

Back pain

Back pain is a very common problem. Around eight in 10 people in Western countries suffer from backache at least some of the time. Back pain is usually not due to any serious disease. Most episodes of back pain get better quickly. Simple analgesics (pain killers) and a change of activity are generally all that is needed.

About half of all people who get back pain will have further episodes. The first step to managing back pain is to rule out the possibility of any medical problem, such as infection or fracture (although these are rarely the cause).

The structure of the back

The spine is the main structure of the body. It provides support for the pelvis, legs, ribcage, arms and skull. The spine is made up of bones called vertebrae that are stacked together to form a loose 'S'-shaped column. Each vertebra is cushioned by spongy tissue or cartilage called intervertebral discs. The discs have a flat structure with a jelly-like centre.

Each vertebra is also joined at the back by pairs of small joints known as 'facet' joints. A mesh of connective tissue called ligaments holds the spine together. Complex layers of muscle provide structural support and allow movement. The spinal cord runs through the centre of the vertebral stack and connects the brain to the rest of the body.

Common causes of back pain

Most people with back pain do not have any significant damage to their spine. The pain comes from the muscles, ligaments and joints. Some common causes of back pain include:

- **Arthritis** – osteoarthritis and ankylosing spondylitis are two forms of arthritis linked to back pain.
- **Muscle and ligament strains** – weak muscles and ligaments are unprepared for sudden or heavy loads and are easily injured. Lifting a heavy load the wrong way, an unusual bout of exercise or even bad posture over a period of time can hurt soft tissue.
- **Osteoporosis** – fracture of the vertebrae due to osteoporosis. Osteoporosis is a disease characterised by thinning of the bones. The vertebrae can become so porous and brittle that they break easily. Pain is due to the fracture.
- **Sciatica** – the nerve that runs from the lower back into the leg is compressed by a bulging intervertebral disc, causing pain.
- **Stress** – one of the side effects of stress is increased muscle tension. This can lead to fatigue, stiffness and localised pain. Constantly tight muscles can create imbalances in a person's posture that may cause misalignment of the spine.

More persistent back pain may be associated with arthritis of the facet joints and degeneration of the discs. However, people with this condition may not experience any pain.

Lifestyle factors contribute to back pain

Most cases of back pain are exacerbated by lifestyle factors, including:

- Lack of exercise
- Being overweight or obese
- Leading a sedentary life
- Poor posture
- Stress
- Bad work practices.

Preventing back pain

In most cases, back pain can be prevented by making a few lifestyle changes. Some suggestions include:

- **Exercise regularly** – this is important to improve posture and increase muscle support of the spine. Try walking instead of using the car. Work towards doing 30 minutes of gentle exercise each day. This can be broken into shorter periods for equal benefit.
- **Lift and carry safely** – if you are picking up a heavy load: squat down, hold the object as close to your body as practical and lift by using your legs, keeping your back straight. Get some help from another person or use equipment (such as a trolley) if the load is too heavy to manage comfortably on your own.
- **Maintain a healthy body weight** – being overweight or obese puts extra strain on your back.
- **Be aware of your posture** – consider your posture, particularly in seated positions such as when driving or sitting at a desk for long periods of time. Don't slump, keep your back upright and use support where necessary (such as a lumbar support cushion or footstool).
- **Take regular breaks** – when driving, standing or sitting for long periods of time, take a break at least every hour. This will help change the position of your joints and loosen your muscles. Include a short walk and a few stretches as part of your break.
- **Relax and manage your pain** – learn some relaxation techniques to reduce stress levels and related muscle tension. Try massage, heat or cold packs and gentle exercise. Seek advice from a physiotherapist.
- **Change your mattress** – surfaces that are too soft or too hard can aggravate a sore back. Avoid sleeping on your stomach.

When to see your doctor

Most back pain can be managed at home. However, there are times when it is important to see your doctor to check there are no medical problems that may be contributing to the pain.

See your doctor if you have back pain **and** any of the following warning signs:

- Severe pain which gets worse instead of better over time
- You are unwell with back pain or have a fever
- Difficulty passing or controlling urine
- Numbness around your back passage or genitals
- Numbness, pain, pins and needles or weakness in your legs
- You are unsteady on your feet.

Treatment in the first few weeks

In the first couple of weeks after the onset of an episode of back pain, treatment will focus on reducing pain and maintaining movement. Treatment options include:

- **Rest** – this may mean temporarily reducing activity such as sport and heavy lifting.
- **Exercise** – this is best prescribed individually by an exercise specialist, such as a physiotherapist. Exercise may include stretching, mobility and strengthening exercises targeting the muscles stabilising and supporting the back.
- **Medication** – painkillers and muscle relaxants may be prescribed temporarily by your doctor.
- **Heat and cold therapy** – hot and cold packs applied to the area of pain may be helpful in relieving pain temporarily.
- **Manual therapy** – massage, joint mobilisation and manipulation may be used by a qualified health professional such as a physiotherapist, osteopath or chiropractor.

Managing long-term back pain

Back pain can be an ongoing problem for many people. Typically, the deep muscles that support and stabilise the back are 'switched off' and weakened by the first episode of back pain. This leaves the spine unsupported and at risk of further injury. Only through specific, targeted exercises can these muscles be retrained to do their job.

It is important to continue to strengthen and condition your back and be aware of your posture, even after the pain has subsided. Talk to your physiotherapist about core retraining exercises or back exercise classes for more information.

Where to get help

- Your doctor

- Other health professionals such as physiotherapists, chiropractors, exercise physiologists or osteopaths

Things to remember

- Back pain is a common problem.
- Back pain most often comes from muscles, ligaments and joints. It can be caused by injury, inflammation, tension, spasm or muscle imbalance.
- Staying active plays an important role in management and prevention.
- Seek advice from a doctor if any warning signs exist.

This page has been produced in consultation with, and approved by:

Arthritis Victoria incorporating Osteoporosis Victoria

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