



Fighting for Safe Work: Injury Data Show Urgent Need for Intervention in NY State's Warehouses

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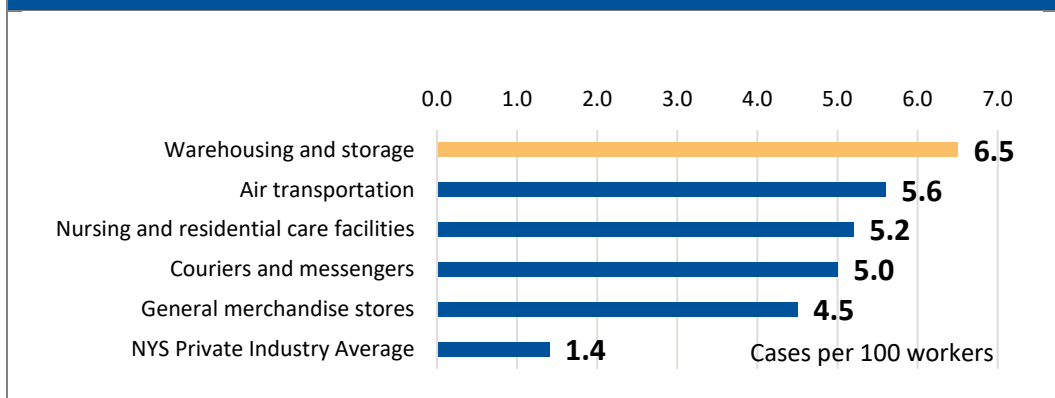
Warehouse Employment Surges 14 Percent in the State, While Workers Continue to be Injured at High Rates, Especially at Amazon

1. Key Findings

An analysis of the latest available data from the Bureau of Labor Statistics and the Occupational Safety and Health Administration shows persistently high rates of warehouse worker injury and these key findings:

- **As warehouse jobs grow, workers in that industry—who are disproportionately Black and Latinx—experience injuries more than workers in any other industry in New York State.** Warehousing jobs have more than doubled since 2010 in New York State (NYS), and grew 14 percent in 2022, compared to 4 percent job growth in the rest of the private sector. Alarming, New Yorkers working in the warehouse industry—who are disproportionately Black and Latinx—were injured at a higher rate than people working in any other industry in New York State in 2021, the latest year for which data are available.¹ The vast majority of injuries in NYS warehouses—88 percent—were cases severe enough that workers could not continue performing their normal job duties and had to either change job duties or take time off work to recover. Warehouse workers suffered such injuries at a rate of 6.5 cases per 100 workers, which is quadruple the rate of the NYS private sector average of 1.4 cases per 100 workers (**Figure 1**).

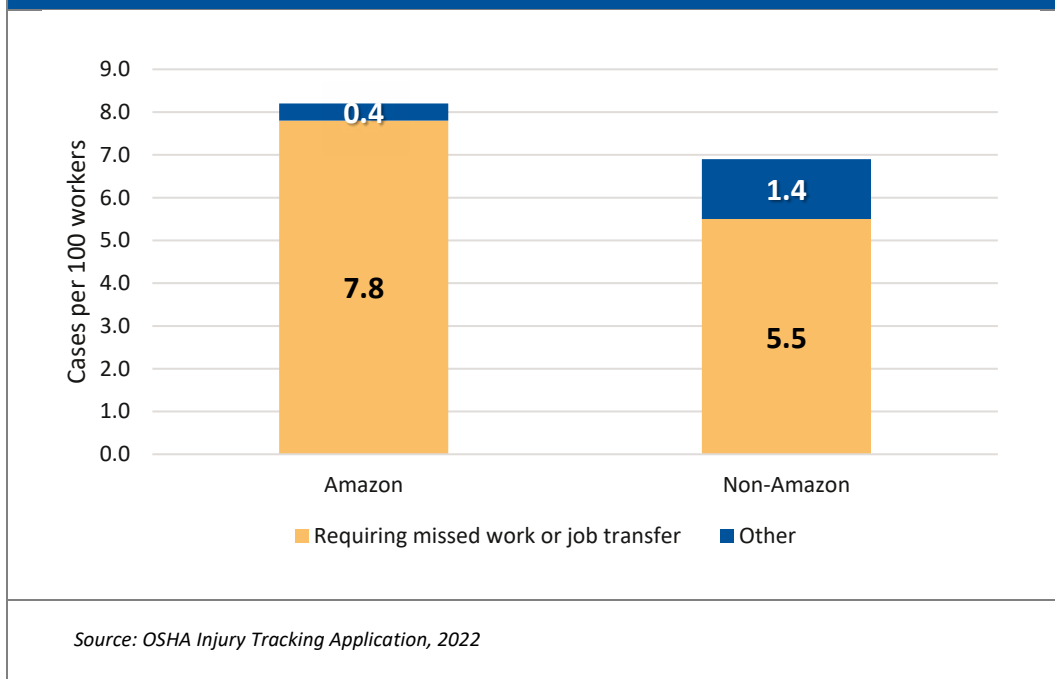
Figure 1. NYS Industries with the Highest Rates of Injuries Requiring Job Transfer or Missed Days of Work, 2021



Source: Bureau of Labor Statistics Survey of Occupational Injury and Illness

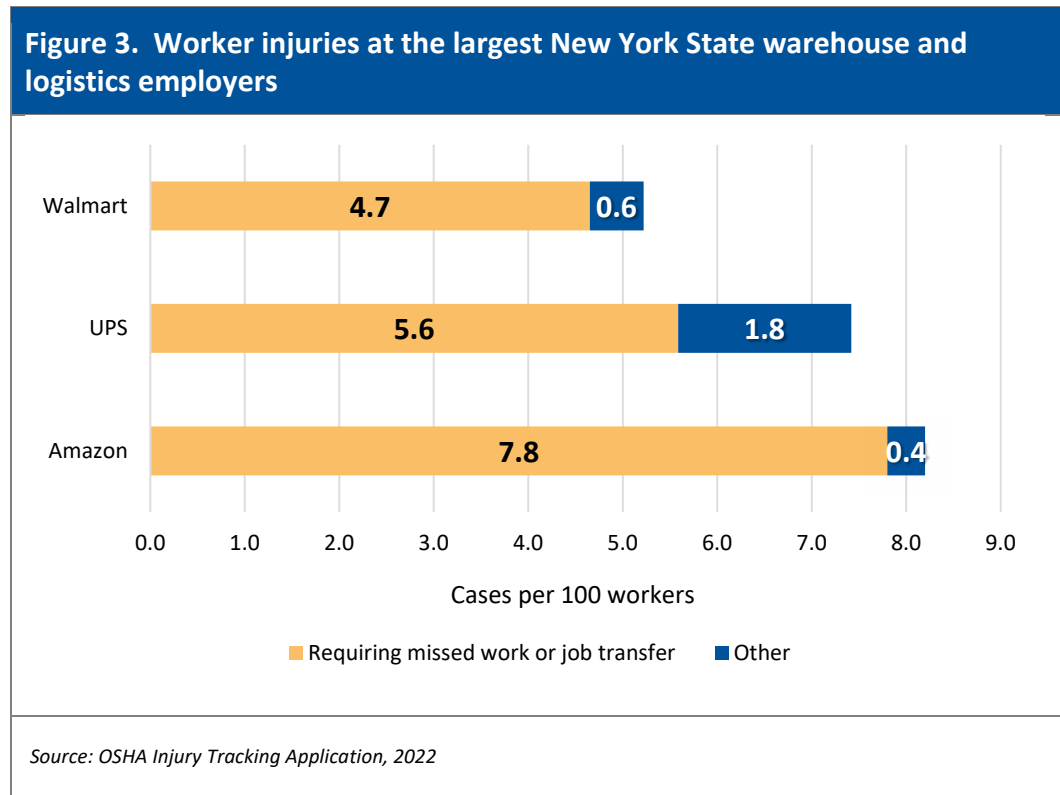
- Amazon workers are injured at even higher rates than their industry peers in New York State.** Amazon is a major employer in the warehousing and logistics sector in New York State, representing about a quarter of NYS warehousing and logistics employment.² According to the most recent data that Amazon self-reported to OSHA, Amazon warehousing and facilities workers in NYS are injured at a rate of 8.2 per 100 workers, a rate the equivalent of one injury for every 12 full-time equivalent employees (FTEs), compared to a rate of 6.9 for workers in non-Amazon warehousing and logistics facilities (**Figure 2**). Moreover, Amazon’s self-reported data may not even reflect the true extent of the injury crisis at the company. An OSHA investigation at ALB1, an Amazon fulfillment center in Schodack, NY, recently revealed that Amazon failed to record various job-related injuries requiring medical attention over a 6-week period in June 2022, which if annualized would have increased the total injury rate by about 50 percent at the facility.³ Amazon’s injury rate has remained persistently high, declining only slightly in 2022 from a rate of 9 cases per 100 FTEs in 2021, despite an active investigation by OSHA at two of its NYS facilities during that period.⁴

Figure 2. Injuries to Warehousing and Logistics Workers in New York State, 2022



- Almost all the injuries to New York State Amazon workers were of the most serious kind.** Ninety-five percent of injuries that NYS Amazon workers experienced in 2022 were cases severe enough that workers could not continue performing their normal job duties and had to either change job duties or take time off work to recover.⁵ (See **Figure 2**.)
- New York State Amazon workers experience the most serious injuries at a 37 percent higher rate than non-Amazon warehousing and logistics workers statewide.** Amazon workers experienced the most serious injuries at a rate of 7.8 cases per 100 FTEs, compared to a rate of 5.6 for their counterparts in similar jobs at

other companies. Injury rates at Walmart and UPS, the two other of the largest warehousing and logistics employers in NYS, also surpass the NYS average injury rate for all private sector workers (1.4). However, Amazon workers were the most likely to experience injuries of the most serious type, meaning those requiring missed work or job transfer. Amazon workers in NYS were 40 percent more likely than their counterparts at UPS and 68 percent more likely than their counterparts at Walmart to suffer these most serious types of injuries.⁶ (See **Figure 3.**)



- **Rensselaer County Amazon facility ranked among the highest in worker injuries of all Amazon facilities nationally for the second year in a row.** Amazon’s ALB1 fulfillment center in Schodack/Castleton-on-Hudson had the highest rate (19.8) of injuries requiring missed work or job transfer of any Amazon fulfillment center in the country in 2021. In 2022, that rate declined only slightly to 17.9, despite an active OSHA investigation during that time.⁷ Over the last few years, workers at that facility have been actively organizing for safer work conditions.

2. Warehouse worker injuries are largely preventable through better job design, such as reducing stressful postures and providing appropriate equipment.

Among the most common injuries that warehouse workers experience are musculoskeletal injuries (MSDs) such as lower back injuries and other muscle strain injuries—injuries that are often caused by the rapid, forceful, and awkward movements without sufficient recovery time.⁸ Decades of scientific research have shown that changes in job design—commonly referred to as ergonomic interventions—can reduce the incidence and severity of workplace musculoskeletal injuries.⁹ Such controls in warehouses may include simple, low-cost, commercially-available engineering solutions and other methods to prevent injuries, such as adjustable-height workstations, tool and handle redesign, mechanical lifting aids, job rotation, reduction of repetitions, and multiple person lifts.¹⁰

Indeed, federal regulators have recently identified numerous job design flaws at Amazon warehouses around the country—including in New York State—as the causes for high rates of job-related injury at those facilities. Earlier this year, OSHA completed a detailed, six-month investigation of the high injury rates at two Amazon facilities in New York State (New Windsor, NY, and Castleton-on-Hudson/Schodack) and determined that multiple major departments in each facility created unacceptable risks of low back injury by failing to provide adequate conveyors, needlessly requiring workers to lift heavy objects from the floor instead of elevated surfaces and failure to provide adequate motorized equipment such as electric pallet jacks (to eliminate the assignment of workers to manually push and pull heavy pallets filled with packages).¹¹



3. Existing federal and state laws are inadequate to protect New York State workers as the warehousing and logistics sectors grow rapidly.

Unfortunately, neither federal law nor New York State law currently requires employers to design jobs in a manner that reduces the risk of musculoskeletal injuries. Moreover, even the meager health and safety protections afforded to workers under federal law are undermined by OSHA's appeals process which allows employers like Amazon to delay fixing the underlying problems for years while the company's appeals are pending. And during that time, under federal law, workers' legal right to participate in an appeal is weak and in most cases blocks them from seeking redress through the courts. This differs from the enforcement mechanisms for other workplace standards such as the minimum wage, in which workers have greater access to the court system to seek back pay for wage theft. Finally, OSHA has very limited authority to protect workers from retaliation if they complain about workplace hazards, so full enforcement of OSHA's anti-retaliation rules often takes years as well.

State lawmakers must respond to this urgent and growing crisis by requiring employers to bring in qualified ergonomists to evaluate worksite and job designs in order to prevent and reduce musculoskeletal injuries as well as establish strong protections against retaliation for workers who demand safe job design.



4. Recommendations

New York State lawmakers took an important step last year in passing the Warehouse Worker Protection Act that regulates dangerous quotas in the industry. To effectively mitigate the warehouse worker injury crisis, lawmakers must also pass the Warehouse Worker Injury Reduction Act (WWIRA) ([S5081/A03309](#)), sponsored by Senator Jessica Ramos and Assemblymember Latoya Joyner, which would address the critical issue of warehouse job design to protect workers in the rapidly growing warehousing and logistics sectors.

Covering warehousing and logistics firms that employ at least 100 workers in one facility or more than 1000 workers in New York State, the WWIRA will help address high rates of warehouse workplace injuries in five key ways. The proposed Act would:

1. **Require expert evaluation** of each large warehouse for potential risks of musculoskeletal disorders—the most frequent type of serious, disabling injury in the warehousing industry. (See Appendix 1 for examples of job design changes to reduce injury risk.)
2. **Mandate worker training** on the prevention of musculoskeletal injury and the formation of worker health and safety committees to address worksite hazards.
3. **Improve on-site medical care** to ensure that warehouse workers with symptoms of musculoskeletal injuries receive appropriate treatment and medical referral in a timely manner.
4. **Establish a private right of action** to allow employees to directly enforce their rights under the Act.
5. **Grant the New York State Department of Labor additional powers** to ensure that the law is effectively enforced, including establishing a pool of qualified experts to do on-site evaluations.

Appendix 1 – Excerpts from OSHA 2023 Citations of NYS Amazon Facilities

Below are excerpts from OSHA’s recent citations of the Amazon facilities in New Windsor, NY, and Schodack, NY, that detail the kinds of changes that would reduce the risk of MSDs.¹²

New Windsor

The following engineering, administrative, and work practice controls are feasible and will materially reduce the hazard at this workplace:

- a) *Task/Process Path: Induct Feeder/Induct Belt Loader*
 - *Use a machine that dumps whole cart contents onto the conveyor belt to reduce reaching and torso bending and frequency of lifting.*
 - *Use carts with height adjustable platforms to reduce reach distance and torso bending.*
 - *Use pallet lifts that rotate to reduce torso bending and reaching distances. Consider pallet lifts that tilt when using Gaylords to reduce bending and reaching distances.*
 - *Reduce the employees’ time on task via administrative methods such as job rotation during the shift or increased number of breaks.*
- b) *Task/Process Path: Stow/Container Building*
 - *Eliminate totes stored at floor height to reduce reaching, torso bending, kneeling, and awkward postures. Consider raising the shelves to knee height.*

Schodack

The following engineering, administrative, and work practice controls are feasible and will materially reduce the hazard at this workplace:

- a) *Task/Process path: Pack*
 - *Provide adjustable height workstations.*
 - *Provide carts with adjustable height platforms.*
 - *Design station to allow for sliding of items from the cart to the workstation.*
 - *Heavy packages should be moved using other lift assist system.*
 - *Attach color-coded stickers to parcels to inform workers of their weight. This can also be done with an automated system.*
- b) *Task/Process path: Sort (ship dock cell and sort areas)*
- c)
 - *Provide adjustable height workstations.*
 - *Provide carts with adjustable height platforms.*
 - *Design station to allow for sliding of items from the cart to the workstation.*
 - *Heavy packages should be moved using other lift assist system.*
 - *Attach color-coded stickers to parcels to inform workers of their weight. This can also be done with an automated system.*
- d) *Task/Process path: Fluid Load /Ship Dock Loader*
 - *To eliminate manual floor loading, parcels should be loaded onto pallets or carts which are then moved into trailers using forklifts or electrical pallet jacks.*
 - *Use 2-wheeled hand trucks conveniently stationed near all loading bays for AAs to use, especially for large, heavy items to be loaded on the trailer.*
 - *Reduce frequency of*

multiple manual handling of packages so that task is not hazardous based on a validated risk assessment. • Install plates that pivot and angle down from the cages to allow easier movement of packages from the cart to a secure position on the trailer. • Require team lifts of heavy parcels on the trailer. • No stacking of heavy parcels (in excess of 51 lbs.) above shoulder height of the 5th percentile female (48") mid-chest level (~52") for the average size Amazon associate. Task/Process path: Receive Dock Unload/ Fluid Unload • Eliminate manual floor unloading. • Parcels should arrive only on pallets or carts which are then removed using forklifts or electrical pallet jacks. • If floor loaded trailers must be received, implement a robotic system to unload packages one at a time onto a powered conveyor.



Appendix 2 – Amazon facilities in NYS ranked by injury rate

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Amazon Facility	City	Number of Employees	Total Injury Rate	Cases w/ Missed Work or Job Transfer
ZY01	Long Island City	47	19.3	100%
ALB1	Schodack	922	18.8	96%
DBU1	Tonawanda	312	18.1	94%
DAB4	Florida	86	14.9	100%
DAB5	Brooklyn	129	12.3	50%
DRO2	Greece	186	11.8	100%
DYO2	Bronx	110	11.2	100%
SYR1	Liverpool	2,139	11.1	96%
DYR3	Westhampton Beach	81	9.9	100%
DBU2	Dewitt	183	9.4	93%
DYO1	New Windsor	199	9.3	88%
DYR7	Holbrook	187	9.2	80%
DYY6	Staten Island	390	9.0	96%
DAB8	Shirley	203	8.3	86%
DYY5	Bronx	243	8.2	94%
DYX2	Staten Island	310	8.1	100%
DXY4	Blauvelt	117	7.7	100%
DYY4	Brooklyn	138	7.6	100%
WNY1	Conklin	136	7.4	80%
DBK1	Woodside	310	7.3	100%
JFK8	Staten Island	5,807	7.2	95%
HNY1	Bethpage	68	6.4	100%
SWF1	Montgomery	1,366	6.3	97%
HNY2	Maspeth	66	6.3	100%
DYY9	Syosset	456	5.7	100%
DNJ3	New York	320	5.5	100%
DNY4	Bethpage	438	5.5	100%
DYN9	Bronx	75	4.9	100%
DBU3	Carle Place	154	4.8	100%
DRO1	Rochester	130	4.7	100%
LDJ5	Staten Island	1,020	4.6	92%
WNY3	Frankfort	122	3.7	100%
DBK4	Maspeth	309	3.5	100%
DBK6	Brooklyn	102	3.5	100%
BUF5	Lancaster	1,336	2.7	83%
SNY5	Mellville	333	1.1	100%
HAL1	Albany	27	0.0	-
HNY3	Emsford	65	0.0	-
HRO1	Rochester	36	0.0	-
HSY1	East Syracuse	21	0.0	-

Source: OSHA Injury Tracking Application, 2022.

Methodology

The data used to calculate total injury rates and serious injury rates in this brief are collected by the Occupational Safety and Health Administration (OSHA) through its Injury Tracking Application. Injury rates are computed from the following formula: (Number of injuries and illnesses x 200,000) / Employee hours worked = Injury rate.

While we report rates for individual facilities in Table 1 in order to provide the reader with as much of the available data as possible, caution should be used when interpreting, citing, and comparing injury rates for the facilities listed in Table 1. The fewer the employees working at a facility, the greater the effect of a single injury on incidence rates. Therefore, the incidence rates for smaller facilities may not be as reliable an indicator as they are at larger facilities. The aggregate rate for the entire state and rates for larger facilities provide more reliable measures.

Our use of the term “injuries” includes both cases reported as “injuries” and work-related “illnesses.” These work-related “illnesses” (including heat-related conditions, skin diseases, respiratory conditions, and poisoning and other conditions) account for less than 5 percent of cases in the period covered by this analysis. All of the injuries that are recorded by Amazon and reported to OSHA are serious enough to require medical care. These are included in what we refer to as the total injury rate. We use the term “the most serious injuries” and “injuries of the most serious kind” to refer to injuries that not only require medical care but also require time off work or job restriction.

The term “warehousing and logistics facilities” refers to establishments that fall under the following NAICS codes: 492110, 493110, 493120, 493130, and 493190.



Endnotes

¹ BLS Survey of Occupational Illness and Injury, 2021; U.S. Census Bureau Quarterly Workforce Indicators.

² Unless otherwise noted, all injury rates cited in this report are derived from data published by the Occupational Safety and Health Administration (OSHA) Injury Tracking Application data, 2021 and 2022 available at <https://www.osha.gov/Establishment-Specific-Injury-and-Illness-Data>. These data are self-reported by companies to OSHA. Companies are required to report any work-related injuries that require medical attention, and whether the injury caused workers to miss days of work or require a job transfer.

³ U.S. Department of Labor, Occupational Safety and Health Administration, "Citation and Notification of Penalty, Amazon.com Services LLC, ALB1 Fulfillment Center, 1835 U.S. 9 Castleton On Hudson, NY 12033," December 15, 2022, <https://www.dol.gov/sites/dolgov/files/OPA/newsreleases/2022/12/OSHA20222343.pdf>

⁴ U.S. Department of Labor, Occupational Safety and Health Administration, "Citation and Notification of Penalty, Amazon.com Services LLC, dba DY01, 500 Hudson Valley Avenue, New Windsor, NY 12553" January 17, 2023, <https://www.dol.gov/sites/dolgov/files/OPA/newsreleases/2023/01/OSHA20230063a.pdf>; U.S. Department of Labor, Occupational Safety and Health Administration, "Citation and Notification of Penalty, Amazon.com Services LLC, ALB1 Fulfillment Center, 1835 U.S. 9 Castleton On Hudson, NY 12033," Feb 1, 2023, <https://www.dol.gov/sites/dolgov/files/OPA/newsreleases/2023/02/OSHA20230163b.pdf>

⁵ Occupational Safety and Health Administration (OSHA) Injury Tracking Application data, 2022

⁶ Occupational Safety and Health Administration (OSHA) Injury Tracking Application data, 2022

⁷ Occupational Safety and Health Administration (OSHA) Injury Tracking Application data, 2021 and 2022

⁸ Katherine Long, "Amazon Warehouse Workers Suffer Muscle and Joint Injuries at a rate 4 times higher than industry peers." Business Insider, March 23, 2022. <https://www.businessinsider.in/tech/news/amazon-warehouse-workers-suffer-muscle-and-joint-injuries-at-a-rate-4-times-higher-than-industry-peers/articleshow/90404991.cms>

⁹ Bruce P. Bernard, M.D., M.P.H, editor. Musculoskeletal Disorders and Workplace Factors - A Critical Review of Epidemiologic Evidence for Work-Related Musculoskeletal Disorders of the Neck, Upper Extremity, and Low Back and <https://www.cdc.gov/niosh/docs/97-141/>

¹⁰ Ergonomic Guidelines on Manual Material Handling, Cal/OSHA Consultation Service, Division of Occupational Safety and Health, California Department of Industrial Relations. <https://www.cdc.gov/niosh/docs/2007-131/pdfs/2007-131.pdf>

¹¹ U.S. Department of Labor, Occupational Safety and Health Administration, "Citation and Notification of Penalty, Amazon.com Services LLC, dba DY01, 500 Hudson Valley Avenue, New Windsor, NY 12553" January 17, 2023

¹² U.S. Department of Labor, Occupational Safety and Health Administration, "Citation and Notification of Penalty, Amazon.com Services LLC, dba DY01, 500 Hudson Valley Avenue, New Windsor, NY 12553" January 17, 2023, <https://www.dol.gov/sites/dolgov/files/OPA/newsreleases/2023/01/OSHA20230063a.pdf>; U.S. Department of Labor, Occupational Safety and Health Administration, "Citation and Notification of Penalty, Amazon.com Services LLC, ALB1 Fulfillment Center, 1835 U.S. 9 Castleton On Hudson, NY 12033," Feb 1, 2023, <https://www.dol.gov/sites/dolgov/files/OPA/newsreleases/2023/02/OSHA20230163b.pdf>