

# What is Group A streptococcal disease?

Group A streptococcus (GAS) is a bacteria naturally found in the throat and on the skin of many people. Approximately 10 to 15% of people carry GAS in their throat without having any symptoms. GAS can cause common infections such as sore throat ('strep throat'), tonsillitis, scarlet fever, and skin infections such as impetigo. However, GAS can also be found in the body in areas that are usually bacteria-free such as the blood, the fluid around the brain and spinal cord, the lining of the muscles, or in the joints. When GAS is found in these bacteria-free places, it is called "invasive disease".

## What are the signs and symptoms of invasive GAS disease?

Symptoms may be minimal or absent, and may include:

- fever, chills, sweats, dizziness;
- redness, swelling, and/or pain in an area of the body;
- headaches, vomiting, difficulty breathing

Any of these symptoms may indicate invasive disease, and can present as various **severe invasive GAS infections** such as:

- necrotizing fasciitis ("flesh eating disease") - an infection of the lining of the muscles;
- myositis - an infection of the muscles;
- meningitis - an infection of the lining of the brain and spinal cord; or
- streptococcal toxic shock syndrome (STSS) - collapse of several body systems

## How is GAS spread?

GAS bacteria is spread by direct contact with fluids from the nose and throat of an infected person, or by direct contact with discharge/fluids from infected wounds. GAS is not spread through the air. Infected persons are generally not contagious after 24 hours of treatment with the right antibiotics.

## Who is at greatest risk of developing invasive Group A strep infection?

Those at highest risk of developing **invasive group A strep** infection includes people who:

- are over the age of 65 years and very young children;
- have weak immune systems, such as those who are on immunosuppressive chemotherapy, or have HIV infection;
- have a chronic disease, such as diabetes, heart or lung disease, or cancer;
- use injection drugs, or abuse alcohol; and
- have chronic skin breaks and sores, including children with chickenpox. (It is recommended children receive 2 doses of chickenpox vaccine.)

## How can invasive GAS infection be prevented?

It is recommended that everyone:

- wash your hands regularly, especially after coughing or sneezing, before handling or eating food, after cleaning or handling a cut/sore/wound;
- keep all sores clean, and watch for possible signs of infection such as an increase in redness, swelling, fluid and pain at the sore site. **Seek medical care if infection is not improving as it may spread rapidly;**
- cover your mouth and nose when you cough or sneeze; use a tissue or your sleeve, not your hands;
- avoid sharing cups/water bottles, utensils and cigarettes;
- do not share drugs, needles, filters and other drug related items; be sure to cook your wash; and
- stay at home for at least 24 hours after the start of antibiotic treatment for strep throat or impetigo

## Who is a close contact and what is recommended for them?

A close contact of someone with invasive GAS disease is someone who may be at an increased risk of infection. They are called “close” contacts because they are people who are likely to have been exposed to the nasal discharge, saliva, or wound discharge of the sick person.

Close contacts include the following people:

- those living in the same household as the sick person and who have spent at least 4 hours/day with the sick person in the 7 days before the person became sick;
- those who share a bed with the sick person;
- those who have had direct contact with the sick person through mouth to mouth resuscitation, open mouth kissing, or an open skin lesion;
- injection drug users who share needles/equipment with the sick person

Classroom, daycare, workplace, and social contacts generally are not considered close contacts.

Close contacts may be given antibiotics to help prevent invasive GAS infection. Whether or not they are provided with antibiotics, anyone who is a close contact should watch for symptoms of GAS and **seek immediate medical attention** if they begin to feel unwell.

If you have any questions or concerns, please contact the Infectious Disease Control Team at 519-663-5317 ext. 2330 or go to [www.healthunit.com](http://www.healthunit.com)

### Reference:

CCDR (2006) *Supplement: Guidelines for the Prevention and Control of Invasive Group A Streptococcal Disease*. (32S2:1-26) Public Health Agency of Canada

Ministry of Health and Long Term Care (2014) Infectious Disease Protocol Appendix A: Chapter: Group A Streptococcal Disease, invasive (iGAS), retrieved on June 27, 2017 from [http://www.health.gov.on.ca/en/pro/programs/publichealth/oph\\_standards/docs/gas\\_chapter.pdf](http://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/gas_chapter.pdf)

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