

Ergonomics Fact Sheet

How Much is Safe to Lift?

Manual lifting of objects such as boxes, products, or persons, is a very common workplace activity - one that is associated with high rates of low-back pain and/or soft-tissue injury to the back, trunk and shoulder. It is not surprising, therefore, that many employees and employers want to know about lifting limits.

Does Nova Scotia have a maximum weight limit for lifting safely?

Like most other jurisdictions, Nova Scotia does not have an established maximum permissible weight for manual lifting. Because the injury risk associated with lifting tasks varies tremendously according to the characteristics of the lift, one limit cannot guarantee safety. For example, an employee may be injured by lifting a seemingly light object that is positioned far away from the lifter's body, whereas someone may safely lift heavier items on a regular basis under 'ideal' lifting conditions.

What conditions contribute to lifting-related injuries?

Many workplace conditions and personal characteristics act together to determine injury risk for lifting activities. Some of these include:

- the **horizontal distance** between the front of the lifter and the object being lifted, at the beginning *and* end of the lift.
- the **vertical heights** at which the lift starts *and* ends.
- whether the lifter has to **twist** his/her body to perform the lift.
- characteristics of the object such as **size, shape, texture**, and whether there are **handles** or other easy-to-grasp features.
- **how many times** per hour and/or per day the lifts are performed.
- the **total length of time** the lifting task is performed per shift/day.
- the strength, stamina, health, and skill of **the lifter**.

How is a lifting situation evaluated to determine safety?

Even though one lifting limit does not exist, it is possible to evaluate individual lifting situations to establish recommended weight limits for those conditions. Measurements that define the lifting task, such as those described above, are used in an equation or in a look-up table to define a maximum weight for that lift. These weight limits are believed to be safe for nearly all workers to be repeatedly exposed, day after day, without developing work-related low back and shoulder disorders associated with repetitive lifting tasks.

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What can we do in our workplace?

It is important to note that, whenever possible, workplaces should investigate alternate ways of handling objects (product, persons, materials, etc.) if regular lifting is a daily part of workers' jobs. This approach is the most effective one for preventing lifting-related injuries and lost time.

If in doubt about whether an existing or proposed lifting situation is safe, have it evaluated. It is best to have this performed by an individual who is trained to apply the evaluation tools properly, usually an ergonomist, or other health and safety professional.

There are often a variety of changes that can be made to improve a lifting task, thereby allowing for more weight to be handled. These evaluations provide insight into what needs to be changed in a task to improve it.

How can I learn more?

We will be producing additional Ergonomics Fact Sheets over the coming months that will address other aspects of lifting and back-injury prevention.

In the meantime, if you have a question contact the OHS Division's Ergonomist by E-mail at pettits@gov.ns.ca, by phone at (902)424-5032, toll-free at 1-800-952-2687 or in writing to:

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