

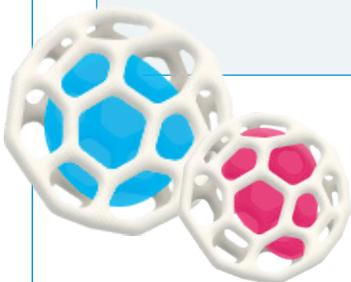


## OrthoInfo Basics

# Low Back Pain

**Almost everyone will experience low back pain at some point in their lives. When it happens, many daily activities become difficult to do.**

Back pain varies from one person to the next. It can range from mild to severe. It can be short-lived or long-lasting. However it happens, low back pain usually gets better on its own within a few weeks.



### What parts of the spine are affected?

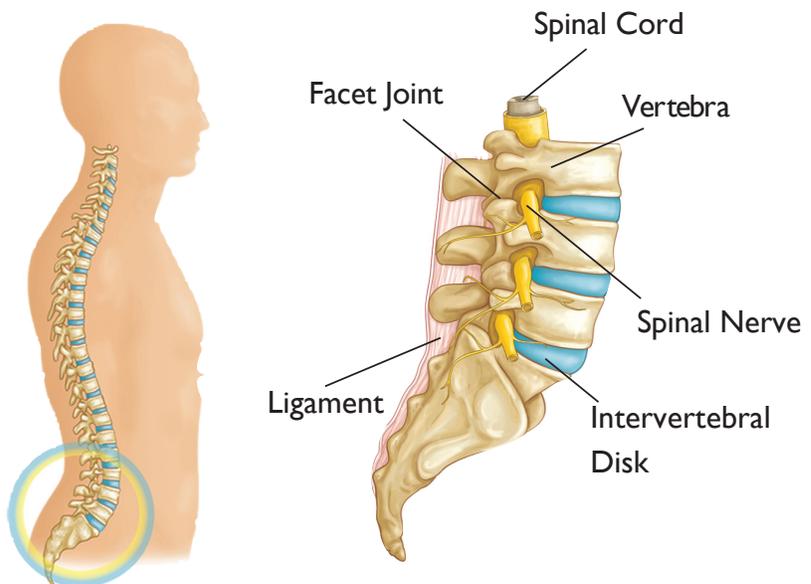
Understanding your spine can help you better understand why you have low back pain.

**Vertebrae.** Your spine is made up of vertebral bones that are stacked on top of one another. These bones connect to create a canal that protects the spinal cord. Your lower back – or lumbar spine – is made up of five vertebrae.

**Spinal cord and nerves.** These “electrical cables” travel through the spinal canal carrying messages between your brain and muscles.

**Intervertebral disks.** In between your vertebrae are flexible, intervertebral disks. They are about a half inch thick, and act as shock absorbers when you walk or run.

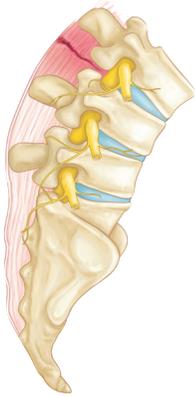
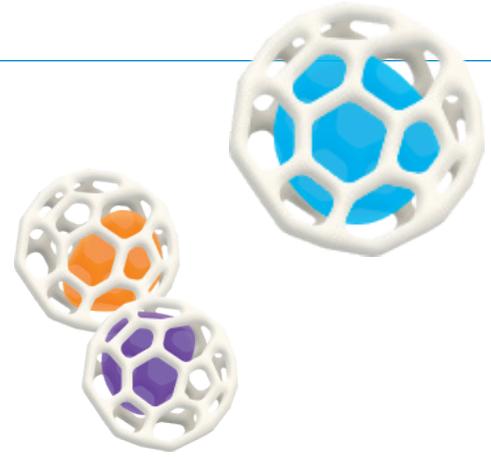
**Muscles and ligaments.** These provide support and stability for your spine and upper body. Strong ligaments connect your vertebrae and help keep the spinal column in position.



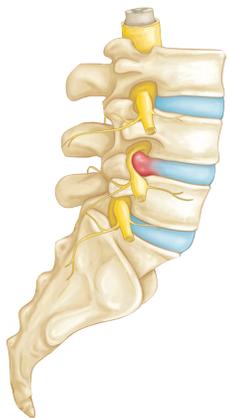
### What are some common causes of low back pain?

Back pain is often caused by injury. Just getting older also plays a role in many back conditions.

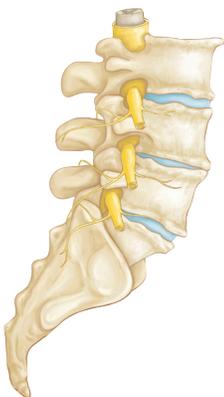
Back pain can be caused by many things. A few common causes are listed here.



**Strains and sprains.** One of the more common causes of low back pain is muscle soreness from overactivity. Muscles and ligament fibers can be overstretched or injured.



**Herniated disk.** An intervertebral disk herniates when its jelly-like center pushes against its outer ring. When the herniated disk bulges out toward the spinal canal, it may put pressure on the sensitive spinal nerves, causing pain.



**Disk degeneration.** With age, intervertebral disks begin to shrink. In some cases, they may collapse completely and cause the bones to rub against one another. Pain and stiffness result. This is also referred to as osteoarthritis or spondylosis.

### How is low back pain treated?

Treatment for low back pain focuses on relieving your symptoms.

In many cases, a combination of treatments will help enough for you to do all the activities you want to do.

**Activity changes.** Some people find that taking rest breaks throughout the day helps relieve pain. It is important to avoid sitting for long periods of time, however. Your doctor can help you adjust your activity levels to speed your healing.

**Medications.** Aspirin or acetaminophen may relieve pain. Nonsteroidal anti-inflammatory medicines reduce swelling and pain. Steroids, taken either by mouth or injection, deliver a high dose of anti-inflammatory medicine.

**Physical medicine.** Therapy can involve treatments like heat, ice, and massage. Active physical therapy consists of stretching, aerobic exercise, and strength training. Exercise can help restore motion and strength to your low back, and can be very helpful in relieving pain.

*(continued on page 3)*

(Treatment – continued from page 2)

**Surgery.** Surgery should only be considered after other options have been tried and failed.

In addition, surgery is an option only if your doctor can pinpoint the exact cause of your low back pain.

There are many spine surgery procedures. Fusion and disk replacement are two of the operations your doctor may discuss with you.

**Spinal fusion.** This is essentially a “welding” process. The painful vertebrae are fused together so that they heal into a single, solid bone.

Spinal fusion eliminates motion between the vertebrae. It is an option when motion is the source of your pain.

**Disk replacement.** This procedure involves removing the disk and replacing it with artificial parts, similar to replacements of the hip or knee.



Use the muscles in your legs to help lift a heavy item.

### How can low back pain be prevented?

It may not be possible to prevent low back pain.

We cannot avoid the normal wear and tear on our spines that goes along with aging. But there are things we can do to lessen the impact of low back problems. Having a healthy lifestyle is a good start.

**Exercise.** Combine aerobic exercise, like walking or swimming, with specific exercises to keep the muscles in your back and abdomen strong and flexible.

**Proper lifting.** Be sure to lift heavy items with your legs, not your back. Do not bend over to pick something up. Keep your back straight and bend at your knees.

**Weight.** Maintain a healthy weight. Being overweight puts added pressure on your lower back.

**Avoid smoking.** Both the smoke and the nicotine cause your spine to age faster than normal.

**Proper posture.** Good posture is important for avoiding future problems. A therapist can teach you how to safely stand, sit, and lift.



### For more information

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For more information about back pain, visit *OrthoInfo* at [www.orthoinfo.org](http://www.orthoinfo.org).

*OrthoInfo* is the patient education website of the American Academy of Orthopaedic Surgeons (AAOS), and is a trusted source of information about musculoskeletal conditions. Our articles are developed by orthopaedic surgeons, and provide detailed information about a wide range of injuries and diseases, as well as treatment options and prevention topics.

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