



# Sinusitis



About 20 million Americans will have at least one bout of sinusitis this year. Nearly all will recover, but an unfortunate few may develop serious complications. If you understand sinusitis, you'll know how to speed your recovery and lower the risk of complications.

For more information about sinusitis from Harvard Health Publications, go to [www.patientedu.org](http://www.patientedu.org).

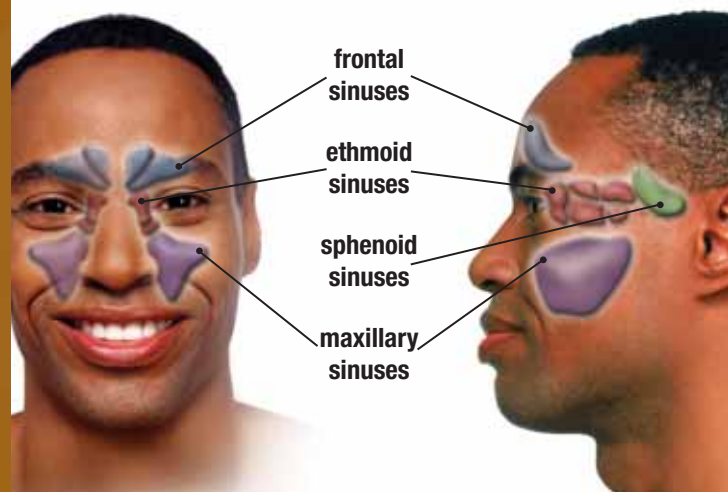
## Your Sinuses

Your sinuses are four pairs of air-filled chambers located in the bones of your face. The *frontal sinuses* are behind the forehead; the *maxillary sinuses* are behind the cheeks; the *ethmoid sinuses* are behind the bridge of the nose; and the *sphenoid sinuses* are deeper in the skull behind the nose (see images below).

A membrane that produces mucus lines the sinuses. When you're healthy, the mucus is a thin, watery fluid that flows freely into the upper part of your nose. But when your sinuses become inflamed, the mucus gets thick and sticky, so it can't flow through the tiny openings that lead to the nose. Fluid builds up in the sinuses, causing pressure and pain—it's sinusitis.

## What Causes Sinusitis?

Sinusitis is an infection caused by bacteria. All of us harbor millions of bacteria in our noses, and many of us have one or more of the germs that cause sinusitis. These bacteria are harmless in the nose, and they don't even cause trouble when



a few creep up into the sinuses—as long as they drain back into the nose. But if sinus drainage is blocked, the bacteria multiply and cause infection. Blockage is the main reason we get sinusitis—and good drainage is the key to treatment.

## What Triggers Sinusitis?

The common cold is the leading culprit. Viruses, not bacteria, cause colds, and antibiotics are useless for treatment. But viruses produce swelling of the nasal tissues, which can block the sinuses. Colds also change the mucus, preventing it from doing its normal job of trapping bacteria.

You may get some sinus pressure when you get a cold, but that doesn't mean you have sinusitis or that you need an antibiotic. Only about one cold in 100 leads to sinusitis, and you can make the odds work for you by doing what it takes to keep your sinuses draining (see page 6). And remember to blow your nose gently without pinching it tightly, so you won't force bacteria up into your sinuses.



Many other things can block your sinuses and lead to infection. The list includes allergies, cigarette smoke and other irritating fumes, changes in barometric pressure during flying or scuba diving, nasal polyps, and a deviated nasal septum.

## Symptoms

Painful pressure is the main symptom. Depending on which sinus is involved (see page 3), the pain is in the forehead, over the cheek or in the upper jaw and teeth, behind the eyes, or at the top of the head. Sinus pain increases when you bend forward.

Nasal congestion and a thick, dark-colored nasal discharge are also common. When the mucus drips into your throat from the back of your nose, you'll notice a foul taste and you may get bad breath or a cough. You may temporarily lose your sense of smell or taste. Finally, you may feel feverish, achy, and tired.

## Diagnosis

In most cases, your doctor can diagnose sinusitis from your symptoms. If pressing over your sinuses causes pain, sinusitis is likely. If complications are suspected, or if your sinusitis is unusually severe, a CT scan is very helpful.



## Treatment: Promoting Drainage

People with early sinusitis can recover simply by promoting drainage. Here's what to do:

- **Drink lots of water.** Good hydration helps keep the mucus thin and loose.
- **Sleep with your head elevated.** If your pain is only on one side, sleep with the pain-free side of your face on the pillow.
- **Inhale steam.** Linger in a hot shower. Boil a kettle, pour the water into a pan, and bend over the pan with a towel over your head to inhale the steam. Even hot tea or chicken soup will help; the secret ingredient is the steam. One way or another, inhale steam three to four times a day.
- **Ask your doctor about prescription nasal sprays** containing steroids, particularly if you have allergies or if your sinusitis is stubborn.
- **Use a salt-water nasal spray** to loosen mucus and rinse your sinuses.



- **Use decongestants.** Tablets containing *pseudoephedrine* are very helpful, but may raise your blood pressure, speed your pulse, or make you jittery and keep you up at night. Nasal sprays containing *oxymetazoline* or *phenylephrine* don't have these side effects, but if you use them too often or too long, your nose can become irritated or dependent on them.

- **Avoid antihistamines.** They're great for allergies and when your nose waters from a cold, but they make mucus thick and hard to drain, the last thing you want in sinusitis.
- **A warm compress on your face may soothe sinus pain.** Over-the-counter pain relievers such as aspirin or acetaminophen will help reduce pain and fever.

## Treatment: Antibiotics

If your sinusitis does not improve after two to four days of drainage therapy—or if it's very severe to begin with—your doctor will prescribe an antibiotic. Many drugs are effective, so your physician will decide what's best for you.

## Complications

Chronic sinusitis causes persistent nasal congestion and discharge; headache is less common, and fever is rare. Steroids or surgery may be needed.

Rarely, acute sinusitis can lead to infections of the eye, skull, or brain. Notify your doctor promptly if you develop a high fever, severe head pain, a red, painful eye, or impaired vision.

## Living With Your Sinusitis

Acute sinusitis is common and uncomfortable. But if you know how to keep your sinuses open and draining freely, you can keep your sinuses healthy and happy.





To learn more about sinusitis,  
visit the **Pri-Med Patient  
Education Center** at  
[www.patientedu.org/sinusitis](http://www.patientedu.org/sinusitis).

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