

Group A Streptococcus (GAS) Fact Sheet

Disclaimer: This fact sheet provides basic general information only and is to be used as a quick guide, not as a complete resource on the subject. If you have any further questions, ask Infection Prevention & Control, your physician, or healthcare worker.

What is it?

Group A Streptococcus (GAS) is a bacteria that is normally found in the nose and throat of 10% of children and 1% of adults, without causing illness. When they do cause illness, the resulting disease is classified into one of two categories: Invasive or Non-invasive.

What is the difference between Invasive and Non-invasive GAS?

Non-invasive common GAS infections include Strep throat, scarlet fever, impetigo and ear infections. These infections are less severe and more contagious than invasive GAS infections.

Invasive GAS infections are more aggressive or severe and may cause conditions known as Streptococcal toxic shock syndrome and necrotizing fasciitis.

How is it spread?

The Group A streptococcus bacteria is spread by direct contact with large droplet secretions from the nose and throat of an infected person, or from contact of mucous membranes or broken skin with secretions from infected sores on the skin. It is rarely spread by casual contact or by contact with objects or through the air. The incubation period is 1 to 3 days after exposure. It is not known why occasionally a person might develop invasive GAS infection. Most cases are single episodes, although institutional outbreaks have rarely occurred.

What are the Early Signs & Symptoms of Invasive GAS Infection?

Early signs of necrotizing fasciitis include fever, severe pain, swelling and redness of the affected area. Early signs of toxic shock syndrome may include low blood pressure and shock, dizziness, confusion, diffuse red rash, nausea, vomiting and abdominal pain. Progression is rapid; therefore any person with these symptoms should seek medical assistance without delay.

Who is at risk of getting Invasive Group A Streptococcus?

Invasive GAS infections are rare. Casual contact does not increase the risk. Although healthy people can get invasive GAS disease, people with chronic illnesses such as cancer, diabetes and kidney disease and those who take steroids are at higher risk. Other conditions increasing risk include breaks in the skin from cuts, burns, penetrating injuries, surgical wounds, or chicken pox.

How can Transmission of Group A Streptococcus be Prevented?

Good **handwashing**, particularly after coughing and sneezing, is important to prevent the spread of GAS infection. It is important to cover the nose and mouth when coughing and sneezing. In addition washing, treating and covering infected wounds and sores prevents the spread of bacteria.

Health care workers must use **Droplet/Contact Precautions** for care of a patient with invasive GAS until 24 hours after initiation of appropriate antibiotic therapy and until wound drainage and secretions can be contained. Healthcare workers should always practice **Routine practices/Standard Precautions**, avoiding direct contact with the secretions and body substances of all patients.

Can Invasive Group A Streptococcus be Treated?

Invasive GAS infections may be treated with common antibiotics. Sometimes supportive care in an intensive care unit and surgery are also necessary

Do Contacts Require Follow up or Treatment?

Close contacts of cases of necrotizing fasciitis or toxic shock-like syndrome are generally offered antibiotics to prevent secondary cases. Antibiotic prophylaxis is recommended for those who were exposed to the case in the 7 days prior to the case becoming ill and up to 24 hours after the case is appropriately treated:

- All contacts living in the same household
- Persons sharing sleeping arrangements
- Anyone with direct mucous membrane contact with oral or nasal secretions of the case.

Health care workers are not considered at risk unless they have had mucous membrane respiratory secretion contact.