

## Frequently Asked Questions

### **What is group A streptococcus (GAS)?**

Group A streptococcus (STREP-toe-KAH-kiss) is a bacterium often found in the throat and on the skin. People may carry this bacterium in the throat or on the skin and have no symptoms of illness. Most GAS infections cause relatively mild illness such as “strep throat,” or impetigo. On rare occasions, these bacteria can cause other severe and even fatal diseases.

### **What illnesses are caused by GAS infection?**

Severe and sometimes fatal GAS disease may occur when bacteria get into parts of the body where bacteria usually are not found such as in the blood, muscle or the lungs. These infections are called “invasive GAS disease” and are reportable in New Jersey. Two of the most severe but least common forms of invasive GAS disease are necrotizing fasciitis (also commonly known as “the flesh eating disease”) and streptococcal toxic shock syndrome (STSS).

Infection with GAS can cause a range of illness including:

- No illness
- Mild illness (strep throat or a skin infection such as impetigo)
- Severe illness (necrotizing fasciitis, STSS)

### **What are the early symptoms of necrotizing fasciitis and STSS?**

Early symptoms of necrotizing fasciitis include:

- Fever
- Severe pain and swelling
- Redness at the wound site

Early signs of STSS include:

- Fever
- Dizziness
- Confusion
- A flat red rash over large areas of the body

### **What is the risk of death due to invasive GAS disease?**

Data from the Centers for Disease Control and Prevention (CDC) note that about 20% of people with necrotizing fasciitis and more than 50% with STSS die. About 10% - 15% of people with other forms of invasive GAS disease die. In New Jersey approximately 10% of people with invasive GAS die.

### **How are group A streptococci spread?**

These bacteria are spread through direct contact with mucus from the nose or throat of people who are infected or through contact with infected wounds or sores on the skin. Ill people, such as those who have strep throat or skin infections, are most likely to spread the infection. People who carry the bacteria, but have no symptoms, are much less contagious.

People are generally no longer able to spread the illness to others after they have taken antibiotics for at least 24 hours.

It is not likely that items such as plates, cups, or toys spread these bacteria.

### **How common is invasive GAS disease?**

About 9,400 cases of invasive GAS disease occurred in the United States in 1999. Of these, about 300 were STSS and 600 were necrotizing fasciitis. In contrast, there are several million cases of strep throat and impetigo each year. In New Jersey, we see approximately 150 cases of GAS invasive diseases annually, with less than five being cases of STSS or necrotizing fasciitis.

### **Why does invasive GAS disease occur?**

Invasive GAS infections occur when the bacteria get past the defenses of the person who is infected. This may occur when a person has sores or other breaks in the skin that allow the bacteria to get into the tissue, or when the person's ability to fight off infection is low due to chronic illness or an illness that affects the immune system.

### **Who is most at risk of getting invasive GAS disease?**

Few people who come in contact with GAS will develop invasive GAS disease. Most people will have a throat or skin infection, and some may have no symptoms at all. Although healthy people can get invasive GAS disease, people with chronic illnesses like cancer, diabetes, and kidney dialysis, and those who use medications such as steroids are at greater risk.

### **How is invasive GAS disease treated?**

GAS infections can be treated with many different antibiotics. CDC encourages early treatment because it may reduce the risk of death from invasive GAS disease. However, even the best medical care does not prevent death in every case. For those with very severe illness, supportive care in an intensive care unit may be needed. For persons with necrotizing fasciitis, surgery often is needed to remove damaged tissue. (NOTE – it is very important to finish your antibiotics, even if you begin to feel better, unless otherwise directed by your health care provider).

### **What can be done to help prevent GAS infections?**

- Wash hands thoroughly, especially after coughing or sneezing, before preparing food and before eating.
- Visit a health care provider if you have a sore throat. Get tested to find out if the illness is strep throat.
- Stay home from work, school, or day care until you have taken an antibiotic for at least 24 hours (if you were diagnosed with strep throat).
- Keep all wounds clean and watch for possible signs of infection such as redness, swelling, pus, and pain at the wound site.
- Visit a health care provider if you have signs of an infected wound (redness, pain, swelling, pus), especially if fever occurs.

**NOTE:** It is not necessary for people exposed to someone with an invasive GAS to take antibiotics in an effort to prevent infection. However, in certain circumstances, antibiotics may be appropriate. Talk to your health care provider to see if preventive antibiotics are right for you.

**Where can I get more information?**

- Your health care provider
- Your local health department
- NJ Department of Health <http://www.nj.gov/health>
- Centers for Disease Control and Prevention <https://www.cdc.gov/groupastrep>

This information is intended for educational purposes only and is not intended to replace consultation with a health care professional.

Adapted from Centers for Disease Control and Prevention

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