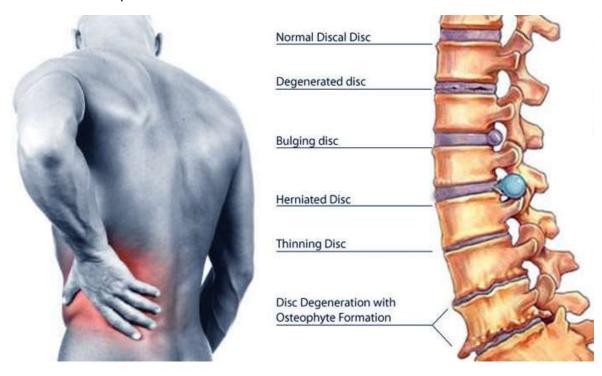
# Back pain

## **Definition**

Back pain is one of the most common reasons people go to the doctor or miss work and a leading cause of disability worldwide. Most people have back pain at least once.

Fortunately, you can take measures to prevent or relieve most back pain episodes. If prevention fails, simple home treatment and proper body mechanics often will heal your back within a few weeks and keep it functional for the long haul. Surgery is rarely needed to treat back pain.



## **Symptoms**

Signs and symptoms of back pain may include:

- Muscle ache
- Shooting or stabbing pain
- Pain that radiates down your leg
- Limited flexibility or range of motion of the back

### Causes

Back pain can come on suddenly and last less than six weeks (acute), which may be caused by a fall or heavy lifting. Back pain that lasts more than three months (chronic) is less common than acute pain.

Back pain often develops without a specific cause that your doctor can identify with a test or imaging study. Conditions commonly linked to back pain include:

- **Muscle or ligament strain.** Repeated heavy lifting or a sudden awkward movement may strain back muscles and spinal ligaments. If you're in poor physical condition, constant strain on your back may cause painful muscle spasms.
- Bulging or ruptured disks. Disks act as cushions between the bones (vertebrae) in your spine. The soft material inside a disk can bulge or rupture and press on a nerve. However, you can have a bulging or ruptured disk without back pain. Disk disease is often found incidentally when you undergo spine X-rays for some other reason.
- Arthritis. Osteoarthritis can affect the lower back. In some cases arthritis in the spine can lead to a narrowing of the space around the spinal cord, a condition called spinal stenosis.
- **Skeletal irregularities.** Back pain can occur if your spine curves abnormally. Scoliosis, a condition in which your spine curves to the side, also may lead to back pain, but generally only if the scoliosis is severe.
- Osteoporosis. Your spine's vertebrae can develop compression fractures if your bones become porous and brittle.

## **Treatments and drugs**

Most acute back pain gets better with a few weeks of home treatment. Over-the-counter pain relievers and the use of heat or ice might be all you need. Bed rest isn't recommended.

Continue your activities as much as you can tolerate. Try light activity, such as walking and activities of daily living. Stop activity that increases pain, but don't avoid activity out of fear of pain. If home treatments aren't working after several weeks, your doctor might suggest stronger medications or other therapies.

#### **Medications**

Depending on the type of back pain you have, your doctor might recommend the following:

 Over-the-counter (OTC) pain relievers. Acetaminophen (Tylenol, others) or nonsteroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen (Advil, Motrin IB, others) or naproxen sodium (Aleve), might relieve acute back pain. Take these medications as directed by your doctor, because overuse can cause serious side effects.

If OTC pain relievers don't relieve your pain, your doctor might suggest prescription NSAIDs.

- **Muscle relaxants.** If mild to moderate back pain doesn't improve with OTC pain relievers, your doctor may also prescribe a muscle relaxant. Muscle relaxants can make you dizzy and sleepy.
- **Topical pain relievers.** These are creams, salves or ointments you rub into your skin at the site of your pain.
- **Narcotics.** Certain drugs, such as codeine or hydrocodone, may be used for a short time with close supervision by your doctor.
- Antidepressants. Low doses of certain types of antidepressants particularly
  tricyclic antidepressants, such as amitriptyline have been shown to relieve some
  types of chronic back pain, independent of their effect on depression.
- Injections. If other measures don't relieve your pain and if your pain radiates down
  your leg, your doctor may inject cortisone an anti-inflammatory medication or
  numbing medication into the space around your spinal cord (epidural space). A
  cortisone injection helps decrease inflammation around the nerve roots, but the pain
  relief usually lasts less than a few months.

#### Education

There's no commonly accepted program to teach people with back pain how to manage the condition effectively. So education might involve a class, a talk with your doctor, written material or a video. Education emphasizes the importance of staying active, reducing stress and worry, and teaching ways to avoid future injury.

## Physical therapy and exercise

Physical therapy is the cornerstone of back pain treatment. A physical therapist can apply a variety of treatments, such as heat, ultrasound, electrical stimulation and muscle-release techniques, to your back muscles and soft tissues to reduce pain.

As pain improves, the therapist can teach you exercises that can increase your flexibility, strengthen your back and abdominal muscles, and improve your posture. Regular use of these techniques can help prevent pain from returning.

### Surgery

Few people need surgery for back pain. If you have unrelenting pain associated with radiating leg pain or progressive muscle weakness caused by nerve compression, you may benefit from surgery. Otherwise, surgery usually is reserved for pain related to structural problems, such as narrowing of the spine (spinal stenosis) or a herniated disk, that hasn't responded to other therapy.

## **Prevention**

You may be able to avoid back pain or prevent its recurrence by improving your physical condition and learning and practicing proper body mechanics.

To keep your back healthy and strong:

- Exercise. Regular low-impact aerobic activities those that don't strain or jolt your back — can increase strength and endurance in your back and allow your muscles to function better. Walking and swimming are good choices. Talk with your doctor about which activities are best for you.
- Build muscle strength and flexibility. Abdominal and back muscle exercises (core-strengthening exercises) help condition these muscles so that they work together like a natural corset for your back. Flexibility in your hips and upper legs aligns your pelvic bones to improve how your back feels. Your doctor or physical therapist can tell which exercises are right for you.
- **Maintain a healthy weight.** Being overweight strains back muscles. If you're overweight, trimming down can prevent back pain.

Use proper body mechanics:

- **Stand smart.** Maintain a neutral pelvic position. If you must stand for long periods, place one foot on a low footstool to take some of the load off your lower back. Alternate feet. Good posture can reduce the stress on back muscles.
- **Sit smart.** Choose a seat with good lower back support, armrests and a swivel base. Consider placing a pillow or rolled towel in the small of your back to maintain its normal curve. Keep your knees and hips level. Change your position frequently, at least every half-hour.
- Lift smart. Avoid heavy lifting, if possible, but if you must lift something heavy, let
  your legs do the work. Keep your back straight no twisting and bend only at the
  knees. Hold the load close to your body. Find a lifting partner if the object is heavy or
  awkward.

## **Buyer beware**

Because back pain is so common, numerous products promise to prevent or relieve your back pain. But, there's no definitive evidence that special shoes, shoe inserts, back supports, specially designed furniture or stress management programs can help. In addition, there doesn't appear to be one type of mattress that's best for people with back pain. It's probably a matter of what feels most comfortable to you.