HEALTH BASICS

Medicines for back pain

Medicines for back pain can reduce discomfort but differ in benefits and risks.

WHAT IT IS
Medicines used to reduce back pain or related discomfort

WHERE IT COMES UP
Self-care, pharmacy advice, and treatment plans

WHY IT MATTERS
Benefits and harms differ by medicine and health history

WHAT IT IS NOT
Not a disease or diagnosis

WHO TO ASK
Pharmacist, primary care clinician, or pain service

HOW IT IS CHECKED
Medicine review; no single test selects treatment

Overview

"Medicines for back pain" is a group of treatment options, not a disease or diagnosis. The group includes non-prescription pain relievers, prescription medicines, and medicines sometimes used for nerve-related pain.

A medicine may reduce pain enough to help you move, sleep, or take part in rehabilitation. Most do not correct the underlying cause of back pain. Benefits are often limited, and no single medicine works best for everyone.

The safest choice depends on the likely cause and duration of the pain, your other health conditions, and the medicines you already use. Recommendations also differ for pain mainly in the back and pain that travels down a leg, often called sciatica.

Medicines are usually only one part of care. Depending on your situation, treatment may also involve staying active, guided exercise, physical therapy, or support for sleep and daily activities.

How it works

Non-steroidal anti-inflammatory drugs like ibuprofen or naproxen , or NSAIDs, include ibuprofen and naproxen. They reduce the production of chemicals involved in pain and inflammation. They may provide short-term relief for some people with low back pain, but they can affect the stomach, kidneys, heart, and circulation.

Paracetamol, called acetaminophen in the United States and Canada, changes how the nervous system processes pain. Research has not shown useful benefit from paracetamol alone for uncomplicated low back pain. It may still appear in combination products or be considered in individual treatment plans.

Muscle relaxants act on the brain, spinal cord, or muscles. Some can provide short-term relief from acute low back pain, but drowsiness, dizziness, and reduced coordination are common concerns. The term "muscle relaxant" covers several medicines with different effects.

Opioids like oxycodone or morphine change pain signals in the brain and spinal cord. Examples include codeine, tramadol, morphine, and oxycodone. They may reduce pain for a short time, but they can cause constipation, nausea, sleepiness, dependence, and overdose. They are not routine treatment for persistent low back pain.

Duloxetine is an antidepressant like sertraline or fluoxetine that also changes pain signalling. Some guidelines include it as an option for chronic low back pain after other approaches have not helped. Its use does not mean that pain is imagined or that the person necessarily has depression.

Gabapentin and pregabalin are used for certain types of nerve pain and seizures. Evidence does not support their routine use for low back pain or sciatica, and they can cause dizziness, sleepiness, swelling, and breathing problems in higher-risk situations.

Oral corticosteroids, benzodiazepines, and long-term opioids are also not recommended routinely for sciatica. Evidence of benefit is limited, while harms can be important.

Creams, gels, and patches act mainly where they are applied. Evidence for topical medicines specifically for low back pain is less clear than for some other muscle and joint conditions.

Why it matters for your health

Medicine decisions involve balancing possible relief against side effects. Even medicines sold without a prescription can cause serious harm or interact with other products.

NSAID risks are higher for some people, including those with kidney disease, heart or circulation conditions, previous stomach ulcers or bleeding, or treatment with blood-thinning medicines. Pregnancy, older age, dehydration, and some forms of asthma can also affect whether an NSAID is suitable.

Too much paracetamol can cause severe liver injury. It is found in many cold, flu, sleep, and combination pain products, so accidental double-dosing can happen when brand names differ.

Medicines that cause sleepiness can affect driving, work, balance, and breathing. These effects may become stronger when opioids, muscle relaxants, gabapentinoids, alcohol, sleeping tablets, or anti-anxiety medicines are combined.

Opioids can also lead to physical dependence, meaning the body adapts to the medicine. This is not the same as addiction, but stopping suddenly may cause withdrawal. Addiction involves loss of control over use despite harm and requires appropriate medical support.

What can go wrong

Back pain sometimes relates to conditions needing prompt assessment rather than stronger pain medicine. These include spinal nerve compression, a spinal infection, a fracture, or cancer affecting the spine.

Seek emergency care for back pain with:

The first three findings can occur with cauda equina syndrome, which is severe compression of nerves at the bottom of the spinal canal. The breathing and alertness signs may indicate a medicine overdose, especially after an opioid or sedating drug.

Contact emergency services or a poison service immediately after a suspected overdose, including excess paracetamol. Do not wait for symptoms, because early liver injury may not be obvious.

Vomiting blood or passing black, tar-like stool can indicate bleeding from the stomach or intestine. This needs urgent medical care, particularly when an NSAID or blood thinner is involved.

Arrange prompt clinical advice for severe pain after a significant injury, or back pain accompanied by fever, feeling very unwell, unexplained weight loss, or a history that raises concern for infection, fracture, or cancer.

Routine follow-up is appropriate when pain is not improving, keeps returning, interferes with normal activities, or requires regular medicine. Side effects such as ongoing constipation, stomach upset, dizziness, swelling, or troublesome sleepiness also deserve a medication review.

- New loss of bladder or bowel control
- Numbness around the genitals, buttocks, or inner thighs

- Rapidly worsening weakness in both legs
- Severe breathing difficulty, blue or grey lips, or inability to wake

What you can do

Before starting or adding a medicine, ask a pharmacist or clinician to check whether it fits your health history and current treatment. Mention pregnancy, allergies, kidney or liver problems, ulcers, heart conditions, asthma, and all prescription, non-prescription, and herbal products.

Useful steps include:

If you regularly use an opioid, antidepressant, gabapentinoid, benzodiazepine, or another medicine that can cause withdrawal, do not stop it suddenly without advice. Ask for a safe reduction plan if it is no longer helping.

There is no blood test or scan that selects the best pain medicine. A review usually considers the pain pattern, function, other conditions, current medicines, and previous response. Imaging may be needed for particular warning signs, but it does not routinely determine which pain reliever to use.

- Check active ingredients, not only brand names
- Avoid taking two NSAIDs together unless specifically instructed
- Follow the product label or prescription rather than increasing the amount yourself
- Record what you took, when you took it, its benefit, and side effects
- Ask whether the medicine can affect driving, work, alcohol use, or sleep
- Ask how long to try it and what would trigger a review

Common questions

Should I start with an over-the-counter medicine?

Not necessarily. "Over the counter" does not mean safe for everyone. A pharmacist can help check for duplicate ingredients, interactions, and reasons to avoid a product.

Are stronger medicines more effective?

Not always. A stronger sedating effect does not guarantee better function or lasting relief. Opioids and some muscle relaxants can add substantial risks while providing only limited benefit.

Is sciatica treated like ordinary back pain?

Not always. Sciatica involves irritation or compression of a nerve supplying the leg. Several medicines commonly described as nerve-pain treatments have not shown enough benefit for routine sciatica treatment.

What if medicine is not helping?

Do not keep increasing it on your own. Record the effect on pain, movement, sleep, and daily tasks, then request a review. The next step may be changing or stopping the medicine, reassessing the cause, or focusing on non-drug treatment.

Can I take pain medicine before exercise or physical therapy?

Sometimes short-term relief makes movement easier, but sedation or dizziness may make activity less safe. Ask how to time a prescribed medicine and whether you should avoid driving or particular exercises.

Sources

- National Institute for Health and Care Excellence. Low back pain and sciatica in over 16s: assessment and management (NG59). Published 2016; updated 2020.
- World Health Organization. WHO guideline for non-surgical management of chronic primary low back pain in adults in primary and community care settings. 2023.
- Qaseem A, Wilt TJ, McLean RM, Forciea MA. Noninvasive Treatments for Acute, Subacute, and Chronic Low Back Pain: A Clinical Practice Guideline From the American College of Physicians. Annals of Internal Medicine. 2017;166:514-530.
- Dowell D, Ragan KR, Jones CM, Baldwin GT, Chou R. CDC Clinical Practice Guideline for Prescribing Opioids for Pain-United States, 2022. MMWR Recommendations and Reports. 2022;71:1-95.
- US Food and Drug Administration. NSAIDs: Drug Safety Communication-FDA strengthens warning of increased chance of heart attack or stroke. 2015.
- US Food and Drug Administration. FDA warns about serious breathing problems with gabapentin and pregabalin. 2019.
- US Food and Drug Administration. Acetaminophen: avoiding liver injury.