

Serial number: BN2025/030 Date: 04/08/2025

Event: Referrals of group A, B, C and G streptococcal isolates to the

Staphylococcus and Streptococcus Reference Section (SSRS)

Notified by: Lee Major- Director of Public Health Microbiology

Kartyk Moganeradj- Head, Staphylococcus and Streptococcus

Reference Section (SSRS)

Katie Hopkins- Lead Clinical Scientist, Antimicrobial Resistance

& Mechanisms Service (ARMS)

HCAI & AMR Division

Authorised by:

Derren Ready- Deputy Director, Public Health Microbiology, Reference Services Colin Brown, Deputy Director, Antimicrobial Resistance & Healthcare Associated Infections

Renu Bindra- Strategic Response Director Jorg Hoffmann- Regional Deputy Director

Laura Woodward, Senior Communications Manager

Contact: Kartyk.moganeradj@ukhsa.gov.uk

Katie.hopkins@ukhsa.gov.uk Theresa.lamagni@ukhsa.gov.uk Colin.brown@ukhsa.gov.uk

Instructions for Cascade

Please note, notes are routinely cascaded to the below groups:

- UKHSA Private Office Groups to cascade within Groups
- Devolved Administrations to cascade to Medical Directors and other DA teams as appropriate to their local arrangements
- Regional Deputy Directors to cascade to Directors of Public Health
- **UKHSA microbiologists** to cascade to non-UKHSA labs (NHS and private)
- CPHIs / UKHSA microbiologists to cascade to NHS Trust infection leads NHS and private-sector laboratories/ NHS infection leads/NHS microbiologist/NHS infectious disease specialists who may be involved in the testing and treatment of suspected cases of Group A, B, C & G Streptococcal infections

Summary:

The purpose of this Briefing Note is to remind colleagues of the request to submit all Group A (GAS), Group B (GBS), Group C (GCS) and Group G (GGS) streptococcal isolates associated with invasive disease to the UKHSA *Staphylococcus* and

Streptococcus Reference Section (SSRS), Antimicrobial Resistance and Healthcare Associated Infections (AMRHAI) Reference Unit. Isolates from non-invasive disease should only be submitted if linked to an outbreak investigation or when associated with severe clinical presentation. The samples from both sterile and non-sterile sites, linked to outbreaks and/or accompanied with severe clinical presentations will not be charged.

Background and Interpretation:

Typing of isolates from group A, B, C and G streptococcal invasive disease enhances surveillance, and informs outbreak detection, management and investigation. Submission of Group C and Group G *Streptococcus* spp. assists with identification and investigation of outbreaks. Atypical strains (*Streptococcus dysgalactiae* subsp. *equisimilis*) expressing Group A streptococcal antigen have been associated with outbreaks in England. Additionally, given the advanced stage of Group B *Streptococcus* (GBS) vaccine development, submission of GBS isolates is particularly important in providing information on clinical impact and cost-effectiveness of GBS vaccination.

We would like to remind colleagues of the request to submit all isolates of group A *Streptococcus*, group B *Streptococcus*, group C *Streptococcus* and group G *Streptococcus* from patients with an invasive disease, as included in the following documents: UK Standards for Microbiology Investigations (UK SMI) ID4: Identification of *Streptococcus* species, *Enterococcus* species and morphologically similar organisms, UK SMI B58: Detection of carriage of Group B Streptococci (*Streptococcus agalactiae*), and the UK public health guidance for GAS in community (Invasive group A streptococcal disease: managing close contacts in community settings) and healthcare settings.

Referral of isolates to SSRS from non-invasive disease should be accompanied by notification that isolates are linked to outbreak investigation, or severe clinical presentation, on the H3 (multiple isolates) or H4 (single isolate) SSRS referral forms to avoid any charges. Isolates from non-invasive disease which are not associated with an outbreak, or a severe clinical presentation, are chargeable.

The SSRS is also able to undertake whole genome sequencing (WGS) to determine genomic relatedness between epidemiologically linked isolates, to confirm or refute transmission patterns. Genomic relatedness assessment is currently undertaken upon request to support outbreak investigations.

Implications & Recommendations for UKHSA Regions:

UKHSA regional teams are asked to use their DIPC, microbiology and laboratory networks to share information in this briefing note for further cascade.

Implications & Recommendations for UKHSA sites and services:

UKHSA Consultants in Public Health Infection (CPHI) and UKHSA microbiologists are asked to support cascade to NHS and other non-UKHSA labs, as well as NHS Trust IPC Leads.

Implications & recommendations for NHS, private laboratories, Devolved Administrations:

The following instructions also includes private laboratories and devolved administrations.

As per the previous Briefing Note <u>2022/101</u> and the UKHSA Bacterial Reference Department (BRD) <u>user manual</u>, all iGAS, iGBS, iGCS and iGGS isolates in England, Wales and Northern Ireland, including isolates from non-sterile sites if they are associated with a severe clinical presentation, should be sent to the UKHSA SSRS, AMRHAI Reference Unit, Public Health Microbiology Division, as part of ongoing surveillance.

In addition, GAS, GBS, GCS and GGS exhibiting exceptional resistance phenotypes should be referred to the UKHSA Antimicrobial Resistance & Mechanisms Service, AMRHAI Reference Unit for confirmation; that is, isolates that are resistant to penicillin according to EUCAST clinical breakpoints v.15.0 (groups A, C and G: MIC >0.03 mg/L or zone diameter <23 mm; group B: MIC >0.125 mg/L or zone diameter <18 mm), exhibit resistance to cephalosporins, vancomycin, teicoplanin, telavancin, dalbavancin, daptomycin, linezolid, tedizolid, quinupristin-dalfopristin, fluoroquinolones or tigecycline. Guidance on how to do this is in the BRD user manual.

In Scotland, all GAS isolates from sterile sites should be submitted to the Scottish Microbiology Reference Laboratories (SMiRL), Glasgow, for typing. Isolates from non-sterile sites may also be submitted if they are associated with a severe clinical presentation, such as streptococcal toxic shock syndrome (STSS) or necrotising fasciitis. In addition, the SMiRL request that they be contacted with regards to all suspected or confirmed GAS outbreaks in acute health care or maternity settings and the isolates submitted for typing. Group B, C and G streptococcal isolates should be sent to UKHSA, if further typing is required.

References/ Sources of information:

- 1. <u>Staphylococcus and streptococcus reference service: single isolate referral form (H4).</u>
- 2. <u>Staphylococcus and streptococcus reference service: multiple isolates referral form (H3).</u>
- 3. <u>Invasive group A streptococcal outbreaks associated with community health services delivered at home, January 2018 to September 2019</u>
- 4. <u>UK Standards for Microbiology Investigations (Identification)</u>, Identification of Streptococcus species, Enterococcus species and morphologically similar organisms ID4, Issue number: 4
- 5. <u>UK Standards for Microbiology Investigations (Bacteriology)</u>, Detection of Carriage of Group B Streptococci (Streptococcus agalactiae) B58, Issue no: 3.1.
- 6. <u>UK guidelines for the management of contacts of invasive group A</u> streptococcus (iGAS) infection in community settings
- 7. Bacteriology reference department user manual.
- 8. <u>Scottish Microbiology Reference Laboratories website</u>. User manuals and service request forms can be found here.