

# Information sources and further reading

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# Information sheet 1: Low back pain: an overview

Low back pain (LBP) is the leading cause of disability globally

619 million people experienced LBP in 2020, that's 1 in 13 people, representing a 60% increase from 1990

Cases of LBP are expected to rise to 843 million by 2050

World Health Organization. WHO guideline for non-surgical management of chronic primary low back pain in adults in primary and community care settings. December 2023

World Health Organization: Low back pain. June 2023

<u>The global epidemic of low back pain</u>. The Lancet Rheumatology. June 2023. DOI: <a href="https://doi.org/10.1016/S2665-9913(23)00133-9">https://doi.org/10.1016/S2665-9913(23)00133-9</a>

## Low back pain is common

LBP can be experienced at any age, and almost everyone will experience it at some time in their lives - thankfully it only becomes chronic (lasting more than 3 months) for a minority.

World Health Organization. WHO guideline for non-surgical management of chronic primary low back pain in adults in primary and community care settings. December 2023

World Health Organization: Low back pain. June 2023

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## What causes low back pain?

90% of LBP is non-specific, this means there is no one specific structure (eg, joint, muscle, ligament, disc) that can be found to cause it, and it is not due to a serious or specific underlying disease.

LBP can often be caused by a combination of factors and even the best scans (like an x-ray or an MRI) cannot identify a clear cause for most chronic LBP.

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Once your doctor or physiotherapist has examined you, they should be able to identify the small number of people with LBP who need a scan.

Australian Physiotherapy Association: Persistent non-specific low back pain

National Institute for Health and Care Excellence (NICE): <u>Low back pain and sciatica in over 16s: assessment and management</u>. NICE guideline [NG59]. Published: 30 November 2016. Last updated: 11 December 2020

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Irish Chartered Society of Physiotherapists. Move 4 Health 2011. Challenging back pain myths

## When to get help for your low back pain

Many people with LBP recover with little or no treatment. However, you should consult your physiotherapist or doctor after:

- 2-3 weeks if your pain is not reducing, or getting worse, or is stopping you from doing your normal activities
- 6 weeks if your pain is staying the same, even if you can still carry on with your normal activities

Chartered Society of Physiotherapy: Getting help for back pain

## When could your low back pain be serious?

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

- bladder and/or bowel symptoms, eg difficulty passing urine
- · impaired sexual function, such as loss of sensation during intercourse
- loss of sensation and power in your legs
- feeling unwell with your back pain, such as a fever
- you are over 50, have had a previous history of cancer, aren't feeling well, and have developed pain for no apparent reason

You should also seek medical advice if you have had a traumatic injury like a fall or been involved in an accident.

Chartered Society of Physiotherapy: 10 things you need to know about your back

bodylogic: Back pain

#### What types of treatments help low back pain?

Physiotherapists are specialists in the care of LBP, and can offer treatment tailored to your needs. Your treatment may include a combination of:

- education to understand how to manage your pain
- lifestyle tips including advice on physical activity, stress and sleep
- physiotherapist- supervised exercise to improve strength and resume physical activities

## · simple painkillers, such as non-steroidal anti-inflammatory medicines

World Health Organization. WHO guideline for non-surgical management of chronic primary low back pain in adults in primary and community care settings. December 2023

World Health Organization. WHO releases guidelines on chronic low back pain

World Health Organization: Low back pain. June 2023

National Institute for Health and Care Excellence (NICE): <u>Low back pain and sciatica in over 16s: assessment and management</u>. NICE guideline [NG59]. Published: 30 November 2016. Last updated: 11 December 2020

Kent P, Haines T, O'Sullivan P, Smith A, Campbell A, Schutze R, Attwell S, Caneiro JP, Laird R, O'Sullivan K, McGregor A, Hartvigsen J, Lee DCA, Vickery A, Hancock M, on behalf of the RESTORE trial team. Cognitive functional therapy with or without movement sensor biofeedback versus usual care for chronic, disabling low back pain (RESTORE): a randomised, controlled, three-arm, parallel group, phase 3, clinical trial. The Lancet. Vol 401, Issue 10391, P1866-1877, 3 June 2023. DOI: https://doi.org/10.1016/S0140-6736(23)00441-5

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Australian Physiotherapy Association: Persistent non-specific low back pain - Choose physio | Australian Physiotherapy Association

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Chartered Society of Physiotherapy: <u>Treatment for back pain</u>
Chartered Society of Physiotherapy: <u>Getting help for back pain</u>

## Why get help?

Chronic LBP can significantly impact your quality of life and is linked to other health conditions. The longer you experience LBP, the more likely it is that you will experience limitations in what you are able to do. Getting help can help you manage your pain and get back to doing your usual activities.

World Health Organization. WHO guideline for non-surgical management of chronic primary low back pain in adults in primary and community care settings. December 2023

World Health Organization. WHO releases guidelines on chronic low back pain

World Health Organization: Low back pain. June 2023

Among health conditions that may benefit from rehabilitation, LBP is the condition that the greatest number of people could benefit from.

World Health Organization. WHO guideline for non-surgical management of chronic primary low back pain in adults in primary and community care settings. December 2023

# Information sheet 2: Myths vs facts

MYTH: My back hurts a lot so I must have seriously damaged it.

FACT: Back pain can be scary, but it's rarely dangerous or associated with serious tissue damage or life-threatening disease - most people make a good recovery.

MYTH: I need a scan or x-ray to know what's wrong with my back.

FACT: Scans rarely show the cause of low back pain. So-called 'abnormal findings' on scans like disc bulges, disc degeneration and arthritis are common and normal in most people without pain, especially as they get older.

MYTH: I'm going to wear out my back by bending and lifting.

FACT: Backs do not wear out with everyday loading and bending. Gradually increasing the strength of your back should allow you to lift weights and loads in different ways.

MYTH: Strong pain killers will help my back feel better sooner.

FACT: Painkillers will not speed up your recovery. Simple pain killers, such as ibuprofen, should only be used alongside other measures, such as exercise, and even then only for a short amount of time.

MYTH: I need my back to be put 'back in place'

FACT: Low back pain doesn't mean something is out of place and needs to be put back in – your back is strong and won't go 'out of place'. It is impossible to 'slip a disc'.

MYTH: I'm getting older, so I'm going to have low back pain.

FACT: Getting older is not a major cause of low back pain, but losing strength can be a cause.

MYTH: I should rest and stay in bed to help my back recover.

FACT: Immediately following the injury, avoiding aggravating activities may help to relieve pain. However, light exercise and gradual return to usual activities is important for your recovery.

MYTH: It hurts when I do exercise and move, so I must be doing harm.

FACT: Backs become healthier with movement and physical activity. The spine is strong and capable of safely moving and loading. Common warnings to protect the spine are not necessary, and can lead to fear and over protection.

MYTH: I need to sit up straight as my bad posture is causing my back pain.

FACT: There is no one perfect posture. Having a variety of postures throughout the day is good for the back. They should feel comfortable and relaxed for you. Differences in postures are a fact of life.

MYTH: I need to do a lot of core exercises to avoid low back pain.

FACT: Low back pain is not caused by a weak core. Evidence shows that doing specific core exercises do not offer extra benefit over general exercise, eg walking, for pain and disability.

MYTH: I need to have surgery or injections to cure my back pain.

FACT: Surgery and injections are very rarely a cure. Exercise and self-management techniques are recommended, and have been shown to be as beneficial, with less risk.

MYTH: The more pain I have, the more my spine is damaged.

FACT: More pain does not always mean more damage. People with similar spine problems can feel very different levels of pain.

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Chartered Society of Physiotherapy: 10 things you need to know about your back

bodylogic podcasts: Podcast | Body Logic

bodylogic: Back pain

Irish Chartered Society of Physiotherapists. Move 4 Health 2011. Challenging back pain myths

# Information sheet 3: Physiotherapy and low back pain

In all types and at all stages of low back pain (LBP), rehabilitation is essential to reassure people and help you make sense of your pain, help support recovery, return to activities you enjoy and maintain independence in daily living.

World Health Organization: Low back pain. June 2023

## The role of physiotherapy in low back pain

Physiotherapists provide expert advice, guidance and treatment for LBP. They will help to improve your overall health and wellbeing, while reducing your chances of future episodes.

LBP can be caused by a combination of physical and psychological factors, a physiotherapist may be able to advise on these and how to adopt a healthier lifestyle.

The biopsychosocial approach

Chronic LBP can be associated with feelings of depression, poor lifestyle habits, and difficulties taking part in work and social activities. Different healthcare professionals, including physiotherapists, work together to help with these different aspects of LBP. They can use what is known as a biopsychosocial approach, and will look at these three factors:

Biological: the physical aspects of your LBP

Psychological: the emotional and mental impact of your LBP, how you are coping with it, your stress levels, and how you perceive your pain, eg if you are scared of doing further damage

Social: this can include your family life, what support you have, the things you have access to, eg places to exercise and/or walk safely, where you work and what you do for a living

Chartered Society of Physiotherapy: 10 things you need to know about your back

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# The role of self-management for low back pain

Self-management and exercise are the most recommended treatments for managing LBP. Your physiotherapist will help you develop a self-management programme that works for you.

#### This may include:

- a plan to put you in control of your pain and get you back to living well again
- provide you with confidence to trust your back again. Your spine is strong. Although
  movements may be painful at first, they will get better as you gradually regain mobility
  and get active again
- how to overcome a fear of movement and injury, or not getting better, eg with a therapy such as cognitive behavioural therapy (CBT)
- understanding that most LBP is not serious
- understanding the importance of sleep in tackling LBP
- how to manage stress and stressful situations that may be contributing to your LBP
- · being physically active
- not smoking tobacco
- being engaged in social and work activities
- · making ergonomic adjustments in the workplace, if required

World Health Organization: Low back pain. June 2023

World Health Organization. WHO guideline for non-surgical management of chronic primary low back pain in adults in primary and community care settings. December 2023

Kongsted A, Ris I, Kjaer P, Hartvigsen. <u>Self-management at the core of back pain care: 10 key points for clinicians</u>. Brazilian Journal of Physical Therapy, Volume 25, Issue 4, 2021. Pages 396-406, ISSN 1413-3555. https://doi.org/10.1016/j.bjpt.2021.05.002

Australian Commission on Safety and Quality in Health Care. Low back pain clinical care standard

Chartered Society of Physiotherapy: Causes of back pain

Chartered Society of Physiotherapy: 10 things you need to know about your back

Australian Physiotherapy Association: Persistent non-specific low back pain

Chartered Society of Physiotherapy: Treatment for back pain

NHS England: Supported self-management

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Jeremy R. Chang, Yuen Kwan Cheung, Saurab Sharma, Shirley X. Li, Rae RY. Tao, Janet Lok Chun Lee, Eliza R. Sun, Sabina M. Pinto, Zhixing Zhou, Howard Fong, Winnie WY. Chan, Kangyong Zheng, Dino Samartzis, Siu-Ngor Fu, Arnold YL. Wong. Comparative effectiveness of non-pharmacological interventions on sleep in individuals with chronic musculoskeletal pain: A systematic review with network meta-analysis. Sleep Medicine Reviews, Volume 73, 2024, 101867, ISSN 1087-0792. https://doi.org/10.1016/j.smrv.2023.101867

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<u>study of consumer and expert opinions</u>. PAIN 160(12):p 2787-2797, December 2019. | DOI: 10.1097/j.pain.0000000000001663

# Information sheet 4: Exercise and low back pain

Exercise has been shown to be the most helpful treatment for low back pain. One type of exercise doesn't appear to be better than any other – remaining active and doing it regularly is the most important. Your physiotherapist will help you find an exercise that's right for you.

World Health Organization. WHO guideline for non-surgical management of chronic primary low back pain in adults in primary and community care settings. December 2023

Chartered Society of Physiotherapy: Treatment for back pain

Australian Physiotherapy Association: Persistent non-specific low back pain

Irish Chartered Society of Physiotherapists. Move 4 Health 2011. Challenging back pain myths

Exercise is helpful for low back pain.

Staying as active as possible and returning to all usual activities gradually is very important in your recovery. Start slowly and increase your activity as your confidence grows.

Rest is not helpful but getting back to movement and usual activities is.

Prolonged rest and avoiding activity can lead to an increase in your low back pain, greater disability, a slower recovery, and being away from work for longer.

Exercise can prevent low back pain returning.

Exercise can significantly prevent the likelihood of your low back pain returning.

Moving with confidence and without fear is important for low back pain.

Many people start moving slowly and very carefully. This makes you tense and puts more strain on your muscles. Exercising and moving in a relaxed manner is much better for your body.

Feeling sore after exercise does not always mean damage to your body.

Muscles that haven't been used a lot get sore more quickly. Feeling stiff and sore after exercise usually means your body is not yet used to the activity, but is adapting to it.

Exercising regularly is essential.

The amount of exercise you do is probably more important than the type of exercise. The greatest benefits are when an inactive person starts doing any exercise. Getting at least 30 minutes per day is ideal.

Exercise has many other health benefits.

Exercise is very important in the prevention and management of heart disease and stroke, certain types of cancer, anxiety and depression.

Exercises for core stability are not better than other forms of exercise.

Core exercises don't offer any particular advantage to other types of active exercise (eg walking) for low back pain.

The best type of exercise is one you enjoy.

Everyone is different - find an exercise that you like and is easy to fit into your lifestyle. Walking, running, cycling, swimming, strength, and aerobic exercise can all help your low back pain.

World Health Organization. WHO guideline for non-surgical management of chronic primary low back pain in adults in primary and community care settings. December 2023

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Sussex Community NHS Foundation Trust: 10 facts about exercise and back pain

Australian Physiotherapy Association: Persistent non-specific low back pain

Chartered Society of Physiotherapy: 10 things you need to know about your back

Chartered Society of Physiotherapy: Treatment for back pain

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World Health Organization: WHO guidelines on physical activity and sedentary behaviour

World Health Organization: Physical activity

Irish Chartered Society of Physiotherapists. Move 4 Health 2011. Challenging back pain myths

# Poster 1: Physiotherapy and low back pain

Physiotherapists provide expert advice, guidance and treatment for low back pain.

## They will:

- · put strategies in place to help you manage your pain
- help support your recovery
- · get you back to doing the activities you enjoy

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World Health Organization. WHO releases guidelines on chronic low back pain

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Australian Physiotherapy Association: Persistent non-specific low back pain - Choose physio | Australian Physiotherapy Association

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Chartered Society of Physiotherapy: Treatment for back pain

Chartered Society of Physiotherapy: Getting help for back pain

# Poster 2: Exercise and low back pain

Backs become healthier with movement and physical activity.

Exercise can prevent low back pain returning and is one of the most helpful treatments for low back pain. One type of exercise doesn't appear to be better than any other.

World Health Organization. WHO guideline for non-surgical management of chronic primary low back pain in adults in primary and community care settings. December 2023

Chartered Society of Physiotherapy: Treatment for back pain

Chartered Society of Physiotherapy: 10 things you need to know about your back

Australian Physiotherapy Association: Persistent non-specific low back pain

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Sussex Community NHS Foundation Trust: 10 facts about exercise and back pain

# Poster 3: Low back pain: a global epidemic

Low back pain is the leading cause of disability worldwide

In 2020 1 in 13 people experienced low back pain

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World Health Organization: Low back pain. June 2023

<u>The global epidemic of low back pain</u>. The Lancet Rheumatology. June 2023. DOI: <a href="https://doi.org/10.1016/S2665-9913(23)00133-9">https://doi.org/10.1016/S2665-9913(23)00133-9</a>

# Self-management and exercise are the most recommended techniques for managing low back pain

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# Banner 1: Physiotherapy can help your low back pain

Physiotherapists are specialists in the care of low back pain, and can offer treatment tailored to your needs. They may:

- help you understand how to manage your pain
- · offer lifestyle tips including advice on physical activity, stress and sleep
- give you an exercise programme to improve your strength and help you resume physical activities

World Health Organization. WHO guideline for non-surgical management of chronic primary low back pain in adults in primary and community care settings. December 2023

World Health Organization: Low back pain. June 2023

World Health Organization. WHO releases guidelines on chronic low back pain

National Institute for Health and Care Excellence (NICE): <u>Low back pain and sciatica in over 16s: assessment and management</u>. NICE guideline [NG59]. Published: 30 November 2016. Last updated: 11 December 2020

Kent P, Haines T, O'Sullivan P, Smith A, Campbell A, Schutze R, Attwell S, Caneiro JP, Laird R, O'Sullivan K, McGregor A, Hartvigsen J, Lee DCA, Vickery A, Hancock M, on behalf of the RESTORE trial team. Cognitive functional therapy with or without movement sensor biofeedback versus usual care for chronic, disabling low back pain (RESTORE): a randomised, controlled, three-arm, parallel group, phase 3, clinical trial. The Lancet. Vol 401, Issue 10391, P1866-1877, 3 June 2023. DOI: https://doi.org/10.1016/S0140-6736(23)00441-5

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Australian Physiotherapy Association: Persistent non-specific low back pain

Foster NE, Anema JR, Cherkin D, Chou R, Cohen SP, Gross DP, Ferreira PH, Fritz JM, Koes BW, Peul W, Turner JA, Maher CG. <u>Prevention and treatment of low back pain: evidence, challenges, and promising directions</u>. The Lancet. Series: Low back pain. Vol 391, Issue 10137, P2368-2383, 9 JUNE 2018. DOI: <a href="https://doi.org/10.1016/S0140-6736(18)30489-6">https://doi.org/10.1016/S0140-6736(18)30489-6</a>

Jeremy S. Lewis, Emma K. Stokes, Boris Gojanovic, Pamela Gellatly, Chidozie Mbada, Saurab Sharma, Ina Diener, Peter O'Sullivan. Reframing how we care for people with persistent non-traumatic musculoskeletal pain. Suggestions for the rehabilitation community. Physiotherapy. Volume 112, 2021, Pages 143-149, ISSN 0031-9406, https://doi.org/10.1016/j.physio.2021.04.002

Chartered Society of Physiotherapy: Treatment for back pain

Chartered Society of Physiotherapy: Getting help for back pain

Chartered Society of Physiotherapy: 10 things you need to know about your back

## Banner 2: Exercise for low back pain

Exercise is helpful for low back pain

Exercise can prevent low back pain returning

The best type of exercise is one you enjoy

Exercise has many other health benefits

World Health Organization. WHO guideline for non-surgical management of chronic primary low back pain in adults in primary and community care settings. December 2023

National Institute for Health and Care Excellence (NICE): <u>Low back pain and sciatica in over 16s: assessment and management</u>. NICE guideline [NG59]. Published: 30 November 2016. Last updated: 11 December 2020

Sussex Community NHS Foundation Trust: 10 facts about exercise and back pain

Australian Physiotherapy Association: Persistent non-specific low back pain

Chartered Society of Physiotherapy: 10 things you need to know about your back

Chartered Society of Physiotherapy: Treatment for back pain

World Health Organization: WHO guidelines on physical activity and sedentary behaviour

World Health Organization: Physical activity

# Additional reading and resources

World Health Organization. WHO guideline for non-surgical management of chronic primary low back pain in adults in primary and community care settings. December 2023

World Health Organization: Low back pain (who.int)

The global epidemic of low back pain. Lancet Rheumatol. 2023 June, volume 5, issue 6, E305. doi: 10.1016/S2665-9913(23)00133-9

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Karran EL, Grant AR, Moseley GL. <u>Low back pain and the social determinants of health: a systematic review and narrative synthesis</u>. Pain. 2020 Nov;161(11):2476-2493. doi: 10.1097/j.pain.000000000001944. PMID: 32910100.

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Jeremy S. Lewis, Emma K. Stokes, Boris Gojanovic, Pamela Gellatly, Chidozie Mbada, Saurab Sharma, Ina Diener, Peter O'Sullivan, Reframing how we care for people with persistent non-traumatic musculoskeletal pain. Suggestions for the rehabilitation community, Physiotherapy, Volume 112, 2021, Pages 143-149, ISSN 0031-9406, https://doi.org/10.1016/j.physio.2021.04.002.

Sharma S, Abbott JH, Jensen MP. Why clinicians should consider the role of culture in chronic pain. Braz J Phys Ther. 2018 Sep-Oct;22(5):345-346. doi: 10.1016/j.bjpt.2018.07.002. Epub 2018 Aug 14. PMID: 30126712; PMCID: PMC6157457.

The Lancet Series: Low back pain. March 2018.

## Resources specific to low back pain in low-income and middle-income countries (LMICs)

Sharma S, Pathak A, Parker R, Costa LOP, Ghai B, Igwesi-Chidobe C, Janwantanakul P, de Jesus-Moraleida FR, Chala MB, Pourahmadi M, Briggs AM, Gorgon E, Ardern CL, Khan KM, McAuley JH; Consortium for Low Back Pain

in Low- and Middle-Income Countries. How low back pain is managed-a mixed methods study in 32 countries. Part 2 of Low Back Pain in Low- and Middle-Income Countries Series. J Orthop Sports Phys Ther. 2024 Apr 11:1-42. doi: 10.2519/jospt.2024.12406. Epub ahead of print. PMID: 38602844.

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#### **Podcasts**

bodylogic podcasts: Podcast | Body Logic