

Low Back Pain in Workers

Low back pain is very common in and out of the workplace. Many back problems are because of improper working conditions and excessive job demands. Low back pain can come and go, or it can last for a long time. The pain can range from discomfort to lifelong disability or no pain but it can limit your daily activities.

How Does Your Back Work?

Your back supports you in an upright position and is capable of a wide range of movements. In addition to bones, joints and cartilage it has many small and large ligaments for **stability** and several layers of powerful muscles for **movement**.

The different parts of the back are:

- ✓ Vertebrae - the bones of the back
- ✓ Cartilage and discs - work as shock absorbers in between the vertebrae
- ✓ Ligaments - fibrous tissue that connects and stabilizes bones
- ✓ Muscles - responsible for movement
- ✓ Nerves - relay messages to the brain
- ✓ Blood vessels - carry oxygen and nutrients to the back.

What Goes Wrong?

The 'S' shaped curve of your back, along with muscles and ligaments, makes it possible to tolerate strain while allowing for movement. In some cases back pain results from too much stress, fatigue or awkward movements. Due to the complex nature of the back, it is difficult to know which specific body part of the back has been damaged as a result of an injury.

Once injured, the back can become susceptible to re-injury especially if there are risk factors in the workplace that are not corrected. Risk factors are aspects of a task that might cause an increased risk of injury. The risk is increased if there is a combination of two or more risk factors found in the same task.

How can your employer prevent back injuries at work?

Your employer is responsible to provide a safe and healthy work environment. Your employer can prevent back injuries by developing an ergonomics program with your workplace health and safety committee. Ergonomics is a science that studies people and the work they do. It tries to fit the work to the worker so you can perform your job in a safe, comfortable and efficient way.

The employer needs to identify and reduce the risks for back injury in the workplace by conducting a risk assessment. The workplace health and safety committee should involve workers to identify problem jobs and suggest ways to improve them.

Risk Factors for Back Injury

- Heavy Physical Work
- Prolonged Standing
- Frequent Bending and Twisting
- Sitting with a Lack of Support
- Repetitive and Long Duration Work
- Whole Body Vibration
- Abrupt or Awkward Movements
- High Stress Jobs

Ergonomic Principles to Prevent Back Injuries

1. **Maintain the natural ‘lumbar’ curve of the lower back** - no touching toes or twisting
2. **Provide support for the lower back when sitting** - a lumbar support helps most workers
3. **Reduce strain on the lower back** - by designing jobs to ergonomic principles.

Practical ways to follow these principles include:

- ❖ Locate objects within easy reach and at a level that can be adjusted to the workers’ body size.
- ❖ Eliminate deep shelves to avoid bending.
- ❖ Avoid lifting heavy objects. Use lifting equipment or ask a coworker for help.
- ❖ Push instead of pull, pull instead of carry.
- ❖ Avoid twisting and jarring motions when lifting.
- ❖ Change the work area to reduce lifting distances.
- ❖ Avoid slippery surfaces and uneven floors and sidewalks.
- ❖ Provide adjustable seating with good lumbar support and educate workers on how to use the equipment.
- ❖ Provide low vibration equipment.
- ❖ Provide a footrest, foot rail or anti-fatigue matting for prolonged standing activities.
- ❖ Wear proper footwear that provides a good foothold and support.
- ❖ Warm up exercises may help reduce back strains. Regular exercise can strengthen muscles and increase flexibility.
- ❖ Organize work to allow for a variety of tasks and alternate heavy tasks with lighter ones.

What should you do if you hurt your back?

Report any pain or injury to your supervisor or employer immediately. This may help identify hazards and correct working conditions before an injury occurs.

See your doctor if you hurt your back at work or have any pain, numbness, tingling or changes in urination or bowel functions. Many back problems occur slowly and get worse over time. Proper diagnosis is needed for relief of pain and healing.

The Workplace Safety and Health Act of Manitoba requires that the employer ensure the safety, health, and welfare of all their workers in a way that is reasonably practical. The Musculoskeletal Injury Prevention Regulation: Part 8 states that a risk assessment must be conducted when a risk of injury is brought to the attention of the employer. This should be done in cooperation with the health and safety committee or worker representative.

Other resources to prevent and deal with a back injury

- Lifting Safely fact sheet
- Ergonomics fact sheet
- Workplace Accommodations: Solutions for Effective Return to Work

Available online at: www.ohcmb.ca

For more information

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