

Sore throat in children

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Sore throat is a common problem during childhood and is usually the result of a bacterial or viral infection. Although sore throat usually resolves without complications, it sometimes requires treatment with an antibiotic. There are some less common causes of sore throat that are serious or even life-threatening.

It is difficult to determine the cause of sore throat based upon symptoms alone; an examination and laboratory test are recommended in most cases.

Viruses — There are many viruses that can cause pain and swelling of the throat. The most common include viruses that cause sore throat as part of an upper respiratory infection, such as the common cold. Other viruses that cause sore throat include influenza, enterovirus, adenovirus, and Epstein-Barr virus (the cause of mononucleosis).

Symptoms — Symptoms that may occur with a viral infection can include a runny nose and congestion, irritation or redness of the eyes, cough, hoarseness, soreness in the roof of the mouth, a skin rash, or diarrhea. In addition, children with viral infections may have a fever and may feel miserable. A high fever

does not necessarily mean that the child has a bacterial infection.

Group A streptococcus — Group A streptococcus (GAS) is the name of the bacterium that causes strep throat. Although other bacteria can cause a sore throat, GAS is the most common bacterial cause; up to 30 percent of children with a sore throat in the winter will have GAS. Strep throat usually occurs during the winter and early spring and is most common in school-age children and their younger siblings.

Symptoms — Symptoms of strep throat in children older than three years often develop suddenly and include fever (temperature $\geq 100.4^{\circ}\text{F}$ or 38°C), headache, abdominal pain, nausea, and vomiting. Other symptoms can include swollen glands in the neck, white patches of pus in the back or sides of the throat, small red spots on the roof of the mouth, and swelling of the uvula ([figure 1](#)).

Strep throat is uncommon in children younger than age two to three years. However, GAS infection can occur in younger children and may cause a runny nose and congestion that is



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prolonged, low-grade fever ($\leq 101^{\circ}\text{F}$ or 38.3°C), and tender glands in the neck. Infants younger than one year may be fussy and have a decreased appetite and low-grade fever.

Other causes — Other common causes of sore throat that are not related to infection include breathing dry air through the mouth (especially during the winter) and allergies (allergic rhinitis).

SORE THROAT DIAGNOSIS

Most cases of sore throat are caused by viruses and do not require treatment. However, it is important to recognize and treat children with strep throat to prevent the spread of infection and also to prevent potentially serious complications of group A streptococcus (GAS) (eg, rheumatic fever).

It is difficult for a parent to know whether their child's sore throat is caused by GAS or a virus.

Parents are encouraged to call their child's health care provider to determine if the child needs to be examined, especially if one or more of the following is present:

- Temperature is $\geq 101^{\circ}\text{F}$ or 38.3°C
- Season is late fall, winter, or early spring
- The child does not have a cough
- Child's age is between 5 and 15 years
- Recent exposure to someone with strep throat
- Difficulty breathing or swallowing
- Child's voice sounds muffled
- Stiff neck or difficulty opening the mouth
- Parent has questions or concerns about child's symptoms

Laboratory testing — If the provider suspects that the child could have strep throat, a test may be done to confirm the diagnosis. If the child does not have signs or symptoms of strep throat, testing is not usually necessary.

There are two types of tests available to diagnose strep throat: a rapid test and a culture. Both tests require the provider to swab the back and sides of the child's throat.

Results of the rapid test are available quickly, within a few minutes. Results of the culture are not available for 24 to 48 hours. The best test depends

upon the individual child's situation and how quickly results are needed.

When the rapid test is used and is negative, a throat culture must be done to confirm that GAS is not present. If the rapid test or culture is positive for GAS, the child will be treated with an antibiotic.

The treatment of sore throat depends upon the cause; strep throat is treated with an antibiotic, while viral pharyngitis is treated with rest, pain relievers, and other measures to reduce symptoms.

Strep throat — Strep throat is usually treated with an antibiotic, such as penicillin, or an antibiotic similar to penicillin (eg, amoxicillin). Children who are allergic to penicillin will be given an alternate antibiotic. The antibiotic is usually given in pill or liquid form one, two, or three times per day. A one-time injection is also available and may be recommended if a child is unwilling to take an oral medication.

Viral throat pain — Sore throat caused by viral infections usually lasts four to five days. During this time, treatments to reduce pain may be helpful but will not help to eliminate the virus. Antibiotics do not improve throat pain caused by a virus and are not recommended.

SORE THROAT PREVENTION

Hand washing is an essential and highly effective way to prevent the spread of infection.

WHEN TO SEEK HELP

Parents of a child with throat pain and one or more of the following should contact their health care provider immediately:

- Difficulty swallowing or breathing
- Excessive drooling in an infant or young child
- Temperature $\geq 101^{\circ}\text{F}$ or 38.3°C
- Swelling of the neck
- Inability or unwillingness to drink or eat
- "Hot potato" or muffled voice
- Difficulty opening the mouth
- Stiff neck

If you have questions or are concerned about your child, please contact our office at 281-374-9700.

Reference:

Wald, E.R. (n.d.). UpToDate. Retrieved from <http://www.uptodate.com/contents/sore-throat-in-children-beyond-the-basics>