

# Acute Sinusitis

**R**espiratory infections, including the common cold and acute sinusitis, affect millions of individuals every year. Colds are caused by viruses, are easily spread from person to person, and are usually short-lived. **Sinusitis** (infection of the paranasal sinuses) usually occurs as a result of a cold but also can result from swelling of the nasal passages, obstruction from a medical device or a nasal deformity, or as part of a general infectious process in the body. Acute sinusitis is often caused by bacteria. Other, less common causes include fungus infection and parasites. Because sinusitis is often a bacterial infection (not just from a virus), antibiotic treatment may be used. It is important to understand that antibiotics do not help a cold. Using antibiotics improperly (such as for a viral infection) can cause **resistant bacteria** (that cannot be killed by the usual antibiotics) to form, leading to antibiotic-resistant infections. The December 5, 2007, issue of *JAMA* includes an article about acute sinusitis.

## SIGNS AND SYMPTOMS

- Fever
- Pain in the face over sinus areas (near the nose, above the teeth, the forehead)
- Thick and **purulent** (filled with pus) nasal discharge from both nostrils that may be worse on one side
- Cough and sore throat (from nasal drainage irritating the throat)
- Fatigue and feeling generally unwell

## DIAGNOSIS

Usually the medical history and physical examination are all that is necessary to diagnose sinusitis. Sometimes x-ray studies, including computed tomography (CT) scan and magnetic resonance imaging (MRI), may be used to confirm the diagnosis and look for causes of sinusitis. Occasionally a sample of the sinus contents (also called **sinus aspiration**) may be taken for laboratory examination to determine the cause.

## TREATMENT

- Drink plenty of fluids.
- Get lots of rest and appropriate sleep.
- Inhaling steam may help to ease congestion of the sinuses.
- Temporary use of an over-the-counter nasal spray may help relieve congestion, but these should not be used for more than 3 days at a time.
- See your doctor if your symptoms last more than a few days.
- Antibiotics may be prescribed if bacterial sinusitis is suspected. It is important to take the full course of antibiotics as prescribed by your doctor. Do not skip doses or stop taking the medication when you begin to feel better.
- Seek medical attention immediately if you develop a high fever, stiff neck, severe headache, tender swelling near the eyes, or changes in your mental status such as confusion or delirium.

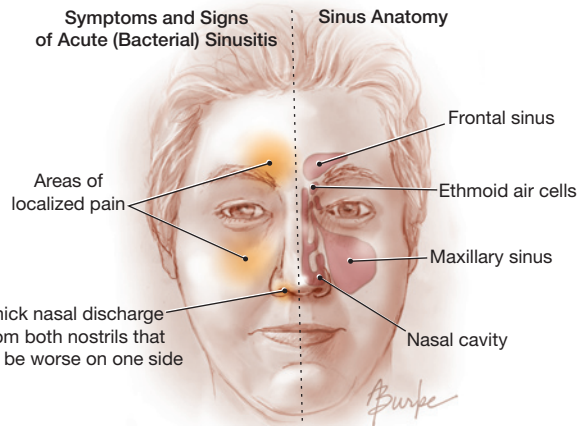
Sources: Centers for Disease Control and Prevention, National Institute of Allergy and Infectious Diseases, American Academy of Pediatrics

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Rare but important symptoms may include severe headaches and redness, tenderness, or swelling in or around the eyebrow or eye.

## FOR MORE INFORMATION

- Centers for Disease Control and Prevention  
[www.cdc.gov](http://www.cdc.gov)
- National Institute of Allergy and Infectious Diseases  
[www.niaid.nih.gov](http://www.niaid.nih.gov)
- American Academy of Pediatrics  
[www.aap.org](http://www.aap.org)

## INFORM YOURSELF

To find this and previous JAMA Patient Pages, go to the Patient Page link on JAMA's Web site at [www.jama.com](http://www.jama.com). Many are available in English and Spanish. A Patient Page on coughs, colds, and antibiotics was published in the May 28, 2003, issue.

