

## **Back Pain - Causes & Solutions**

Back pain. It's nothing to some, a nuisance to many, and an inconvenience to a few -- right?

Well, not exactly. When you look at the statistics, you'll realize that back pain is a serious issue in today's society -- far more serious than most people realize! How serious, you ask? According to the *American Chiropractic Association*, right now more than 31 million North Americans are experiencing lower back pain. And that's to say nothing of the upper back and neck!

Still not convinced that back pain is more than a trifle? Consider these facts:

- Back pain is among the most common reasons for missed work days
- Back pain is the second most common reason people seek medical attention (respiratory infections being the first)
- For most people, your back begins to age before you reach thirty
- Back pain is chronic: most people who get it, get it again
- Canadians spend more than \$50 billion each year trying to combat back pain
- After heart disease and cancer, back pain is the most expensive ailment to treat
- The American Chiropractic Association estimates that 80% of people will have problems with their backs at some point during their lives

When you look at these facts, three things become obvious:

1. At some point in your life, you'll probably experience back pain
2. Back pain is an expensive and painful condition
3. Back pain costs billions of dollars each year (especially if you take into account all those missed work days!)

For many people, back pain is a serious, painful, and chronic condition severely affecting their ability to engage in normal activities.

## What is Back Pain?

On the surface, that might seem a simple answer: back pain is when your back hurts! But there's far more to back pain than pain itself. More to the point, there are dozens of associated problems that come hand-in-hand with a sore back. To complicate the matter, back pain doesn't necessarily indicate any kind of serious condition. On the other hand, serious conditions often have back pain as a symptom! Confused yet? Your back is a complicated piece of engineering.

### How Your Back Works

Your back is a series of stacked bones (vertebrae) that compose your spine. These bones do for your spinal cord what your skull does for your brain: they protect the extremely important and delicate nerves within. Small sections of your spinal cord squeeze through spaces in the vertebrae, allowing them to carry information to the rest of your body.

Muscles and tendons bind those vertebrae together. Your spine also has built-in "shock absorbers" called discs. These rest between your vertebrae and prevent strain and damage when you engage in high-impact physical activity (things like running, dancing, or jumping).

Even though you have a single spine running through your back, you can think of the muscles and tendons as divided into two categories: lower and upper.

### Lower Back Pain

Your lower back is anything from around your midsection down to your hips. Lower back pain is the most common complaint doctors hear about. It can manifest as a sharp sensation in the small of your back or a more general ache, and it has many causes.

Because your spine is such a central part of your body, your lower back muscles extend into your legs and abdomen. For that reason, low back pain can also result in shooting pain in your legs or bouts of nausea. Unfortunately, a *2005 study by Toronto Western Hospital Research* found that less than a third of lower back pain cases get better over the course of a year. That means that if you're experiencing back pain, it's hard to get rid of.

### Upper Back Pain

Upper back pain is less common than lower back pain, but it can be even more problematic. When we talk about your upper back, we're including your shoulders and neck. As computer usage increases, neck pain and shoulder pain increase too.

As with your lower back, your upper back muscles extend into other parts of your body. Side effects of upper back pain include severe headaches, pain in your arms, and lower back tension.

### **Types of Back Pain**

The first thing most doctors will ask you if you seek treatment for back pain is where the pain is located. The next thing they'll want to discuss is whether the pain is chronic or acute.

Acute pain refers to a specific injury. If you're in a car accident and get whiplash, that's acute. Chronic pain is pain that doesn't go away. If you've experienced pain in the same location more or less steadily for 3 - 6 months, you're dealing with a chronic condition. And when we're talking back pain, acute injuries have a way of becoming chronic in a hurry.

## **The Results of Chronic Back Pain**

If only back pain limited itself to the back! Unfortunately, it has a tendency to spread. Back pain affects you physically, psychologically, and emotionally in ways you never would have imagined. Just a few of the side effects of chronic back pain include:

- poor sleep patterns
- reduced immunity to illness
- growing stiffness in the rest of the body (as your other joints try to compensate for the reduced movement in your back)
- headaches and nausea
- pain in your limbs
- irritability, depression, and other emotional disorders
- reduced ability to work
- reduced ability to do physical activities

Unfortunately, many of these problems create a vicious cycle. For example, back pain reduces your desire and ability to engage in physical activity. Physical activity, though, is key to maintaining a healthy spine. As you can see, as your symptoms worsen, your quality of life can decrease significantly.

## What Causes Back Pain?

There are many causes of back pain, some common, others less so. If you had an initiating event (like an injury or accident), you'll probably pinpoint the cause easily. For many people, though, back pain is a constant in their lives, and they have no idea why!

Hopefully, this list will help you understand the mechanics of back pain.

### 1. Injury

Injury is an extremely common cause of back pain. When we talk about injury, we're covering a wide variety of damage to a muscle or bone. A back injury can range from a strained muscle to a severed spinal cord resulting in full paralysis. Of course, if we're talking about back pain, we're probably not dealing with something of that severity.

Car accidents often result in neck injuries. When your head is unsupported, the force of the impact can seriously damage the muscles of your upper back. Most people associate this with whiplash, but while whiplash is the most common neck injury, it isn't the only one. A car accident can do far more damage to your back than a case of whiplash.

Work related injuries are also extremely common causes of back pain. This is especially true in situations where your job requires a lot of heavy lifting. Less common, but just as painful, are athletic injuries. Most of the time, these come from moving the wrong way -- zigging when you should have zagged, so to speak.

On the other hand, injuries can come from much more common causes. Carrying heavy handbags or backpacks, being extremely overweight, and not using care when lifting things can result in chronic back injuries. Physical inactivity can also create serious problems for your back: when your muscles are weak, they're more likely to get injured.

### 2. Medical

There are a number of medical conditions that cause back pain. Some of these include:

- **Osteoarthritis**

Osteoarthritis occurs when the discs between your vertebrae disintegrate so that bone rubs against bone every time you move. Athletes often suffer from osteoarthritis since it builds up over years of high-impact activity. However, obesity and prior back injuries also increase your risk of osteoarthritis.

- **Osteoporosis**

We've all heard of this one (drink your milk!). As you age, your bones can begin to lose calcium, making them weaker. When a person with osteoporosis engages in physical activity, the weak front of the vertebrae can crack or fracture slightly. If this continues over time, it results in serious and intense back pain.

- **Slipped Disc**

Also known as a *hernia*, a slipped disc is exactly what it sounds like: an injury resulting in one of the discs slipping from between your vertebrae and coming to rest against a nerve. Nerves are there to sense pain -- that's one of their main functions.

If something is constantly resting against one of them, your body will let you know in a hurry.

- **Serious Illness**

In rare instances, back pain can indicate a very serious problem: kidney infections, cancer, diabetes, or, in the case of the neck, meningitis. If you experience prolonged back pain, and it doesn't seem to respond to self-treatment, you should see a doctor.

### **3. Posture**

Remember how your parents and schoolteachers always told you to "sit up straight?" You should have listened! We spend a lot of time sitting down, and almost none of us do it properly. When you slouch, your muscles readjust to accommodate this "new" posture. Unfortunately, they're accommodating in ways they were never meant to grow. That means when you use them the way they're supposed to be used, they can't handle the movement.

Even worse, you might have poor posture in your sleep! If your mattress sags, or doesn't provide the proper support, you could be causing serious damage to your back at night. Most of the time, we associate lying down with taking the pressure *off* your back. If you don't have the right mattress and pillow, though, you can actually make the problem worse -- which is why experts don't recommend sleeping on the couch.

Your mattress and pillow are at least as important as your shoes. Think about it: you spend about eight hours a night -- a third of your day -- in bed. If you're using an improper mattress, or one that doesn't provide adequate support, then instead of allowing your muscles to rest during the night, you're forcing them to work even harder to support your unnatural position. A good mattress and pillow are essential to keeping your back healthy and strong.

#### 4. Stress

Your emotional health has a serious impact on your body. Stress can cause all sorts of crazy reactions in people, including illness, changes in appetite and sleep, and physical pain. Because many people tighten their back muscles when they're worried or upset, stress can seriously aggravate existing pain or even create its own.

### Preventing Back Pain

Maybe you're one of the lucky 20% who will never have back problems. But it's more than likely that, if you haven't had problems yet, you will at some point in the future. As we've seen, back pain can be extremely debilitating, so your best bet is prevention! There are many things you can do to limit your chances of injuring your back.

#### 1. Exercise caution when lifting or bending

Most, lower back injuries are the result of improper lifting. You aren't Superman: there's no shame in getting help to lift something heavy! Trust me, your macho image will suffer a lot more from spending three days in bed than asking for a hand.

If you are lifting something yourself, think about your posture. You've heard it said, "Lift with your knees." All that means is, when you're lifting something heavy from the ground, you should bend your knees instead of hinging forward from your waist. If you hinge forward, all of your lifting strength comes from your back. Bend at the knees, and your thighs and quads get to take some of the burden.

#### 2. Rest your head against the seat when driving.

It's called a *headrest* for a reason! Most neck injuries occur when the head snaps rapidly forward and back. If you drive with your head back, resting against the seat, then it can't snap as far forward and can't snap backwards at all. It might feel a bit awkward at first, but it comes with an added benefit: improved posture while driving!

#### 3. Sit properly, especially if seated for long periods.

If you have a desk or computer job, you might have to spend a lot of time in a chair. Sit properly! Keep your feet flat on the floor and your back straight -- not painfully, just don't slouch.

#### **4. Make sure your computer equipment is properly adjusted.**

If you spend a lot of time typing, you should be able to face your screen head-on, not at an angle. Make sure your desk, chair, and keyboard are at a proper height.

#### **5. Invest in good shoes.**

This is especially true if you're on your feet all day, and even more so if you're a woman who tends toward high heels. If your shoes are uncomfortable, you aren't standing properly, which leads to bad posture, and so on.

#### **6. Live a healthy lifestyle.**

Maintaining a healthy body weight and engaging in physical activity are both keys to preventing back pain. Exercise also helps ward off osteoporosis, another major source of pain. People who exercise regularly tend to experience less back pain and recover from it more quickly when they do. In fact, many doctors recommend, "exercise therapy" when dealing with back and neck injuries: strengthening the muscles around the injured area and building the entire body's health.

#### **7. Stretch when exercising.**

A few minutes stretching your back before and after you work it will make all the difference in the world!

#### **8. Take time to relax.**

Since stress can exercise such influence over your body, it's important that you take the time to manage it. Whatever keeps you emotionally grounded, whether that's a spiritual activity, a hot bath, or a night out with the guys, it's essential that you do it. If you're too busy to give yourself a couple hours a week, then you're too busy.

#### **9. Invest in a good mattress.**

As we've already established, your mattress and pillow are essential to providing proper lumbar support while you sleep. If your mattress is saggy or overly soft, your back has to work hard all night long. Have you ever woken up stiff and sore? Now you know why! The ideal mattress is firm and comfortable, providing good support for your entire body (i.e., it shouldn't sag when you lie on it).

Good sleep is important for other reasons, too! Yes, a bad mattress means back pain, but it can also mean less sleep, lower immunities, and irritability. Your bed is worth the investment.

## Treating Back Pain

If you already suffer from chronic back pain, you know how difficult it can be. Unfortunately, in many cases there is no “cure” for back pain. You can, however, treat your pain. You might not get rid of it completely, but you can reduce it to a manageable extent. In fact, many people with chronic back pain are amazed at what a difference a few lifestyle changes can make!

### When to See a Doctor

Many people try to manage pain of all kinds on their own. To a certain extent, that's a good thing: you don't have to run to the hospital for a bruised shin! But there are times when you do need medical attention, and back pain can indicate one of those times.

See a doctor immediately if:

- Your back pain comes with a fever and a sense of illness
- You have numbness or pain extending down your legs
- You are over sixty and experience extreme pain when moving
- You have blood in your urine
- You have a history of cancer
- Your legs are weak/ you have difficulty standing
- You have pain in your legs that gets worse when you bend or raise your legs toward your chest
- The pain doesn't go away over an extended period, or the pain gets worse and worse

These symptoms can indicate anything from a kidney infection to a fractured spine. In all probability, there's nothing seriously wrong. However, if any of the above apply to you, it's better to be safe than sorry! Make a doctor's appointment as soon as possible.

## Helping Yourself

If you want to try addressing the back pain yourself, there are certain steps you can take before seeing a doctor.

### **1. Apply heat or ice to the affected area.**

If you think you may be dealing with a minor injury (such as a strain or twisted muscle), give yourself a few days. Apply heat to relax the muscle and ice to reduce swelling. If the pain is quite bad, you might also want to consider taking an anti-inflammatory painkiller, such as ibuprofen.

### **2. Improve your posture.**

Bad posture is a lifelong habit, and it can be difficult to correct. One tip that might help you is to slide a small pillow or rolled-up sweater behind the small of your back when sitting. This provides support and prevents you from slouching.

### **3. Buy comfortable shoes.**

Invest a bit of money in shoes that will support you comfortably throughout your day. Look for flat shoes or a very low heel, comfort, and support. You should feel stable in your shoes, not as though you're about to slip.

### **4. Buy a good mattress.**

Invest in a proper mattress that will help you heal while you sleep instead of injuring you further. Mattresses are good investments, but they should be replaced every 8-10 years. If you've had yours longer than that, it's definitely time for a change!

Things to look for when buying a mattress:

- **Comfort.** Usually, comfort comes from the padding above the springs. Test mattresses in the position you normally sleep in, don't just flop down and pronounce it good!
- **Support.** A mattress's coils and springs provide support. Make sure you understand the mattress type: different brands have different numbers and tensions of springs.
- **Flexibility.** The reason we recommend sleeping on a mattress and not on the floor is that you can have *too* firm a product! Your mattress shouldn't just provide support; it should allow for your body's natural curves. Most of the time, a medium-firm mattress is preferable to a firm mattress.

- **Value.** Just as “cheap” doesn’t mean “inferior,” “expensive” doesn’t mean “quality.” Most of the time, though, you will pay more for a good mattress than a bad one. It’s just common sense. Keep in mind, you’ll spend a lot of time on this bed: the investment is worth it. Just make sure you shop around and get the best value possible!

Once you have your mattress, take care of it by flipping and rotating it periodically. Not only will it last longer, you’ll have a more comfortable sleep!

You should also make sure that your pillow allows your head to remain in alignment with the rest of your spine. Also consider using pillows to supplement your posture. A pillow tucked under your knees, for instance, can help your spine curve more naturally while you sleep.

## **Getting Help**

Sometimes, back pain reaches a point where it’s unmanageable by yourself. At that point, it’s time to seek the advice of professionals.

### **1. Medical doctors**

Your medical doctor is usually your first stop for back pain. He or she can rule out medical causes, prescribe painkillers, and refer you to therapists or specialists.

### **2. Chiropractors**

Some people are very suspicious of chiropractors while others swear by them. Talk to people you know and find a chiropractor you trust. You can go in for a consultation if you’re not comfortable making an actual appointment the first time.

### **3. Exercise instructors**

If the pain doesn’t prevent you, begin simple stretches or exercises to increase back strength. Yoga is particularly good for people with back injuries. However, if you’re suffering from back pain, you should seek a professional instructor. That way you can make sure you’re doing the exercises properly and not damaging your back further.

You may also want to consult an exercise therapist, who might be able to set up a program to help you build strength and reduce pain.

### **4. Massage therapists**

Massage can be very effective in treating back pain.

## Life Goes On

Back pain can have a terrible impact on your daily life. Fortunately, there are many treatments and practices available. Keeping active, taking care of your body, and buying and maintaining a good mattress are just a few of the ways you can manage pain and keep your day-to-day life as normal as possible.

Don't let back pain rule your life. Find ways to treat it. Make sure you eat, sleep, and exercise properly, and you'll be amazed at the changes you'll see not only in your back, but in your overall well-being.