

Communicable Disease Report

Pilgrimage to Mecca (Hajj) 1991

The WHO reports that Saudi Arabia requires **all** travellers arriving from a country, any part of which is infected by yellow fever, to produce a valid yellow fever vaccination certificate, in accordance with the country's normal requirements. Travellers arriving without a certificate will be vaccinated and placed under surveillance for six days, but freedom of movement will be permitted.

Pilgrims and Umra visitors are required to produce a certificate of vaccination against meningococcal meningitis, issued not more than two years and not less than 10 days before arrival in Saudi Arabia. Pilgrims from countries where meningitis is endemic, and from countries with diseases subject to the International Health Regulations, will be examined. Suspect cases will be isolated and contacts placed under surveillance.

Prophylaxis against *Pneumocystis carinii* pneumonia in children infected with Human Immunodeficiency Virus

In a number of studies *Pneumocystis carinii* pneumonia (PCP) has been found to be the most common serious opportunist infection amongst HIV-1 infected children. It may now be worthwhile to offer prophylaxis once investigations indicate failing immunity. Recommendations have recently been published by the American Centers for Disease Control (Mortality and Morbidity Weekly Report, March 15, 1991; 40, No RR-2).

A trimethoprim/sulphamethoxazole combination is suggested in the first instance and a scheme is proposed for decision on the age and level of immunity at which to start prophylaxis. Opinion is divided on the best regime which remains at the discretion of the paediatrician managing the case.

Principles and practice of multipoint methods in the clinical laboratory

A one-day workshop will be held at the Central Public Health Laboratory, Colindale, in conjunction with the British Society for Microbial Technology, on Wednesday 19 June 1991. The workshop will consist of lectures and extensive demonstrations covering the use of multipoint technology for bacterial identification, antibiotic sensitivity testing and urine screening.

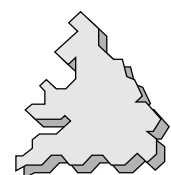
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Respiratory tract infections:
weeks 91/11 - 14

Mycobacterial infections:
weeks 91/11 - 14

Bacteraemia and bacterial meningitis:
weeks 91/11 - 14

Unusual infections:
weeks 91/11 - 14



Respiratory tract infections, England and Wales: laboratory reports weeks 91/11 - 14

Laboratory reports	Number of reports received				Total reports 91/11-14	Cumulative total 1991
	91/11	91/12	91/13	91/14		
Adenovirus (excluding EM faeces)	51	55	71	58	235	734
Coronavirus	—	1	2	—	3	9
Influenza A	1	2	8	—	11	68
Influenza B	183	238	148	94	663	1502
Parainfluenza	11	11	13	5	40	103
RS virus	287	231	418	158	1094	5620
Rhinovirus	5	12	15	8	40	119

Comment

Adenovirus (excluding EM faeces): 59 patients had eye infections, including M 73y with endophthalmitis. 8 patients had pneumonia and 16 had bronchiolitis. M 22y had encephalitis (serum and CSF antibody), F 16y had meningitis (throat isolate). M 18y had myocarditis.

Influenza A (all single titres): 3 patients had pneumonia and F 50y had pericarditis.

Influenza B (58 isolates; 152 rising titres; 1 microscopy): 2 regions reported more than 10% cases: E Anglia (119 cases) and S Western (185).

151 patients had pneumonia, 6 had bronchiolitis and 2 had croup. 4 adults had pericarditis, and one child and 4 adults had myocarditis; F 48y had pleuro-pericardial effusions and rhabdomyolysis. M 24y had bullous myringitis. Male, age not stated, had optic neuritis; F 59y had cerebellar syndrome; 3 adults had Guillain-Barre syndrome and F 9y had Reye syndrome. M 12y had Stevens Johnson syndrome and F 25y had erythema multiforme. Male, age not stated, had *Staphylococcus aureus* bacteraemia and pneumonia; F 46y had pneumococcal bacteraemia. F 18y had a lung abscess.

Outbreaks: two boarding school outbreaks were reported in Worcester and Slough. A ward outbreak in a geriatric unit was reported in SW Thames.

Parainfluenza: type 1, 16; **type 2**, 3; **type 3**, 20. One patient

had pneumonia, 17 bronchiolitis and 4 croup.

RS virus: 3 regions reported more than 10% cases: Northern (137 cases), Trent (288) and W Midlands (124). 83% of patients were aged less than 1 year. 12 patients had pneumonia, 171 had bronchiolitis and one had croup.

Rhinovirus: one patient had pneumonia and 5 had bronchiolitis.

Chlamydia psittaci: 16 patients had pneumonia. 3 patients had contact with birds, including one with finches & parrots and one with parrots. One patient was a farmer. F 42y had pericarditis and a woman presented with hepatitis. M 59y had Henoch-Schonlein purpura.

Coxiella burnetii: one patient had pneumonia. M 40y travelled to Pakistan.

Legionella pneumophila: 3 males and 3 females, age range 26-84 years. 5 patients had pneumonia. M 84y died. Recent travel abroad: Italy 1, USA (Florida) 1.

Mycoplasma pneumoniae: 4 regions reported more than 10% cases: Northern (19 cases), E Anglia (19), Wessex (24) and S Western (35). 77% of cases were in the 5-44 years age group. 81 patients had pneumonia. M 13y and F 28y had meningitis; M 20y had peripheral neuropathy and F 32y had transverse myelitis. M 9y, F 13y, M 23y and F 36y had Stevens Johnson syndrome; 6 other patients had rashes. F 30y and F 66y had haemolytic anaemia.

	Number of reports received				Total reports 91/11-14	Cumulative total 1991
	91/11	91/12	91/013	91/14		
Chlamydia psittaci	4	12	7	7	30	124
Coxiella burnetii	—	1	1	3	5	16
Legionella pneumophila	3	1	—	2	6	41
Mycoplasma pneumoniae	39	44	60	41	184	808

Respiratory syncytial virus (RSV) surveillance 90/40 - 91/14

Laboratory reports of RSV infections are declining following the annual winter epidemic. The total number of reports each winter has increased in recent years (figure 1), which may reflect an increase in investigation and availability of tests rather than incidence. However, the

total is a little lower this year (6542 reports in weeks 90/40 - 91/14) compared with the same period in the previous winter. The epidemic has peaked a little later in each of the last three years: week 88/48 in 1988/89, week 89/50 in 1989/90 and week 91/01 in 1990/91.

AIDS and HIV-1 antibody reports - United Kingdom

During March 1991, 101 new cases of AIDS were reported. Sixty-nine were probably infected through sexual intercourse between men (9 died), eleven through sexual intercourse between men and women (1 died), ten through injecting drug use (2 died), one through either injecting drug use or sexual intercourse between men, five through blood factor treatment (1 died), one through blood transfusion, and one, who died, through mother to child transmission. The exposure category of three cases, one of whom died was undetermined.

Since reporting began in 1982 a total of 4454 AIDS cases (4226 men and 228 women) have been reported of whom 2549 are known to have died (Table 1). The 1309 cases reported between April 1990 and March 1991 was 36% more than the number reported during the preceding twelve month period. Owing to delay in reporting the total number of AIDS cases diagnosed in more recent periods is not yet known. Between week 45 in 1984 and week 13 in 1991, 15,337 HIV-1 antibody positive persons (13,457 males, 1714 females and 166 whose sex was not known) were reported (Table 3).

Among injecting drug users, reports of AIDS cases rose sharply from 51 in April 1989 - March 1990, to 87 in April 1990 to March 1991 (Table 1). Reports of newly diagnosed HIV-1 infections in injecting drug users declined, but this probably represents current testing patterns rather than transmission.

The rate of increase in AIDS cases attributed to heterosexual intercourse was high: in the past year 129

cases were reported compared with 88 in the previous year, an increase of 47%. Moreover a greater proportion of the total AIDS cases, excluding cases in visitors and cases due to blood factor treatment are now attributable to heterosexual intercourse, 9.6% of cases reported in 1990 compared with 7.5% in 1989 and only 3.3% in 1988 or earlier.

The potential for further HIV-1 transmission through heterosexual intercourse is shown by the number of known infected adult heterosexuals (Table 2 and 4), 769 (18%) of AIDS cases and 4602 (34%) of HIV-1 antibody positive reports.

The steady increase in the number of reports of AIDS cases in the UK continued in the first quarter of 1991 when 358 reports were received, the second highest quarterly total ever. In the final quarter of 1990 when an average of 24 new AIDS cases were reported each week, the UK ranked fifth among European countries experiencing the greatest increase in AIDS cases after France (88 per week), Italy (50 per week), Spain (34 per week) and the Federal Republic of Germany (27 per week).

Of 31 European countries for which data were available at the end of 1990, the UK with an estimated cumulative AIDS incidence of 72 per million population was ranked tenth in the order of magnitude of the AIDS epidemic. The estimated cumulative incidence rate per million population was higher in Switzerland (243 per million), France (234 per million), Spain (193 per million) and Italy (143 per million).

Table 1 AIDS cases (known deaths) by exposure category and date of report: United Kingdom to 31 March 1991

How persons probably acquired the virus	Apr 89 - Mar 90		Apr 90 - Mar 91		Jan 82 - Mar 91			
	Male	Female	Male	Female	Male	(Deaths)	Female	(Deaths)
Sexual intercourse								
between men	740	—	951	—	3489	(2017)	—	—
between men and women								
"high risk" partner ¹	4	5	2	8	11	(7)	25	(14)
other partner abroad ²	47	24	76	31	171	(83)	75	(31)
other partner UK	4	4	5	7	13	(6)	13	(4)
Injecting drug use (IDU)	42	9	64	23	140	(61)	45	(23)
IDU & sexual intercourse between men	10	—	21	—	66	(38)	—	—
Blood								
blood factor (e.g. haemophiliacs)	49	—	58	2	242	(165)	4	(2)
blood/tissue transfer (e.g. transfusion)								
abroad	1	1	3	11	14	(9)	25	(16)
UK	2	4	2	5	16	(13)	14	(9)
Mother to child	1	2	7	9	16	(6)	23	(11)
Other/undetermined	11	3	24	—	48	(32)	4	(2)
Total	911	52	1213	96	4226	(2437)	228	(112)

1. Includes men and women who had sex with injecting drug users, or with those infected through blood factor treatment or blood transfusion, 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 March 1991

Sexual orientation	Apr 89 – Mar 90		Apr 90 – Mar 91		Jan 82 – Mar 91	
	Cases	(%)	Cases	(%)	Cases	(%)
Homosexual men	634	(67)	841	(67)	3010	(69)
Bisexual men	116	(12)	132	(11)	548	(13)
Heterosexual men and women	196	(21)	279	(22)	769	(18)
Total ¹	946	(100)	1252	(100)	4327	(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 91/13

How persons probably acquired the virus	Weeks 89/14 – 90/13			Weeks 90/14 – 91/13			Weeks 84/45 – 91/13		
	Male	Female	NK	Male	Female	NK	Male	Female	NK
Sexual intercourse									
between men	1190	–	–	1473	–	–	8796	–	–
between men and women									
“high risk” partner ¹	8	41	–	3	37	–	25	187	1
other partner abroad ²	97	70	2	149	129	–	431	317	7
other partner UK	14	9	–	13	22	–	43	50	2
under investigation	32	29	–	38	51	–	136	174	–
Injecting drug use (IDU)	178	49	–	148	52	1	1379	640	30
IDU & sexual intercourse between men	18	–	–	24	–	–	158	–	–
Blood									
Blood factor (e.g. haemophiliacs)	38	1	–	56	–	–	1243	7	1
Blood/tissue transfer (e.g. transfusion)									
abroad/UK	15	8	1	4	10	–	77	64	2
Mother to child	18	20	1	24	24	2	91	91	35
Other/undetermined ¹	121	36	4	110	25	5	1078	184	88
Total	1729	263	8	2042	350	8	13457	1714	166

1. Includes men and women who had sex with injecting drug users, or with those infected through blood factor treatment or blood transfusion, 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 through sexual intercourse between men and women.

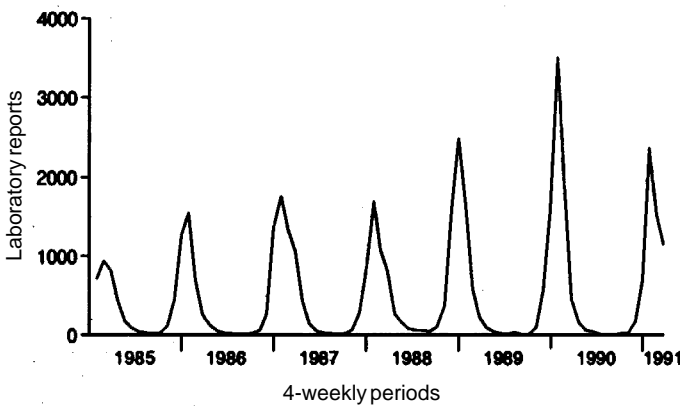
Table 4 Sexual orientation of adult (15 years or over) HIV-1 antibody positive persons by date when reported: United Kingdom to week 91/13

Sexual orientation	Weeks 89/14 – 90/13		Weeks 90/14 – 91/13		Weeks 84/45 – 91/13	
	Number	(%)	Number	(%)	Number	(%)
Homosexual men/bisexual men	1208	(67)	1496	(68)	8952	(66)
Heterosexual men and women ¹	587	(33)	702	(32)	4602	(34)
Total	1795	(100)	2198	(100)	13554	(100)

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

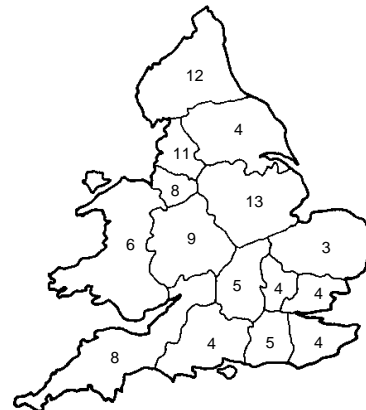
Tables 1–4 were prepared from voluntary confidential reports by clinicians and microbiologists sent directly to the PHLS Communicable Disease Surveillance Centre (081-200-6868) and to the Communicable Diseases (Scotland) Unit (041-946-7120), from returns by Haemophilia Centre Directors to the Oxford Haemophilia Centre (0865-225316), and from monthly returns by paediatricians to the British Paediatric Surveillance Unit (071-935-1866).

Laboratory reports to CDSC of RS virus infections: England and Wales 1985-91



Three regions (Northern, Trent and N Western) have reported more than 10% of the cases in the most recent epidemic (figure 2), but this cannot be interpreted as indicating increased local incidence as diagnostic practices vary. Most of the cases (83%) were reported in children aged less than 1 year old, followed by 9% in the 1-4 years group. Many fewer reports were received from cases in the

Laboratory reports to CDSC of RS virus infections: regional proportion (%)



older age groups but this too may be influenced by diagnostic practice, as possible RSV infection is not investigated as often in the older age group. Outbreaks of influenza-like illness associated with RSV infection are occasionally reported among the elderly in residential homes.

Respiratory Diseases Section, CDSC

Mycobacterial infections, England and Wales, laboratory reports weeks 91/011 - 14

Mycobacterium tuberculosis 83: 48 males, 35 females.
Pulmonary infections 66: 42 males, 24 females. 10 were sputum smear positive. 17 patients were aged 65 years or more; M 69y died. 4 isolates were from pleural aspirates.
Disseminated 4: indigenous M 2y with vertebral osteomyelitis and pulmonary disease (bone isolate). F 31y (sputum and lymph nodes), M 50y (larynx and lymph nodes), F 69y with miliary disease (all from Indian subcontinent).
Meningitis 1: F 2y (isolate from bronchial washings).
Lymph nodes 7: 1 male, 6 females (3 from Indian subcontinent).
Genitourinary 4: 3 males, 1 female.

Abscess 1: F 64y with neck abscess.
M. bovis 1: M 43y with genitourinary tract infection.
M. kansasii 2: M 22y and M 87y, both sputum smear positive pulmonary infections.
M. xenopi 5: M 54y, M 55y, M 63y and M 72y, all pulmonary infections (1 sputum smear positive). Known HIV-1 antibody positive M 27y (liver biopsy).
Avium-intracellulare group 6: 3 children with lymphadenopathy; F 4y with submandibular abscess; M 53y and F 75y with pulmonary disease.
M. fortuitum 1: F 24y (abscess).
M. marinum 2: M 41y with fish tank granuloma and male, age not stated, with skin lesions on arm.

Bacteraemia and bacterial meningitis, England and Wales: weeks 91/11 - 14

Organism	No. of reports received		Age		Total received	Cumulative total for 1991
	blood only	CSF only or CSF & blood	<1m	≥65y		
Staphylococci						
S. aureus	330	4	14	139	334 (3)	1287
coagulase negative	171	3	23	35	174	633
Streptococci						
group A	53	—	1	21	53	197
group B	41	7	21	9	48	175
group C & G	29	—	—	17	29	106
enterococci	91	—	7	38	91	350
α and non-haemolytic	115	3	1	36	118	368
S. pneumoniae	308	31	3	155	339	1436

* methicillin-resistant strains of *Staphylococcus aureus*

Bacteraemia

Staphylococcus aureus: 20 of the patients with intravascular lines were on haemodialysis. 18 patients had pneumonia/lung abscess; 16 had UTI/GTU surgery, including 3 women with post partum infections; 2 had biliary tract disease (ERCP, 1) and 4 had burns.

Coagulase negative: F 42y with CSF shunt; 4 patients had UTI/GU surgery.

Streptococci:

group A: 17 patients had skin infections, including one with burns and 3 with surgical wounds. Three women had puerperal infections, including one of three patients presenting with disseminated intravascular coagulopathy. M 8y and M 63y had throat infections. F 71y had pericarditis (blood, joint, lung and pericardial isolates) and M 73y had splenic abscess (blood isolate).

group B: 15 neonates; 7 patients with UTI/GU surgery, including 4 women with childbirth associated infections; 3 patients had skin infections.

group C, 5 and group G, 24: 10 patients had skin infections

and F 88y with sore throat and diarrhoea had polyarthritis; 3 had had UTI/GU surgery, including one woman with post partum infection. **Group G,** F 76y with endocarditis had septic arthritis and vaginal discharge (blood, HVS isolates).

enterococci: *S. bovis* 7; *S. durans* 2; *S. faecalis* 37; *S. faecium* 14. 15 patients had UTI/GU surgery; 10 had biliary tract disease.

α- and non-haemolytic: *S. gordonii* 1; *S. milleri* 12; *S. mitis* 24; *S. morbillorum* 4; *S. mutans* 3; *S. salivarius* 11; *S. sanguis* 45. 5 patients had UTI/GU surgery, including 2 women with post partum infections; 3 had biliary tract disease.

S. pneumoniae: 36 children aged 4 years or less including M 1y with CSF shunt; F 6m with orbital cellulitis; M 1y with septic arthritis; and 6 children with pneumonia; 148 other patients had pneumonia; 5 women had post partum infections and F 40y had peritonitis. F 59y had orbital cellulitis (eye isolate also).

Also reported: male with septic arthritis (joint isolate).

	Total bacteraemia	Acute bone/joint	Age		IV/CP lines	Pace-makers	Endocarditis (with prostheses)	IVDA (with endocarditis)
			<15y	≥65y				
Staphylococci								
<i>S. aureus</i>	12	9	6	13	75	9	8 (2)	4 (-)
Coagulase negative	29	-	-	-	107	3	4 (3)	-
Streptococci								
group A	53	6	5	1	-	-	-	-
group B	41	1	-	1	-	-	-	-
group C & G	29	3	-	2	2	-	1 (-)	-
enterococci	91	-	-	-	17	1	4 (1)	-
α and non-haemolytic	115	1	-	-	11	-	28 (1)	1 (-)
S. pneumoniae	307	7	1	2	2	-	3 (-)	-

Meningitis

Staphylococcus aureus: M 9y; M 18y with fractured base of skull; F 58y with CSF shunt; F 65y after recent fall (blood isolate only); male, age not stated, after neurosurgery.

Coagulase negative: one preterm neonate; and two patients with CSF shunts (M 17y and male, age not stated).

Streptococci: group A: F 4y with cerebral abscess (blood isolate) and F 58y with meningitis after clipping of subarachnoid vessel (blood isolate).

group B: 6 neonates; alcoholic M 51y; one, age and sex not stated.

S. milleri: F 12y with ventriculitis and cerebral abscess; M 18y; M 53y with frontal glioma.

S. pneumoniae: 15 children aged 4 years or less (blood only, 2); 13 patients aged 5-64 years (blood only, 1); 4 aged 65 years or more (blood only, 1); 3, age not stated.

Unusual infections

Agrobacterium radiobacter: male patient with leukaemia and IV-line (blood isolate).

Corynebacterium striatum: M 65y on haemodialysis (blood

isolate).

Neisseria sp.: M 19y on chemotherapy for teratoma (blood isolate).

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

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