

## Communicable Disease Report

### Microbiological test strip (API20NE) identifies *Brucella melitensis* as *Moraxella phenylpyruvica*

Early in 1991, Oxford PHL received culture slopes of isolates which had been identified abroad as *Moraxella phenylpyruvica*, using API20NE. The specimens came from two patients: blood culture and abscess isolates from the first and a blood culture isolate from the second. The organisms were referred for confirmation of identification and, since they had already been identified as *M. phenylpyruvica*, were handled on the open bench. API20NE tests were repeated and gave a 'good identification' with a 90.5% probability of being *M. phenylpyruvica*. The profile number generated by API20NE for these isolates was 1200004, indicating reduction of nitrate, positive urease and oxidase tests and negative results for other components of the test strip. Three months later, the MLSO who had handled the isolates complained of a febrile, flu-like illness. Serology performed by Preston PHL gave results compatible with infection by *Brucella melitensis* and a small, Gram-negative, oxidase-positive, urease-positive coccobacillary organism was cultured from the blood. This and the isolates referred to Oxford PHL were submitted to the Central Veterinary Laboratory, Weybridge, where they were identified as *B. melitensis* biovar 1. The infected MLSO responded to a course of doxycycline and rifampicin. The above information has been conveyed to API, the Health and Safety Executive and the Department of Health.

Microbiologists should note, therefore, that organisms identified as *M. phenylpyruvica* by API20NE even with a 'good identification' might in fact be *Brucella spp.*, species which are not included in the database. This possibility must thus be excluded by agglutination with brucella antiserum. It should be borne in mind that a delay in the diagnosis of illness may result in addition to the risk of laboratory acquired infection. Oxford PHL has instituted a protocol which aims to minimise the latter risk when handling isolates received from overseas for confirmation of identity. Of those organisms listed in Hazard Group 3 (Categorisation of pathogens according to hazard and categories of containment, 2nd edition. London, HMSO: 1990), the following are liable to be received sloped on routine media: *Bacillus anthracis*, *Brucella spp.*, *Francisella tularensis*, *Pseudomonas mallei*, *Pseudomonas pseudomallei*, *Salmonella paratyphi* A, B and C, *Salmonella typhi*, *Shigella dysenteriae* and *Yersinia pestis*. Copies of the protocol can be obtained from Dr JB Selkon, Oxford PHL.

### Management of fungal infections

The British Society for Mycopathology is holding a meeting entitled 'Trends in the management of fungal infections' at the Central Public Health Laboratory, Colindale, London on Friday 25 October 1991. Topics to be covered include evaluation and pharmacokinetics of new antifungal agents, and the use of itraconazole, fluconazole and liposomal amphotericin B in the treatment of systemic fungal infections. The registration fee is £15 for BSM members and £30 for non-members. Further information can be obtained from Mrs F Knight, Mycological Reference Laboratory, CPHL, 61 Colindale Avenue, London NW9 5HT (telephone 081 200 4400, fax 081 205 6528).

#### Hepatitis:

weeks 91/33 - 36

#### Miscellaneous viruses:

weeks 91/33 - 36

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

#### Sexually transmitted diseases:

weeks 91/33 - 36

#### Bacteraemia and bacterial meningitis:

weeks 91/33 - 35

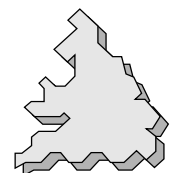
#### Unusual infections

#### Imported infections:

weeks 91/33 - 36

#### Opportunist infections:

weeks 91/33 - 36



## Hepatitis, England and Wales: laboratory reports weeks 91/33 – 36

Laboratory reports	Number of reports received				Total for weeks 91/33-36	Cumulative total 1991
	91/33	91/34	91/35	91/36		
Hepatitis A (IgM)	199	96	99	109	503	5075
HBsAg total	49	27	40	27	143	1392
acute hepatitis B	15	5	7	11	38	385
other	34	22	33	16	105	1007

### Hepatitis A

A total of 503 reports was received. The comparatively large total for week 91/33 is explained by 'back reporting' by a regional laboratory.

A further 18 reports (12 female, 6 male) from the Corby/Kettering community outbreak were received, as were small numbers of additional reports from the Gloucester, Durham, Liverpool and Cardiff community outbreaks. An increased number of reports was received from Hull.

Family outbreaks were reported from the following regions: Northern (7, including an extended family of 10, of whom 6 developed hepatitis A), Yorkshire (3), Trent (2), Oxford (2), W Midlands (5) and N Western (3).

A history of recent travel abroad was recorded in 34 (7%) reports: Indian subcontinent 12, Europe/Mediterranean 6, Africa 4, Middle East 3, Far East 2; other 7, including 3 adults who ate seafood in Papua New Guinea.

Laboratory reports	Age (years)					Not stated	Total
	<1	1-14	15-44	45-64	≥65		
Hepatitis A (IgM)	–	186	258	29	9	21	503
HBsAg total	2	4	87	30	8	12	143
acute hepatitis B	1	–	29	7	1	–	38
other	1	4	58	23	7	12	105

### Hepatitis B

Thirty-eight reports of acute hepatitis B were received (26 male, 11 female, 1 sex not stated). Risk exposure information was recorded for only 13 (34%): homosexual contact 3; heterosexual contact 4 (1 male, 3 female, including M 31y and

F 32y with histories of unprotected exposure in Thailand); injecting drug use 1 (male); other 3 (including infant aged 8 months, recipient of blood transfusion in Romania); no recognised risk 2 (1 male, 1 female).

## Miscellaneous viruses, England and Wales: laboratory reports weeks 91/33 – 36

Laboratory reports	Number of reports received				Total for weeks 91/33-36	Cumulative total 1991
	91/33	91/34	91/35	91/36		
Cytomegalovirus	31	19	33	22	105	835
Molluscum contagiosum	1	–	–	–	1	26
Varicella zoster	1	4	1	1	7	118
HTLV-1	–	–	1	–	1	15

**Cytomegalovirus:** 2 regions reported more than 10% cases: NW Thames (16 cases) and SW Thames (28).

Ages: 14 babies aged less than one year, 6 of whom were neonates including 1 whose mother seroconverted in pregnancy; 4 children aged 1-4 years; 1, 5-9 years and 3, 10-14 years; 33 adults aged 15-44 years; 25, 45-64 years and 6, 65 years or more; 19 age not stated.

Forty-two patients were transplant recipients (cardiac 6, renal 15, lung 1, bone marrow 15, liver 3, organ not specified 2); 11 were known to be HIV-1 antibody positive including 2 males with CMV retinitis; 8 patients had hepatitis and 8 had lower respiratory tract infection (including 4 of the known HIV-1 antibody positive males and M 58y after lung transplant). Three patients had glandular fever-like illness. Also reported: M 68y with neuropathy and cold agglutinins.

**Epstein-Barr virus:** F 53y with hepatitis; F 15y with laryngitis and ataxia; F 20y with Guillain-Barré syndrome and Chinese

F 28y with nasopharyngeal carcinoma.

**Molluscum contagiosum:** 1 adult.

**Herpes simplex:** F 70y and M 37y with encephalitis (both serol); male, age not stated, with primary genital infection and meningitis (genital isolate).

**Varicella zoster:** M 63y with encephalitis (serol); M 3y with cerebellar ataxia after chickenpox (serol); F 50y with systemic lupus erythematosus who developed encephalitis with shingles (skin, serol).

**HTLV-1:** M 59y, ethnic origin unknown, with atypical myopathy and neuropathy.

**Papovavirus:** adult male on cytotoxic therapy and adult male after heart-lung transplant (both urine).

**Polyomavirus:** F 39y (urine microscopy) and female, age not stated, (urine) after bone marrow transplants; F 69y with leukaemia (urine microscopy).

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

One hundred and thirty-two new cases of AIDS were reported during August 1991. One hundred were probably infected through sexual intercourse between men (21 died), 14 through sexual intercourse between men and women (3 died), 5 through injecting drug use, 3 through either injecting drug use or sexual intercourse between men (1 died), 1 through blood factor treatment, 2 through blood/tissue transfer and 1, who died, was infected through transmission from mother to child. The exposure categories of 5 cases were undetermined.

Since reporting began in 1982, a total of 4977 AIDS cases (4698 male and 279 female) have been reported of whom 2901 are known to have died (Table 1). There was an increase of 16% in the number of cases reported in the two consecutive 12 month periods between September 1989 and August 1991. An increase in the proportion of reports of AIDS in heterosexual men and women has also occurred in the same period with these now comprising 23% of all AIDS cases (Table 2). The

country or region of first report of AIDS cases and related deaths is shown in Table 3.

Seventy-three per cent of AIDS cases were reported between the ages of 25 and 44 years, compared with only 65% of HIV-1 infections (Table 4). The age pattern also differed between sexes, both AIDS and HIV-1 infections being reported at an older age in men than women. For AIDS, the age band 15 to 34 years accounted for 42% of cases in men but 62% of cases in women. The respective proportions of HIV-1 infections were 62% (men) and 84% (women).

*Pneumocystis carinii* pneumonia was the major indicator disease for AIDS diagnoses where sexual intercourse, injecting drug use, blood factor or blood/tissue transfer were considered the probable methods of acquisition (Table 5). Kaposi's sarcoma was only an important indicator disease for cases involving sexual intercourse between men.

**Table 1 AIDS cases and deaths by exposure category and date of report: United Kingdom to 31 August 1991**

How persons probably acquired the virus	Sept 89 - Aug 90		Sept 90 - Aug 91		Jan 82 - Aug 91			
	Male	Female	Male	Female	Male	Deaths	Female	Deaths
Sexual intercourse								
between men	858	—	934	—	3864	2271	—	—
between men and women								
"high risk" partner <sup>1</sup>	3	8	5	8	14	7	29	17
other partner abroad <sup>2</sup>	59	25	75	41	199	97	95	39
other partner UK	4	7	10	6	22	13	15	6
Injecting drug use (IDU)	48	11	59	31	159	72	61	36
IDU & sexual intercourse between men	17	—	22	—	78	46	—	—
Blood								
blood factor (e.g. for haemophilia)	53	1	55	1	262	186	4	3
blood/tissue transfer (e.g. transfusion)								
abroad	2	6	1	5	14	9	26	17
UK	4	5	1	4	15	12	16	10
Mother to infant	2	4	8	10	18	8	27	13
Other/undetermined	9	2	27	2	53	36	6	3
<b>Total</b>	<b>1059</b>	<b>69</b>	<b>1197</b>	<b>108</b>	<b>4698</b>	<b>2757</b>	<b>279</b>	<b>144</b>

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 August 1991**

Sexual orientation	Sept 89 - Aug 90 <sup>1</sup>		Sept 90 - Aug 91		Jan 82 - Aug 91	
	Cases	(%)	Cases	(%)	Cases	(%)
Homosexual men	751	(68)	825	(66)	3342	(69)
Bisexual men	124	(11)	132	(11)	603	(12)
Heterosexual men and women	227	(21)	284	(23)	884	(18)
<b>Total<sup>2</sup></b>	<b>1102</b>	<b>(100)</b>	<b>1241</b>	<b>(100)</b>	<b>4829</b>	<b>(100)</b>

1. Period during which reports were received.

2. 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 August 1991**

Country or region of first report	Sept 89 – Aug 90		Sept 90 – Aug 91		Cumulative total since 1982	
	Cases	Related deaths <sup>1</sup>	Cases	Related deaths	Cases	Related deaths
England:						
Northern	25	12	16	1	91	52
Yorkshire	30	20	33	13	127	82
Trent	25	10	26	13	97	59
E Anglia	9	5	15	3	55	34
NW Thames	450	207	437	77	1912	1081
NE Thames	146	52	276	67	893	467
SE Thames	136	64	149	53	551	344
SW Thames	45	28	51	12	188	121
Wessex	31	23	30	11	114	77
Oxford	22	11	35	10	108	63
S Western	19	11	32	11	104	65
W Midlands	32	14	31	6	114	61
Mersey	13	5	21	12	68	48
N Western	60	28	48	23	198	125
Wales	16	8	19	15	76	59
Northern Ireland	8	7	5	4	25	22
Scotland	61	27	81	31	256	141
United Kingdom total	1128	532	1305	362	4977	2901
Ch. Islands/Isle of Man	1	1	1	1	4	4

1. These deaths are of patients referred to in the previous column and known to have occurred at any time up to 31 August 1991. Reporting of recent deaths is incomplete.

**Table 4 Age distribution of AIDS cases (excluding visitors<sup>1</sup>) at the time of diagnosis and HIV-1 infected persons at time of test: United Kingdom to 30 June 1991**

Age group (years)	Male				Female				Total	
	AIDS Numbers	(%)	HIV-1 Numbers	(%)	AIDS Numbers	(%)	HIV-1 Numbers	(%)	AIDS	HIV-1 <sup>2</sup>
0 - 14	36	(<1)	288	(2)	25	(10)	54	(3)	61	345
15 - 24	221	(5)	2551	(20)	35	(14)	630	(38)	256	3202
25 - 34	1601	(37)	5525	(43)	115	(47)	769	(46)	1716	6319
35 - 44	1562	(36)	3114	(24)	43	(18)	158	(9)	1605	3281
45 - 54	660	(15)	1101	(9)	15	(6)	33	(2)	675	1134
55 or over	231	(5)	363	(3)	9	(4)	22	(1)	240	385
Sub total (100%)	4311	(100)	12942	(100)	242	(100)	1666	(100)	4553	14666
Not stated	57		879		3		90		60	1046

1. 145 AIDS cases in visitors are excluded from the table.

2. The totals include reports of 135 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 30 June 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	699	(19)	1776	(48)	103	(3)	1121	(30)	3699
Sexual intercourse between men and women	25	(7)	151	(43)	4	(<1)	170	(49)	350
Injecting drug use <sup>1</sup>	10	(4)	143	(51)	1	(<1)	125	(45)	279
Blood factor or blood/tissue transfer	1	(<1)	141	(43)	–	(–)	189	(57)	331
Other/undetermined	2	(2)	42	(42)	2	(2)	53	(54)	99

1. Includes 70 men who had sex with men and who were also injecting drug users.

## Sexually transmitted diseases, England and Wales: laboratory reports weeks 91/33 – 36

Laboratory reports	Male	Female	Not stated	Total for weeks 91/33-36	Cumulative total 1991
<b><i>Neisseria gonorrhoeae</i></b>					
β-lactamase producing	16	8	1	25	153
other penicillin-resistant strains	13	4	–	17	83
extra-genital isolates	11	2	–	13	167
<b>Ophthalmia neonatorum</b> (<6 weeks)					
gonococcal	2	–	–	2	11
chlamydia	20	16	2	38	332
<b><i>Chlamydia trachomatis</i></b>	NA	NA	NA	NA	NA
<b>Herpes simplex</b>	NA	NA	NA	NA	NA

NA Not available

### Comment

***Neisseria gonorrhoeae*: β-lactamase producing strains.** Country of infection: UK 6, Nigeria 4, Guyana 2, Jamaica 2, Holland, Morocco, Saudi Arabia, Thailand and Vietnam, one each.

**Other penicillin-resistant strains:** 12 penicillin resistant, 4 tetracycline resistant and one trimethoprim resistant.

**Extra-genital isolates:** 5 from throat (3 male, 2 female), of which two were penicillin resistant (one of which was also

β-lactamase producing), 10 from rectum (8 male, 2 female), of which one was penicillin resistant and β-lactamase producing, and 1 from joint (male, trimethoprim resistant).

***Chlamydia trachomatis*, eye infections:** 38 babies aged less than 6 weeks; 2 children aged 6 weeks or more; 26 adults and 8 patients, age not stated. Two women with pelvic inflammatory disease and 6 with infertility.

## Bacteraemia and bacterial meningitis, England and Wales: laboratory reports 91/33 – 35

Laboratory reports	No. of reports received		Age		Total for weeks 91/33-35	Cumulative total 1991
	Blood only	CSF only or CSF & blood	<1m	≥65y		
<b><i>Bacteroides sp</i></b>	42	–	–	23	42	623
<b><i>Clostridium sp</i></b>	8	–	1	5	8	206
Anaerobic cocci	11	–	–	4	11	117
<b><i>Acinetobacter sp</i></b>	17	2	1	3	19	272
<b><i>Aeromonas sp</i></b>	4	–	–	3	4	24
<b><i>Pseudomonas sp</i></b>	99	1	3	41	100	892
<b><i>Serratia sp</i></b>	16	–	2	7	16	122

### Bacteraemia

***Bacteroides sp*:** *B. fragilis* 30; *B. intermedius* 1; *B. melaninogenicus* 1; *B. oralis* 1; *B. ovatus* 2. *B. fragilis*, M 63y with liver abscess, F 45y and F 66y with pelvic abscess, M 78y with leukaemia, M 44y and F 81y with lymphoma, F 64y on cytotoxic drugs (all blood isolates). *Bacteroides sp*, M 78y with epididymo-orchitis (blood isolate).

***Fusobacterium nucleatum*:** 1.

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

*C. perfringens* 4; *C. ramosum* 1. *C. paraputrificum*, M 4d with necrotising enterocolitis (blood isolate). *C. ramosum*, F 81y with lymphoma (blood isolate). Also reported: *C. perfringens*, M 53y with cholecystitis and surgery (gall bladder isolate).

**Anaerobic cocci:** F 27y and female, age not stated, both post partum infections (blood isolates). *Peptostreptococcus sp*, M 78y with leukaemia.

***Eubacterium lentum*:** M 44y with lymphoma (blood isolate).

Laboratory reports	Total bacteraemia	Gastrointestinal tract	Biliary tract (ERCP)	UTI/GU (pregnant)	Ischaemic/pressure sores
<b><i>Bacteroides sp</i></b>	42	7	2 (–)	8 (–)	4
<b><i>Clostridium sp</i></b>	8	2	–	1 (–)	1
Anaerobic cocci	11	–	–	2 (–)	–

***Achromobacter xylosoxidans* (*Alcaligenes xylosoxidans*):** F 73y with septic arthritis.

***Acinetobacter sp*:** *A. calcoaceticus* (*anitrat*) 6; *A. junii* 1; *A. lwoffii* 3. *A. calcoaceticus*, F 47y with leukaemia (blood isolate) and F 40y with lymphoma (blood isolate). *A. junii*, M 29y with Hodgkin's disease. *Acinetobacter sp*, M 26y with lymphoma, M 45y on cytotoxic therapy, F 37y with liver transplant, M 26y with renal transplant.

***Alcaligenes sp*:** *A. denitrificans*, F 38y with myelodysplasia.

*A. odorans*, M 4y with leukaemia.

***Aeromonas hydrophila*:** M 59y with leukaemia.

***Pseudomonas sp*:** *P. acidovorans* 1; *P. aeruginosa* 67; *P. cepacia* 2; *P. fluorescens* 4; *P. maltophilia* 13. *P. aeruginosa*, F 75y with osteomyelitis, M 57y with liver abscess, F 73y and M 61y with biliary tract disease, M 64y with pneumonia (all blood isolates). *P. paucimobilis*, M 4m on ventilator (blood isolate). *P. vesicularis*, F 8m with mastoid abscess (blood isolate). *Pseudomonas sp*, HIV-1 antibody positive M 34y (blood isolate).

Laboratory reports	Total bacteraemia	UTI/GU (pregnant)	Burns	Intravascular lines	Leukaemia/bone marrow suppression (IV-lines)
<i>Acinetobacter sp</i>	17	– (–)	–	3	5 (3)
<i>Aeromonas sp</i>	4	– (–)	–	1	1 (–)
<i>Pseudomonas sp</i>	99	17 (–)	–	11	30 (8)
<i>Serratia sp</i>	16	4 (–)	–	4	– (–)

*Serratia sp*: *S. liquefaciens* 5; *S. marcescens* 8; *S. marinorubra* (*rubidaea*) 1. *S. liquefaciens*, HIV-1 antibody positive M 29y with IV-line (blood isolate).

#### Meningitis:

*Acinetobacter calcoaceticus*: M 4y and F 14y with CSF shunts (CSF isolates).

*Pseudomonas aeruginosa*: F 72y (CSF isolate).

### Unusual infections

*Aerococcus viridans*: M 55y with hepatitis (blood isolate).

*Aeromonas hydrophila*: M 70y with leukaemia (blood isolate).

**Diphtheroids** 2: M 66y with myeloma; F 27y with IV-line (both blood isolates).

*Gemella haemolysans*: male infant aged 2 months (blood isolate).

*Hafnia alvei*: M 66y with leukaemia (blood isolate).

*Peptostreptococcus sp*: F 67y with abdominal pain (blood isolate; *Bacteroides fragilis* isolate also).

### Imported infections, England and Wales: laboratory reports 91/33 – 36

*Ancylostoma duodenale*: M 65y (India).

**Dengue**: M 20y pancytopenic and febrile after visit to SE Asia.

**Hookworms** 28 (Africa, Bangladesh, S America, Thailand, one each).

*Iodamoeba butschilis*: M 28y (Pakistan).

*Leishmania sp* 2: F 2y with anaemia and hepatosplenomegaly after holiday in Spain (bone marrow, liver biopsy, serol) and male, age not stated.

*Loa loa* 2: male, ages not stated.

*Onchocerca volvulus* 3: male adults.

*Plasmodium sp* 32: *P. falciparum* 20 (Nigeria 7, including M 18y and M 29y on visit to leprosarium; Ghana 4; Kenya 3, including M 39y and M 30y naval personnel, one of whom had *P. vivax* also after visit to Mombasa; Pakistan 1, male, also had *P. vivax*; Cameroun 1; India 1; E Africa 1, Togo M 58y with cerebral malaria, died). *P. vivax* 12 (Pakistan 6, India 2, Kenya 1).

**Ross River virus** 2: M 49y and F 21y, both with fever and arthropathy after visits to Australia.

*Schistosoma sp* 6: *S. haematobium* 1 (adult male); *S. mansoni* 5 (3 male, 2 female).

*Strongyloides stercoralis* 10: (India, Africa, one each).

### Opportunist infections, England and Wales: laboratory reports 91/33 – 36

*Aspergillus fumigatus* 3: M 31y with pneumonia after renal transplant, died (lung); M 53y (sputum, *A. niger* also) and M 54y (lung), both after liver transplant.

**Candida sp** 24 (all blood isolates): *C. albicans* 12; *C. guilliermondii* 1; *C. krusei* 1; *C. parapsilosis* 6; *C. tropicalis* 2; *Candida sp* 2. Three were premature infants, of whom two died; 2 had leukaemia/lymphoma; 7 had had abdominal surgery and were receiving total parenteral nutrition through central venous lines.

*Malassezia furfur* 1: female neonate on total parenteral nutrition after complex abdominal surgery.

**Nocardia sp** 3: *N. asteroides* 2, including M 56y with lung and brain abscesses and skin nodules who had had renal transplant. *N. aerocolonigenes*, M 21y known to be HIV-1 antibody positive.

*Pneumocystis carinii* 11 (all males): 9 were known to be HIV-1 antibody positive.

*Torulopsis glabrata* 2: F 14y with IV-line; F 58y with pneumonia after chemotherapy for lymphoma (blood).

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