

Drug information

# Painkillers and NSAIDs

## **PAINKILLERS AND NSAIDS**

are used to manage pain

**VERSUS  
ARTHRITIS**

## Introduction

Painkillers and non-steroidal anti-inflammatory drugs (or NSAIDs) can improve pain and swelling. They can also help you to stay active. They can be taken on their own, or with other treatments.

They can sometimes cause side effects, but many of these are minor and uncommon. Some of the main ones are covered in this booklet, but you should read the leaflet that comes with your medicine. Talk to your doctor or pharmacist if you need more information or if you have any questions or concerns.

## What types of painkillers are there?

Most pain-relieving medications fall into one of the following groups:

- **Non-opioid painkillers** – this includes paracetamol. Some of these are available over the counter from pharmacies and supermarkets. Other types need a prescription.
- **Anti-inflammatory drugs** – such as ibuprofen or naproxen. These are also known as non-steroidal anti-inflammatory drugs or NSAIDs. Some of these can be bought over the counter, and some need a prescription.
- **Compound painkillers** – this is when two different drugs are combined into one. This could be a painkiller with an NSAID, or an opioid painkiller with a non-opioid painkiller. An example is co-codamol, which combines paracetamol with codeine.
- **Opioid painkillers** – such as codeine, tramadol and morphine. These are only available on prescription.

## What are analgesics?

Analgesics (an-al-gee-sics) is the medical name for painkillers and they mean the same thing. We'll use the term painkillers here.

You will probably be recommended non-opioid painkillers or anti-inflammatory drugs first. It may be recommended that you take them at the same time. If these don't work, or you need stronger pain medication, then you may be offered compound painkillers or opioid (oh-pee-oyd) painkillers.

You may need other drugs alongside the ones described in this leaflet. For more information, see the section 'Can I take other medicines alongside painkillers or NSAIDs?' on p. 18.

## What are non-steroidal anti-inflammatory drugs (NSAIDs)?

NSAIDs are used to relieve pain and reduce inflammation.

They're often used to relieve symptoms of arthritis and other conditions that cause long-term pain.

**Table 1:** Examples of painkillers and NSAIDs

	<b>Non-opioid painkillers and NSAIDs</b>	<b>Compound painkillers</b>	<b>Opioid painkillers</b>
Examples	Paracetamol, aspirin, ibuprofen	Co-codamol, co-codaprin, co-dydramol	Codeine, tramadol, morphine
What are they?	The most common types of painkillers and anti-inflammatory drugs	A combination of drugs in one tablet. These usually include paracetamol, aspirin, codeine or dihydrocodeine	The strongest types of painkillers
What are they used for?	Mild to moderate pain. This can include headaches, injuries or osteoarthritis	Mild to moderate pain. This can include headaches, injuries or osteoarthritis	Moderate to severe pain caused by many things, such as an injury, osteoarthritis, surgery or rheumatoid arthritis. Opioids can also be taken with NSAIDs for severe pain

	<b>Non-opioid painkillers and NSAIDs</b>	<b>Compound painkillers</b>	<b>Opioid painkillers</b>
Where do I get them?	Over the counter at supermarkets and pharmacies, although most NSAIDs are only available on prescription	Stronger types need a prescription. Less strong types can be bought over the counter, at pharmacies	Opioids are only available on prescription
What else should I know?	Paracetamol and some NSAIDs are available as suppositories, gels, creams, sprays or patches	Some can be used instead of NSAIDs, if they can't be taken for any reason	Opioid painkillers can come as patches. See our factsheet on opioid painkilling patches for more information.  Opioid medication can carry a risk of addiction. If you are worried, speak to your doctor

## Paracetamol

Non-opioid painkillers are the most common type of painkiller.

Paracetamol is available over the counter and it's often the first treatment for mild to moderate pain.

You may also take paracetamol in combination with a non-steroidal anti-inflammatory drug (NSAID).

### Risks and side effects of paracetamol

Side effects are rare, though some people develop a rash.

Paracetamol can also damage your liver if taken at high doses. The number you can buy at any one time is limited because of this risk.

Be aware that many other products also contain paracetamol, so you should include these in your daily totals. These include cold and flu medications, and compound painkillers.

Paracetamol may not be suitable if you need long-term pain relief. If you are taking it for long periods, your doctor may review it every so often, to see if it's still helping.

Paracetamol must be used in lower doses than usual if you have kidney problems. It should also be used with caution if you have liver problems. You should only drink alcohol in moderation when taking paracetamol.

## Aspirin

Aspirin is used for mild or moderate pain. Some types can be bought over the counter from pharmacies and others are only available on prescription.

## Risks and side effects of aspirin

Most people can take aspirin. However, you may need to be careful if you:

- are over 65 years old
- have asthma
- have had stomach ulcers at any time in your life
- have severe liver or kidney problems
- have a bleeding disorder such as haemophilia (hee-mer-fill-ee-er) which is when your blood doesn't clot properly
- have high blood pressure that is not being controlled
- are pregnant, breastfeeding or trying to get pregnant
- have had an allergic reaction to aspirin or NSAIDs
- are taking other medications.

If any of these apply to you, ask a doctor or pharmacist for advice before taking NSAIDs.

Aspirin can cause problems with your stomach at higher doses. This is less likely with tablets you can dissolve in water, or ones that have an enteric coating. This is a special covering on tablets, so that the drug is not released until it passes through your stomach.

Children and young people under the age of 16 shouldn't take aspirin.

If you're taking low-dose aspirin over a long period of time, it's advised that you don't take other NSAIDs, unless under medical supervision. Ask your doctor's advice if you're unsure.

## Ibuprofen

Ibuprofen (eye-boo-pro-fen) is commonly used and can help with pain and inflammation. It can be bought over the counter, without a prescription. It is classed as an NSAID.

Ibuprofen can be bought as tablets or capsules, gels or creams, liquids, sprays or patches.

### Risks and side effects of ibuprofen

You shouldn't take ibuprofen if you:

- are pregnant – unless prescribed by a doctor
- have ever had a strong, unpleasant reaction to aspirin or NSAIDs
- have had a stomach ulcer at any time in your life
- have severe heart failure or liver disease
- are taking low-dose aspirin for cardiovascular reasons.

You should use ibuprofen with caution if you're aged 65 or over, breastfeeding, or have:

- asthma
- lupus
- Crohn's disease or ulcerative colitis
- kidney or liver problems
- ever had any bleeding in your stomach
- high blood pressure
- had a stroke
- peripheral arterial disease
- heart problems – such as angina, heart attacks, or mild to moderate heart failure.

Ibuprofen can interact with other medicines. This can increase your risk of side effects and stop your medication from working properly.

Check the leaflet that comes with your medicine to see if it can be taken with ibuprofen. If you're not sure, ask your doctor or a pharmacist.

## Other non-steroidal anti-inflammatory drugs (NSAIDs)

There are about 20 different NSAIDs available on prescription to treat the symptoms of arthritis.

Ibuprofen is one type of NSAID that can be used to treat pain. However, there are many more available over the counter or on prescription.

These include:

- naproxen (na-procks-en)
- diclofenac (die-clo-fe-nac)
- mefenamic acid (mef-uh-nam-ik ass-id)
- indomethacin (in-doe-meth-a-sin)
- high-dose aspirin – low-dose aspirin isn't usually thought of as an NSAID.

Cox-2 inhibitors, which are a newer type of NSAID, are also an option. These include:

- celecoxib (sell-ee-cox-ib)
- etoricoxib (ee-torry-cox-ib)

NSAIDs may be sold under these names or a brand name.

## Risks and side effects of NSAIDs

Most people are able to take NSAIDs, but some people need to be careful. You might be at a higher risk of side effects if you:

- are over 65 years old
- are pregnant or trying for a baby
- are breastfeeding
- have asthma
- have had an allergic reaction to NSAIDs before
- have had stomach ulcers at any time in your life
- have any problems with your heart, liver, kidneys, blood pressure, circulation, or bowels
- are a smoker
- are taking other medications.

If any of these apply to you, ask a doctor or pharmacist for advice before taking NSAIDs.

Possible side effects of NSAIDs include:

- stomach aches
- feeling sick
- diarrhoea (die-a-ree-ah)
- headaches
- drowsiness
- feeling dizzy
- stomach ulcers
- a hole forming in the wall of your stomach or bowel.

There's evidence that all NSAIDs are linked to a small increase in the risk of having a heart attack or stroke. This includes NSAIDs bought over the counter, such as ibuprofen.

Speak to your doctor if you are worried about this, as they can assess your heart attack and stroke risk.

If you're at risk of developing stomach problems, such as ulcers or bleeding, your doctor should:

- prescribe another drug called a proton-pump inhibitor (PPI) to help protect the stomach, along with your NSAIDs. These lower the amount of acid that's produced in your stomach. Examples include esomeprazole, lansoprazole, omeprazole, pantoprazole and rabeprazole. These are available as different brand names.
- switch to a newer NSAID, such as celecoxib or etoricoxib. However, these can have other side effects so are not suitable for everyone.

Stronger and slow-release NSAIDs are available on prescription, which can be used for rheumatoid arthritis and other types of inflammatory arthritis. You shouldn't take more than one type of NSAID tablet at a time, or take NSAIDs with aspirin.

Except on medical advice, NSAIDs shouldn't be used long-term without an occasional break to see if they're still necessary and working. Speak to your doctor if you need longer-term pain relief.

## NSAID gels and creams

A number of NSAIDs are also available as gels, creams, sprays or patches, which you apply to the affected area. These are known as topical NSAIDs. Some of these, such as ibuprofen and diclofenac, are available over the counter. Others, such as ketoprofen (key-toe-pro-fen) are only available on prescription.

If you have osteoarthritis, it is recommended that topical NSAIDs are tried before tablets, cox-2 inhibitors or opioid painkillers. This is because there is evidence that they are safer than taking tablets.

## Compound painkillers

Compound painkillers are made from a combination of two different drugs. These are usually a standard painkiller, such as paracetamol, aspirin or ibuprofen, plus a low dose of an opioid painkillers, such as codeine or dihydrocodeine. Some common compounds are listed in Table 2 opposite.

Compound painkillers containing low doses of codeine are available over the counter from pharmacists. Stronger ones are only available on prescription.

### Risks and side effects of compound painkillers

Compound painkillers can be more effective than taking a single painkiller, and are more convenient than taking multiple tablets. However, they also combine the risks of each of the ingredients.

Compound painkillers usually contain paracetamol or aspirin combined with an opioid. For information about the benefits and risks, please see the sections on each ingredient.

Compound painkillers that contain codeine shouldn't generally be used for more than three days at a time, unless advised by a doctor. This is because they are potentially addictive.

If you take compound painkillers according to their instructions, it is unlikely that you will become addicted to them. However, it is important to talk to your doctor if:

- you feel the need to take them for longer
- your symptoms continue for longer than you're meant to take the painkillers
- you feel very unwell when you stop taking the painkillers, but feel better if you start taking them again.

Ask your doctor's advice before using compound painkillers if you're pregnant or breastfeeding.

**Table 2:** Compound painkillers

	Co-codamol	Co-codaprin	Co-dydramol
What is it?	Codeine and paracetamol	Codeine and aspirin	Paracetamol and dihydrocodeine
Where do I get them?	Over the counter or on prescription	On prescription	On prescription
Most common side effects	Constipation, feeling sick, drowsiness and feeling dizzy.  Long-term use of paracetamol can cause problems with the kidneys, heart and lungs	Constipation, feeling sick, drowsiness, feeling dizzy, heartburn and indigestion	Constipation, feeling sick, drowsiness and feeling dizzy.  Long-term use of paracetamol can cause problems with the kidneys, heart and lungs
What else should I know?	For more severe pain, a range of doses is available		For more severe pain, a range of doses is available

## Opioid painkillers

Opioid painkillers can sometimes be used for moderate to severe pain when other painkillers haven't worked. Pain is considered 'severe' when:

- it interferes with your daily life
- you have to take frequent rests
- you move or walk awkwardly.

Opioid painkillers include:

- codeine (co-deen)
- dihydrocodeine (die-high-dro-co-deen)
- tramadol (tram-a-doll)
- buprenorphine (byuu-pre-nor-feen)
- fentanyl (fen-ta-nil)
- morphine (more-feen)
- oxycodone (ox-ee-code-own)
- tapentadol (ta-pen-ta-doll)

Opioid painkillers come in tablets, liquids or patches. Your doctor will advise on which type is best for you, depending on your pain level, your own preferences, your age and any other medication you're taking.

You can only get strong opioid painkillers on prescription. Most are controlled under the Misuse of Drugs Act and are classified as Class A or B drugs.

It is illegal to have opioid painkillers unless they have been prescribed to you. It's also illegal to give them away or sell them.

Opioid painkillers can become addictive, so they should be used with caution. It is important to talk to your doctor if:

- you feel the need to take them for longer or at higher doses than originally prescribed
- your symptoms continue for longer than you're meant to take the painkillers
- you feel very unwell when you stop taking the painkillers, but feel better if you start taking them again.

Ask your doctor's advice before using opioid painkillers if you're pregnant or breastfeeding.

## Risks and side effects of opioid painkillers

Opioid painkillers can cause more side effects than simple painkillers. They are only available on prescription and need to be monitored by your doctor.

In many cases, they're only used for short periods of time when extra pain relief is needed. This is to reduce the risk of you becoming addicted to them and other side effects.

Side effects of opioid painkillers include:

- feeling sick
- being sick
- constipation
- drowsiness and dizziness, which increases when drinking alcohol
- not being able to concentrate
- breathing problems – let your doctor know if you have long-term breathing problems like chronic obstructive pulmonary disease (COPD) or asthma.

If you are using antidepressants or antipsychotics, be careful of taking tapentadol. This is because your risk of seizures may be higher if you are being prescribed these drugs at the same time.

If you get any side effects, talk to your doctor.

### Mixing opioid painkillers

Mixing any opioid painkillers with alcohol or tranquilisers means that having an overdose is more likely. This can cause a coma, breathing problems and in some cases, death.



## Addiction

Opioid painkillers are safe to take if you:

- follow the instructions given to you by your doctor or pharmacist
- take the recommended dose for the recommended time period.

However, it is possible to get addicted to them if you take them regularly for quite a while.

People can build a tolerance to opioid painkillers. This means that you have to take more of them to get the same effect or avoid withdrawal symptoms. Because of this, they may not be suitable for treating long-term pain.

Withdrawal symptoms are physical or psychological reactions that happen when you stop taking a drug that you are addicted to. These reactions are your body's way of getting used to not having the drug in your system.

Withdrawal symptoms include:

- tremors
- anxiety
- yawning
- sweating
- runny nose
- disturbed sleep
- feeling sick
- goosebumps
- feeling restless
- diarrhoea
- stomach cramps
- muscle spasms.

## Driving

It is illegal in England and Wales to drive when taking prescription drugs if this affects your ability to drive.

Talk to your doctor about whether you should drive if you've been prescribed any of the following:

- amphetamine
- clonazepam
- diazepam
- flunitrazepam
- lorazepam
- methadone
- morphine or opiate and opioid-based drugs – such as codeine, tramadol or fentanyl
- oxazepam
- temazepam.

You can drive after taking these drugs if:

- you've been prescribed them and followed advice on how to take them
- they aren't causing you to be unfit to drive, even if you're above the specified limits.

The law doesn't cover Northern Ireland and Scotland, but you can still be arrested if you're unfit to drive.

## What painkillers can I take together?

Some people need to take more than one type of painkiller at any one time. If you need to do this, you need to be aware of drug combinations that are safe and unsafe.

The following combinations are generally considered safe:

- aspirin with paracetamol
- NSAID (such as ibuprofen) with paracetamol
- aspirin with an opioid
- NSAID (such as ibuprofen) with an opioid
- paracetamol with an opioid.

The following combinations are unsafe and shouldn't be taken together:

- aspirin with an NSAID (such as ibuprofen)
- paracetamol with a compound painkiller that contains paracetamol.

Speak to your doctor if you have any questions or concerns about the types of painkillers you have been advised to take.

## Can I take other medicines alongside painkillers or NSAIDs?

Many people with arthritis and related conditions will need to take painkillers or NSAIDs, along with drugs that treat the underlying cause of their condition. The combination you take will depend on your condition.

For inflammatory types of arthritis, such as rheumatoid arthritis, your doctors should recommend disease-modifying anti-rheumatic drugs (DMARDs). These types of drugs change how your condition develops. An example of a DMARD is methotrexate (mee-thoh-trex-ate).

DMARDs won't stop your pain straight away, but once they start to work, you should be able to reduce or stop your pain relief medicines.

If you have gout, you may need NSAIDs or colchicine (coal-chuh-seen) to deal with the pain and swelling from an attack. You may then need another drug, such as allopurinol (al-oh-pure-ri-nol) or febuxostat (fe-bucks-oh-stat), in the longer term to reduce the risk of having more gout attacks.

If you have pain as a result of nerve damage, or fibromyalgia (fie-bruh-my-al-juh) your doctor may suggest drugs such as amitriptyline (am-ee-trip-ter-leen), gabapentin (gab-a-pen-tin) or pregabalin (prey-gab-a-lin). Although these are not classed as painkillers, they can be helpful for some types of pain.

If you have osteoarthritis of the hand or knee, topical capsaicin (cap-say-sin) applied several times daily can be used alongside other painkillers.

If you're taking medications for other conditions, you should speak to your doctor or a pharmacist about possible interactions.

## Can I drink alcohol if I'm taking painkillers or NSAIDs?

Most people who take painkillers or NSAIDs will be able to drink alcohol in moderation.

It's best for all of us to stick within government guidelines of not drinking more than 14 units of alcohol per week, and to spread them through the week. Having two or three days each week when you don't drink alcohol is good for you.

Alcohol can increase the risk of side effects of some painkillers and NSAIDs. It's a good idea to read the leaflet that comes with your drug to see what it says about drinking alcohol. Talk to your doctor or a pharmacist if you have any concerns.

## Will painkillers or NSAIDs affect fertility, pregnancy or breastfeeding?

If you're planning to start a family or you become pregnant, you should discuss your medication with your doctor as soon as possible.

There may be a small increased risk of miscarriage if NSAIDs are taken around the time of conception. You may therefore wish to avoid NSAIDs if you are trying to conceive and during the first three months of your pregnancy.

Most NSAIDs should be stopped at 32 weeks of pregnancy. Low-dose aspirin may be continued during your pregnancy and is recommended if you have:

- high blood pressure
- certain other long-term conditions – such as antiphospholipid syndrome for some people with lupus.

There is little evidence on the use of newer NSAIDs, called cox-2 inhibitors during pregnancy, so these should be avoided.

Paracetamol and opioid painkillers may be used during pregnancy, although it's recommended that you do not use them regularly or for long periods. Caution is advised with drugs containing codeine, as it could affect the nervous system of the unborn baby.

Regularly taking high doses of opioid painkillers while pregnant in the lead up to birth can cause the baby to have withdrawal symptoms.

If you're a pregnant woman who has been taking opioids every day for a while, you shouldn't suddenly stop using them without speaking to your doctor. If you do, it could increase your risk of premature labour or a miscarriage.

Paracetamol and aspirin can be taken while breastfeeding. NSAIDs do pass into breastmilk, but there's no evidence that this is harmful to babies.

This leaflet is a guide to painkillers and NSAIDs, their benefits and potential side effects. If there's anything else you'd like to know about any of the drugs mentioned here, just ask the healthcare professionals in charge of your care.

## Thank you!

A team of people helped us create this booklet. We would like to thank Edward Dandy, Dr Benjamin Ellis and Dr Anish Kotecha for helping us review the booklet.

We would also like to give a special thank you to the people who shared their opinions and thoughts on the booklet. Your contributions make sure the information we provide is relevant and suitable for everyone.



**FAMILIES**  
**FRIENDS**  
**DOCTORS**  
**RESEARCHERS**  
**DONORS**  
**FUNDRAISERS**  
**VOLUNTEERS**  
**VERSUS**  
**ARTHRITIS**

Registered Charity No 207711  
Scotland No SC041156  
© Versus Arthritis 2019

**Versus Arthritis**

Copeman House  
St Mary's Court  
St Mary's Gate  
Chesterfield S41 7TD

Tel 0300 790 0400  
calls charged at standard rate

[www.versusarthritis.org](http://www.versusarthritis.org)  
[enquiries@versusarthritis.org](mailto:enquiries@versusarthritis.org)

Follow us:



VA2258