

MOHSS

Montana Occupational Health & Safety Surveillance

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Lifting and Moving Safely

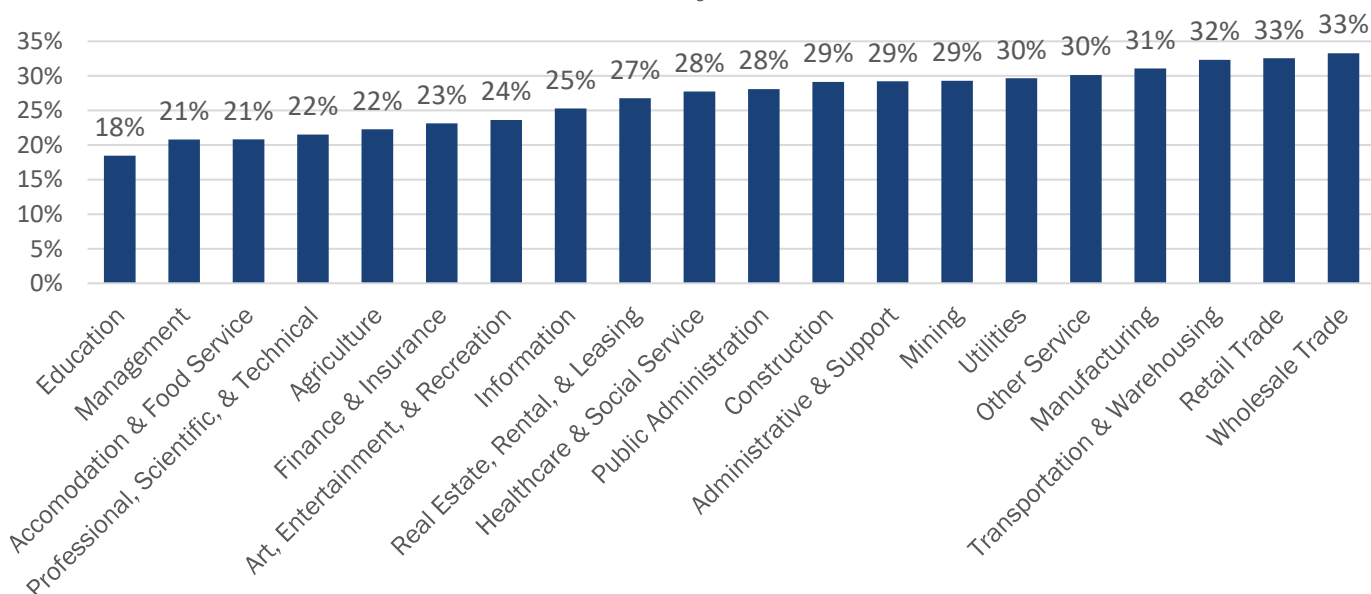
Nearly all jobs require employees to engage in some form of physical exertion, which may include moving heavy or bulky objects around the worksite. Excessive or improper lifting, pushing, pulling, carrying, or other exertions can lead to muscle strains, sprains, or tears, along with other types of injuries. As a common working hazard and a major source of workplace injury, educating workers on correct lifting and handling of loads is vital to ensuring a safe and efficient workplace. This newsletter examines the statistics of reported exertion injuries and provides guidance on prevention.



The Impact of Unsafe Exertion

In the past five years, the Montana Department of Labor & Industry received over 30,000 reports of strain injuries, making strains the most common form of workplace injury. Details in this reports suggest lifting, twisting, pushing or pulling, holding or carrying, and repetitive motion are common activities preceding a strain injury. Strains are the most common form of workplace injury in most major industries, comprising anywhere from 18% to 33% of all workplace injuries reported. Strains are responsible for the largest percentage of injuries in the economic sectors dedicated to trade (both wholesale and retail) and transportation (including warehousing).

Percent of All Injuries from Strains



Montana Department of
LABOR & INDUSTRY

Avoiding Strain Injuries

Many employers cannot eliminate lifting and moving weight from their daily work activities. Effective prevention involves training and equipping workers with the information they need to safely perform workplace exertion tasks supported by the development of an ergonomics program. To achieve this, workers and employers should:

- Conduct an ergonomic assessment of the workplace. Workers and employers should examine the workplace and identify all potential strain hazards, including heavy or bulky objects moved during work and spaces where workers must assume or maintain awkward postures. The type and prevalence of these hazards will vary between workplaces. Workers and employers should carefully review their workplace's unique hazards and take steps to mitigate risk.
- Research the proper ergonomic solution for the hazards identified. For heavy or bulky objects, the solution should focus on proper lifting and handling (such as using leg muscles instead of back muscles and bringing the load to elbow height), along with the equipment needed to safely transfer loads between locations in the workplace. For posture issues, the solution should focus on reducing the time workers spend in awkward positions, as well as reducing the intensity of work being performed in that position.
- If necessary, acquire relevant manual material handling equipment. These may include rolling carts, dollies, walk-behind stackers for moving heavy objects, step ladders for helping workers reach objects from shelves or other heights, and desk equipment designed to promote proper posture for office workers. These also may include workspace improvements, such as the installation of ramps or elevators.
- Develop and conduct workplace-specific training on proper lifting and handling along with workplace ergonomics. Notify all workers of the hazards identified in the ergonomic assessment, explain and demonstrate the proper way to avoid strains from these hazards, familiarize workers with the location and proper use of ergonomic equipment, and conclude with having all workers demonstrate proper techniques and usage of equipment.
- Maintain and update the ergonomics program as necessary, continually training workers on proper exertion practices and correcting issues as they are identified.

Safe Workplace Exertion Resources

Numerous workplace safety agencies and organizations have developed helpful guidance and tools for identifying hazards and reducing harm from workplace exertion. These include:

- [The National Institute for Occupational Safety and Health](#): The Ergonomics and Musculoskeletal Disorders page of the NIOSH website includes a description of lifting and moving hazards and strain injuries along with guidance for developing an ergonomics program and tools for calculating how much weight workers can safely move.
- [The American Conference of Governmental Industrial Hygienists](#): The ACGIH has developed tables for calculating lifting limits, both for overall ergonomic health and hand-wrist specific ergonomic health. These tools are available on the ACGIH website, and adapted versions of these tools can be found from other organizations.
- [The National Safety Council](#): The NSC has compiled research and resources on the prevalence of sprain injuries and guidance for promoting ergonomics in the workplace.

Additionally, both the Montana Department of Labor & Industry and many workers' compensation insurers can assist with ergonomic assessments and program development. [DLI's Safety and Health Consultation Program](#) can provide free visits to obtain insights on specific hazards in a workplace without the risk of citations or fines. Contact DLI today to ensure workers are safely performing workplace exertion tasks.