

Know the code: lifting and handling loads

By: Juliet Kershaw, OHS Magazine



Who's at risk in Alberta?

Lifting and loading are intrinsic to industrial settings, but by no means exclusive to them. Think of health care facilities, office blocks and big-box stores. Some workplaces, like warehouses and trucking depots exist only to move materials around, but today more and more retailers operate like warehouses and face the same challenges in terms of preventing overexertion injuries.

While injuries from lifting, loading, pulling or pushing can happen to anyone in any industry, some occupations put workers at greater risk for overexertion injuries. In 2003, the Workers' Compensation Board - Alberta reported that the industries, or sectors, listed below had the highest rate of sprains, strains and tears caused by overexertion or bodily reaction and exertion:

food stores -- hospitals & care centres -- trucking services -- cities
meat processing -- federal government -- steel & metal fabrication
industry construction -- wood products manufacturing

At your work site, jobs that require workers to handle loads may have taken a back seat in previous hazard assessments.

This kind of work deserves a closer look. Jobs that entail moving boxes, stocking shelves or lifting (whether patients, cartons, or bags of money!) are increasingly laying people up and causing them to be off work.

A new Occupational Health and Safety (OHS) Code requirement expects employers to tackle hazards associated with lifting and handling loads. At big industrial and institutional sites, the movement to arrest the persistent rise in injuries caused by overexertion is well underway. The grocery industry, for instance, has introduced trolleys, handcarts, wheeled drums and other equipment to reduce manual handling and is watching overexertion injuries decrease. But much is left to be done throughout the province.

OHS' Code requires employees to assess hazards associated with any task that involves manual handling and lifting, for example, hauling sacks of flour at a bakery or moving clients in and out of wheelchairs in long-term care facilities. This means taking a thoughtful and thorough approach to not only identifying hazards but also introducing safer and more efficient work practices. After completing a hazard assessment, employers are required to put injury controls in place. Where lifting and loading jobs expose workers to injury, the manual handling component must be minimized if it can't be completely eliminated.

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Last, employers must train their employees to operate equipment competently, and to know and adhere to safe work practices. If a company manages to reduce or eliminate manual handling by introducing new equipment, employees must be trained on the equipment and show that they are competent to use it.

Changes urgently needed

Injuries related to materials handling are on the increase, affecting workers' lives and companies' bottom lines. For at least the past six years, overexertion has been the number one contributor to strains, sprains and tears. Overexertion, which often occurs in manual handling activities, can cause soft-tissue (or musculoskeletal) injuries (MSIs) such as back strain, wrist or ankle sprains, muscle spasms and tendonitis.

"Soft-tissue injuries represent a very significant problem that's just getting worse," notes Workplace Health & Safety ergonomic specialist Ray Cislo. The task force that provided advice about updating the occupational health and safety legislation looked at work and injury trends and specifically requested that the new legislation address issues related to MSIs. "The task force felt strongly that the issue needed to be addressed sooner rather than later." Cislo says.

The link between lifting and injury is conclusive, reports ergonomic consultant Margo Fraser. When you lift something, the load on your spine increases, and your spine can only bear so much loading before it is injured. New research shows that cumulative loading - repeating the same load-bearing activity over a period of time - poses just as much of a risk as peak load bearing.

"Employers must train their workers to use good body mechanics", emphasizes Fraser. Workers could save untold hours and years of future back pain if they habitually practiced three crucial lifting techniques: maintaining low back curve, never twisting and keeping the load close.

The challenges:

1. Identifying risks

"Not all manual tasks will cause injury, so a hazard assessment is particularly useful." notes Cislo. Once employers understand how to conduct thorough hazard assessments, they will better understand the risks associated with manual handling activities and ways to reduce the risks.

2. Solving design problems

Fraser suggests that many employers often lack know-how in solving design problems. The design of equipment, work flow and storage, and

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the movement of goods can significantly affect the amount of manual handling required. Properly designed work spaces that reduce the number of times workers handle something can also improve productivity, Cislo points out.

In Fraser's experience, employers may identify the cause of an injury as overexertion, but be unable to explain what caused it. "Was it due to poor lifting technique or because the item had to be lifted from the floor instead of from shoulder height? Or was there no lifting equipment the worker could use?"

3. Managing costs

"Employers can always improve their work sites, even when resources are scarce." Fraser says. "The most important change is mindset, you have to use your resources creatively. It's small businesses that get caught, because they don't have a lot of cash, and don't know what to do or where to go for help."

Minimizing manual handling does not necessarily mean investing in expensive new equipment. Purchasing an overhead crane, complete conveyor or lift system may not be the only answer. Cislo recommends that employers start with the simplest interventions and then look closely at work flow. On the other hand, employers who are planning to build or renovate may find opportunities to incorporate new work processes and equipment to eliminate manual lifting.

As well, Cislo says, even when an employer makes a substantial investment initially, the payback period should be "very reasonable". Introducing conveyors or rollers, redesigning work flow and/or making equipment modifications and minimal equipment purchases will achieve surprising results.

Training workers to use good body mechanics incurs no costs other than the resources allocated to training and the time supervisors spend encouraging staff to think about ways of improving materials/handling work.

4. Getting advice

Ergonomic consultants can help with hazard assessments, work flow and training. To ensure that someone in the organization can continue the consultant's efforts, employers might consider a 'train the trainer' approach.

Fraser finds that employees are often the employer's best resource because they know their jobs best. "Employees can come up with brilliant

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ideas," Fraser says, "from designing devices that save themselves pain to saving their employers money."

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