Busting the Myth of Safe Automation at Amazon

To drive faster delivery times and reduce costs, Amazon's ultimate goal is to automate and integrate robotics into 75% of its operations by opening new fulfillment centers and retrofitting existing sites.[1] To justify this seismic operational shift, corporate messaging claims that automation and robotics-integrated facilities improve worker safety and reduce physical strain.

An analysis of 2025 OSHA injury data reveals the latent reality: **Amazon's robotics-integrated fulfillment centers host a disproportionate concentration of workplace injuries, severe lost-time incidents, and chronic physical strain for human workers.** Instead of mitigating injuries, automation and robotic integration drive productivity by increasing workers' pace and speed—leading to disproportionately higher injury volume, aggregate recovery times, and compounded harm on workers' lives. **Although robotic facilities make up approximately 13% of Amazon's total e-commerce facilities nationwide, they account for over 30% of recorded serious injury cases.** Robotic sites documented an average of 6,729 days away or restricted/transferred work per facility—more than triple the average of 2,186 days at traditional e-commerce facilities.

While Amazon maintains that investing in robotics and automation benefits consumers, investors, and workers by accelerating delivery, reducing costs, and mitigating physically strenuous tasks, the recorded OSHA injury rate is not significantly better at robotics facilities than at its traditional e-commerce facilities. In 2025, the average national injury rate per 100 workers (full-time equivalents) at an Amazon robotics-integrated facility was 4.98—only 0.4 lower than at traditional e-commerce facilities. In some states, such as Michigan, the average injury rate per 100 workers at a robotics facility was actually 0.4 higher. These injury rates suggest that integrating robotics into workers' tasks at Amazon is not safeguarding them from workplace hazards; instead, it is driving work at faster speeds and turning robots into catalysts for chronic musculoskeletal disorders.[2]

This report analyzes 2025 OSHA injury data to understand the impact of Amazon's robotics facilities on workplace safety and underscore the critical need for workers to have a voice in

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[1] "Amazon Plans to Replace More Than Half a Million Jobs With Robots," *New York Times*, October 21, 2025.

[2] Kévin Bouillet, Sophie Lemonnier, Fabien Clanché, Gérome C Gauchard. Effects of pace on productivity and physical and mental workloads in a Human-Cobot Collaboration. International Journal of Occupational Safety and Ergonomics, 2025, 31 (1), pp.328-336.

how the implementation of new technology shapes the future of work. Specifically, our analysis examines national injury and DART (Days Away, Restricted, or Transferred) data, along with detailed state-level findings from California, Michigan, and Georgia. The report also considers how large-scale automated pacing concentrates injuries in certain fulfillment centers and contributes to widespread operational disruptions. The report concludes with recommendations that strengthen worker protections by calling for a worker-led AI and Automation Advisory Council at Amazon and rigorous government enforcement of health and safety regulations.

Methodology

This report relies on publicly available injury data that Amazon self-recorded on OSHA Form 300 and OSHA Form 300A in 2025. Our analysis is limited to injury data for Amazon facilities under the NAICS code 493110, General Warehousing and Storage. We excluded data from Amazon Couriers and Express Delivery Services under NAICS code 492110 because delivery drivers' work differs from that of warehouse workers. Moreover, because Amazon uses third-party delivery services and the Amazon Flex Program to deliver packages, the company is not the employer of record for delivery workers. These data are available on OSHA's public web portal here.

OSHA regulations require employers to record work-related fatalities, illnesses, and serious injuries requiring medical treatment beyond first aid. To evaluate the extent of severe safety impacts on workers, this methodology uses OSHA's Days Away from Work, Restricted, or Transferred (DART) metric. Employers must submit the number of DART cases at a workplace establishment and the total number of workdays a worker spent away from work, on restricted duty, or transferred to another job because of a work-related injury. We refer to the number of DART cases as "serious injuries" and to the measure of DART days as "days away or restricted/transferred from work." Injury rates are calculated in accordance with industry standards, using DART cases plus other cases per 100 full-time equivalents. A full-time equivalent equals total worker hours per year divided by 2000, the standard work-year hours per employee.

Tracking DART rates isolates incidents that cause major work and life disruptions and serves as a key indicator of repetitive motion injuries, physical strain, and inadequate ergonomic controls.[3] Elevated DART rates are an indication of ineffective safety, supervision, and engineering controls, suggesting that a company is high-risk and vulnerable to operational disruptions.

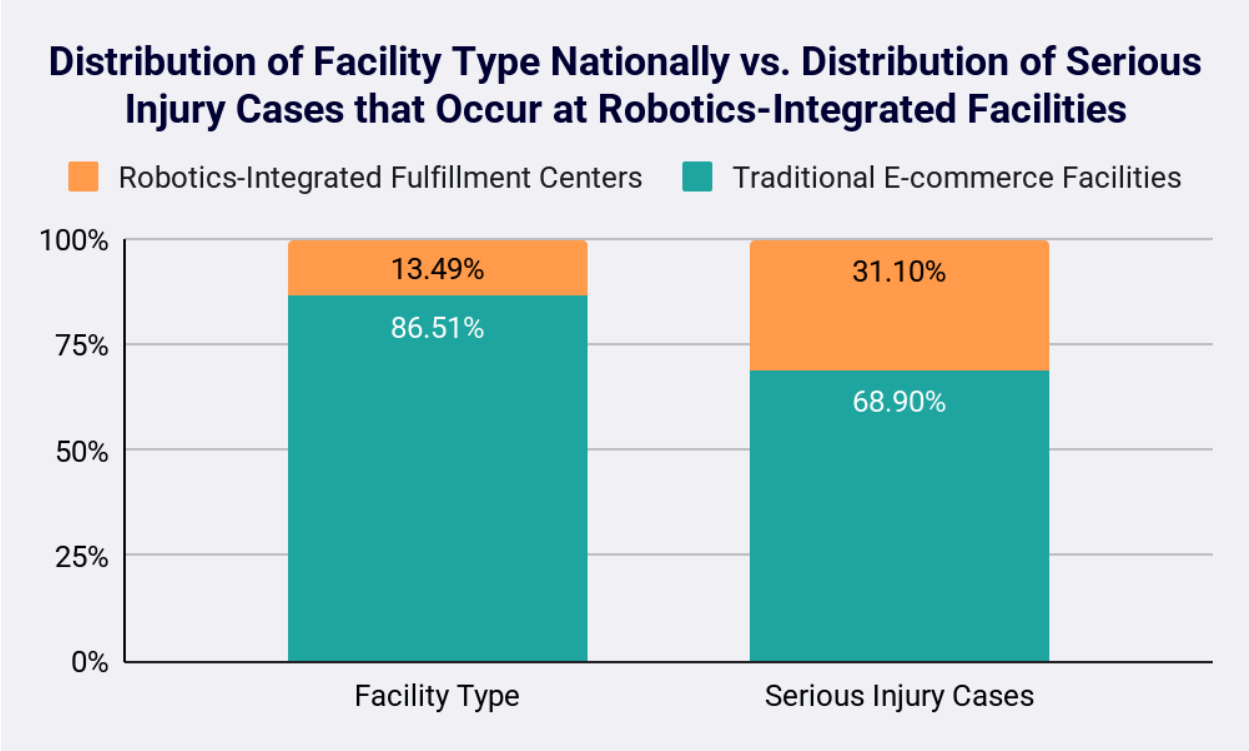
Neither OSHA nor Amazon distinguishes between robotics-integrated fulfillment centers and traditional e-commerce facilities or fulfillment center functions (ie – sort center, sortable fulfillment center, cross-dock, same-day delivery, etc.) in their data. To identify

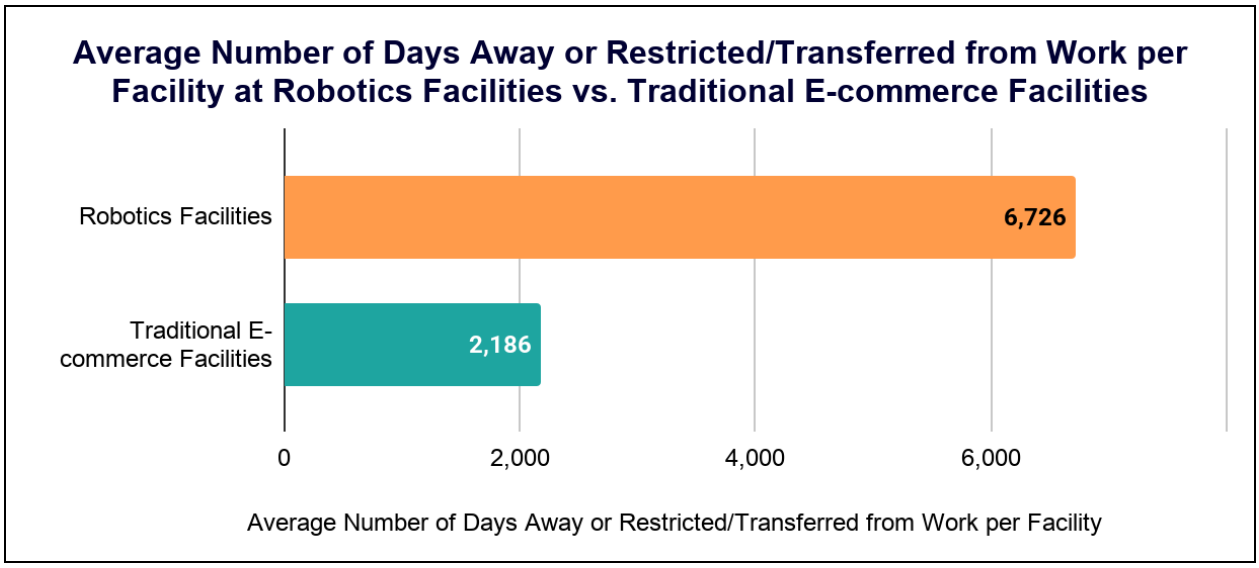
[3] National Safety Council: Injury Facts website. "Musculoskeletal Injuries."

robotics-integrated facilities, we cross-reference Amazon's public website (including fulfillment centers that offer tours of Amazon's robots and job postings), employee discussions on Reddit, and media reporting. Robotics-integrated facilities are also called "robotics facilities."

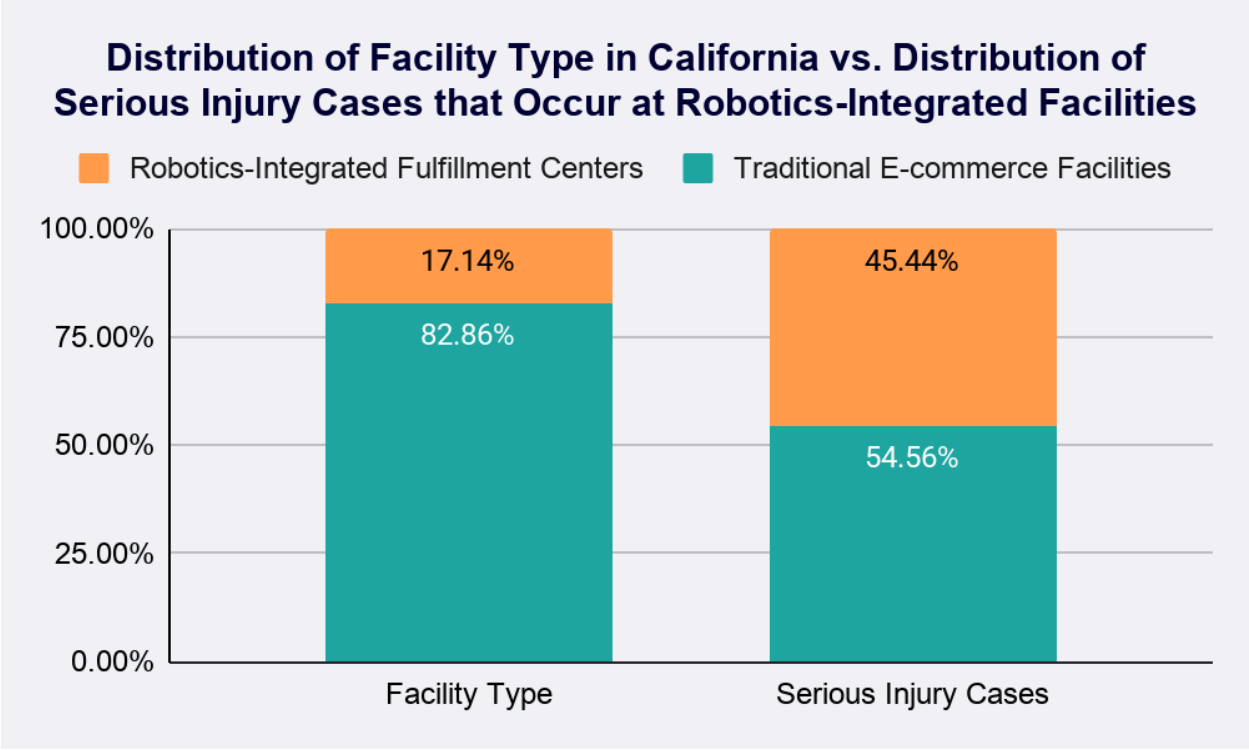
Injuries are disproportionately concentrated at robotics facilities

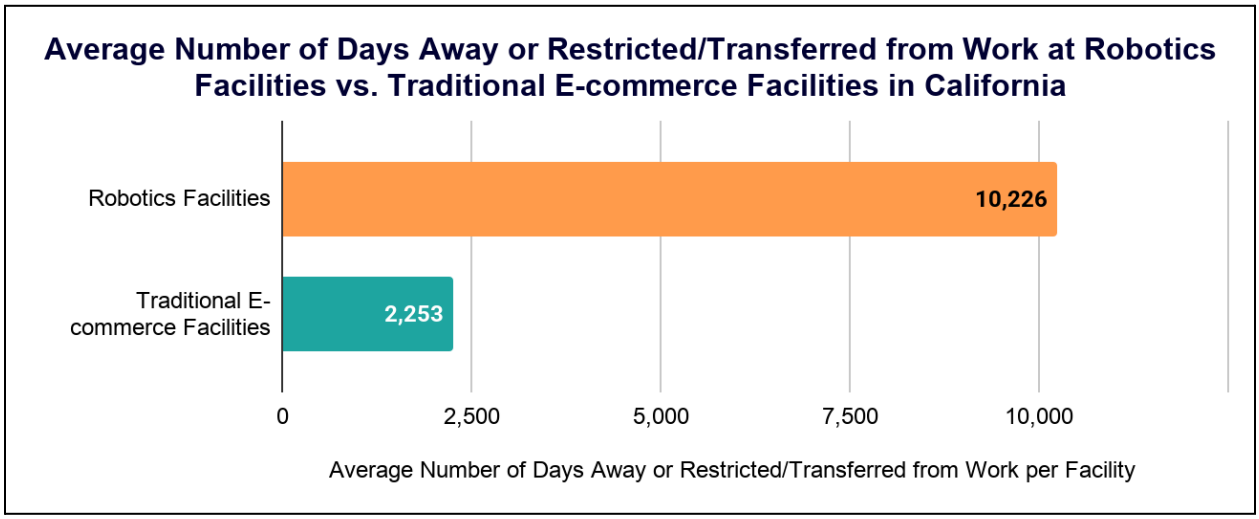
Despite corporate claims that automation improves workplace safety, workers at Amazon robotics facilities suffer significantly more time-loss injuries on average. **Nationally, robotic facilities represent only 13.5% of Amazon's total fulfillment centers, but they account for 31% of serious injury cases nationwide.** Robotic sites logged an average of 6,726 days away or restricted/transferred work per facility—more than triple the average of 2,186 days at traditional e-commerce facilities.





A closer look at state-level data further reveals a disproportionate concentration of injury volume and lost time at Amazon's more highly robotized facilities. In California, robotics facilities account for 17% of Amazon's warehouses, but 45% of injury cases statewide at Amazon warehouses. In fact, **the top 10 sites with the highest total injuries are at robotics sites**. Moreover, at Amazon's California robotics facilities, injured workers were on average 10,226 days away or restricted/transferred from work per location, compared to 2,253 DART days for traditional e-commerce facilities.





In Michigan, a state long at the center of automation, Amazon workers at robotics-integrated facilities also experienced the disparate impact of injuries. **While 4 out of the 10 Amazon warehouses in the state are robotics facilities, they account for 61% of injury cases statewide at Amazon warehouses.** That is, in the 4 robotics warehouses in Michigan, workers suffered 361 injuries, compared to 234 at the 6 traditional e-commerce facilities.

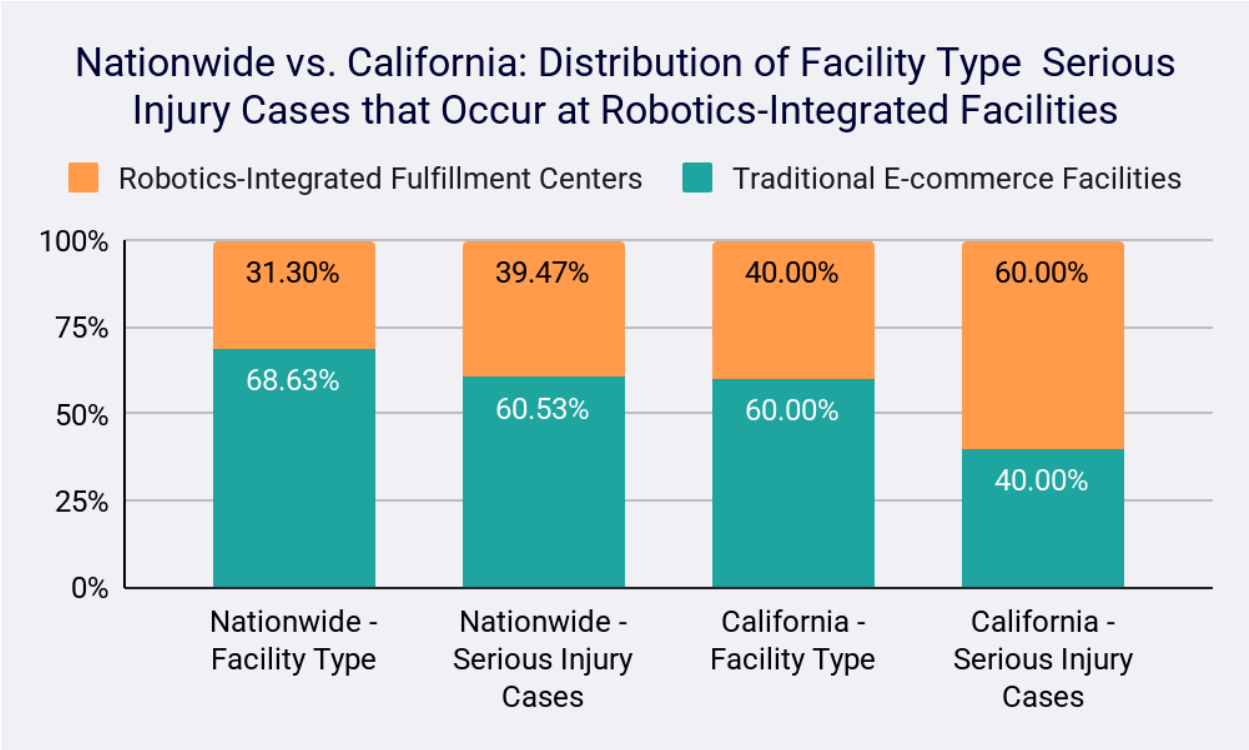
Located near Atlanta in Stone Mountain, ATL2 serves as Amazon's sole robotics fulfillment center in Georgia. The company operates 17 traditional e-commerce facilities throughout the state. In 2025, while ATL2 logged an injury rate of 2.14 cases per 100 full-time equivalents, compared to an average injury rate of 3.98 cases per 100 full-time equivalents at traditional e-commerce facilities, injured workers at ATL2 accumulated 5,040 days away or restricted/transferred from work, far exceeding the 2,140 average days per location experienced by workers at traditional e-commerce facilities. **The exceedingly high number at ATL2 indicates that operations were disproportionately disrupted by workers suffering from serious injuries at robotics facilities.**

Serious Injuries are Concentrated at Large Robotics Facilities

Further analysis of large Amazon warehouses (facilities with over 1,000 employees) shows how workers at Amazon's robotic facilities are particularly exposed to injuries. Because robots are primarily deployed in massive facilities that employ thousands of workers and operate 24/7, workers at certain warehouses are left vulnerable to physical strain that can lead to musculoskeletal disorders. Thus, while corporate metrics may report lower per-worker injury rates, the actual toll on workers' bodies translates to thousands of injuries and days lost at work.

The disproportionate concentration of injury at large robotics facilities is staggering. In 2025, Amazon recorded a total of almost 9,000 injury cases nationwide at its 64 large robotic facilities, compared to approximately 12,500 injury cases at its 140 large traditional e-commerce facilities. **In total, Amazon facilities with more than 1,000 workers had operations disrupted for more than 1 million days last year; 40% of those days occurred at large robotics facilities.**

In California, the concentration of injuries at large robotics facilities is even starker. 40% of warehouses that employ more than 1,000 workers have robotic operations, but account for 60% of injury cases at Amazon warehouses in the state. In 2025, nearly 2,000 workers injured at robotic warehouses were away or restricted/transferred from work for a total of 122,707 days, while operations at traditional e-commerce facilities were disrupted for 73,833 days. Put another way, workers suffering serious injuries at robotics facilities throughout the state in 2025 caused a disruption in operations equaling 336 worker-years.



Recommendations and Conclusion

The findings in this report demonstrate that Amazon warehouse workers remain exposed to workplace hazards despite the company's aggressive investment in automation and robot-integrated facilities. While its rapid push toward robotics may have improved productivity and delivery times, workers remain exposed to severe physical strain and persistent hazards.

To reverse these trends, regulators must rigorously enforce federal and state OSHA standards. Decades of agency underfunding and reliance on corporate self-regulation have effectively permitted Amazon to deploy robotic automation under the guise of safety, while circumventing workers' voices. Enforcing ergonomic standards, limiting algorithmic quotas, and frequent inspections of large fulfillment centers with disproportionately high injury volumes, along with meaningful penalties, would go a long way in keeping workers safe.

Empowering workers is essential to building safer automation at Amazon. During the 2026 annual general meeting, Joan Morris, an Amazon warehouse worker from Georgia, presented a non-binding floor proposal calling for an Artificial Intelligence and Automation Advisory Council ("AI Advisory Council") composed primarily of hourly and frontline workers. It would provide oversight, review, and recommendations on deploying artificial intelligence, robotics, and automated decision-making technologies. By giving workers a direct voice in evaluating and guiding AI and automated technologies, Amazon can better align its operations with safety standards, accountability, and the company's long-term health.

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