

Group A Streptococcus

Group A streptococcus (GAS) is a common bacteria. Lots of us carry it in our throats and on our skin and it doesn't always result in illness. However, GAS does cause a number of infections, some mild and some more serious.

The most serious infections linked to GAS come from invasive group A strep, known as iGAS.

These infections are caused by the bacteria getting into parts of the body where it is not normally found, such as the lungs or bloodstream. In rare cases an iGAS infection can be fatal.

Whilst iGAS infections are still uncommon, there has been an increase in cases this year, particularly in children under 10 and sadly, a small number of deaths.

How is it spread?

GAS is spread by close contact with an infected person and can be passed on through coughs and sneezes or from a wound.

Some people can have the bacteria present in their body without feeling unwell or showing any symptoms of infections and while they can pass it on, the risk of spread is much greater when a person is unwell.

Which infections does GAS cause?

GAS causes infections in the skin, soft tissue and respiratory tract. It's responsible for infections such as tonsillitis, pharyngitis, [scarlet fever](#), impetigo and cellulitis among others.

While infections like these can be unpleasant, they rarely become serious. When treated with antibiotics, an unwell person with a mild illness like tonsillitis stops being contagious around 24 hours after starting their medication.

What is invasive group A strep?

The most serious infections linked to GAS come from invasive group A strep, known as iGAS.

This can happen when a person has sores or open wounds that allow the bacteria to get into the tissue, breaches in their respiratory tract after a viral illness, or in a person who has a health condition that decreases their immunity to infection. When the immune system is compromised, a person is more vulnerable to invasive disease.

What is being done to investigate the rise in cases in children?

Investigations are underway following reports of an increase in lower respiratory tract Group A Strep infections in children over the past few weeks, which have caused severe illness.

Currently, there is no evidence that a new strain is circulating. The increase is most likely related to high amounts of circulating bacteria.

It isn't possible to say for certain what is causing higher than usual rates of these infections. There is likely a combination of factors, including increased social mixing compared to the previous years as well as increases in other respiratory viruses.

What should parents look out for?

It's always concerning when a child is unwell. GAS infections cause various symptoms such as sore throat, fever, chills and muscle aches.

As a parent, if you feel that your child seems seriously unwell, you should trust your own judgement.

Contact NHS 111 if or your GP if:

- your child is getting worse
- your child is feeding or eating much less than normal
- your child has had a dry nappy for 12 hours or more or shows other [signs of dehydration](#)
- your baby is under 3 months and has a temperature of 38C, or is older than 3 months and has a temperature of 39C or higher
- your baby feels hotter than usual when you touch their back or chest, or feels sweaty
- your child is very tired or irritable

Call 999 or go to A&E if:

- your child is having difficulty breathing – you may notice grunting noises or their tummy sucking under their ribs
- there are pauses when your child breathes
- your child's skin, [tongue or lips are blue](#)
- your child is floppy and will not wake up or stay awake

How can we stop infections from spreading?

Good hand and respiratory hygiene are important for stopping the spread of many bugs. By teaching your child how to wash their hands properly with soap and warm water for 20 seconds, using a tissue to catch coughs and sneezes, and keeping away from others when feeling unwell, they will be able to reduce the risk of picking up, or spreading, infections.

Winter illness advice for parents

As this is the first winter without pandemic restrictions in two years, you and your children may be more susceptible to the usual winter bugs and viruses this year. Winter bugs and viruses are usually mild, but can sometimes become more serious, particularly in younger children or if an infection spreads to a vulnerable family member.

Here are the top 5 things you can do to help protect your children and reduce the risk of infections for your family this season.

1 - Check your child is up to date with their vaccinations

Vaccination is the best defence against severe illness, so to protect your child, check their red book or contact your GP to make sure that your child is up to date with all of their vaccines. You can see some of the vaccines on offer below, and the full list of vaccines your child should have on the [NHS website vaccination schedule, including the flu vaccine](#).

2 – Be aware of any local illnesses and take up any additional vaccinations your child is eligible for

You might have seen on the news that Poliovirus has recently been detected in sewage in north and east London. Polio is an illness caused by a virus that attacks the nervous system – in unvaccinated children and adults it can cause permanent paralysis.

While the risk to the public overall is extremely low, to protect children in areas where Poliovirus has been detected, an additional dose of the polio vaccine is being offered. Therefore, if your child is between 1 and 9, and lives in London, book your polio vaccine. This will provide a high level of protection from paralysis for your child and help to reduce the further spread of the virus.

3 - Teach your child how to wash their hands and cover their coughs and sneezes

The good hygiene habits that were used to slow the spread of COVID-19 are important defences against a range of other infections, including respiratory infections and stomach bugs, like norovirus.

4 - Learn about the symptoms of common infections and what you can do if they get worse

There are several common infections that your child might pick up over the winter period. In most cases, these infections will be a mild illness and can be treated at home. However, in some cases they might get worse and require medical help. Some common infections include:

Scarlet Fever <https://www.nhs.uk/conditions/scarlet-fever/>

Flu <https://www.nhs.uk/conditions/flu/>

Respiratory Syncytial Virus and Bronchiolitis <https://www.nhs.uk/conditions/bronchiolitis/>

5 - Support your child's school or nursery by keeping them off when needed

Depending on the type of infection, it may spread through respiratory droplets, direct contact between people, or via contact with a contaminated surface. This means that if your child is infectious, there is a risk they could pass it to others in their school or nursery, or amongst other members of your family.




If your child has mild respiratory symptoms, like a runny nose, sore throat, or slight cough but are otherwise well, they can continue to attend their school or nursery.

If your child has a tummy bug with vomiting and/or diarrhoea, keep them off for 48 hours after symptoms have stopped. You can learn more about norovirus, which is one very infectious tummy bug, and how to stop the spread in [5 ways to beat the bug](#).

More information about when to keep your child away from school or nursery is available here: [Is my child too ill for school? - NHS \(www.nhs.uk\)](#)

Fever and Rash advice

How is your child?

 RED	<p>If your child has any of the following features:</p> <ul style="list-style-type: none">■ Is going blue around the lips■ Too breathless to talk / eat or drink■ Becomes pale, mottled and feels abnormally cold to touch■ Becomes extremely agitated, confused or very lethargic (difficult to wake)■ Develops a rash that does not disappear with pressure (the 'Glass Test')■ Develops swollen lips, a swollen tongue and is struggling to breathe■ Is under 3 months of age with a temperature of 38°C / 100.4°F or above (unless fever in the 48 hours following vaccinations and no other red or amber features)	<p>You need urgent help. Go to the nearest Hospital Emergency (A&E) Department or phone 999</p>
 AMBER	<p>If your child has any of the following features:</p> <ul style="list-style-type: none">■ Develops a painful rash■ Develops a blistering rash■ Develops a rash affecting more than 90% of their body■ Has had chickenpox in the past few days and is now getting more unwell with a high fever and spreading red rash■ Develops red lips or a red tongue■ Develops significant skin peeling■ Continues to have a fever of 38.0°C or above for more than 5 days	<p>You need to contact a doctor or nurse today. Please ring your GP surgery or contact NHS 111 - dial 111 or for children aged 5 years and above visit 111.nhs.uk</p>
 GREEN	<ul style="list-style-type: none">■ If none of the above features is present, most children with fever and rash can be safely managed at home.■ If you think that this is a worsening of your child's eczema, optimise your child's eczema treatment or see their GP or practice nurse.	<p>Self Care Continue providing your child's care at home. If you are still concerned about your child, contact NHS 111 – dial 111 for children aged 5 years and above visit 111.nhs.uk</p>

How can I help my child?

Most rashes require no medical input and simply get better by themselves without any treatment. This includes viral rashes. If your child has a fever and is distressed, you may consider giving them paracetamol (calpol) and/or ibuprofen (although ibuprofen should be avoided if your child has chickenpox).

Some rashes require you to keep your child off from nursery or school. This includes chickenpox and scarlet fever.

More information about when to keep your child away from school or nursery is available here: [Is my child too ill for school? - NHS \(www.nhs.uk\)](https://www.nhs.uk/health-conditions/child-illness/my-child-too-ill-for-school/)

How long is the rash likely to last?

Most rashes usually appear quite quickly and only last for a few days.

What should you look out for?

Not all rashes are due to viral infections. If your child develops a rash that doesn't fade under pressure using the glass test, they need to be seen urgently by a doctor.

Other features that you should look out for painful skin rashes, blistering rashes and rashes affecting the lips and tongue.

If your child has had chickenpox in the past couple of days and is now getting more unwell with a high fever and a spreading red rash, they need to be seen urgently.

If your child appears unwell to you, in terms of being difficult to rouse, pale and floppy or if they are struggling to breath, you should have them seen urgently by a doctor.

If their temperature stays above 38°C for more than 5 days, you should also have them seen.



Typical non-specific, viral rash



The glass test: child needs to be seen urgently