

NHS Choices: Financial year (April 2008 to March 2009) reports and rates of MRSA bacteraemia in elective patients, October 2009

Overview of Data

- Data are reported from 167 NHS acute Trusts. This data will also be published on the NHS Choices website (www.nhs.uk).
- This publication only includes information on cases of MRSA bacteraemia for patients admitted on an **elective** basis to NHS acute Trusts. These cases constitute a small proportion (approximately 7%) of the total number of reported MRSA bacteraemia cases in England for FY 2008/09 (193 of the 2,935 cases reported).
- In the financial year April 2008 to March 2009, a total of 193 reports of MRSA bacteraemia were reported in elective patients, with a rate of 0.3 cases per 10,000 elective bed days.
- A total of 51% (85) NHS acute Trusts did not report any “elective” MRSA bacteraemias in financial year 2008/09. The remaining 49% of Trusts reported MRSA bacteraemia numbers ranging from 1 to 14.
- Of the six Trust categories the largest proportion of reports come from acute Teaching Trusts (44%) while the lowest proportion can be found in acute specialist and acute specialist children’s Trusts (approximately 3.5% in each category).

Definition of Elective Admission

- An elective admission can be defined as one that has been arranged in advance. It is distinct from an emergency admission, a maternity admission or a transfer from a Hospital bed in another health care provider.
- All records submitted to the HPA with an ‘admission category’ of either ‘Planned (deferred)’ or ‘Waiting list’ are classed as elective admissions.

Appendix 1 – Format of the results:

The data tables contain data based on reports of meticillin-resistant *Staphylococcus aureus* (MRSA) isolated from blood cultures in English NHS acute Trusts. Data are reported to the HPA via a web-enabled mandatory surveillance system. This surveillance is operated by the HPA on behalf of the Department of Health.

- The MRSA bacteraemia infection rate per 10,000 bed days for each Trust was calculated as follows:

$$\text{Trust Rate} = \left[\frac{\text{Number of elective MRSA bacteraemia reports from that Trust for the time period}}{\text{Number of elective bed days in the time period}} \right] \times 10,000$$

- The denominator used is based upon bed days calculated using Hospital Episode Statistics (HES) data. This exercise was undertaken in conjunction with the Department of Health.
- For each finished episode within a Trust where the method of admission was 'elective', the episode start date was subtracted from the episode end date to produce an episode length in days. These were then totalled over the Trust.
- At the time of publication the latest available HES data are for the financial year 2007/08 (April to March).
- The Wilson score method without continuity correction was used to calculate 95% confidence intervals.
- Confidence intervals are included to indicate the inherent variability of the Trust level rate estimates. A confidence interval gives an estimated range of values that should include a particular parameter. A confidence interval is calculated to a given probability (95% in the current table).

Appendix 2 – Caveats and Health Warnings:

- Data were extracted from the HPA's data capture system on 20th August 2009. Changes and updates to the data since this date will be reflected in any subsequent publications.
- Data are collected at Trust level and are not published for individual hospitals within a Trust.
- This publication includes elective MRSA bacteraemia counts and rates only. NHS Choices routinely publish a set of elective scorecards for patients to view when considering where to go for a particular operation. The elective rate is a more relevant measure to patients in this situation.

These data should not be used as the basis for decisions on the clinical effectiveness of interventions in individual Trusts without further investigations. It is also important to note that MRSA-positive blood cultures are reported by the Trust whose laboratory processes the specimen, which may not always reflect where the bacteraemia was acquired.