

Invasive Group A Streptococcus (GAS)- Factsheet

What is invasive GAS infection?

There is a group of bacteria called group A *Streptococcus* (also called group A strep), which can cause many different bacterial infections. The bacteria are commonly found in the throat and on the skin. Most GAS infections are relatively mild, such as strep throat and impetigo. Invasive GAS infection occurs when the bacteria have invaded normally sterile parts of the body such as blood, deep muscle and fat tissue, etc. Two of the most severe, but least common, forms of invasive GAS disease are called necrotizing fasciitis (infection of muscle and fat tissue) and streptococcal toxic shock syndrome (a rapidly progressing infection causing low blood pressure/shock and injury to organs such as the kidneys, liver and lungs).

What are the symptoms of invasive GAS infection?

Symptoms depend on the part of the body involved. Streptococcal toxic shock syndrome (STSS) symptoms include fever, chills, muscle pain, nausea, and vomiting, then quickly progress to sepsis. Necrotizing fasciitis begins with pain in the affected area followed by swelling, erythema (reddening of the skin), tenderness and heat.

Why does invasive GAS infection occur?

Most cases of invasive GAS occur randomly. For example, it is very rare for someone with necrotizing fasciitis to spread infection to other people.

How long are people contagious?

People are no longer contagious within 24 hours after initiation of appropriate antibiotics. Untreated purulent GAS skin lesions may be contagious for weeks or months.

Who is most at risk of invasive GAS infection?

Anyone can get an infection from GAS bacteria, but risk factors for invasive GAS include: cancer, diabetes, HIV infection, injection drug use, surgical wound, and recent varicella (chickenpox) infection.

What treatment is available for people with invasive GAS infection?

Prompt treatment is key. A healthcare provider will prescribe antibiotics, but in more serious cases further treatment may be required such as supportive care in an intensive care unit or surgery.

Do infected people need to be kept home from school, work or daycare?

If you are a food handler or healthcare worker you should not go to school, daycare, or work until antibiotics have been taken for at least 24 hours.

How can I protect myself and my family from getting invasive GAS infection?

Practicing good hygiene, like washing your hands often is the best way to protect yourself from GAS infections. Daycare centers should clean toys daily with an approved disinfectant. Keep any cuts, scrapes, or other wounds clean and watch for signs of infection and see a healthcare provider if they get red, swollen, or you develop a fever.