

Communicable Disease Report

Influenza surveillance

The general practitioner consultation rate (per 100,000) for 'influenza-like illness', reported by doctors in the Royal College of General Practitioners (RCGP) scheme, has risen from 19.4 in week 90/48 to 42.3 in week 90/51 and 74.9 (provisional) in week 91/01. However, the consultation rate for 'epidemic influenza', which is usually reserved for the more severe form of illness and is a more reliable indicator of true influenza activity, has risen only slightly, from 7.5 in week 90/48 to 22.1 (provisional) in week 91/01. This is much lower than the levels between 200 and 300 seen in the epidemic of last winter. Influenza activity in Wales is also running at a low level.

Very few laboratory reports confirming influenza virus infections are being received: 8 isolates of influenza B virus have been confirmed by the Virus Reference Laboratory since week 90/44, and no isolates of influenza A, of either subtype, have been confirmed so far this season.

Increased influenza-like illness, associated with the H₁N₁ subtype of influenza A, has been reported in Sweden, and local outbreaks of influenza have been reported from Korea associated with the H₃N₂ subtype of influenza A. However, in the remainder of Europe, and in North America, influenza activity is reported at low levels and most isolates have been of influenza B virus.

It is likely that infections with *Mycoplasma pneumoniae* and respiratory syncytial virus are contributing to the influenza-like illness reported in the community.

Case-control study of listeriosis in England and Wales: progress report

The study began in the first week of July 1990, following an explanatory notice in the CDR which asked for cases to be reported to the investigators at CDSC as soon as possible after isolation of the organism. Notices were also placed in the Newsletters of the Royal College of Obstetricians and Gynaecologists and the British Paediatric Association, and in a widely circulated General Practitioners' newspaper.

By the end of December 1990, 35 cases and 139 controls matched for age, sex and underlying condition, had been enrolled; 10 of the cases were associated with pregnancy. The study involves interviews which centre mainly on food histories in the four weeks before onset of illness. All interviews have been conducted by the same research nurse and always with the prior permission of the appropriate medical practitioner(s). All the subjects who were approached agreed to co-operate. Although patients, or their relatives, have recently undergone a major life event, they have been extremely willing to participate and welcomed the opportunity to discuss the illness. No adverse reactions to the interviews have been reported.

Because numbers of reports of listeriosis in England and Wales declined substantially in 1990 compared with the previous three years, as many as possible of those identified are needed for enrolment into the study. We are most grateful to microbiologists and public health physicians who have reported the cases to date and who have been so helpful in facilitating the organisation of interviews.

We still wish to hear of new cases as soon as possible after diagnosis, preferably by telephone, so as to minimise problems of recall during interviews.

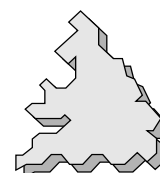
Respiratory tract infections:
weeks 90/51-91/02

AIDS and HIV-1 antibody reports – United Kingdom: December 1990

Mycobacterial infections:
weeks 90/51-91/02

Bacteraemia and bacterial meningitis:
weeks 90/51-91/02

Notice



Respiratory tract infections, England and Wales: laboratory reports weeks 90/51 - 91/02

	Number of reports received				Total reports 90/51-91/02	Cumulative total 1990
	90/51	90/52	91/01	91/02		
Adenovirus (excluding EM faeces)	31	20	45	53	149	2656
Coronavirus	2	-	-	1	3	57
Influenza A	1	2	2	2	7	2563
Influenza B	3	1	6	9	19	344
Parainfluenza	5	3	2	3	13	494
RS virus	235	171	485	598	1489	7141
Rhinovirus	8	5	7	5	25	322

Comment

Adenovirus (excluding EM faeces): 3 patients had bronchiolitis and 3 had pneumonia; 35 had eye infections; F 5y had encephalitis (CSF).

Influenza A (all single titres): 2 patients had pneumonia.

Influenza B (8 isolates; 3 rising titres; 8 single titres): 2 patients had pneumonia and 1 had croup.

Parainfluenza: type 1, 5; type 2, 1; type 3, 6; type 4 unspecified, 1. 4 patients had bronchiolitis and 1 had croup.

RS virus: no region reported more than 10% cases. 80% of patients were aged less than 1 year and 10% were aged 1-4 years. 366 patients had bronchiolitis, 18 had pneumonia and 1 had croup.

Comment: the epidemic of RSV infection is occurring as usual at this time of year. Although most often identified in infants, it may be responsible for some of the influenza-like illness observed in older age groups.

Rhinovirus: 6 patients had bronchiolitis and 3 had pneumonia.

	Number of reports received				Total reports 90/51-91/02	Cumulative total 1990
	90/51	90/52	91/01	91/02		
<i>Chlamydia psittaci</i>	10	6	23	4	43	514
<i>Coxiella burnetii</i>	2	-	2	1	5	155
<i>Legionella pneumophila</i>	3	1	2	3	9	160
<i>Mycoplasma pneumoniae</i>	65	32	68	52	217	1410

***Chlamydia psittaci*:** 24 patients had pneumonia. F 27y had erythema nodosum; F 34y had meningitis; M 35y had pericarditis.

14 patients had contact with birds or animals, including budgerigars 5, parrots 2, finches 2; 2 patients worked on farms and 2 worked in a pet shop.

***Mycoplasma pneumoniae*:** there has been a sharp increase in the number of reports as predicted. 3 regions reported more than 10% cases: Northern (21 cases), E Anglia (27) and S Western (45). Ages: 16% of cases were aged 5-9 years, 12% were 10-14 years and 47% were 15-44 years.

111 patients had pneumonia. 3 children had rashes; F 28y had Stevens Johnson syndrome; one male had erythema nodosum. M 11y had sickle cell crisis. 2 patients had

neurological symptoms: F 8y with ataxia and F 87y with myopathy. M 30y had myocarditis.

Comment: the four yearly epidemic continues to grow. If it follows the pattern of previous epidemics, *M. pneumoniae* infections are likely to be reported at high levels throughout most of 1991. The diagnosis should be considered in any case of community-acquired pneumonia, particularly in children and young adults.

***Coxiella burnetii*:** 2 patients had pneumonia; 1 patient had contact with farm animals.

***Legionella pneumophila*:** 5 males, 4 females, age range 24-72 years. 7 patients had pneumonia. M 65y died. Recent travel abroad 3: Spain 2, Italy 1.

AIDS and HIV-1 antibody reports – United Kingdom

Reports of acquired immune deficiency syndrome (AIDS) cases to 31 December 1990 and HIV-1 antibody positive persons to week 90/52 in the United Kingdom are summarised in tables 1-4. The background to the format of these tables, including explanatory notes, was given in CDR 1991;1:R6-R9. The geographical distribution of AIDS cases and HIV-1 antibody positive persons to the end of 1990 will be reported in a later CDR.

During December 1990, 114 new cases of AIDS were reported. Eighty three were probably infected through sexual intercourse between men (11 died), 14 through sexual intercourse between men and women (1 died), four through injecting drug use, two through either injecting drug use or sexual intercourse between men, three through blood factor treatment (1 died), one through blood transfusion and three through mother to child transmission. The exposure category of four cases was undetermined.

Since reporting began in 1982, a total of 4,098 AIDS cases (3,895 males, 203 females) were reported by the end of December 1990 of whom 2,256 were known to have died (Table 1). In 1990, the 1,276 AIDS cases reported

represented a 51% increase compared with the 846 cases reported in the previous year. Amongst exposure categories, the percentage increase in cases between 1989 and 1990 was 44% for the sexual intercourse between men category, 78% for the sexual intercourse between men and women category, and 102% for the injecting drug use category. According to sexual orientation (Table 2) the proportion of AIDS cases that were heterosexual men and women increased from 20% in 1989 to 22% in 1990. Owing to reporting delay, however, the true figure for AIDS incidence in 1990 is not yet available, therefore percentage increases reported here must be interpreted cautiously.

Between week 45 in 1984 and week 52 in 1990, 15,166 HIV-1 antibody positive persons (13,335 males, 1,635 females) were reported (Table 3). The 2,445 reports received in 1990 represented a 19% increase on the 2,059 reports in 1989. The number of reported infections due to sexual intercourse between men and women in 1990 was 61% greater than in 1989. Overall 34% of the total known HIV-1 infected adults can be described as heterosexual and between 1989 and 1990 this proportion increased (Table 4).

Table 1 AIDS cases (known deaths) by exposure category and date of report: United Kingdom to 31 December 1990

How persons probably acquired the virus	Jan 89 - Dec 89		Jan 90 - Dec 90		Jan 82 - Dec 90			
	Male	Female	Male	Female	Male	(Deaths)	Female	(Deaths)
Sexual intercourse								
between men	655	–	942	–	3234	(1789)	–	–
between men and women								
"high risk" partner ¹	3	6	3	7	11	(6)	23	(13)
other partner abroad ²	36	17	70	30	145	(68)	63	(25)
other partner UK	4	3	5	8	13	(5)	13	(4)
Injecting drug use (IDU)	32	9	63	18	123	(50)	38	(20)
IDU & sexual intercourse between men	9	–	20	–	61	(32)	–	–
Blood								
Blood factor (e.g. haemophiliacs)	40	1	60	1	225	(154)	3	(2)
Blood/tissue transfer (e.g. transfusion)								
abroad	1	4	2	10	13	(9)	24	(14)
UK	4	3	2	6	16	(13)	14	(9)
Mother to child	–	4	6	7	15	(5)	21	(10)
Other/undetermined	13	2	15	1	39	(26)	4	(2)
Total	797	49	1188	88	3895	(2157)	203	(99)

1. Includes men and women who had sex with injecting drug users, or with those infected by contaminated blood and women who had sex with bisexual men.

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 by date of report: United Kingdom to 31 December 1990

Sexual orientation	Jan 89 - Dec 89		Jan 90 - Dec 90		Jan 82 - Dec 90	
	Cases	(%)	Cases	(%)	Cases	(%)
Homosexual men	562	(68)	843	(68)	2796	(70)
Bisexual men	102	(12)	120	(10)	505	(13)
Heterosexual men and women	169	(20)	271	(22)	691	(17)
Total ¹	833	(100)	1234	(100)	3992	(100)

1. Excludes some cases under investigation.

Table 3 HIV-1 antibody positive persons by exposure category and date when reported: United Kingdom to week 90/52

How persons probably acquired the virus	Weeks 89/01 - 89/52			Weeks 90/01 - 90/52			Weeks 84/45 - 90/52		
	Male	Female	NK	Male	Female	NK	Male	Female	NK
Sexual intercourse									
between men	1256	-	-	1505	-	-	8597	-	-
between men and women									
"high risk" partner ¹	6	34	-	7	32	-	24	164	1
other partner abroad ²	73	54	1	124	105	1	364	256	7
other partner UK	5	4	-	10	19	-	32	38	2
under investigation	43	40	-	55	65	-	170	189	-
Injecting drug use (IDU)	174	50	-	163	50	1	1359	628	30
IDU & sexual intercourse between men	18	-	-	19	-	-	162	-	-
Blood									
Blood factor (e.g. haemophiliacs)	26	2	-	74	-	-	1246	6	1
Blood/tissue transfer (e.g. transfusion)									
abroad/UK	13	8	1	7	11	-	72	64	2
Mother to child	14	18	-	26	23	3	84	82	35
Other/undetermined ¹	171	44	4	114	24	7	1225	208	118
Total	1799	254	6	2104	329	12	13335	1635	196

1. Includes men and women who had sex with injecting drug users, or with those infected by contaminated blood, or women who had sex with bisexual men.

2. Includes persons without other identified risks from, or who have lived in, countries where the major route of HIV-1 transmission is

Table 4 Sexual orientation of adult (15 years or over) HIV-1 antibody positive persons by date when reported: United Kingdom to week 90/52

Sexual orientation	Weeks 89/01 - 89/52		Weeks 90/01 - 90/52		Weeks 84/45 - 90/52	
	Number	(%)	Number	(%)	Number	(%)
Homosexual men/bisexual men	1274	(71)	1522	(68)	8756	(66)
Heterosexual men and women ¹	531	(29)	713	(32)	4443	(34)
Total	1805	(100)	2235	(100)	13199	(100)

1. Includes those exposed through injecting drug use or infected by contaminated blood who were not known to be homosexual or bisexual men.

Tables 1-4 were prepared from voluntary confidential reports by clinicians and microbiologists sent directly to the PHLS Communicable Disease Surveillance Centre (081-200-6868) and to the Communicable Diseases (Scotland) Unit (041-946-7120), and from monthly returns by paediatricians to the British Paediatric Surveillance Unit (071-935-1866).

Mycobacterial infections, England and Wales: laboratory reports weeks 90/51 - 91/02

Mycobacterium tuberculosis 85: 46 males, 36 females, 3 not stated.

Pulmonary infections 57 (35 males, 20 females, 2 not stated): 16 were sputum smear positive. There were 23 adults aged 65 years or more and 1 death in a patient aged 66 years. One child aged less than 15 years was reported.

Disseminated 3: HIV antibody positive M 32y (sputum, axillary abscess); F 77y with meningitis (CSF, sputum); F 81y with miliary disease died (bronchus).

Lymph nodes 11: 10 from Indian Sub Continent (ISC).

Genitourinary 4: 2 males, 2 females.

Bone/joint 2: including M 29y from ISC with spinal infection.

Abdomen 2: F 33y from ISC and indigenous F 47y.

Abscess 5 (site: chest wall 1, neck 2).

Pericardium 1: indigenous F 23y with tamponade.

M. xenopi 3 males with pulmonary infections (ages 36y, 86y and one not stated).

Avium-intracellulare group 8: 7 males, 1 female. 5 males with AIDS: M 34y, M 48y, one age not stated (blood isolates); M 44y (faecal isolate) and one age not stated (tissue); 3 children aged 1-11 years with lymphadenopathy.

M. malmoense 5: M 40y, M 42y and F 73y with pulmonary infections (1 sputum smear positive); M 42y with lymphadenopathy; M 56y with lung abscess and leukaemia who died.

M. marinum 2: M 30y and M 40y both have contact with fish.

Bacteraemia and bacterial meningitis, England and Wales: weeks 90/51 - 91/02

Organism	No. of reports received		Age		Total received	Cumulative total for 1990
	Blood only	CSF only or CSF & blood	<1m	≥65y		
Staphylococcus aureus	385	7	8	100	392 (3)*	5110
Coagulase negative	152	9	26	31	161	2322
Streptococci						
group A	45	—	—	23	45	567
group B	52	6	19	12	58	680
group C & G	36	—	—	24	36	443
enterococci	127	2	5	56	129	1609
α and non-haemolytic	155	3	2	41	158	1356
Streptococcus pneumoniae	394	34	2	162	428	3957

* methicillin-resistant strains of *Staphylococcus aureus*

Bacteraemia

Staphylococcus aureus: 26 patients had UTI/GU surgery including 7 women with post partum infections; 24 had pneumonia/lung abscess; 20 of the patients with intravascular lines/prostheses were on haemodialysis. Also reported: one neonate with toxic epidermal necrolysis (skin); M 3y with liver abscess (pus); F 54y with aortic aneurysm (vessel wall); 3 patients aged 22-75 years with septic arthritis (joints).

Coagulase negative: one child had CSF shunt.

Streptococci group A: 15 patients had skin sepsis; M 5y had pharyngitis; 5 women had post partum infections; 3 elderly patients had pneumonia.

Also reported: M 70y with spontaneous peritonitis.

group B: 16 neonates and 2 babies aged 1-2 months; 5 women with post partum infections; 3 adults had skin infections and 4 elderly patients had UTI/GU surgery.

group C, 8 and group G 28: 10 patients had skin sepsis. Also reported: F 24y with osteomyelitis (bone).

enterococci: *S. bovis* 16; *S. equinus* 1; *S. faecalis* 58; *S. faecium* 16. 19 patients had UTI/GU surgery including 2 women with post partum infections; 10 had biliary tract disease.

α and non-haemolytic: *S. acidominimus* 1; *S. lactis* 1; *S. milleri* 14; *S. mitior* 30 (*S. mitis* 27); *S. morbillorum* 2; *S. mutans* 2; *S. salivarius* 6; *S. sanguis* 37. 3 women had post partum infections; 4 patients had biliary tract disease.

Also reported: *S. milleri*, F 2y with cerebral abscess; 3 patients aged 22-81 years with acute bone/joint infections.

S. pneumoniae: 41 children aged 4 years or less. 190 patients (48%) had pneumonia. F 6m had facial cellulitis; F 4y had peritonitis; F 25y had post partum infection. Also reported: one male with infected aneurysm (vessel wall).

	Total Bacteraemia	Acute Bone/joint	Age		IV/CP lines	Pace-makers	Endocarditis with prostheses	IVDA with endocarditis
			<15y	≥65y				
Staphylococcus aureus	385	45	18	11	78	9	10 (-)	2 (1)
Coagulase negative	152	—	—	—	78	—	7 (2)	—
Streptococci								
group A	45	4	1	2	2	—	—	1 (-)
group B	52	3	1	1	—	—	2 (-)	—
group C & G	36	1	—	1	1	1	—	—
enterococci	127	—	—	—	12	—	12 (2)	—
α and non-haemolytic	155	—	—	—	9	—	15 (2)	1
Streptococcus pneumoniae	394	2	1	—	—	—	1 (-)	—

Meningitis

Staphylococcus aureus: 11 patients aged 1 month - 76 years had meningitis (4 blood isolate only), including 3 with CSF shunts.

Coagulase negative: 5 patients aged 4 months - 5 years with CSF shunts; F 7y; M 33y; M 51y and M 57y.

Streptococcus group B: 3 neonates and 3 other babies aged 1-2 months.

S. bovis: one infant.

S. faecium: F 58y after colonic surgery.

S. mitis: F 1y.

S. salivarius: M 74y.

S. sanguis: F 2y with CSF shunt. M 16y had subdural abscess (blood, pus).

S. pneumoniae: 44 patients (10 blood isolate only): 4 children aged 4 years or less, 22 patients aged 5-64 years and 7 aged 65 years or more.

Unusual infections

Bacillus sp 3: *B. cereus*, F 28y on ventilator after RTA (blood) and M 64y with infected gun shot wounds (wound). *B. pumilus*, F 87y with infected joint prosthesis (joint) had **Staphylococcus aureus** bacteraemia also.

Branhamella catarrhalis: F 2y (blood).

Diphtheroids 5: 5 immunocompromised patients aged 12-74 years, two had IV-lines (all blood).

Erysipelothrix rhusiopathiae: M 79y, a farmer, had endocarditis on porcine valve replacement (blood).

Haemophilus aphrophilus: M 56y with prosthetic valve endocarditis (blood).

Propionibacterium sp: M 60y (blood).

Providencia stuartii 2: women with urinary tract infections (blood).

Short courses in parasitology

The Liverpool School of Tropical Medicine are running two identical courses in diagnostic parasitology from 24-28 June and 1-5 July 1991. There will also be a single course in the laboratory diagnosis of malaria from 9-12 July 1991.

Further details and booking information are available from Dr JM Jewsbury, Department of Parasitology, Liverpool School of Tropical Medicine, Pembroke Place, Liverpool L3 5QA (telephone 051-708 9393; Fax 051-708 8733).

**From week 91/01 data in CDR will be from England and Wales only, unless otherwise stated.
Because of this change, 4-weekly averages for the previous 5 years will not be included.**

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