



## Group A Streptococcal Infections

The most common infection caused by group A streptococci is a sore throat known as strep throat. Streptococcal sore throats (pharyngitis) are especially common among school-aged children and teenagers.

Group A streptococcal (GAS) organisms are also responsible for skin infections, including some cases of impetigo and cellulitis. Many GAS infections are spread when a child comes in direct contact with the skin lesions or secretions from the throat or nose of an infected person.

Other GAS infections include blood infections (septicemia), pneumonia, arthritis, and scarlet fever (strep throat with a rash caused by a toxin the germ releases into the body). Some children get sick because of their bodies' reaction to the streptococcal infection. These illnesses affect the kidney (glomerulonephritis) and heart (rheumatic fever). Treatment of the streptococcal infection can prevent rheumatic fever, but not glomerulonephritis.

While some GAS illnesses tend to be mild, others are much more serious. For example

- Necrotizing fasciitis is a severe streptococcal infection that kills tissue very quickly. It is sometimes called flesh-eating disease. Infants and the elderly are most at risk.
- Streptococcal toxic shock syndrome is a serious illness, caused when a toxin made by bacteria gets into the body and causes a dangerous decline in blood pressure and other symptoms.

## Signs and Symptoms

When group A streptococcus infects a child younger than 3 years, the symptoms tend to be milder than in older children. Infants with a streptococcal infection may have a low fever and thickened nasal discharge. Toddlers may have a fever, irritability, a decreased appetite, and in some cases, swollen glands in the neck.

When a child is older than 3 years, he may have more serious streptococcal-related symptoms such as a red and very painful sore throat, a high fever (greater than 102°F or 38.9°C), white patches of pus on the tonsils (but not always), and swollen glands in the neck.

An infected child will become ill 2 to 5 days after being exposed to streptococcal bacteria.

## What You Can Do

Home remedies such as gargling with warm salt water may relieve some of your child's throat pain. Acetaminophen can lower his temperature and lessen the pain.

## When to Call Your Pediatrician

If your child has a sore throat, especially with pus on the tonsils or swollen glands, contact your pediatrician.

## How Is the Diagnosis Made?

Your doctor will swab your child's throat and tonsils to test whether he has a GAS infection. Some pediatricians' offices have quick-result streptococcal tests that can help diagnose streptococcal infection in several minutes.

## Treatment

The primary treatment for GAS sore throats is penicillin taken orally or by a shot. Ampicillin, amoxicillin, or oral cephalosporins are sometimes used as alternatives. If your child is allergic to penicillin, oral erythromycin is usually chosen.

## What Is the Prognosis?

When antibiotics are given to treat a GAS infection, your child should recover fully. However, if his throat infection goes untreated, the infection may spread to other parts of the body. He can develop an ear or sinus infection. Group A streptococcus can also lead to rheumatic fever, a rare disease affecting the heart and joints, or glomerulonephritis, a

kidney problem in which urine turns a brownish color and blood pressure increases.

## Prevention

Group A streptococcal infections are very contagious. Throat infections, for example, are passed through the air by sneezing, coughing, or touching an infected child.

Children with GAS pharyngitis or skin infections should not return to school or child care until they've been taking antibiotic treatment for at least 24 hours.

**Last Updated** 11/21/2015

**Source** Immunizations & Infectious Diseases: An Informed Parent's Guide (Copyright © 2006 American Academy of Pediatrics)

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