BACK CARE GUIDE

BackCare
The Charity for Healthier Backs

IN ASSOCIATION WITH THE BACKCARE ORG.

INTRODUCTION

BackFacts

Back pain affects most of us

According to a survey [1] published in 2000 almost half the adult population of the U.K. (49%) report low back pain lasting for at least 24 hours at some time during the year.

In a similar survey carried out 10 years earlier[2] just over one third of the population complained of such back pain.

In 1998[3] almost one in five adults (18%) experienced low back pain for the first time.

It is estimated[4] that up to four out of five people (80%) will experience back pain lasting more than a day at some time during their life.

How long does it last

In 1998 in over half of those people who reported back pain the episode lasted for over 4 weeks - affecting 8 million[3] people and in the case of 2.5 million of these the back pain lasted throughout the year.

Young people are more likely to have brief acute episodes of back pain while chronic pain is more characteristic of older people. There is little difference in the occurrence in men and women.

Risk factors for low back pain

- Back pain is spread fairly evenly across the community in terms of age, sex and geography but occupation makes a difference. Over 1 million people have back pain or upper limb disorders.[10]
- Reported back pain is most common in those with skilled manual, partly skilled and unskilled jobs.[3]
- Some occupations can cause back problems without involving injury. Among these are:

- driving a motor vehicle. People who drive over 25,000 miles a year averaged just over 22 days a year off work with a bad back, compared with just over 3 days for low mileage drivers.[11]
- driving a train. Train drivers are twice as likely as HGV drivers to report low back pain.[12]
- work involving intensive use of the telephone without headsets. 50% of office workers who use a telephone for at least two hours a day and also use a computer report neck pain and 31% lower back pain[13]
- being a supermarket cashier-57% experience lower back pain in a year. [14]

Chronic low back pain is often associated with psychological and social factors - often referred to as Yellow flags.

Treating low back pain

Currently recommended treatment[15]for an acute attack of low back pain, which has no danger signs (known as 'Red Flags'), is

- painkillers
- continuing with normal activities
- manipulation if required

remaining at work or returning as soon as possible

Bed rest is not recommended and makes matters worse and so should be avoided. Despite this the last survey in 1998[3]showed that GPs still recommended bed rest to one in four of the people who consult them about back pain.

The longer someone is off work with back pain, the lower their chances of returning to work.(50% will return at six months but only 5% after one year)[8] Patients who return to normal activities feel healthier, take fewer pain killers, and are less distressed than those who limit their activities.

Psychological and social factors ('Yellow Flags') are more important risk factors for developing chronic pain than physical symptoms and signs.[15]

Recent guidelines emphasise the need to monitor low back pain reports in the workplace.[8]

- stay at work if possible with any necessary modifications
- maintain contact if not able to remain at work
- the possibility of returning to work even if not entirely painfree
- the importance of rehabilitation

BackCare for Drivers

Driving can be a pain in the back. Confined in a fixed position for hours **on end, stressed out by traffic and with the constant vibrations of wheels on the road, it's not surprising so many people get back ache after a long drive.**Work, leisure and driving all contribute to wear and tear of your back . over the years. Two out of three adults will experience severe back pain at some time in their lives and for half of us our backs are so badly damaged that we will suffer long term back pain.But there are things that we can all do to avoid damaging our backs or to reduce existing discomfort.

Are you sitting comfortably?

- Car seats usually feel comfortable when you first sit in them, but after a lengthy period of travelling significant discomfort and even back pain may be experienced. Many car seats do not provide adequate support and can cause strain to be placed upon the bones, muscles, discs and ligaments of the back.
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- Any lack of support is even more serious if you have a previous back injury or are suffering from muscular back strain. Good, supportive seating can help to reduce discomfort, and may also prevent postural back ache from occurring in the first place.
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- Providing adequate support to the back whilst travelling is important for passengers as well as drivers. Most of the following points are equally useful for passengers.
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How can you adjust your seat to help?

- You can help your back by making sure that your driving position is as comfortable as possible, with all driving controls and switches within easy reach.
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- Bring your seat forward so you can comfortably depress the clutch without over stretching. If your vehicle is an automatic, use the accelerator pedal location as a guide for your seat position.
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- Adjust the seat so that your hips and knees are comfortably flexed.
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- Sit in an upright posture, do not hunch over the steering wheel or slouch in the seat. Adjust the angle of the backrest so that your arms are comfortably positioned on

- the steering wheel. Your arms and shoulders should feel relaxed and you should have a clear view of the road.
- If your vehicle has any lumbar support, adjust this to provide a gentle pressure against the lowest part of your back. If your seat lacks support, you may find it beneficial to use a lumbar roll or back support.
- Adjust your mirrors correctly - making full use of all your mirrors will minimise the need for you to twist around in the seat.

Cervical Spondylosis

Cervical Spondylosis Cervical Spondylosis is a general term for any **degenerative changes in the upper spine. Cervical spondylosis is not really a diagnosis, but a reference to the changes that occur, often with age, to the discs and vertebrae of the neck.**

The intervertebral discs act as a springy cushion. They are made of an outer casing, called the annulus fibrosus and an inner softer jelly-like' substance, the nucleus. The nucleus shrinks with age and becomes tougher and more fibrous. The bony surfaces above and below the disc, called the vertebral end plates, thicken and spread so that a rim of bone develops around the edge of the disc. Degenerative changes can also affect the facet joints that lie behind and on either side of the vertebral canal. The changes in these joints are also known as osteo-arthritis. Spondylosis and osteo-arthritis, usually occur together. Extra bony growths on the vertebrae, called osteophytes may also be present and can press on the nerve roots causing pain and irritation.

What can you do?

If you have a sudden (acute) attack, ice packs, painkillers, gentle exercise and relaxation are important to try and switch off the pain. If symptoms persist, then an assessment by your GP or a physical therapist (physiotherapist, magnetic therapist, chiropractor or osteopath) may be necessary. This will help determine the cause of your pain and possible treatments for it.

Self care and life-style changes are also of great importance. Good posture whilst standing, sitting, working at a computer, driving and sleeping is essential, as these are all potential high risk areas for necks. Pain in the neck area usually creates a great deal of tension in the rest of the body, particularly around the shoulders, middle back and head so training yourself to relax might be helpful. You may find that listening to some soothing music or a relaxation tape is useful. Neck strengthening exercises can also alleviate the pain of muscles that are in spasm, but it is important to get good advice from one of the therapists mentioned above or a qualified exercise practitioner.

Sciatica

What is Sciatica?

Sciatica is the name given to the pain in the leg that radiates from the **lower back and buttock, down through the thigh and calf, sometimes reaching the toes. Sciatica literally means pain from pressure on the sciatic nerve.**

This pain can be felt as an aching, burning or stinging. It can be so severe that it makes every movement, including sitting, coughing and sneezing excruciating. It can be accompanied with feelings of numbness, pins and needles,

spasms and cramp. Some people report no back pain, but the origin of the problem is in the spine.

More common than true Sciatica, is "referred" pain in the leg, the back pain may be so intense that it "overflows" to the buttock, groin and leg. It is not caused by nerve pressure but by pain in a disc or facet joint or the surrounding soft tissues.

What causes Sciatica?

These confused messages sent via the nerves can be caused by an injury, for example a fall, damage caused by vibration and by cumulative strain, or by disorders such as spondylosis (the degenerative change to the vertebrae), facet joint inflammation or spinal stenosis (narrowing of the spinal canal).

Some occupations are more commonly affected; long distance lorry drivers, sedentary and manual workers. People who are either tall, smoke, or have a family history of disc problems, are more at risk.

The onset of pain

Many people will need pain killers for an attack of sciatic pain, and should take it easy for the first 24 48 hours of its onset, but remember, **bed rest is not a treatment** in itself. You should continue with your life as much as the pain allows, it is sometimes necessary to stop for a while to relax and recover, but this does not mean become immobile and you should start a gradual return to normal activities and gentle exercise as soon as possible.

What can be done?

It is important to know that half of the people with nerve root pain recover within six weeks and that only one in a hundred of those referred to hospital out patient

departments require surgery. Treatment options obviously depend on the severity of the symptoms and the cause of the problem, but always try the least invasive, most conservative treatment first. In the meantime, it is important to listen to the warning signals your body is giving you and stop doing whatever aggravates the pain.

It is also very important to consider the way you use your back. Back pain can recur and you should think about whether you need to modify your work environment or car or to if you need to correct your posture whilst sitting and standing, lifting and even sleeping

Physiotherapy and the manipulative therapies of chiropractic and osteopathy are found to be beneficial by many people. Others find the Alexander Technique helpful and Acupuncture and the use of healing magnets can help with pain control.

Bear in mind however that with all treatments, each person's response will be different, because we are all different. It is difficult to say what will work for you and it is a matter of trial and error until you find which treatment works best for you.

Spondylosis and Osteo-Arthritis

Spondylosis is a general term for any changes in the spine **caused by wear and tear. Spondylosis is not really a diagnosis, but refers to the changes that occur, often with age, to the discs and vertebrae of the back.**

The intervertebral discs act as a springy cushion. They are made up of an outer casing called the annulus fibrosus, and an inner softer jelly-like substance, the nucleus.As we age several changes occur, the nucleus shrinks and becomes tougher and more fibrous. The bony surfaces above and below the disc, called the vertebral end plates,

thicken and spread so that a rim of bone develops around the edge of the disc. These changes can also affect the facet joints that lie behind and on either side of the vertebral canal. The changes in these joints are also known as osteoarthritis. Spondylosis and osteo-arthritis usually occur together. Extra bony growths can grow on the vertebrae and may press on the nerve roots causing pain and irritation. These extra bony growths are called osteophytes.

A sudden attack

There are a wide range of treatment options. Initially, if in a sudden (acute) attack or relapse, ice packs, painkillers, gentle exercise and relaxation are important to try and switch off the pain. If symptoms persist then an assessment by your GP or physical therapist e.g. physiotherapist, chiropractor , magnetic therapist or osteopath may be required.

Looking after yourself and making some life-style changes is also of great importance. Good posture whilst standing, sitting, working at a computer, driving, moving things and even sleeping are essential, as these are all potential high risk areas for backs. Learning to relax, listening to music or possibly a relaxation tape might be helpful.

Back strengthening exercises can also ease the pain of muscles that are in spasm, but it is important to get good advice from a qualified physical therapist (as mentioned above).

If pain continues for more than a few weeks, if it worsens, or your symptoms change in any way, then a specialist opinion may be necessary.

If the pain is not worsening then you will probably be better off doing stretching and strengthening exercises to maintain the muscles of the back.

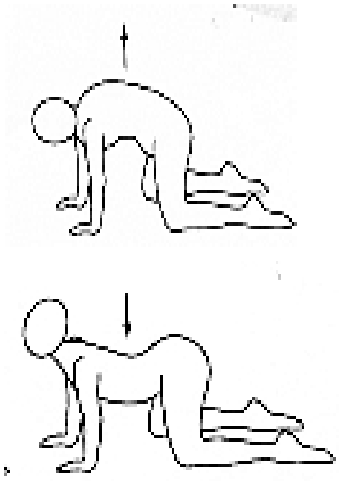
Exercise for a better back

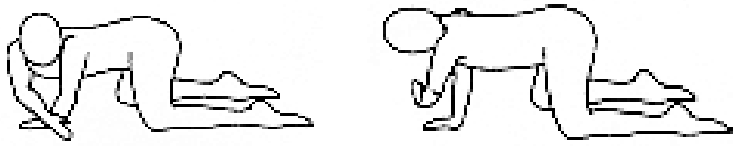
Spinal Mobility Exercises - perform daily

These exercises should be carried out slowly and deliberately. If you have pain when you perform any of them, limit the particular exercise movement so that you are comfortable. If you feel pain when you start any movement, then it should not be carried out.

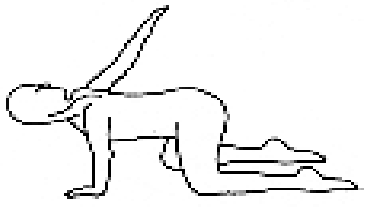
Starting position for all exercises is on all fours. Hands ,should be placed shoulder width apart, arms and thighs vertical. Use an exercise mat if you have one.

Arch the back, at the same time, look down at the floor. Then lower the stomach towards the floor, hollowing the back and at the same time look up to the ceiling. (if you are pregnant you should not do the second part of this exercise hollowing your back, instead keep your back straight)
Repeat 10 times.





Slowly walk the hands around to the right, back to the starting position then around to the left.
Repeat 5 - 10 times.



Raise one hand off the floor, reach underneath your body as far as you can.
On the return, swing the arm out to the side as far as you can then return to the starting position.
Follow the moving hand with the eyes. Repeat with the other arm.
Repeat 5 - 10 times.

Draw alternate knees to the opposite elbow
Repeat 10 times

Stretch one arm forward in front, at the same time stretching the opposite leg out behind.
Repeat 10 times

Swing the seat from side to side in a controlled manner.
Repeat 10 times.

Sit back on your haunches. Lower the body forward and down so that the nose goes as close to the ground as comfortably possible. Move forward, running your nose along the ground as far as you can go before coming upright and repeating.

Please note:
This page can only offer general advice, since it is not possible to recommend specific exercises for your pain without having seen you. You need to decide which exercises are most appropriate for your needs. We recommend you check with your GP or chartered physiotherapist before taking up a new programme.

A bit about your back

The spine is made up of 33 small bones called vertebrae with discs that act as shock absorbers in between. These bones are given a code to show where they are in the spine.
C followed by a number from 1 to 7 will refer to the vertebrae in the neck.

- T 1-12 refers to the thoracic spine (from the bottom of the neck to the lumbar region).
- L followed by 1-5 refers to the lumbar (or lowest) section of the spine.

- Beneath the lumbar spine there are another 5 vertebrae fused together, forming the sacrum with the coccyx (or tail bone) underneath.

The discs are made up of a soft jelly like substance (the nucleus) which is held inside a tough, elastic and fibrous outer casing (the annulus). If the outer casing of these discs is damaged in any way and causes the nucleus to protrude, or even leak out, it causes what is commonly known as a 'slipped' disc, but correctly known as a prolapsed disc.

The muscles of the back support this structure and when these muscles go into spasm the most common form of back pain occurs. This often happens when you have been doing something strenuous or that involves a lot of bending or when you have been in an awkward position for a long time and go to move. There are other more serious causes of back pain such as disc prolapse and diseases of the spine, but if your pain has subsided and there are no unusual symptoms such as numbness, pins and needles or pain down the leg, muscle spasm would usually be the culprit (if your pain lasts longer than 48 hours and is getting worse, or if any of the signs previously mentioned appear, you should consult your GP immediately).

The lowest region of the back - the lumbar region - is the most vulnerable area, and back pain often occurs here. This is because the lower part of the spine bears the entire weight of the upper body, and is flexed, twisted and bent more than any other part of the spine. It therefore, inevitably, suffers more wear and tear.

You will notice that your spine is not straight, but is actually an 's' shape. Not all backs are the same 's' shape but they are usually curved with a hollow in the base of your neck and another in the small of your back. This shape should be kept in mind as it is important to keep the natural curves in your spine whatever you are doing