



CDR WEEKLY

Current Issue: Volume 14 Number 38 Published on: 16 September 2004

MAIN STORIES THIS WEEK:

- ▾ [National outbreak of Salmonella Newport infection, England, and Northern Ireland](#)
- ▾ [Healthcare associated infections – a strategy for hospitals in Wales](#)

Bacteraemia:

- ▾ [Escherichia coli bacteraemias, England, Wales, and Northern Ireland: 2003](#)

Diary:

- ▾ [Healthcare workers and infectious diseases: update on screening and immunisation](#)
- ▾ [Diploma in Hospital Infection Control. Residential course on engineering in infection control: steam sterilisation, washer-disinfectors, specialist ventilation and other aspects of hospital hygiene](#)
- ▾ [Hospital Infection Society/HPA Laboratory of Healthcare Associated Infection Course on Hospital Infection Control, a module of the Diploma in Hospital Infection Control](#)

CDR SUBSCRIPTION:

- ▾ To subscribe to *CDR Weekly*, please visit: <<http://www.hpa.org.uk/cdr/contact.htm>>

News

Last updated: **16 September 2004**
 Next update due: **23 September 2004**

▾ [National outbreak of Salmonella Newport infection, England, and Northern Ireland](#)

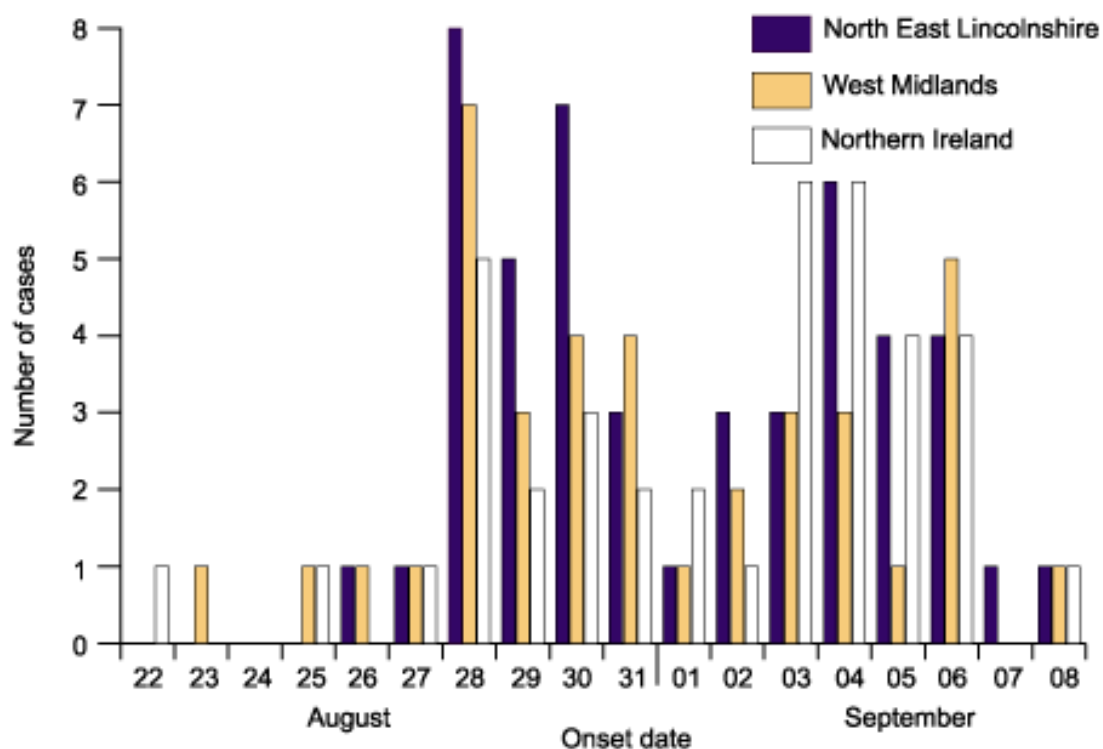
▾ [Healthcare associated infections – a strategy for hospitals in Wales](#)

National outbreak of Salmonella Newport infection, England, and Northern Ireland

Since 9 September 2004, the Health Protection Agency's Laboratory of Enteric Pathogens (LEP) has confirmed 27 cases of *Salmonella enterica* serovar Newport infection in two NHS regions in England, and also in Northern Ireland. Plasmid profiling performed so far on a subset revealed that the isolates are similar to each other, but not identical to an isolate from lettuce implicated in a national outbreak of *S. Newport* infection in England and Wales in 2001 (1,2). Further molecular testing (pulsed field gel electrophoresis) is underway.

One hundred and eighty-four suspected cases (north east Lincolnshire 81 cases; West Midlands 56; Northern Ireland 47) are being investigated locally by public health, environmental health, and microbiology laboratory staff. Case ages range from under one year to 89 years with most cases aged between 20 and 40 years. Thirteen cases have been admitted to hospital as a result of their illness. Cases in the three regions are tightly clustered in time (figure). Fast-food premises and take-away restaurants have been commonly implicated in cases' illness.

Figure National outbreak of *Salmonella* Newport infection in England and Northern Ireland. Epidemic curve by region



Salmonella Newport is a relatively uncommon strain of *Salmonella*, with approximately 150 laboratory-confirmed cases reported annually in England and Wales. Chicken and turkey are the most common sources of infection.

Microbiologists are asked to expedite the referral to the LEP of suspected cases of *S. Newport* infection (group C salmonellas; antigenic structure 6.8: e.h: 1.2). Consultants in Communicable Disease Control are asked to notify the HPA's Communicable Disease Surveillance Centre of any local increases in notifications of confirmed Group C salmonella infections.

For further information please contact Iain Gillespie (tel: 020 8327 7486; email: <Iain.Gillespie@hpa.org.uk> at CDSC or Linda Ward in the Laboratory of Enteric Pathogens (tel: 020 8327 6132; email: <Linda.Ward@hpa.org.uk>).

References

1. LR Ward, C Maguire, MD Hampton, E de Pinna, HR Smith, CL Little, IA, *et al.* Collaborative investigation of an outbreak of *Salmonella enterica* serotype Newport in England and Wales in 2001 associated with ready-to-eat salad vegetables. *Communicable Disease and Public Health* 2002; **5**(4): 301-4.
2. Sagoo SK, Little CL, Ward L, Gillespie IA, Mitchell RT. Microbiological study of ready-to-eat salad vegetables from retail establishments uncovers a national outbreak of salmonellosis. *J Food Prot.* 2003; **66**: 403-9.

Healthcare associated infections – a strategy for hospitals in Wales

The strategy of the Welsh Assembly Government (WAG) for reducing healthcare associated infections in hospitals was launched by the Health Minister on Thursday, 9 September 2004. The strategy document, *Healthcare associated infections – a strategy for hospitals in Wales*, is the first of a suite of WAG initiatives that will also cover healthcare associated infections in the community setting, core guidance in infection control, and handling infectious diseases emergencies.

The strategy has been developed by the Welsh Healthcare Associated Infection Subgroup of the WAG's Committee for the Control of Communicable Disease, and has received strong support from the NHS Management Executive and Trust chief executives in Wales. The central philosophy of the programme is that all staff must understand their personal responsibilities to patients, other staff, visitors, and themselves in reducing the risk of infections to a minimum. They are to be supported in this by a comprehensive package of measures, building on progress already made, and incorporating:

- Clear management arrangements, with a focus on accountability at clinical directorate level and overall responsibility for trust performance lying with the chief executive.
- A requirement that directorates should work with the trust infection control specialists to determine priorities for action in their area of activity.
- Adoption by trusts of comprehensive surveillance and audit programmes to monitor and direct their infection control programmes.
- New initiatives aimed at targeted reductions in infection.
- Introduction of new education and training initiatives for staff at all levels.
- Development of recommendations for specialist staffing resources and isolation facilities.
- Implementation of improved information technology.

The strategy reinforces a delivery framework based on adherence to national standards that are endorsed by the Welsh Healthcare Standards Advisory Board through the Statement of Standards. The relevant standards currently in operation in Wales are Welsh Risk Pool Standards and National Standards of Cleanliness. (The Welsh Risk Pool is a mutual self-insurance scheme designed to cover member NHS bodies in Wales – membership is voluntary, but all Trusts and Health Authorities in Wales are members). The former are subject to on-going review. Implementation of the strategy will be underpinned by incorporation of the programme into NHS Wales performance management systems and overseen by Healthcare Inspectorate Wales.

The full document is available at: <<http://www.cmo.wales.gov.uk/content/publications/strategies/healthcare-associated-infections-e.pdf>> or via the NPHS Wales website.

Current Issue: Volume 14 Number 38

Published on: 16 September 2004

Bacteraemia

Last updated: **16 September 2004**

Next update due: **21 October 2004**

[Escherichia coli bacteraemias, England, Wales, and Northern Ireland: 2003](#)

Key points:

- There was an increase the number of reports of bacteraemias due to *Escherichia coli* in 2003 (16,431) compared to previous years.
- There was a 26% rise in *E. coli* bacteraemia reports made via the voluntary reporting scheme in England, Wales, and Northern Ireland in 2003 compared with reports in 2002. Some of this rise, however, will be due to improved laboratory reporting of isolates, *ie*, improved data ascertainment.
- Eighty-six per cent of laboratories in England, Wales, and Northern Ireland included susceptibility results to one or more antimicrobials in their reports.
- Of those *E. coli* reports with susceptibility data for amoxycillin/ampicillin more than half (56%) indicated resistance.
- Twelve per cent of *E. coli* isolates reported with susceptibility data for one ciprofloxacin were resistant. This percentage was 10% for cefuroxime whereas less than 10% of isolates tested were resistant to cefotaxime, ceftazidime, and gentamicin.

[Click here to view a PDF file of this report](#) 

Escherichia coli bacteraemias, England, Wales, and Northern Ireland: 2003

Key points:

- There was an increase in the number of reports of bacteraemias due to *Escherichia coli* in 2003 (16,431) compared to previous years.
- There was a 26% rise in *E. coli* bacteraemia reports made via the voluntary reporting scheme in England, Wales, and Northern Ireland in 2003 compared with reports in 2002. Some of this rise, however, will be due to improved laboratory reporting of isolates, ie, improved data ascertainment.
- Eighty-six per cent of laboratories in England, Wales, and Northern Ireland included susceptibility results to one or more antimicrobials in their reports.
- Of those *E. coli* reports with susceptibility data for amoxycillin/ampicillin more than half (56%) indicated resistance to these antimicrobials.
- Twelve per cent of *E. coli* isolates reported with susceptibility data for ciprofloxacin were resistant. This percentage was 10% for cefuroxime whereas less than 10% of isolates tested were resistant to cefotaxime, ceftazidime, or gentamicin.

This report covers bacteraemias due to *Escherichia coli* reported by laboratories in England, Wales, and Northern Ireland in 2003. All laboratory reports described here concern isolation of this species from blood culture. Rates are calculated using Office for National Statistics (ONS) 2002 mid-year resident population denominators for each corresponding age and region. Regional analyses were made with reference to the English regions introduced in April 2002.

Regional distributions

A total of 16,431 provisional laboratory reports of *Escherichia coli* bacteraemias were received for 2003 from

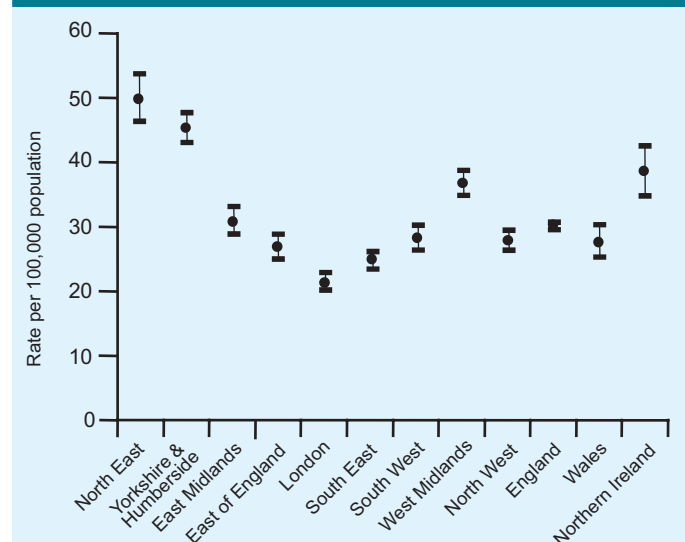
England, Wales, and Northern Ireland, a 26% increase on the equivalent data in 2002 (1). Eighty-six per cent of laboratories in England reported *E. coli* bacteraemias, compared with 79% of laboratories in Wales and 92% of labs in Northern Ireland (table 1). There was considerable regional variation in the reported rates of *E. coli* bacteraemias from England (figure 1): the highest reporting rate was from the North East region (50.1 per 100,000 population) and the highest number of reports was from Yorkshire and Humberside (2201), which had the next highest reporting rate (44.2/100,000). London and the South East had the lowest reporting rates, 21.05/100,000 and 25.1/100,000 respectively. England had an overall reporting rate of 30.2 *E. coli* bacteraemias per 100,000 population, while the rate in Wales was 28.2 per 100,000 population, and the rate was considerably higher in Northern Ireland at 39.1/100,000 population.

Table 1 Laboratory ascertainment data for *E. coli* bacteraemia reports England, Wales, and Northern Ireland: 2003

Region/Country	Number of laboratories*	No. reporting <i>E. coli</i> bacteraemias	% reporting <i>E. coli</i> bacteraemias	% not reporting <i>E. coli</i> bacteraemias
North East	11	10	91	9
Yorkshire & Humberside	21	20	95	5
East Midlands	11	10	91	9
East of England	18	18	100	—
London	32	22	69	31
South East	29	24	83	17
South West	18	18	100	—
West Midlands	20	20	100	—
North West	31	23	74	26
England	191	165	86	14
Wales	14	11	79	21
Northern Ireland	12	11	92	8

*Provisional data (August 2004).

Figure 1 Region-specific rates* of bacteraemia due to *Escherichia coli*: England, Wales, and Northern Ireland: 2003



*Rates calculated using 2002 mid-year resident population estimates.

Antimicrobial resistance patterns

Eighty-six per cent of laboratories in England, Wales, and Northern Ireland reported susceptibility results for at least one antibiotic (table 2). Eighty-one per cent (13,365/16,431) of *E. coli* bacteraemia reports were accompanied by susceptibility results for one or more antibiotics, a moderate improvement on the percentage of reports with susceptibility information in 2002 (78%). The most commonly reported antimicrobial susceptibility was for gentamicin (12,477) followed by amoxicillin/ampicillin (12,170), ciprofloxacin (11,597), cefuroxime (11,085), ceftazidime (7806), and cefotaxime (4941).

More than half (56%) of *E. coli* reports with amoxicillin/ampicillin susceptibility data indicated resistance to this antibiotic. Resistance to cefuroxime was reported in 10% of reports with susceptibility information and resistance to ciprofloxacin reported in 13% of reports with susceptibility information. Resistance to cefotaxime was reported in 4% of reports, resistance to ceftazidime was reported in 4%, and resistance to gentamicin was reported in 6% of those *E. coli* bacteraemia reports that included susceptibility data for these antimicrobials (table 3).

The proportion of *E. coli* bacteraemia reports containing susceptibility information for ampicillin/amoxicillin varied considerably from 66% in Yorkshire and Humberside to 90% in the East of England region. There was a marked contrast between the proportion of reports with susceptibility results for ampicillin/amoxicillin from Wales (73%) and in Northern Ireland (42%). The percentage of reports with susceptibility data indicating resistance to ampicillin/amoxicillin ranged from 50% in East of England region to 62% in the North East. Fifty-three per cent of *E. coli* reports with susceptibility data were resistant in Wales, while 62% of such reports indicated ampicillin/amoxicillin resistance in Northern Ireland. *E. coli* reports that indicated sensitivity to amoxicillin/ampicillin (5312)

indicated little or no resistance to the other antibiotics listed (figure 2).

There was similar variability in the reporting of susceptibility results for the other antimicrobials reported here.

Reported resistance of *E. coli* bacteraemia isolates to cefuroxime ranged from 5% in Wales and Northern Ireland, and 6% in the North East, to 17% in the South East. The majority of cefuroxime resistant isolates indicated resistance to amoxicillin/ampicillin (82%), with lower proportions of resistance to cefotaxime (16%), ceftazidime (22%), ciprofloxacin (45%), and gentamicin (26%) (figure 3).

Forty-eight percent of *E. coli* reports sensitive to cefuroxime indicated resistance to amoxicillin/ampicillin.

Resistance to cefotaxime in *E. coli* bacteraemia isolates was reported infrequently, ranging from 2% in the East of England and Yorkshire and Humberside regions, 7% in the South East, and 8% in the West Midlands. Resistance to cefotaxime was reported for 2% of *E. coli* isolates reported from Wales and 3% of such reports from Northern Ireland. Resistance to ciprofloxacin and gentamicin was reported in 78% and 48% of cefotaxime-resistant *E. coli* isolates respectively (figure 4).

Resistance to ceftazidime in *E. coli* bacteraemia isolates was also reported infrequently, ranging from 2% in the North East and East of England regions to 7% in London, and 8% in the West Midlands. The reported resistance to ceftazidime of *E. coli* isolates was 1% in Wales and 4% in Northern Ireland. Resistance to ciprofloxacin was reported in 78% of ceftazidime-resistant *E. coli* isolates, while 48% of ceftazidime-resistant *E. coli* isolates were also gentamicin resistant (figure 5).

The percentage of ciprofloxacin resistance in *E. coli*

Table 2 Antimicrobial susceptibility ascertainment for laboratories reporting *E. coli* bacteraemias: England, Wales, and Northern Ireland: 2003

Region/Country	Laboratories reporting <i>E. coli</i> bacteraemias	Laboratories reporting any antimicrobial susceptibility information	(%)
North East	10	10	100
Yorkshire & Humberside	20	16	80
East Midlands	10	8	80
Eastern	18	18	100
London	22	17	77
South East	24	21	88
South West	18	18	100
West Midlands	20	18	90
North West	23	21	91
England	165	147	89
Wales	11	8	73
Northern Ireland	11	6	55

Table 3 Antibiotic susceptibilities for *E. coli* bacteraemia reports England, Wales, and Northern Ireland: 2003

	Sensitive	Resistant (%)*	No information (%)†
Amoxicillin/ampicillin	5312	6858 (56)	4261 (26)
Cefuroxime	9926	1159 (10)	5346 (33)
Cefotaxime	4729	212 (4)	11,490 (70)
Ceftazidime	7513	293 (4)	8625 (52)
Ciprofloxacin	10,149	1448 (12)	4834 (29)
Gentamicin	11,720	757 (6)	3954 (24)
Cefpodoxime	2	2 (50)	16,427 (100)

* As a per cent of reports with susceptibility information.

† As a per cent of total reports.

Figure 2 Ampicillin/amoxycillin susceptibility data for *E. coli* reported from bacteraemias, England, Wales, and Northern Ireland: 2003

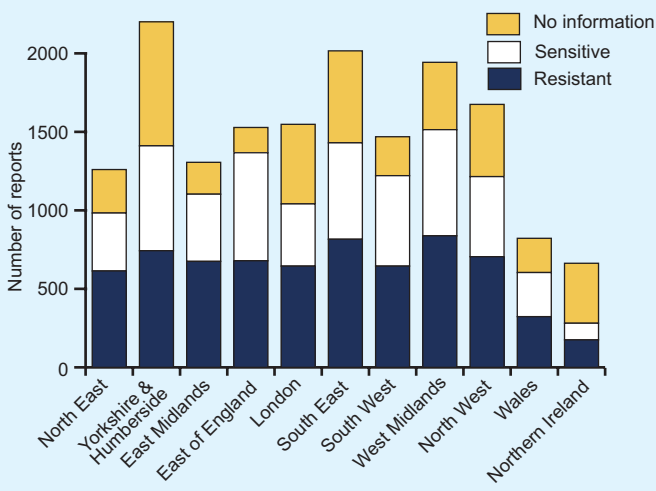


Figure 3 Cefuroxime susceptibility data for *E. coli* reported from bacteraemias, England, Wales, and Northern Ireland: 2003

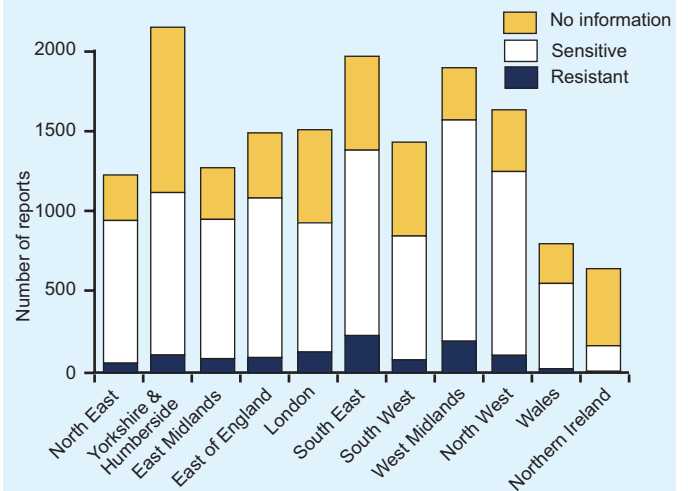


Figure 4 Cefotaxime susceptibility data for *E. coli* reported from bacteraemias, England, Wales, and Northern Ireland: 2003

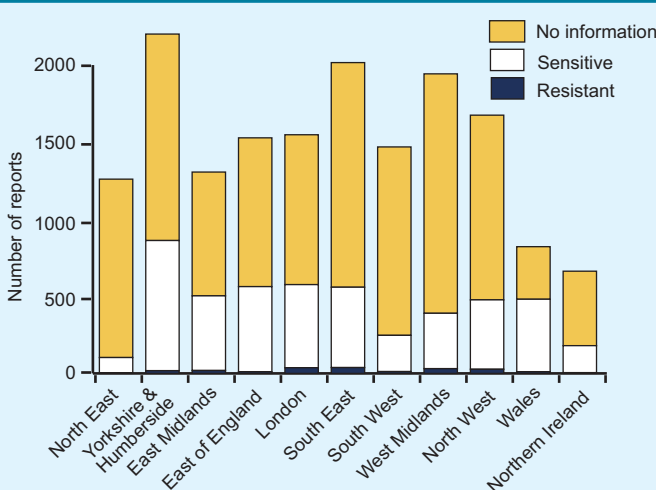


Figure 5 Ceftazidime susceptibility data for *E. coli* reported from bacteraemias, England, Wales, and Northern Ireland: 2003

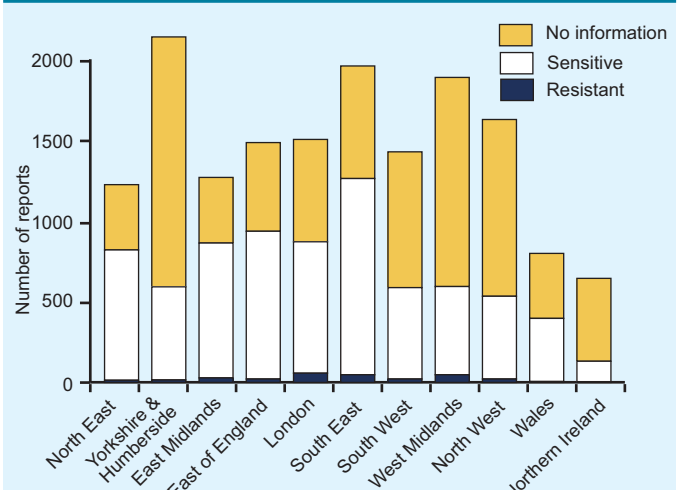


Figure 6 Ciprofloxacin susceptibility data for *E. coli* reported from bacteraemias, England, Wales, and Northern Ireland: 2003

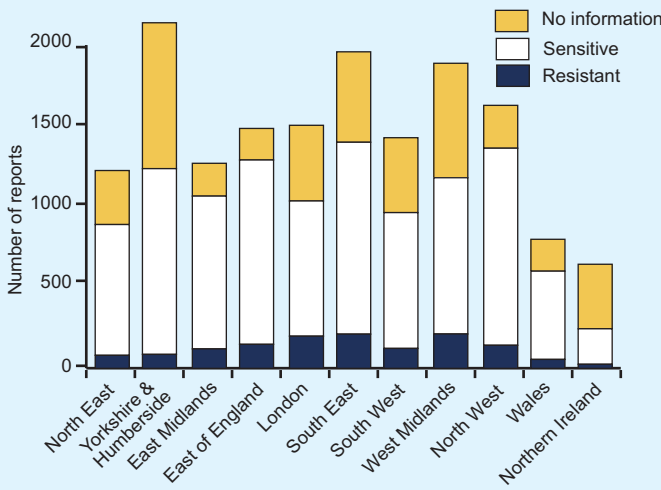
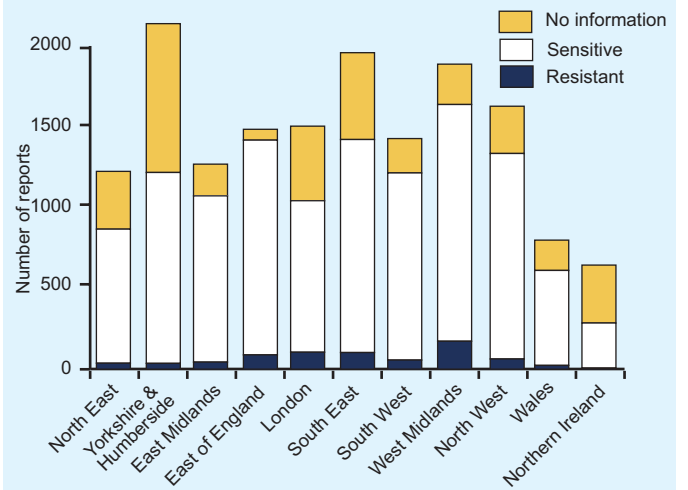


Figure 7 Gentamicin susceptibility data for *E. coli* reported from bacteraemias, England, Wales, and Northern Ireland: 2003



isolates ranged from 7% in Yorkshire and Humberside to 19% in London. Ciprofloxacin resistance was reported in 9% of isolates reported from Wales with susceptibility data and 10% of such isolates reported from Northern Ireland were resistant to ciprofloxacin. The majority of ciprofloxacin resistant *E. coli* isolates (83%) were resistant to amoxicillin/ampicillin, while fewer were resistant to cefuroxime (36%), cefotaxime (11%), ceftazidime (16%), and gentamicin (31%) (figure 6).

The majority of *E. coli* reports from England and Wales included data on gentamicin susceptibility. Northern Ireland, however, reported this information in just 44% of isolates. Reported gentamicin resistance in *E. coli* bacteraemia isolates ranged from 4% in the East Midlands and North East regions to 11% in the West Midlands. Gentamicin resistance was reported in 4% and 2% of *E. coli* bacteraemia reports from Wales and Northern Ireland respectively (figure 7).

Multiple resistance to amoxicillin/ampicillin, cefuroxime, ciprofloxacin, gentamicin, and either or both cefotaxime and ceftazidime was indicated in 59 *E. coli* bacteraemia reports in 2003.

Discussion

Escherichia coli has ranked second only to *Staphylococcus aureus* as the leading cause of bacteraemia in England and Wales in both 2002 and 2003. Of the Gram-negative bacteria, *E. coli* is consistently the most common cause of bacteraemia in England, Wales, and Northern Ireland (2,3).

The number of *E. coli* bacteraemia reports appeared to have stabilised between 11,000 and 12,000 between 1999 and 2001 period (4). This was followed, however, by an increase to more than 12,500 *E. coli* bacteraemia reports in 2002 for England and Wales (13,050 if Northern Ireland is included) (1). Here we report a further increase in *E. coli* bacteraemia reports to 15,768 for England and Wales in 2003 (16,431 including Northern Ireland). This represents an increase of 41% in *E. coli* reports from England and Wales between 1999 and 2003. These data, however, must be interpreted cautiously, as reports of *E. coli* bacteraemias continue to be reported some time after the year-end and the final numbers of reports for both 2002 and 2003 may increase. For example, up until February 2003, 13,050 *E. coli* reports had been made via the voluntary surveillance scheme, but by August 2004, this figure had risen to 14,043, an increase of 7%. Hence, if the provisional number of reports from 2003 are compared with those reported for 2002, there is a 26% increase, but when the 2003 numbers are compared to the latest figures this increase is 17%. In 2003, *E. coli* bacteraemia reports were received from an additional ten laboratories compared to 2002. It is, therefore, difficult to quantify any rise in bacteraemia reports and differentiate this from the contribution of improved data ascertainment.

Reporting information on antimicrobial susceptibilities improved considerably for *E. coli* bacteraemias, from 68% (7796/11,392) in 2001 to 78% in 2002, and 81% in 2003. Resistance to amoxicillin/ampicillin and cefuroxime has remained relatively unchanged since 2001, although 2003 has seen a 2%

increase in cefuroxime resistance between 2002 and 2003 (3, 4). There was an increase in reported resistance of *E. coli* bacteraemia isolates to cefotaxime/ceftazidime (from 2% to 3%) between 2001 and 2002. In 2003, where these antimicrobial resistances have been analysed separately, cefotaxime resistance and ceftazidime resistance have reached 4%. When analysed together, 3% of *E. coli* isolates reported with susceptibility results for cefotaxime/ceftazidime were resistant.

In the period between 2001 and 2003, ciprofloxacin resistance has risen from 6% to 12% and gentamicin resistance from 3% to 6%. The upward trend in ciprofloxacin resistance (from 0.8% in 1990, 3.7% in 1999 (5), 6% in 2001 (4), 8% in 2002 (1), and to 12% in 2003) is striking. These data are in keeping with the disturbing year-on-year rise in ciprofloxacin resistance, reported in late 2003 (6).

Members of the Enterobacteriaceae genus, including *Klebsiella* spp. and *E. coli* are increasingly found to produce extended spectrum beta-lactamases (ESBLs). These enzymes render bacteria resistant to most beta-lactam antibiotics, sparing only the carbapenems and cephamycins.

Recently, outbreaks of *E. coli* producing CTX-M ESBLs have been found in a number of regions in England where some of these infections have resulted in bacteraemias. At present, it is unclear whether these infections are hospital- or community-acquired. Questionnaires were sent to regional leads/regional epidemiologists to establish the extent of investigations and any data ascertainment issues.

Investigations are still ongoing, but an interim analysis of voluntary bacteraemia reports from 2001-2003, using resistance to both ceftazidime and cefotaxime as a crude marker, has identified a further three regions which may have evidence of CTX-M ESBL *E. coli* bacteraemias. It must be noted, however, that the use of these resistances as a marker for ESBL-producing *E. coli* bacteraemias is crude and more detailed investigations will be required at the regional level. Indeed, further investigation of the microbiology and epidemiology of ESBLs is underway in the South East and London regions.

Under laboratory conditions, CTX-M ESBLs confer a clearer resistance to cefotaxime (the best indicator for CTX-M type ESBLs) than to ceftazidime (the best indicator for SHV and TEM ESBLs) and it is strongly advised that all enterobacteriaceae isolates should be screened with both of these antimicrobials, or with cefpodoxime. Isolates resistant to any of these agents should be further investigated for ESBLs using one of the detection methods described in the recent guidance to diagnostic laboratories compiled by the Health Protection Agency's Antibiotic Resistance and Monitoring and Reference Laboratory, available at http://hpa.org.uk/srmd/div/nsi/armrl/ESBL_advice_June_2004.pdf.

Some of the strains identified in the outbreaks mentioned above are also resistant to trimethoprim, fluoroquinolones, and aminoglycosides and some of the more serious infections may require treatment with an intravenous carbapenem (7-9).

Differences in the reporting of antimicrobial

susceptibilities between regions may account for the variation in resistance seen. It is not possible to confirm whether the increases seen in bacteraemias rates due to the species reported here or the increases in antimicrobial resistance are due to enhanced ascertainment of data (reporting of cases), or whether they reflect a real increase in the number of bacteraemias and a real increase in the levels of antimicrobial resistance. Similarly, it is not possible to determine the cause of variation in levels of reported antimicrobial resistance between regions. Indeed, the data reported here are considered provisional as the HPA's Communicable Disease Surveillance Centre continues to receive 2003 bacteraemia reports from regions.

Acknowledgements


These reports would not be possible without the weekly contributions from microbiology colleagues in laboratories across England, Wales, and Northern Ireland, without which there would be no surveillance data. Feedback is welcome, and should be addressed to either Andrew Pearson (email: <andrew.pearson@hpa.org.uk> or Allison Lee <allison.lee@hpa.org.uk>. In addition, the support from colleagues within the Health Protection Agency, Specialist and Reference Microbiology Division, in particular, is valued in the preparation of the reports. These contributions are greatly appreciated.

Reference List

1. PHLS. *Escherichia coli*, *Proteus* spp, *Morganella morganii* and *Providencia* spp bacteraemias: England and Wales, 2002. *Commun Dis Rep CDR Wkly* [serial online] 2003 [cited 6 September 2004]; **13(8)**: Bacteraemia. Available at <<http://www.hpa.org.uk/cdr/PDFfiles/2003/cdr0803.pdf>>.
2. HPA. Laboratory reports of bacteraemias England, Wales, and Northern Ireland: 2002 and 2003. *Commun Dis Rep CDR Wkly* [serial online] 2004 [cited 6 September 2004]; **14(3)**: Bacteraemia. <<http://www.hpa.org.uk/cdr/PDFfiles/2004/cdr0304.pdf>>.
3. PHLS. Bacteraemia, England and Wales: laboratory reports 2001 and 2002. *Commun Dis Rep CDR Wkly* [serial online] 2003 [cited 6 September 2004]; **13(3)**: Bacteraemia. Available at <<http://www.hpa.org.uk/cdr/PDFfiles/2003/cdr0303.pdf>>.
4. PHLS. *Escherichia coli*, *Proteus* spp, *Morganella morganii* and *Providencia* spp bacteraemias: England and Wales, 2001. *Commun Dis Rep CDR Wkly* [serial online] 2002 [cited 6 September 2004]; **12(8)**: Bacteraemia. Available at <<http://www.hpa.org.uk/cdr/PDFfiles/2002/cdr0802.pdf>>.
5. Livermore DM, James D, Reacher M, Graham C, Nichols T, Stephens P, *et al*. Trends in fluoroquinolone (ciprofloxacin) resistance in enterobacteriaceae from bacteremias, England and Wales, 1990-1999. *Emerg Infect Dis* 2002; **8**:473-8.
6. Livermore DM, Nichols T, Lamagni TL, Potz N, Reynolds R, Duckworth G. Ciprofloxacin-resistant *Escherichia coli* from bacteraemias in England; increasingly prevalent and mostly from men. *J Antimicrob Chemother*. 2003; **52**:1040-2.
7. HPA. Infections with organisms carrying extended-spectrum beta-lactamases in the community: first report. *Commun Dis Rep CDR Wkly* [serial online] 2003 [cited 6 September 2004]; **13(32)**: News. Available at <<http://www.hpa.org.uk/cdr/PDFfiles/2003/cdr3203.pdf>>.
8. Livermore DM, Brown DF. Detection of beta-lactamase-mediated resistance. *J Antimicrob Chemother*. 2001; **48 Suppl 1**: 59-64.
9. Carter MW, Oakton KJ, Warner M, Livermore DM. Detection of extended-spectrum beta-lactamases in klebsiellae with the Oxoid combination disk method. *J Clin Microbiol* 2000; **38**:4228-32.

Diary

Last updated: 16 September 2004

 [Healthcare workers and infectious diseases: update on screening and immunisation](#) 
 [Diploma in Hospital Infection Control. Residential course on engineering in infection control: steam sterilisation, washer-disinfectors, specialist ventilation and other aspects of hospital hygiene](#)
 [Hospital Infection Society/HPA Laboratory of Healthcare Associated Infection Course on Hospital Infection Control, a module of the Diploma in Hospital Infection Control](#)
[Uncertain Threats in an Uncertain World - managing major/catastrophic incidents](#)
Healthcare workers and infectious diseases: update on screening and immunisation 

Healthcare workers and infectious diseases: update on screening and immunisation
 (CPD point from the Faculty of Occupational Medicine have been applied for)

A one day conference for Occupational Health and Infection Control Professionals titled *Healthcare workers and infectious diseases: update on screening and immunisation* will be held at the Royal Free Hospital, London, Monday 27 September 2004 (registration from 09:15 to 09:45)

This conference is aimed at occupational health, infection control, virology, and microbiology specialists who are involved in writing and implementing policies on health care worker protection from infectious diseases. It also addresses contact tracing.

Delegates will have the opportunity to question experts from the HPA who were involved in developing the national guidance, and staff from the Royal Free hospital who have recent experience of translating the guidance into local policy.

Copies of the Royal Free policies will be available and delegates can request an electronic copy by email.

Programme Outline:

- Chicken pox new guidance from the DoH by Dr Elizabeth Miller of the Health Protection Agency, London.
- From policy to practice screening, immunisation and contract tracing by Dr Siân Williams, consultant in occupational medicine, Royal Free Hospital, London.
- TB: how to interpret screening tests and when to give BCG by Dr Marc Lipman, consultant in respiratory and HIV medicine, Royal Free Hospital, London.
- Hepatitis C: what do the tests mean? By Dr Anna Maria Geretti, consultant and senior lecturer in Virology, Royal Free Hospital, London.
- Implementing DoH guidance on HCV screening of HCWs Dr Paul Grime, consultant in occupational medicine and honorary lecturer, ~~Royal Free Hospital, London.~~
- Blood borne virus screening of health care workers audit of pre-employment BBV screening across London by Deborah Mathews, operational manager / senior nurse, Royal Free Hospital, London.
- Measles epidemiology by Dr Mary Ramsay, consultant epidemiologist, Health Protection Agency CDSC.
- From policy to practice screening, immunisation, and contact tracing by Chris Jeffs, senior occupational nurse advisor, Royal Free Hospital, London.
- Nurse prescribing and patient group directions By Wendy Spicer, principal pharmacist, Royal Free Hospital, London.

For more details and a booking form contact Judith Swallow, Conference Coordinator
 Occupational Health and Safety Unit, Royal Free Hospital, Pond Street, London NW3 2QG. tel: 0207 830 2513 Fax: 0207 830 2512, email: <judith.swallow@royalfree.nhs.uk>.



Diploma in Hospital Infection Control. Residential course on engineering in infection control: steam sterilisation, washer-disinfectors, specialist ventilation and other aspects of hospital hygiene

There will be two courses on engineering in infection control in 2005: one from 16 to 20 May and another on 3 to 7 October. Both will be held at Eastwood Park Training Centre in Falfield (near Bristol), a specialist centre for healthcare engineering. The course is a module for the Diploma in Hospital Infection Control, but can also be taken by those not registered for the DipHIC. This course is registered for CPD points. The fee is £1250 (residential) or £975 (non-residential). For details regarding registration and further information about the courses please write to Greta Howell, Laboratory of HealthCare Associated Infection, HPA, 61 Colindale Avenue, London NW9 5HT, or email: <greta.howell@hpa.org.uk>.



Hospital Infection Society/HPA Laboratory of Healthcare Associated Infection Course on Hospital Infection Control, a module of the Diploma in Hospital Infection Control

The next course on hospital infection control on which places are available will be on the 21 - 25 November 2005. (The 21 - 25 February course is full). The course will be held at the Health Protection Agency in Colindale, northwest London, and will cover epidemiology, bacterial typing, antibiotic resistance, control and management of outbreaks, blood borne viruses, hospital hygiene, ventilation and other aspects of infection control, including policies and guidelines. The course is recognised for CPD points and is a module for the Diploma in Hospital Infection Control (DipHIC), but can also be taken by those not registered for the DipHIC. The fee is £500-00 (non-residential). For further information and an application form, please write to Greta Howell, Laboratory of Healthcare-Associated Infection, HPA, 61 Colindale Avenue, London NW9 5HT, or email: <greta.howell@hpa.org.uk>.