

NORA Sector Council Bulletin Wholesale & Retail *Trade*

ADDRESSING THE NEEDS OF WHOLESALE AND RETAIL TRADE FOR A SAFE FUTURE

A Closer Look at Overexertion Injury Prevention

What is an overexertion injury?

Although many of us are familiar with overexertion—from straining or using too much effort—ergonomists use the term to define a common injury. An overexertion injury can occur if you try to perform a task that requires more strength or endurance than you have available for that task. For example, if you try to lift a 60-pound box but normally are able to lift only a 50-pound box, you are risking an overexertion injury. What makes prevention difficult is that a person’s work capacity is not fixed or easily measured but can vary from day to day and even hour to hour.

How common is this type of injury?

For the past 15 years, “injuries from overexertion” have ranked number one in the top-ten workplace injuries, accounting for nearly one in four workplace injuries each year. According to the [2016 Liberty Mutual Workplace Safety Index report](#), overexertion injuries are also the most expensive class of workplace injuries in the United States. With direct annual costs in excess of \$62 billion, businesses spend more than a billion dollars a week on compensation for these injuries.

Is there a solution?

Ergonomists, who believe overexertion injury results from a mismatch between a worker’s capacity and the demands of the job, focus on equalizing that matchup. The traditional staffing approach has been to identify or hire workers who have sufficient capacity to perform high-demand jobs. Over time, however, a worker’s capacity will diminish with age and overuse, resulting in an increased risk of injury unless the workforce is replenished with new or younger workers. The data suggest that this approach has not been successful, as both the frequency and costs of overexertion injuries have

not diminished. The alternate approach—the ergonomic solution—is to focus on changing the job, rather than the workers. Hence, the goal should be to redesign the job to reduce its demands, so that more workers are available with the capacity to perform it.

How can businesses start reducing overexertion injuries?

According to the Bureau of Labor Statistics, begin by examining the reports of overexertion and focus on the jobs workers are performing when they are injured. Assess high-demand jobs that are known to require excessive force such as lifting, pulling, pushing, turning, and carrying. Look for signs of fatigue and reports of low-back pain. Often you will also see signs of decreased output and lower quality of work. Businesses facing these concerns often look to training programs that focus on lifting mechanics. However, the literature indicates such programs are not as effective in the long run as the ergonomic solution (that is, [Prevention through Design](#)).

What types of engineering controls are available?

In many cases it is not feasible to change the design of the workplace or job, but one can introduce various engineering controls for those jobs involving manual lifting, such as mechanical lifts, assists, overhead hoists, and adjustable carts and tables, which are designed to improve the positioning of products.

NIOSH addressed the problem of manual lifting in retail supermarkets and grocery stores with a mobile-friendly document. [Ergonomic Solutions for Retailers](#) (NIOSH Publication #2015-100) shows 13 types of jobs in which various engineering lift-assist devices have been introduced.



Emerging Issues

BLS Publishes 2014 Data on Nonfatal Workplace Injuries and Illnesses

The Bureau of Labor Statistics (BLS) published a News Release on Thursday, November 19, 2015 for [Nonfatal Occupational Injuries and Illnesses Requiring Days Away from Work, 2014](#).

Overall Industry Report

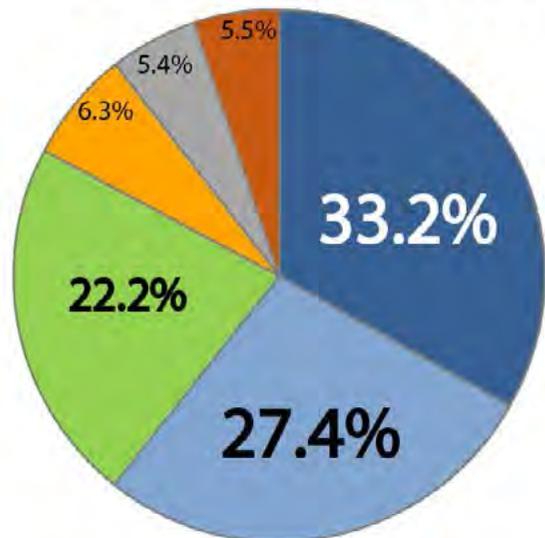
- » Overall, the number of reported nonfatal U.S. workplace injuries and illnesses decreased by 2% from 2013.
- » Overexertion was the most common exposure or event causing workplace injury or illness in 2014, across all U.S. industries.
- » Across all U.S. industries, the category of Falls, Slips, or Trips occurred at the second highest incidence rate among workplace injuries and illnesses.
- » The leading category of injury or illness was Sprains, Strains, or Tears, for which the median time away from work to recuperate was 10 days.

Specific to WRT

- » Retail Trade was described as being among the top three private sector industries in terms of days away from work, with more than 100,000 in 2014.
- » The Chart shows the distribution of injuries by event or exposure, 2014. Overexertion, bodily reaction, falls slips trips account for 60 percent of all injuries with days away from work.

To read the news release and access BLS data, visit <http://www.bls.gov/news.release/pdf/osh2.pdf>.

Distribution of injuries by event or exposure, 2014



33.2% Overexertion and bodily reaction
22.2% Contact with object, equipment
27.4% Slips, trips, falls
6.3% Violence and other injuries by person
5.4% Transportation incidents
5.5% All other events

Source: U.S. Bureau of Labor Statistics, 2015
(<http://www.bls.gov/iif/oshwc/osh/case/osch0055.pdf>)

Study to Prevent Violence in Convenience Stores

Did you know that robbery-related shootings, stabbings, attacks, muggings, and killings are the most common causes of death in U.S. retail businesses? NIOSH recently conducted a study in Dallas and Houston, Texas, that focused on robbery-related safety procedures in the Crime Prevention through Environmental Design (CPTED) guidelines.

Although complying with the ordinance-required safety measures and evidence-based research findings would be consistent with industry 'best practices' for preventing workplace violence, the NIOSH study showed that their use was limited. In both Houston and Dallas, compliance was higher for some CPTED guidelines than others, but compliance was not high for less-costly, straightforward approaches. The three overall best practices that nevertheless had the lowest compliance rates were signage/postings (including registration stickers and affidavits), visibility, and drop safes. These low-cost solutions can deter violence in convenience stores. See a summary of the study report at <http://www2a.cdc.gov/nioshtic>.

To find previous editions, go to <http://www.cdc.gov/niosh/programs/wrt/bulletins.html>.

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