

Group A Streptococcal Infection

Information and advice for patients and contacts

Infection Prevention and Control

What is Group A Streptococcal infection?

Group A streptococci (GAS) are a type of bacteria. Many people carry these bacteria harmlessly in their throat or on their skin, and have no symptoms of illness; this is known as being 'colonised'. At any one time, up to one in five people can be colonised with GAS. Infection occurs when people with GAS develop symptoms. GAS infection is contagious.

What are the symptoms of GAS infection?

The most common symptoms of GAS infection are:

- A mild sore throat or
- A skin infection called impetigo
- There may also be flu-like symptoms and muscle tenderness.

What is Invasive Group A Streptococcal Infection?

In rare cases, GAS can also cause more serious or 'invasive' infection (iGAS). Where iGAS infection occurs, the bacteria may produce toxins and may cause a number of severe and sometimes fatal conditions such as:

- An infection of the bloodstream (bacteraemia).
- Severe infection which spreads to areas of soft tissue below the skin (necrotising fasciitis). This is rare.
- Streptococcal toxic shock syndrome. This is rare but can cause rapidly progressive symptoms of faintness, vomiting, diarrhoea, high fever, rash and confusion.

Complications of iGAS can include:

Acute rheumatic fever (a disease of the heart)

Glomerulonephritis (kidney disease)

It is important to realise that although these conditions are serious, they do not occur as commonly as a sore throat or skin infection.

What are the symptoms of iGAS infection?

Early signs and symptoms of iGAS infection include:

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

Group A Streptococcal Infection

Information and advice for patients and contacts

Infection Prevention and Control

It is important to remember that many of these symptoms may be due to other less severe conditions. However, if you have been in contact with someone who has been diagnosed with iGAS infection within the last 30 days and you develop any of these symptoms, seek medical advice immediately. Tell the Doctor that you have been in contact with someone recently diagnosed with Invasive group A Streptococcal Infection.

How do you catch GAS?

GAS bacteria are produced in the nose and throat of infected people and spreads between people during sneezing, kissing and touching. The bacteria are more likely to enter the body and cause invasive infection through broken skin. A person may become infected from either their own skin lesions or from contact with an infected person.

Contracting iGAS from a relative or household member is very rare.

GAS infection has occasionally resulted from consuming unpasteurised milk or milk products

What is most at risk?

People with lower immunity are more likely to become ill. Those most at risk include:

- Very young or elderly people;
- People with chronic illnesses such as heart disease, diabetes, HIV infection or cancer;
- Those who have recently been infected with chicken pox;
- Those undergoing high dose steroid therapy;
- Injecting drug users.

How is GAS diagnosed?

The wide range of possible symptoms makes it difficult for doctors to diagnose GAS infection early. If you are suspected to have GAS infection, you may have blood samples or nose or throat swabs taken and tested.

If you are diagnosed with GAS infection, it is sometimes necessary to check relatives or other people in contact with you to see if they are carrying the same strain of GAS. This is normally done by taking nose and throat swabs.

What is the treatment for GAS?

Most people who are colonised with GAS never receive treatment for it. This is because the GAS bacteria can quite happily live on our skins or in our mouths without causing any problems.

Group A Streptococcal Infection

Information and advice for patients and contacts

Infection Prevention and Control

GAS infection is usually successfully treated with the antibiotic penicillin. If you are allergic to penicillin, you must inform your GP or Doctors as soon as possible so that a safe alternative antibiotic can be prescribed. It is very important to complete the full course of antibiotics as prescribed.

Close contacts of a person with GAS infection will also be given antibiotics if they have symptoms suggesting that they are also infected. If a mother or baby in the neonatal period (first 28 days of life) develops iGAS, both will be given antibiotics.

Antibiotics may also be given as a control measure in outbreaks. This is to prevent spread of infection.

What are the benefits of treatment?

Successful treatment usually means that an infected person recovers without any major complications.

Are there any risks to the treatment?

Common side effects of antibiotics include nausea, vomiting and diarrhoea. If you suffer any of these side effects do not stop taking the antibiotics but see your GP or Doctor as soon as possible as they may change your treatment or give you something to cope with the nausea.

What are the risks of not getting treatment?

If you do not take your antibiotics or complete the full course given, your infection may become worse and in severe cases may be fatal.

Are there any alternatives?

If infection is severe, antibiotics may be given by injection. In cases of necrotising fasciitis, the affected tissue needs to be removed surgically.

How long am I infectious for?

If left untreated, people with GAS infection are usually infectious for 2–3 weeks after developing a sore throat. If treated with antibiotics, people with GAS infection stop being infectious 24 hours after treatment is started.

Should I stay away from work/school?

GAS infection is contagious. You should avoid exposing other people by staying away from work until 24 hours after you begin treatment and until you are well enough to go back. Children who have GAS infection should not go to school or day care during this period.

Group A Streptococcal Infection

Information and advice for patients and contacts

Infection Prevention and Control

How can the spread of GAS be prevented?

- Wash your hands thoroughly with hot soapy water after contact with a person who has been diagnosed with GAS infection and ensure you dry them thoroughly;
- If you have a GAS infection, try and stay away from people with a weakened immune system until you have had 24 hrs of antibiotics;
- Avoid consuming unpasteurised milk.

Who might contact me if I am infected?

An Infection, Prevention and Control Consultant or Nurse may contact you to try to identify the source of infection and help you prevent further spread of infection.

Where can I get more information?

Speak to your GP or specialist for more information. Other sources of information include:

NHS Non Emergency Number

111

Sources used for the information in this leaflet

UK Health Security Agency (2014). *Group A streptococcal infections: guidance and data*.

Available at: <https://www.gov.uk/government/collections/group-a-streptococcal-infections-guidance-and-data> (Accessed 8 April 2022).

If you would like to suggest any amendments or improvements to this leaflet please contact SWB Library Services on ext 3587 or email swbh.library@nhs.net.



A Teaching Trust of The University of Birmingham
Incorporating City, Sandwell and Rowley Regis Hospitals
© Sandwell and West Birmingham Hospitals NHS Trust
ML5295
Issue Date: April 2022
Review Date: April 2025