

Handling and Lifting

Physiotherapy in Huntsville for Work Activities

What is Manual Handling?

Manual handling, sometimes called material handling, is any activity where a person pushes, pulls, carries, lifts or restrains an object or person. Manual handling is the source of many work-place injuries,

such as back pain, neck pain and muscle tears. Injuries related to manual handling can be prevented using a few rules.

Rules for smart manual handling.

1. Think first and prepare.
2. Allow your spine to move naturally
3. Hold the load close to your body.
4. Minimize twisting under load

1. Think first and prepare.

Plan ahead for any manual handling. Ask yourself the following questions:

- Do I really need to move this object? Is there an alternative such as a mechanical aid (trolleys, forklifts, conveyors)?
- What does the object weigh? Is the weight evenly distributed? Can I split up the load?
- Am I capable of moving the object given my general fitness, fatigue levels and past experience?
- How will I grip the object? Do I need gloves?
- Should I ask for help?
- What do I need to do to my environment before I complete the task? Is the path clear? Is there a place ready to move the object to?

This rule is most often forgotten, yet it is the most important. Thinking only takes a minute.

2. Allow your spine to move naturally.

Your spine is quite capable of bending and flexing and is designed to do so when lifting, much like your knee. It is important to use the normal capacity of your spine and not to artificially make it more rigid and less responsive. In fact, it has been shown that our stabilizing muscles are actually able to function better when our spine is moving in a natural way and that some of our stabilizers do not function well at all with the spine is in a "neutral" position. Further, one systematic review of 11 papers found that lumbar flexion during lifting is NOT a risk factor for low back pain onset or persistence. (Saraceni et al 2019) It may be true that back injuries can occur when bending and lifting but this still does not mean that bending the spine is bad - no more than bending your knee is bad. The most reasonable explanation for low back injury with lifting is that the load being lifted exceeded that back's loading capacity! Therefore, allowing your spine to develop load tolerance and capacity by practicing the action in a normal and natural way and using loads that are within one's loading capacity may be the answer. (APTEI

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3. Hold the load close to your body.

Holding the load close to your body allows your muscles to manage the load more successfully, letting your large muscles and skeleton take more of the weight. Even holding a relatively light object can seem difficult if you are holding it with outstretched arms.

4. Minimize twisting.

When you twist your spine the small muscles and ligaments close to the spine do most of the work. Given that twisting, or rotation, is a natural motion of the spine, it is just fine to do this to some extent - in a natural way with a load that is within your lift and moving capacity. However, it is good practice to try to move your feet to point in the direction you are going to help you engage more of your overall muscle power to assist with the task.

How ProActive Rehab can help.

The basic rules above are kept simple so that they are easy to remember when you are actually in the workplace or doing the task at hand. There are also some important individual factors that can help prevent injuries from manual handling. Your personal fitness level, level of alertness, and physical training for a task all impact your risk of injury. Having strong abdominal and back muscles and training them, and your joints, to do the physical demand is a great advantage. Some forms of regular exercise such as swimming and walking help to keep the abdominal and back muscles strong but nothing replaces actual lifting and loading exercises to develop this ability!

At ProActive Rehab, we can assess your body mechanics and can provide education, strategies and exercises to address these and many other issues. We can also design you a program to improve your abdominal and back muscle function during manual handling as well as help you to learn to move without fear and build your body's capacity and resilience!