

SPINE

5 . Globally, low back pain (along with migraine, age-related and other hearing loss, iron-deficiency anaemia, and major depressive disorder) were the five leading causes of YLDs (Years of healthy life lost due to disability) in 2016, contributing 57.6 million (95%) uncertainty interval.

Pain is not always a bad thing! Pain is the body's way to receive messages that there is a threat or something is wrong.

The pain can be much worse than a sore, achy back. It can radiate to other areas of your body, cause intense muscle spasms and leave you lying in bed, debilitated by pain. Lower back pain is so common — and so problematic — that it's the No. 1 reason for missed work days worldwide, according to the World Health Organization.

Why does my back hurt?

The spine is wonderfully designed to allow movement. It is also designed to help absorb and distribute forces from everyday activities.

The spine is made up of 33 small bones called vertebrae. Together, they form what is known as the vertebral column. There are 7 vertebrae in the cervical region which is your neck; 12 vertebrae in the thoracic region which is your upper back; 5 vertebrae in the lumbar spine; and 5 sacral vertebrae and 4 coccyx which are located below that.

Between each of the vertebrae is a disc that binds the vertebra together like a very strong ligament. It acts as a cushion and a shock absorber. These inter-vertebral discs are made up of two parts - the nucleus pulposus and the annulus fibrosis. The nucleus pulposus is in the middle of the disc and is jelly-like due to its large water content; it is composed of up to 80% water! The annulus fibrosis surrounds this nucleus and so forms the outer part of the disc. These discs play an important role in keeping the back healthy!

The spine has 4 main motions—forward bending, backward bending, sidebending, and rotation.

So many things can go wrong with your back. You can injure yourself from overexertion or from doing nothing at all. A simple sneeze can suddenly send you into fits of spasmodic pain. Most of the time, the cause is mechanical. It's something you can fix and recover from. Your back problem may even resolve on its own without as much as a visit to your doctor.

Common Causes of Lower Back Pain

Back pain that's mechanical in nature comes down to one thing: activity. Either a certain activity led to an issue that caused the pain or a general lack of activity created an environment where your back can't hold up to daily demands. Those activity-related issues result in:

Strains and sprains – Most acute lower back pain falls into this category. You overstretched a muscle and strained it, or tore a tendon, resulting in a sprain. Both can happen from twisting or lifting something incorrectly, picking up a heavy object or overextending your reach.

Herniated or ruptured discs – The impact from an accident, fall or sports injury can damage your spine. Back pain starts immediately after injury. It may also cause tingling or numbness in your legs.

Sciatica – Sharp lower back pain that radiates down through your butt and legs is due to compression on the sciatic nerve. Sciatica often occurs after a herniated or ruptured disc.

Pregnancy – Lower back pain is a common complaint in pregnancy. Your muscles and ligaments are stretching as your belly and the baby grows. The added weight and bump up front can overtax your

back.

Rare Conditions That Lead to Lower Back Pain

There are many less common reasons for lower back pain. But these less common reasons are a lot more serious. Each of these would require medical attention to fix the underlying cause of your lower back pain. In rare cases, your pain can come from:

Degenerative disc

Spinal stenosis

Scoliosis

Infection

Tumor

Fibromyalgia

Does it matter where my lower back pain is located?

Not really. Right side, left side or both sides, you can have lower back pain anywhere. But it is more common to have lower back pain on just one side of your body.

The anatomy of your back is symmetrical. The spine separates the two sides. You would have to injure the same areas on both sides of your back to experience pain in both places. Even when it feels like your entire lower back hurts, the pain is probably coming from either the right or left side.

Because of all the organs in the abdomen, many people worry that their pain is a sign of something much more serious. Problems with those organs primarily cause abdominal pain. If back pain is present, it's up high enough to rarely be confused for low back pain.

The one exception isn't an organ, but an artery. Your aorta runs down the left side of your spine. In extremely rare cases, a bulge can develop and create an aortic aneurysm that leads to lower left back pain.

How do I relieve my lower back pain?

First, you have to understand the cause. If you had an accident, fall or injury, schedule an appointment with your provider to get checked out. But if you pulled something or just generally have a sore lower back, the guidelines start with at-home treatment.

You might think that if you rest your pain will go away. It's actually the opposite. Movement is the best medicine. Inactivity can make the muscles tighten up, causing more pain. So stay active and stick to your normal routine as much as the pain allows. And try out these exercises to target the affected areas and relieve your lower back pain.

Lower Back Stretches

Stretching is an important part of a normal workout routine. It helps you maintain normal range of motion and prevent muscles from shrinking up from lack of use.

Physical Therapy for Lower Back Pain

Not all back pain is the same. Even if you practice proper stretching and strengthen your core, the pain get worse or just hang around for weeks. Chronic or severe lower back pain are both more complex issues.

A physical therapist can pinpoint the problem and design an individualized stretching and exercise program that targets specific muscles to relieve your pain. They also work with you to ensure you're performing each lower back stretch and exercise correctly.

When stretching and exercise isn't enough, a physical therapist can use manipulation, mobilization and other treatment methods to reduce your lower back pain symptoms and resolve the underlying cause.

But you don't have to wait until your pain is unbearable or chronic. Visit a physical therapist or check out the Bone & Joint Center if your lower back pain lasts more than a few days so you can get back on your feet and back to work faster.

How Common is Neck Pain?

Here are a few statistics on the prevalence of neck pain:

- Neck pain reported to be 2nd most common musculoskeletal disorder that leads to disability and injury claims
- 2002: 13.8% of population > 18 years old in U.S. reported neck pain.
- Up to 50% of people with neck pain have ongoing symptoms for > 3 months, therefore are categorised as "Chronic" patients.

There are certain factors that can increase the risk for neck pain

- Working at a desk that is ill fitting to the body
- Working at a computer for long periods of time
- Sitting with bad posture for long periods of time
- Working on above head activities (i.e. painting) for long periods of time
- The Cervical Tool Kit to help identify or classify patients based on evidence informed interventions.