

Communicable Disease Report

Routine immunisation for influenza to include those aged 65 years and over and health care workers

The Department of Health is recommending that annual immunisation for influenza in the United Kingdom (UK) be extended to the 65 to 74 year age group from this winter. Immunisation is currently recommended for people of all ages with chronic illnesses that put them at increased risk of the complications of influenza, those living in long stay residential accommodation and, since 1998, all those aged 75 years and over¹. The new recommendations are based on advice from the Joint Committee on Vaccination and Immunisation following an appraisal which showed that immunising the otherwise fit 65 to 74 year age group provides benefits in terms of life expectancy as well as a reduction in complications and hospital admissions.

The DoH has recommended a target uptake of 70% among all those aged 65 years and over for general practitioners and health authorities, although in the first year a minimum uptake of 60% is recommended. Health authorities have been asked to ensure that arrangements are in place for each practice to monitor uptake levels and offer support to practices where achieving the minimum 60% uptake may be difficult. They have also been asked to identify a co-ordinator with overall responsibility for influenza immunisation.

It is additionally recommended that immunisation be offered to all health care workers involved in the delivery of care and/or support to patients. Social Service employers have also been asked to consider offering immunisation to all staff involved in the delivery of care and/or support to clients.

The changes were announced by the Secretary of State for Health as part of a package of measures in the winter flu campaign, which will include a programme of public education to run later this year. Information on the changes has been sent to health and local authorities² and to general practitioners³. Further information can be obtained from the Department of Health web site at <www.doh.gov.uk/flu.htm>.

1. Department of Health, Welsh Office, Scottish Office Department of Health, DHSS (Northern Ireland). Immunisation against infectious disease. London: HMSO, 1996.
2. Department of Health. *Winter 2000/1: capacity planning for health and social care: emergency care and social care*. (HSC200/016; LAC200/14). London: Department of Health, 2000.
3. Chief Medical Officer. *CMO Update 26*. London: Department of Health, 2000.

Microbiological investigation into wound botulism

The clinical diagnosis of wound botulism in the patient reported in CDR (*CDR Wkly 2000; 10: 177*) has been confirmed by the Food Safety Microbiology Laboratory (FSML) at the PHLS Central Public Health Laboratory. The patient had a long history of heroin injection. Botulinum toxin type A was detected in serum and organisms producing botulinum toxin A were isolated from pus collected from a sinus relating to an earlier abscess.

Wound botulism is caused by localised infection with *Clostridium botulinum* producing toxins A or B. The organism produces toxin in vivo which spreads systemically and binds to presynaptic membranes in the neuromuscular junction. This binding blocks the release of acetylcholine and results in the typical descending flaccid paralysis of botulism. Recovery may take up to a year because of the high affinity of the toxin for the receptors. *C. botulinum* is naturally present in the environment as spores and can colonise a wound after traumatic injury or, rarely, an abscess. It can also be introduced into wounds associated with intravenous or intranasal drug use. Subcutaneous injection of black tar heroin is particularly risky. Spores may be introduced into drugs in the country of origin, or at any point along the

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Invasive meningococcal infections, England and Wales: laboratory reports, weeks 13-16/00

	Method of diagnosis			Total reports 13-16/00	Cumulative total to week 16* 2000
	CSF and blood culture	non-culture†	Other sites culture		
Group A	1	–	–	1	1
B	54	56	17	127	760
C	31	33	2	66	423
W135	23	4	3	30	42
X	–	–	–	–	1
Y	1	1	1	3	11
Z	–	–	–	–	–
29E	–	–	–	–	–
Ungroupable	1	–	4	5	12
Ungrouped	–	27	–	27	61
Total	111	121	27	259	1311

* combined CDSC and Meningococcal Reference Unit data

† latex antigen, microscopy, polymerase chain reaction

Invasive meningococcal infections, England and Wales: serogroup by age, weeks 01-13/00

	Weeks 01-13/00 (01-13/99)						Total reports 01-13/00	Cumulative totals*	
	<1	1-4	5-14	15-24	>24	NK		2000	1999
Group A	–	– (1)	–	–	–	–	–	–	1
B	138 (110)	178 (173)	88 (81)	98 (79)	142 (95)	1 (8)	645	645	546
C	21 (36)	101 (97)	83 (76)	51 (92)	116 (73)	2 (8)	374	374	382
W135	4 (5)	– (1)	1	–	9 (10)	–	14	14	16
X	– (1)	1	–	–	– (1)	–	1	1	3
Y	4 (1)	– (2)	–	2 (1)	2	–	8	8	3
Z	–	–	–	–	–	–	–	–	–
29E	–	–	–	1	– (1)	–	1	1	1
Ungroupable	1	1 (2)	4 (1)	4 (3)	2	–	12	12	6
Ungrouped	8 (21)	8 (47)	11 (33)	3 (19)	7 (17)	2 (2)	39	39	136
Total	176 (174)	289 (323)	187 (191)	159 (194)	278 (197)	5 (18)	1094	1094	1097

Vaccine preventable diseases of childhood, England and Wales: laboratory reports, weeks 13-16/00

Laboratory reports	Number of reports received				Total reports 13-16/00	Cumulative totals*	
	13/00	14/00	15/00	16/00		2000	1999
<i>Bordetella pertussis</i>	1	1	3	1	6	36	71
<i>Haemophilus influenzae</i> type b†	3	3	–	1	7	24	17
Measles‡	1	2	–	1	4	36	23
Mumps‡	13	14	11	–	38	183	88
Rubella	2	–	–	2	4	24	75

* cumulative totals may include late reports not included in the last period

† invasive disease only

‡ includes cases confirmed by salivary IgM antibody tests

Bordetella pertussis: five infants (aged 1 to 2 months); M 5y.***Haemophilus influenzae* type b**: (blood isolate unless otherwise stated) M 3y; M 3y and M 4y both with meningitis; M 4y and F 89y with pneumonia; M 40y; F 26y with epiglottitis.**Measles**: M 36y, F 23y, and F 28y all unvaccinated; F 13y from Salford outbreak (*CDR Wkly* 2000; 4: 29).**Mumps**: M 1y and F 3y both unvaccinated; seven children aged 9 to 11 years; 19 aged 12 to 17 years, mainly from secondary school outbreaks in North West (11) and West Midlands (8) regions; nine adults aged 19 to 60 years.**Rubella**: M 1y; M 29y; F 23y; F 30y.**Salivary IgM antibody tests in cases notified to ONS, weeks 05-08/00**

	Cases		Salivary IgM antibody results		
	Notified	Tested (%)	Total positive	Recently vaccinated	Confirmed
Measles	229	165 (72)	8	3	5
Mumps	203	146 (72)	61	–	61
Rubella	174	116 (67)	1	–	1

Virus infections, England and Wales: laboratory reports, weeks 17-20/00

Laboratory reports	Number of reports received				Total reports 17-20/00	Cumulative total 2000
	17/00	18/00	19/00	20/00		
Coxsackie A	–	1	1	–	2	10
Coxsackie B	1	3	4	–	8	34
Cytomegalovirus	16	16	36	13	81	427
Echovirus	5	5	4	1	15	45
Parvovirus B19	1	4	9	3	17	64
Varicella zoster virus	4	7	8	5	24	131

Coxsackie A: A7, 1; A16, 1. F 3y and F 24y. Isolates from Eastern and Trent regions.

Coxsackie B: B2, 2; B3, 1; B4, 1; B5, 2; untyped, 2. M 1d, F 10m, M 1y, F 1y, M 6y (CSF (cerebrospinal fluid) isolate), F 7y, M 27y, F 39y with meningitis (CSF isolate).

Cytomegalovirus: F 1d; seven infants; two children age 1 to 4 years; two aged 5 to 9 years; two aged 10 to 14 years; 30 patients aged 15 to 44 years; 28 aged 45 to 64 years; seven aged 65 years or over; and two whose ages were not reported. Eight patients were immunocompromised: five had undergone transplants. Eastern region reported 23 cases, South West 18, South East 16, Northern and Yorkshire eight, Trent six, London four, and West Midlands and Wales two each.

Echovirus: type 4, 1; type 11, 1; type 13, 2; type 16, 1; type 18, 3; type 22, 2; type 30, 1; untyped, 4. Two neonates (aged under one month); five infants, including M 5m with meningitis; three children aged 1 to 4 years; F 9y; M 12y;

three aged 15 to 44 years, including F 35y with meningitis (CSF isolate). Trent region reported four cases, Eastern and South West three each, London and South East two each, and West Midlands one.

Epstein-Barr virus (98): F 7m; five children aged 1 to 4 years, including F 4y with splenomegaly; seven aged 5 to 9 years, ten aged 10 to 14 years; 60 patients aged 15 to 44 years; seven aged 45 to 64 years, including M 58y with chronic Q fever; six aged 65 years and over; and two whose ages were not reported.

Herpes simplex virus: five detections in CSF: patients were aged 11 months to 41 years. Nineteen eye infections were reported.

Parvovirus B19: F 1y; F 11y; 13 patients aged 15 to 44 years, F 58y, F 64y. South West region reported six cases, South East and Eastern three each, Trent and Wales two each, and Northern and Yorkshire one.

Varicella zoster virus: CSF isolate from male of unknown age.

Enhanced surveillance of suspected meningococcal disease

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 modified system requires consultants in communicable disease control (CCDCs) to report each week confirmed and probable cases of meningococcal disease in their districts to their regional epidemiologists.

Table 1 Meningococcal disease by region (excluding Northern Ireland and South East), weeks 10-13/00

Region*	Group				Total
	B	C	Other†	Infection not confirmed	
Eastern	6	3	–	9	18
London	8	7	2	23	40
North West	6	3	–	16	25
Northern and Yorkshire	13	5	2	22	42
Northern Ireland	2	3	2	4	11
South East	13	8	2	29	52
South West	10	2	2	10	24
Trent	8	6	–	15	29
Wales	12	5	–	17	34
West Midlands	10	7	3	25	45
Total	88	49	13	170	320

* NHS Executive regional office boundaries, 1 April 1999

† includes W135, X, Y, 29E, and ungroupable

These data are then collated and reported to the PHLS Communicable Disease Surveillance Centre (CDSC) each month. In addition, CCDCs are asked to report to CDSC details of clusters of meningococcal disease in educational establishments in their districts.

Weeks 10-13/00

A total of 320 cases of meningococcal disease identified through the enhanced surveillance system were reported in weeks 10 to 13 of 2000. The number of cases reported for this four week period was 10% lower than in the previous

Table 2 Meningococcal disease by age (excluding Northern Ireland and South East regions), weeks 10-13/00

Group	Age (years)						Total
	<1	1-4	5-14	15-24	≥25	NK	
Group B	21	26	9	17	15	–	88
C	3	18	7	11	9	1	49
Other*	1	4	3	2	3	–	13
Infection not confirmed	48	52	28	20	21	1	170
Total	73	100	47	50	48	2	320

NK not known

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

four weeks (358). South East region reported the largest number of cases (52) (table 1).

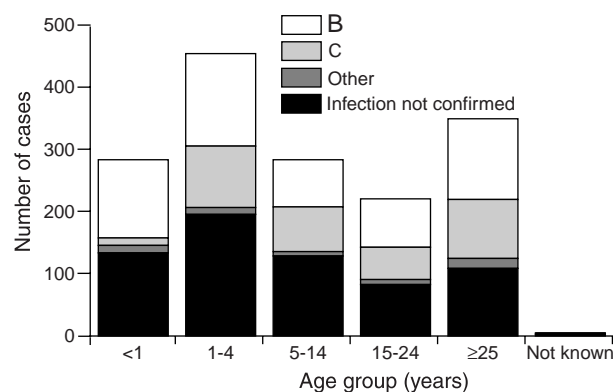
Excluding Northern Ireland, the regional surveillance scheme identified 309 cases of invasive meningococcal disease during weeks 10 to 13 of 2000; by comparison 190 cases of meningitis and septicaemia were officially notified from England and Wales and 194 confirmed cases were reported through the routine laboratory system for the same four week period from England, Wales, and Northern Ireland.

Forty-seven per cent (150/320) of cases identified by enhanced surveillance were confirmed as *Neisseria meningitidis* infections, 59% (88) of which were serogroup B and 33% (49) serogroup C. Forty-nine per cent of confirmed cases were children under 5 years of age, among whom 64% of infections were with group B meningococci (table 2).

First quarter 2000

The enhanced surveillance system identified 1599 cases of meningococcal disease in the first quarter of 2000, 37% more than in the fourth quarter of 1999 (1165). One thousand five hundred and twenty-six of these were clinically diagnosed as invasive meningococcal disease, representing 45% more cases than reported through the routine notification system after excluding Northern Ireland (1004) (table 3). The overall case

Figure Serogroups of *N. meningitidis* identified in cases in England and Wales, by age: weeks 01-13/00



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

fatality rate was 5.7%, with the highest rate in cases with meningococcal meningitis and septicaemia (7.9%). Nine hundred and forty-five cases were confirmed *N. meningitidis* infections compared with 1106 confirmed cases identified through the routine laboratory system. Group B accounted for 59% (559/945) and group C 35% (332) (figure).

Table 3 Clinically diagnosed cases of meningococcal disease: England and Wales, weeks 01 - 13/00

Region	Meningococcal meningitis (deaths)	Meningococcal septicaemia (deaths)	Meningococcal meningitis and septicaemia (deaths)	<i>N. meningitidis</i> infection but not meningitis or septicaemia (deaths)	Total (deaths)
Eastern	40 (1)	62 (1)	11	1	114 (2)
London	74 (4)	97 (7)	22 (3)	8 (1)	201 (15)
North West	29 (1)	91 (3)	14 (2)	—	134 (6)
Northern and Yorkshire	63 (3)	106 (6)	43 (2)	2	214 (11)
Northern Ireland	21	36 (2)	2 (1)	9	68 (3)
South East	67 (3)	119 (9)	34 (2)	7 (2)	227 (16)
South West	47 (2)	62 (4)	11	2	122 (6)
Trent	37	92 (11)	19 (3)	2	150 (14)
Wales	25 (1)	82 (4)	6 (1)	—	113 (6)
West Midlands	46	109 (7)	27 (1)	1	183 (8)
Total	449 (15)	856 (54)	189 (15)	32 (3)	1526 (87)

Microbiological investigation into wound botulism (continued from page 185)

distribution chain, as well as by the individual drug user. Cigarette filters used to clean heroin before injection were obtained from three recent cases of wound botulism in Switzerland. Three isolates from these filters were sent to FSML for toxin testing: two produced botulinum toxin type A and one type B.

Wound botulism is not common, although underdiagnosis may occur. The disease should be considered when a single case presents with signs and symptoms compatible with botulism, and where there is a recent history of wound, laceration, abscess or puncture injuries and epidemiological investigation suggests that a foodborne cause is unlikely. Early recognition and treatment with antitoxin are extremely important because antitoxin can inactivate toxin only before it binds to receptors.

Dr MM Brett or other senior staff of the FSML may be contacted to discuss suspected cases of wound botulism and laboratory testing (telephone 020 8200 4400 ext 4116). Outside working hours, and to check for availability of antitoxin, contact the CDSC duty doctor.

Notifications of infectious diseases

Doctors in England and Wales have a statutory duty to notify a 'proper officer' of the local authority (usually the consultant in communicable disease control) of cases of certain infectious diseases (*CDR Review 1993; 3: R19-25*). Notifications of infectious diseases, not all of which are microbiologically confirmed, prompt local investigation and action to control the diseases. Proper officers are required each week to inform the Registrar General of the

number of cases of each disease that have been notified. The responsibility for collating the weekly returns from proper officers, and publishing analyses of local and national trends has been transferred to CDSC from ONS (*CDR Weekly 1997; 7: 145*). Data published here – and an expanded form of table 2 with data to district level – are also available in an electronic format to Epinet subscribers on the PHLS network.

Table 1 Notifications of infectious diseases* in the past 6 weeks, with totals for the current year compared with corresponding periods of the two preceding years

		Week						Cumulative totals to week 19†			Cumulative totals from mid-year to week 19‡			
		14/00	15/00	16/00	17/00	18/00	19/00	1998 (i)	1999 (ii)	2000 (iii)	97/98(a)	98/99(b)	99/00(c)	
Tuberculosis	Cases [§]	139	146	154	100	147	145	2053	2220	2540	4902	5373	5519	
Scarlet fever	Cases	76	64	45	56	34	52	1749	1072	971	3042	2204	1692	
Malaria	Cases	16	7	6	6	14	23	433	264	267	1309	829	899	
Leptospirosis	Cases	–	–	–	–	–	1	10	9	11	24	29	22	
Food poisoning formally notified ascertained	Cases	1257	1252	1096	1045	1134	1644	25131	24735	22645	79495	78683	69945	
	Cases	700	672	507	535	527	831	14428	14632	12017	45557	45499	37928	
	Cases	557	580	589	510	607	813	10703	10103	10628	33938	33184	32017	
Typhoid fever presumed contracted	Cases	6	4	5	4	5	4	38	55	48	122	119	112	
	abroad [§]	6	3	4	4	5	4	32	46	46	104	104	105	
	GB	–	1	1	–	–	–	6	9	2	18	15	7	
Paratyphoid fever presumed contracted	Cases	2	–	1	–	1	5	37	37	22	92	103	84	
	abroad [§]	2	–	1	–	1	5	35	34	20	87	93	79	
	GB	–	–	–	–	–	–	2	3	2	5	10	5	
Dysentery	Cases	27	30	21	31	30	35	456	523	469	1479	1655	1282	
Viral hepatitis	hepatitis A	Cases	74	84	50	64	43	75	1094	1167	1230	2898	2853	3020
	hepatitis B	Cases	29	27	17	31	19	31	580	605	486	1688	1341	1331
	hepatitis C	Cases	15	31	17	19	11	15	280	272	349	653	767	827
	other and unknown	Cases	30	23	11	10	11	26	158	225	347	342	604	759
		Cases	–	3	5	4	2	3	76	65	48	215	141	103
Meningitis meningococcal	influenzal (<i>Haemophilus influenzae</i>)	Cases	61	58	37	40	48	55	910	963	985	1861	1914	1880
	other specified	Cases	39	22	19	20	28	26	547	557	554	1038	1054	1018
	unspecified	Cases	1	2	–	–	1	–	11	6	18	29	21	36
		Cases	15	28	11	13	16	17	258	280	299	590	589	591
		Cases	6	6	7	7	3	12	94	120	114	204	250	235
Meningococcal septicaemia (without meningitis)	Cases	42	45	32	49	28	34	672	909	837	1298	1566	1531	
Acute encephalitis infective post-infectious	Cases	–	–	–	–	2	1	11	9	5	26	24	13	
	Cases	–	–	–	–	1	1	9	6	3	17	15	11	
	Cases	–	–	–	–	1	–	2	3	2	9	9	2	
Whooping cough	Cases	25	5	5	8	16	10	602	379	194	2314	1165	786	
Tetanus	Cases	–	–	–	–	–	–	–	1	–	5	8	2	
Measles	Cases	45	58	52	40	60	51	1729	1000	1052	3588	2471	2146	
Mumps	Cases	49	65	43	46	50	59	624	590	871	1518	1331	1704	
Rubella	Cases	47	50	33	40	42	36	1565	832	732	3057	1978	1546	
Ophthalmia neonatorum	Cases	4	3	1	–	2	9	76	70	63	190	166	139	
Special cases														
Cholera	Cases	–	1	–	–	1	1	20	10	8	40	32	23	
Diphtheria	Cases	–	–	–	1	–	–	6	9	6	14	23	13	

All figures include late returns

* includes notifications from Port Health Authorities

† Cumulative totals commencing week ended (i) 2 Jan (ii) 8 Jan (iii) 7 Jan

‡ Cumulative totals from mid-year commencing week ended (a) 5 July (b) 4 July (c) 9 July

§ Includes cases of unstated origin

¶ Excluding chemoprophylaxis

Table 2 Notifications of infectious diseases in week 19/00 (health regions, counties, and unitary authorities)

Area	Measles	Mumps	Rubella	Dysentery	Scarlet fever	Whooping cough	Viral hepatitis	TB all forms*	Meningitis†	Food poisoning notified§	ascertained#	Malaria
Northern and Yorkshire	6	9	6	4	9	1	10	12	8	89	97	2
Cumbria	–	–	–	–	2	–	1	–	–	4	10	–
Durham	–	1	2	–	1	–	–	–	–	11	2	–
North Yorkshire	–	1	–	–	1	–	–	–	–	13	14	–
Northumberland	1	–	2	–	1	–	–	1	2	–	14	–
Tyne and Wear¶	–	–	–	–	–	–	–	–	–	4	29	–
West Yorkshire¶	3	7	–	3	1	1	2	8	5	32	21	2
City of Kingston upon Hull	1	–	1	–	–	–	5	1	–	2	–	–
Darlington	–	–	–	–	–	–	–	–	–	–	7	–
East Riding of Yorkshire	1	–	–	1	1	–	1	1	1	2	–	–
Hartlepool	–	–	–	–	–	–	–	1	–	4	–	–
Middlesbrough	–	–	–	–	–	–	–	–	–	6	–	–
Redcar and Cleveland	–	–	–	–	–	–	–	–	–	–	–	–
Stockton-on-Tees	–	–	1	–	2	–	1	–	–	11	–	–
York	–	–	–	–	–	–	–	–	–	–	–	–
Trent	8	3	4	1	10	–	6	25	6	62	100	1
Derbyshire	–	–	–	–	2	–	1	1	1	16	7	–
Leicestershire	–	–	1	–	–	–	–	1	–	9	1	–
Lincolnshire	–	–	–	–	3	–	–	1	–	5	22	–
Nottinghamshire	1	–	–	–	4	–	1	1	1	13	24	–
South Yorkshire¶	3	1	3	1	–	–	1	6	–	10	10	–
Derby	1	1	–	–	–	–	–	2	1	–	2	–
Leicester	–	1	–	–	–	–	–	13	1	–	10	1
North East Lincolnshire	1	–	–	–	1	–	–	–	2	3	3	–
North Lincolnshire	1	–	–	–	–	–	3	–	–	1	–	–
Nottingham	1	–	–	–	–	–	–	–	–	5	21	–
Rutland	–	–	–	–	–	–	–	–	–	–	–	–
Eastern	4	8	1	3	2	–	3	4	2	67	52	1
Bedfordshire	–	–	–	–	–	–	–	–	–	–	–	–
Cambridgeshire	–	2	–	–	–	–	–	–	1	16	7	–
Essex	–	2	–	–	1	–	–	2	–	23	6	–
Hertfordshire	–	2	–	1	1	–	2	2	–	8	15	1
Norfolk	–	2	–	1	–	–	1	–	1	2	22	–
Suffolk	–	–	1	1	–	–	–	–	–	4	2	–
Luton	–	–	–	–	–	–	–	–	–	–	–	–
Peterborough	3	–	–	–	–	–	–	–	–	6	–	–
Southend-on-Sea	–	–	–	–	–	–	–	–	–	–	–	–
Thurrock	1	–	–	–	–	–	–	–	–	8	–	–
London	12	3	5	5	9	3	7	61	1	136	27	12
Greater London	12	3	5	5	9	3	7	61	1	136	27	12
South East	4	7	8	4	6	1	3	14	15	160	163	5
Buckinghamshire	1	–	–	–	–	–	–	1	1	1	21	–
East Sussex	–	–	–	–	2	–	–	–	–	3	3	–
Hampshire	–	1	2	–	–	1	–	2	1	24	26	1
Kent	1	–	1	1	2	–	1	–	–	8	6	–
Northamptonshire	–	–	–	–	–	–	–	2	4	15	11	2
Oxfordshire	–	–	–	–	–	–	2	2	4	1	46	–
Surrey	–	2	–	1	–	–	–	1	2	41	7	–
West Sussex	–	–	1	–	1	–	–	–	2	14	26	–
Bracknell Forest	–	–	–	–	–	–	–	–	–	12	–	1
Brighton and Hove	–	–	–	–	–	–	–	–	–	–	–	–
Isle of Wight	–	–	–	–	–	–	–	–	–	–	–	–
Medway Towns	1	–	–	–	–	–	–	–	–	7	–	–
Milton Keynes	–	–	–	–	–	–	–	–	–	1	11	–
Newbury	–	2	–	–	–	–	–	–	–	7	–	–
Portsmouth	1	1	–	–	–	–	–	–	–	13	–	–
Reading	–	–	–	1	–	–	–	3	–	3	–	–
Slough	–	–	–	–	–	–	–	1	–	–	–	–
Southampton	–	1	1	–	1	–	–	1	–	4	5	1
Windsor and Maidenhead	–	–	2	–	–	–	–	–	–	4	–	–
Wokingham	–	–	1	1	–	–	–	1	1	2	1	–
South West	2	2	2	4	1	1	14	4	4	79	111	1
Cornwall and Isles of Scilly	–	–	–	–	1	–	–	–	–	5	12	–
Devon	–	1	–	–	–	–	1	–	–	15	17	–
Dorset	–	–	–	–	–	1	3	1	–	4	10	–
Gloucestershire	–	–	–	1	–	–	–	–	–	5	–	–
Somerset	1	–	–	1	–	–	–	–	–	23	–	–
Wiltshire	1	1	–	–	–	–	–	–	–	8	–	–
Bath and NE Somerset	–	–	–	–	–	–	–	–	–	4	6	–
Bournemouth	–	–	–	–	–	–	4	1	–	3	–	–
Bristol	–	–	1	1	–	–	2	1	–	2	28	1
North Somerset	–	–	–	–	–	–	2	–	1	3	6	–
Plymouth	–	–	1	–	–	–	–	–	2	–	9	–
Poole	–	–	–	–	–	–	2	–	–	3	5	–
South Gloucestershire	–	–	–	1	–	–	–	1	1	–	10	–
Swindon	–	–	–	–	–	–	–	–	–	4	–	–
Torbay	–	–	–	–	–	–	–	–	–	–	8	–

Area	Measles	Mumps	Rubella	Dysentery	Scarlet fever	Whooping cough	Viral hepatitis	TB all forms*	Meningitis†	Food poisoning notified§	ascertained#	Malaria
West Midlands	8	11	4	11	7	1	3	6	8	78	99	–
Shropshire	–	2	–	–	1	–	2	–	–	4	11	–
Staffordshire	5	–	3	–	1	1	–	1	–	23	6	–
Warwickshire	–	–	–	–	1	–	–	–	2	5	10	–
West Midlands‡	3	9	1	11	3	–	1	5	5	32	49	–
Worcestershire	–	–	–	–	1	–	–	–	–	6	5	–
Hereford	–	–	–	–	–	–	–	–	–	7	7	–
Stoke-on-Trent	–	–	–	–	–	–	–	–	1	–	7	–
Telford and Wrekin	–	–	–	–	–	–	–	–	–	1	4	–
North West	5	15	5	2	7	2	15	11	9	97	129	–
Cheshire	–	–	–	–	–	–	–	1	2	2	10	–
Cumbria	–	–	–	–	–	–	–	–	–	4	23	–
Greater Manchester‡	4	–	4	1	2	1	11	4	1	23	35	–
Lancashire	–	–	1	–	3	–	–	5	1	51	9	–
Merseyside	1	1	–	–	2	1	1	1	2	15	22	–
Blackburn	–	14	–	–	–	–	–	–	1	–	6	–
Blackpool	–	–	–	–	–	–	3	–	1	1	20	–
Halton	–	–	–	–	–	–	–	–	1	1	–	–
Warrington	–	–	–	1	–	–	–	–	–	–	4	–
Wales	2	1	1	1	1	1	14	8	2	63	35	1
Blaenau Gwent	–	–	–	–	–	–	–	–	–	–	1	–
Bridgend	–	–	–	–	–	–	–	–	–	2	–	–
Caerphilly	–	–	–	–	–	–	–	–	–	1	–	–
Cardiff	–	1	–	–	–	–	–	3	–	2	3	–
Carmarthenshire	–	–	–	–	–	–	1	–	–	1	–	–
Ceredigion	–	–	–	–	–	1	1	–	–	–	1	1
Conwy	–	–	–	–	–	–	1	–	–	3	3	–
Denbighshire	–	–	–	–	–	–	2	–	–	4	1	–
Flintshire	–	–	–	–	–	–	–	1	–	5	2	–
Gwynedd	–	–	–	–	–	–	–	–	–	1	5	–
Isle of Anglesey	2	–	–	–	–	–	–	–	–	3	2	–
Merthyr Tydfil	–	–	–	–	–	–	–	–	–	1	–	–
Monmouthshire	–	–	–	–	–	–	–	–	–	–	2	–
Neath and Port Talbot	–	–	–	–	–	–	–	3	–	3	–	–
Newport	–	–	–	1	–	–	–	–	–	–	2	–
Pembrokeshire	–	–	–	–	–	–	–	–	–	6	1	–
Powys	–	–	–	–	–	–	–	–	–	–	3	–
Rhondda, Cynon, Taff	–	–	–	–	–	–	–	1	–	6	–	–
Swansea	–	–	–	–	1	–	8	–	2	10	–	–
Torfaen	–	–	–	–	–	–	–	–	–	12	–	–
Vale of Glamorgan	–	–	1	–	–	–	–	–	–	1	4	–
Wrexham	–	–	–	–	–	–	1	–	–	2	5	–

* Excluding prophylaxis. † All forms. § Formally notified. # Ascertained by other means. ‡Metropolitan county.

Unitary authorities are shown in italics.

Notifications in week 19/00 of infectious diseases not shown in table 2

Acute encephalitis: one infective case; in West Yorkshire.

Cholera: one case; in Surrey.

Leptospirosis: one case; in Dorset.

Meningitis (meningococcal): 26 cases; four in Oxfordshire, three in Northamptonshire, two in each of Northumberland, Plymouth, Warwickshire, West Midlands, and West Sussex, and one in each of Blackburn, Chester, East Riding of Yorkshire, Halton, Leicester, North Somerset, South Gloucestershire, West Yorkshire, and Wokingham.

Meningococcal septicaemia (without meningitis): 34 cases; four in each of Swansea, Tyne and Wear, and West Midlands, two in each of City of Kingston upon Hull, Derby, Warrington, and Warwickshire, and one in each of Buckinghamshire, Cumbria, Greater London, Hertfordshire, Neath and Port Talbot, Northamptonshire, Northumberland, North

Yorkshire, Pembrokeshire, Peterborough, South Yorkshire, Southampton, West Yorkshire, and Wiltshire.

Ophthalmia neonatorum: nine cases; two in Bristol, and one in each of Greater London, Greater Manchester, Plymouth, Shropshire, Suffolk, Wiltshire, and Worcestershire.

Paratyphoid fever: five cases; four presumed to have been contracted abroad – two from North Yorkshire, and one from Greater London and from Wokingham; one country of unknown origin – from Greater Manchester.

Typhoid fever: four cases; all presumed to have been contracted abroad – three from Greater London and one from Hertfordshire.

No cases of acute poliomyelitis, anthrax, diphtheria, meningitis influenzae (*Haemophilus influenzae*), plague, rabies, relapsing fever, smallpox, tetanus, typhus, viral haemorrhagic fever, or yellow fever were notified.

Table 3 Weekly analysis report of notifications above expected rates in week 19/00

District	County	Observed number	Expected number	Ratio observed/expected	District	County	Observed number	Expected number	Ratio observed/expected
Dysentery					Measles				
Birmingham	West Midlands	7	0.69	10.17	Isle of Anglesey	Isle of Anglesey	2	0.07	30.00
Bradford	West Yorkshire	3	0.33	9.19	Peterborough	Peterborough	3	0.17	17.15
Food poisoning (all)					Meningitis (all)				
Blackpool	Blackpool	21	4.88	4.30	South Northamptonshire	Northamptonshire	2	0.08	25.47
Bolton	Greater Manchester	20	8.44	2.37	Meningitis (meningococcal)				
Bracknell Forest	Bracknell Forest	12	3.42	3.51	Horsham	West Sussex	2	0.06	34.24
Bristol	Bristol	30	12.74	2.36	South Oxfordshire	Oxfordshire	2	0.06	32.27
Broxtowe	Nottinghamshire	10	3.56	2.81	Mumps				
Cherwell	Oxfordshire	12	4.17	2.88	Blackburn	Blackburn	14	0.20	71.57
Chichester	West Sussex	11	3.31	3.32	Bridgnorth	Shropshire	2	0.05	38.59
East Hampshire	Hampshire	11	3.49	3.15	Walsall	West Midlands	7	0.32	22.14
Elmbridge	Surrey	12	3.88	3.09	Rubella				
Fylde	Lancashire	10	2.37	4.22	Blyth Valley	Northumberland	2	0.06	35.49
Gedling	Nottinghamshire	10	3.54	2.83	Lichfield	Staffordshire	3	0.06	49.26
Hereford	Hereford	14	4.62	3.03	Rotherham	South Yorkshire	3	0.18	16.26
Nottingham	Nottingham	26	9.02	2.88	Windsor and Maidenhead	Windsor and Maidenhead	2	0.09	21.95
Oxford	Oxfordshire	11	4.28	2.57	Scarlet fever				
Richmondshire	North Yorkshire	6	1.47	4.07	Allerdale	Cumbria	2	0.09	22.40
Sefton	Merseyside	24	9.25	2.60	Ashfield	Nottinghamshire	3	0.11	28.35
South Hams	Devon	9	2.51	3.58	Tonbridge and Malling	Kent	2	0.10	19.58
South Lakeland	Cumbria	25	3.19	7.84	Tuberculosis*				
South Ribble	Lancashire	17	3.28	5.19	Ealing	Greater London	7	0.82	8.55
Torfaen	Torfaen	12	2.87	4.18	Harrow	Greater London	4	0.59	6.79
Vale of White Horse	Oxfordshire	11	3.60	3.06	Hounslow	Greater London	4	0.57	7.00
Waverley	Surrey	13	3.66	3.55	Leicester	Leicester	13	0.83	15.69
West Devon	Devon	8	1.48	5.40	Newham	Greater London	8	0.64	12.50
Food poisoning (formally notified)					Sheffield	South Yorkshire	6	1.48	4.05
Bracknell Forest	Bracknell Forest	12	1.73	6.94	Viral hepatitis (all)				
Burnley	Lancashire	6	1.44	4.16	Blackpool	Blackpool	3	0.22	13.47
Chorley	Lancashire	7	1.56	4.49	Bolton	Greater Manchester	10	0.38	25.99
Derbyshire Dales	Derbyshire	6	1.11	5.39	Bournemouth	Bournemouth	4	0.23	17.15
East Hampshire	Hampshire	11	1.76	6.24	City of Kingston upon Hull	City of Kingston upon Hull	5	0.39	12.84
Elmbridge	Surrey	9	1.96	4.59	North Lincolnshire	North Lincolnshire	3	0.22	13.61
Fylde	Lancashire	10	1.20	8.35	Oswestry	Shropshire	2	0.05	39.69
Hounslow	Greater London	10	3.28	3.05	Swansea	Swansea	8	0.33	23.92
Lambeth	Greater London	14	4.20	3.33	Note: This table shows those districts from which the rates of notifications reported this week were significantly higher than expected (P<0.005). The number of notifications in each district is shown in the third column (observed). The number expected if the national rate is applied to the district population is shown in the fourth column (expected). The fifth column shows by how many times the number of notifications exceeds the expected number (ratio observed/expected). Caution must be exercised when interpreting this table, as listing is wholly dependent on comparable reporting of notifiable infectious diseases from all districts of England and Wales and on local patterns of disease.				
Leeds	West Yorkshire	26	11.65	2.23					
Mole Valley	Surrey	6	1.27	4.71					
Portsmouth	Portsmouth	13	3.05	4.26					
Richmond upon Thames	Greater London	10	2.82	3.54					
Rossendale	Lancashire	5	1.05	4.76					
South Ribble	Lancashire	17	1.66	10.26					
South Somerset	Somerset	8	2.42	3.31					
Stafford	Staffordshire	9	1.98	4.54					
Staffordshire Moorlands	Staffordshire	7	1.52	4.60					
Stockton-on-Tees	Stockton-on-Tees	11	2.86	3.84					
Swansea	Swansea	10	3.70	2.70					
Taunton Deane	Somerset	7	1.59	4.42					
Thurrock	Thurrock	8	2.11	3.79					
Torfaen	Torfaen	12	1.45	8.26					
Wandsworth	Greater London	11	4.26	2.58					
Waverley	Surrey	13	1.85	7.02					
West Devon	Devon	7	0.75	9.35					
Malaria									
Camden	Greater London	2	0.08	24.33					
Greenwich	Greater London	4	0.09	42.56					

* excluding prophylaxis

AIDS and HIV infection in the United Kingdom: monthly report

United Kingdom data from the PHLS AIDS and STD 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)

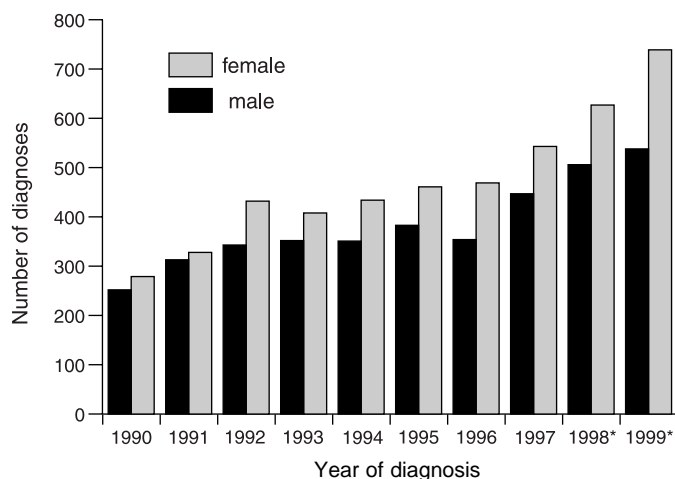
HIV infection in women in the United Kingdom

By the end of March 2000, a total of 41 174 HIV infected patients had been diagnosed and reported in the United Kingdom (UK), 7198 (17%) of whom were female (table 1). Of these 2113 (29%) are known to have developed AIDS and 1397 (19%) are known to have died. Two hundred and fifty-eight died without having had an AIDS defining condition reported. Five thousand three hundred and sixty eight of the infections (75%) were acquired heterosexually, and 1114 (15%) by injecting drug use.

Women account for almost a third (1114 of 3583) of patients infected through injecting drug use, compared with over half of all infections acquired heterosexually (5368 of 9796). Fourteen per cent (752) of heterosexually infected women were reported as having had contact with a high-risk partner, such as a bisexual man or an injecting drug user (IDU). Seventy-two per cent (3863) of women infected heterosexually through contact with partners who had themselves been infected heterosexually were classified as having been infected abroad, mostly in Africa (3408). Ten per cent (535) were probably infected in the UK. The higher number of heterosexual infections among females has several contributory factors. Contacts in the high-risk partner category, so called 'bridge populations', are predominantly male and the HIV virus may be more efficiently transmitted by heterosexual sex from males to females than vice versa.

The number of females diagnosed has risen every year since 1993 (table 2). Diagnoses have increased from 369 in 1990 to 562 in 1995, with 861 reported so far in 1999. Meanwhile diagnoses in males remained steady at around

Figure 1 Diagnoses of heterosexually acquired HIV infection† by sex and year of diagnosis: UK data to the end of March 2000



* numbers, particularly for recent years, are likely to increase as delayed reports are received

† individuals with laboratory reports of infection plus those with AIDS or death reports for whom no matching laboratory report has been received

2000 per year for much of the 1990s. The proportion of total diagnoses in females rose, more than doubling from 14% in 1990 to 30% in 1999. This is predominantly a result of the continuing increase in diagnoses in individuals infected heterosexually¹. Among such individuals (figure 1) more females than males have been diagnosed each year since the start of the epidemic. Although diagnoses in both sexes have risen, particularly since 1997, those in women are increasing more rapidly. Reports of heterosexually acquired cases received so far of diagnoses made in 1999 include 739 women and 538 men. Both of these numbers are likely to rise as delayed reports are received.

Women, on average, are younger at HIV diagnosis than men (figure 2). This difference is particularly evident for heterosexually acquired cases, with the difference in median age at diagnosis between men and women throughout the last decade being more than four years. In injecting drug users the age difference is less marked, ranging between a half and three years. There has been a gradual increase in the median age at diagnosis among both injecting drug users and those heterosexually infected over the last ten years. The smallest increase was in heterosexual men. Male and female IDUs and heterosexual

Table 1 Exposure category of HIV infected individuals* by sex: United Kingdom data cumulative to end of March 2000

How HIV infection was probably acquired	Male	Female	Total†
Sex between men	24311	–	24311
Sex between men and women	4422	5368	9796
Injecting drug use	2469	1114	3583
Blood factor eg for haemophilia	1339	12	1351
Blood/tissue transfer	136	156	295
Mother to infant	315	309	626
Other/undetermined	944	239	1212
Total	33936	7198	41174

* individuals with laboratory reports of infection plus those with AIDS or death reports for whom no matching laboratory reports have been received

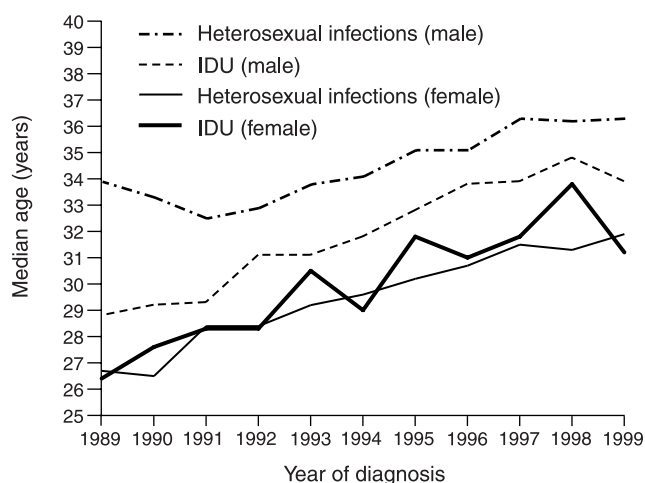
† includes 40 with sex not recorded

Table 2 Number of HIV infections* diagnosed by sex and year of diagnosis: UK data to the end of March 2000

Sex	1990	1991	1992	1993	1994	1995	1996	1997	1998*	1999†
Male	2156	2254	2185	2070	2018	2054	2076	2023	2017	1986
Female	369	443	534	522	522	562	576	648	731	861
Total	2525	2697	2719	2592	2540	2616	2652	2671	2748	2847

* individuals with laboratory reports of infection plus those with AIDS or death reports for whom no matching laboratory reports have been received

† numbers, particularly for recent years are likely to increase as delayed reports are received

Figure 2 Median age at HIV diagnosis* by sex and route of infection: UK data to the end of March 2000

* individuals with laboratory reports of infection plus those with AIDS or death reports for whom no matching laboratory report has been received

females have shown an increase of around five years in median age at diagnosis between 1989 and 1999.

Most women with HIV infection are of childbearing age. By the end of January 2000 1704 children had been born in the UK to HIV infected mothers, 626 of whom were known to have been infected with the virus¹. The number of infants born to HIV infected mothers has continued to increase. Twenty-one per cent (362 of 1704) of the cumulative total to date were born in 1998-99. The majority of maternal infections were acquired abroad through heterosexual sex. In Scotland, infections associated with injecting drug use still predominate.

The annual survey of diagnosed HIV infections for 1998 recorded 16891 patients seen for treatment and care in England, Wales, and Northern Ireland, 3324 of whom were female (table 3). This represents a 23% increase in prevalence since 1997, when 2709 females (out of a total of 15074) were recorded by the survey. According to the 1998 figures 70% of women seen for treatment in that year lived in London (2327 of 3324). Information on ethnicity was provided for 96% of females. Fifty-three per cent of the total (1752 of 3342) were described as black African, 88% of whom (1535 of 1752) lived in London. Thirty-two per cent of the total (1058 of 3342) were described as white, 58% of whom (612) lived outside London. Fewer individuals were of south Asian or black Caribbean ethnicity.

It has been estimated that there are a further 2800 undiagnosed heterosexually infected females in the UK². Unlinked anonymous testing of residual blood samples taken from genitourinary medicine (GUM) clinic attenders in London in 1997 and 1998 found that 57% of heterosexual HIV-infected men and 55% of women were aware of their infection. GUM clinic attenders are considered to be a subset of the population at higher risk of infection. Rates of diagnosis among pregnant women, who are seen as representative of the general population, are lower. In 1998 it was estimated that only 41% of maternal HIV infections in London had been diagnosed before delivery. Of those, 54% were diagnosed before pregnancy and the remainder during antenatal care.

1. CDSC. AIDS and HIV infection in the United Kingdom: monthly report. *Commun Dis Rep CDR Wkly* 2000; 17:157.
2. Unlinked anonymous HIV surveys steering group. *Prevalence of HIV in the United Kingdom in 1998*. London: Department of Health, PHLS, Institute of Child Health, SCIEH, 1999.

Table 3 Diagnosed HIV infected female patients, by ethnicity and region of residence when last seen for care in 1998*: data from survey of prevalent HIV infections (diagnosed)

NHS region of residence	White	Black-Caribbean	Black-African	Black-other	South Asian [†]	Other/mixed	Not known	Total
England:								
Northern and Yorkshire	58	1	22	1	—	4	—	86
Trent	78	—	22	—	10	13	—	123
Eastern	70	2	46	—	3	6	2	129
London	446	71	1535	46	28	114	87	2327
South East	163	7	68	—	2	13	31	284
South West	61	1	14	—	1	11	—	88
West Midlands	52	11	22	—	3	5	1	94
North West	86	—	16	—	5	5	18	135
England total	1014	93	1745	47	52	176	139	3266
Wales	28	—	6	—	2	4	1	41
Northern Ireland	16	—	1	—	—	—	—	17
Total[‡]	1058	93	1752	47	54	180	140	3324

* Patients seen for statutory medical HIV-related care at services in England, Wales, and Northern Ireland in 1997.

† Indian/Pakistani/Bangladeshi.

‡ Includes 1 black-Caribbean patient whose region of residence was not reported.

§ Excludes 8 patients resident abroad and 21 with area of residence could not be allocated.