



# Strep Throat (Streptococcal Pharyngitis) and Scarlet Fever

## What is strep throat?

A disease caused by group A *Streptococcus* bacteria

## What is scarlet fever?

- A fine red rash that makes the skin feel like sandpaper. Scarlet fever is caused by a toxin produced by a strep infection of the throat or another area of the body. The rash is usually quite prominent in the armpits and groin area, often making the creases in the bend of the elbow and back of the knee pinker than usual. Sometimes, the area around the mouth has a pale appearance.
- Children who have scarlet fever are generally not any sicker than children with strep throat.

## What are the signs or symptoms?

- Some of the following symptoms may be present:
  - Sore throat
  - Fever
  - Stomachache
  - Headache
  - Swollen lymph nodes in neck
  - Decreased appetite
- Strep throat is much less likely if there is
  - Runny nose
  - Cough
  - Congestion
- Children younger than 3 years with group A streptococcal infection rarely have a sore throat. Most commonly, these children have a persistent nasal discharge (which may be associated with a foul odor from the mouth), fever, irritability, and loss of appetite.

## What are the incubation and contagious periods?

- Incubation period: 2 to 5 days.
- Contagious period: The risk of spread is reduced when a person who is ill with strep throat is treated with antibiotics. Up to 25% of asymptomatic schoolchildren and a small number of adults carry the bacteria that cause strep throat in their nose and throat and are not ill. In outbreaks, a higher propor-

tion of children with no symptoms of illness may be carriers. The risk of transmission from someone who is not sick but is carrying the bacteria is low.

**Note:** The bacteria that cause strep throat also can cause impetigo.

## How is it spread?

- Respiratory (droplet) route: Contact with large droplets that form when a child talks, coughs, or sneezes. These droplets can land on or be rubbed into the eyes, nose, or mouth. The droplets do not stay in the air; they usually travel no more than 3 feet and fall onto the ground.
- Contact with the respiratory secretions from or objects contaminated by children who carry strep bacteria.
- Close contact helps the spread of the infection.

## How do you control it?

- Use good hand-hygiene technique at all the times listed in Chapter 2.
- Have a health professional evaluate individuals with a severe sore throat with a rash and those who have only a severe sore throat that lasts longer than 24 hours.
- If cough/runny nose are major symptoms, strep is unlikely and testing for strep is not indicated.
- Testing for strep in children/adults who are not having symptoms is not indicated.

## What are the roles of the educator and the family?

- Report the infection to the staff member designated by the early childhood education program or school for decision-making and action related to care of ill children. That person, in turn, alerts possibly exposed family and staff members to watch for symptoms.
- Antibiotics for infected individuals.

## Exclude from educational setting?

**Yes.**

## Readmit to educational setting?

### Yes, when all the following criteria are met:

- At least the first 12 hours of antibiotic treatment has been given. Research has shown that children infected with strep do not pose a risk to others once they have received their first 12 hours of antibiotic treatment.
- When the child is able to participate and staff members determine they can care for the child without compromising their ability to care for the health and safety of the other children in the group.

## Comments

- Most frequent cause of sore throat in children is viral infection, not strep throat.
- A throat culture or rapid strep test is the only way to be certain of the diagnosis of strep throat.
- Even if untreated, most children and adults with group A streptococcal infections recover on their own. Some who are not treated develop complica-

tions, including ear infections, sinusitis, abscesses in the tonsils, infection of the lymph nodes (ie, tender and warm swollen glands) or a rare kidney disease called post-streptococcal glomerulonephritis. Indications for testing include a sudden development of sore throat, fever, headache, pain on swallowing, abdominal pain, nausea, vomiting, and enlarged, tender lymph nodes in the front part of the neck without a runny nose.

- A more rare but very serious complication of strep throat is the development of rheumatic heart disease, a condition that affects the valves and function of the heart. Children younger than 3 years are very unlikely to get strep throat infection or develop rheumatic heart disease. Therefore, testing these younger children is generally not recommended, especially if they show signs of a viral illness like runny nose or cough.

