CONDITION

Strep throat

Strep throat is a contagious throat and tonsil infection caused by group A Streptococcus bacteria.

WHAT IT IS
Contagious bacterial infection of the throat and tonsils

BODY SYSTEM
Throat and upper airways

MAIN SYMPTOMS
Sudden sore throat, painful swallowing, fever, swollen neck glands

WHAT CAUSES IT
Group A Streptococcus bacterial infection

HOW IT IS DIAGNOSED
Rapid antigen test, molecular test, or throat culture

MAIN TREATMENT
Antibiotics and symptom relief

CAN IT BE CURED?
Yes, antibiotics clear the infection

IS IT AN EMERGENCY?
Sometimes, with breathing difficulty or inability to swallow

LONG-TERM OUTLOOK
Full recovery is usual; complications are uncommon

Overview

Strep throat is an infection of the throat and tonsils caused by group A Streptococcus bacteria, often called group A strep. It can affect people of any age but is most common in school-age children and teenagers.

Strep throat is different from the many sore throats caused by viruses. Cough, a runny nose, hoarseness, and red eyes are more likely with a viral infection. Symptoms alone cannot always tell the difference, so testing may be needed.

Most people recover fully. Treatment matters because antibiotics like amoxicillin or doxycycline can shorten symptoms, reduce the time you are contagious, and lower the risk of certain complications. These include pockets of infection near the tonsils and rheumatic fever, an inflammatory reaction that can affect the heart.

Symptoms

Symptoms usually begin suddenly, about 2 to 5 days after contact with the bacteria. They may include:

Children may also have nausea, vomiting, or stomach pain. Some people develop a rough, red rash known as scarlet fever.

A cough, runny nose, hoarse voice, mouth ulcers, or red eyes suggests that a virus is more likely. However, white patches or severe pain do not prove that a sore throat is caused by strep.

Some people carry group A strep in their throat without being ill. A carrier may test positive while a separate viral infection is causing the sore throat. A healthcare professional will interpret the test alongside the symptoms.

- A sore, red throat
- Pain when swallowing
- Fever
- Red and swollen tonsils, sometimes with white patches
- Tender, swollen glands at the front of the neck
- Small red spots on the roof of the mouth
- Headache or body aches

Causes and risk factors

Strep throat is caused by group A Streptococcus pyogenes . The bacteria spread mainly through droplets and saliva when an infected person talks, coughs, or sneezes. They can also spread through close contact or shared cups and eating utensils.

Risk is higher when you spend time in crowded indoor settings, such as schools, childcare centres, or shared households. Infection is more common in late winter and early spring in temperate climates, although it can occur at any time.

Close contact with someone who has strep throat increases the chance of infection. Most exposed people do not need preventive antibiotics. They should watch for symptoms and seek advice if symptoms develop.

You cannot get strep throat from cold weather itself. Pets are not considered a usual source of human group A strep throat.

Diagnosis

A healthcare professional may examine your throat, tonsils, neck glands, temperature, and skin. The pattern of symptoms helps decide whether testing is useful, but an examination alone cannot reliably confirm strep throat.

Tests use a swab rubbed over the tonsils and back of the throat. Testing may include:

Rapid antigen results may be available during the visit. A culture takes longer but can detect infections missed by some rapid tests.

For children and teenagers, a negative rapid antigen test is often followed by a throat culture because rheumatic fever prevention is especially important in these age groups. Follow-up culture after a negative rapid test is not routinely needed for most adults because rheumatic fever is uncommon in adults. Local testing practices may differ.

Testing is usually unnecessary when symptoms clearly point to a viral infection, such as a cough and runny nose. A positive test should be interpreted carefully in someone who may be a strep carrier.

- A rapid antigen test, often called a rapid strep test
- A molecular test that looks for bacterial genetic material
- A throat culture, which grows bacteria from the swab

Treatment and management

Confirmed strep throat is treated with antibiotics. Penicillin-based antibiotics are commonly used, while other options are available for people with an allergy. The choice depends on the type of allergy, local bacterial resistance patterns, age, and other health factors.

Take an antibiotic exactly as directed and complete the prescribed course unless the prescriber tells you to stop. Do not save leftover antibiotics or share them. Antibiotics do not treat viral sore throats, and using them when they are not needed can cause side effects and contribute to antibiotic resistance.

Many people begin to feel better within a day or two after starting treatment. Contact the prescribing service if symptoms are not improving after about 48 hours, or if they worsen.

Comfort measures may include:

Follow the product label and ask a pharmacist if you are unsure whether a medicine is suitable. Children and teenagers should not take aspirin for a viral-like illness because of the risk of Reye syndrome, a rare but serious condition affecting the brain and liver.

Rest can help while fever and throat pain are active. Avoid smoking and second-hand smoke, which can further irritate the throat.

- Drinking enough water or other soothing fluids
- Eating soft or cool foods if swallowing hurts
- Gargling warm salt water if you can do so safely
- Using an appropriate over-the-counter pain or fever medicine

Complications

Complications are uncommon, especially when strep throat is recognized and treated.

The infection can occasionally spread into nearby tissue. This may cause an abscess, which is a pocket of pus, beside or behind a tonsil. Warning signs include severe one-sided throat pain, a muffled voice, drooling, difficulty opening the mouth, or swelling of the neck.

Group A strep can also trigger an immune reaction after the throat infection has improved. Acute rheumatic fever can affect the joints, skin, nervous system, and heart. Post-streptococcal glomerulonephritis causes inflammation in the kidneys and may lead to dark urine, swelling, or reduced urination. Antibiotics help prevent rheumatic fever but do not reliably prevent this kidney complication.

Rarely, group A strep causes a serious infection in the blood or deep tissues. This is different from uncomplicated strep throat and requires urgent hospital care.

Prevention

There is no vaccine currently available to prevent strep throat.

To reduce spread:

People with strep throat should stay home from school, childcare, or work until they have no fever and have taken an appropriate antibiotic for at least 12 to 24 hours. Follow local public health or school rules if they are more specific.

Routine testing or antibiotics are not generally needed for household members who feel well.

- Wash your hands with soap and water, especially after coughing or sneezing
- Cover coughs and sneezes with a tissue or your elbow
- Do not share cups, bottles, utensils, or food

- Clean frequently touched surfaces during an illness
- Avoid close face-to-face contact while contagious

Living with it and what to expect

Strep throat is usually a short-term condition. Fever and throat pain often begin to ease within the first few days, and most people recover without lasting effects. Tiredness or mild throat discomfort may continue for a little longer.

Once you have recovered, you can return to normal activities as your energy allows and after the contagious period has passed. Strep throat does not usually cause ongoing limits on eating, exercise, school, or work.

Having strep throat once does not provide reliable lifelong immunity. You can get it again after a new exposure. Repeated positive tests may represent new infections, exposure within a household, or harmless carriage of the bacteria.

If infections keep returning, a clinician may review the test results, timing, treatment completion, and whether each episode had typical strep symptoms. Tonsil surgery is not routinely needed after an isolated infection. It may be considered in selected people with frequent, well-documented throat infections after the benefits and risks are reviewed.

When to get medical help

Arrange a routine or same-day assessment if you or your child has a sudden sore throat with fever, painful swallowing, swollen neck glands, or a known close exposure to strep throat. Testing may be appropriate, particularly when there is no cough or runny nose.

Contact a healthcare service promptly if:

Seek urgent assessment for severe one-sided throat pain, a muffled voice, drooling, neck swelling, or difficulty opening the mouth. These can suggest an abscess.

Call emergency services for difficulty breathing, blue or grey lips, inability to swallow saliva, severe drowsiness, confusion, collapse, or rapidly worsening swelling of the throat or neck.

- Symptoms are worsening rather than improving
- There is no improvement after about 48 hours of antibiotics
- Fever returns after initially settling
- A rough red rash develops

- Drinking is difficult or there are signs of dehydration
- Dark urine, facial swelling, joint pain, or unusual movements appear after the infection
- Throat infections keep coming back

Common questions

How can I tell strep throat from a viral sore throat?

Strep throat often causes sudden throat pain, fever, painful swallowing, and tender neck glands without a cough. Viral infections more often cause coughing, a runny nose, hoarseness, or red eyes. These patterns are not exact, so a throat swab may be needed.

Can strep throat go away without antibiotics?

Some infections improve on their own, but confirmed strep throat is usually treated with antibiotics. Treatment shortens illness and contagiousness and lowers the risk of complications such as rheumatic fever.

How long is strep throat contagious?

Appropriate antibiotics greatly reduce contagiousness. People should generally stay home until they have no fever and have taken antibiotics for at least 12 to 24 hours. Without treatment, the bacteria may spread for longer.

Can I get strep throat more than once?

Yes. Previous infection does not give reliable lifelong protection. A later sore throat may be a new strep infection, a viral infection, or a positive test in someone who carries strep without symptoms.

Does everyone in the household need a strep test?

Usually not. Household members who feel well generally do not need testing or preventive antibiotics. Anyone who develops compatible symptoms should seek advice about testing.

Do I need a new toothbrush after strep throat?

Replacing a toothbrush is not routinely required to cure strep throat or prevent recurrence. Do not share toothbrushes, and rinse yours after use as usual.

Sources



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- Centers for Disease Control and Prevention. About Strep Throat
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