

# A guide for people with low back pain

This booklet will provide you with up-to-date information about low back pain and things you can do to help it get better



If you need help to understand this leaflet or would like it in a different language or format such as large print, Braille or audio, please ask a member of staff.

**Physiotherapy Department**

**Tel: 0300 300 0046**

**Please consult your physiotherapist whilst you are under treatment if you have any questions or queries.**

## Introduction

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In recent times, research into low back pain has progressed and new findings are challenging some of the things that were previously thought to be true. This booklet will provide you with current information about low back pain and things you can do to help it get better.

## What is low back pain (LBP)?

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Low back pain is very common, almost everyone experiences it at some point in their lives. Back pain is usually as a result of a sprain or a strain. The recovery for this type of back pain is excellent, with the majority of people getting back to normal within a few weeks. Although low back pain can be painful, it is very rarely due to a serious cause.

## Are there different types of low back pain?

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Yes, specific and non-specific.

Specific LBP is rare. Less than 1% of all low back pain is due to a specific cause such as cancer, infection, inflammation of the spine or a broken bone. 5% of people will have low back pain and/or pain in one or both of their legs, which may be the result of compression of nerves in the lower back, which can sometimes alter the power and/or sensation of the lower limbs.

This is reassuring and means that the majority (95%) of people with low back pain **do not** have a specific underlying cause. It is often a result of a sprain or strain at times when we are more susceptible, for example when we are tired, 'run down', stressed or inactive. This is known as non-specific low back pain.

## You can have back pain without any damage or injury

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Many factors can cause back pain and often a combination of these are involved.

Physical factors - such as protecting the back and avoiding movements.

Psychological factors - including fear of damage or not getting better, feeling down or being stressed.

General health and lifestyle factors - being tired and rundown, not getting enough good quality sleep, being overweight or not getting enough physical activity.

Social triggers - difficult relationships at work or home, low job satisfaction or stressful life events, like a family death or illness.

Crucially it is important to know that all pain is 100% real and never 'all in your head', even when factors like stress or mood are involved. Ultimately, the brain has to make the final decision as to whether or not you should be in pain.

Each of the factors can turn up the volume on your pain and gaining a greater understanding of when that can happen puts you in a stronger position to recognise them and learn how to turn the volume on your pain back down.

Turning the pain up or down relates to the sensitivity of the nervous system. The brain and the nervous system are highly adaptable and can accommodate changes both good and bad.

## Do I need further tests or scans?

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X-rays and scans are **not** recommended for people with low back pain unless a specific cause is suspected. A careful history and examination is of far greater value for most cases of back pain, rather than a scan.

All the evidence shows that people **without** low back pain show findings on MRI scans that include disc bulges, disc degeneration and 'arthritic' changes to the joints. But remember, these people **do not** have pain. Such findings

are now considered to be a normal part of ageing, just like baldness or wrinkles.

These types of scan findings can create worry in an unhelpful way, and cause a person to protect their lower back which we now know can make low back pain last longer than it should.

The table on the next page summarises normal age-related MRI findings by age. Remember this is in people **without** low back pain.

## What happens if I have 'specific' low back pain?

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If you have a specific cause to your low back and/or leg pain, your healthcare practitioner will guide your management. The most common cause is due to nerve compression in your lower back, usually from a disc prolapse (when a soft cushion of tissue between the bones in your spine pushes out - also referred to as a slipped disc). Although very painful, recovery is excellent with natural healing usually within 3-6 months for the majority of people. Surgery is rarely indicated.

## Signs and symptoms to look out for

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These symptoms are very rare but you should contact a doctor if you experience any of them:

- difficulty passing urine or having the sensation to pass water that is not there
- loss of bladder or bowel control
- numbness or tingling in your genitals or buttocks area
- impaired sexual function such as loss of sensation during intercourse
- loss of power in your legs, a change in your normal walking pattern
- feeling unwell with your back pain, such as a fever or significant sweating that wakes you from sleep.

## Age (years) of individuals without any back pain

Positive Imaging Findings	20	30	40	50	60	70	80
Disc Degeneration (the discs lose a bit of fluid)	37%	52%	68%	80%	88%	93%	96%
Disc Signal Loss (the disc contains less water)	17%	33%	54%	73%	86%	94%	97%
Loss of Disc Height (the disc shrinks a bit)	24%	34%	45%	56%	67%	76%	84%
Bulging discs (a small bit of the disc changes shape)	30%	40%	50%	60%	69%	77%	84%
Disc Protusion (the disc changes shape)	29%	31%	33%	36%	38%	40%	43%
Annular Fissure (the disc has a scratch on it)	19%	20%	22%	23%	25%	27%	29%
Facet degeneration (the small joints change shape)	4%	9%	18%	32%	50%	69%	83%
Spondylolisthesis (1 vertebra bone moves forward on another)	3%	5%	8%	14%	23%	35%	50%

## What can I do to help myself?

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The following sections provide you with up-to-date scientific recommendations for the management of low back pain, which are based on international guidelines.

### Avoid bed rest, stay in work and gradually resume normal activities

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In the first few days of a new episode of low back pain, it is ok to take things a little easier. However, staying as active as possible and returning to all usual activities gradually is actually important in aiding recovery - this includes staying in work where possible. Prolonged bed rest (more than 24 hours) is not recommended and can delay your recovery.

People can often become protective of their lower back after an episode of pain for fear of causing further pain or re-injury. While it is normal to move differently and more slowly in the first few days of having back pain, this altered movement can be unhealthy if continued in the long-term.

Although it may initially be painful, by gradually getting yourself moving again in a relaxed way and doing normal activities will speed up your recovery. It may hurt to do this but it will not cause any harm to your back, in fact it will help you to get better.

### Medication

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There is no strong evidence on the benefits of painkillers and they do not speed up recovery. They should only be used in conjunction with other measures, such as exercise. Exercise has been proven to release endorphins (natural self-made painkillers in the brain) so this enables you to tap into your own personal internal 'drug cabinet' thereby helping to reduce your pain.

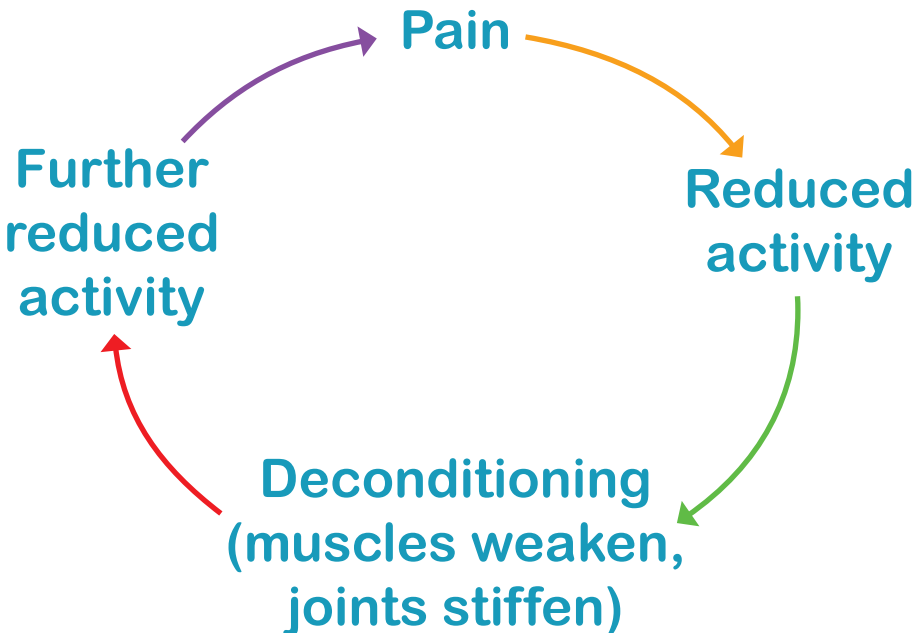
## Sleep

Sleep is important for recovery. This is because it reduces stress and improves your overall feeling of wellbeing. **Aim for 7.5 - 8 hours a night and try to aim for a regular routine, as far as possible.** It is also very important to know that there is no best position or type of mattress - whatever feels most comfortable for you is best.

### Tips to aid with sleep:

- avoid napping in the day
- avoid large meals before bed
- avoid stimulants e.g. alcohol, caffeine and nicotine before bed
- exercise – try relaxing exercise e.g. yoga in the evening and more vigorous exercise in the morning or afternoon
- associate your bed with sleep - e.g. do not watch TV/use phones/tablets in bed
- ensure adequate exposure to natural light – this is important for a healthy sleep/wake cycle.

## Pain - inactivity cycle



## Exercise

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Exercise is shown to be very helpful for tackling back pain and is also the most effective strategy to prevent future episodes.

Department of Health guidelines state adults should aim to be active daily. **Over a week, activity should add up to at least 150 minutes (2½ hours) of moderate intensity activity.** Moderate intensity activity is any physical activity that gets you warm, sweaty and out of breath.

Start slowly and build up both amount and intensity of what you do. Initially this may seem a little scary, but some muscle soreness when you begin exercising is normal. An increase in pain is rarely an indication that you are causing harm to your body or that you need to stop.

No one type of exercise is proven to be more effective than others so just pick an exercise that:

- you enjoy
- you can afford
- fits in with your daily schedule.

## Finding the right path

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### No pain no gain

Often causes more pain and more flare ups.

### Stop when I get pain

Often causes more pain and deconditioning

Find the path in the middle, start easy and build slowly. Be patient, it's not always easy at first. It can often be helpful to write down some short-term or long-term goals that are important to you, which can help you to gradually move forward to where you want to be. It is important that you follow the SMART principles below.

## SMART goals

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- S**pecific Exactly what you want do do?
- M**easurable How will you know when you've reached it?
- A**chievable Is it in your power to accomplish it?
- R**ealistic Can you realistically achieve it?
- T**imed When will you complete this by?

## Maintaining a healthy weight

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Increased abdominal fat is a known predictor of back pain. Exercise is a great way to start this process but changing to a healthy diet is important too. Sometimes this can be hard, but your GP or health professional can signpost you to available services that can help.

## Stop smoking

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There are strong links between smoking and back pain. Speak to any healthcare professional who can help by signposting you to services to help you kick the habit.

## Stress

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How you feel can have implications on the amount of pain you may experience. Stress, low mood anxiety can all be contributing factors to your pain. It can be helpful to recognise this. A certain amount of stress is good for us, however, too much stress can become a problem. Making time for the things you enjoy and taking time out for relaxation can help. Abdominal breathing exercises, meditation and mindfulness are great ways to calm a sensitised nervous system.

## What is mindfulness?

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Paying more attention to the present moment – to your own thoughts and feelings, and to the world around you. It can enable you to change the way you think and feel about an experience, especially stressful experiences. As a mind-body approach, it can increase our ability to manage difficult situations and make wise choices.

## Mindfulness of breath exercise

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- Sit comfortably with both feet touching the ground and your back away from the back of the chair.
- Take a slow, controlled breath in, filling your lungs over a count of five seconds.
- Breathe out slowly, emptying your lungs over a count of seven seconds.
- Repeat slowly. Be aware of any tightness in your body, and let go of the tension as you exhale.

## Flare-up management

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Remember setbacks are normal. They may happen due to many reasons such as illness or life events that are beyond your control or sometimes we do not know why they occur.

## How can you prevent flare-ups?

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- Regular exercise and keeping active.
- Avoid prolonged postures/prolonged periods of inactivity.
- Pace your activities.
- Use stress management techniques.
- Be assertive, so that you keep control of how much you do.

## What you can do if you experience a flare-up?

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- Reduce your activity levels for a few days, but try not to totally stop or rest, then gradually increase activity back to normal levels as soon as possible.

- Use analgesia/heat/ice if it helps you to manage your symptoms and allows you to keep moving.
- Stay as active as possible.
- Do not panic.

**“You can’t stop the waves, but you can learn how to surf”**

(Kabat-Zinn, 2004)

## Common low back pain myths

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There are many myths surrounding back pain. There is considerable and growing evidence that beliefs and attitudes of people with back pain can greatly influence their disability and prognosis.

**Here are some common misconceptions of back pain:**

**My back pain is due to something being out of place**

No evidence suggests that bones or joints move out of alignment. Also discs do not pop in and out of place. X-rays and scans can show some slight change of alignment and disc bulges but these are generally not related to pain.

**Lifting and bending are dangerous**

Contrary to common belief, research shows poor links between lifting and bending and low back pain.

**The more pain I feel, the more damage I have done**

This is not true - different people with similar back problems experience different levels of pain. There are many factors that can influence the pain we feel such as previous pain experiences, anxiety, fear, stress levels and our coping strategies.

**Exercise isn’t safe for my back**

Exactly the opposite is the truth. Regular and paced exercise is great for your body and mind. It can usually help to reduce pain.

**I must keep an upright posture**

No specific posture is better than another - different postures suit different people. Slouching is not damaging your back.

**I need an operation**

Surgery is very rarely needed for low back pain and only occasionally when there is a specific cause.

## My back pain is here to stay

Many factors are associated with back pain and many people have previously received treatment focussed on one factor, such as massage for sore muscles, this can lead to frustration and reduced optimism for the future. Treatment that addresses multiple individual factors can be much more helpful.

## Useful resources

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[www.nice.org.uk/guidance](http://www.nice.org.uk/guidance) search for 'low back pain'

[www.csp.org.uk/yourback](http://www.csp.org.uk/yourback)

[www.pain-ed.com/public](http://www.pain-ed.com/public) - check out 'Back pain - separating fact from fiction'

[www.evanshealthlab.com](http://www.evanshealthlab.com) - search '23 and 1/2 hours' and '90:10 stress' for useful lifestyle information

[www.nhs.uk/Conditions/stress-anxiety-depression/Pages/mindfulness](http://www.nhs.uk/Conditions/stress-anxiety-depression/Pages/mindfulness)

## Key points to remember

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- The back is a resilient and strong structure that is designed to move and be used.
- Serious or permanent damage is rare.
- A scan is not needed to be able to effectively treat low back pain.
- Keep moving in a relaxed way. It is normal to experience some pain as you recover.
- Remember hurt does not always equal harm.
- Stay at work or return to work ASAP.
- A healthy lifestyle including regular exercise, good sleep and reducing stress decreases your risk of ongoing pain, it will help keep you and your back healthy.

Date implemented: August 2018

Review date: August 2020

Leaflet No. 510 - Edition 1

**With thanks to University Hospitals of  
Leicester NHS Trust for kindly sharing their information.**