

BCCA Statement on Scarlet Fever and Invasive Group A Streptococcus 06 December 2022

Current invasive Group A streptococcus (iGAS) infection notifications remain unusually high for this time of year, particularly in children. Marked increases in scarlet fever notifications are also being seen. Important links from the UK Health Security Agency are available at:

[Group A streptococcal infections: report on seasonal activity in England, 2022 to 2023](#) and [UKHSA update on scarlet fever and invasive Group A strep 2 Dec 2022](#).

The advice and guidance is likely to change as more data becomes available and updates will be provided through NHSE and the health security agency.

There has been an increase in lower respiratory tract GAS infections in children over the past few weeks in some cases causing severe illness. A high burden of co-circulating viral infections may be contributing to the increased severity and complications through co-infection. Clinicians should continue to be mindful of potential increases in invasive disease and maintain a high index of suspicion in relevant patients as early recognition and prompt initiation of specific and supportive therapy for patients with iGAS infection can be life-saving.

Urgent notification to UKHSA Health Protection Teams of iGAS infection is essential to facilitate immediate public health actions including assessment of contacts.

There are no specific recommendations for children and adults with congenital heart disease. Although an autoimmune inflammatory reaction to group A streptococcus can lead in very rare cases to rheumatic fever, to our knowledge, group A streptococcus does not cause a more severe illness in children with congenital heart disease.

Recommendations for primary care:

- Given the unusually high level of GAS, and viral co-circulation in the community, health care professionals are asked to have a low threshold to consider and empirically prescribe antibiotics to children presenting with features of GAS infection, including where secondary to viral respiratory illness.
- Consider taking a throat swab to assist with differential diagnosis or if the patient is thought to be part of an outbreak (to confirm aetiology), allergic to penicillin (to determine antimicrobial susceptibility) or in regular contact with vulnerable individuals
- Parents of children with presumed respiratory viral infection should be made aware of features suggestive of secondary bacterial infection, such as clinical deterioration, and when and how to seek further help. Safety netting advice for parents can be found [here](#).
- GPs should maintain a low threshold for prompt referral to secondary care of any children

presenting with persistent or worsening symptoms.

Recommendations for secondary care:

- Maintain a low threshold for considering pulmonary complications of GAS, especially if presenting with: an illness compatible with bacterial pneumonia, scarlet fever, GAS infection, or if GAS was recently isolated, or the patient was recently in contact with a case of scarlet fever/ GAS infection. Prompt initiation of appropriate antibiotics remains key.
- In the case of culture-negative fluid specimens, use molecular diagnostics such as GAS-specific PCR or 16S rDNA PCR, as guided by microbiology specialists.
- Clinicians are further reminded of the importance of rapid notification of all cases of severe GAS infection (including pneumonic complications/ empyema) to Health Protection Teams to facilitate rapid assessment of contacts and identification of epidemiological links with other cases, as per national public health guidelines.
- Severe GAS cases encompass cases of invasive disease (iGAS) defined through the isolation of GAS from a normally sterile site, plus additional cases where GAS is isolated from a non-sterile site in combination with clinical signs consistent with a severe infection (streptococcal toxic shock syndrome, pneumonia, necrotising fasciitis, puerperal sepsis, meningitis, septic arthritis). This includes cases diagnosed via culture or molecular methods.

Advice for parents:

Scarlet fever is caused by bacteria called group A streptococci. These bacteria also cause other respiratory and skin infections such as strep throat and impetigo.

Scarlet fever is usually a mild illness, but it is highly infectious. Therefore, look out for symptoms in your child, which include a sore throat, headache, and fever, along with a fine, pinkish or red body rash with a sandpapery feel. On darker skin, the rash can be more difficult to detect visually but will have a sandpapery feel. Contact NHS 111 or your GP if you suspect your child has scarlet fever, because early treatment of scarlet fever with antibiotics is important to reduce the risk of complications such as pneumonia or a bloodstream infection. If your child has scarlet fever, keep them at home until at least 24 hours after the start of antibiotic treatment to avoid spreading the infection to others.

In very rare occasions, the bacteria can get into the bloodstream and cause an illness called invasive Group A strep (iGAS).

There are lots of viruses that cause sore throats, colds and coughs circulating. These should resolve without medical intervention. However, children can on occasion develop a bacterial infection on top of a virus and that can make them more unwell.

As a parent, if you feel that your child seems seriously unwell, you should trust your own judgement. Contact NHS 111 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 38°C, or is older than 3 months and

has a temperature of 39°C 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

Further information:

1. [Streptococcus A and scarlet fever - Healthier Together advice.](#)

Healthier Together website: This includes an excellent traffic light guideline and graphics of strep A infection

2. [Group A streptococcus- What you need to know - HSA advice.](#)

Health Security Agency website.

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