

Communicable Disease Report

Acute hepatitis B virus infection in children and teachers, England and Wales 1985-90

In the six years from 1985-90, 5626 reports of acute HBV infection were received from laboratories in England and Wales by CDSC. Age was recorded in 5402 reports; 106 (2%) were of children aged 1-15 years, more than a third of whom were aged 13-15 years.

Acute HBV infections, laboratory reports, England and Wales, 1985-90

Age(yrs)	1985	1986	1987	1988	1989	1990	Total
1- 15	22	28	12	15	16	13	106
≥15	1669	1227	731	596	556	511	5290
Not stated	80	57	31	22	16	18	224
Total	1771	1312	774	636*	590*	543*	5626*
Teachers	13	5	3	3	1	1	26

* includes 6 infants aged less than 1 year

Risk factor information was given for 71 children (67%). 38 had names which suggested that they belonged to an ethnic group of high HBsAg prevalence, and of these 5 had recently received medical care in, and 8 had visited, areas of high HBsAg prevalence abroad. 18 children were in other recognised high risk groups: 2 had haemophilia (reported in 1985), 6 were resident in institutions, 4 were intravenous drug users, and 6 were thought to have acquired the virus by sexual contact. 15 were from families in which at least one other member was known to be HBsAg positive. For the remaining 35 children information about a possible source was not recorded. One report mentioned that the child's family had been tested for HBsAg and found to be negative, the others either did not report family testing or did not document its outcome.

Ear piercing and tattooing may be a route of infection, and in one instance a child with pierced ears had exchanged earrings with friends. In one case transmission from a carrier in an ordinary school was considered, but neither source nor route of infection was recorded.

Risk information in children with acute HBV infection, England & Wales, 1985-90

Risk information	Age (years)					Male	Female	Total
	1-3	4-6	7-9	10-12	13-15			
Family members HBs Ag positive	2	3	5	3	2	11	4	15
High prevalence ethnic group	3	7	2	5	8	16	9	25
Travel to high prevalence area	-	2	1	4	1	6	1	8*
Health care in high prevalence area	1	2	-	2	-	2	3	5
Haemophilia	-	1	1	-	-	2	-	2
Residential special school	-	-	-	1	5	4	2	6
Intravenous drug user	-	-	-	-	4	2	2	4
Sexual exposure	-	-	-	-	6	2	4	6
Risk/ethnic group not known	1	7	4	6	17	17	16	35*
Total	7	22	13	21	43	62	41	106*

* 3 sex not stated

Hepatitis:
weeks 91/13 - 16

Miscellaneous viruses
weeks 91/13 - 16

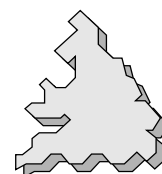
Sexually transmitted diseases:
weeks 91/13 - 16

Bacteraemia and bacterial meningitis:
weeks 91/13 - 16

Unusual infections
weeks 91/13 - 16

Imported infections:
weeks 91/13 - 16

Opportunist infections:
weeks 91/13 - 16



Teachers accounted for only 26 of the 2384 reports of acute HBV infection in adults in which occupation was stated. Of these, 21 were male and 5 were female. Two teachers (1 male, 1 female) who worked in special schools were reported in 1985. In the remainder there was usually a clear history of risk behaviour and in no instance was it suggested that the infection had been occupationally acquired.

Hepatitis, England and Wales: laboratory reports weeks 91/13 - 16

Laboratory reports	Number of reports received				Total for weeks 91/13-16	Cumulative total 1991
	91/13	91/14	91/15	91/16		
Hepatitis A (IgM)	201	102	142	92	537	2518
HBsAg total	58	38	31	42	169	612
acute hepatitis B	16	8	11	19	54	184
other	42	30	20	23	115	428

Hepatitis A

A total of 537 reports was received, which included a further 42 reports from the Corby community outbreak (24 male, 17 female, aged between 3 and 54 years); further reports from community outbreaks in Hartlepool (9), Gloucester (8), Dryburn (7), and Airedale (5). Family outbreaks were reported from Wales and the

following regions: Trent (1), SE Thames (3), W Midlands (3), Mersey (1) and N Western (4); and a small outbreak in a commune was reported from SE Thames.

A history of travel abroad was reported in 23/537 (4%) reports: Indian subcontinent 9, Europe/Mediterranean 6, M East 2, SE Asia 3, Central/S America 3, Africa 1.

Laboratory reports	Age (years)					Not stated	Total
	<1	1-14	15-44	45-64	≥65		
Hepatitis A (IgM)	1	192	287	28	4	25	537
HBsAg total	—	6	114	26	6	17	169
acute hepatitis B	—	1	40	9	—	4	54
other	—	5	74	17	6	13	115

Hepatitis B

54 reports of acute hepatitis B infection were received (42 male, 12 female). Risk factor information was recorded for 36 (66%): homosexual contact, 5; heterosexual contact, 5 (1 male, 4 female); intravenous drug use, 7 (5 male, 2 female);

surgery and/or transfusion, 3 (1 male, 2 female); other, 6 (5 male, 1 female); no reported risk factor 10 (9 male, 1 female).

Miscellaneous viruses, England and Wales: laboratory reports weeks 91/13 - 16

Laboratory reports	Number of reports received				Total for weeks 91/13-16	Cumulative total 1991
	91/13	91/14	91/15	91/16		
Cytomegalovirus	28	24	18	11	81	361
Molluscum contagiosum	1	1	2	—	4	12
Varicella zoster	6	2	5	3	16	66
HTLV-1	2	—	1	—	3	7

Cytomegalovirus: 2 regions reported more than 10% of cases: NW Thames (10 cases) and Wessex (11).

Ages: 11 babies aged less than 1 year, including 1 neonate; 1 child aged 1-4 years and 5 aged 10-14 years; 29 adults aged 15-44 years; 27, 45-64 years; 5, 65 years or more; 3, age not stated.

25 patients had organ transplants; 7 had leukaemia/lymphoma; 10 were known to be HIV-1 antibody positive. 9 patients had hepatitis and 7 had respiratory tract infections. F 18y with fever had cerebellar ataxia.

EB virus: M 66y with aplastic anaemia had jaundice after multiple transfusions.

Molluscum contagiosum: 4 adults.

Papilloma virus: M 56y with verrucae.

Herpes simplex: M 32y with leukaemia had fever and facial numbness (serum: CSF antibody = 128:4).

Varicella zoster: 6 patients had neurological symptoms: M 4y with facial palsy; F 12y with unilateral deafness; F 10y, F 15y, M 27y and F 92y with encephalitis after shingles.

Papovavirus 2: M 7y after bone marrow transplant and M 34y with leukaemia.

Polyomavirus 5: one woman and four men after bone marrow transplants.

HTLV-1: F 51y with non-Hodgkins lymphoma; F 54y with fever and weight loss; F 64y with neurological signs known to have had treatment for neurosyphilis four years ago.

Sexually transmitted diseases, England and Wales: laboratory reports weeks 91/13 - 16

Laboratory reports	Male	Female	Not stated	Total for weeks 91/13-16	Cumulative total 1991
<i>Neisseria gonorrhoeae</i>					
β-lactamase producing	6	1	–	7	33
other penicillin-resistant strains	3	3	–	6	29
extra genital isolates (penicillin sensitive)	11	1	–	12	82
Ophthalmia neonatorum (<6 weeks)					
gonococcal	–	1	1	2	7
chlamydia	13	20	–	33	136
Chlamydia trachomatis	679	1290	25	1994	8817
Herpes simplex	290	390	19	699	2961

Comment

***Neisseria gonorrhoeae*, β-lactamase producing strains.**

Country of infection: Kenya 1.

Spectinomycin-resistant strains: 4.

Extra-genital isolates: 8 from throat (all male including 2 rectum also) and 4 from rectum (3 male).

***Chlamydia trachomatis*, genital tract infections:** 1959 (661

male and 1273 female).

Eye infections: 33 babies aged less than 6 weeks; 3 children aged 6 weeks or more; 20 adults and 4 patients, age not stated.

2 women with pelvic inflammatory disease and 5 with infertility.

Bacteraemia and bacterial meningitis, England and Wales: laboratory reports 91/13 - 16

Laboratory reports	No. of reports received		Age		Total for weeks 91/13-16	Cumulative total 1991
	Blood only	CSF only or CSF & blood	<1m	≥65y		
<i>Bacteroides</i> sp	70	–	2	41	70	257
<i>Clostridium</i> sp	24	–	1	17	24	106
Anaerobic cocci	10	1	1	6	11	52
<i>Acinetobacter</i> sp	12	1	–	9	13	70
<i>Aeromonas</i> sp	1	–	–	1	1	7
<i>Pseudomonas</i> sp	85	–	–	52	85	364
<i>Serratia</i> sp	15	–	1	7	15	53

Bacteraemia

***Bacteroides* sp:** *B. capillosus* 1; *B. eggerthii* 1; *B. fragilis* 50; *B. uniformis* 1. M 17y with infected meningomyelocele (blood isolate). *B. fragilis*, M 60y with dental abscess and M 65y with lymphoma and stomatitis (both blood isolates).

***Eikenella corrodens*,** F 71y with myelodysplasia (blood isolate).

***Fusobacterium* sp:** bacteraemia 4: preterm neonate; F 46y after genito-urinary surgery; M 51y with endocarditis.

F. necrophorum, M 37y with necrobacillosis.

***Clostridium* sp:** *C. bifermentans* 1; *C. butyricum* 1;

C. innocuum 1; *C. perfringens* 15; *C. ramosum* 1; *C. septicum* 4.

***Eubacterium lentum*:** M 40y with intra-abdominal sepsis (blood isolate).

Anaerobic cocci: M 60y and F 79y with dental sepsis (both blood isolate).

Laboratory reports	Total bacteraemia	Gastrointestinal tract	Biliary tract (ERCP)	UTI/GU (pregnant)	Ischaemic/pressure sores
<i>Bacteroides</i> sp	70	26	4 (–)	9 (2)	8
<i>Clostridium</i> sp	24	6	2 (–)	1 (–)	3
Anaerobic cocci	11	2	–	2 (–)	1

***Alcaligenes* sp:** M 45y with leukaemia had IV-line (blood isolate).

***Aeromonas hydrophila*:** one patient with biliary tract infection. F 72y with infected hand (pus).

***Pseudomonas* sp:** *P. aeruginosa* 66; *P. cepacia* 2;

P. maltophilia 8; *P. putida* 1; *P. testosteroni* 1. 7 patients had biliary tract infections. *P. aeruginosa*, M 64y with prosthetic valve endocarditis (blood isolate).

***Serratia* sp:** *S. liquefaciens* 2; *S. marcescens* 7; *S. plymuthica* 1. 3 patients had biliary tract infections.

Laboratory reports	Total bacteraemia	UTI/GU (pregnant)	Burns	Intravascular lines	Leukaemia/bone marrow suppression (IV-lines)
<i>Acinetobacter sp</i>	12	1 (-)	-	3	1 (1)
<i>Aeromonas sp</i>	1	-	-	-	1 (-)
<i>Pseudomonas sp</i>	85	16 (-)	7	7	18 (2)
<i>Serratia sp</i>	15	1 (-)	3	2	-

Meningitis

Acinetobacter haemolyticus: M 4y with cerebral tumour (CSF isolate).

Peptococcus sp: F 18y (CSF isolate).

Unusual infections

Agrobacterium radiobacter: immunosuppressed F 24y with IV-line (blood isolate).

Aerococcus viridans: M 70y with endocarditis (blood isolate).

Branhamella catarrhalis: F 54y (blood isolate).

Capnocytophaga sp: M32y with AIDS and stomatitis (blood isolate).

Cardiobacterium hominis: F 70y with cerebral tumour receiving chemotherapy (blood isolate).

Diphtheroids: M 32y with leukaemia had IV-line (blood isolate).

Gardnerella vaginalis: F 48y with collection of fluid in wound after ureteric surgery (wound isolate).

Gemella sp 2: *G. haemolysans*, M 84y with endocarditis (blood isolate); *G. morbillorum*, M 52y with pneumonia (blood isolate).

Hafnia alvei: male with biliary tract disease (blood isolate).

Leptotrichia buccalis: M 69y with leukaemia (blood isolate).

Moraxella sp: M 69y with lung and cerebral tumours (blood isolate).

Neisseria mucosa: M 11m on chemotherapy (blood isolate).

Imported infections

Dengue type 1, 1: M 29y after visit to St. Lucia.

Filaria 3: *Dipetalonema perstans* 1; *Onchocerca volvulus* 2.

Hookworms 35: Africa 1; Bali 1; Bangladesh 3; Belize 1; Pakistan 3.

Leishmania sp 4: 3 adults and one, age not stated, all with cutaneous lesions (Belize 1).

Plasmodium sp 15: *P. falciparum* 5 (Ghana 2), including 3 children aged less than 5 years; *P. ovale* 4 (Ghana 2; Nigeria

2), *P. vivax* 6 (Guyana 1; India 1; Pakistan 2).

Rickettsia 2: *R. conorii*, M 45y bitten by a tick in S Africa a week before developing a feverish illness, had no rash.

Spotted fever group, F 59y with fever after visit to S Africa.

Schistosoma sp 6: *S. haematobium* 3; *S. mansoni* 3 (Uganda 1; Zimbabwe 1).

Strongyloides sp 1 (Uganda).

Opportunist infections

Actinomycosis 4: *A. israelii*, 1; *A. meyeri*, 1. Two women with IUCDs and two men with facial infections.

Aspergillus sp 4: *A. fumigatus* 2. M 9m with bronchiolitis (NPA); 2 adults with leukaemia.

Candida sp 22: *C. albicans*, 15; *C. krusei*, 2; *C. parapsilosis*, 1; *C. tropicalis*, 2; *Candida sp 2*. 21 isolates were from blood cultures: 4 neonates; 8 patients with IV-lines including 3 with leukaemia/lymphoma. *C. albicans*, diabetic F 65y with meningitis (CSF, mouth, sputum isolates).

Cryptococcus neoformans 5: 3 known HIV-1 antibody positive patients (2 with meningitis); immunocompromised M 37y (CSF isolate); M 49y (CSF and blood

isolates).

Nocardia asteroides 2: M 62y with history of pulmonary tuberculosis (sputum isolate) and M 66y with peritonitis (peritoneal dialysate).

Pneumocystis carinii 24: 13 known HIV-1 antibody positive males including 6 with haemophilia; 3 other immunocompromised individuals (all sputum/bronchial washings).

Torulopsis sp 1: F 81y with carcinomatosis (blood isolate).

Trichosporon cutaneum 1: M 53y with leukaemia (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