

Patient information from the BMJ Group

Sinusitis

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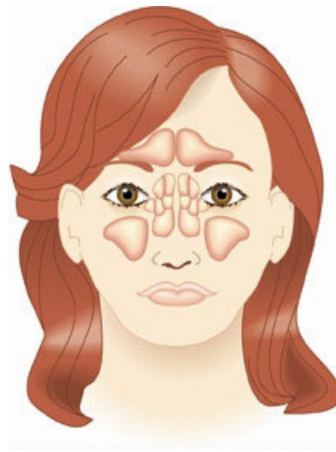
Sinusitis

Sinusitis can be very painful, but it usually clears up on its own. If your symptoms don't go away, there are treatments that can help.

We've brought together the best research about sinusitis and weighed up the evidence about how to treat it. You can use our information to talk to your doctor and decide which treatments are best for you.

What is sinusitis?

Sinusitis means your sinuses are inflamed. It's usually caused by an allergic reaction or an infection in your sinuses that stops them working properly.



Any of your sinuses can get blocked and inflamed, leading to sinusitis.

Sinuses are small spaces filled with air inside your skull. You have them in your cheekbones, behind and between your eyes, and in your forehead. They make mucus, which normally drains through small openings into your nose. If you have sinusitis, the swelling and inflammation in your sinuses interferes with this drainage and causes mucus to build up.

You can have sinusitis that lasts a long time (called **chronic sinusitis**) or you may get short attacks. Short attacks that last for four weeks or less are called **acute sinusitis**. Here we look at treatments for acute sinusitis, which is the most common type.

Sinusitis

People often get sinusitis after they've had a viral infection such as a cold or the flu.^[1] Hay fever and other allergies can also cause sinusitis.^[1] Sometimes a tooth abscess can cause sinusitis.

What are the symptoms of sinusitis?

Sinusitis can be very painful.

The symptoms often start just as you think you're getting better from an infection.^[2] Sometimes people think they have a cold when they really have acute sinusitis, because their nose feels blocked.

With sinusitis you may get some of these symptoms as well as a blocked nose:^[3]

- A high temperature
- Pain in your forehead, upper jaw, teeth, or cheeks, or around your eyes
- Loss of your sense of smell
- A headache that is worse when you lean forward (it might start when you get up in the morning)
- Toothache or pain when you eat
- Large amounts of green or yellow mucus in your nose
- Generally feeling unwell
- A sore throat (caused by the mucus dripping down from your nose into your throat).

Your doctor will usually be able to tell if you have sinusitis by your symptoms, although it's difficult for doctors to tell if sinusitis is caused by bacteria or by a virus.^[4] Sometimes, if your sinusitis is very bad or keeps coming back, you may need to see a specialist or have tests such as an x-ray or a CT scan .

How common is sinusitis?

Sinusitis is fairly common.

Between 1 in 100 and 5 in 100 people are diagnosed with having sinusitis every year.^[5]

About 1 in 200 people who have a cold will go on to get sinusitis.^[6]

What treatments work for sinusitis?

Sinusitis usually gets better on its own. But if your symptoms are very bad, it's best to see your doctor.

- A steroid nasal spray can help clear up your symptoms. The advantage of this treatment is that you don't need a prescription from your doctor. You can buy it from a pharmacy. The full name for these steroids is corticosteroids. They are not the same as the anabolic steroids used by some bodybuilders and athletes.
- You may wish to try medicines you can buy over the counter, such as an antihistamine or a [decongestant](#) . But there hasn't been any good research on these treatments.
- You may need to take painkillers, such as paracetamol or ibuprofen, to ease sinus pain.
- Some people inhale steam to help drain blocked sinuses, but there is a danger of scalding.
- Antibiotics are not needed immediately. They are likely to make little difference to symptoms and may have side effects. ^[8]

Treatment Group 1

Which treatments work best? We've looked at the best research and given a rating for each treatment according to how well it works.

Treatments for sinusitis

Treatments that are likely to work

- [Steroid nasal sprays](#)

Treatments that need further study

- [Antihistamines](#)
- [Decongestants](#)
- [Salt water nasal spray](#)
- [Breathing in water vapour](#)

Treatments that are unlikely to work

- [Antibiotics](#)

What will happen to me?

Acute sinusitis can last up to a month, but many people get better within five to 10 days.

About two-thirds of people with acute sinusitis get better without having any treatment from their doctor. ^[4]

You may want to take some painkillers (such as paracetamol) to deal with the pain.

Some people get repeat attacks of sinusitis. There's also a chance that you will get **chronic sinusitis** (sinusitis that lasts more than three months). If this happens to you, see your doctor. You will probably be referred to a specialist doctor for tests and treatment.

There is a small risk that the surfaces of your sinuses can be permanently damaged. ^[7]

Sinusitis can cause serious problems that affect people's brain and eyes. But this is very rare. ^[4]

Treatments:

Antibiotics

In this section

Antibiotics are medicines that kill bacteria. They don't work against viruses, which are a common cause of sinusitis. And antibiotics can cause side effects, especially diarrhoea.

One summary of the research (a **systematic review**) looked at whether antibiotics could help people with acute sinusitis. ^[9] It found that, after one or two weeks, people who took antibiotics were no more likely to be cured than people who took a dummy tablet (**placebo**).

Antibiotics can be harmful. An upset stomach is a common side effect from taking antibiotics.

Also, if antibiotics are used too much, bacteria start to become resistant to them. This means that the antibiotics no longer kill the bacteria. So doctors are careful to give antibiotics only to people who really need them.

Guidelines for doctors say they shouldn't prescribe antibiotics for most people with acute sinusitis. ^[8] However, occasionally doctors will prescribe antibiotics if they think that the sinusitis is caused by bacteria. But they may first wait to see if the person gets better without them.

Steroid nasal sprays

In this section

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Using a nasal spray can probably help to improve your symptoms.^[10] ^[11] The full name for the drugs used in these sprays is corticosteroids. These steroids are not the same as the anabolic steroids used by some bodybuilders and athletes. You can buy some steroid nasal sprays over the counter at the pharmacy. For others you'll need a prescription from your doctor. There are several different steroid sprays. Some common ones (with their brand names) are beclometasone (Beconase), budesonide (Rhinocort Aqua), flunisolide (Syntaris), and fluticasone (Flixonase). You breathe these sprays in through your nose once or twice a day.

One summary of the research (a **systematic review**) found that, two to three weeks after starting treatment, people who used a steroid nasal spray were more likely to feel better than people who used a dummy spray containing no medicine (a **placebo**).^[10] But the difference was small:

- 73 in 100 people who used a steroid nasal spray had much improved symptoms, or were completely free of symptoms
- 66 in 100 people who used a dummy spray had much improved symptoms, or were completely free of symptoms.

Another review had similar results. It also looked at side effects. About one-quarter of the people reported problems, whether they used the steroid nasal spray or the dummy spray. The most common problems were headaches and nosebleeds.^[11]

Antihistamines

In this section

We don't know if these medicines can help. Antihistamines are often used to treat **allergic conditions** such as **hay fever**. You can buy some antihistamines at a pharmacy, but you'll need a prescription from your doctor for others. They come as tablets and syrups. Some examples are acrivastine (brand name Benadryl Allergy Relief), cetirizine (Zirtek), and chlorphenamine (Piriton).

Some antihistamines can make you sleepy, so you need to be careful how you use them, especially if you operate machinery or drive a car.

Decongestants

In this section

You can try decongestants for sinusitis, but we don't know if they work. Decongestants come as tablets and nasal sprays. They aim to reduce the swelling inside your nose so you can breathe more easily. Common decongestants (and their brand names) are pseudoephedrine (Sudafed), oxymetazoline (Vicks Sinex), phenylephrine (Fenox), and xylometazoline (Otrivine).

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You should not use decongestant nasal sprays for longer than a week. After that they can cause **rebound congestion**, which means they can make the problem worse after you stop taking them. ^[12]

Decongestants are not suitable for some people. If you have heart disease, diabetes, or a thyroid condition, talk to your doctor before taking a decongestant.

Some decongestant sprays may irritate the lining of your nose and cause headaches and nausea. ^[13]

Pseudoephedrine can make your heart race, and it can also cause restless feelings and sleep problems. ^[14]

Salt water nasal spray

In this section

Rinsing the nose with salt water has been a folk remedy for colds for many years, so some people think this should work for blocked sinuses. You can buy some salt water drops and sprays in pharmacies. There hasn't been enough good research to say whether these work for sinusitis.

One review of the research (a systematic review) looked at three studies of 618 children and adults with sinusitis and other infections. Overall, it did not find much difference between people who rinsed their nose with salt water and those who used other treatments. For adults there was some suggestion that those who used salt water got better and were back to work more quickly than those who didn't. But the improvement was not large enough to be sure it wasn't caused by chance. ^[15]

Breathing in water vapour

In this section

If you've got blocked sinuses, you could try breathing in water vapour to clear your nose. Try bending your head over a bowl of hot water, with a towel covering your head. Use water that's hot, but not boiling, and take care not to scald yourself.

There hasn't been any good research to say whether breathing water vapour helps with sinusitis.

Further informations:

Glossary:

allergy

If you have an allergy to something (such as pollen or a medicine), your body always overreacts to it. The reaction happens because your immune system (your body's system for fighting infection) is too sensitive to it.

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X-ray

X-rays are pictures taken of the inside of your body. They are made by passing small amounts of radiation through your body and then onto film.

CT scan

A CT scan is a type of X-ray. It takes several detailed pictures of the inside of your body from different angles. CT stands for computed tomography. It is also called a CAT scan (computed axial tomography).

decongestant

A decongestant is a medicine that clears up swelling (congestion) in the nose or in the chest. It can unblock a stuffy nose and make it easier to breathe.

systematic reviews

A systematic review is a thorough look through published research on a particular topic. Only studies that have been carried out to a high standard are included. A systematic review may or may not include a meta-analysis, which is when the results from individual studies are put together.

placebo

A placebo is a 'pretend' or dummy treatment that contains no active substances. A placebo is often given to half the people taking part in medical research trials, for comparison with the 'real' treatment. It is made to look and taste identical to the drug treatment being tested, so that people in the studies do not know if they are getting the placebo or the 'real' treatment. Researchers often talk about the 'placebo effect'. This is where patients feel better after having a placebo treatment because they expect to feel better. Tests may indicate that they actually are better. In the same way, people can also get side effects after having a placebo treatment. Drug treatments can also have a 'placebo effect'. This is why, to get a true picture of how well a drug works, it is important to compare it against a placebo treatment.

allergic reaction

You have an allergic reaction when your immune system overreacts to a substance that is normally harmless. You can be allergic to particles in the air you are breathing, like pollen (which causes hay fever) or to chemicals on your skin, like detergents (which can cause a rash). People can also have an allergic reaction to drugs, like penicillin.

hay fever

You get hay fever when your immune system reacts too strongly to pollen or mould. Your doctor may call it seasonal allergic rhinitis. The most common symptoms are sneezing, a runny or blocked nose, and red, itchy eyes. You may also cough or wheeze.

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