



My Aching Back

A Guide to Acute Low Back Pain



PRIMED
Patient Education Center

www.patientedu.org

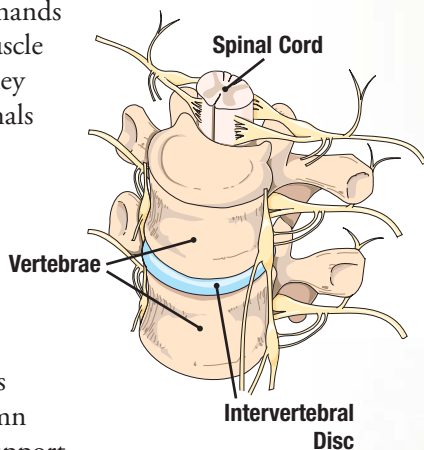
If your back aches, you're not alone. In fact, 70% to 80% of American adults have experienced low back pain. Back pain is the 5th most common reason people seek medical care. And it's also expensive—with an annual tab of over \$50 billion.

Back aches are common, painful, and expensive—but they're rarely serious. **Half the episodes resolve in less than a week**, and three-quarters are gone within a month.

The Normal Back

Like every part of the human body, the back is complex. Your “backbone” is not a bone at all but a column of 24 individual bones called *vertebrae*. These bones are separated by *intervertebral discs*, which act as shock absorbers. Each disc has a soft core surrounded by a capsule of fibrous tissue. Nerve roots run out from the spinal cord, passing between the vertebral bodies. These spinal nerves transmit the commands responsible for muscle movement, and they carry back the signals of sensation (See Figure).

A group of strong ligaments holds the vertebrae together. Muscles run along the sides of the spinal column to provide extra support.



What Causes Back Pain?

There are many causes of back pain. The most common are:

- | | |
|-----------------------------|------------------|
| • Bulging discs | • Pinched nerves |
| • Sciatica | • Arthritis |
| • Muscle spasms and strains | |

Poor posture, tight muscles, and abnormal spine alignment are other causes of back pain. More serious problems, such as osteoporosis, compression fractures, tumors, and infections, are much less common. Often, the exact cause of back pain remains a mystery.



When is Back Pain Serious?

Pain is always serious to the sufferer, but it **doesn't necessarily signal a major medical problem**. If you have ordinary back pain, you can probably take care of it yourself. But you should see a doctor without delay if you have any of these warning symptoms:

Back Pain Warnings

- Onset of pain **before age 20** or **after age 55**
- **Recent major trauma**, including motor vehicle accidents, falls, and severe sports injuries
- **Pain radiating down a leg**, particularly if accompanied by:
 - Numbness or loss of sensation
 - Weakness or loss of muscular strength
 - Impaired bowel or bladder control
- Pain that is **constant and does not vary** with motion
- Pain in the upper back or chest
- Pain that **increases at night** or when lying down
- Unexplained **fever of 101° or more**
- Unexplained **weight loss of 10 pounds or more**
- A **previous diagnosis of cancer** or another major illness
- Use of **steroids or other drugs** that block the immune system
- History of **drug abuse**

Should I See a Doctor?

If you have warning symptoms, the answer is yes. For ordinary back pain, the choice is yours. It's certainly wise to begin by taking care of yourself. But if your pain persists for 4 to 6 weeks, you should see your doctor. In most cases, a primary care physician is the best choice. Specialists, such as orthopedists, neurologists, and neurosurgeons, are reserved for unusual or difficult cases.

Should I Stay In Bed?

You may have to rest in bed while your pain is at its worst, but be sure to get up as soon as you can. Staying off your feet won't speed your recovery, and it's bad for your overall health.

Use common sense. Be as active as your pain will allow, but don't push too hard. Avoid heavy lifting, bending and twisting, and prolonged sitting. When you rest, lie on a firm surface such as a good mattress, a mattress with a bed board under it, or the floor. Use a heating pad if it helps you feel better. When you sit, pick a chair with good low back support. As you improve, spend less time resting, and more time standing and walking.

Should I Do Back Exercises?

Back exercises are not helpful for acute low back pain. But after you recover, they may help you prevent other episodes. Although there is little scientific evidence, it's ok to start exercises 2 to 3 weeks after your back feels better.



Can Medications Help?

Drugs won't speed recovery, but they can ease the pain and help you get up and around. For ordinary low back pain, treat yourself with non-prescription drugs. Start with a simple pain reliever such as *acetaminophen*. It's not as strong as some other drugs, but it has fewer side effects. If needed, use high doses, but not more than 1,000 mg 4 times a day.

Most doctors recommend a *non-steroidal anti-inflammatory medication* (NSAID) as the next treatment. You can try a nonprescription product such as *aspirin*, *ibuprofen*, or *naproxen*, or you can ask for one of the many prescription NSAIDs. Stronger prescription painkillers and narcotics are rarely needed. If you have intense muscle spasms, your doctor may prescribe a muscle relaxant such as *diazepam*, *cylobenzaprine*, *carisoprodol*, or *methocarbamol*. Finally, an anti-seizure medication such as *gabapentin* may help ease nerve pain from sciatica.

Should I Have X-rays or Lab Tests?

If your pain lasts for as long as 4 to 6 weeks, your doctor may recommend a series of x-rays along with a few simple lab tests such as a complete blood count,



erythrocyte sedimentation rate (ESR), and *urinalysis*. More elaborate tests are rarely helpful for ordinary acute low back pain.

Should I Have a CT Scan or MRI?

Computed tomography (CT scanning) is a powerful imaging technique, but for back pain, *magnetic resonance imaging* (MRI) is more effective. In general, CTs should be used only when detailed imaging is needed and an MRI test cannot be performed.

MRIs provide a superb look at the vertebral bones and joints, the discs, and the nerve roots. They are safe, but not for people with pacemakers or certain metallic implants. They are expensive, and they can trigger claustrophobia. Because they are slow, they may be hard for people who cannot lie still because of pain.

MRIs are not needed for uncomplicated low back pain, but they can be very important for patients with warning signs or with pain that's prolonged or unusually severe. In most cases, MRIs should be performed only if surgery is a serious consideration.

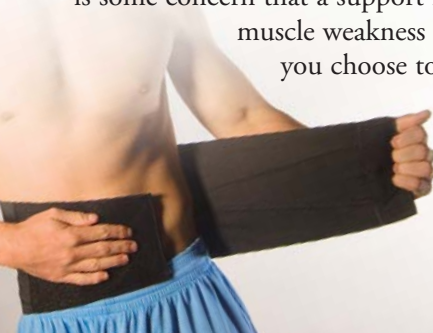


Should I See a Chiropractor?

Chiropractors and osteopaths generally recommend spinal manipulation for back pain, but most physicians are skeptical. Before you try manipulation, be sure you don't have any back warning symptoms (see page 4). Remember, too, that most acute low back pain will resolve without special treatment, and that physical therapists are an excellent resource for pain that doesn't resolve on its own. With these constraints, manipulation therapy is an understandable choice for people with chronic pain who feel it's worth their time and money.

Should I Wear a Brace?

Wearing a lumbosacral support ("back brace" or "corset") for acute low back pain is one of the many traditional treatments that have not stood the test of careful scientific studies. In fact, there is some concern that a support may produce muscle weakness and stiffness. If you choose to use a support, wear it only when you think it will do the most good.



Also, be sure to keep your back flexible and strong with an exercise program once your pain has settled down.

Are Other Treatments Available?

Although most acute low back pain will resolve with a simple, conservative, self-directed program, **some people require additional therapy for difficult or chronic pain.** A *physical therapy-rehabilitation* program can be very helpful. If physical therapy doesn't do the trick, doctors may treat selected patients by injecting steroids into the painful area.

If needed, surgery is also available. It may be required, even urgent, in cases of complicated back pain (see page 4), but it should be the last resort for uncomplicated pain. If a herniated lumbar disc is responsible, a lumbar discectomy is the preferred approach.

How Can I Keep My Back Healthy?

Exercises to keep your back flexible and to strengthen your abdominal and back muscles may help. **Good posture and body mechanics are essential.** In particular, be careful when you lift.

Keep heavy objects close to your body, and be sure to bend your knees and lift with your legs, not your back.





The best way to prevent back pain is to keep the rest of your body healthy. Exercise is the key. Active, fit folks have less back pain than inactive, out-of-shape people. Swimming, walking, and biking are particularly worthwhile for those who've had back pain in the past. A good diet will also help—not by nourishing bones and joints, but by preventing obesity.

The best way to prevent back pain is to keep the rest of your body healthy.

Back to Basics

Because it's so common, back pain is a hot topic for both health care professionals and the general public. Listen to the options, and then decide what's best for you. **For most people, a simple self-planned program will control acute low back pain.** But whether you treat yourself or get professional help, you should always listen to your body, staying alert for the warning signs that could indicate serious trouble. Fortunately, such warnings are uncommon. For most adults, basic care will banish backaches.





To learn more about low back pain, visit the **Pri-Med Patient Education Center** at www.patientedu.org/lowbackpain.

Brought to you by:

PR•MED Patient Education Center



HARVARD
MEDICAL SCHOOL



Pri-Med Patient Education Center

2127 2nd Ave North
Fort Dodge, IA 50501

service@patientedu.org

About This Brochure: This brochure was written by practicing physicians from Harvard Medical School. It is part of a series developed by the Pri-Med Patient Education Center and distributed in conjunction with the Medical Group Management Association.

All the information in this brochure and on the associated Web site (www.patientedu.org) is intended for educational use only; it is not intended to provide, or be a substitute for, professional medical advice, diagnosis, or treatment. Only a physician or other qualified health care professional can provide medical advice, diagnosis, or treatment. Always consult your physician on all matters of your personal health.

Harvard Medical School, the Pri-Med Patient Education Center, and its affiliates do not endorse any products.

Consulting Physicians: Hsuey B. Simon, MD and Anthony L. Komaroff, MD
Editorial Director: John Rusko
Managing Editor: Keith D'Oria
Senior Editor: Jamie Brickwedel
Art Director: Dan Nichol

© Copyright Harvard Medical School.



Printed on 10%
post-consumer
recycled paper.

PMPEC-PC-LBP-001