

# Factors that influence musculoskeletal health



Most of us will experience back pain at some point in our lives. Back pain is so prevalent that it is one of the top 10 reasons for medical visits<sup>1</sup>.

There are a number of risk factors that increase the likelihood of injury. Below, we've highlighted the top risk factors<sup>2,3</sup>:

## Job-related factors

It's important that you are aware of how your job may increase your risk of back injury. Frequent or heavy lifting, pushing, pulling, twisting or vibration put added stress on the back. Seated jobs also increase risk of back pain due to poor posture and lack of regular movement.

**Prevention:** For all jobs, keeping a healthy, active lifestyle will help ensure your body is ready for work.

If your job requires any lifting, make sure you've received proper training from your employer on safe lifting techniques. Regular rest breaks or job rotation can help to prevent injuries caused by repetition. For custom needs, a professional such as an ergonomist can give suggestions to lower risk of injury.

If you work at a desk, set up your desk and chair according to ergonomic guidelines. Devices such as a monitor riser or footrest can help you do this. Choose a chair that adjusts and gives you enough support. It is also important to **fit regular movement into your day**. Take a couple of minutes each hour to stand up and stretch. Check out this article with **6 chair exercises you can do at your desk**.

## Fitness level/lifestyle

Poor physical fitness makes it more likely you will experience back pain due to weaker muscles supporting the spine. In addition, excessive weight can add stress to the back, increasing likelihood of injury over time.

**Prevention:** Make **exercise** a part of your daily routine and maintain a **healthy diet**. Core strengthening exercises are especially good for preventing low back pain. If you haven't been active in a while, start slowly. Increasing exercise too quickly can also lead to injury. Lumino Health can help get you started with these **8 core exercises to do at home**.



## Poor posture

Poor posture increases stress on the spine and can lead to injury over time. Avoid things like slouching at your desk or improper lifting techniques.

**Prevention:** Pay attention to your body position and correct yourself when you notice bad posture. Keeping up with a core strengthening program will also help to strengthen your core muscles and improve your posture. Lumino Health can help get you started with these **tips on how to improve your posture**.

## Psychological factors

There is a strong connection between physical and mental health. Mental health concerns such as depression and anxiety have been linked to an increased risk of back pain. In addition to making it more difficult to feel motivated to exercise, these conditions can affect pain perception, and how much one focuses on pain. Further, stress can lead to increased muscle tension. On the other hand, chronic physical pain can contribute to mental health issues.

**Prevention:** Talk to your doctor about any mental health concerns you might have. Seeking treatment early on can help you to manage your symptoms and prevent them from progressing. Check out Lumino Health's **Stress and Anxiety** or **Emotional Wellness** Guides for more information and resources on managing your mental health.

## Age

The risk of back injury increases with age due to natural wear and tear on the spine. Loss of bone density and muscle strength with age increases the chances of a back injury.

**Prevention:** Maintaining a healthy diet, healthy weight and active lifestyle helps to slow bone and muscle loss. Check out **this article** on exercises to keep you mobile as you age.

## Genetics

Some health conditions increase the likelihood of back pain and are influenced by your family history. Examples include arthritis, cancer and diabetes.

**Prevention:** While you cannot change your genetics, you can do things to lower your risk and manage these conditions. Speak with your doctor to learn more on how to manage a healthy lifestyle.

## Pregnancy

During pregnancy, ligaments around the pelvis loosen. Together with increased weight carried in front of the body, pregnant women are more likely to develop back pain.

**Prevention:** Back pain due to pregnancy usually resolves after giving birth. To prevent pain during pregnancy, limit time spent on your feet and keep up with exercises that strengthen the low back. Some women benefit from using special pillows for sleeping and sitting to correct posture. Speak with your treatment provider about your symptoms to determine what is right for you.

## Smoking

Smoking can cause reduced blood flow to the spine, leading to degeneration and increased risk of injury.

**Prevention:** Check out **this article** from Lumino Health to help you get started on your quitting journey.

<sup>1</sup> Centers for Disease Control and Prevention (2020). **Work-related musculoskeletal disorders & ergonomics**.

<sup>2</sup> National Institute of Neurological Disorders and Stroke (2020). **Back pain fact sheet**

<sup>3</sup> Centre of Research Expertise for the Prevention of Musculoskeletal Disorders. **Work Shouldn't Hurt – Work and MSD**