

Sinusitis

What are sinuses?

Sinuses are hollow spaces in your skull bone, above and between your eyes and behind your cheeks (as shown in the picture). Each sinus links to the nasal passages by small channels and are lined with soft, pink tissue called mucosa. Normally, the sinuses are empty except for a thin layer of mucus.

Both air and mucus flow through your sinuses and drain into your nose, little hairs called cilia help the mucus move through the sinus cavities. The mucus from the sinuses drains into your nasal passages and then down the back of your throat to be swallowed.

The draining mucus helps keep your nose moist and it filters out dust and bacteria.

The sinuses also enhance our voices, humidify the air we breathe in and help to protect the face during trauma.



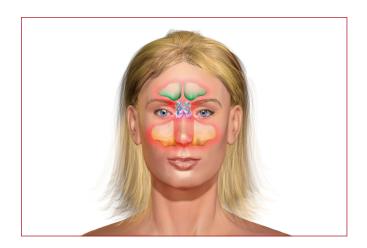
When the mucosa lining of the sinuses becomes inflamed and irritated, it makes it harder for the mucus to drain properly, and the sinuses become blocked, and this causes the mucous membrane to become infected – this is known as sinusitis. Acute sinusitis normally lasts for around 1 to 3 weeks, but when symptoms persist for 3 months or more, it is called chronic sinusitis.

How do you get sinusitis?

Acute sinusitis is common in adults - it is estimated that 6-15% of the population regularly experience sinusitis, it is less common in children because their sinuses are not fully developed, with 6-7% affected. In most people, acute sinusitis develops if you have allergies such as hay fever or after a cold or flu-like illness. Colds and flu are caused by viruses which may spread to the sinuses.

There are also a number of factors that can make the sinuses more prone to infection:

- Smoking
- Asthma and allergies
- Cystic fibrosis
- Exposure to chemical pollutants, such as exhaust fumes
- A weakened immune system, e.g., due to HIV or chemotherapy treatment
- Facial injuries or surgery
- Infected teeth
- Frequent colds (especially for young children)



What are the most common symptoms of sinusitis?

Three of the most common symptoms include:

- Pain and tenderness over the infected sinus. The pain is often throbbing and worse when you bend your head forwards. Chewing may also be painful.
- 2. Nasal symptoms. You may have either:
 - · A blocked nose. This may occur in one or both nostrils
 - · A runny nose. Yellow or green discharge may mean infection
- 3. A high temperature

Sinusitis can also cause the following symptoms:

- · Headache and toothache
- Bad breath
- Feeling tired and unwell
- · Reduced sense of taste and smell

Many people with sinusitis also experience a persistent productive/chesty cough, this is triggered by mucus draining down the back of your throat (post-nasal drip). Young children often display different symptoms such as; irritability, sore ears, snoring, feeding difficulty or nasal speech.

How is sinusitis diagnosed?

Your health professional can usually diagnose acute sinusitis from listening to your symptoms. They may also check to see if you have a temperature or if you have pain over your sinuses. They may examine your nose, as often the lining of the nose is swollen. Investigations are not usually needed to diagnose acute sinusitis.





Treatment options for sinusitis

Acute sinusitis often clears up within 10 days without treatment. However, there are several things you can do to treat the symptoms in the meantime. Helpful home remedies relieve symptoms include:

- Nasal irrigation with warm saline solution
- · Warm face packs, which may provide localised pain relief
- Adequate fluids and rest
- Having a hot shower can help the nose feel clearer (steam inhalation from a bowl or kettle is no longer recommended due to it being ineffective and high risk of burns)
- Saline nasal drops may help to relieve congestion and blockage in the nose

Medicines

You can get many of these treatments from a pharmacy without needing a doctor's prescription.

- Paracetamol or ibuprofen can reduce pain and/or fever
- Antihistamines can help to dry up nasal secretions and relieve a post-nasal drip if your symptoms are as a result of hay fever or an allergy. Some antihistamines can make you feel sleepy so use with caution if you need to drive or be alert.
- Decongestants work by narrowing blood vessels in the nose, throat and sinuses, resulting in reduced swelling and mucous production. You shouldn't use decongestant nasal sprays or drops, such as oxymetazoline, for longer than 3 days and decongestant tablets, for example, phenylephrine for longer than 1 week. Decongestant tablets should be taken with care if you have high blood pressure.
- Cough expectorants if a chesty cough is present with sinusitis, then an expectorant can dissolve thick mucus or increase the water content of the mucus making it easier to cough up. Products with expectorants in them are usually labelled to be effective for 'chesty coughs' or for 'congestion'. Both oral liquid and tablet products are available to buy at the pharmacy or supermarket.
- Antibiotics are rarely used to treat sinusitis because sinusitis
 is mostly caused by viruses. Antibiotics only work against
 bacteria but not viruses. They may be considered if you
 become very unwell or if your symptoms persist after 10
 days and don't respond to other measures

What are the long term effects of untreated sinusitis?

With acute sinusitis, symptoms usually resolve in 1-3 weeks, regardless of whether antibiotics are taken or not,

and complications are rare.

Complications with chronic sinusitis are more frequent, with acute flare ups being the most common complication. Severe complications are estimated to occur in about 1 in 10,000 cases of sinusitis, these include:

- · Adenoid or throat infections, especially in children
- Bone infections
- Complications of the eye including infections around the eye socket
- Infection in the brain meningitis or abscess formation
- Psychological problems associated with chronic pain and ill health.

Pain may be particularly bad when travelling by plane, especially on landing. Scuba divers should consult with specialists, as their sinuses are more prone to barotrauma.

Is sinusitis contagious?

Acute sinusitis may be contagious if the infection is due to a virus, but not if the cause is bacterial. You can pass it on like a cold. Sneezing, for example, can send virus-containing droplets into the air, which can then be breathed in by a person nearby.

When to seek further help

It is recommended that you see a doctor if you begin to feel very unwell or symptoms become severe or do not ease within 10 days. (However, as mentioned, it is common to take up to 3 weeks for symptoms to go completely.) The sort of symptoms you should tell a doctor about are severe pain and/or swelling at the front of your head, around the eye or face and bloodstained discharge coming from the nose. It is also recommended that you see the doctor if you are having reoccurring bouts of sinusitis.

If you want help choosing decongestants, cough mixtures or other medicines your local pharmacy will be able to help with advice and additional information.

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