



Serial number 2022/073

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Event: Persistently high incidence of scarlet fever and invasive group A streptococcus above seasonally expected levels

Notified by: HCAI, Fungal, AMR, AMU & Sepsis Division, UK Health Security Agency

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NIERP Level: Routine

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Background and Interpretation:

The incidence of invasive group A streptococcus (iGAS) is higher than expected for this time of year. Notifications have increased in 2022 returning to pre-pandemic levels and reaching a similar level to the last high incidence year of 2018. The increase has been prominent in children under 10 years, with 316 cases in England from January to July 2022, compared with 22 for the same period last year (302 in 2018). Several deaths attributed to iGAS in children <10y have been seen, but no evidence to date of an increase in case fatality rate.

Of concern is the unusual seasonal pattern. Spring activity did not decrease over the summer and sustained high levels continued into June-July. Early indications suggest a possible decline in cases in children in August, although these may rise with start of the school term. Cases in adults (>15y) for the first half of 2022 have been considerably lower than for 2018 (700 vs 1663 for Jan-June), although showing a concerning rise in July and into August.

Whilst *emm* 12 has been dominant in the first half of the year, *emm* 1.0 is currently increasing rapidly in all age groups; this strain type is historically associated with population increases in iGAS infection.

Scarlet Fever notifications are also higher than expected for this time of year, having followed a similar trend to iGAS infection, with rising incidence through April-June followed by a high plateau; early indications of a decline in August are noted.



Implications and recommendations for UKHSA Regions

It is likely that the unusual seasonal pattern of scarlet fever and iGAS infection will continue. HPTs are asked to be aware of the unusual seasonal pattern and the uncertainty around the expected levels in the coming months as schools reopen. HPTs should be prepared to raise awareness among stakeholders, according to local risk assessment, so that they are aware of the unusual seasonal pattern and consider scarlet fever and iGAS infection. Stakeholders may include GPs, A&E departments, Microbiologists, Infectious Disease Consultants, Directors of Public Health, and educational professionals. Draft letters are available in the appendices of the scarlet fever outbreak guidance that can be adapted for local use, available [here](#). More detailed epidemiological analysis will be published in a GAS seasonal activity update in the Health Protection Report in the coming weeks, along with further communications.

Communication with health professionals should make them aware of the available guidance and the need to take the following actions if scarlet fever or other GAS presentations are suspected:

- prescribe an appropriate treatment course of antibiotics promptly (this should not await the results of any swabs taken) to reduce risk of complications and onward transmission
- advise exclusion from nursery / school / work for at least 24 hours after the commencement of appropriate antibiotic treatment
- consider taking a throat swab to assist with differential diagnosis, for example to differentiate scarlet fever from measles or rubella, or if the patient is:
 - thought to be part of an outbreak
 - allergic to penicillin (GAS can be resistant to macrolides and clindamycin; determining antimicrobial susceptibility will facilitate an appropriate treatment).
 - in regular contact with vulnerable individuals e.g. health and adult social care workers (people vulnerable to invasive GAS include those who are immunocompromised, have comorbidities, women in the late stage of pregnancy, or those with skin diseases).

Guidance for HPTs on management of scarlet fever outbreaks in schools and nurseries is available [here](#).

Guidance for managing close contacts of invasive GAS disease and prevention of GAS infection in acute healthcare and maternity settings are available [here](#).

Guidance for health protection in education and childcare settings is available [here](#).

Information for the public on scarlet fever is available [here](#) and sepsis is available [here](#).



Implications and recommendations for UKHSA sites and services

UKHSA lead public health laboratories may receive increased numbers of throat swabs from scarlet fever cases and outbreaks. The HPT may request free typing on outbreak isolates which can be performed at the Staphylococcus and Streptococcus Reference Section, AMRHAI. Please inform the reference laboratory that samples are part of an outbreak, to expedite processing and avoid service charges.

Implications and recommendations for local authorities

Local Authority Directors of Public Health are asked to be aware of the unusual seasonal pattern of scarlet fever and iGAS infection and the uncertainty around the expected levels in the coming months and be prepared to raise awareness among nurseries, schools and school nurses to remind them of the available guidance and the importance of promptly notifying outbreaks to HPTs. Draft letters are available in the appendices of the scarlet fever outbreak guidance that can be adapted for local use.

References/ Sources of information

1. Guidelines for the public health management of scarlet fever outbreaks in schools, nurseries and other childcare settings:
<https://www.gov.uk/government/publications/scarlet-fever-managing-outbreaks-in-schools-and-nurseries>
 2. Guidance for managing close contacts of invasive GAS disease and prevention of GAS infection in acute healthcare and maternity settings are available
<https://www.gov.uk/government/collections/group-a-streptococcal-infections-guidance-and-data>
 3. Guidance for Health protection in education and childcare settings
<https://www.gov.uk/government/publications/health-protection-in-schools-and-other-childcare-facilities>
 4. Information for the public on scarlet fever <https://www.nhs.uk/conditions/scarlet-fever/> and sepsis <https://www.nhs.uk/conditions/sepsis/>
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