

Group A Streptococcal (GAS) Disease

Fact Sheet



Maine Center for Disease
Control and Prevention
An Office of the
Department of Health and Human Services

What is group A streptococcus?

Group A streptococcus (GAS) is a bacteria often found in the throat and on the skin. Most GAS infections cause mild illnesses such as "strep throat," or impetigo. Rarely, these bacteria can cause severe and even life-threatening diseases.

How is GAS spread?

GAS is spread through direct contact with mucus from the nose or throat of persons who are infected. It can also be spread through direct contact with infected wounds or sores on the skin. It is not likely that household items like plates, cups, or toys spread these bacteria.

What kinds of illnesses are caused by infection with GAS?

Infection with GAS can result in various symptoms including:

- Mild illness (strep throat or a skin infection such as impetigo)
- Severe illness (blood infection, breakdown of skin, organ failure)

Some people carry GAS in their throat and on their skin without looking or feeling sick.

What is invasive GAS disease?

Severe, sometimes life-threatening, GAS disease may occur when bacteria get into the blood, muscle, or the lungs. These infections are called "invasive GAS disease." Necrotizing fasciitis (NF) and Streptococcal Toxic Shock Syndrome (STSS) are severe but uncommon types of GAS infection. NF, sometimes described by the media as "the flesh-eating bacteria," destroys muscles, fat, and skin tissue. STSS causes blood pressure to drop rapidly and organs to fail. STSS is not the same as the "toxic shock syndrome" associated with tampon usage.

How does invasive GAS disease occur?

Invasive GAS infections occur when a person has sores or other breaks in the skin that allow the bacteria to get into the tissue. It may also occur when a person has chronic illness or a weak immune system.

Who is most at risk of getting invasive GAS disease?

People with chronic illnesses like cancer, diabetes, and kidney failure, and those who use medications such as steroids have a higher risk of invasive GAS disease.

What are the early signs and symptoms of NF and STSS?

Early signs and symptoms of necrotizing fasciitis include fever, severe pain and swelling, and redness at the wound site.

Early signs and symptoms of STSS include fever, dizziness, confusion, and a flat red rash over large areas of the body.

How is invasive GAS disease treated?

GAS infections can be treated with antibiotics. Early treatment may reduce the risk of death from invasive GAS disease. Hospital care may be needed for those with very severe illness. Surgery is often needed to remove damaged tissue when there is severe skin infection.

What can be done to prevent GAS infections?

Good hand washing, especially after coughing and sneezing and before preparing foods or eating can reduce the spread of all types of GAS infection. If your doctor is treating you for strep throat, stay home from work, school, or day care until 24 hours after starting an antibiotic. Keep all wounds clean and watch for possible signs of infection such as: redness, swelling, drainage, and pain at the wound site. A person with signs of an infected wound, especially if fever occurs, should seek medical care. Speak with your medical provider about the need for antibiotics if you have been exposed to someone with invasive GAS infection.

Where can I get more information?

Contact your healthcare provider or local health center or visit:

Maine CDC:

<http://www.maine.gov/dhhs/mecdc/infectious-disease/epi/airborne/group-a.shtml>