

Group A streptococcus infection

What is Group A streptococcus?

Group A streptococcus (GAS) is a bacterium that often lives in people's throats or on their skin. Most of the time this germ does not make people sick.

Illnesses most commonly caused by GAS are sore throats ('strep throat') or skin infections (sometimes referred to as 'school sores').

Some people who have GAS infections go on to develop complications such as acute rheumatic fever and post-streptococcal glomerulonephritis (heart and kidney diseases) but these are uncommon.

Occasionally, it does cause other severe and even life-threatening sickness referred to as invasive GAS or iGAS (see below).

How is it spread?

GAS spreads among infected people via skin contact and actions such as sneezing and kissing.

Invasive GAS disease

Severe, sometimes life-threatening, disease can occur when GAS invades parts of the body such as blood, muscles or lungs. These infections are called invasive GAS disease (iGAS). Two of the most severe forms are necrotising fasciitis and streptococcal toxic shock syndrome.

Necrotising fasciitis destroys muscles, fat and skin tissue.

Streptococcal toxic shock syndrome causes a rapid drop in blood pressure which causes organ failure (e.g. failure of the kidneys, liver, lungs).

For what to do when someone close to you has an iGAS infection look at the [invasive group A streptococcus infection poster](#).

Why invasive GAS disease happens

When GAS bacteria gain 'entrance' and overwhelm the body's defences, iGAS diseases can occur. This may happen when the person's skin defence is broken with a sore or cut and the bacteria invade.

People with chronic illnesses or illnesses that affect the immune system may be more vulnerable to iGAS. Rarely, people with no known risk factors have developed iGAS disease.

Who is at risk?

Most people who come in contact with GAS will not develop invasive GAS disease. Some will have a throat or skin infection but most will have no symptoms at all.

Although healthy people can get iGAS disease those most at risk are:

- children <5 years of age, especially infants
- people aged >65 years
- Indigenous people
- people living in crowded conditions or where good hygiene is hard to maintain
- people with chronic illnesses (eg. cancer, diabetes, chronic lung, heart, liver and kidney diseases) and those with heavy alcohol consumption (consume over 20 standard drinks a week or binge drinking)
- people with skin and soft tissue infections such as cellulitis
- people who use medications such as steroids for a long time
- children with a recent (2 weeks) history of chickenpox.

Risk and advice for contacts of people with iGAS disease

The risk of secondary cases of iGAS occurring in contacts is not entirely clear but is considered low. The Centre for Disease Control (CDC) will follow up people diagnosed with iGAS disease to consider management of their recent and close contacts. In some circumstances the CDC will recommend close contacts receive antibiotics to kill the GAS.

Any contacts with signs of a sore throat or an infected wound, especially if fever occurs, should seek medical care and inform the care giver that they are a potential contact of an iGAS case.

Prevention

Good hygiene is the mainstay of preventing all forms of GAS disease.

To reduce the spread of bacteria wash your hands, especially after coughing and sneezing and before preparing, eating or serving foods.

People with 'strep throats' should stay at home for 24 hours after taking an effective antibiotic.

Treatment

Prompt antibiotic therapy is required and most people need admission to hospital for medicine and monitoring.

People with necrotising fasciitis may require surgery to remove damaged tissue.

Contact

For more information contact the Public Health Unit's Centre for Disease Control in your region.

The full list of contacts of contacts can be found at [NT Health](#).

Location	Address	Phone	Fax	Email
Darwin	Ground Floor, Building 4 Royal Darwin Hospital Rocklands Drive Tiwi NT 0810	(08) 8922 8044 1800 008 002	(08) 8922 8310	CDCSurveillance.DARWIN@nt.gov.au
Katherine	O'Keef House Katherine Hospital Gorge Road Katherine NT 0850	(08) 8973 9049	(08) 8973 9048	CDC.Katherine@nt.gov.au
Tennant Creek	Schmidt Street Tennant Creek NT 0860	(08) 8962 4259	(08) 8962 4420	CDC.Barkly@nt.gov.au
Alice Springs	Disease Control Unit Lower Ground Floor Eurilpa House, 25 Todd Street Alice Springs NT 0870	(08) 8951 7540	(08) 8951 7900	CDC.alicesprings@nt.gov.au
Nhulunbuy	Corner Mathew Flinders Way and Chesterfield Court Nhulunbuy NT 0880	(08) 8987 0357	(08) 8987 0500	CDCGove.DoH@nt.gov.au