

## Patient education: Low back pain in adults

### Low back pain is very common.

1. **More than 80 percent of people have at least one episode of low back pain** during their lifetime.
2. Although back pain usually does not represent a serious medical problem and **most often resolves on its own**, it can be frustrating when pain interferes with daily life.
3. **Certain factors seem to increase a person's risk** of developing low back pain. These include smoking, obesity, older age, female sex, physically strenuous or sedentary work, job-related stress, job dissatisfaction, and mental health issues such as anxiety or depression.
4. Low back pain is often categorized as **"acute" (lasting four weeks or less), "subacute" (lasting 4 to 12 weeks), or "chronic" (lasting more than 12 weeks)**. While most episodes of acute pain resolve quickly, some people do go on to have longer-term pain.

### Causes

1. **Many different things can cause low back pain.** Most of the time there is no specific cause, but, rarely, pain can be related to a disease or disorder.
2. **Degenerative disc disease** — Over time, normal wear and tear can lead to degenerative disc "disease" (breakdown of the spinal discs), with the development of small cracks and tears and/or loss of fluid in the discs. This can lead to changes in the neighboring spinal vertebrae, including the formation of bone spurs (areas of bony overgrowth). **Calling this condition a "disease" is somewhat misleading because these changes occur with normal aging.** While the changes in the discs can cause back pain, there are many older people with degenerative disc disease who have no symptoms.
3. **Osteoarthritis** — Osteoarthritis can affect the joints that connect the vertebrae to one another, called the facet joints. This condition, known as facet joint arthropathy, can lead to bone spurs around the joint and may cause low back pain. However, like degenerative disc disease, **facet joint arthropathy is very common with aging and many people with this condition have no symptoms.**
4. **Spondylolisthesis** — Spondylolisthesis is a condition in which one of the vertebrae of the lower spine "slips" forward in relation to another. Spondylolisthesis is usually caused by stress on the joints of the lower back and may be associated with facet

joint arthropathy. **Although this condition can cause low back pain and sciatica, it may cause no symptoms** at all.

5. **Lumbar spinal stenosis** — Spinal stenosis is a condition in which the vertebral canal (the open space inside the vertebrae) is narrowed. This is often caused by bone spurs, which can occur in older people with osteoarthritis (see '[Osteoarthritis](#)' above). **Some people with spinal stenosis have no symptoms, while others experience pain in the lower legs with standing and changes in position; this is known as neurogenic claudication.**
6. **Occupational back pain** — Sometimes back pain is related to occupational factors. These can include poor posture while sitting or standing at work, sitting or standing for long periods of time, driving long distances, improper lifting techniques, frequent lifting, and lifting excessively heavy loads. **Low back pain is as common among workers who sit for prolonged periods as in people whose jobs require heavy lifting.**

### **Terminology**

1. **Low back pain can feel different to different people** and may be associated with other features or symptoms depending on the cause.
2. **Radiculopathy** — Radiculopathy may accompany low back pain; it occurs when a nerve root in the spine is irritated by something pressing on it (a protruding disc, arthritis of the spine, or even a muscle in spasm). Symptoms of radiculopathy include **radiating pain, numbness, tingling, or muscle weakness in the specific area related to the affected nerve root, usually the lower leg.**
3. **Sciatica** — Sciatica is a specific type of radiculopathy; it occurs with irritation or compression of one of the spinal nerve roots that branch off the sciatic nerve. The **pain is typically sharp or burning and extends down the back or side of the thigh and may reach as far as the foot or ankle.** You may also feel numbness or tingling. Occasionally, sciatica may also be associated with muscle weakness in the leg or the foot. If a disc is herniated, sciatic pain often increases with coughing, sneezing, or bearing down.
4. **Neurogenic claudication** — Neurogenic claudication is a type of pain that can occur when there is narrowing of the spinal canal from arthritis or other causes. In these patients, standing and positional changes result in increased compression of the spinal cord, causing pain and discomfort. **The pain runs down the back to the buttocks, thighs, and lower legs, often involving both sides of the body.** This may cause limping and weakness in the legs. The pain usually gets worse when extending the lower spine (eg, when standing or walking) and gets better when flexing the spine by sitting, stooping, or leaning forward, even while walking.

5. Unless acute low back pain is caused by a serious medical condition (which is uncommon), **it typically resolves fairly quickly, even if there is a bulging or herniated disc.**

### Treatments

1. **Remaining active** — Many people are afraid that they will hurt their back further or delay recovery by remaining active. However, **remaining active, to the extent that you are able, is one of the best things you can do for your back.**
2. **If you have severe pain, you may need to rest your back for a day or so.** It may be most comfortable to lie on your back with a pillow under your knees and your head and shoulders elevated. For sleeping, you may want to lie on your side with your upper knee bent and a pillow between your knees.
3. **Prolonged bed rest is not recommended.** Studies have shown that people with low back pain recover faster when they remain active. Movement helps to relieve muscle spasms and prevents loss of muscle strength.
4. **While you should avoid strenuous activities and sports while you are in pain, it is fine to continue doing regular day-to-day activities and light exercises, such as walking.**
5. **Heat** — Using a heating pad or heated wrap can help with low back pain during the first few weeks.
6. **Modifications at work** — Most experts recommend that people with low back pain continue to work so long as it is possible to avoid prolonged standing or sitting and heavy lifting. **If your job does not allow you to sit or stand comfortably, you may need to take some time off work while you recover.** While standing at work, stepping on a block of wood with one foot (and periodically alternating the foot on the block) may be helpful.
7. **Pain medications** — You can try taking an over-the-counter medication to help relieve pain. Nonsteroidal anti-inflammatory drugs (NSAIDs), **such as may work better than acetaminophen for low back pain.**
8. If you do take pain medication, **it may be more effective to take a dose on a regular basis for three to five days, rather than using the medication only when your pain becomes unbearable.**
9. Muscle relaxants (eg, cyclobenzaprine [brand name: Flexeril]) are prescription medications; while these may help relieve back pain, **they can cause drowsiness** and are probably no better than ibuprofen in relieving pain.
10. **Opioids** (drugs derived from or related to morphine) are **not recommended** for most people with back pain.

11. **Physical Therapy** – experienced physiotherapists can help with pain management during a flare-up (acupuncture, spinal manipulations) as well as flare up prevention (safe and appropriate home based exercises).
12. Most of the time, **an episode of back pain will get better on its own and does not require extensive testing or treatment.** Some people with low back pain should be evaluated and managed by a primary care provider. **If low back pain is caused by a serious condition,** a neurosurgeon or orthopedist who specializes in back disorders is usually recommended.

### **Am I getting better?**

1. “I’m not experiencing pain as often as I did a week ago”.
2. “On a scale of 0 to 10, my pain is less intense than it was a week ago.”
3. “I can do more things this week without pain than I could a week ago”.
4. “I may not be 100% but I’m closer to it than I was a week ago”

### **If you experience any of the following symptoms, please see your family physician.**

- New back pain if you are 70 years or older.
- Pain that does not go away, even at night or when lying down.
- Back pain accompanied by weakness in one or both legs or problems with bladder, bowel, or sexual function – These can be signs of cauda equina syndrome, and they result from compression of the nerve bundle at the base of the spine. These symptoms should be evaluated as soon as possible.
- Back pain accompanied by unexplained fever or weight loss.
- Back pain with a history of cancer, a weakened immune system, osteoporosis, or the use of corticosteroids (eg, prednisone) for a prolonged period of time.
- Back pain that is a result of falling or an accident, especially if you are older than 50 years.
- Pain spreading into the lower leg, particularly if accompanied by weakness of the leg.
- Back pain that does not get better within four weeks.

**If you have an episode of back pain that resolves,** it is generally not necessary to consult your health care provider unless you have specific questions or concerns.

Source: <https://www.uptodate.com/contents/low-back-pain-in-adults-beyond-the-basics/print>