



Health Protection Report

weekly report

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Increasing norovirus activity in the community, September/October 2008

Surveillance evidence suggests that norovirus cases in the community are rising and that the annual 'norovirus season' is likely to have begun. In the past, rises of reports of norovirus from children in the community have preceded outbreaks in healthcare settings. Therefore, those working in infection control in hospitals and nursing homes should be aware of the increase in the community cases and should respond quickly to cases of vomiting and diarrhoea. Precautions to prevent the spread of enteric viruses should be emphasised. Published guidelines are available [1] and should be used to prevent and control outbreaks of diarrhoea and vomiting.

Norovirus is the most common cause of gastrointestinal disease in the UK. During the winter months, from October to March, increasing numbers of norovirus-related cases and outbreaks are reported. Norovirus is highly infectious and easily spread in settings where people are in close contact with one another.

In the past, early detection of the seasonal rise in cases has been difficult due to the inherent delays in laboratory reporting. However, collaborative work between the Health Protection Agency's Centre for Infections (Cfi), HPA West Midlands and NHS Direct has led to the development of new tools to determine when the norovirus season has begun in the community. This has been achieved by analysing historic data on laboratory reports to Cfi and calls to NHS Direct about vomiting in children under five. Once other causes of increased calls (mainly rotavirus) have been excluded, calls about vomiting in this age group are a reliable early indicator of norovirus outbreaks in healthcare settings. Data from the past three weeks indicates that the number of calls for vomiting in children under five (excluding those estimated to be due to rotavirus) has followed a rising trend. Vomiting calls to NHS direct exceeded 4% of all call volume in week 40.

Q Surveillance® data on diarrhoea and vomiting GP consultations have also shown a recent increase. The over level of calls and consultations is not higher than expected for this time of year and is not indicative of higher than normal seasonal activity.

References

1. Chadwick PR, Beards G, Brown D, Caul EO, Cheesbrough J, Clarke I, et al. Management of hospital outbreaks of gastro-enteritis due to small round structured viruses. *Journal of Hospital Infection* 2000; **45**: 1-10. Available at http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1194947408355
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Pathogenic arenavirus causes three deaths in South Africa, ex Zambia

Four human cases of arenavirus infection, three of whom have died, have been identified in South Africa since 12 September 2008. The virus is related to the Lassa fever virus, and although arenaviruses have previously been isolated in southern Africa, they have not been associated with human disease.

The index case, a 36 year old female, working in the tourism sector and based in Lusaka, Zambia, was medically evacuated to South Africa with an undiagnosed illness on 12 September 2008 and died in a Johannesburg hospital on 14 September [1, 2]. She was reported to have had close contact with horses and a possible history of tick exposure [3, 4]. Two further deaths were reported – on 2 October and 5 October – among medical staff who had had direct contact with infected body fluids from the index case [5]. All three patients experienced a fever, headache, diarrhoea and myalgia, developing into rash and hepatic dysfunction with rapid deterioration before death. There was no significant bleeding [1]. A fourth case, confirmed by PCR, who worked with one of the secondary cases, is undergoing treatment. The incubation period for cases ranges from 7-13 days [5]. Laboratory results for a cleaner who died and had performed terminal cleaning of the room of the index case are awaited.

Tests at the National Institute for Communicable Diseases (NICD) in South Africa and the Centre for Disease Control (CDC) in the United States have proved negative for a range of viral haemorrhagic fevers including Crimean-Congo haemorrhagic fever, Lassa fever, Ebola, Marburg, Rift Valley fever and Hantavirus. In addition, patients tested negative for malaria, leptospirosis and rickettsia [3]. Preliminary investigations have detected an arenavirus in tissue and blood samples from the fatal cases. Further analysis and characterisation of the virus is on-going and contacts of the cases are being traced in South Africa and Zambia.

Specific advice for travellers to Zambia and South Africa is available at:
http://www.nathnac.org/pro/clinical_updates/arenavirus_151008.htm

References

1. WHO Epidemic and Pandemic Alert and Response, 10 October 2008:
http://www.who.int/csr/don/2008_10_10/en/index.html

2. WHO Epidemic and Pandemic Alert and Response, 13 October 2008:
http://www.who.int/csr/don/2008_10_13/en/index.html

3. NICD, Communicable Disease Communique: outbreak of an acute disease,

ex-Zambia, October 2008, vol 7, alert (1):

http://www.nicd.ac.za/pubs/communique/2008/NICDSpecialCommOct_alert01.pdf

4. ECDC Threat Assessment, 10 October 2008:

http://ecdc.europa.eu/en/files/pdf/Health_topics/20081010_unknown_disease_Zambia-Final.pdf

5. Promed, 13 October 2008:

http://www.promedmail.org/pls/otn/f?p=2400:1001:3263212593792122::NO::F2400_P1001_BACK_PAGE,F2400_P1001_PUB_MAIL_ID:1000,74355

Expert Advisory Group on AIDS – vacancies for members

The Expert Advisory Group on AIDS (EAGA) is an advisory non-departmental public body whose role is to provide independent expert scientific advice to the Chief Medical Officers of the United Kingdom on HIV/AIDS.

EAGA has vacancies for three expert members: a consultant virologist, a genitourinary medicine/HIV nurse consultant, and a representative of black and minority ethnic groups affected by HIV.

Members of EAGA must be knowledgeable about, and experienced in, the area of HIV/AIDS and have an outstanding record of achievement in their own field. Excellent interpersonal and communication skills are essential. All members have a collective responsibility for the operation of EAGA and members actively participate in reviewing scientific data and in producing or contributing to papers presented to the Group.

Information about the application procedure for these vacancies, for which the closing date is Monday 3 November 2008, is available on the Appointments Committee website at:
http://www.appointments.org.uk/view_vac.asp?ID=2295.

Further information about the EAGA is available at: <http://www.advisorybodies.doh.gov.uk/eaga/index.htm>

Infection reports

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Bacteraemia

Results of the voluntary reporting scheme for bacteraemia due to *Enterococcus* spp, England, Wales and Northern Ireland: 2003 to 2007

There was an approximately 2% decrease in the total number of voluntary reports for bacteraemia due to *Enterococcus* spp (including Group D streptococci) in 2007 (7789 reports) compared to 2006 (7947 reports) under the reporting scheme that has been in operation since 2003.

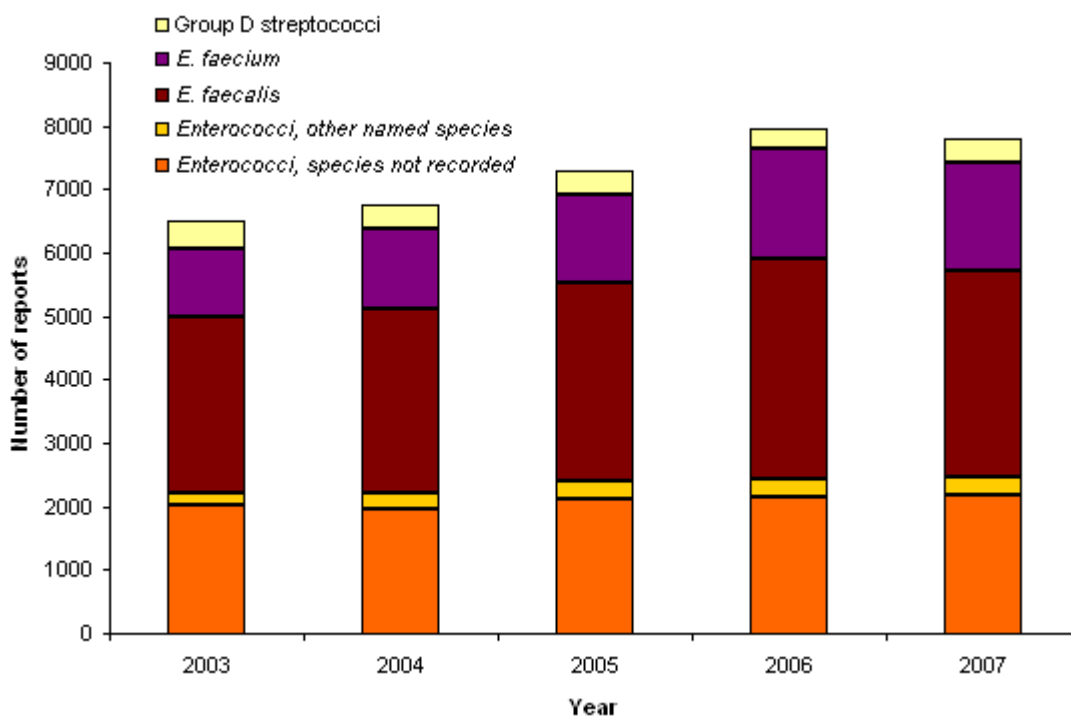
This follows three years during which the annual number of voluntarily reported cases of these infections had been rising (figure 1); the number of reports of bacteraemia due to *Enterococcus* spp, was 20% higher than in 2003.

The increase in the number of all bacteraemia voluntarily reported over the same period was 25% (86,176 cases in 2003 and 108,298 in 2007).

The increased level of reporting in recent years may either be due to increased incidence and/or increased ascertainment.

This report covers reports made to the Health Protection Agency from laboratories in England, Wales, and Northern Ireland. Age-specific rates of enterococcal bacteraemia were calculated using Office of National Statistics 2007 mid-year resident population estimates as the denominator. Data were extracted on 18 September 2008, by which time 2007 data should have been nearly complete. Data were analysed and displayed according to current regional boundaries and are provisional. Where the percentage resistance to a specific antibiotic is given, the denominator excludes those reports without any susceptibility information for that antibiotic.

Figure 1. Enterococcal and non-enterococcal group D streptococcal bacteraemia reports: 2003 to 2007*

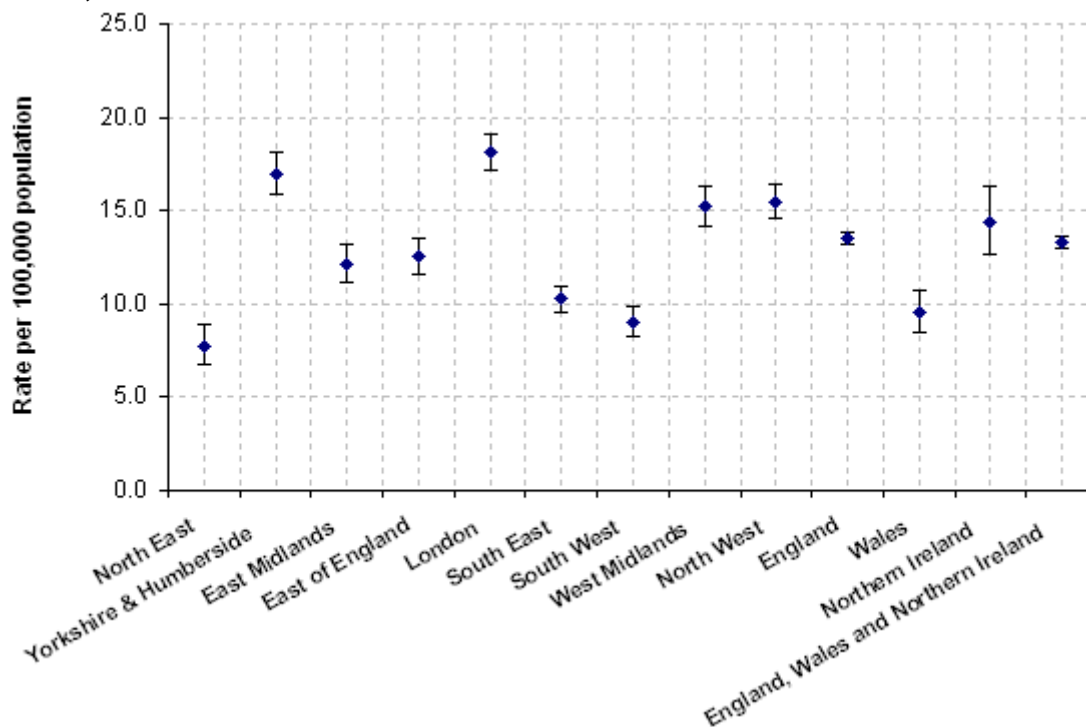


* Data extracted on 18 September 2008.

Key points of the analysis of 2007 data

- ▶ London accounts for the highest rates (18.08 per 100,000 population) of *Enterococcus* spp. bacteraemia in 2007, whereas the North East region reports the lowest rates (7.76) per 100,000 population) (figure 2).

Figure 2. Region-specific rates of *Enterococcus* spp bacteraemia: England, Wales and Northern Ireland, 2007*



* Data extracted on 18 September 2008.

- ▶ Rates of *E. faecalis* and *E. faecium* bacteraemia are higher in males than females of the equivalent age.
- ▶ The total number of reports for *E. faecalis* bacteraemia that contain susceptibility data for at least one antimicrobial agent has increased by 17% over the last four years (from 2765 reports in 2003 to 3229 reports in 2007).
- ▶ The total number of reports for *E. faecium* bacteraemia that contain susceptibility data for at least one antimicrobial agent has increased by 61% over the last four years (from 1067 reports in 2003 to 1718 reports in 2007).

In addition to voluntary surveillance of enterococcal bacteraemia, mandatory surveillance of bacteraemia specifically due to glycopeptide-resistant enterococci (GRE) commenced in October 2003. The most recent publication of these results can be found on the HPA website at:

<http://www.hpa.org.uk/web/HPAweb&Page&HPAwebAutoListName/Page/1191942126541>.

Information on the mandatory GRE bacteraemia surveillance scheme can be found at:

<http://www.hpa.org.uk/web/HPAweb&Page&HPAwebAutoListName/Page/1191942125810>.

Further data tables and graphs about *Enterococcus* spp. bacteraemias, England, Wales, and Northern Ireland: 2003 to 2007 can be viewed at:

<http://www.hpa.org.uk/web/HPAweb&Page&HPAwebAutoListName/Page/1202115520800>.

Chemical hazards and poisons

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Chemical Hazards and Poisons Report – Issue 13

At the time of the Health Protection 2008 conference in Warwick last month, the HPA Centre for Radiation, Chemical, and Environmental Hazards published the latest edition of its regular report on chemical incident management and related research activities. Among the themes covered by articles in this issue are:

- ▶ the development of a best practice methodology to assist Health Protection Units dealing with carbon monoxide incidents. This includes an algorithm, currently being tested, to facilitate decision-making from the time of identification of a carbon monoxide hazard situation until the incident area is declared safe;
- ▶ the development of a mapping technique, involving satellites that track small movements in the earth's crust, to indicate geographical areas that may be vulnerable to natural disasters;
- ▶ assessment of the health risks for inhabitants of the Pacific island of Montserrat (particularly children and workers) arising from their exposure to volcanic ash particles (volcanic activity has made much of the south of the island uninhabitable since 1997).

[Chemical Hazards and Poisons Report - Issue 13, April 2008 \(PDF 3.1 MB\)](#)

Downloadable from HPA website, see: [HPA Publications \ Reports \ Chemicals and Poisons Reports](#)

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