

Communicable Disease Report

An outbreak of foodborne *Shigella sonnei* infection

A large point source outbreak of dysentery has been reported in association with a reception held at a village in Cambridgeshire at the end of January. A cold buffet was served which had been prepared by a local catering firm. One hundred and seven of the 200 guests are known to have developed diarrhoea with a median incubation period of 48 hours. An ampicillin-resistant *Shigella sonnei* has been isolated from 81 of 93 faecal samples obtained from symptomatic cases. An additional ten cases have been confirmed in household contacts who did not attend the reception. *S. sonnei* has also been isolated from samples taken from two of the eleven catering staff. Food-specific attack rates derived from 141 questionnaires reveal a high and independent relative risk for each of two prawn dishes. Both the affected catering staff had been involved in the preparation of prawn vol-au-vents.

There have been few reports of foodborne outbreaks of dysentery in England and Wales in recent years. *S. flexneri* type 4 was isolated from six air crew who ate sandwiches at a hotel in Ghana in 1986 (*CDR* 1990; (19): 5). In 1984, five members of a ship's crew contracted *S. flexneri* type 2a infection after eating oysters purchased in France (*CDR* 1986; (34): 3). *S. sonnei* was isolated from twenty-four individuals from Scandinavia who became ill after eating soft cheeses purchased at Charles de Gaulle airport in Paris in 1982 (*CDR* 1982; (14):1).

The number of laboratory reports of *S. sonnei* infection in England and Wales rose to 9830 in 1991 (compared with 2228 and 2319 in 1989 and 1990, respectively). This is the highest level recorded for almost twenty years and coincides with large community outbreaks in several parts of the country.

Methicillin-resistant *Staphylococcus aureus* (MRSA)

An increased number of isolates of MRSA has been reported from hospitals in Bradford during the second half of 1991. Some have come from patients on geriatric wards but a proportion emanate from elsewhere in the community and an investigation is underway to seek evidence for common factors.

This strain is similar to, and may be indistinguishable from, one already identified by the Division of Hospital Infection in three hospitals in Birmingham, six in London and 15 elsewhere in the country. It is resistant to penicillin and erythromycin (inducible phenotype) and some isolates have also shown resistance to ciprofloxacin. It is positive for protein A secretion and Tween 80 hydrolysis and negative for urease and gelatinase. It types weakly with phage 75 only; carries bacteriophages which display a characteristic lytic spectrum, and has been designated EMRSA-15 following previous convention¹. It also produces large amounts of enterotoxin C.

1. Kerr S, Kerr GE, Mackintosh CA, Marples RR. A survey of methicillin-resistant *Staphylococcus aureus* affecting patients in England and Wales. *J Hosp Infect* 1990; **16**: 35-48.

Hepatitis:
weeks 92/04 - 07

Miscellaneous viruses:
weeks 92/04 - 07

Sexually transmitted diseases:
weeks 92/04 - 07

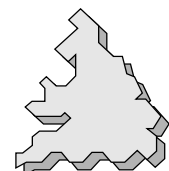
Bacteraemia and bacterial meningitis:
weeks 92/04 - 07

Unusual infections

Imported infections:
weeks 92/04 - 07

Opportunist infections:
weeks 92/04 - 07

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



Hepatitis, England and Wales: laboratory reports, weeks 92/04 – 07

Laboratory reports	Number of reports received				Total for weeks 92/04-07	Cumulative total 1992
	92/04	92/05	92/06	92/07		
Hepatitis A (IgM)	156	179	192	184	711	1273
HBsAg total	37	25	42	36	140	265
acute hepatitis B	15	3	5	6	29	60
other	22	22	37	30	111	205

Hepatitis A

A total of 711 reports was received; this compares with 684 in the equivalent four-week period in 1991. Reports include F 3y and male child, both with fulminant hepatic failure, and F 41y a midwife who had previously delivered a baby born to a woman with acute HAV infection.

Cases continue to be reported from the Kettering (18), Durham, Cardiff and Liverpool community outbreaks. Family outbreaks were reported from Wales (2) and the following

regions: Northern (1), Yorkshire (13), Trent (1), E Anglia (1), NE Thames (1), SW Thames (1), Oxford (1), W Midlands (3), Mersey (1) and N Western (1). A school/community outbreak, where at least 9 of the 287 pupils were HAV (IgM) positive, has been reported from the Peterborough area.

A history of travel abroad was recorded in 29 (4%) reports: Mediterranean/Europe 10; Africa 6; Indian subcontinent 6; Middle East 2; other 5.

Laboratory reports	Age (years)					Not stated	Total
	<1	1-14	15-44	45-64	≥65		
Hepatitis A (IgM)	–	206	412	62	8	23	711
HBsAg total	–	10	89	22	3	16	140
acute hepatitis B	–	1	23	1	1	3	29
other	–	9	66	21	2	13	111

Hepatitis B

Twenty-nine cases (21 male, 8 female) of acute hepatitis B were reported. Risk exposure information was provided for 19 of these (13 male, 2 female): homosexual contact 4 (male);

injecting drug use 5 (3 male, 2 female); heterosexual contact 4 (female); sexual contact 2 (male); surgery/transfusion 1 (male); no recognised risk 3 (male).

Miscellaneous viruses, England and Wales: laboratory reports, weeks 92/04 – 07

Laboratory reports	Number of reports received				Total for weeks 92/04-07	Cumulative total 1992
	92/04	92/05	92/06	92/07		
Cytomegalovirus	20	16	35	33	104	216
Molluscum contagiosum	–	–	1	1	2	4
Varicella zoster	–	3	2	1	6	16
HTLV-1	–	2	–	1	3	4

Cytomegalovirus: two regions reported more than 10% of cases: Trent (16 cases) and SW Thames (20).

Ages: 18 babies aged less than one year, including 3 neonates with congenital infection. Four children aged 1-4 years; 4, 5-9 years; 1, 10-14 years; 29 adults aged 15-44 years, including one pregnant women who had intra-uterine death; 29, 45-64 years; 6, 65 years or more; 13 age not stated.

Thirty-six patients had organ transplants (heart 14, renal 9, bone marrow 8, liver 3, lung 2). Six patients were known to be HIV-1 antibody positive, including one patient who had retinitis. Five patients had leukaemia/lymphoma; one had systemic lupus erythematosus; one had hypogammaglobulinaemia; 15 had respiratory tract infection; 9 had hepatitis; F 27y and F 35y had Guillain-Barré syndrome; 3 patients had glandular fever; F 22y and F 23y with cervical isolates.

Molluscum contagiosum: one child and one adult both had skin infection.

Herpes simplex: M 61y (serum) and M 64y had encephalitis (both CSF serology); F 21y who seroconverted in pregnancy – her baby died of disseminated herpes simplex virus infection; M 82y with leukaemia (PM lung isolate).

Varicella zoster: M 66y had encephalitis (serology); F 91y had zoster ophthalmicus (microscopy); M 31y with chickenpox pneumonitis died of respiratory failure (serology; *Mycoplasma pneumoniae* IgG titre was 1:512).

HTLV-1, 3 (all serology): F 57y and F 61y with neurological symptoms (both West Indian origin); F 58y whose husband is HTLV-1 antibody positive and had adult T-cell lymphatic leukaemia.

Polyomavirus: F 43y with bone marrow transplant had progressive multifocal leucoencephalopathy (serum, CSF serology); F 28y with leukaemia (urine isolate); F 56y with bone marrow transplant (urine electron microscopy).

Sexually transmitted diseases, England and Wales: laboratory reports, weeks 92/04 – 07

Laboratory reports	Male	Female	Not stated	Total for weeks 92/04-07	Cumulative total 1992
<i>Neisseria gonorrhoeae</i>					
β-lactamase producing	19	21	2	42	42
other antibiotic-resistant strains	18	21	1	40	40
extra-genital isolates	8	8	–	16	18
Ophthalmia neonatorum (<6 weeks)					
gonococcal	1	–	–	1	1
chlamydia	16	12	1	29	58
<i>Chlamydia trachomatis</i>	780	1490	6	2276	3886
Herpes simplex	319	496	13	828	1479

Comment

Neisseria gonorrhoeae, β-lactamase producing strains: Country of infection: UK 26, Nigeria 3, Africa, Greece, Indonesia, Kenya, Sierra Leone, Thailand and USA, one each. Other antibiotic-resistant strains: 26 tetracycline-resistant (19 β-lactamase producing also), 3 ciprofloxacin-resistant (1 β-lactamase producing also) and 13 penicillin-resistant (chromosomal mediated resistant *N. gonorrhoeae*).

Extra-genital isolates: 7 from throat (5 male, 2 female); 10 from rectum (3 male, 7 female), of which one was also β-lactamase producing, and 2 from throat and rectum (both female).

Chlamydia trachomatis: eye infections: 29 babies aged less than 6 weeks; 3 children aged 6 weeks or more; 13 adults and 2 patients, age not stated. Two women with pelvic inflammatory disease and one with infertility.

Bacteraemia and bacterial meningitis, England and Wales: weeks 92/04 – 07

Laboratory reports of blood and CSF isolates of bacteria are grouped into four categories and published in a weekly sequence:

1. Staphylococci and streptococci (excluding anaerobic cocci).
2. Enterobacteriaceae ie, *Citrobacter*, *Enterobacter*, *Escherichia coli*, *Klebsiella*, *Proteus* and *Salmonella species*.
3. Environmental and anaerobic bacteria ie, *Bacteroides*, *Clostridia*, *Acinetobacter*, *Aeromonas*, *Pseudomonas*, *Serratia* and anaerobic cocci.
4. *Neisseria meningitidis*, *Haemophilus species* and *Listeria monocytogenes*.

This week's CDR contains reports for category 3. Less commonly reported causes of bacteraemia or bacterial meningitis are listed under **unusual infections**.

Laboratory reports	No. of reports received		Age		Total for weeks 92/04-07	Cumulative total 1992
	Blood only	CSF only or CSF & blood	<1m	≥65y		
<i>Bacteroides sp</i>	67	–	–	25	67	121
<i>Clostridium sp</i>	23	–	1	15	23	52
Anaerobic cocci	9	–	1	4	9	22
<i>Acinetobacter sp</i>	28	–	–	11	28	57
<i>Aeromonas sp</i>	1	–	–	1	1	4
<i>Pseudomonas sp</i>	105	1	3	56	106	221
<i>Serratia sp</i>	15	–	1	7	15	24

Bacteraemia

Bacteroides sp: *B. buccae* 1; *B. fragilis* 46; *B. loescheii* 1; *B. thetaiotaomicron* 2; *B. vulgatus* 1; *Bacteroides sp* 15. *B. fragilis*, M 57y with systemic lupus erythematosus; M 67y and M 74y after repair of aortic aneurysm; F 57y had myeloma. *Bacteroides sp*, M 70y with septic arthritis.

Clostridium sp: *C. perfringens*: type A, 1; untyped 13.

C. ramosum 2; *C. septicum* 3; *C. subterminale* 1; *Clostridium sp* 1. *C. ramosum*, F 10y with intussusception.

Anaerobic cocci: *Peptococcus sp* 1; *Peptostreptococcus sp* 4; anaerobic *streptococcus* 1; microaerophilic *streptococcus* 1; *Veillonella sp* 2.

Laboratory reports	Total bacteraemia	Gastrointestinal tract	Biliary tract (ERCP)	UTI/GU (pregnant)	Ischaemic/pressure sores
<i>Bacteroides sp</i>	67	22	6 (–)	7 (–)	4
<i>Clostridium sp</i>	23	3	3 (–)	1 (–)	–
Anaerobic cocci	9	–	–	2 (–)	–

Acinetobacter sp: *A. calcoaceticus (anitratu)s* 10; *A. junii* 1; *A. Iwoffii* 5; *Acinetobacter sp* 2.

Aeromonas hydrophila 1.

Eikenella corrodens: F 4y had neck abscess (abscess isolate only).

Pseudomonas sp: *P. aeruginosa* 80; *P. diminuta* 1; *P. fluorescens* 5; *P. maltophilia* 4; *P. pickettii* 1; *P. putida* 2; *P. stutzeri* 3. *P. aeruginosa*, M 29y with necrotic cellulitis and AIDS; M 38y

after craniotomy; M 55y with cholangiocarcinoma; M 62y after thoracotomy for empyema; F 1m (CSF and blood); F 48y with multiple liver abscesses. *P. maltophilia*, F 77y with carcinoma of biliary tract.

Serratia sp: *S. liquefaciens* 7; *S. marcescens* 5; *S. marinorubra (rubidaea)* 1. *S. liquefaciens*, F 1y had biliary atresia. *S. marcescens*, M 63y after amputation.

Laboratory reports	Total bacteraemia	UTI/GU (pregnant)	Burns	Intravascular lines	Leukaemia/bone marrow suppression (IV-lines)
Acinetobacter sp	28	4 (-)	1	3	9 (4)
Aeromonas sp	1	-	-	1	-
Pseudomonas sp	105	20 (-)	3	9	23 (3)
Serratia sp	15	2 (-)	-	4	1 (1)

Unusual infections

Achromobacter xylosoxidans 2: M 72y (blood isolate) and F 72y (blood and skin ulcer isolates).

Aerococcus viridans: M 77y with carcinoma of bile duct and biliary stent (blood isolate).

Arcanobacterium haemolyticum: M 23y had pharyngitis and skin rash (blood isolate).

Corynebacterium sp 1: M 38y with leukaemia had IV-line (blood isolate).

Diphtheroids 2: M 68y with perforated appendix (blood

isolate; *Bacteroides sp* and *Streptococcus acidominimus* also isolated); F 82y with mycosis fungoides had pyrexia (blood isolate).

Propionibacterium acnes: male neonate whose mother had premature ruptured membranes (blood isolate).

Rhodococcus equi: M 14y (blood isolate).

Veillonella sp: F 59y on CAPD had exit site infection and peritonitis (exit site swab and peritoneal dialysate isolates; *Mycoplasma hominis* also isolated from exit site).

Imported infections, England and Wales: laboratory reports, weeks 92/04 – 07

Arbovirus 5: Dengue virus 4: type 1, M 20y after travel to Thailand and M 52y, who had type 2 also, after travel to Singapore and the Philippines; untyped, M 76y previously resident in Borneo. Ross River fever virus 1: M 45y after travel to Australia.

Echinococcus granulosus (hydatid disease): M 11y from Egypt had a liver cyst (microscopy).

Filaria 1: *Onchocerca volvulus*.

Hookworm 27 (Bangladesh, Ethiopia, Grenada, Nigeria, Pakistan, Sierra Leone, Sri Lanka, Vietnam, Zaire, 1 each).

Plasmodium sp 10: *P. falciparum* 3 (Gambia, Niger, 1 each)

including patient who ceased chloroquine prophylaxis on return to the UK from Niger, one week before onset of symptoms; *P. malariae* 1 (Nigeria); *P. ovale* 1 (Liberia and the Philippines); *P. vivax* 5 (Papua New Guinea 2, India 1) including patient from India with *P. falciparum* also.

Rickettsia sp: M 62y after travel to Cyprus and Egypt.

Schistosoma sp 6: *S. haematobium* 2; *S. mansoni* 4 (Ethiopia, Nigeria, Zambia 1 each).

Strongyloides sp 7 (Pakistan, South Africa 1, each) including one patient who was HIV-1 antibody positive.

Opportunist infections, England and Wales: laboratory reports, weeks 92/04 – 07

Actinomyces sp 4: *A. israelii* 3; *A. odontolyticus* 1. *A. israelii*, M 33y had dental abscess; F 70y with submandibular abscess; F 48y had intra-uterine contraceptive device. *A. odontolyticus*, F 4y with neck abscess (*Eikenella corrodens* also isolated).

Aspergillus sp 7: *A. fumigatus* 4; *A. niger* 2; *Aspergillus sp* 1. *A. fumigatus*, F 65y and F 72y (both sputum isolates); F 47y with mastoid infection; F 59y (serum). *A. niger*, M 48y and F 45y both with outer ear infection.

Candida sp 34: *C. albicans* 22 (21 blood isolates); *C. krusei* 2; *C. parapsilosis* 2; *C. pseudotropicalis* 1; *C. tropicalis* 3; *Candida sp* 4. One patient had endocarditis, 13 had IV-lines; 1 had renal transplant; 2 with Hodgkin's disease; 5 had

leukaemia; 1 had Goodpasture's syndrome; 1 was immunocompromised. *C. albicans*, M 19d (CSF and blood isolates).

Cryptococcus neoformans: HIV-1 antibody positive male, age not stated (CSF isolate).

Malassezia furfur 1: M 34y (skin/wound isolate).

Nocardia sp 1: M 69y had cerebral abscess.

Pneumocystis carinii 16 (all sputum/BAL isolates): 15 HIV-1 antibody positive patients (13 male, 2 female); immunocompromised child, age not stated, with Hodgkin's disease.

Trichophyton sp 4: *T. rubrum* 2; *T. verrucosum* 1; *Trichophyton sp* 1.

Data are for England and Wales only, unless otherwise stated.

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

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

During **January 1992**, 107 new cases of AIDS were reported. Fifty-nine were probably infected through sexual intercourse between men (8 died), 19 through sexual intercourse between men and women (3 died), seven through injecting drug use (1 died), one through either injecting drug use or sex between men, ten through blood factor treatment (9 died), one through blood/tissue transfer (1 died), and eight through transmission from mother to infant (2 died). The exposure categories of two cases were undetermined.

Since reporting began in 1982, a total of 5556 AIDS cases (5215 males, 341 females) have been reported, of whom 3455 are known to have died (Table 1). The number of female cases reported increased from 96 to 129 (34%) in the two twelve month periods from February 1990 to January 1992.

Twenty-five per cent of AIDS cases reported in the last twelve months were reported, regardless of exposure category, to be heterosexual (Table 2). This demonstrates the potential for further HIV-1 transmission through sexual intercourse between men and women.

The number of new reports of AIDS cases declined in six regions over the past twelve months (Table 3). However, after allowing for reporting delay and under-reporting, the current incidence of AIDS is estimated to be slightly more than that forecast in the 1990 'Day Report' (*Communicable Disease Report January 1990:Suppl*). Eighty-nine per cent of AIDS cases reported in 1988 or earlier are known to have died (Table 4). 2161 deaths from AIDS are known to have occurred since the beginning of 1989 (Table 5).

Table 1 AIDS cases and deaths by exposure category and date of report: United Kingdom to 31 January 1992

How persons probably acquired the virus	Feb 90 - Jan 91		Feb 91 - Jan 92		Jan 82 - Jan 92			
	Male	Female	Male	Female	Male	Deaths	Female	Deaths
Sexual intercourse								
between men	970	–	933	–	4256	2689	–	–
between men and women								
"high risk" partner ¹	3	8	7	11	17	8	35	21
other partner abroad ²	72	33	87	57	235	119	123	52
other partner UK	4	7	19	7	33	16	19	9
Injecting drug use (IDU)	61	20	55	31	180	99	72	43
IDU & sexual intercourse between men	21	–	19	–	84	55	–	–
Blood								
blood factor (e.g. for haemophilia)	59	2	61	–	295	217	4	3
blood/tissue transfer (e.g. transfusion)								
abroad	3	10	–	4	14	11	28	18
UK	2	6	2	4	17	14	18	11
Mother to infant	7	9	8	12	22	9	35	16
Other/undetermined	15	1	27	3	62	42	7	3
Total	1217	96	1218	129	5215	3279	341	176

1. 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: United Kingdom to 31 January 1992

Sexual orientation (regardless of exposure category)	Feb 90 - Jan 91 ¹		Feb 91 - Jan 92 ¹		Jan 82 - Jan 92	
	Cases	(%)	Cases	(%)	Cases	(%)
Homosexual men	863	(68)	813	(64)	3681	(68)
Bisexual men	129	(10)	140	(11)	663	(12)
Heterosexual men and women ²	278	(22)	323	(25)	1035	(19)
Total³	1270	(100)	1276	(100)	5379	(100)

1. Period during which reports were received.

2. Includes those exposed through injecting drug use or infected

through blood factor treatment or blood transfusion.

3. 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 31 January 1992

Country or region of first report	Feb 90 – Jan 91		Feb 91 - Jan 92		Cumulative total since 1982	
	Cases	Related deaths ¹	Cases	Related deaths ¹	Cases	Related deaths ¹
England:						
Northern	28	13	13	4	97	64
Yorkshire	42	27	24	6	139	92
Trent	24	11	26	13	109	73
E Anglia	7	2	25	4	69	37
NW Thames	504	250	430	82	2082	1275
NE Thames	240	109	288	46	1046	585
SE Thames	159	86	141	38	611	384
SW Thames	43	31	70	18	213	140
Wessex	38	28	21	6	121	87
Oxford	22	10	41	11	124	70
S Western	17	11	41	12	118	73
W Midlands	38	20	39	15	134	84
Mersey	20	10	14	9	71	52
N Western	49	31	61	29	219	157
Wales	13	10	16	12	82	65
Northern Ireland	6	5	4	2	27	24
Scotland	63	40	93	42	294	193
United Kingdom total	1313	694	1347	349	5556	3455
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 31 January 1992.

Table 4 AIDS cases by date of report and number known to have died: United Kingdom to 31 December 1991

Year ¹	First quarter		Second quarter		Third quarter		Fourth quarter		Annual Total	
	Reports	Related deaths ²	Reports	Related deaths ²	Reports	Related deaths ²	Reports	Related deaths ²	Reports	Related deaths Number (%)
1985	35	34	31	28	45	39	47	43	158	144 (91)
1986	49	46	61	59	96	87	95	87	301	279 (93)
1987	148	138	143	133	197	172	156	143	644	586 (91)
1988	203	185	167	148	194	158	193	159	757	650 (86)
1989	208	165	178	128	272	183	185	119	843	595 (70)
1990	322	193	278	162	367	182	305	140	1272	677 (53)
1991	355	127	307	87	317	73	391	71	1370	358 (26)

1. The three cases reported in 1982, 25 of the 26 reported in 1983 and 74 of the 77 reported in 1984 are known to have died.

2. These deaths are of patients referred to in the previous column and known to have occurred at any time up to 31 December 1991.

Table 5 AIDS cases by date of diagnosis and AIDS deaths by date of death: United Kingdom to 31 December 1991

Year ¹	First quarter		Second quarter		Third quarter		Fourth quarter		Annual Total	
	Diagnosis	Deaths	Diagnosis	Deaths	Diagnosis	Deaths	Diagnosis	Deaths	Diagnosis ²	Deaths ²
1985	49	19	37	34	70	30	72	33	234	119
1986	91	47	118	63	110	61	131	94	461	266
1987	144	78	157	99	171	90	189	76	663	345
1988	186	90	224	96	230	101	216	117	863	406
1989	249	132	236	161	277	145	242	209	1007	651
1990	289	176	255	181	276	188	289	211	1111	757
1991	269	234	246	194	260	194	139	131	915	753

1. For 39 diagnoses and 23 deaths the year of occurrence is unknown; 18 cases were diagnosed in 1982 or earlier, 34 in 1983, and 106 in 1984; 8 cases died in 1982 or earlier, 16 in 1983, and 47 in 1984.

2. Totals include diagnoses and deaths for which quarter of occurrence is unknown.