

## Spine Education - Back Pain

### What Is Low Back Pain?

Low back pain is a universal human experience -- almost everyone has it at some point. The lower back, which starts below the ribcage, is called the lumbar region. Pain here can be intense and is one of the top causes of missed work. Fortunately, low back pain often gets better on its own. When it doesn't, there are effective treatments.

### Symptoms of Low Back Pain

Symptoms range from a dull ache to a stabbing or shooting sensation. The pain may make it hard to move or stand up straight. Acute back pain comes on suddenly, often after an injury from sports or heavy lifting. Pain that lasts more than three months is considered chronic. If your pain is not better within 72 hours, you should consult a doctor. Severe back pain after a fall or injury should be checked out by a health care professional. Other warning signs include a loss of bowel or bladder control, leg weakness, fever, and pain when coughing or urinating. If you have any of these symptoms along with your back pain, contact your doctor.

### Muscle Strain or Sciatica?

Back pain is almost always related to the muscles in the back or the coverings of the muscle which is called the fascia. The kind of back pain that follows heavy lifting or exercising too hard is often caused by muscle strain. But sometimes leg pain can be related to a disc that bulges or ruptures. If a bulging or ruptured disc presses on a spinal nerve, pain may run from the buttock down one or both legs. This is called sciatica.

### Back Pain Culprits

- **Your Job** - If your job involves lifting, pulling, or anything that twists the spine, it may contribute to back pain. However, sitting at a desk all day comes with risks of its own, especially if your chair is uncomfortable or you tend to slouch.
- **Your Bag**- Although you may wear your purse, backpack, or briefcase over your shoulder, it is the lower back that supports the upper body -- including any additional weight you carry. So an overstuffed bag can strain the lower back, especially if you carry it day after day. If you must tote a heavy load, consider switching to a wheeled briefcase.
- **Your Workout** - Overdoing it at the gym or golf course is one of the most common causes of overextended muscles leading to low back pain. You're especially vulnerable if you tend to be inactive during the work week and then spend hours at the gym or softball field on the weekend.
- **Your Posture** - Mom was right when she said, "Stand up straight!" Your back supports weight best when you don't slouch. This means sitting with good lumbar support for your lower back, shoulders back, with feet resting on a low stool. When standing, keep weight evenly balanced on both feet.



- **Herniated Disc** - The spine's vertebrae are cushioned by gel-like discs that are prone to wear and tear from aging or injuries. A weakened disc may rupture or bulge, putting pressure on the spinal nerve roots. This is known as a herniated disc and can cause intense leg pain. Bulging or herniated discs do not usually cause back pain.

**Chronic Conditions** - Several chronic conditions can lead to low back pain.

- Spinal stenosis is a narrowing of the space around the spinal cord, which can put pressure on the spinal nerves. Stenosis causes leg pain primarily but the arthritic conditions that lead to stenosis can result in back pain.
- Spondylitis refers to chronic back pain and stiffness due to severe inflammation of the spinal joints.
- Spondylolisthesis refers to a malalignment of the spinal bones. This is often a cause of back and or leg pain.
- Fibromyalgia causes widespread muscle aches, including back pain.

### Who's at Risk for Low Back Pain?

Most people get their first taste of low back pain in their 30s. The odds of additional attacks increase with age. Other reasons your low back may hurt include:

- Being overweight
- Inactive lifestyle
- Jobs that require heavy lifting

### Home Care for Low Back Pain

Back pain due to muscle strain will usually get better on its own, but you can take steps to make yourself more comfortable. A heating pad or warm baths may provide temporary pain relief.

### The Bed Rest Debate

When your back hurts, you may not feel like getting out of bed. But if the problem is muscle strain, doctors recommend returning to your normal activities as soon as possible. Studies suggest that any more than a day or two of bed rest can actually make the pain worse and may reduce muscle tone and flexibility.

### Preventing Low Back Pain

There's no sure way to prevent back pain as you age, but there are steps you can take to lower your risk:

- Stay at a healthy weight.
- Exercise regularly.
- Lift with your legs, not your back.
- Make sure your work station position isn't contributing to your pain.

## Diagnosing Low Back Pain

To help your doctor diagnose the source of low back pain, be specific in describing the type of pain, when it started, related symptoms, and any history of chronic conditions. Your doctor will probably not need to order X-rays, CT or MRI scans before starting treatment.

## Yoga

If back pain doesn't go away in three months, there's evidence that yoga can help. In one study, people who took 12 weeks of yoga classes had fewer symptoms of low back pain than people who were given a book about care for back pain. The benefits lasted several months after the classes were finished. The study suggests conventional stretching also works just as well. Make sure your instructor is experienced at teaching people with back pain and will modify postures for you as needed.

## Physical Therapy

If back pain has left you inactive for a long time, a rehabilitation program can help you strengthen your muscles and get back to your daily activities. A physical therapist can guide you through stretches, strength exercises, and low-impact cardio that will help you be fitter without straining your back.

## Strengthening the Back

Two types of strength-training moves that may benefit the lower back are flexion and extension exercises. In flexion exercises, you bend forward to stretch the muscles of the back and hips. In extension exercises, you bend backward to develop the muscles that support the spine. One example is doing leg lifts while lying on your stomach. Depending on the cause of your back pain, there are some exercises you should not do. If you have back pain, make sure to talk to your doctor about what exercises are safe for you.

## Spinal Manipulation

Chiropractors and some osteopathic doctors use spinal manipulation to treat low back pain by applying pressure with their hands to bones and surrounding tissues. This treatment is not appropriate for everyone.

## Massage Therapy

Massage may relieve chronic low back pain, especially when combined with exercise and stretching. Researchers noted patients who did all 3 were able to move around easier and had less short term and long term pain.

## Acupuncture

Can acupuncture treat back pain? The evidence is mixed. A study of several hundred people with long-lasting back pain found surprising results. Those who had simulated acupuncture (involving toothpicks tapping the skin) got the same



benefits as those who had real acupuncture with needles. After eight weeks, both groups had greater relief than people who did not have acupuncture.

## Pain Management

Your doctor may prescribe medication or may refer you to a pain management doctor to manage your chronic back pain.

## Medications

Mild back pain often feels better with over-the-counter pain relievers, such as acetaminophen, ibuprofen, or naproxen. Pain-relieving creams may be helpful for muscle aches. For severe pain or chronic pain, your doctor may recommend prescription medication.

## Injections

If simpler therapies and medications aren't helping, your doctor may recommend injections to the back. One procedure, called a nerve root block, targets irritated nerves. Injections for back pain usually contain steroid medication.

## Surgery

If long-lasting back pain is interfering with your daily life, and other treatments have not provided relief, you may be a candidate for surgery. Depending on the cause of your pain, a surgeon may remove a herniated disc, widen the space around the spinal cord, and/or fuse two spinal vertebrae together.