



What is Group A Streptococcus?

Group A streptococcus (GAS) or *Streptococcus pyogenes* is a bacterium often found in the throat and on the skin. People may carry Group A streptococci in the throat or on the skin and have no symptoms of illness.

How are GAS spread?

Streptococci survive in throats and on hands for long enough to allow easy spread between people through sneezing, kissing and skin contact. People may carry group A streptococci in the throat or on the skin and have no symptoms of illness. This is sometimes known as being colonised.

What kinds of illnesses are caused by Group A streptococci?

Most GAS infections are relatively mild illnesses such as "strep throat," scarlet fever or a skin infection such as impetigo. On rare occasions, these bacteria can cause other severe and even life-threatening diseases.

What is invasive group A streptococcal disease (iGAS)?

Sometimes life-threatening GAS disease may occur when bacteria get into parts of the body where bacteria usually are not found, such as the blood, muscle, or the lungs. These infections are termed invasive Group A Streptococcal disease.

Two of the most severe, but rare, forms of invasive GAS disease are necrotising fasciitis and Streptococcal Toxic Shock Syndrome. Necrotising fasciitis destroys muscles, fat, and skin tissue. Streptococcal toxic shock syndrome (STSS), causes blood pressure to drop rapidly and organs (e.g., kidney, liver, lungs) to fail.

Why does invasive group A streptococcal disease occur?

Invasive GAS infections occur when the bacteria get past the defences 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 the infection is decreased because of chronic illness or an illness that affects the immune system.

Although healthy people can get invasive GAS disease, people with chronic illnesses (such as cancer, diabetes, heart disease etc.), those who use medications such as steroids and injecting drug users have a higher risk.

Also, some strains of GAS are thought to be more likely to cause severe disease than others.

How common is iGAS?

Invasive Group A streptococcal disease is very rare. There are 2-4 cases per 100,000 population annually.

Am I at risk of getting invasive group A streptococcal disease from close contact with a relative or household contact?

Most people who come into contact with GAS remain well and symptom-free, or develop mild throat or skin infections. Healthy people can get invasive GAS disease from a relative or a member of their household, but it is very rare.

What do I need to be aware of?

The most important thing to be aware of are the early signs and symptoms of invasive disease which are shown in the box below.

Early signs and symptoms of invasive group A streptococcal disease

- High Fever
- Severe muscle aches
- Localised muscle tenderness
- Redness at the site of a wound

What should I do if I develop any of these symptoms?

If you develop any of these symptoms contact your GP or seek medical advice immediately. Tell your GP that you have been in contact with someone recently diagnosed with invasive group A streptococcal disease and that you have developed some symptoms that you are worried about. It is very likely that your GP will ask you to come into the surgery so he/she can examine you.

Do contacts of a case require treatment?

Usually contacts of case do not require any treatment and secondary cases and clusters are rare. However, if a household contact experiences any symptoms of a streptococcal infection such as sore throat, skin infection or fever within 30 days of the first case, they should contact their GP and may require antibiotics.

Good infection control measures such as effective hand hygiene, good general cleaning and waste handling reduce the risk of cross infection.

Most people who come into contact with GAS remain well and symptom-free, or develop mild throat or skin infections. Contracting invasive GAS disease from a relative or household member is very rare.

More information can be obtained from your GP or NHS 111 or UKHSA London SLHPT on 0344 326 2052 (Mon-Fri 9am-5pm).

Severe streptococcal infection and necrotising fasciitis support group can be contacted on <http://www.nfsuk.org.uk/>