

## Streptococcal Pharyngitis, Group A Streptococcal (GAS) Disease

Strep throat is an infection caused by group A streptococcus, a type of bacteria. These bacteria, commonly called “strep,” can cause a variety of diseases such as strep throat and impetigo. Rarely, especially if left untreated, group A strep can also cause more severe illnesses such as kidney infections, scarlet fever, heart valve infections, deep skin and muscle infections, and rheumatic fever.

### Transmission

Strep throat is spread **person to person** via large respiratory droplets (e.g., coughing, sneezing) or direct contact with people who are ill. It is unlikely to be spread by touching surfaces or objects. Rarely, strep throat can be spread through improper food handling. Transmission time is significantly reduced when sick people are diagnosed and treated promptly. Those on antibiotics generally stop being contagious after about 12 hours on medication, while those left untreated may be contagious for days or weeks.

### Symptoms

Symptoms of strep throat may include sudden onset of fever, sore throat, pain when swallowing, red and swollen tonsils (sometimes with white patches or streaks of pus), tiny red spots on the roof of the mouth, and swollen lymph nodes in the front of the neck. Less common symptoms may include nausea and vomiting. People that develop rash should be seen urgently by a doctor, since this may indicate progression to a more serious disease form of GAS disease.

### Diagnosis

Health care providers diagnose strep throat by collecting and testing a swab from the back of the throat. These may include rapid tests or may require a longer period to culture (grow) the bacteria.

### Treatment

Strep throat is treated with antibiotics. Antibiotics help a person resolve their symptoms sooner, reduce the duration of illness, prevent complications, and reduce the likelihood of spreading the disease to others. Those prescribed antibiotics for strep throat should complete their full recommended course of antibiotics, even after symptoms have resolved. Additional therapy to lessen pain and swelling may be recommended, such as pain relievers.

## Prevention

The best way to avoid the spread of strep throat is by staying home while sick, taking antibiotics as recommended, and practicing good hand hygiene. School and child care settings should follow standard practices for cleanliness and hygiene to prevent the spread of strep through in their facilities.

Strep throat is not currently preventable by vaccination. (Pneumonia vaccination prevents a different type of strep bacteria and does not prevent GAS.) Previous infection with strep throat does not yield long-term immunity to a person and individuals often contract strep throat more than once in their lifetime.

Frequent strep infections should be discussed with a healthcare provider, who may recommend removal of the tonsils and/or adenoids, which are the part of the throat frequently infected by strep bacteria. Doctors may also recommend culturing throat bacteria while the patient is healthy, because some people are “colonized” with this bacteria (meaning that it lives in their throat without causing illness.)

## Exclusion Guidance

**People with strep throat** should be excluded from work, child care, or school until they are feeling well enough to attend, are fever-free without the use of fever reducers and have been on antibiotics for at least 12 hours.

For additional information about pneumonia, please contact the North Dakota Department of Health and Human Services', Disease Control and Forensic Pathology Section, at 701.328.2378.

### Resources:

1. Centers for Disease Control and Prevention. (2022, January 6). CDC Group A Streptococcal (GAS) Disease. Centers for Disease Control and Prevention. Retrieved September 7, 2023, from <https://www.cdc.gov/groupastrep/diseases-public/strep-throat.html>
2. Kimberlin, D. W., Barnett, E. D., Lynfield, R., Sawyer, M. H. (2021) Red Book: 2021-2024 Report of the Committee on Infectious Diseases. 32<sup>nd</sup> ed. American Academy of Pediatrics. [Management and Prevention of Infectious Diseases; Group A streptococcal (GAS) infections] [pages 694-707].

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