

Results of the first year of mandatory-Glycopeptide-Resistant Enterococci (GRE) reporting: October 2003 to September 2004

Introduction

Reporting of bacteraemia caused by Glycopeptide-Resistant Enterococci (GRE) has been mandatory for NHS acute Trusts in England since September 2003(1). This scheme is operated by the Health Protection Agency on behalf of the Department of Health. Data are requested quarterly from each of the 173 acute NHS Trusts in England by Health Protection Agency (HPA) Local and Regional Services Division (LARS) and collated and analysed by the Centre for Infections (Cfi - HPA).

This report describes the data collected during the first year of the mandatory surveillance scheme, October 2003 to September 2004.

The National Glycopeptide-Resistant Enterococcal Bacteraemia Surveillance Working Group recommended that the significance of blood cultures containing GRE should be assessed clinically². If a bacteraemia is found to be clinically significant and due to either a GRE or a GRE and other non-GRE organism(s), it should still be reported as a GRE bacteraemia.

Positive blood cultures from the same patient within 14 days of the initial culture are considered to be part of the original episode and should not be reported. All subsequent positive blood cultures more than 14 days apart should be reported as these are considered to be new episodes.

Enterococci from blood cultures should be tested for susceptibility to the antibiotic vancomycin. Teicoplanin is not an acceptable alternative to vancomycin for these purposes.

Methods

GRE reports are displayed here as total reports by quarter, by region, and also by Trust category. NHS acute Trusts are categorised according to type. This is based on the Trust types used for the *Staphylococcus aureus* mandatory surveillance scheme and agreed with HPA regional offices.

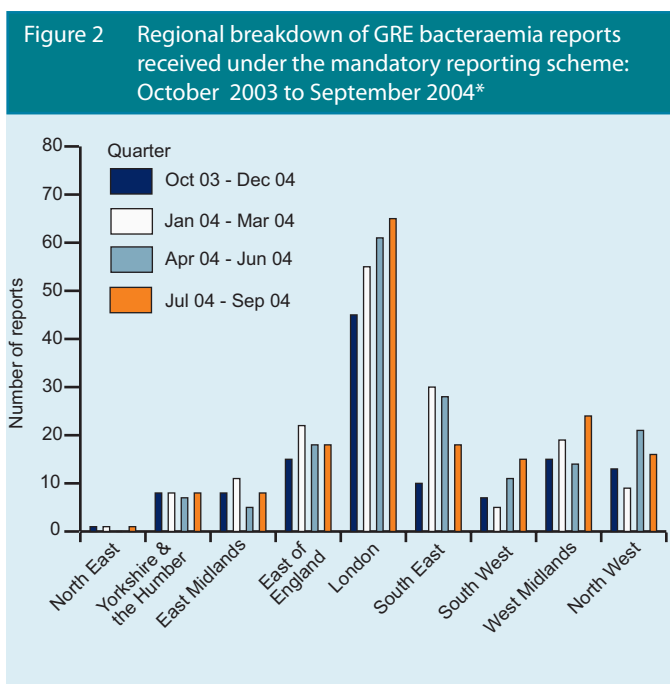
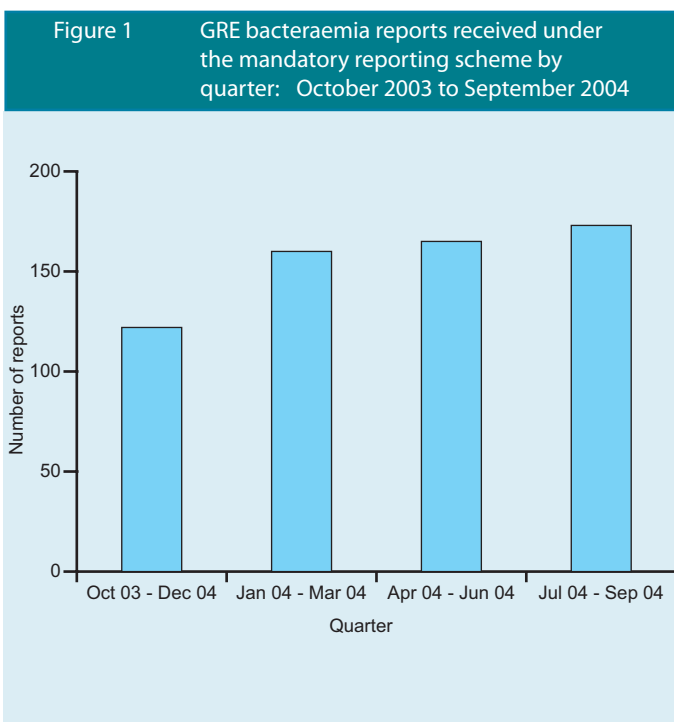
The three types of Trusts (and number of Trusts that reported in each category) are:

- **General Acute Trusts (109):** Trusts providing general acute healthcare services;
- **Specialist Trusts (45):** Trusts with specialist services which receive patients referred from other Trusts for these services;
- **Single Specialty Trusts (17):** Trusts undertaking health services for a particular specialty (eg, orthopaedics).

Results

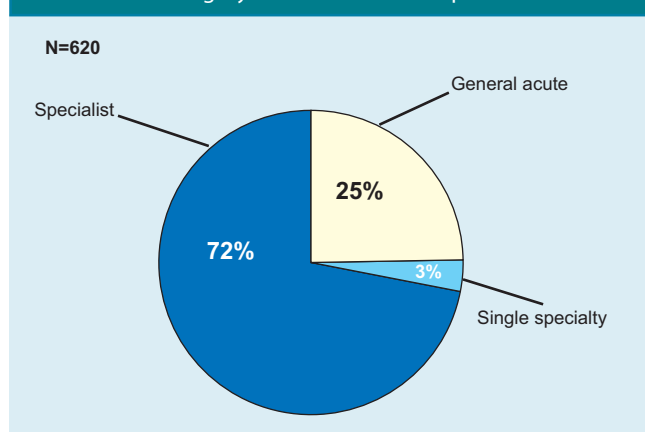
Between October 2003 and September 2004 the Health Protection Agency received 620 reports concerning GRE bacteraemia under the mandatory scheme, from 171 out of 173 acute NHS Trusts (two Trusts did not provide any data):

- Ninety-six Trusts reported at least one case of GRE bacteraemia during the year, but only fourteen Trusts reported more than ten cases of GRE bacteraemia.
- Seventy-five Trusts reported no cases of GRE bacteraemia.



*All data are provisional.

Figure 3 GRE bacteraemia reports received under the mandatory reporting scheme by Trust category: October 2003 to September 2004



A distribution of reports by quarter is shown in figure 1. The total number of reports appears to have increased each quarter, however, this pattern is not observed in each region, as shown by the regional breakdown in figure 2.

A direct comparison of the number of reports across regions is not possible as there is considerable variability in regional population sizes. Within regions, Trust mix is varied with differing numbers of General Acute, Specialist and Single Specialty hospitals. Figure 3 shows the percentages of reports by Trust category. The greatest number of reports was received from specialist Trusts, although specialist Trusts make up only 26% of the reporting Trusts.

Discussion

The quarterly increase in number of GRE bacteraemia reports observed in figure 1 is not observed across all regions. It should be noted that regions are not equal in population size and differ in their Trust mix with differing numbers of General Acute, Specialist, and Single Specialty Trusts. Most Trusts reported less than ten or, in many cases, no cases of GRE bacteraemia during the year.

At the Trust level, the number of GRE bacteraemia reports is affected by the case mix i.e. the types of patients treated which may be dependent on the specialist units that exist within a particular Trust.

GRE bacteraemia occurs mainly on specialist units, particularly transplantation, renal, haematological malignancy, and intensive care units (2). Since most GRE bacteraemia are likely to be associated with specialist units, the National Glycopeptide-Resistant Enterococcal Bacteraemia Surveillance Working Group recommended that reports of GRE bacteraemia should indicate the specialty in which the patient acquired the infection (2). Specialty data allowing analysis by case mix was not collected consistently during the first year of surveillance. Methodology for the collection of specialty data will be further developed for the third year of this surveillance scheme (starting October 2005).

It should also be noted that the patient may also have acquired the GRE infection in the community or while in another healthcare facility, however, the proportion of community versus hospital-acquired GRE bacteraemia are

not assessed in this scheme. Mandatory data concerning numbers and rates of GRE bacteraemia reported by individual NHS Trusts are published at: <http://www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsPolicyAndGuidance/PublicationsPolicyAndGuidanceArticle/fs/en?CONTENT_ID=4118347&chk=IFi3Za>.

Further information about GRE can be found on the HPA website at <http://www.hpa.org.uk/infections/topics_az/enterococci/default.htm>.

The most recent *CDR Weekly* report concerning *Enterococcus* spp bacteraemia data collected via the voluntary surveillance scheme can be found at <http://www.hpa.org.uk/cdr/archives/2005/Bact_Ent_1105.pdf>.

Acknowledgements

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References

1. Department of Health (Chief Medical Officer and Chief Nursing Officer) Surveillance of Healthcare Associated Infections (PL/CMO/2003/4; PL/CNO/2003/4) (*Letter*). London: Department of Health, 9 June 2003. Available at: <<http://www.dh.gov.uk/assetRoot/04/01/34/10/04013410.pdf>>.
2. HPA. National glycopeptide-resistant enterococcal bacteraemia surveillance working group. London: Department of Health, August 2004. Available at: <<http://www.hpa.org.uk/infections/publications/pdf/GRE%20act%20surveillance%20final%20Aug04.pdf>>.