

Sinusitis

Your sinuses are air-filled spaces behind your forehead, nose passages, cheeks and eyes that are lined with mucus membranes. When your sinuses are healthy, mucus can drain out and air can circulate easily, but when your sinuses are blocked, the mucus can build up, letting bacteria and other germs grow. This can cause sinusitis, or inflammation of the sinuses. Certain medical conditions like colds and allergies can increase the risk by preventing the small hairs within the sinuses (called cilia) from removing mucus.

There are **3** types of sinusitis:

Acute: Lasting up to four weeks

Subacute: Lasting four to 12 weeks

Chronic: Lasting three months or longer

Chronic sinusitis is a common condition reported by people who were exposed to the World Trade Center disaster.¹

Certain conditions, such as a deviated septum, bone spurs or polyps, can block the opening of the sinuses and cause sinusitis.

The following may also increase your risk of sinusitis:

- ▶ Allergic rhinitis or hay fever
- ▶ Cystic fibrosis
- ▶ Large adenoids
- ▶ Tooth infections (rare)
- ▶ Weakened immune system, such as from HIV or chemotherapy



- ▶ Attending day care
- ▶ Changes in altitude (such as flying or scuba diving)
- ▶ Exposure to strong chemical odors
- ▶ Smoking and exposure to cigarette or cigar smoke

Symptoms in Adults and Children

In adults, sinusitis symptoms usually follow a cold that does not improve or worsens after five to seven days. Typical symptoms include:

- ▶ Bad breath or loss of smell
- ▶ Cough, which is often worse at night
- ▶ Fatigue and generally not feeling well
- ▶ Fever



- ▶ Headache, toothache, facial tenderness or pressure, or pain behind the eyes
- ▶ Nasal congestion or discharge
- ▶ Sore throat
- ▶ Postnasal drip

¹De la Hoz, R, Shohet MR, Cohen JM. Occupational Rhinosinusitis and Upper Airway Disease: The World Trade Center Experience. Current Allergy and Asthma Reports 2010;10:77-83. (Summary: link.springer.com/article/10.1007/s11882-010-0088-0.)



In children, sinusitis symptoms include:

- ▶ Cold or respiratory illness that has been improving but then begins to worsen
- ▶ High fever, along with darkened nasal discharge, for at least three days
- ▶ Nasal discharge (with or without a cough) that has not been improving for more than 10 days

Seeing Your Doctor

Your doctor will check your sinuses. They may also examine your eyes, ears, nose and throat, and ask:



- ▶ What are your symptoms?
- ▶ When did your symptoms start and does anything seem to improve or worsen them?
- ▶ Do you currently have a cold or other respiratory infection, or have you had one recently?
- ▶ Do you have allergies?
- ▶ Do you take any medications, including herbal remedies and supplements?
- ▶ Do you have any other health problems?
- ▶ Do you smoke or are you exposed to secondhand smoke?
- ▶ Are you regularly exposed to other pollutants in the air such as diesel exhaust, welding fumes or construction dust?

Prevention Tips



- ▶ Avoid very dry indoor environments.
- ▶ Reduce time in swimming pools treated with chlorine, which can irritate the lining of the nose and sinuses.
- ▶ Before flying in a plane, use a decongestant nasal drop or spray to reduce sinus or middle ear discomfort during takeoff or landing.
- ▶ Treat nasal congestion from a cold or allergy promptly with a decongestant, antihistamine or inhaled steroids.
- ▶ Limit contact with people who have colds and other upper respiratory viral infections.
- ▶ Drink fluids to help keep your mucus thin.
- ▶ Use saltwater nasal washes (saline washing or irrigation) to wash out mucus and bacteria and help keep your nasal passages open.
- ▶ Gently blow your nose, keeping both nostrils open. Forceful blowing can push mucus back into your sinuses and block them.

For more information, visit nyc.gov/health or cdc.gov and search for **sinusitis**.