



# Back pain

## Your questions answered

If you have back pain, you're not alone. It's a common problem experienced by many people. In fact, in 2017-18, 1 in 6 Australians said they had back problems. That's about 4 million people<sup>1</sup>.

### Q. What is back pain?

**A.** Back pain is any pain you feel in your back – from your neck to your buttocks. It's most commonly experienced in the lower (or lumbar) spine.

Back pain can be acute or persistent.

Acute back pain usually begins quickly and lasts for a relatively short time. It may be due to something you did, such as a sudden twisting movement while playing sport, a fall or accident, or overdoing it in the garden. Or there may be nothing you can identify as the trigger for your pain.

Persistent back pain, also called chronic back pain, lasts for more than three months. Even if pain persists, it generally doesn't mean there's a serious underlying cause, or it can't be treated effectively.

Back pain can affect people at any age but most often appears during adolescence and increases into early adulthood.

### Q. How does the back work?

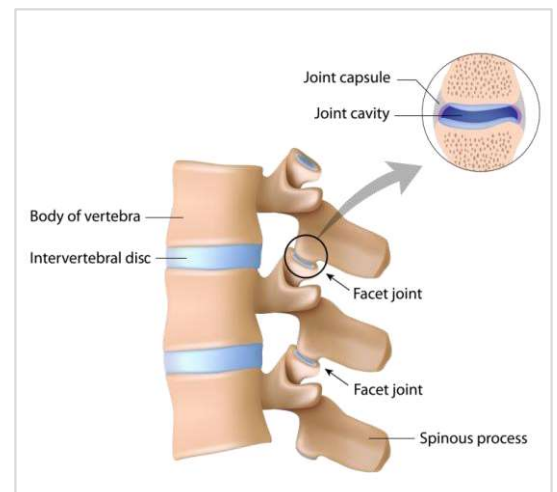
**A.** Your back is amazing. It's strong, flexible and made for movement. It supports your body and allows you to bend, twist, lift things and get around. But when you're in pain, it doesn't feel amazing.

So to better understand your back and back pain, let's take a closer look at how it's structured.

Your backbone (spine or spinal column) is made up of bones called vertebrae stacked on top of each other to form an S-shaped column.

The spinal cord, which transports messages to and from the brain and the rest of the body, runs down a bony tunnel behind the vertebral bodies, where it's protected from damage. It runs through the length of the spinal column.

Each vertebra is cushioned by spongy tissue called intervertebral discs. These discs act as shock absorbers.



Vertebrae are joined together by small joints (facet joints), allowing the vertebrae to slide against each other, so you can twist, bend, and turn. Tough, flexible bands of soft tissue (ligaments) also hold the spine in position.

Layers of muscle provide structural support and help you move. They're joined to bone by strong tissue (tendons).

The spine is divided into five regions. They are:

- cervical spine (neck): at the top of the spine are seven vertebrae. Your doctor may sometimes refer to them by letter and number, for example, C1 - the 1st vertebrae in the cervical spine, to C7 – the 7th vertebrae in the cervical spine.
- thoracic spine (middle back): has 12 vertebrae (T1 to T12). This is where your ribs attach to the spine.
- lumbar spine (lower back): has five vertebrae (L1 to L5). The lumbar spine connects to the pelvis.
- sacrum: a triangular-shaped bone that connects to the hips. It's made up of the five fused sacral vertebrae (S1 to S5).
- coccyx (tailbone): at the base of your spine are four fused vertebrae. Your pelvic floor muscles and ligaments attach here.

As you can see, the structures and soft tissues in your back are tough, flexible and designed to move, carry weight and support you.

### **Q. What causes back pain?**

**A.** Many things can cause back pain; however, often, there's no specific cause.

In most cases (90-95%), the cause of back pain is unknown. This is non-specific back pain. While this may sound frustratingly vague, the good news is that most back pain isn't caused by a specific condition, illness or serious damage to the back.

Factors that may put you at risk of developing non-specific back pain include:

- stress
- anxiety or depression
- smoking
- poor sleep
- lack of exercise
- sudden or unusual increase in spinal loading - for example, if you have a sick child and have to lift and carry them more than usual
- being overweight or obese
- having a sedentary or inactive job or lifestyle.

It's important to note here that [research](#) indicates that once common beliefs about causes of back pain, such as getting older, poor posture, or having a weak core, are no longer valid.

Back pain with a specific cause is less common (~5%). It includes things such as:

- inflammatory arthritis – [spondyloarthropathy](#) and [ankylosing spondylitis](#) are two types of arthritis linked to back pain
- [osteoarthritis](#)
- bone fracture – e.g. due to an accident or a condition such as [osteoporosis](#)
- [herniated disc](#) (sometimes called disc protrusion). This occurs when the intervertebral disc becomes weakened, causing it to bulge, sometimes pressing on nerves. However, it doesn't 'slip' or move out of place.

Very rarely (less than 1%), back pain can signify a spine infection or cancer. Your GP will look for symptoms and signs associated with these conditions.

### **Q. How is back pain diagnosed?**

**A.** If you have back pain that's causing you distress or affecting your ability to do your daily activities, you should see your doctor. Your doctor will:

- ask you questions about your back pain, including potential causes or triggers, if you've experienced it before, and how it affects you
- ask about any other symptoms or health issues you have
- do a thorough physical examination.

In most cases of back pain, imaging (e.g. x-rays, CT or MRI scans) isn't helpful or recommended as they aren't good at identifying the cause of pain. They also don't change how your back pain will be managed. A thorough examination by your doctor will decide whether any scans are appropriate.

It's also important to know that many investigations show 'changes' to your spine that are likely to represent the normal passage of time, not damage to your spine.

For more information about questions to ask your doctor before you get any test, treatment or procedure, visit the [Choosing Wisely Australia website](#).

### **Q. How is back pain treated?**

**A.** Back pain usually goes away on its own, but if it's causing you pain or distress, there are things you can do to manage it effectively. This includes self-care and lifestyle changes such as [exercise](#), stress management and improving [sleep quality](#). Some people may need to use [medicines](#) for a short period to help them get back to their usual activities.

### **How can I manage my back pain and prevent future problems?**

**A.** There are many things you can do.

**Learn more about your back pain.** What makes it better, and what makes it worse? Knowing as much as possible about your back pain means that you can make informed decisions about your healthcare and actively manage it.

**Exercise regularly.** In the case of back pain, movement is medicine. Although you might think you need to protect your back from further pain by not moving it or by resting it, your back is made for movement. And resting can make things worse. Evidence shows that regular exercise improves symptoms such as pain, fatigue and poor sleep. It's also vital for maintaining flexibility, muscle strength, and bone health. When starting an exercise program, you should incorporate exercises that improve flexibility, muscle strength, balance, and overall fitness and endurance. Start exercising slowly and gradually increase the time and intensity of your exercise sessions over weeks and months. A physiotherapist or exercise physiologist can help you work out an exercise program right for you.

**Move naturally.** This can be challenging when dealing with back pain, but the more relaxed and natural your movements are, and the less you protect or guard your back, the better your back pain will be. When you feel yourself tensing your back muscles or moving stiffly, stop, breathe deeply and relax your body.

**Manage your weight.** Your spine supports your weight as you walk and move around. When you're carrying extra weight, this adds additional load to your spine. That's why it's important to keep to a [healthy weight](#). Your doctor or dietitian can advise you on safe weight-loss strategies if you need to lose weight.



**Quit smoking.** As well as the obvious links to cancer and lung disease, [smoking](#) increases your risk of developing [back pain](#), [neck pain](#), [rheumatoid arthritis](#) and [osteoporosis](#). It also causes fatigue and slower healing, which can make your pain worse. But Quitting can be challenging, so reach out for help when you decide to quit. Talk to your doctor, contact [Quitline \(137 848\)](#) or [ICanQuit](#) and get your family involved.

**Manage your stress.** Living with persistent back pain can be stressful. And stress can make your pain worse by causing the muscles throughout your body to tense or spasm. By easing your stress and muscle tension, you can help to reduce your pain levels and create a better sense of overall wellbeing.

**Look after your mental health.** Both [anxiety and depression](#) are more common in people with ongoing and unpredictable health conditions like back pain. So it's reassuring to know that help and effective treatments are available. Chatting with your GP is often a good place to start. Your GP can recommend and link you to a [mental health professional](#). They can work with you to create a [mental health treatment plan](#) if needed. This means Medicare will pay for part of the cost for you to see certain mental health professionals.

**Get back to your normal activities.** Try to be as active as possible and get on with your day-to-day life, including work and exercise. If you're returning to heavy manual jobs, this may take longer.

**Relax.** Learn some relaxation techniques to reduce stress levels and related muscle tension. Try [massage](#), [heat packs](#) and [gentle exercise](#).

**Try mindfulness.** This form of [meditation](#) has been proven to reduce pain.

#### **Q. What medicines are used to treat back pain?**

**A.** Medicines may help reduce the pain you're experiencing. But it's important to understand that they may not get rid of your pain completely. This doesn't mean your back is damaged.

Talk with your doctor or pharmacist for advice about pain medicines. There are different types available, both over-the-counter and by prescription. They include:

- [Non-steroidal anti-inflammatory drugs](#) (NSAIDs). NSAIDs have side effects, so using the lowest dose for the shortest period is best.
- [Topicals](#). These are rubs, gels, ointments, sprays, patches and creams applied to your skin (topically). Some topicals contain medicines such as NSAIDs and corticosteroids.

Medicines that aren't effective for back pain are:

- Paracetamol. Research has shown that paracetamol has no effect on back pain – both acute and persistent.
- Opioids. Although opioids were once commonly prescribed to treat back pain, there's no evidence that they provide any greater benefits than NSAIDs for acute back pain. They may offer short-term relief for people with persistent back pain; however, there's no evidence of long-term benefit. They also have a high risk of serious side effects and the potential to cause harm. Before prescribing an opioid, you and your doctor will discuss the risks and benefits for you. Read the Choosing Wisely Australia patient guide '[5 Questions to ask about using opioids for back pain or osteoarthritis](#)' for more information about opioids.

### **Q. Are there any red flags I need to be aware of?**

**A.** Although it's very rare, back pain can be caused by something more serious. Signs you should be aware of include:

- severe pain that gets worse over time instead of better
- you're generally unwell with your back pain or have a fever
- problems controlling your bladder or bowel
- numbness, pins-and-needles in your legs, between your legs, or feet
- weakness in your legs or unsteadiness on your feet
- unexplained weight loss
- redness or swelling on your back.

If you experience these symptoms, contact your doctor or the [Healthdirect](#) Helpline on 1800 022 222. Registered nurses are available 24 hours a day, 7 days a week, to provide advice.

### **Q. What about surgery?**

**A.** In most cases, the evidence doesn't support the use of surgery to treat chronic back pain. Most people can manage their back pain with education, exercise, and lifestyle changes.

If your doctor suggests back surgery as an option, ask questions so you can make an informed choice. Choosing Wisely Australia has [5 questions to ask your doctor or healthcare provider](#) to help you get started.

### **Q. Where can I get more help?**

**A.** Many people and support organisations can help you manage your musculoskeletal condition. They include:

- your doctor
- [physiotherapist](#)
- [exercise physiologist](#)
- [dietitian](#)
- Musculoskeletal Australia | [msk.org.au](http://msk.org.au) | National Arthritis and Back Pain+ Help Line: 1800 263 265

### **Q. How can Musculoskeletal Australia help?**

**A.** Our nurses are available for you to speak with about back pain or any other musculoskeletal issues you have. You can contact them on weekdays between 9am-5pm. Phone 1800 263 265 or email [helpline@msk.org.au](mailto:helpline@msk.org.au). We also have a range of services – including free webinars – you can access on our [website](#).



## More to explore

- [Back pain](#)  
Versus Arthritis
- [Empowered Beyond Pain podcast](#)  
Body Logic Physiotherapy and co-hosted by Professor Peter O'Sullivan, Dr JP Caneiro and Kevin Wernli
- [Low back pain](#)  
painHEALTH
- [Managing back pain](#)  
Royal Australian College of General Practitioners
- [Patient education: Low back pain in adults \(Beyond the Basics\)](#)  
UpToDate
- Watch our videos
  - [Making sense of disabling low back pain](#) – Professor Peter O'Sullivan.
  - [Pain, the brain and your amazing protectometer](#) – Professor Lorimer Moseley.

If you found this information useful, help us help others by [donating today](#).

© Musculoskeletal Australia

*Updated April 2023*

---

## Reference

<sup>i</sup> [Back problems](#), Australian Institute of Health and Welfare, 2022. Accessed 19 August 2022.

