Back Pain - Factsheet

Back pain is extremely common. Up to 80% of people will experience back pain at some time during their lives. Low back pain is the most prevalent and costly musculoskeletal condition in Australia, estimated to cost up to $1billion per annum with indirect costs exceeding $8billion. It is also the most common health condition causing older Australians to be absent from the labour force.

Back pain isn’t an illness or a disease in itself. It’s a symptom of injury to the back.

The spinal column is a series of bony discs (vertebrae) arranged one on top of the other and formed in an “S” shape. It is supported by ligaments that run up and down it, and muscles on either side of it. Between each disc is a thin layer of cartilage with a soft jelly like core which acts like a shock absorber. Together, the vertebrae and discs act together to allow the spine to move backwards, forwards and sideways, enabling us to arch, twist and bend.

The main role of the spinal column is to support the weight of the body. It also protects the spinal cord which travels from the base of the brain through the spinal column, ending in a series of nerves which supply the limbs and the internal organs of the body.

Causes of Back Pain

Generally, the back is able to cope with the stresses that are placed on it during every day life and normal activities – e.g., pushing, lifting, twisting, running – but if there are abnormally high stresses, muscles and ligaments can be overstretched and tear and joints can become damaged. Abnormal stresses may include:

- Lifting or pushing a heavy object the wrong way or with incorrect posture/technique
- Sitting or standing in a position that puts excessive weight on the spine (this is a particular issue for people who are overweight or obese)
- Subjecting the spine to repetitive movements.

Abnormal or high stresses on the back cause more damage in the back is in poor condition such as when the ligaments and muscles are weak. For this reason back pain is more common in people who are physically inactive, overweight or obese, and/or have poor posture.

The most common causes of lower back pain are mechanical. Examples include spinal joint dysfunction and disc prolapses (commonly referred to as a ‘slipped disc’), muscular strains and arthritis in the spine (which increases as people age).

Other causes of back pain include inflammatory arthritis, and fractures due to osteoporosis. Back pain may also be ‘referred’ from another location.

Serious back pain conditions include compression of the spinal cord, serious infections and cancer (usually from another source such as the prostate or lung).

In degenerative conditions the onset of back pain is typically gradual. In contrast, back pain related to an injury is often comes on suddenly and may occur in a previously healthy person.
Treatment of Back Pain

Most back pain is due to mechanical causes, which while still painful, is usually not serious and not likely to cause long term damage. It is often not necessary to see a doctor, especially if the pain is mild. However, a doctor should be consulted if:

- pain is severe
- there’s sciatica
- there are symptoms of nerve damage such as numbness, pins and needles
- there’s a fever
- there’s pre-existing arthritis or osteoporosis
- pain persists for more than a few weeks.

Relief from back pain may be helped by:
- Staying active which has been shown to be much better pain relief than resting in bed.
- Mild pain relief medication such as paracetamol or aspirin
- Massage, stretching exercises and physiotherapy treatment

Preventing a reoccurrence of back pain can be helped by:
- Strengthening back muscles and maintaining a good level of physical fitness
- Maintaining a healthy body weight
- Maintaining good posture and safe lifting/moving techniques.

For a small number of people, back pain persists for a long time. If it lasts longer than three months it is generally considered to be chronic back pain.

Chronic back pain often occurs either because an injury is severe such as fractured vertebrae or because there’s an underlying condition such as arthritis or osteoporosis. Depending on the cause of chronic back pain, treatment may vary. Often however, the damage in chronic back pain cases can’t be reversed or the pain completely resolved. In these cases the aim of treatment is to reduce pain and discomfort as much as possible, and minimise lack of functionality or disability. In a few cases, surgery may be an option such as where material from a slipped disc causes nerve symptoms. However, the success rate for back surgery is variable and so surgery is generally only recommended in specific cases which have a good likelihood of success. Treatment for chronic back pain often consists of resting for short periods, activity, pain relief and physiotherapy. Like other chronic conditions, chronic back pain can cause stress and poor mental health. It is important for sufferers of chronic back pain to have access to stress management and good mental health services if required.

Other Back Facts

- Both manual workers and office workers have a similar incidence of low back pain
- Most back pain (86%) is better within one month
- There is greater pressure on the lumbar discs when sitting compared to standing
- Gradual back damage can occur even when there is no pain
- Stiffness can be an early warning sign of gradual damage to the back
- Research has shown that sitting correctly with an upright posture can reduce low back pain when compared to slouched sitting
- Through education and practice, poor lifting techniques/habits can be rectified