# Sinusitis and Your Child



Sinusitis is an inflammation of the lining of the nose and sinuses. It is a very common infection in children.

Viral sinusitis usually accompanies a cold. Allergic sinusitis may accompany allergies such as hay fever. Bacterial sinusitis is a secondary infection caused by the trapping of bacteria in the sinuses during the course of a cold or allergy.

### Fluid inside the sinuses

When your child has a viral cold or hay fever, the linings of the nose and sinus cavities swell up and produce more fluid than usual. This is why the nose gets congested and is "runny" during a cold.

Most of the time the swelling disappears by itself as the cold or allergy goes away. However, if the swelling does not go away, the openings that normally allow the sinuses to drain into the back of the nose get blocked and the sinuses fill with fluid. Because the sinuses are blocked and cannot drain properly, bacteria are trapped inside and grow there, causing a secondary infection. Although nose blowing and sniffing may be natural responses to this blockage, when excessive they can make the situation worse by pushing bacteria from the back of the nose into the sinuses.

#### Is it a cold or bacterial sinusitis?

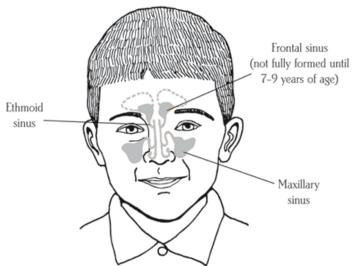
It is often difficult to tell if an illness is just a viral cold or if it is complicated by a bacterial infection of the sinuses.

### Generally viral colds have the following characteristics:

- Colds usually last only 5 to 10 days.
- Colds typically start with clear, watery nasal discharge. After a day or 2, it is normal for the nasal discharge to become thicker and white, yellow, or green.
  After several days, the discharge becomes clear again and dries.
- Colds include a daytime cough that often gets worse at night.
- If a fever is present, it is usually at the beginning of the cold and is generally low grade, lasting for 1 or 2 days.
- Cold symptoms usually peak in severity at 3 or 5 days, then improve and disappear over the next 7 to 10 days.

# Signs and symptoms that your child may have bacterial sinusitis include:

- Cold symptoms (nasal discharge, daytime cough, or both) lasting more than 10 days without improving
- Thick yellow nasal discharge and a fever for at least 3 or 4 days in a row
- A severe headache behind or around the eyes that gets worse when bending over
- Swelling and dark circles around the eyes, especially in the morning
- Persistent bad breath along with cold symptoms (However, this also could be from a sore throat or a sign that your child is not brushing his teeth!)



The linings of the sinuses and the nose always produce some fluid (secretions). This fluid keeps the nose and sinus cavities from becoming too dry and adds moisture to the air that you breathe.

In very rare cases, a bacterial sinus infection may spread to the eye or the central nervous system (the brain). If your child has the following symptoms, call your pediatrician immediately:

- Swelling and/or redness around the eyes, not just in the morning but all day
- Severe headache and/or pain in the back of the neck
- Persistent vomiting
- Sensitivity to light
- Increasing irritability

### Diagnosing bacterial sinusitis

It may be difficult to tell a sinus infection from an uncomplicated cold, especially in the first few days of the illness. Your pediatrician will most likely be able to tell if your child has bacterial sinusitis after examining your child and hearing about the progression of symptoms. In older children, when the diagnosis is uncertain, your pediatrician may order computed tomographic (CT) scans to confirm the diagnosis.

### Treating bacterial sinusitis

If your child has bacterial sinusitis, your pediatrician may prescribe an antibiotic for at least 10 days. Once your child is on the medication, symptoms should start to go away over the next 2 to 3 days—the nasal discharge will clear and the cough will improve. Even though your child may seem better, continue to give the antibiotics for the prescribed length of time. Ending the medications too early could cause the infection to return.

When a diagnosis of sinusitis is made in children with cold symptoms lasting more than 10 days without improving, some doctors may choose to continue observation for another few days. If your child's symptoms worsen during this time or do not improve after 3 days, antibiotics should be started.

If your child's symptoms show no improvement 2 to 3 days after starting the antibiotics, talk with your pediatrician. Your child might need a different medication or need to be re-examined.

## Treating related symptoms of bacterial sinusitis

**Headache or sinus pain.** To treat headache or sinus pain, try placing a warm washcloth on your child's face for a few minutes at a time. Pain medications such as acetaminophen or ibuprofen may also help. (However, do not give your child aspirin. It has been associated with a rare but potentially fatal disease called Reye syndrome.)

Nasal congestion. If the secretions in your child's nose are especially thick, your pediatrician may recommend that you help drain them with saline nose drops. These are available without a prescription or can be made at home by adding 1/4 teaspoon of table salt to an 8-ounce cup of water. Unless advised by your pediatrician, do not use nose drops that contain medications because they can be absorbed in amounts that can cause side effects.

Placing a cool-mist humidifier in your child's room may help keep your child more comfortable. Clean and dry the humidifier daily to prevent bacteria or mold from growing in it (follow the instructions that came with the humidifier). Hot water vaporizers are not recommended because they can cause scalds or burns.

### Remember

If your child has symptoms of a bacterial sinus infection, see your pediatrician. Your pediatrician can properly diagnose and treat the infection and recommend ways to help alleviate the discomfort from some of the symptoms.

The information contained in this publication should not be used as a substitute for the medical care and advice of your pediatrician. There may be variations in treatment that your pediatrician may recommend based on individual facts and circumstances.



