

Group A Streptococcus (GAS)

What is Group A Streptococcal Disease (GAS)?

GAS is a germ (bacterium) that is often found in the nose, throat and/or on the skin of healthy people. Many people may carry the germ but it doesn't cause infection or illness to them. However, for others, the germ can cause disease, ranging from a mild to serious illness.

How does GAS Spread?

These bacteria are spread through

- direct contact with secretions from the nose or throat of people who are infected (ex: such as kissing, mouth to mouth resuscitation),
- by droplets (when someone coughs/sneezes)
- contact with infected wounds or sores on the skin.

Those who are ill and have symptoms of GAS infection are the most likely to spread it to others. People who carry the bacteria but have no symptoms are much less contagious. Treating an infected person with an antibiotic for 24 hours or longer generally eliminates the ability to spread the bacteria to others.

What kind of illnesses are caused by GAS?

Most people who become ill from GAS will experience common infections such as sore (strep) throat, tonsillitis, scarlet fever and skin infections (such as impetigo or pyoderma).

Cellulitis (swelling of the skin, pain, redness and warmth) is sometimes due to GAS bacteria entering the skin through a cut or some other opening in the skin. This type of infection needs medical attention before it becomes severe.

What is Invasive GAS?

GAS is sometimes found in unusual places in the body such as blood, fluid surrounding the brain and spinal cord, or in the lining of muscles and joints. GAS found in these unusual places is called "INVASIVE GAS (iGAS) disease" and can occasionally cause severe disease. The commonly called "flesh eating disease" (necrotizing fasciitis) and streptococcal shock syndrome (STSS) are some examples of severe iGAS disease.

What are some signs and symptoms of severe invasive GAS (iGAS)?

Early signs of necrotizing fasciitis include fever, severe pain and rapid skin swelling, redness or a dark purple color to the skin.

Early signs of STSS include fever, a general feeling of unwellness, dizziness, confusion, red rash on the body and sometimes abdominal pain.

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How is GAS treated?

Mild infections are usually treated with oral antibiotics. More serious infections may require intravenous (IV) antibiotics. Occasionally, these serious infections may also need a surgical procedure to help remove the infection.

Treating an infected person with antibiotics for 24 hours or longer generally eliminates the ability to spread the bacteria. It is very important to take ALL the antibiotics prescribed.

Anyone who is identified as a close contact of a person with severe iGAS may be given antibiotics in order to prevent a GAS infection from occurring.

Who is most at risk of getting iGAS?

Few people who come into contact with GAS bacteria develop invasive disease. Although healthy people can develop iGAS, the elderly, those with chronic illnesses such as HIV, cancer, diabetes and kidney disease requiring dialysis are more at risk. Additionally, people with breaks/tears/cuts in the skin may provide the opportunity for GAS to enter the body.

Close contacts of people with iGAS may be at an increased risk of infection, however the risk of infection is low. Close contacts may include:

- people living in the same household as the sick person
- people sharing sleeping arrangements with the sick person
- people who have had direct contact with the sick person through open mouth kissing, touching draining skin sores
- injection drug users who shared needles/drug works with the sick person.

School classmates (kindergarten and older), work colleagues, as well as social or sports contacts of the sick person are not usually considered to be close contacts.

What can be done to help prevent GAS infections?

- Good personal hygiene, especially frequent hand washing (using soap and water for at least 15 seconds) and bathing
- Cover your cough or sneeze with a tissue or into your sleeve
- Wounds and cuts should be well cleansed and bandaged
- Seek medical attention if a cut becomes infected.

Why is a Public Health Nurse Involved?

The Thunder Bay District Health Unit investigates all reports of communicable diseases, including invasive GAS disease. Our role is to investigate the circumstances of the infection, provide education to the infected person and to confidentially identify and notify close contacts of the infected person. Contacts are given information about the infection and are assessed for the need for preventive antibiotics.

This fact sheet provides basic information only. It must not take the place of medical advice, diagnosis or treatment. Always talk to a health care professional about any health concerns.

**For further information contact the Infectious Disease Program at 625-8318
or toll free 1-888-294-6630, ext. 8318.**