

GAO Highlights

Highlights of [GAO-24-106413](#), a report to the Ranking Member, Committee on Education and the Workforce, House of Representatives

Why GAO Did This Study

To quickly fill orders, e-commerce warehouses and companies that deliver these orders to consumers (last-mile delivery), use technology to increase productivity and monitor worker performance. Worker safety advocates, employees, and researchers have raised questions about whether employers' use of technology, along with performance expectations, may increase the risk of injuries in this rapidly growing sector.

GAO was asked to review how technology affects worker safety at e-commerce warehouses and last-mile delivery companies. This report examines the types and causes of injuries at these workplaces, and the extent to which OSHA identifies and addresses ergonomic hazards, among other objectives.

GAO reviewed relevant federal laws, regulations, and guidance. GAO analyzed BLS data from 2018 through 2022 on injuries (the most recent available). GAO also analyzed OSHA inspection data and interviewed headquarters officials and staff (compliance officers and managers) at six area offices. GAO conducted nongeneralizable surveys of workers and interviewed 15 stakeholder groups and five employers knowledgeable about safety issues and technology in these industries.

What GAO Recommends

GAO is making five recommendations, including that OSHA improve its injury data, training, and guidance on ergonomic hazards, and evaluate its inspection program. OSHA generally agreed but raised some concerns discussed in the report.

View [GAO-24-106413](#). For more information, contact Thomas Costa at (202) 512-4769 or CostaT@gao.gov.

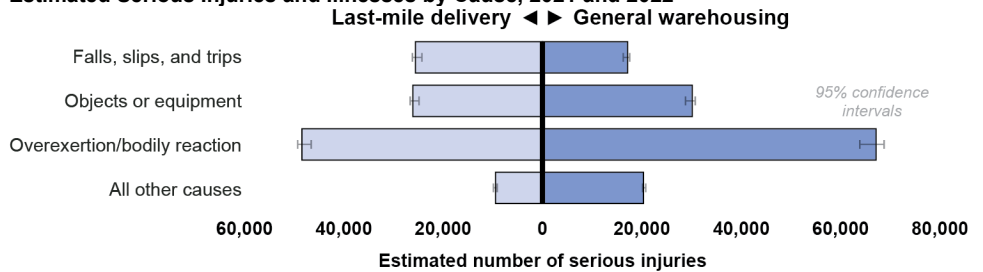
WORKPLACE SAFETY AND HEALTH

OSHA Should Take Steps to Better Identify and Address Ergonomic Hazards at Warehouses and Delivery Companies

What GAO Found

Three major hazards caused most of the injuries and illnesses in general warehousing (which includes e-commerce warehouses) and the companies that deliver these orders to consumers ("last-mile delivery"), according to Bureau of Statistics (BLS) data. Overexertion and bodily reaction, the most common hazard (see figure), can cause musculoskeletal disorders, such as tendonitis or back pain. The transportation and warehousing sector (which includes e-commerce warehouses and last-mile delivery) had the highest serious injury and illness rate of all 19 sectors in 2022, with an estimated 3.8 cases per 100 workers, according to BLS data.

Estimated Serious Injuries and Illnesses by Cause, 2021 and 2022



Source: GAO analysis of Bureau of Labor Statistics (BLS) data. | GAO-24-106413

Although the Occupational Safety and Health Administration (OSHA) cited warehouse and last-mile delivery employers for more than 2,500 workplace violations from fiscal years 2018 through 2023, 11 included ergonomic hazards, according to OSHA data. Because OSHA does not have an ergonomic standard it must use the general duty clause of the Occupational Safety and Health Act of 1970 to cite these hazards. General duty clause citations require a high level of evidence that can make issuing them a challenge, according to OSHA officials. OSHA staff described other challenges to identifying, assessing, and addressing ergonomic hazards, including compliance officers (1) having difficulty determining if ergonomic hazards caused injuries reported on forms, (2) receiving little training on ergonomic hazards, and (3) relying on unclear ergonomic guidance. By addressing these issues OSHA may be better able to identify and address ergonomic hazards and more fully protect workers from harm.

In fiscal year 2024, OSHA implemented an inspection program to better protect workers from hazards at warehouses and other worksites, including general warehouses and last-mile delivery companies. The program requires compliance officers to determine if ergonomic hazards exist and, if so, to take appropriate enforcement action. According to officials, OSHA will review this program annually, focusing on quantitative outcomes like the number of establishments inspected and hazards identified. Once OSHA has taken steps to improve how it identifies and addresses ergonomic hazards, it should evaluate if this program is more fully protecting workers from such hazards. Such an evaluation will allow OSHA to assess: (1) the efficacy of its efforts in identifying and addressing ergonomic hazards and (2) if and how it may improve these efforts to better protect warehouse and delivery workers from ergonomic hazards.