Volume 11

Number 8

22 February 2001

CDR WEEKLY

Main stories this week:

Improvement in antenatal screening for HIV in the United Kingdom

First review of electronic *CDR Weekly*

Updated this week:

Viral hepatitis, England and Wales: laboratory reports, weeks 45/00-48/00

Invasive meningococcal infections, England and Wales: laboratory reports, weeks 49-52/00

Vaccine preventable diseases of childhood, England and Wales: laboratory reports, weeks 49-52/00

Virus infections, England and Wales: laboratory reports, weeks 04-07/01

Laboratory reports of hepatitis infection, England and Wales: weeks 01-39/00

National enhanced surveillance of suspected meningococcal disease

HIV infection in women giving birth in the UK – trends in prevalence and proportions diagnosed to the end of June 2000

Diary dates

Notifications of infectious diseases, weekly data

Printable versions (PDF files) of *CDR Weekly* 01-07/00

Best viewed at a screen resolution of 800 x 600 pixels

To download a printable version of this week's *CDR Weekly*, click the icon below. Please note that the pdf file now reflects the appearance of the website, not the old print version.

If you need *Acrobat Reader*, click here

If you have any comments or encounter any problems with this website, please contact nhough@phls.org.uk

Last updated: 22 February 2001

Next update due 1 March 2001

Contents

Improvement in antenatal screening for HIV in the United Kingdom

Data from ongoing studies shows that diagnosis of HIV among pregnant women continued to improve throughout the United Kingdom in early 2000. This will result in the prevention of a substantial number of mother to child transmissions of HIV infection, as once women are aware of their status they can be offered interventions which reduce the risk of vertical transmission from one in four to less than one in 20 (1).

In the first half of 2000, data from the national unlinked anonymous seroprevalence programme and the Royal College of Obstetricians and Gynaecologists national study of HIV in pregnancy indicated that 73% of HIV-infected pregnant women in inner London had been diagnosed by the time they gave birth. In outer London and the rest of England and Wales the proportions of pregnant women diagnosed prior to birth were 65% and 49% respectively. The proportion of women of previously unknown serological status diagnosed in pregnancy also increased, indicating that much of the improvement is attributable to better antenatal diagnosis. These proportions, which are higher than in previous years, are likely to rise further as late reports are incorporated into the data (see routine HIV report which includes data on individual districts). The increase is especially pronounced in outer London and the rest of England and Wales.

Improvements in maternal diagnosis reflect the success of initiatives by the Department of Health, the PHLS, and professional groups (in particular midwives and obstetricians) to enhance antenatal HIV screening. The Intercollegiate Guidelines <www.phls.co.uk/facts/HIV/rcpch.pdf> published in 1998 recommended that antenatal HIV testing be offered and recommended universally within London. In 1999 the government introduced national targets for antenatal HIV testing uptake, detection of maternal infection, and reductions in vertical transmission (2). These included a universal offer and recommendation of an HIV test to areas outside London as well as within, as part of routine antenatal care. It is encouraging that recent data not only show that improvements in antenatal HIV diagnosis have continued in London, but also that improvements are now starting throughout the rest of England and Wales. In the first six months of 2000, however, half of HIV infected pregnant women living in England and Wales outside London remained undiagnosed at the time of giving birth.

1. Duong T, Ades AE, Gibb D, Tookey P, Masters J. Vertical transmission rates for HIV in the British Isles: estimates based on surveillance data. *BMJ* 1999; **319**: 1227-9.

2. NHS Executive. *Reducing mother to baby transmission of HIV (HSC 1999/183)*. London: NHS Executive, 1999.

First review of electronic *CDR Weekly*

It is now two months since the launch of *CDR Weekly* as an electronic serial. The presentation of the four-weekly cycle of material is established, and after a few initial changes, the format of the pdf files has settled down. We are emailing pdf files to over 650 recipients, and alerting over 150 others when we publish. There has been a steady stream of incoming emails commenting about the site, which has sometimes risen to a raging torrent if we have had an obvious problem! We will shortly be undertaking the first major review of the site and would especially welcome comments to aid this process. These can be sent to the deputy editor Neil Hough at nhough@phls.org.uk. Comments should arrive by 9 March to be included in this particular process, although comments are welcome at all times.

Last updated: 22 February 2001

Next update due 22 March 2001

Contents

Viral hepatitis, England and Wales: laboratory reports, weeks 45/00-48/00

	Number of reports received				Total reports 45/00-48/00	Cumulative total 2000
Laboratory reports	**45/00**	**46/00**	**47/00**	**48/00**		
Hepatitis A (IgM)	31	17	17	21	86	960
Hepatitis E (IgM/IgG)	2	–	–	2	4	31
Acute hepatitis B	15	13	7	14	49	542
HBsAg other	11	2	4	16	33	575
HBsAg*	4	2	7	13	26	356
Hepatitis C	91	42	42	150	325	4408

* category not yet determined

	Age (years)						Total
Laboratory reports	**<1**	**1-14**	**15-44**	**45-64**	**65+**	**Not stated**	
Hepatitis A (IgM)	–	14	55	9	6	2	86
Hepatitis E (IgM/IgG)	–	–	1	3	–	–	4
Acute hepatitis B	–	2	36	9	1	1	49
HBsAg other	–	1	29	2	1	–	33
HBsAg*	1	11	439	86	25	13	575
Hepatitis C	4	1	218	74	21	7	325

* category not yet determined.

Hepatitis A

A total of 52 cases were reported, compared with 101 in the equivalent four week period in 1999. A history of travel abroad in the six weeks before onset was recorded in two cases (Indian sub-continent 1, unknown 1). Three cases were associated with outbreaks in Trent, London, and West Midlands regions.

Hepatitis B

Twenty-one cases (15 males, 6 females) of acute hepatitis B were reported. Information about risk exposure was available for nine cases: sexual intercourse between men three (aged 24 to 43 years); injecting drug use six (five males aged 18 to 47 years, F 35y.

Hepatitis C

A total of 239 cases of hepatitis C infection were reported. Reports were received from the following regions: Northern and Yorkshire 3; Trent 34; Eastern 63; London 18; South East 5; South and West 58; West Midlands 22; Wales 36.

Hepatitis E

One case of hepatitis E infection was reported.

Invasive meningococcal infections, England and Wales: laboratory reports, weeks 49-52/00

	Method of diagnosis			Total reports 49-52/00	Annual total* 2000
	CSF and blood		Other sites		
	culture	non-culture**	culture		
Group A	–	–	–	**–**	**2**
Group B	66	74	12	**152**	**1645**
Group C	17	10	1	**28**	**712**
Group W135	4	2	2	**8**	**109**
Group X	–	–	–	**–**	**4**
Group Y	1	1	1	**3**	**29**
Group Z	–	–	–	**–**	**–**
Group 29E	–	–	–	**–**	**–**
Ungroupable	–	–	6	**6**	**22**
Ungrouped	–	13	–	**13**	**137**
Total	**88**	**100**	**22**	**210**	**2660**

* combined CDSC and Meningococcal Reference Unit data. ** latex antigen, microscopy, polymerase chain reaction.

Vaccine preventable diseases of childhood, England and Wales: laboratory reports, weeks 49-52/00

Laboratory reports	Number of reports received				Total reports 48-52/00	Annual totals*	
	49/00	50/00	51/00	52/00		2000	1999
Bordetella pertussis	3	2	1	3	**9**	**156**	**269**
Haemophilus influenzae type b**	2	8	2	2	**14**	**99**	**67**
Measles#	–	1	1	–	**2**	**95**	**88**
Mumps#	12	36	13	30	**91**	**654**	**358**
Rubella	1	–	–	–	**1**	**64**	**184**

* cumulative totals may include late reports not included in the last period. ** invasive disease only. # includes cases confirmed by salivary IgM antibody tests.

Salivary IgM antibody tests in cases notified to ONS, weeks 45-48/00

	Cases		Salivary IgM antibody results		
	Notified	Tested (%)	Total positive	Recently vaccinated	Confirmed
Measles	134	104 (78)	5	1	4
Mumps	173	126 (73)	63	–	63
Rubella	108	72 (67)	–	–	–

Virus infections, England and Wales: laboratory reports, weeks 04-07/01

Laboratory reports	Number of reports received				Total reports 04-07/01	Cumulative total 2001
	04/01	05/01	06/01	07/01		
Coxsackie A	–	–	2	1	**3**	**6**
Coxsackie B	5	6	5	3	**19**	**23**
Cytomegalovirus	40	16	10	18	**84**	**127**
Echovirus	8	4	1	12	**25**	**39**
Parvovirus B19	12	7	6	5	**30**	**50**
Varicella zoster virus	15	12	9	14	**50**	**74**

Laboratory reports of hepatitis infection, England and Wales: weeks 01-39/00 **(provisional data)**

Hepatitis A

A total of 763 reports of hepatitis A infection were reported to the end of the third quarter 2000

(table 1). Forty-eight per cent of cases occurred in 15 to 34 year olds.

Table 1 Quarterly laboratory reports of hepatitis A infection by age group and sex, England and Wales: 2000

Age	Quarter 1 Jan-Mar			Quarter 2 Apr-Jun			Quarter 3 Jul-Sep			Total
	Male	Female	NK	Male	Female	NK	Male	Female	NK	
<1	1	–	–	–	1	–	–	–	–	**2**
1-4	3	1	–	4	3	1	1	3	–	**16**
5-9	10	5	–	14	11	–	5	7	–	**52**
10-14	8	15	–	11	12	1	14	6	–	**67**
15-24	50	26	3	50	16	–	24	17	1	**187**
25-34	36	17	1	49	28	1	31	16	1	**180**
35-44	26	12	2	23	9	–	15	6	–	**93**
45-54	17	8	–	8	5	1	10	3	1	**53**
55-64	4	4	1	7	7	–	7	3	–	**33**
65+	9	8	–	9	8	–	3	9	–	**46**
NK	4	6	–	5	6	–	7	5	1	**34**
Total	**168**	**102**	**7**	**180**	**106**	**4**	**117**	**75**	**4**	**763**

Data based on date of specimen.

Acute hepatitis B

A total of 455 reports of acute hepatitis B infection were reported to the end of the third quarter of 2000. The majority of cases (61%) occurred in 15 to 34 year olds (table 2). Cases in males exceeded those in females in each quarter by approximately three to one.

Table 2 Quarterly laboratory reports of hepatitis B infection by age group and sex, England and Wales: 2000

Age	Quarter 1 Jan-Mar			Quarter 2 Apr-Jun			Quarter 3 Jul-Sep			Total
	Male	Female	NK	Male	Female	NK	Male	Female	NK	
<15	1	–	–	2	–	–	–	3	–	**6**
15-24	30	20	3	18	20	–	14	12	1	**118**
25-34	55	14	1	35	10	–	34	9	2	**160**
35-44	22	9	1	23	8	–	16	4	–	**83**
45-54	14	4	–	11	2	–	10	–	–	**41**
55-64	6	4	–	7	3	–	4	–	2	**26**
65+	3	2	–	4	1	–	1	–	–	**11**
NK	2	1	–	1	2	1	3	–	–	**10**
Total	**133**	**54**	**5**	**101**	**46**	**1**	**82**	**28**	**5**	**455**

Data are based on date of specimen.

Injecting drug use was the main risk factor associated with hepatitis B infection, accounting for 48% (145/305) of individuals with known risk factors (table 3). Twenty-four per cent (74/305) of individuals with known risk factors with heterosexual exposure; 13% sex between men and 16% associated with other risk exposures.

Table 3 Quarterly laboratory reports of acute hepatitis B infection by risk exposure, England and Wales: 2000

Risk exposure	Quarter 1 Jan-Mar	Quarter 2 Apr-Jun	Quarter 3 Jul-Sep	Total
IVDU	65	41	39	**145**
Sex between men	19	12	10	**41**
Sex between men and women	32	27	15	**74**
Other identified risk	21	14	10	**45**
No identified risk	55	54	41	**150**
Total	**192**	**148**	**115**	**455**

Data are based on date of specimen.

Hepatitis C

A total of 3680 reports of hepatitis C infection were reported to the end of the third quarter of 2000 (table 4). The majority of cases (63%) occurred in 25 to 44 year olds. Cases in males exceeded those in females in each quarter.

Table 4 Quarterly laboratory reports of hepatitis C infection by age group and sex, England and Wales: 2000

Age	Quarter 1 Jan-Mar			Quarter 2 Apr-Jun			Quarter 3 Jul-Sep			Total
	Male	Female	NK	Male	Female	NK	Male	Female	NK	
<15	2	1	–	6	2	1	8	3	–	**23**
15-24	90	76	5	80	70	8	85	65	6	**485**
25-34	320	166	21	324	128	17	248	100	10	**1334**
35-44	233	89	10	250	97	8	191	96	8	**982**
45-54	138	50	13	125	42	2	112	33	3	**518**
55-64	16	13	5	23	24	1	19	10	2	**113**
65+	30	18	2	22	18	3	30	14	2	**139**
NK	13	10	5	23	9	5	14	7	–	**86**
Total	**842**	**423**	**61**	**853**	**390**	**45**	**707**	**328**	**31**	**3680**

Data are based on date of specimen.

National enhanced surveillance of suspected meningococcal disease

Regional enhanced surveillance of meningococcal disease began in 1998 in five regions of England and was extended to include all regions in England, Wales, and Northern Ireland in January 1999. The national enhanced surveillance system requires consultants in communicable disease control (CCDCs) to report confirmed and probable cases of meningococcal disease in their districts each week to their regional PHLS Communicable Disease Surveillance Centre (CDSC). These data are sent to CDSC Colindale each week. In addition, CCDCs are asked to report to CDSC details of clusters of meningococcal disease in educational establishments in their districts.

Fourth Quarter 2000: weeks 40-52/00

A total of 836 cases of meningococcal disease were identified through the enhanced surveillance system in the eight English regions, Wales, and Northern Ireland during the fourth quarter of 2000, 32% lower than in the equivalent quarter in 1999 (1238) (table 1). Northern and Yorkshire region reported the highest number cases (129).

Table 1 Meningococcal disease by region and country: weeks 40-52

Region	Group				Total
	B	C	Other*	Infection not confirmed	
Eastern	32	8	3	38	**81**
London	32	4	4	71	**111**
North West	10	4	–	19	**33**
Northern and Yorkshire	56	8	17	48	**129**
Northern Ireland	13	3	1	21	**38**
South East	28	7	5	61	**101**
South West	44	11	6	23	**84**
Trent	37	12	3	38	**90**
Wales	29	7	4	30	**70**
West Midlands	29	10	6	54	**99**
Total	**310**	**74**	**49**	**403**	**836**

* includes W135, X, Y, 29E, ungroupable and ungrouped

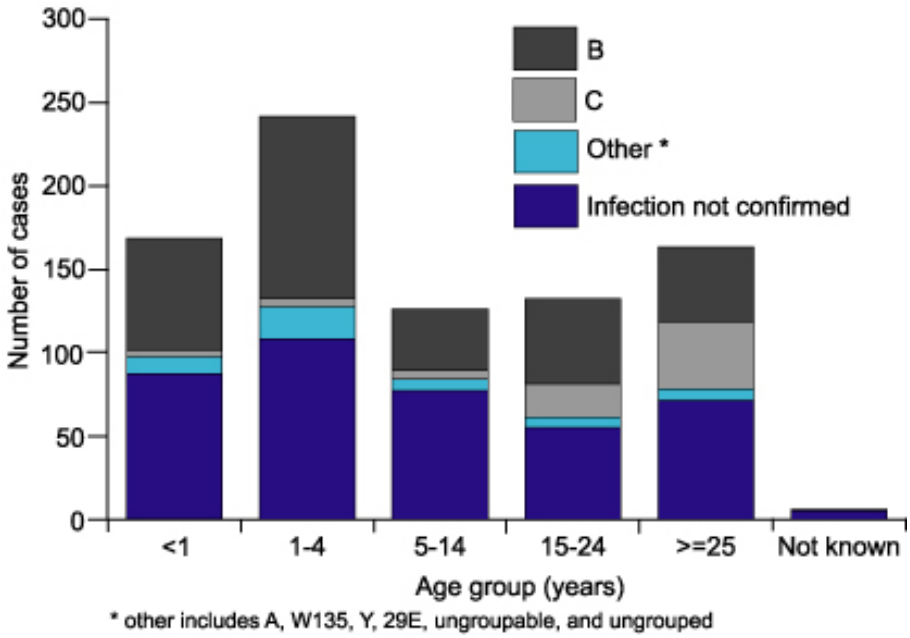
A clinical diagnosis of invasive disease was reported for 769 cases in England and Wales, 35% higher than the total number of cases of meningitis and septicaemia (497) officially notified during the same period. The overall fatality rate in those with a clinical diagnosis of invasive meningococcal disease was 4.2 per 100 cases and 5.2 per 100 cases diagnosed with septicemia (table 2). Fifty-two per cent (433/836) of cases identified by enhanced surveillance were confirmed as *Neisseria meningitidis*, compared with 570 infections confirmed by the reference laboratory.

Table 2 Clinically diagnosed cases (deaths) of meningococcal disease: England , Wales, and Northern Ireland: weeks 40-52/00

Region	Meningococcal infection				Total
	Meningitis	Septicaemia	Meningitis and septicaemia	Not meningitis or septicaemia	
Eastern	37 (1)	28 (2)	4 (1)	3	**72 (4)**
London	48 (1)	45 (1)	10 (1)	2	**105 (3)**
Northern Ireland	12	26 (3)	–	–	**38 (3)**
North West	9	12	3	–	**24**
Northern and Yorkshire	33	56 (5)	36 (1)	2	**127 (6)**
South East	29 (1)	46	24	2 (1)	**101 (2)**
South West	33 (1)	42 (1)	9	–	**84 (2)**
Trent	19 (1)	61 (3)	9	1	**90 (4)**
Wales	19 (1)	45 (1)	4 (1)	–	**68 (3)**
West Midlands	31 (1)	59 (6)	8	–	**98 (7)**
Total	**270 (7)**	**420 (22)**	**107 (4)**	**10 (1)**	**807 (34)**

Serogroup B infection was confirmed in 72% (310/433) of cases, serogroup C in 17% (74/433), and the remaining 11% included other serogroups and ungrouped cases. Compared to the equivalent quarter in 1999, an overall reduction in the number of cases of both serogroup B and C disease was observed. The number of cases of serogroup B infection fell by 18% (310 cases compared with 382 cases in 1999) and serogroup C by 71% (74 cases compared with 257 cases). The greatest reduction in serogroup C disease, 87%, was observed in those aged less than 20 years: 24 cases were seen in the fourth quarter of 2000 compared with 180 in the equivalemt period of 1999. A 31% decrease in unconfirmed cases was seen in this age group. The reduction in cases of group C disease is attributable to the use of the meningococcal group C conjugate vaccine, which was introduced in November 1999.

Figure Serogroups of *N. meningitidis* identified in cases in England, Wales, Northern Ireland by age: weeks 40-52/00



Archive data

Last updated: 22 February 2001

Next update due 22 March 2001

AIDS and HIV infection in the United Kingdom: monthly report

United Kingdom data from the PHLS HIV and STI Division, Scottish Centre for Infection and Environmental Health, Institute of Child Health, London, and Oxford Haemophilia Centre (on behalf of UK Haemophilia Centre Directors' Organisation).

HIV infection in women giving birth in the UK – trends in prevalence and proportions diagnosed to the end of June 2000

National unlinked anonymous (UA) monitoring of the prevalence of HIV-1 infection in women who give birth in the United Kingdom (UK) began in 1988 by testing for maternal antibody in infant dried blood spots. Since 1992 the survey has covered about 70% of the UK cohort of births. Data derived from this survey are presented for participating districts in tables 1 and 2. The results of UA monitoring are aligned with reports of HIV infected pregnant women made through the Royal College of Obstetricians and Gynaecologists* (RCOG) to the National Study of HIV in Pregnancy. This provides estimates of the proportions of HIV infected pregnant women who have had their infection diagnosed before pregnancy or during antenatal care. These estimates have attracted considerable interest since it became apparent in 1994 that interventions during pregnancy and in the perinatal period could greatly reduce the risk of transmission of HIV from mother to child. The uptake of such interventions by diagnosed HIV infected pregnant women is high and there are also benefits for women themselves in having their infection diagnosed early. Data in table 1 are to the end of June 2000 and in table 2 to the end of 1999. Results are based on the health authority of residence of the mother at the time of delivery. District data do not necessarily apply to hospitals in those districts because women living in one district may receive care elsewhere. This is especially true in urban areas such as London. Hospital specific data, based on the alignment of the results from the unlinked anonymous testing of antenatal bloods and RCOG notifications, are also available for 14 major London hospitals. Methodologies for both surveys have been described in detail elsewhere (1).

*The unlinked surveys for England are managed for the Department of Health by CDSC (PHLS) (UA surveys in SE Thames and all regions outside the Thames area) and by ICH (London) (UA surveys in NE, NW and SW Thames and the National Study of HIV in Pregnancy). The survey in Scotland is co-ordinated by the Scottish Centre for Infection and Environmental Health and the Neonatal Metabolic Screening Laboratory, Stobhill General Hospital, Glasgow. A steering group chaired by the Department of Health oversees the UA surveys, reviews strategy, and ensures that the data are collected, analysed, and presented in the most useful way for purchasers and providers.

Table 1 HIV infection in pregnant women giving birth in the UK 1994 – June 2000: alignment of dried blood spot survey data with confidential reports through the Royal College of Obstetricians and Gynaecologists

Table 2 Dried blood spot survey: United Kingdom 1996-1999 – prevalence of maternal HIV infection and alignment with confidential reports from Royal College of Obstetricians and Gynaecologists by participating health authorities

Prevalence of HIV infection

The highest prevalence of HIV in the UK is in inner London. In 1999, 173 women (38.9 per 10,000) who gave birth to live-born infants in inner London were HIV infected (table 1), the highest annual total ever reported. In outer London, 81 HIV-infected women (14.0 per 10,000) gave birth to live-born infants (table 1). Within London prevalence varied substantially according to maternal district of residence and in 1998-1999 ranged from 45.3/10,000 women in East London and City to 5.5/10,000 women in Bromley (table 2).

Elsewhere in the United Kingdom the prevalence of HIV infection among women giving birth to live-born infants has remained low, although in England and Wales in 1999 the estimated number of births was the highest ever reported (2.2/ 10,000 women) (table 1 and 2). A rise that was observed in 1999 has been sustained in the first half of 2000. In Scotland a similar prevalence was observed (2.3/10,000).

Estimates of HIV prevalence in pregnant women have also been made for districts in the UK not covered by the UA programme (table 3). These estimates have been derived using available data from the dried blood spot programme and the survey of prevalent HIV infections diagnosed (SOPHID) (2).

Table 3 Estimated prevalence of maternal HIV infection and alignment with confidential reports from the RCOG for districts not participating in the dried blood spot survey – 1998-1999

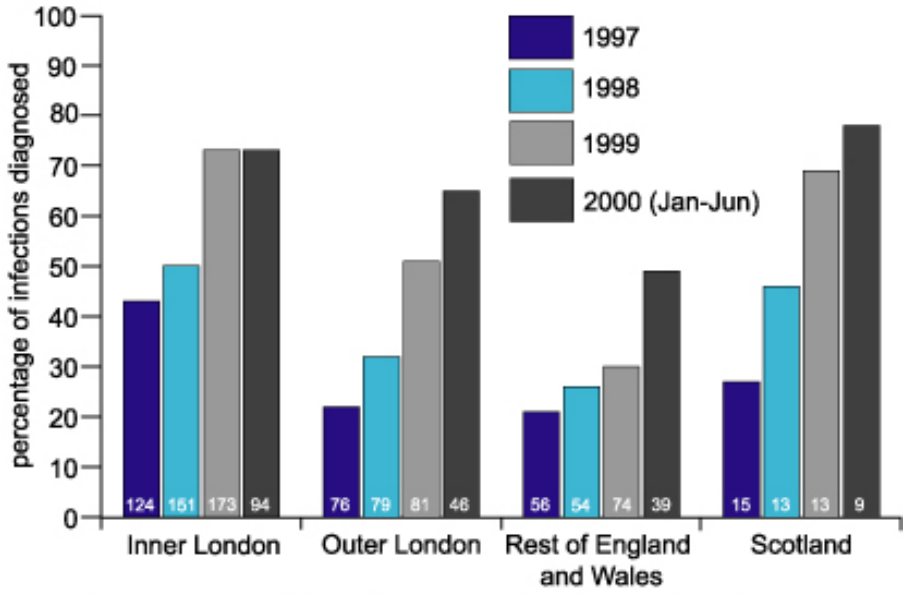
Region and health authority	Estimated number of positives* (diagnosed cases)**	Number of births in health authority	Estimated prevalence per 10,000
Eastern			
Cambridge and Huntingdon	3 (1)	10410	2.9
East Norfolk	2 (1)	13089	1.5
North West Anglia	2 (–)	10343	1.9
Suffolk	2 (1)	15437	1.3
Total	*9 (3)*	*49279*	*1.8*
Northern and Yorkshire			
County Durham	2 (–)	13435	1.5
Gateshead and South Tynside	1 (–)	7882	1.3
North Cumbria	2 (–)	6736	3.0
Newcastle and North Tynside	2 (–)	10503	1.9
Northumberland	– (–)	6324	–
Sunderland	1 (–)	6520	1.5
Tees	2 (–)	13236	1.5
Total	*10 (–)*	*64636*	*1.5*
South East			
Isle of Wight	1 (1)	2408	4.2
North and Mid Hampshire	2 (1)	13841	1.4
Portsmouth and SE Hampshire	2 (1)	12431	1.6
Southampton and SW Hampshire	2 (–)	11994	1.7
Total	*7 (3)*	*40674*	*1.7*
South West			
Avon	5 (1)	23481	2.1
Cornwall and Isles of Scilly	2 (–)	10026	2.0
Dorset	2 (1)	13740	1.5
Gloucestershire	2 (–)	12729	1.6
North and East Devon	2 (–)	9708	2.1
South and West Devon	2 (–)	12372	1.6
Somerset	2 (–)	10528	1.9
Wiltshire	2 (1)	15186	1.3
Total	*19 (3)*	*107770*	*1.8*
Wales			
Bro Taf	2 (1)	18008	1.1
Dyfed Powys	2 (–)	10046	2.0
Gwent	2 (–)	13563	1.5
Morgannwg	1 (–)	11126	0.9
North Wales	2 (–)	14920	1.3
Total	*9 (1)*	*67663*	*1.3*
Northern Ireland			
Total	*6 (–)*	*48187*	*1.2*

* Estimated number of HIV positive samples using data from the Dried Blood Spot Survey and the Survey of Prevalent HIV Infections diagnosed; ** Reported numbers of births to HIV infected mothers whose maternal infections had been diagnosed before and during pregnancy. Data based on confidential reports to the Royal College of Obstetricians and Gynaecologists (RCOG). Recent figures are subject to reporting delays. District data do not necessarily apply directly to individual hospitals in those districts because women who live in one district may receive antenatal care elsewhere. This is especially the case in urban areas.

Proportions of maternal infections diagnosed: performance monitoring

Information on the proportions of maternal infections diagnosed provides district specific performance monitoring for antenatal HIV testing. Data for the first half of 2000 for inner London showed that of the 94 maternal infections recorded through UA testing, 73% (69) could be aligned with reports of infected women to the national study of HIV in pregnancy (table 1 and figure 1). Of the 64 women who had not been diagnosed prior to pregnancy, 61% (39) were identified antenatally. This proportion, which is slightly higher than that observed in 1999, is likely to rise as further reports of women with diagnosed HIV infection are made. In outer London the proportion of maternal infections diagnosed showed a small rise before 1998. More recently, however, considerable progress has been made and the antenatal diagnosis rate rose from 16% in 1998 to 34% in 1999 and to 56% in the first half of 2000 (table 1). In outer London in the first half of 2000 65% of maternal infections were diagnosed at the time of birth (table 1 and figure 1). In the rest of England and Wales there has been an improvement in the antenatal diagnosis rate from 9% in 1999 to 29% in the first half of 2000, and overall about half of all maternal infections were diagnosed at the time of birth. In Scotland in the first half of 2000 the majority (78%) of maternal infections were diagnosed at the time of birth (table 1 and figure 1).

Figure 1 Proportion of HIV infections diagnosed prior to birth among pregnant women



Numbers at base of columns refer to the total number of positive specimens

In 1999 there were an estimated 380 births to HIV-infected women in the UK and this would have resulted in about 55 HIV-infected infants. Although recent improvements in maternal diagnosis have contributed to a decrease in the number of HIV infections passed from mother to child, fewer than 10 infant HIV infections would have occurred had all maternal HIV infections been diagnosed and appropriate interventions offered to all HIV-infected pregnant women (1). The recent improvement in maternal diagnosis follows substantial efforts made to improve antenatal HIV diagnosis. National targets and objectives that were set in 1999 involve the offer and recommendation of an HIV test to all pregnant women throughout England. This should lead to an 80% reduction by December 2002 in the number of children acquiring HIV infection from their mothers (3,4). Routine monitoring of the uptake of antenatal tests, including HIV, is being undertaken in London to monitor progress towards these targets. Preliminary results show that across London approximately two thirds of pregnant women are taking the test, that uptake rates vary substantially by maternity unit, and that the data requested is often difficult for units to collect. It is important that this monitoring scheme is not only sustained but also extended outside London. The proportion of maternal infections diagnosed will continue to be monitored through the alignment of obstetric reports of HIV infected pregnant women made to the National Study of HIV in Pregnancy with results from the unlinked anonymous dried blood spot programme. This surveillance approach needs to become routine for a number of years after screening policy has been implemented to ensure that HIV infected pregnant women are being diagnosed before their babies are born.

The fourth UK Survey of antenatal testing policy, a collaborative project between the Institute of Child Health (London) and the PHLS Communicable Disease Surveillance Centre, is currently underway. A questionnaire will be sent to all maternity units in the UK and Republic of Ireland. The results will provide a valuable insight into the development of policy and practice in antenatal screening within maternity units, and update findings from previous surveys which were carried out in 1996 (maternity units within the UK), and 1999 (maternity units within London). For further information contact Susan Cliffe at CDSC (email: scliffe@phls.org.uk).

Results from the unlinked anonymous surveys of pregnant women, together with all other unlinked anonymous data, are published annually by the Department of Health. In addition local results, broken down by year and district, are forwarded every six months to directors of public health, regional epidemiologists and local collaborators in the unlinked surveys.

1. Unlinked Anonymous HIV Surveys Steering Group. *Unlinked Anonymous HIV Prevalence Monitoring Programme: United Kingdom. Data to the end 1998.* London: Department of Health, Public Health Laboratory Service, Institute Child Health, Scottish Centre for Infection and Environmental Health, 1999.

2. Molesworth AM. Results of a survey of diagnosed HIV infections prevalent in 1996 in England and Wales. *Communicable Dis Public Health* 1998; **1**: 271-5.

3. Expert Group on Antenatal HIV Targets. *Targets aimed at reducing the number of children born with HIV: report from an expert group*. London: Department of Health, July 1999.

4. NHS Executive. *Reducing mother to baby transmission of HIV. Health Service Circular HSC1999/183.* London: NHS Executive, 1999.

Archive data

Go to top

Table 1 HIV infection in pregnant women giving birth in the UK 1994 – June 2000: alignment of dried blood spot survey data with confidential reports through the Royal College of Obstetricians and Gynaecologists†

Area of residence of mother	Number tested	Number of births to HIV infected mothers (a)*	Prevalence per 10 000	Number of maternal HIV infections reported as diagnosed		Overall percentage diagnosed before birth ((b+c)/a)‡	Percentage of infections diagnosed during antenatal care (c/(a-b))§
				Diagnosed before pregnancy (b)	Diagnosed during pregnancy (c)		
Inner London							
1994	43 781	127	29.0	21	16	29	15
1995	43 906	118	26.9	18	11	25	11
1996	45 543	134	29.4	25	21	34	19
1997	45 713	124	27.1	34	19	43	21
1998	44 561	151	33.9	39	37	50	33
1999	44 503	173	38.9	68	58	73	55
2000 (Jan-Jun)	22 410	94	41.9	30	39	73	61
Outer London							
1994	61 318	53	8.6	5	2	13	4
1995	60 596	74	12.2	11	5	22	8
1996	62 370	70	11.2	12	7	27	12
1997	60 694	76	12.5	11	6	22	9
1998	59 340	79	13.3	15	10	32	16
1999	57 784	81	14.0	20	21	51	34
2000 (Jan-Jun)	29 527	46	15.6	10	20	65	56
Rest of England and Wales¶							
1994	357 713	47	1.3	7	1	17	3
1995	346 793	38	1.1	3	1	11	3
1996	349 175	59	1.7	10	7	29	14
1997	349 983	56	1.6	10	2	21	4
1998	348 686	54	1.5	12	2	26	5
1999	338 653	74	2.2	17	5	30	9
2000 (Jan-Jun)	164 459	39	2.4	11	8	49	29
Scotland							
1994	62 188	18	2.9	9	3	67	33
1995	60 899	15	2.5	9	1	67	17
1996	59 290	16	2.7	8	2	63	25
1997	59 604	15	2.5	4	–	27	–
1998	57 298	13	2.3	5	1	46	13
1999	55 374	13	2.3	8	1	69	20
2000 (Jan-Jun)#	26 631	9	3.4	6	1	78	33

* Data provided from the unlinked anonymous dried blood spot survey

† Confidential reports of HIV positive pregnancies made through the RCOG survey. These reports are subject to reporting delay, particularly for recent years

‡ Estimated percentage of births to HIV infected mothers whose maternal infection had been reported to have been diagnosed either prior to or during pregnancy ((b+c)/a)

§ Estimated percentage of births to previously undiagnosed HIV infected mothers reported as diagnosed during antenatal care (c/(a-b))

¶ Not all districts participate in the dried blood spot survey in their areas. It is estimated that 55% of births in this area are covered by this survey.

\# Data provisional

Table 2 Dried blood spot survey: United Kingdom 1996-1999 – prevalence of maternal HIV infection and alignment with confidential reports from Royal College of Obstetricians and Gynaecologists† by participating health authorities

Region and health authority/board	1996-1997 Positives* (diagnosed cases)†		Tested	Prevalence per 10000	1998-1999 Positives* (diagnosed cases)†		Tested	Prevalence per 10000
London								
Barking and Havering	4	(1)	10858	3.7	7	(2)	10714	6.5
Barnet	15	(2)	8036	18.7	13	(5)	7903	16.4
Bexley and Greenwich	18	(7)	11864	15.2	16	(8)	11807	13.6
Brent and Harrow	27	(3)	13285	20.3	24	(14)	12629	19.0
Bromley	2	(3)	7388	2.7	4	(1)	7225	5.5
Camden and Islington	26	(12)	10859	23.9	24	(18)	10880	22.1
Croydon	5	(2)	9065	5.5	22	(7)	8762	25.1
Ealing, Hammersmith, and Hounslow§	40	(15)	26758	14.9	31	(24)	24812	12.5
East London and The City	69	(19)	24197	28.5	107	(61)	23634	45.3
Enfield and Haringey	40	(9)	15266	26.2	48	(20)	14608	32.9
Hillingdon	4	(3)	6839	5.8	6	(1)	6603	9.1
Kensington, Chelsea, and Westminster§	14	(3)	5187	27.0	8	(3)	4790	16.7
Kingston and Richmond	8	(2)	8659	9.2	9	(–)	7813	11.5
Lewisham, Southwark, and Lambeth	92	(40)	25456	36.1	109	(69)	24556	44.4
Merton, Sutton, and Wandsworth	17	(10)	16717	10.2	39	(27)	16224	24.0
Redbridge and Waltham Forest	23	(4)	13886	16.6	17	(8)	13228	12.9
Region total	**404**	**(135)**	**214320**	**18.9**	**484**	**(268)**	**206188**	**23.5**
South East								
Berkshire	6	(1)	21173	2.8	5	(4)	21077	2.4
Buckinghamshire	2	(1)	16248	1.2	2	(1)	15468	1.3
East Kent	2	(2)	13173	1.5	3	(1)	12983	2.3
East Sussex, Brighton, and Hove	5	(2)	15156	3.1	2	(1)	15318	1.3
East Surrey	–	(–)	8733	–	5	(1)	8129	6.2
Northamptonshire	2	(1)	14805	1.4	5	(1)	14477	3.5
Oxfordshire	8	(3)	13645	5.9	2	(–)	13191	1.5
West Kent	4	(–)	25089	1.6	1	(–)	24297	0.4
West Surrey	2	(1)	18959	1.1	4	(–)	20213	2.0
West Sussex	2	(1)	16425	1.2	8	(5)	15944	5.0
Region total	**33**	**(12)**	**163406**	**2.0**	**37**	**(14)**	**161097**	**2.3**
Eastern								
Bedfordshire	7	(2)	14995	4.7	8	(1)	14289	5.6
East and North Hertfordshire	4	(–)	12662	3.2	4	(1)	12240	3.3
North Essex	1	(–)	14095	0.7	–	(–)	13543	–
South Essex	3	(–)	22519	1.3	9	(2)	21966	4.1
West Hertfordshire	3	(1)	13232	2.3	1	(–)	12929	0.8
Region total	**18**	**(3)**	**77503**	**2.3**	**22**	**(4)**	**74967**	**2.9**
Northern and Yorkshire‡								
Bradford	1	(–)	9436	1.1	1	(1)	10028	1.0
Hull	1	(–)	11466	0.9	–	(–)	10508	–
Leeds East	4	(–)	7288	5.5	4	(–)	5632	7.1
Leeds West	2	(–)	6551	3.1	4	(1)	9166	4.4
Region total	**8**	**(–)**	**68734**	**1.2**	**9**	**(2)**	**68317**	**1.3**
Trent								
Barnsley	–	(–)	5450	–	1	(–)	4866	2.1
Doncaster	2	(2)	7170	2.8	1	(–)	6809	1.5
Leicestershire	8	(2)	22308	3.6	5	(1)	21584	2.3
Lincolnshire	1	(–)	7096	1.4	1	(–)	6920	1.4
North Nottinghamshire	1	(–)	9268	1.1	–	(–)	8674	–
Nottingham	1	(–)	15302	0.7	4	(1)	14544	2.8
Sheffield	4	(3)	12153	3.3	2	(3)	12069	1.7
Southern Derbyshire	1	(–)	13458	0.7	1	(1)	13407	0.7
South Humber	–	(–)	14412	–	1	(–)	13663	0.7
Region total	**18**	**(7)**	**120935**	**1.5**	**16**	**(6)**	**116070**	**1.4**
West Midlands								
Birmingham	5	(2)	31220	1.6	10	(3)	29954	3.3
Coventry	2	(–)	7887	2.5	–	(–)	7688	–
Dudley	1	(–)	7496	1.3	1	(–)	7014	1.4
Herefordshire	1	(–)	3531	2.8	–	(–)	3393	–
North Staffordshire	4	(–)	10642	3.8	1	(–)	10266	1.0
Sandwell	2	(–)	7840	2.6	–	(1)	7273	–
Shropshire	1	(–)	10080	–	1	(–)	9785	1.0
South Staffordshire	–	(–)	13162	–	2	(–)	12678	1.6
Warwickshire	–	(–)	10958	–	2	(–)	10648	1.9
Wolverhampton	–	(–)	6721	–	4	(1)	6438	6.2
Worcestershire	1	(–)	12134	0.8	–	(–)	11970	–
Region total	**17**	**(2)**	**126120**	**1.3**	**21**	**(5)**	**121212**	**1.7**
North Western								
Bury and Rochdale	1	(1)	9888	1.0	2	(–)	10118	2.0
East Lancashire	–	(–)	12970	–	2	(–)	12915	1.5
Liverpool	1	(–)	12554	0.8	2	(1)	11922	1.7
Manchester	5	(2)	8413	5.9	4	(2)	11754	3.4
Morecombe Bay	1	(–)	3190	3.1	–	(–)	3284	–
North Cheshire	1	(–)	7992	1.3	1	(–)	8462	1.2
North West Lancashire	3	(–)	10314	2.9	2	(–)	9842	2.0
Salford and Trafford	2	(–)	10387	1.9	4	(–)	10521	3.8
South Cheshire	1	(–)	14137	0.7	4	(2)	14197	2.8
South Lancashire	2	(–)	6435	3.1	1	(1)	6458	1.5
St Helens and Knowsley	–	(–)	7204	–	1	(–)	7269	1.4
Stockport	1	(–)	6357	1.6	–	(–)	6300	–
West Pennine	1	(1)	5850	1.7	–	(–)	5682	–
Wigan and Bolton	2	(1)	13662	1.5	–	(–)	13596	–
Region total	**21**	**(5)**	**142460**	**1.5**	**23**	**(6)**	**145676**	**1.6**
Scotland								
Argyll and Clyde	2	(–)	10722	1.9	–	(–)	10044	–
Ayrshire and Arran	1	(–)	8334	1.2	1	(–)	7852	1.3
Borders	2	(–)	2261	8.8	–	(–)	2031	–
Fife	1	(–)	7597	1.3	2	(–)	7403	2.7
Forth Valley	–	(–)	6426	–	1	(–)	6259	1.6
Grampian	2	(–)	11947	1.7	–	(–)	11638	–
Greater Glasgow	3	(4)	21052	1.4	5	(–)	19341	2.6
Lanarkshire	2	(–)	13835	1.4	–	(–)	13221	–
Lothian	13	(6)	18329	7.1	12	(9)	17539	6.8
Tayside	5	(4)	8884	5.6	5	(6)	8297	6.0
Region total	**31**	**(14)**	**118894**	**2.6**	**26**	**(15)**	**112672**	**2.3**

Eighteen health authorities in UK (non-London) had no positive specimens between 1996 and 1998 (Calderdale and Halifax, Dewsbury, Dumfries and Galloway, Grimsby, Highlands, Huddersfield, Isle of Man, North Derbyshire, Orkney, Pontefract, Sefton, Shetland, Solihul, Wakefield, Warrington, Western Isles, Wirral, and York)

* Positives from an unlinked anonymous seroprevalence survey, which covers London, six regions in England outside London, and Scotland

† Reported numbers of births to HIV infected mothers whose maternal infections had been diagnosed before or during pregnancy. Data based on confidential reports to the Royal College of Obstetricians and Gynaecologists (RCOG). Recent figures are subject to reporting delay. District data do not necessarily apply directly to individual hospitals in those districts because women who live in one district may receive antenatal care elsewhere. This is especially the case in urban areas such as London.

‡ Unlinked anonymous specimens from women receiving antenatal care

§ Specimens collected from the former district of Riverside have been allocated to Ealing, Hammersmith, and Hounslow. Results for Riverside are as follows: 1996-1997 21 positives out of 11069 samples tested; 1998-1999 9 positives out of 10835 samples tested