

Communicable Disease Report

Measles surveillance

A large outbreak of measles has been reported in North Wales. Seventy-four cases have been identified by notification or case finding in Gwynedd health district with dates of onset between 15 September and 4 November. Forty-two cases occurred in one secondary school and secondary school children are also affected in neighbouring districts. A vaccination programme has been implemented in the local schools.

The collection of age-specific seroprevalence data for measles, mumps and rubella began in 1986¹. Between 1986 and 1990, susceptibility to measles in children under 15 years declined from 15% to 12%; the greatest reduction occurring in children aged 1-4 years, consistent with improved vaccine coverage in this age group. Susceptibility in 9-14 year olds remained low at 5-6%. During the same period, notifications of measles declined substantially in all age groups but especially in children aged 1-9 years (Figure). The proportion of notified cases has increased in children under one and in adults.

Figure Age distribution of measles notifications in England and Wales

These data do not suggest that there is need for a school vaccination programme in England and Wales, at present. However, the situation may vary across the country and CDSC would be interested to hear of any outbreaks of measles, particularly those affecting older children or adults. Laboratories wishing to participate in the seroprevalence monitoring programme (and especially those in London) should contact Dr E Miller (at CDSC) or Dr P Morgan-Capner (at Preston PHL).

1. Morgan-Capner P, Wright J, Miller CL, Miller E. Surveillance of antibody to measles, mumps and rubella by age. *BMJ* 1988; **297**: 770-2.

Influenza surveillance

Influenza activity, as assessed by routine clinical and microbiological indices, continues to run at low levels in England and Wales. Infections due to respiratory syncytial virus, however, are being reported in high numbers at present, consistent with the anticipated annual increase. CDSC would be grateful for information about outbreaks of influenza-like illness due to, or suspected to be due to, influenza virus.

Virus infections:
weeks 91/46 - 49

Animal-associated infections:
weeks 91/46 - 49

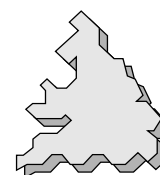
AIDS and HIV-1 in the United Kingdom: monthly report

Bacteraemia and bacterial meningitis:
weeks 91/46 - 49

Unusual infections

Selected bacterial infections:
weeks 91/46 - 49

Notices



Virus infections, England and Wales: laboratory reports, weeks 91/46 – 49

Laboratory reports	Number of reports received				Total reports 91/46-49	Cumulative total 1991
	91/46	91/47	91/48	91/49		
Coxsackie A	1	1	1	1	4	66
Coxsackie B	8	4	6	1	19	422
Echovirus	33	18	19	20	90	710
Measles	–	–	2	2	4	47
Mumps	1	–	4	–	5	47
Parvovirus B19	6	5	4	2	17	702
Rubella	3	1	2	1	7	235

Coxsackie A: A7, 2; A9, 1; A2, 1.

Two infants aged less than 6 months (nasopharyngeal aspirate and faecal isolates). One patient presented with meningitis: F 18y (throat isolate).

Coxsackie B: B1, 5; B2, 2; B3, 2; B4, 3; B5, 2; B6, 2; B untyped 3.

Five children aged less than 15 years, including 3, 1-11 months and one baby less than 1 month. Two patients presented with meningitis: M 13d (CSF isolate) and male, age not stated (throat isolate).

Echovirus: type 4, 1; type 7, 3; type 9, 21; type 11, 6; type 14, 2; type 17, 1; type 18, 12; type 19, 5; type 22, 12; type 23, 1; type 25, 1; type 26, 1; type 30, 23.

Forty-four patients presented with meningitis (CSF isolates 23): 14 children aged less than 15 years, including 8, 10-14 years, 1, 5-9 years; 2, 1-4 years and three babies aged less than 1 year; 23 adults aged 15-44 years.

Three regions reported more than 10% of cases: Yorkshire (20 cases), Wessex (17) and S Western (10).

Notifications to OPCS of measles, mumps and rubella, England and Wales

Notifications					Total 91/46-49	Cumulative total 1991
	91/46	91/47	91/48	91/49		
Measles	165	164	149	162	640	9201
Mumps	64	45	54	49	212	2794
Rubella	123	118	96	118	455	6921

Measles: M 8y presented with encephalitis (serology only); 3 adults.

Mumps: 2 children aged 3 months and 8 years, respectively; 2 adults, including M 32y with meningitis (serology only); one patient age not stated.

Parvovirus (B19): no region reported more than 3 cases.

Ages: 3 children aged less than 15 years; 13 adults aged 15 or

more years (4 pregnant); 1 age not stated. Eleven patients presented with rash and 8 had acute arthritis.

Rubella: no region reported more than 2 cases.

Ages: 2 children aged less than 10 years, including neonate who presented with petechial rash and thrombocytopenia; 5 adults (all males).

Animal-associated infections, England and Wales: laboratory reports, weeks 91/46 – 49

Borrelia burgdorferi 2: M 46y with rash and general malaise after tick bite in Scotland; F 46y with rash after multiple tick bites whilst walking.

Brucella melitensis type 1: F 23y from abroad with fever and meningitis (CSF isolate).

Cowpox: M 15y with granulomatous lesion and inflamed eye, lives on a farm.

Echinococcus granulosus (hydatid disease): F 64y with hepatic cyst.

Leptospira sp 6: *L. hardjo* 2: M 31y, a farmer, with febrile illness, myalgia and headache; M 50y, also a farmer whose cattle had leptospirosis, with fever, headache, myalgia and vomiting; *L. icterohaemorrhagiae* 3: M 20y, active in many

country pursuits, with pyrexia, headache, lymphadenopathy, arthralgia, URTI and eye involvement; M 24y, a farm worker with jaundice; M 52y, a herdsman; *Leptospira sp* 1: M 30y, a cowman.

Pasteurella sp 15: *P. multocida* 14: 9 patients had dog bites, 4 had cat bites/scratches and one a wound; *Pasteurella sp* 1.

Toxocara sp 3: two boys aged 3 years with eye lesions, and a girl aged 4 years with eosinophilia.

Toxoplasma gondii 50: 21 patients had lymphadenopathy; 5 had eye lesions; 2 were HIV-1 antibody positive; F 31y and F 34y both had babies with congenital infections; F 21y had a spontaneous abortion at 21 weeks with histological evidence of foetal infection.

AIDS and HIV-1 infection in the United Kingdom: monthly report

During **November 1991**, 158 new cases of AIDS were reported. One hundred and fifteen were probably infected through sexual intercourse between men (18 died), 17 through sexual intercourse between men and women (4 died), 7 through injecting drug use (1 died), two through either injecting drug use or sexual intercourse between men, 6 through blood factor treatment, one through blood/tissue transfer and three through transmission from mother to child. The exposure categories of 7 cases (3 died) were undetermined.

This represents the highest number of cases of AIDS reported in any one calendar month. Numbers fluctuate from month to month: the number of monthly cases reported ranged from 89 to 142 (mean – 107) in 1990 and from 92 to 158 (mean – 115) thus far in 1991.

Since reporting began in 1982, a total of 5348 AIDS cases (5033 males, 315 females) have been reported of whom 3334

are known to have died (Table 1). There was an increase of 12% in the numbers of males reported in the two consecutive twelve month periods from December 1989 to November 1991, compared with a 45% increase for females. The proportions of adult cases reported to be homosexual has decreased over this period whereas the proportions reported as heterosexual has increased (Table 2).

The geographical distribution of place of report is shown in Table 3. Tables 4 and 5 relate to AIDS cases and HIV infections reported by September 1991. The female cases tend to be younger than males (Table 4). Except among men infected through sexual intercourse between men, about half the AIDS cases were diagnosed with 'other' indicator diseases (Table 5); mostly opportunistic infections other than *Pneumocystis carinii* pneumonia (357), HIV wasting (79), HIV encephalopathy (49) or lymphoma (40).

Table 1 AIDS cases and deaths by exposure category and date of report: United Kingdom to 30 November 1991

How persons probably acquired the virus	Dec 89 - Nov 90		Dec 90 - Nov 91		Jan 82 - Nov 91			
	Male	Female	Male	Female	Male	Deaths	Female	Deaths
Sexual intercourse								
between men	899	–	971	–	4120	2610	–	–
between men and women								
"high risk" partner ¹	3	8	5	9	15	8	32	20
other partner abroad ²	64	28	86	53	219	114	112	49
other partner UK	3	5	20	6	33	15	16	7
Injecting drug use (IDU)	61	18	52	30	170	91	68	41
IDU & sexual intercourse between men	19	–	20	–	81	53	–	–
Blood								
blood factor (e.g. for haemophilia)	61	1	64	1	286	204	4	3
blood/tissue transfer (e.g. transfusion)								
abroad	2	10	1	2	14	10	27	18
UK	2	5	1	6	16	14	19	11
Mother to infant	4	7	7	11	18	8	31	14
Other/undetermined	10	1	32	2	61	40	6	4
Total	1128	83	1259	120	5033	3167	315	167

1. Men and women who had sex with injecting drug users, or with those infected through blood factor treatment or blood transfusion,

2. Includes persons without other identified risks from, or who have lived in, countries where the major route of HIV-1 transmission is through sexual intercourse between men and women.

Table 2 Sexual orientation of adult (15 years or over) AIDS cases: United Kingdom to 30 November 1991

Sexual orientation	Dec 89 – Nov 90 ¹		Dec 90 – Nov 91 ¹		Jan 82 – Nov 91	
	Cases	(%)	Cases	(%)	Cases	(%)
Homosexual men	798	(68)	854	(65)	3564	(69)
Bisexual men	119	(10)	138	(11)	639	(12)
Heterosexual men and women	257	(22)	317	(24)	980	(19)
Total²	1174	(100)	1309	(100)	5183	(100)

1. Period during which reports were received.

2. Excludes some cases under investigation.

Tables 1–5 were prepared from voluntary confidential reports by clinicians and microbiologists sent directly to the PHLS AIDS Centre at CDSC (081 200 6868) and to the Communicable Diseases (Scotland) Unit (041 946 7120), from returns by Haemophilia Centre Directors to the Oxford Haemophilia Centre (0865 225316), and monthly returns by paediatricians to the British Paediatric Surveillance Unit.

Table 3 Geographical distribution of AIDS cases and deaths by date of report: to 30 November 1991

Country or region of first report	Dec 89 – Nov 90		Dec 90 – Nov 91		Cumulative total since 1982	
	Cases	Related deaths ¹	Cases	Related deaths ¹	Cases	Related deaths ¹
England:						
Northern	27	14	13	3	94	62
Yorkshire	31	21	33	13	134	91
Trent	22	13	25	12	100	69
E Anglia	6	1	25	3	66	35
NW Thames	497	247	426	79	2026	1237
NE Thames	167	86	336	69	1006	575
SE Thames	152	78	142	43	587	370
SW Thames	45	33	66	14	207	136
Wessex	33	26	27	10	118	86
Oxford	28	13	33	9	115	68
S Western	19	12	39	11	114	71
W Midlands	34	18	30	8	120	71
Mersey	15	7	20	12	71	51
N Western	52	30	50	26	206	147
Wales	12	7	22	17	81	65
Northern Ireland	6	5	6	4	26	23
Scotland	65	40	86	38	277	177
United Kingdom total	1211	651	1379	371	5348	3334
Ch. Islands/Isle of Man	2	2	-	-	5	4

1. These deaths are of patients referred to in the previous column and known to have occurred at any time up to 30 November 1991. Reporting of recent deaths is incomplete.

Table 4 Age distribution of AIDS cases (excluding visitors¹) at the time of diagnosis and HIV-1 infected persons at time of test: United Kingdom to 30 September 1991

Age group (years)	Male				Female				Total	
	AIDS		HIV-1		AIDS		HIV-1		AIDS	HIV-1 ²
	Number	(%)	Number	(%)	Number	(%)	Number	(%)		
0 - 14	37	(1)	297	(2)	26	(10)	57	(3)	63	357
15 - 24	235	(5)	2600	(19)	38	(14)	657	(37)	273	3278
25 - 34	1710	(37)	5754	(43)	128	(49)	812	(46)	1838	6592
35 - 44	1655	(36)	3246	(24)	47	(18)	174	(10)	1702	3428
45 - 54	700	(15)	1133	(8)	15	(6)	34	(2)	715	1167
55 or over	255	(6)	379	(3)	9	(3)	23	(1)	264	402
Sub total (100%)	4592	(100)	13409	(100)	263	(100)	1757	(100)	4855	15224
Not stated	57		856		4		91		61	1024

1. 149 AIDS cases in visitors are excluded from the table.

2. The totals include reports of 135 HIV-1 infected persons for whom sex and/or age was not stated.

Table 5 Major indicator diseases at diagnosis: AIDS cases United Kingdom to 30 September 1991

How persons probably acquired the virus	Kaposi sarcoma		<i>P. carinii</i> pneumonia		Both		Other		Total (100%)
	Cases	(%)	Cases	(%)	Cases	(%)	Cases	(%)	
Sexual intercourse between men	736	(19)	1865	(48)	104	(3)	1220	(31)	3925
Sexual intercourse between men and women	28	(7)	166	(43)	5	(1)	188	(49)	387
Injecting drug use ¹	12	(4)	148	(49)	1	(<1)	141	(47)	302
Blood factor or blood/tissue transfer	1	(<1)	179	(52)	-	(-)	163	(48)	343
Other/undetermined	2	(2)	46	(43)	3	(3)	57	(53)	108

1. Includes 79 men who had sex with men and who were also injecting drug users.

Bacteraemia and bacterial meningitis, England and Wales: laboratory reports, weeks 91/46 – 49

Laboratory reports	No of reports received		Age		Total received	Cumulative total 1991
	Blood only	CSF only or CSF & blood	< 1m	≥ 65y		
<i>Neisseria meningitidis</i>	21	42	–	3	63 (13) *	946
group A	1	–			1 (1) *	
B	12	26			38 (8) *	
C	2	6			8 (1) *	
ungrouped	6	10			16 (3) *	
<i>Haemophilus influenzae</i>	59	59	2	5	118 (2) §	1089
type b	29	39			68 (1) §	
<i>Listeria monocytogenes</i>	10	2	4	4	12	86

* sulphonamide-resistant

§ β-lactamase producing

Neisseria meningitidis: two regions reported more than 10% of cases: Trent (7 cases) and W Midlands (8).

Thirteen sulphonamide-resistant strains were reported: **group A**, 1 (Trent); **group B**, 8 (Trent, NW Thames, SE Thames 2, S Western, W Midlands, Mersey, N Western); **group C**, 1 (Wales);

ungrouped, 3 (Trent, NW Thames, Wales).

Also reported: M 24y, M 26y and F 30y all had contact with recent cases (all throat isolates); M 47y (throat isolate); M 28y (urethral isolate); M 1y with meningitis (nose and throat isolates).

Notifications to OPCS of meningitis and meningococcal infections, England and Wales

Notifications	91/46	91/47	91/48	91/49	Total 91/46-49	Cumulative total 1991
Total meningitis	58	38	45	49	190	2602
Meningococcal meningitis	21	11	13	23	68	1067
Meningococcal septicaemia	5	7	3	3	18	262

Age distribution recorded on laboratory reports

Laboratory reports	Age (years)										Not stated
	<1	1	2	3	4	5-9	10-14	15-19	20-24	≥25	
<i>Neisseria meningitidis</i>	16 *	9	4	2	2	5	–	5	6	10	4
<i>Haemophilus influenzae</i>	44 §	20	10	11	6	1	1	–	2	20	3

* includes 3 aged ≤3 months

§ includes 8 aged ≤3 months

Haemophilus influenzae: three regions reported more than 10% of cases: Trent (15 cases), S Western (14) and W Midlands (17).

Fourteen ampicillin-resistant strains were reported: M 2y (Trent), M 3y (S Western), F 59y (NE Thames) and 2y, sex not stated, all had epiglottitis; M 10m (NE Thames), M 10m (Northern), M 4m and M 3y (both N Western) and F 9m

(Mersey) all with meningitis; M 7m (S Western) and F 10m (Oxford) both had cellulitis; M 80y (W Midlands) had pneumonia; M 43y (Mersey) and F 62y (Trent) (both blood isolates). M 7m (blood and CSF isolates), M 4y (CSF isolate), F 3y (blood and CSF isolates) and F 5y (CSF isolate) all with otitis media. M 1y had croup (blood isolate). M 8m (blood isolate) and F 10m (blood and eye isolates) had facial cellulitis. Five

H. influenzae: clinical features recorded on laboratory reports

Clinical features	Age in years				Not stated
	≤3	4-14	15-64	≥65	
Meningitis (blood isolate only)	54 (5)	4 (1)	3	–	3
Epiglottitis	12	2	1	–	–
Pneumonia	2	1	1	3	–
Septic arthritis/osteomyelitis	2	–	–	–	–
Facial cellulitis	2	–	–	–	–

other patients had skin infection (2 blood isolate only, 1 blood and skin, 1 blood and eye, 1 blood and CSF).

Also reported: M 4y with epiglottitis (throat isolate).

H. parainfluenzae: M 70y with catheter (blood and urine isolates), F 73y (blood isolate).

Listeria monocytogenes: bacteraemia: four patients were

immunocompromised: F 33y, F 73y, F 78y and F 81y (all blood isolates); F 48y with meningitis (blood isolate); F 33y with puerperal pyrexia (blood isolate) and baby (isolates from stomach, nose, skin and throat); male neonate, M 6d, M 74y and F 6d (all blood isolates). Meningitis: M 56y with perianal abscess (CSF and perianal isolates); M 14d (CSF isolate).

Unusual infections

Brevibacterium sp: F 35y with systemic lupus erythematosus had prosthetic joint and was on haemodialysis (blood isolate).

Haemophilus aphrophilus 4: M 36y had abscess on chest wall (aspirated pus isolate; *Bacteroides sp* also isolated); M 77y had endocarditis (blood isolate); F 54y with primary biliary cirrhosis

had pyrexia and pleural effusion (blood isolate); F 55y had epidural abscess (biopsy tissue isolate).

Lactobacillus sp: M 12y with heart/lung transplant (blood isolate).

Selected bacterial infections, England and Wales: laboratory reports, weeks 91/46 – 49

Bordetella pertussis 12: 3 regions reported 2 or more cases: NE Thames (3), SW Thames (4) and Wessex (3).

Ages: 7 babies aged less than 6 months, including 6 less than 3 months; 2 infants aged 6-11 months; 1 child aged 2 years; 1

child aged 6 years and 1 adult aged 32 years.

Corynebacterium (Arcanobacterium) haemolyticum: patient 19y, sex not stated, had sore throat (blood isolate).

Microbiology for consultants in communicable disease control

A day release course on microbiology for epidemiologists, organised jointly by the London School of Hygiene and Tropical Medicine (LSHTM) and the Central Public Health Laboratory (CPHL), will take place every Wednesday between 25 March and 17 June 1992 (excluding Easter week). The course aims to cover areas of microbiology of particular relevance to CCDCs and trainees in the specialty. The first five weeks will be held at LSHTM and subsequent weeks at CPHL. Only twelve places are available, so early application is encouraged.

Further information is available from Dr Margaret Parker, Assistant Registrar, London School of Hygiene and Tropical Medicine, Keppel Street, London WC1E 7HT (telephone 071 927 2408).

Epi info

An *Epi info* course will take place on Thursday 27 and Friday 28 February 1992. This two day module introduces all aspects of *Epi info* and includes extensive hands-on experience. All participants should be fully conversant by the end of the course, which is suitable for medical and nursing staff, microbiologists and those involved in environmental issues.

Further information can be obtained from Binnie Hene, Department of Public Health and Epidemiology, University of Manchester, Stopford Building, Oxford Road, Manchester M13 9PT (telephone 061 275 5201).

Computers for microbiologists

A one week course giving guidance on how to install, maintain and develop a computing system suitable for a routine clinical microbiology laboratory will commence on 16 March 1992 and will be run jointly by the departments of medical microbiology (Prof J P Burnie) and computation (Dr S Lucas) at Manchester University. The course fee is £500.

Further information can be obtained from Miss Brenda Gardner, Department of Medical Microbiology, University of Manchester Medical School, Oxford Road, Manchester M13 9PT.

From week 91/01, data in CDR is from England and Wales only, unless otherwise stated.

Weekly numbers are provisional and should not be used to indicate trends