

Communicable Disease Report

***Corynebacterium diphtheriae*, skin ulcers and travel abroad**

Corynebacterium diphtheriae has recently been isolated from skin ulcers on the lower limbs of two UK residents recently returned from journeys abroad. These two cases are unconnected. In one, *C. diphtheriae var mitis*, together with a group A streptococcus, was isolated from a non-healing ulcer on the heel of a man who had recently returned from a walking holiday in India. He was treated with erythromycin, as were a small number of close contacts, pending the results of toxigenicity tests. These subsequently proved negative and no secondary spread was demonstrated. In the second case, a group A streptococcus, *Staphylococcus aureus* and *C. diphtheriae var gravis* were isolated from a persistent foot ulcer which followed sand-fly bites sustained in the Yemen. The painful, itchy lesions had been partly treated with antibiotics whilst abroad and one was biopsied three weeks after return to this country by a doctor who considered a possible diagnosis of cutaneous leishmaniasis. This patient received a two week course of erythromycin. The patient's wife, who had not travelled recently, developed itchy, weeping lesions on the lower limbs approximately one week after his return. These lesions yielded streptococci, staphylococci and coryneforms, subsequently identified as *C. diphtheriae var gravis*. The latter organism was also isolated from nose and throat swabs. A two week course of erythromycin was given. *In vitro* tests indicate that the organism is non-toxicogenic. No further secondary spread has been demonstrated in other members of the household or their immediate contacts. Nose and throat swabs from two other household members yielded coryneform bacteria which were shown not to be *C. diphtheriae*. All subjects had been vaccinated.

Non-toxicogenic strains of *C. diphtheriae var gravis* are unusual but, of the 19 *C. diphtheriae* isolates received by the Division of Hospital Infection so far this year, eight have been in this category. Notified cases of clinical diphtheria averaged 2.2 per year for England and Wales during the period 1986-91. Cutaneous diphtheria is not a notifiable condition but the last case reported to CDSC occurred in a 19 year old girl recently returned from Pakistan from whom a toxigenic strain of *C. diphtheriae var mitis* was isolated (CDR 1990; (45): 1).

CDSC will be grateful for any further reports of isolates of *C. diphtheriae* from cases of cutaneous (or other) infection and any relevant travel details.

Regulation of HIV testing kits

New regulations*, which restrict the sale, use and advertising of HIV testing kits, come into force on 1 April 1992. It will be an offence to sell these kits to the public, or to provide HIV testing services other than through a registered medical practitioner or in accordance with the request of such a doctor. Advertising the sale of kits to the public will also be an offence and the advertising of HIV testing services must state that they are directed by a registered medical practitioner. Where kits are sold (eg, as supplies for use by health services), they must be accompanied by warnings about the interpretation of results, including the fact that positive results must not be relied upon unless confirmed by at least one other test, and that tests for antibodies may be negative in the early stages of infection. This should ensure that kits do not become available over the counter for self-testing and that testing is not provided without adequate counselling and medical support.

* *HIV testing kits and service regulations 1992*, SI 460 (available from HMSO, price £1.05).

Hepatitis:
weeks 92/08 - 11

Miscellaneous viruses:
weeks 92/08 - 11

Sexually transmitted diseases:
weeks 92/08 - 11

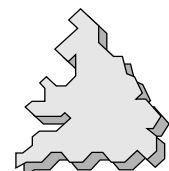
Bacteraemia and bacterial meningitis:
weeks 92/08 - 11

Unusual infections

Imported infections:
weeks 92/08 - 11

Opportunist infections:
weeks 92/08 - 11

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



Hepatitis, England and Wales: laboratory reports, weeks 92/08 – 11

Laboratory reports	Number of reports received				Total for weeks 92/08-11	Cumulative total 1992
	92/08	92/09	92/10	92/11		
Hepatitis A (IgM)	171	213	157	157	698	1971
HBsAg total	25	50	23	34	132	397
acute hepatitis B	10	18	6	8	42	102
other	15	32	17	26	90	295

Hepatitis A

A total of 698 cases was reported; this compares with 681 in the equivalent four-week period in 1991. Reports include F 26y who developed acute liver failure, F 50y who had cholecystectomy for gallstones and M 37y, chef on a drilling exploration vessel. Outbreaks were reported from a women's refuge (Yorkshire), a school/local community (Peterborough, E Anglia) and a special school (E Anglia). Cases continue to be reported from the Kettering (35), Cardiff, Liverpool and

Dryburn community outbreaks. Family outbreaks were reported from Wales (3) and the following regions: Northern (6), Yorkshire (6), E Anglia (1), SE Thames (3), S Western (1) and N Western (1).

Recent travel abroad was recorded in 24 (3%) reports: Indian subcontinent 10; Mediterranean/Europe 5; S America and SE Asia, 2 each; Africa and Middle East, one each; other 3.

Laboratory reports	Age (years)					Not stated	Total
	<1	1-14	15-44	45-64	≥65		
Hepatitis A (IgM)	–	188	413	61	15	21	698
HBsAg total	–	6	87	24	5	10	132
acute hepatitis B	–	–	29	7	3	3	42
other	–	6	58	17	2	7	90

Hepatitis B

Forty-two cases (27 male, 14 female, 1 sex not stated) were reported. Risk exposure information was provided for 26 of these: homosexual contact 4; injecting drug use 6 (4 male, 2 female); heterosexual contact 3 (M 23y who probably acquired HBV on holiday in Thailand, F 23y who developed acute liver

failure and required transplant after infection acquired from her HBsAg positive partner, and F 29y); transfusion/surgery 1 (F 33y); other 4 (3 male, 1 female); no recognised risk 8 (7 male, 1 female).

Miscellaneous viruses, England and Wales: laboratory reports, weeks 92/08 – 11

Laboratory reports	Number of reports received				Total for weeks 92/08-11	Cumulative total 1992
	92/08	92/09	92/10	92/11		
Cytomegalovirus	33	16	50	22	121	337
Molluscum contagiosum	–	2	–	–	2	6
Varicella zoster	4	4	6	3	17	33
HTLV-1	–	1	–	–	1	5

Cytomegalovirus: three regions reported more than 10% of cases: Trent (19 cases), SW Thames (37) and W Midlands (14). Ages: 17 infants aged less than one year, including 4 with congenital infection; 2 of these were neonates, one of whom had hepatosplenomegaly and thrombocytopenia; 3 children aged 1-4 years; 3, 5-9 years; 1, 12 years; 48 adults aged 15-44 years including 6 pregnant women, of whom 2 had intra-uterine growth retardation and 2 had spontaneous abortion; 29, 45-64 years; 8, 65 years or more; 12 age not stated.

Thirty-one patients had organ transplants (renal 13, heart 12, bone marrow 3, liver 2, not stated 1). Nine patients were known to be HIV-1 antibody positive, including one patient who had retinitis. Three patients had leukaemia; one had

systemic lupus erythematosus; one was on chemotherapy; 12 had hepatitis, including 2 after blood transfusion; 15 had respiratory tract infection; 5 had glandular fever; F 72y had Guillain-Barré syndrome; M 3y had lymphadenopathy.

Molluscum contagiosum: 2 adult patients had skin infection. **Varicella zoster:** M 3y, M 23y, M 25y and M 48y all had encephalitis (serology). F 30y and two females, ages not stated, had chickenpox pneumonia (serology).

HTLV-1: F 64y (West Indian origin) had lymphoma (serology). **Polyomavirus:** HIV-1 antibody positive M 36y had progressive multifocal leucoencephalopathy (serum, CSF serology); M 5y and M 17y (both urine isolates), and M 40y (urine, electron microscopy) all with bone marrow transplants.

Sexually transmitted diseases, England and Wales: laboratory reports, weeks 92/08 – 11

Laboratory reports	Male	Female	Not stated	Total for weeks 92/08-11	Cumulative total 1992
<i>Neisseria gonorrhoeae</i>					
β-lactamase producing	20	6	–	26	68
other antibiotic-resistant strains	16	5	–	21	61
extra-genital isolates	2	–	–	2	20
Ophthalmia neonatorum (<6 weeks)					
gonococcal	1	–	–	1	2
chlamydia	14	13	2	29	87
<i>Chlamydia trachomatis</i>	638	1333	20	1991	5877
Herpes simplex	282	488	6	776	2255

Comment

Neisseria gonorrhoeae, β-lactamase producing strains: Country of infection: UK 13, Australia, Ghana, Indonesia, Kenya, Philippines, Thailand and West Indies, one each.

Other antibiotic-resistant strains: genital tract: 14 tetracycline-resistant (12 β-lactamase producing also), 4 ciprofloxacin-resistant (all β-lactamase producing also) and 1 penicillin-resistant (chromosomally-mediated resistant *N. gonorrhoeae*).

Extra-genital isolates: one from throat and one from rectum (both male).

N. meningitidis: homosexual M22y (throat and rectal isolates).

Chlamydia trachomatis: eye infections: 29 babies aged less than 6 weeks; 3 children aged 6 weeks or more; 8 adults and 4 patients, age not stated. Three women with infertility, one of whom had pelvic inflammatory disease.

Bacteraemia and bacterial meningitis, England and Wales: weeks 92/08 – 11

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 92/08-11	Cumulative total 1992
	Blood only	CSF only or CSF & blood	<1m	≥65y		
<i>Bacteroides sp</i>	63	–	–	39	63	189
<i>Clostridium sp</i>	17	–	1	11	17	69
Anaerobic cocci	12	–	–	4	12	34
<i>Acinetobacter sp</i>	20	–	3	3	20	77
<i>Aeromonas sp</i>	2	–	–	2	2	6
<i>Pseudomonas sp</i>	100	1	3	54	101	331
<i>Serratia sp</i>	18	–	–	6	18	45

Bacteraemia

Bacteroides sp: *B. distasonis* 1; *B. fragilis* 40; *B. oralis* 2; *B. thetaiotaomicron* 3. *B. fragilis*, M 76y after aorto-bifemoral graft and F 65y with leukaemia. *Bacteroides sp*, M 69y with subdural abscess (blood and subdural isolates).

Eikenella corrodens 1.

Fusobacterium necrophorum 2: M 1y with chronic otitis media; F 17y.

Clostridium sp: *C. butyricum*, 1; *C. paraputrificum* 1; *C. perfringens* 13; *C. ramosum* 1; *C. septicum* 1. *C. perfringens*, M 69y with recent CSF shunt insertion (blood isolate).

Laboratory reports	Total bacteraemia	Gastrointestinal tract	Biliary tract (ERCP)	UTI/GU (pregnant)	Ischaemic/pressure sores
<i>Bacteroides sp</i>	63	8	2 (–)	5 (–)	10
<i>Clostridium sp</i>	17	2	1 (–)	–	1
Anaerobic cocci	12	1	2 (–)	–	1

Acinetobacter sp: *A. calcoaceticus (anitratu)* 9; *A. junii* 1; *A. Iwoffii* 2. *A. calcoaceticus*, F 39y and 24y, sex not stated, both with leukaemia; F 45y with myeloma and female, age not stated, with bone marrow transplant. *Acinetobacter sp*, M 4y with neuroblastoma and female, age not stated, with leukaemia.

Alcaligenes sp: M 80y with lymphoma.

Pseudomonas sp: *P. aeruginosa* 74; *P. cepacia* 1; *P. fluorescens* 2; *P. maltophilia* 13. *P. aeruginosa*, female neonate with systemic lupus erythematosus; HIV-1 antibody positive M 29y, M 34y and M 44y; M 56y, M 77y, F 44y and F 70y all with lymphoma; F 57y with myeloma. *P. maltophilia*, M 26y, M 32y, F 56y and

female, age not stated, all with leukaemia; male, age not stated, had liver transplant. *Pseudomonas sp*, M 66y with myeloma.

Serratia sp: *S. liquefaciens* 7; *S. marcescens* 9. *S. liquefaciens*, M 61y with lymphoma, M 61y with myeloma and F 88y with leukaemia and urinary tract infection. *S. marcescens*, M 62y with leukaemia. *Serratia sp*, M 78y, amputee with gas gangrene of arm (*Clostridium septicum* also isolated).

Meningitis

Pseudomonas maltophilia: F 56y with CSF shunt.

Laboratory reports	Total bacteraemia	UTI/GU (pregnant)	Burns	Intravascular lines	Leukaemia/bone marrow suppression (IV-lines)
<i>Acinetobacter sp</i>	20	2 (-)	2	1	5 (2)
<i>Aeromonas sp</i>	2	-	-	-	1 (-)
<i>Pseudomonas sp</i>	100	10 (-)	-	11	13 (2)
<i>Serratia sp</i>	18	3 (-)	-	-	2 (-)

Unusual infections

Agrobacterium radiobacter: M 70y (blood isolate).

Diphtheroids: M 80y (blood isolate).

Flavimonas oryzihabitans: M 71y with chronic obstructive airways disease (blood isolate).

Flavobacterium indologenes: M 26y with leukaemia (blood).

Gemella morbillorum: M 31y (blood isolate).

Moraxella lacunata: M 56y had lacrimal duct calculi (calculus isolate; *Candida parapsilosis* also isolated).

Imported infections, England and Wales: laboratory reports, weeks 92/08 – 11

Arbovirus 2: both Dengue virus untyped.

Clonorchis sinensis 1: F 58y had eaten raw fish in Hong Kong.

Diphyllobothrium latum 1: F 71y had travelled in Europe and Canada.

Filaria 4: *Mansonella (Dipetalonema) perstans* 1; *Loa loa* 1; *Onchocerca volvulus* 1; *Filaria sp* 1 (Papua New Guinea).

Hookworm 23: (Nigeria, Pakistan, 1 each).

Leishmania sp 1.

Plasmodium sp 7: *P. falciparum* 2 (Ghana, Kenya); *P. ovale* 3 (Africa, Uganda, 1 each); *P. vivax* 2.

Schistosoma 10: *S. haematobium* 4; *S. mansoni* 6 (Africa, Far East, Kenya, 1 each).

Strongyloides sp 3: (West Indies 1).

Opportunist infections, England and Wales: laboratory reports, weeks 92/08 – 11

Actinomyces sp 6: *A. israelii* 4; *A. meyeri* 1; *A. odontolyticus* 1. *A. israelii*, M 25y had dental abscess; F 33y and F 40y had intra-uterine contraceptive device; F 44y with parotid infection. *A. meyeri*, F 10y with dental abscess.

Aspergillus sp 3: *A. fumigatus* 2; *A. niger* 1. *A. fumigatus*, child 10y and child 11y (both sputum isolates). *A. niger*, M 43y (outer ear isolate).

Candida sp 19: *C. albicans* 11; *C. parapsilosis* 6; *C. tropicalis* 1; *Candida sp* 1. Four patients had IV-lines, 3 were immuno-

compromised, 2 had infected joint prostheses. *C. parapsilosis*, infant 21d with IV-line and congenital abnormalities (blood and pericardium isolates).

Cryptococcus neoformans 2: M 39y with AIDS and M 58y (both CSF isolates).

Rhodotorula sp: M 37y with lymphoma had IV-line (blood isolate).

Torulopsis sp 3: *T. glabrata* 2 (both blood isolates). *Torulopsis sp*, M 48y, bone marrow transplant patient (blood isolate).

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 **February 1992**, 94 new cases of AIDS were reported. Sixty-seven were probably infected through sexual intercourse between men (10 died), 15 through sexual intercourse between men and women (3 died), five through injecting drug use (2 died), three through blood factor treatment and two through transmission from mother to child. The exposure categories of two cases were undetermined.

Since reporting began in 1982, a total of 5648 AIDS cases (5295 males, 353 females) has been reported, of whom 3527 (62%) are known to have died (Table 1). The number of female cases reported increased by 33% (from 99 to 132) between March 1991 and February 1992 compared with the preceding twelve month period; the number of male cases decreased by 4% (from 1237 to 1185) over the same period.

The majority of new adult AIDS cases continues to consist of homosexual men (Table 2). However, the proportion of cases reported to be heterosexual (regardless of exposure category) has increased to 25%, demonstrating the potential for further HIV-1 transmission through sexual intercourse between men and women.

The number of new reports of AIDS cases declined in seven English regions and Wales over the past twelve months, but increases in reports were seen from E Anglia and S Western regions (Table 3). AIDS cases and HIV-1 infections tend to occur at a younger age in women than in men (Table 4). The age band 15-34 years accounts for 61% of female AIDS cases but only 42% of males; the figures for HIV-1 infection are 83% and 62%, respectively.

Table 1 AIDS cases and deaths by exposure category and date of report: United Kingdom to 29 February 1992

How persons probably acquired the virus	Mar 90 – Feb 91		Mar 91 – Feb 92		Jan 82 – Feb 92			
	Male	Female	Male	Female	Male	Deaths	Female	Deaths
Sexual intercourse								
between men	981	–	916	–	4327	2743	–	–
between men and women								
"high risk" partner ¹	3	9	7	13	17	9	38	21
other partner abroad ²	74	36	80	57	238	125	129	55
other partner UK	6	7	16	8	30	14	20	10
Injecting drug use (IDU)	64	21	53	30	183	102	73	44
IDU & sexual intercourse between men	22	–	16	–	84	57	–	–
Blood								
blood factor (e.g. for haemophilia)	59	2	63	–	299	220	4	3
blood/tissue transfer (e.g. transfusion)								
abroad	3	10	1	4	15	11	28	18
UK	2	5	1	4	16	13	18	11
Mother to infant	7	9	10	12	24	9	35	16
Other/undetermined	16	–	22	4	62	43	8	3
Total	1237	99	1185	132	5295	3346	353	181

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 29 February 1992

Sexual orientation (regardless of exposure category)	Mar 90 – Feb 91 ¹		Mar 91 – Feb 92 ¹		Jan 82 – Feb 92	
	Cases	(%)	Cases	(%)	Cases	(%)
Homosexual men	873	(68)	791	(63)	3735	(68)
Bisexual men	131	(10)	143	(11)	681	(12)
Heterosexual men and women ²	288	(22)	316	(25)	1055	(19)
Total³	1292	(100)	1250	(100)	5471	(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 29 February 1992

Country or region of first report	Mar 90 – Feb 91		Mar 91 – Feb 92		Cumulative total since 1982	
	Cases	Related deaths ¹	Cases	Related deaths ¹	Cases	Related deaths ¹
England:						
Northern	29	13	14	4	99	65
Yorkshire	38	23	26	6	142	93
Trent	22	10	28	12	112	74
E Anglia	7	2	26	5	70	38
NW Thames	498	242	418	79	2116	1299
NE Thames	256	111	287	48	1075	599
SE Thames	161	87	138	36	621	395
SW Thames	45	31	68	22	214	146
Wessex	36	26	23	8	123	90
Oxford	26	12	40	10	127	71
S Western	16	10	41	13	119	74
W Midlands	37	18	40	16	137	86
Mersey	20	10	13	8	71	52
N Western	58	36	51	25	219	159
Wales	16	14	13	9	82	66
Northern Ireland	4	4	4	2	27	24
Scotland	67	42	87	39	294	196
United Kingdom total	1336	691	1317	342	5648	3527
Ch. Islands/Isle of Man	1	1	–	–	5	4

1. These deaths are of patients referred to in the previous column and known to have occurred at any time up to 29 February 1992.

Table 4 Age distribution of AIDS cases at the time of diagnosis and HIV-1 infected persons at time of test: United Kingdom to 31 December 1991

Age group (years)	Male				Female				Total	
	AIDS		HIV-1		AIDS		HIV-1		AIDS	HIV-1 ¹
	Number	(%)	Number	(%)	Number	(%)	Number	(%)		
0 - 14	43	(1)	302	(2)	35	(11)	66	(4)	78	370
15 - 24	255	(5)	2671	(19)	44	(14)	689	(37)	299	3382
25 - 34	1887	(37)	6008	(43)	150	(47)	856	(46)	2037	6890
35 - 44	1832	(36)	3375	(24)	60	(19)	187	(10)	1892	3570
45 - 54	782	(15)	1180	(8)	19	(6)	42	(2)	801	1222
55 or over	292	(6)	398	(3)	12	(4)	23	(1)	304	421
Sub total (100%)	5091	(100)	13934	(100)	320	(100)	1863	(100)	5411	15855
Not stated	37		812		3		89		40	973

1. The totals include reports of 130 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 31 December 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	792	(19)	1956	(47)	109	(3)	1340	(32)	4197
Sexual intercourse between men and women	32	(7)	187	(42)	7	(2)	216	(49)	442
Injecting drug use ¹	12	(4)	158	(48)	1	(<1)	157	(48)	328
Blood factor or blood/tissue transfer	–	(–)	186	(51)	–	(–)	180	(49)	366
Other/undetermined	3	(3)	48	(41)	3	(3)	64	(54)	118

1. Includes 83 men who had sex with men and who were also injecting drug users.