



Sore Throats

Insight into causes and treatments of sore throats

What Causes a Sore Throat?

Sore throat is a symptom of many medical disorders. Infections cause the majority of sore throats and are contagious. Infections are caused either by viruses such as the flu, the common cold, mononucleosis, or by bacteria such as strep, mycoplasma, or hemophilus. While bacteria respond to antibiotic treatment, viruses do not.

Viruses: Most viral sore throats accompany flu or colds along with a stuffy, runny nose, sneezing, and generalized aches and pains. These viruses are highly contagious and spread quickly, especially in winter. The body builds antibodies that destroy the virus, a process that takes about a week. Sore throats accompany other viral infections such as measles, chicken pox, whooping cough, and croup. Canker sores and fever blisters in the throat also can be very painful.

One viral infection takes much longer than a week to be cured: infectious mononucleosis, or “mono.” This virus lodges in the lymph system, causing massive enlargement of the tonsils, with white patches on their surface and swollen glands in the neck, armpits, and groin. It creates a severely sore throat and, sometimes, serious breathing difficulties. It can affect the liver, leading to jaundice—yellow skin and eyes. It also causes extreme fatigue that can last six weeks or more. “Mono,” a severe illness in teenagers but less severe in children, can be transmitted by saliva. So it has been nicknamed the “kissing disease,” but it can also be transmitted from mouth-to-hand to hand-to-mouth or by sharing of towels and eating utensils.

Bacteria: Strep throat is an infection caused by a particular strain of streptococcus bacteria. This infection can also damage the heart valves (rheumatic fever) and kidneys (nephritis), cause scarlet fever, tonsillitis, pneumonia, sinusitis, and ear infections. Because of these possible complications, a strep throat should be treated with an antibiotic. Strep is not always easy to detect by examination, and a throat culture may be needed. These tests, when positive, persuade the physician to prescribe antibiotics. However, strep tests might not detect other bacteria that also can cause severe sore throats that deserve antibiotic treatment.

For example, severe and chronic cases of tonsillitis or tonsillar abscess may be culture negative. Similarly, negative cultures are seen with diphtheria, and infections from oral sexual contacts will escape detection by strep culture tests. Tonsillitis is an infection of the lumpy tissues on each side of the back of the throat. In the first two to three years of childhood, these tissues “catch” infections, sampling the child’s environment to help develop his immunities (antibodies). Healthy tonsils do not remain infected. Frequent sore throats from tonsillitis suggest the infection is not fully eliminated between episodes. A medical study has shown that children who suffer from frequent episodes of tonsillitis (such as three- to four- times each year for several years) were healthier after their tonsils were surgically removed. Infections in the nose and sinuses also can cause sore throats because mucus



from the nose drains down into the throat and carries the infection with it. The most dangerous throat infection is epiglottitis, caused by bacteria that infect a portion of the larynx (voice box) and cause swelling that closes the airway. This infection is an emergency condition that requires prompt medical attention. Suspect it when swallowing is extremely painful (causing drooling), when speech is muffled, and when breathing becomes difficult. A strep test may miss this infection.

Allergy: The same pollens and molds that irritate the nose when they are inhaled also may irritate the throat. Cat and dog danders and house dust are common causes of sore throats for people with allergies to them.

Irritation: During the cold winter months, dry heat may create a recurring, mild sore throat with a parched feeling, especially in the mornings. This often responds to humidification of bedroom air and increased liquid intake. Patients with a chronic stuffy nose, causing mouth breathing, also suffer with a dry throat. They need examination and treatment of the nose.

Pollutants and chemicals in the air can irritate the nose and throat, but the most common air pollutant is tobacco smoke. Other irritants include smokeless tobacco, alcoholic beverages, and spicy foods. A person who strains his voice (yelling at a sports event, for example) gets a sore throat not only from muscle strain but also from the rough treatment of his throat membranes.

Reflux: An occasional cause of morning sore throat is regurgitation of stomach acids up into the back of the throat. To avoid reflux, tilt your bedframe so that the head is elevated four- to six- inches higher than the foot of the bed. You might find antacids helpful. You should also avoid eating within three hours of bedtime, and eliminate caffeine and alcohol. If these tips fail, see your doctor.

Tumors: Tumors of the throat, tongue, and larynx (voice box) are usually (but not always) associated with long-time use of tobacco and alcohol. Sore throat and difficulty swallowing—sometimes with pain radiating to the ear—may be symptoms of such a tumor. More often the sore throat is so mild or so chronic that it is hardly noticed. Other important symptoms include hoarseness, a lump in the neck, unexplained weight loss, and/or spitting up blood in the saliva or phlegm.

When should I take antibiotics?

Antibiotics are drugs that kill or impair bacteria. Penicillin or erythromycin (well-known antibiotics) are prescribed when the physician suspects streptococcal or another bacterial infection that responds to them. However, a number of bacterial throat infections require other antibiotics instead. Antibiotics do not cure viral infections, but viruses do lower the patient's resistance to bacterial infections. When such a combined infection occurs, antibiotics may be recommended.

When an antibiotic is prescribed, it should be taken as the physician directs for the full course (usually 10 days). Otherwise the infection will probably be suppressed rather than eliminated, and it can return. Some children will experience recurrent infection despite antibiotic treatment. When some of these are strep infections or are severe, your child may require a tonsillectomy.



Should other family members be treated or cultured?

When a strep test is positive, many experts recommend treatment or culturing of other family members. Practice good sanitary habits; avoid close physical contact; and sharing of napkins, towels, and utensils with the infected person. Handwashing makes good sense.

What if my throat culture is negative?

A strep culture tests only for the presence of streptococcal infections. Many other infections, both bacterial and viral, will yield negative cultures and sometimes so does a streptococcal infection. Therefore, when your culture is negative, your physician will base his/her decision for treatment on the severity of your symptoms and the appearance of your throat on examination.

How Can I Treat My Sore Throat?

A mild sore throat associated with cold or flu symptoms can be made more comfortable with the following remedies:

- Increase your liquid intake. Warm tea with honey is a favorite home remedy.
- Use a steamer or humidifier in your bedroom.
- Gargle with warm salt water several times daily: tsp. salt to cup water.
- Take mild pain relievers such as acetaminophen (Tylenol Sore Throat®, Tempra®) or ibuprofen (Advil®).

When Should I See a Doctor?

Whenever a sore throat is severe, persists longer than the usual five- to seven- day duration of a cold or flu, and is not associated with an avoidable allergy or irritation, you should seek medical attention.

The following signs and symptoms should alert you to see your physician:

- Severe and prolonged sore throat
- Difficulty breathing
- Difficulty swallowing
- Difficulty opening the mouth
- Joint pain
- Earache
- Rash
- Fever (over 101N)
- Blood in saliva or phlegm
- Frequently recurring sore throat
- Lump in neck
- Hoarseness lasting over two weeks