Infection report

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Group A streptococcal infections: first report on activity during the 2015/16 season

Following the substantial elevation in scarlet fever notifications last two seasons, indications from the early part of this 2015/16 season continue to show elevated levels of activity, similar to the same period last year [1].

The seasonal levels of invasive group A streptococcal (iGAS) disease appear elevated compared with what would normally be expected at this low point within the season, which may be suggestive of the seasonal peak occurring earlier than in previous seasons. Close monitoring is recommended due to the potentially severe outcomes of iGAS disease.

Scarlet fever

So far this season, scarlet fever activity is showing a similar pattern to previous years, with gradually increasing numbers of notifications each week. A total of 2155 scarlet fever notifications have been made so far this season (figure 1; weeks 37 to 50 2015). This pattern varies geographically; most areas are reporting the same levels as this time last year, however a few areas are showing elevated levels of notifications compared to the same period last year.

The age distribution of scarlet fever cases reported to date remains similar to previous years, with 89% of cases reported in children under 10 years of age (median 4y; range <1y to 93y).

Figure 1. Weekly scarlet fever notifications in England, 2010/11 onwards*

* Dashed line indicates that numbers may increase as further notifications expected.
Invasive Group A Streptococcus

Laboratory reports of iGAS disease notified through routine laboratory surveillance in England so far this season total 326 cases (week 37 to 49 2015), higher than the average for the previous five years (223 reports) or the range seen during these years (188 to 256; figure 2).

The median age of patients with iGAS infection so far this season is 49 years (range <1y to 99y), which is lower than was reported at the same point last season (61y) as well as the preceding five seasons (56.5y to 63y last five seasons). Twenty per cent of infections reported so far this season are in children (<15y), within the range of what has been reported at the same point in the previous 5 seasons (average 14%; range 12% to 20%).

Analysis of iGAS emm strain diversity remains similar to what is normally seen with emm st1 and emm st12 and emm st89 the most common types identified so far this season.

Figure 2. Weekly laboratory reports of invasive GAS infection, England, 2010/11 onwards*

![Graph showing weekly laboratory reports of invasive GAS infection, England, 2010/11 onwards.]

* Dashed line indicates that numbers may increase as further isolates expected

The number of cases of iGAS disease notified through routine laboratory surveillance in England was slightly elevated last season compared with levels normally seen, and the slight elevation so far this season is a concern. Clinicians, microbiologists and Health Protection Teams 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.

Since the peak in scarlet fever notifications reported in the 2013/14 season, levels of scarlet fever have remained elevated. Whilst this might reflect heightened awareness and improved diagnosis and/or notification practices, the reasons behind this increase are unclear but may be
attributable to long-term natural cycles in disease incidence. Close monitoring, rapid and decisive response to potential outbreaks remains essential given the potential complications associated with GAS infections.

Invasive disease isolates and those from suspected clusters/outbreaks should be submitted to the Respiratory and Vaccine Preventable Bacteria Reference Unit at Public Health England, 61 Colindale Avenue, London NW9 5HT. Relevant guidelines/FAQs are available on the PHE website, as follows:

- Guidelines on infection control in schools and other childcare settings, including recommended exclusion periods for scarlet fever and guidelines on management of scarlet fever outbreaks, can be found at: https://www.gov.uk/government/publications/scarlet-fever-managing-outbreaks-in-schools-and-nurseries

- FAQs on scarlet fever can be found at: https://www.gov.uk/government/collections/scarlet-fever-guidance-and-data

- Guidelines for the management of close community contacts of invasive GAS cases and the prevention and control of GAS transmission in acute healthcare and maternity settings are also available here: https://www.gov.uk/government/collections/group-a-streptococcal-infections-guidance-and-data

Reference