

## Communicable Disease Report

### **A cluster of *Escherichia coli* O 157 infections**

CDSC has received information on seven recent isolates of urease positive *Escherichia coli* O 157 from adults and children, all of whom have had bloody diarrhoea. CDSC would be grateful for information on any isolates of *E. coli* O 157 from adults or children since 1 January 1991, especially if the isolates have been found to be urease positive.

### **Transmission of HIV-1 infection during an invasive dental procedure - United States**

In July 1990, the Centers for Disease Control (CDC) in the United States published details of a possible transmission of HIV-1 to a patient during an invasive dental procedure (MMWR 1990; 39: 489-93). Extensive investigation of over 500 patients of this dentist, who died from AIDS in 1990, have now shown five, including the index patient, to be infected with HIV-1 (MMWR 1991; 40: 21-33). Careful appraisal of the lifestyle of these infected patients and HIV-1 test results of their sexual partners, together with virological results on the HIV-1 strains from the dentist, three of the patients and eight other local patients who were used as controls, has led the investigators to suggest strongly that at least three of the patients were infected with HIV-1 during their dental care. Although each of the three patients had invasive dental procedures performed on them by the infected dentist, uncertainty still remains about the precise mode of HIV-1 transmission.

This is the first report in the literature of transmission of HIV-1 from an infected health care worker to patients. CDC have taken the opportunity to reiterate guidelines which promote adherence to universal precautions and proper cleaning and sterilisation or disinfection of instruments and equipment. Consideration of ways to further reduce the very low risk of HIV-1 transmission from infected health care workers to patients in the United States is continuing. United Kingdom guidelines are contained in the report of the recommendations of the Expert Advisory Group on AIDS, issued in March 1988 and titled "AIDS: HIV-infected health care workers", which is available from HMSO.

### **Reporting of HIV-2 infections in the United Kingdom**

By the end of 1990, twelve HIV-2 infections had been identified in the United Kingdom, and details of these are given in CDR 1991; 1: R19-R23. It is likely that these twelve account for most of the recognised HIV-2 infections. Microbiologists who are aware of other diagnosed HIV-2 infections in the United Kingdom are invited to report these on CDR Form 2. Copies of guidance on HIV laboratory reporting are available from the PHLS AIDS Centre at CDSC.

### **Microbiological safety of food conference**

The Royal Institute of Public Health and Hygiene are organising a one day conference, on the Richmond Report on the Microbiological Safety of Food, on 7 March 1991 at St Bartholomew's Hospital. The conference will feature a keynote address from Sir Mark Richmond, contributions from members of the Committee, details of the Government's response to the recommendations of the Committee by senior officers of the Department of Health and Ministry of Agriculture, Fisheries and Food and independent comments on the recommendations by representatives of the Institute of Food Science and Technology and consumers.

### **Hepatitis:**

weeks 91/01-04

### **Sexually transmitted diseases:**

weeks 91/01-04

### **Bacteraemia and bacterial meningitis:**

weeks 91/01-04

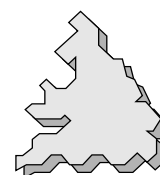
### **Imported infections:**

weeks 91/01-04

### **Opportunist infections:**

weeks 91/01-04

### **Notices**



## Hepatitis, England and Wales: laboratory reports weeks 91/01-04

Laboratory reports	Number of reports received				Total for weeks 91/01-04
	91/01	91/02	91/03	91/04	
Hepatitis A (IgM)	171	156	162	170	659
HBsAg total	35	28	27	43	133
acute hepatitis B	14	8	6	16	44
other	21	20	21	27	89

### Hepatitis A

F 75y with leukaemia, developed rash and abnormal liver function tests after blood transfusion; M 42y had acute renal failure.

Increased numbers of reports continue to be received from all regions.

Outbreaks: family outbreaks have been reported from Wales (2), and the following Regions: Northern (1), Yorkshire (2), Trent (2), NE Thames (1), SE Thames (3), S Western (3), W Midlands (2) and N. Western (6); and school outbreaks have been reported from SE Thames, Mersey and N Western Regions.

Corby community outbreak: 52 further reports received, 26 males, 25 females, 1 sex not stated; ages ranged from 4-45 years, total 199.

Small numbers of additional reports have been received from the Gloucester (2), Reading (7) and Liverpool (14) community outbreaks; and a community outbreak affecting young adults (5 male, 8 female) has been reported from Hartlepool.

Travel: recent travel abroad was recorded in 40/659 (6.1%) reports: ISC 11; Africa 11; Mediterranean/Europe 10 (Morocco 3); Far East 3; M East 1; other/not stated 4.

Laboratory reports	Age					Not stated	Total
	<1y	1-14y	15-44y	45-64y	≥65y		
Hepatitis A (IgM)	-	197	384	40	9	29	659
HBsAg total	-	7	93	19	5	9	133
acute hepatitis B	-	3	31	7	1	2	44
other	-	4	62	12	4	7	89

### Hepatitis B

Forty-five reports of acute hepatitis B were received: 35 male, 10 female. Risk factor information was recorded for 35: homosexual contact 5, heterosexual contact 6 (1 male, 5 female); IVDU 6 (5 male, 1 female); surgery and/or blood

transfusion, 4 males; travel abroad 5, including M 11y and F 10y who received injections in Pakistan; other 6, including M 3y, Romanian orphan; no recognisable risk 3.

## Miscellaneous viruses, England and Wales: laboratory reports weeks 91/01-04

Laboratory reports	Number of reports received				Total for weeks 91/01-04
	91/01	91/02	91/03	91/04	
Cytomegalovirus	35	17	20	33	105
Molluscum contagiosum	-	-	-	-	-
Varicella zoster	2	2	4	3	11
HTLV1	-	-	-	-	-

**Cytomegalovirus:** 4 regions reported more than 10 cases: Trent (13), E Anglia (21), NW Thames (12) and W Midlands (14).

Ages: 4 neonates; 11 babies aged 1-11 months; 5 children aged 1-4 years; 2, 5-9 years; 42 patients aged 15-44 years; 27, 45-64 years; 4, 65 or more years; 10, age not stated.

36 patients had organ transplants; 7 had leukaemia/lymphoma; 1 was known to be HIV antibody positive and 2 had had blood transfusions; 8 patients had a glandular fever-like illness and 10 had hepatitis; 7 children had respiratory tract infections.

**Herpes simplex:** one disseminated neonatal infection was

reported (brain, lung, liver isolates). 7 patients had neurological symptoms: F 7y, M 24y, M 28y, M 41y, F 46y and M 62y with encephalitis; female, age not stated, with aseptic meningitis.

**Varicella zoster:** M 46y with chickenpox had pneumonia; M 23y had Bells palsy and ataxia; F 58y had aseptic meningitis.

**Papovavirus 1:** M 52y after bone marrow transplant.

**Polyomavirus 3:** F 4y with leukaemia; M 34y after bone marrow transplant. **Polyoma JC,** M 62y with AIDS and PML.

## Sexually transmitted diseases, England and Wales: laboratory reports weeks 91/01-04

Laboratory reports	Male	Female	Not stated	Total for weeks 91/01-04
<b><i>Neisseria gonorrhoeae</i></b>				
β-lactamase producing	4	1	-	5
other penicillin-resistant strains	4	2	-	6
extra-genital isolates (penicillin sensitive)	20	4	-	24
<b><i>Ophthalmia neonatorum</i></b> (<6 weeks)				
gonococcal	1	-	-	1
chlamydia	25	17	1	43
<b><i>Chlamydia trachomatis</i></b>	785	1376	24	2185
<b>Herpes simplex</b>	337	459	12	808

## Comment

***Neisseria gonorrhoea*** : penicillin sensitive extra-genital: 8 from throat (6 male and 2 female), and 16 from rectum (14 male and 2 female).

***Chlamydia trachomatis***. Genital tract infections: 2136 (765 male and 1348 female). Eye infections: 43 babies aged less than 6 weeks; 3 children aged 6 weeks or more; 32 adults

and 5 patients, age not stated. 4 women with pelvic inflammatory disease and 2 with infertility. LGV (lymphogranuloma venereum) 1: M 25y.

The totals for this period are comparable with those for the previous 4-week period.

## Bacteraemia and bacterial meningitis, England and Wales: laboratory reports weeks 91/01-04

Laboratory reports	No. of reports received		Age		Total for weeks 91/01-04
	Blood only	CSF only or CSF & blood	<1m	≥65y	
<b><i>Bacteroides sp</i></b>	67	-	1	39	67
<b><i>Clostridium sp</i></b>	31	-	1	20	31
Anaerobic cocci	19	-	-	6	19
<b><i>Acinetobacter sp</i></b>	24	-	-	8	24
<b><i>Aeromonas sp</i></b>	2	-	-	1	2
<b><i>Pseudomonas sp</i></b>	115	-	1	54	115
<b><i>Serratia sp</i></b>	13	-	1	7	13

## Bacteraemia

***Bacteroides sp***: *B. bivius* 1; *B. buccae* 1; *B. caecae* 1; *B. fragilis* 43; *B. melaninogenicus* 1; *B. oralis* 1; *B. thetaiotaomicron* 2; *B. uniformis* 1; *B. vulgatus* 1.

***Fusobacterium sp*** 3: *F. necrophorum* 2. F 4y with mastoiditis and M 20y with gastrointestinal disease (both blood isolates). *F. nucleatum*, M 60y with gastrointestinal disease (blood).

***Clostridium sp***: *C. clostridiforme* 1; *C. perfringens* 20; *C. ramosum* 1; *C. septicum* 6. *C. perfringens*, M 64y with gas

gangrene after wrist fracture. *C. septicum*, F 1y with haemorrhagic chickenpox and necrotic area on buttock; F 71y with carcinomatosis, bowel ischaemia and gas gangrene of thigh (all blood isolates).

***Eubacterium sp*** 2: F 67y and M 76y with gastrointestinal disease (both blood).

***Peptostreptococcus magnus***: male, age not stated, with prosthetic valve endocarditis (blood isolate).

Laboratory reports	Total bacteraemia	Gastrointestinal tract	Biliary tract (ERCP)	UTI/GU (pregnant)	Ishaemic/pressure sores
<b><i>Bacteroides sp</i></b>	67	24	6 (1)	7 (3)	5
<b><i>Clostridium sp</i></b>	31	13	-	1 (-)	-
Anaerobic cocci	19	4	-	3 (2)	1

***Alcaligenes sp***: bacteraemia 1.

***Aeromonas sp***: *A. caviae* 1; *A. hydrophila* 1.

***Pseudomonas sp***: *P. aeruginosa* 85; *P. cepacia* 1; *P. fluorescens* 4; *P. maltophilia* 7; *P. pickettii* 2. 8 patients had biliary tract disease (ERCP 5). *P. aeruginosa*, M 64y had prosthetic valve endocarditis.

Also reported: *P. fluorescens*, M 64y after arthroscopy (joint). *Pseudomonas sp*, F 73y with endophthalmitis had *candida sp* also (vitreous), after recent candida endocarditis. ***Serratia sp***: *S. liquefaciens* 5; *S. marcescens* 6; *S. marinorubra* 1. *S. marcescens*, F 32y after ERCP, and M 70y with cholangiocarcinoma.

	Total bacteraemia	UTI/GU (pregnant)	Burns	Intravascular lines	Leukaemia/ bone marrow suppression (IV-lines)
<i>Acinetobacter sp</i>	24	1 (-)	1	5	8 (2)
<i>Aeromonas sp</i>	2	-	-	-	1 (-)
<i>Pseudomonas sp</i>	115	25 (-)	2	13	32 (5)
<i>Serratia sp</i>	13	-	-	1	-

### Meningitis

*Acinetobacter sp*: M 66y with leukaemia (blood, PM brain, lung isolates).

### Unusual organisms

*Achromobacter xylosoxidans*: M 69y after vascular surgery (blood isolate).

*Aerococcus viridans*: M 69y with septic arthritis had group G streptococci also (blood isolate).

*Lactobacillus sp*: M 9y after liver transplant (blood isolate).

*Moraxella sp*: F 87y (blood isolate).

*Propionibacterium acnes*: F 77y with myeloma (blood isolate).

### Imported infections

**Dengue 1**: M 30y who recently visited China.

**Filaria sp 1. Hookworms 17.**

**Leishmaniasis 1**: Egyptian F 23y with hepatosplenomegaly, fever and leucopenia, recently on holiday in Greece (bone marrow aspirate).

**Plasmodium sp 17**: *P. falciparum* 12 (Nigeria 4, Gabon 2,

Kenya 2, Ghana 1, Uganda 1); *P. malariae* 1 (Ghana); *P. vivax* 4 (India, Pakistan, Sudan, Asia 1 each).

**Schistosoma 14**: *S. haematobium* 7 (Kenya 1); *S. mansoni* 7 (Ghana 1, Sierra Leone 1, Uganda 2).

**Strongyloides 12** (Thailand, Laos, Uganda, Romania 1 each).

### Opportunist infections

**Actinomycosis 5**: *A. israelii* 5. 3 women with intrauterine contraceptive devices; F 46y with oro-facial infection; 1 patient with sinusitis.

**Aspergillus 3**: *A. fumigatus* 3. M 55y, a farmer, with corneal ulcer (eye); M 24y, with pneumonia after bone marrow transplant, had *A. terreus* also (bronchial washings); F 66y with pulmonary aspergilloma.

**Candida sp 23**: *C. albicans* 15; *C. guilliermondii* 2; *C. krusei* 1; *C. parapsilosis* 1; *C. tropicalis* 1; *candida sp* 3. 22 were from blood cultures: 11 from patients with IV-lines including 2/7 with leukaemia or bone marrow suppression. F 73y

with known candida endocarditis developed endophthalmitis (eye).

**Cryptococcus neoformans 2**: immunosuppressed M 71y and a male, age not stated (both blood isolates).

**Histoplasmosis 1**: M 50y with bronchopulmonary infection, not known to be immunodeficient, had travelled widely but not in the USA (bronchial washings, serol).

**Pneumocystis carinii 5**: 4 HIV-1 antibody positive men (sputum/bronchial washings) and an immunocompromised child (lung).

**Torulopsis glabrata 4** (all blood isolates).

### Course on hospital infection control

The Hospital Infection Control Society and the PHLS Division of Hospital Infection are holding a five-day course on hospital infection control from 13-17 May 1991 at Colindale.

The course is primarily intended for senior registrars in medical microbiology who require training for consultant responsibilities for infection control in both the hospital and the community, although newly appointed consultants may apply. The topics will include laboratory work, epidemiology, outbreak control, management aspects in the hospital and the community, practical issues of hospital hygiene to include the decontamination of equipment, building design, and food poisoning etc.

Further details are available from Dr B D Cookson, Director, Division of Hospital Infection, Central Public Health Laboratory, 61 Colindale Avenue, London NW9 5HT.

**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**