



CDR WEEKLY

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News

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▣ Evidence of a continuing increase in the HIV prevalence among injecting drug users in England and Wales

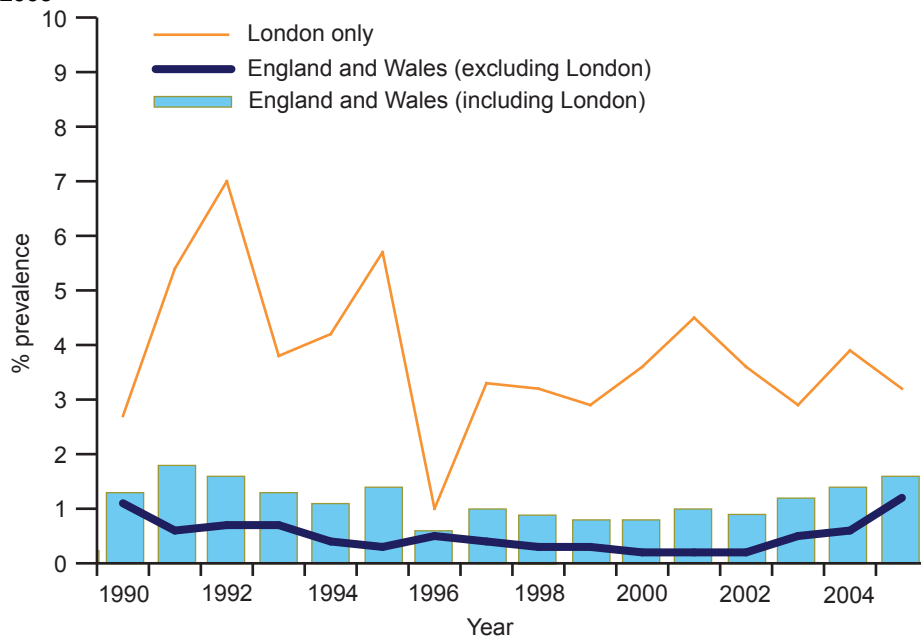
▣ *Management of spa pools - controlling the risks of infection*

▣ New Primary Care Reports

▣ Evidence of a continuing increase in the HIV prevalence among injecting drug users in England and Wales

Data from the Unlinked Anonymous Prevalence Monitoring Programmes (UAPMP) voluntary survey of injecting drug users (IDUs) in contact with services for drug users, such as needle exchanges and methadone maintenance programmes, shows that the recent increases in HIV prevalence among injectors in England and Wales continued in to 2005 (1,2). The overall HIV prevalence among the current and former IDUs participating in this survey during 2005 was 1.6% (49/3028), the highest level seen since 1992 when the prevalence was also 1.6% (54/3328). Although the prevalence in London would appear to have varied little in recent years, outside of London prevalence has increased six-fold from 0.2% (4/2111) in 2002 to 1.2% (29/2400) in 2005 (figure 1). Preliminary analyses indicate that this increase is not due to changes in the surveys sample over time.

Figure 1 HIV prevalence among current and former injecting drug users, England and Wales: 1990 to 2005



Data from the Unlinked Anonymous Prevalence Monitoring Programmes survey of injecting drug users in contact with services.

The prevalence among those who had first injected during the last three years has also increased from 0.3% (1/388) in 2002 to 1.3% (5/384) in 2005. Just under half of those participants in the survey with antibodies to HIV were aware of their infection. Although this is comparable to the level found in 2004, it was the lowest level of awareness ever recorded in the survey.

By the end of December 2005, 76,850 new HIV diagnoses had been made and reported in the United Kingdom since surveillance began in 1982. Of these, 5.7% (4392/76,850) were probably acquired through injecting drug use. The total number of new HIV diagnoses among IDUs for 2005 is expected to increase once all reports are received, reaching an estimated 182 diagnoses (range 169 to 194), compared to 131 in 2004.

These findings, together with previous observations, indicate continuing and increased HIV transmission among IDUs. This increase in HIV prevalence has followed a reported rise in risk behaviours (3) among IDUs and an increase in the prevalence of hepatitis C infection (1). There is evidence of an increase in the injection of crack-cocaine (4), which has been associated with higher prevalences of bloodborne virus infection (1).

For those commissioning and providing services for IDUs, these findings reiterate the need to improve services to prevent HIV and other infections among IDUs. In particular, there is a need to ensure:

- sufficient provision of needle and syringe exchange that is able to respond to changing patterns of drug use such as crack-cocaine injection;
- availability to IDUs of appropriate information and practical advice on safer injecting practices, the prevention of blood-borne virus transmission, and on the safe disposal of used equipment; and;
- easy access to diagnostic tests for HIV.

In England, the *National Treatment Agency's Models of care: Update 2005* (5) sets out a framework for the provision of these activities within the full range of services provided for those using drugs.

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Management of spa pools – controlling the risks of infection

New guidance published by the Health Protection Agency warns both commercial and domestic owners of spa pools about the risks of infections if they do not follow guidance on how to maintain them properly (1).

Spa pools in the home are becoming more commonplace with between 14,000 and 15,000 installed in homes each year in the United Kingdom. They provide the perfect conditions for certain bacteria to survive, and cause infection because the pools have a raised water temperature and conditions that create an aerosol of water. The new guidance sets out the practical measures that can be followed to prevent users contracting infections such as legionnaires' disease and folliculitis (inflammation of the hair follicles) and to prevent other hazards to health such as slipping.

It also sets out the specific responsibilities of those who manage commercially run spa pools to ensure staff working with the pool and recreational users are protected. Commercial spa pools can have large numbers of bathers compared to water volume, which makes it important that users are informed of precautionary measures they may take to reduce health risks such as:

- Not exceeding 15 minutes in the spa pool at a time;
- Not immersing their heads underwater or swallowing the water;
- Bathers should use the toilet and shower before entering the pool.
- Bathers should not use the spa pool if they have had diarrhoea in the last 14 days and those suffering from heart diseases or skin conditions should take medical advice before entering the pool.

References

1. HPA. *Management of Spa Pools - Controlling the Risks of Infection*. London: Health Protection Agency, 15 March 2006. Available at <http://www.hpa.org.uk/publications/2006/spa_pools/>.

New Primary Care Reports

This week sees the first online publication of the QResearch bulletin and the new Appendix for NHS Direct in the *CDR Weekly* (<http://www.hpa.org.uk/cdr/pages/primarycarewr.htm>). Both of these will be updated weekly.

The QResearch bulletin is a result of collaboration between the Nottingham University Division of Primary Care Collaborative National Surveillance Project and the Health Protection Agency (HPA).

<http://www.hpa.org.uk/infections/topics_az/primary_care_surveillance/QResearch.htm>. A nationally representative sample of 518 practices contributes to the QRESEARCH database that contains information on the health needs, risks, care and outcome for a population of over 4 million patients. Timely primary care data can be analysed to Strategic Health Authority level. It can link morbidity data to prescribing and vaccination data as well as extract various risk factors such as socio-demographic indicators, ethnicity, and rurality.

The NHS Direct Syndromic Surveillance Project is an ongoing collaboration between NHS Direct and the HPA <http://hpa.org.uk/infections/topics_az/primary_care_surveillance/NHSD.htm>.

Data on ten symptoms/syndromes are received electronically from 22 call centres and analysed on a daily basis. The new Appendix is in addition to the currently available NHS Direct Syndromic Surveillance Bulletin. Although the bulletin includes reports of major rises in symptoms reported to NHS Direct, and regularly updated national graphs showing proportions of calls for individual symptoms/syndromes, the Appendix provides regularly updated graphs showing age-group specific trends and HPA region-specific trends.

Bacteraemia

Last updated: **16 March 2006**

Next update due: **21 April 2006**

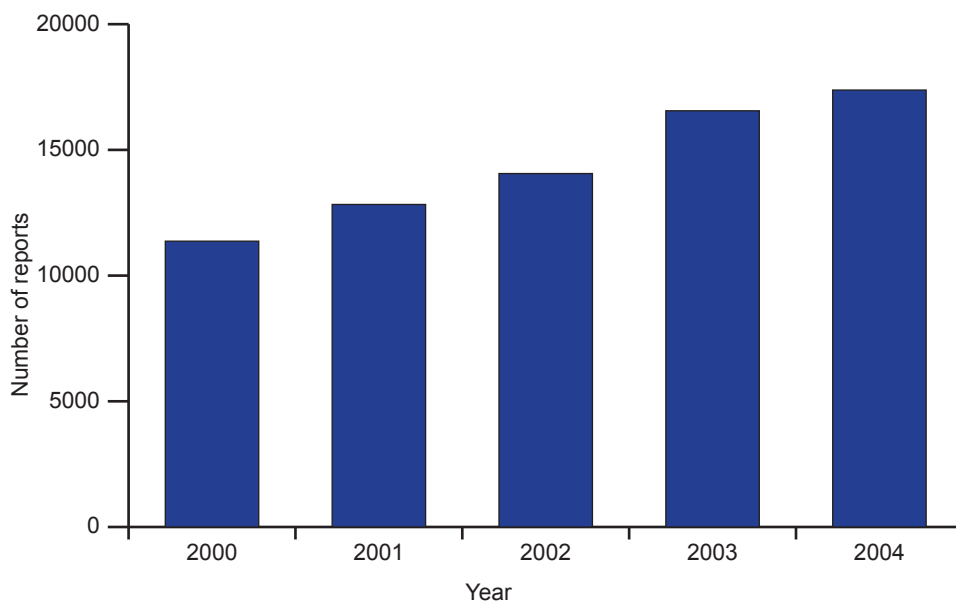
Escherichia coli bacteraemias in England, Wales, and Northern Ireland: 2004

There was a five per cent increase in the number *Escherichia coli* bacteraemias reported via the voluntary surveillance scheme in 2004 with 17,380 reports, compared to 16,555 reports in 2003 (table 1). This represents a smaller increase in reporting than occurred between 2002 and 2003, when an 18% increase occurred (figure 1).

Table 1 Number of *E. coli* bacteraemia reports in England between 2000 and 2004

	Number of <i>E. coli</i> reports	Percentage increase
2000	11,369	–
2001	12,829	12.84
2002	14,059	9.59
2003	16,555	17.75
2004	17,380	4.98

Figure 1 Number of *E. coli* bacteraemia reports in England between 2000 and 2004



The rate of *E. coli* bacteraemias has increased to its highest level in 2004 for England (31.5/100,000 population), Wales (32.8/100,000), and Northern Ireland (42.3/100,000). This increase may also reflect improved laboratory reporting practices that result in increased ascertainment.

In 2004, the highest rate was in the North East region at 48.3/100,000 and the lowest in the South East at 21.7/100,000). These variations in rate are also affected by differing ascertainment between regions. Since 2002, rates of *E. coli* bacteraemia have increased in all regions in England, although the pattern of increase differs between regions.

Ninety-four per cent of laboratories in England, Wales, and Northern Ireland included susceptibility results for at least one antimicrobial in their *E. coli* reports, an increase of 8% compared to 2003. In 2004, antimicrobial susceptibility information was reported least often for cefotaxime and most often for gentamicin (table 2).

Table 2 Antimicrobial susceptibilities for *E. coli* bacteraemia reports in England, Wales, and Northern Ireland: 2004

Antimicrobial	Number of sensitive reports	% Sensitive*	Number of resistant reports	% Resistant *	Total number of reports with susceptibility information	Number of reports with no susceptibility information	% No information †
Ampicillin/amoxicillin	5820	42.99	7718	57.01	13,538	3842	22.11
Cefuroxime	10,645	88.25	1417	11.75	12,062	5318	30.60
Cefotaxime	5657	93.92	366	6.08	6023	11,357	65.35
ceftazidime	8254	93.60	564	6.40	8818	8562	49.26
Ciprofloxacin	11,069	84.22	2074	15.78	13,143	4237	24.38
Gentamicin	13,095	92.62	1043	7.38	14,138	3242	18.65
Cefpodoxime	123	91.79	11	8.21	134	17,246	99.23
Amoxicillin/clavulanate	7220	79.51	1861	20.49	9081	8299	47.75

*As a percent of *E. coli* reports with susceptibility information for that antibiotic.

†As a percentage of total number of *E. coli* reports for 2004: 17380.

Of those reports with susceptibility information, the highest resistance levels reported were to amoxicillin/ampicillin, with more than half (57%) indicating resistance. The lowest resistance was to cefotaxime, with six per cent of reports indicating resistance.

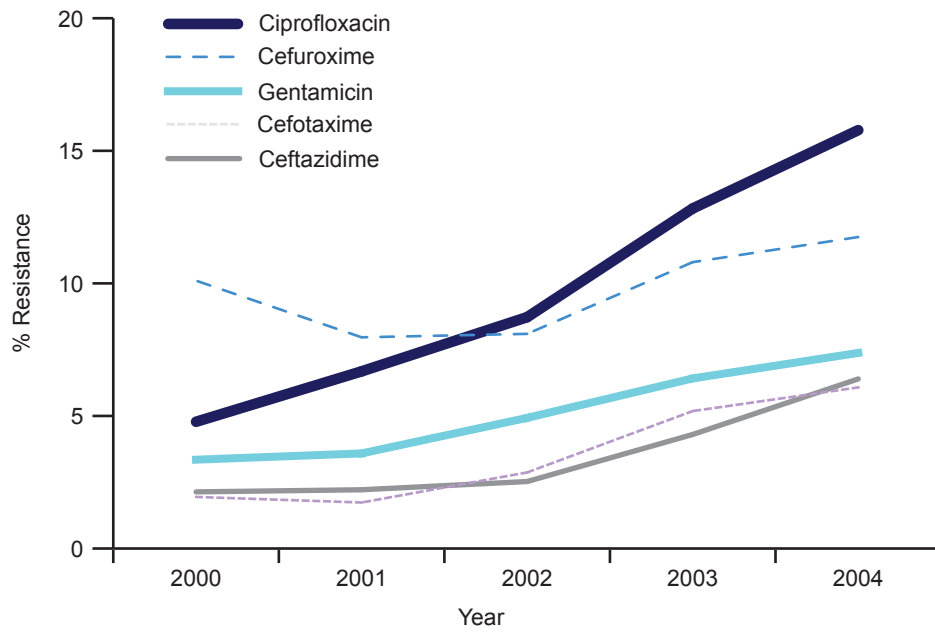
Levels of resistance to all antibiotics have been increasing since 2002, with the highest percentage resistance occurring in 2004. This is likely to be a true increase, as reporting of antimicrobial susceptibility has also improved over this time period (table 3).

Table 3 Percentage of *E. coli* resistant to various antibiotics from 2000 to 2004

Year	Ampicillin/amoxicillin	Cefuroxime	Cefotaxime	ceftazidime	Ciprofloxacin	Gentamicin
2000	54.34	10.10	1.94	2.14	4.78	3.35
2001	54.70	7.97	1.73	2.22	6.68	3.59
2002	55.74	8.10	2.87	2.53	8.73	4.93
2003	56.51	10.80	5.18	4.30	12.82	6.42
2004	57.01	11.75	6.08	6.40	15.78	7.38

The most marked percentage increase in resistance of all the antibiotics was for ciprofloxacin, with a rise from 5% in 2000 to 16% resistance in 2004. This data should be interpreted with caution, given the varying levels of susceptibility reporting for each antimicrobial (figure 2).

Figure 2 Percentage of *E. coli* resistant to various antibiotics



A linear trend analysis was carried out on this data which accounts for these variations in susceptibility reporting, and shows that from 2002 to 2004 the average annual increase in percentage resistance was highest in cefotaxime (49%) and lowest in cefuroxime (9%).