

# Streptococcal Sore Throat and Scarlet Fever

## Clinical Description:

Streptococcal sore throat is an acute syndrome with fever, exudative tonsillitis or pharyngitis, and tender cervical lymph nodes; however, it can occur with very few symptoms. Many sore throats resembling "strep throat" are not due to strep and may be caused by a viral infection. Scarlet fever is a combination of a streptococcal sore throat and a skin rash caused by a toxin produced by Group A *Streptococcus* bacteria (*Streptococcus pyogenes*). The disease is characterized by a fine, red rash that feels almost like sand-paper. It appears first on the upper body, then spreads to cover almost all of the body. In full-blown cases, this may occur over a period of several hours to several days. The rash fades on pressure and leads to flaking of the skin. With few exceptions, it is usually no more severe or dangerous than a strep throat without the rash. The main reason for concern with a streptococcal infection is the risk of developing rheumatic fever, which is markedly reduced by prompt treatment with appropriate antibiotics.

## Incubation Period:

The incubation period ranges from 1 - 3 days, rarely longer.

## Mode of Transmission:

The primary mode of transmission is by large respiratory droplets or direct contact with individuals who have strep throat or with carriers of the bacteria. Strep throat and scarlet fever are rarely transmitted through direct contact with objects. Individuals with acute respiratory tract (especially nasal) infections are particularly likely to transmit infection.

## Period of Communicability:

A person who is untreated can spread the disease as long as he or she is symptomatic, usually 10 to 21 days. Infected individuals can no longer transmit the infection within 24 to 48 hours after the initiation of antibiotic therapy.

## Exclusion/Reporting:

Ill persons should not return to school until at least 24 hours after beginning antibiotic treatment when ill with noninvasive Group A *Streptococcus* infections. Asymptomatic individuals should not be excluded from school.

## Prevention/Care:

- Individuals with a sore throat and fever and an unexplained fever over 101 degrees Fahrenheit should be referred for medical evaluation.
- Encourage good personal hygiene.

## Outbreaks:

According to the ISDH Communicable Disease Reporting Rule (410 IAC 1-2.3) the definition of an outbreak means cases of disease occurring in a community, region, or particular population at a rate in excess of that which is normally expected. The local health department should be notified of suspected and/or documented cases of

streptococcal sore throat and scarlet fever if the number of cases is in excess of what is normally experienced in your school or occur with a common connection (same class, sports team, etc.). For additional information and recommendations regarding the preparation for, and the management of an outbreak situation in a school setting, see Appendix A, "Managing an Infectious Disease Outbreak In a School Setting."

**Other Resources:**

Indiana State Department of Health Quick Facts Page (found on disease/condition page):  
<http://bit.ly/12IJLfd>

Centers for Disease Control and Prevention (CDC):  
[http://www.cdc.gov/ncidod/dbmd/diseaseinfo/groupastreptococcal\\_g.htm](http://www.cdc.gov/ncidod/dbmd/diseaseinfo/groupastreptococcal_g.htm)

Mayo Clinic:  
<http://www.mayoclinic.com/health/strep-throat/DS00260>  
<http://www.mayoclinic.com/health/scarlet-fever/DS00917>