 19% said it was about the same, 11% said it was less, and 7% were unsure.[25] And 44% said electronic monitoring is mainly used to control or discipline workers, as opposed to 34% who said it is mainly used to help develop workers' skills and abilities.[26]

A majority of Walmart warehouse workers reported challenges related to the pace and intensity of work: Fifty-six percent said keeping up with Walmart's pace of work was hard,[27] 20% said it was

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[21] Schneider, D., & Harknett, K. (2022). What's to like? Facebook as a tool for survey data collection. *Sociological Methods & Research, 51*(1), 108–140.

[22] https://s201.q4cdn.com/262069030/files/doc_downloads/OtherFilings/2024/eeo1_2023-submission.pdf.

[23] The sample size varies 439 and 444 responses for most of results reported here, with the exception of the questions on paying bills (n=404) and whether monitoring played a role in physical or mental health impacts (n=168 and n=160, respectively; note that that numbers are smaller because the questions were asked only to subset of survey respondents who identified negative health impacts from working at the company.
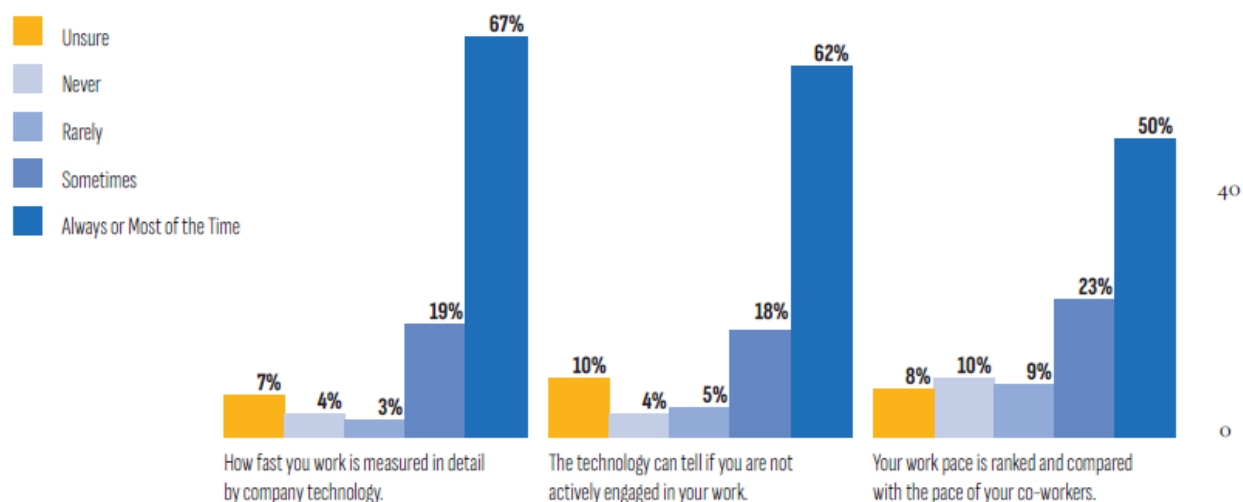
[24] 18% said they rarely do, and 5% said they never do.

[25] Another 5% said the question was not applicable since this was their first job.

[26] 14% were unsure and 7% said monitoring is used for another reason.

[27] Here, we aggregated the 27% who strongly agreed and 29% who somewhat agreed.

FIGURE 1

Experiences Related to Work Monitoring, Pace, and Intensity While Working at Walmart

Legend:
- Unsure
- Never
- Rarely
- Sometimes
- Always or Most of the Time

How fast you work is measured in detail by company technology.
- Unsure: 7%
- Never: 4%
- Rarely: 3%
- Sometimes: 19%
- Always or Most of the Time: 67%

The technology can tell if you are not actively engaged in your work.
- Unsure: 10%
- Never: 4%
- Rarely: 5%
- Sometimes: 18%
- Always or Most of the Time: 62%

Your work pace is ranked and compared with the pace of your co-workers.
- Unsure: 8%
- Never: 10%
- Rarely: 9%
- Sometimes: 23%
- Always or Most of the Time: 50%

not,[28] and 24% were neutral on this question.[29] In turn, the data show that work pace and intensity are closely linked to workplace monitoring. As shown in Figure 1, 67% of workers said how fast they work was always or most of the time measured in detail by company technology, 62% said the monitoring technology can always or most of the time tell if they are not actively engaged in their work, and 50% said their pace of work was always or most of the time ranked and compared with that of their coworkers (a substantial share of respondents also answered "sometimes" to these questions). Nearly one-third of workers (32%) reported always or most of the time feeling anxious about meeting their production standard or rate, and another 33% said they sometimes felt this way. Many also indicated that their production standard or rate made it hard for them to find time to use the bathroom: Twenty-four percent said they always or most of the time found it hard, and 34% said they sometimes did.
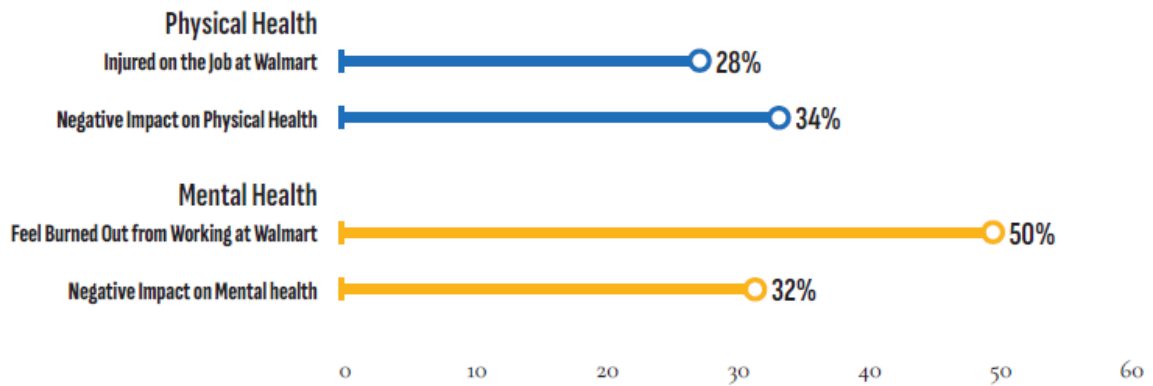
Physical and Mental Health

A significant share of workers reported injuries and adverse physical health impacts from working in Walmart warehouses. As shown in Figure 2, 28% had been injured on the job during their time at the company (including 38% at the company for over five years), with pace of work/workload cited as the leading factor contributing to injury (see Appendix 1, Table 1 for a full list of contributing factors). Most also reported mild, moderate, or severe heat stress, physical exhaustion, leg/knee/foot pain, back pain/aching, shoulder or neck pain/aching, and hand/wrist/arm pain (see Appendix 1, Table 2). Overall, 34% said working at Walmart had a negative impact on their physical health, 24% said it had a positive impact, and 42% said it had no impact. Among those reporting a negative

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[28] Here, we aggregated the 8% who strongly disagreed and the 12% who somewhat disagreed.
[29] That is, they responded "neither agree nor disagree."

FIGURE 2   Physical and Mental Health Impacts of Working at Walmart

Physical Health

Injured on the Job at Walmart — 28%

Negative Impact on Physical Health — 34%

Mental Health

Feel Burned Out from Working at Walmart — 50%

Negative Impact on Mental health — 32%

0   10   20   30   40   50   60

physical health impact, 40% said this negative impact was related to Walmart's workplace monitoring, 20% said it might be, and 40% said it was not.
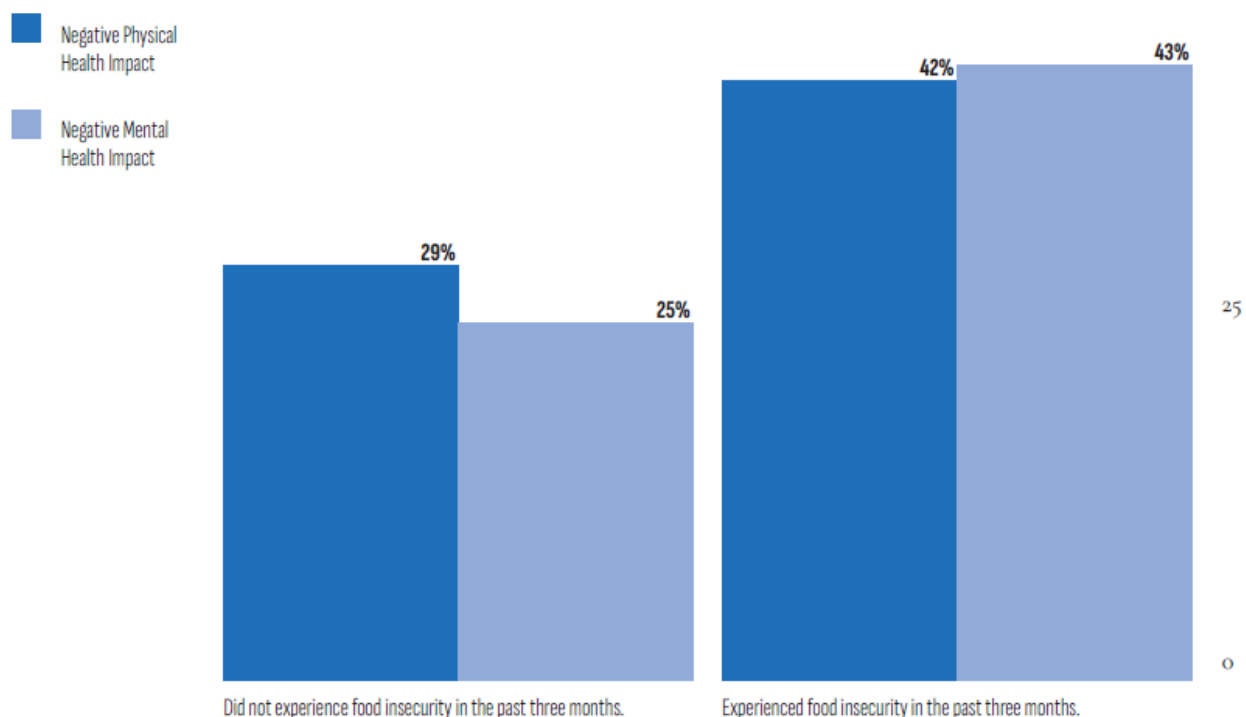
Many Walmart warehouse workers also reported a negative mental health toll from working at the company. Half (50%) reported feeling burned out from working at Walmart. One-third (33%) said working at Walmart had a negative impact on their mental health, 15% said it had a positive impact, and 53% said it had no impact. Among those reporting a negative mental health impact, 46% said it was related to Walmart's workplace monitoring, 27% said it might be, and 27% said it was not (see Figure 2 for an overview of key data points related to physical and mental health impacts).

Economic Insecurity

Finally, in line with previous research on Walmart retail associates, our data indicate that many Walmart warehouse workers are struggling financially and navigating economic insecurity. Nearly half (48%) reported trouble paying all of their bills with no remaining balance in the past three months. Two in five (40%) said they had experienced one or more forms of food insecurity during the past three months (eating less food than they thought they should, being hungry but not being able to eat, or not being able to eat balanced meals) and one in three (33%) had experienced one or more forms of housing insecurity (moving due to eviction or foreclosure, receiving notice of eviction or foreclosure, or being worried about making rent or mortgage payments).

In turn, workers experiencing food and housing insecurity were more likely to report adverse health impacts. Those experiencing food insecurity were more likely than those who did not to report negative physical health impacts (42% versus 29%) and negative mental health impacts (43% versus 25%) from working at Walmart (see Figure 3). Workers experiencing housing insecurity were more

Negative Physical Health Impact

Negative Mental Health Impact

Did not experience food insecurity in the past three months.   Experienced food insecurity in the past three months.

likely than those who did not to report negative physical health impacts (42% versus 30%).[30] Together with the results reported above, these findings suggest multiple channels through which working at Walmart may generate adverse health impacts, including work pace and other elements of job design as well as limited earnings that compromise workers' ability to meet basic needs.

Conclusion

The findings presented in this report show that Walmart's low-cost, high-efficiency retail model, which guides the company's choices on everything from operations to pay, presents significant challenges for its workforce. An established leader in using advanced technologies in supply-chain management and data analytics, Walmart is now applying these lessons in its distribution facilities. The impacts of new warehouse technologies on workers go far beyond augmenting efficiency; they are also a driver of greater speed and work intensity. Walmart monitors its workforce at a level higher than workers have experienced at previous employers, using surveillance as a key tool in managing workers at arms' length, measuring their performance, and disciplining them. The survey findings show not only that technology-enabled monitoring is widely felt at Walmart warehouses, but that it is directly linked to an intense pace of work that many find difficult to sustain.

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[30] All differences reported in this paragraph are statistically significant at a 95% confidence level based on the results of weighted logistic regression analysis.

Simultaneously, the data indicate that large numbers of Walmart warehouse workers experience financial precarity and struggle to make ends meet. In turn, both issues—work intensity and financial precarity—are associated with a troubling physical and mental health toll among those working in the company's warehouses.

Walmart directly employs 6% of all workers in the warehousing industry[31] and countless more indirectly through its relationships with third-party contractors.[32] Given the findings of the survey, it is clear that Walmart warehouse workers—and, indeed, all warehouse workers—deserve and require protections that will safeguard their health and well-being. Many state legislatures have taken steps toward such safeguards, passing legislation that limits the use of technology-enabled productivity quotas and the disciplinary measures that accompany them.[33] The bipartisan Warehouse Worker Protection Act, introduced in the Senate in May 2024, would codify similar standards at the federal level.[34] Alongside industry-specific legislation, efforts to strengthen workers' rights to organize collectively and bargain over their conditions would provide an important set of tools to raise standards and curtail harmful practices at Walmart and other employers.[35]

Acknowledgments

Appendix 1

Table 1: Factors Contributing to Injuries on the Job Among Walmart Warehouse Workers	
Pace of work/workload	39%
Repetitive motion	37%
Heavy packages	32%

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[31] Based on 2023 OSHA ITA data for NAICS 493110 and 493120.
[32] https://www.mwpvl.com/html/walmart.html.
[33] See, for example, https://www.forbes.com/sites/antoniopequenoiv/2023/05/17/new-minnesota-bill-bans-warehouses-from-firing-workers-over-undisclosed-quotas-latest-state-taking-aim-at-amazon/ and https://apnews.com/article/amazon-california-warehouse-workers-labor-citations-eab249e0f0b90347383d7e85b4c0d4ab.
[34] https://www.congress.gov/bill/118th-congress/senate-bill/4260.
[35] The Protecting the Right Organize (PRO) Act is the most notable recent effort to strengthen workers' organizing rights at a federal level. Originally introduced in 2018, the bill twice passed in the House, but has since languished.

Awkward lifting, reaching, or twisting	32%
Getting hit by a package/equipment	29%
Slipping	14%
Broken equipment	13%

Table 2: Incidence of Pain and Bodily Stress Due to Working in Walmart Warehouses				
	None	Mild	Moderate	Severe
Heat stress	42%	24%	21%	13%
Physical exhaustion	28%	31%	29%	11%
Leg, knee, or foot pain	32%	32%	27%	9%
Back pain/aching	30%	35%	27%	8%
Shoulder or neck pain/aching	36%	32%	26%	6%
Hand, wrist, or arm pain	35%	37%	21%	6%
Dehydration	60%	25%	12%	4%