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# Communicable Disease Report

## Paralytic shellfish poisoning

The amount of paralytic shellfish poison (PSP) in mussels and scallops from the North-East coast of the British Isles has risen this year to a level which could pose a health hazard. Scallop fishing in the area from Berwick to Newcastle has been suspended by an Order under the Food and Environment Protection Act 1985. Commercial fishing of mussels does not take place in affected waters during the PSP season, which lasts from spring to early summer, but warning notices have been placed along the coast advising the public not to collect and eat mussels. Crabs and other shellfish are also being sampled but there is no evidence that these are a hazard at present. Shellfish from other parts of the country are not affected.

PSP is a heat-stable neurotoxin produced by dinoflagellates ingested by shellfish. The toxin can cause numbness, paraesthesiae and muscular weakness progressing to respiratory paralysis within a few hours of eating contaminated shellfish. As there is a comprehensive monitoring and control programme to prevent these shellfish from reaching the market, it is very unlikely that cases of poisoning will occur. The Communicable Disease Surveillance Centre will, however, be grateful for any reports of suspected poisoning.

The last recorded outbreak of illness in the United Kingdom due to the consumption of affected shellfish occurred in Northumberland in 1968[1]. Severe cases are uncommon and there have been no deaths in the United Kingdom since 1909. Five episodes of paralytic shellfish poisoning were recorded in the United States in 1990: the single fatal outcome followed the consumption of shellfish collected from a beach in Alaska[2].

1. Pearson RCM, Ingham HR, Wood PC, Dewar HA. An epidemic of mussel poisoning in north-east England. Lancet 1968; ii: 767-70.
2. MMWR 1991 15 March; 40: 157-61.

## Cryptosporidiosis in London

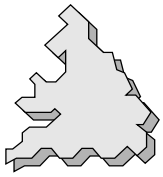
Forty cases of cryptosporidiosis were identified at Tooting PHL between late January and mid-April 1991. The majority have occurred in older children and adults. A case control study is being carried out to investigate the source. Cases and controls have been drawn from the London Boroughs of Merton, Sutton and Wandsworth. Nineteen cases were notified to Richmond environmental health department between January and March 1991. More than half were associated with a local playgroup. Further information is obtainable from the Division of Field Services at CDSC.

## HIV infection in travellers

A recent report[1] indicates that heterosexual contact in South East Asia is becoming an important source of HIV transmission into the Australian population. Seven cases were described of men who developed HIV infection following sexual contact in Thailand and the Philippines; two of them appear to have transmitted infections to subsequent female partners in Australia. The risk to travellers has been highlighted in a review of 170 cases of AIDS occurring in UK residents presumed to have been infected by heterosexual contact abroad and particularly in Africa[2].

1. Australian HIV surveillance report. 1991; 7 Suppl 2: 1-2.
2. Noone A, Gill ON, Clarke SE, Porter K. Travel, heterosexual intercourse and HIV-1 infection. Communicable Disease Report 1991; 1: R39-43.





**Correspondence to:** Editor CDR,
PHLS Communicable Disease Surveillance Centre,
61 Colindale Avenue, London NW9 5EQ
Tel: 0181 200 6868 Fax: 0181 200 7868 Telex: 8953942

PHLS
Public Health Laboratory Service

## Virus infections, England and Wales: laboratory reports weeks 91/18 - 21

| Laboratory reports | Number of reports received | | | | Total reports 91/18-21 | Cumulative total for 1991 |
|---|---|---|---|---|---|---|
| | 91/18 | 91/19 | 91/20 | 91/21 | | |
| Coxsackie A | 2 | 1 | 1 | 3 | 7 | 32 |
| Coxsackie B | 17 | 1 | 14 | 9 | 41 | 128 |
| Echovirus | 10 | 9 | 4 | 6 | 29 | 128 |
| Measles | 2 | – | 1 | 1 | 4 | 16 |
| Mumps | – | – | 1 | – | 1 | 23 |
| Parvovirus B19 | 22 | 24 | 34 | 13 | 93 | 366 |
| Rubella | 13 | 1 | 9 | 11 | 34 | 131 |

**Coxsackie A**, A7, 2; A9, 3; and A21, 2.
Ages: 4 children aged less than 15 years; 2 adults and 1 patient age not stated.
Two patients had meningitis: **A9**, F 18y (CSF isolate) and **A21**, F 19y (throat isolate).
**Coxsackie B**: B1, 2; B2, 5; B3, 18 (SW Thames 3, Wessex 3, S Western 7); B4, 3; B5, 12 (Northern 6, Oxford 4); B6, 1.
Ages: 26 children aged less than 15 years;14 adults and 1 patient age not stated.
Seven patients had meningitis (CSF isolate 4): **B1**, F 33y; **B2**, F 29y; **B3**, F 3 days; **B5**, F 7y and 3 adults.
**Echovirus**, type 4, 1; type 5, 1; type 6, 1; type 9, 5 (N Western 3); type 11, 1; type 17, 1; type 22, 3; type 23, 1; type 30, 15 (Northern 12).
Ages: 19 children aged less than 15 years; 7 adults and 3 not stated.
Ten patients had meningitis (CSF isolate 8): **type 6**, M 8y; **type 9**, M 14 days; **type 22**, F 25y; **type 30**, 7 patients aged 3 days - 39 years.
The number of enterovirus infections reported remains low. However, there has recently been an increase in the number of echovirus **type 30** infections reported, mainly from the Northern region.

**Notifications to OPCS of measles, mumps and rubella, England and Wales**

| Notifications | 91/18 | 91/19 | 91/20 | 91/21 | Total 91/18-20 | Cumulative total for 1991 |
|---|---|---|---|---|---|---|
| Measles | 186 | 181 | 193 | N/A | 560 | 3687 |
| Mumps | 55 | 62 | 49 | N/A | 166 | 1173 |
| Rubella | 152 | 134 | 166 | N/A | 452 | 2878 |

N/A not available

**Measles**: 3 children aged less than 15 years and one adult. Two children had subacute sclerosing panencephalitis (SSPE).
**Mumps**: a child aged 8 years with meningitis was reported (CSF isolate).
**Parvovirus (B19)**: only one region reported more than 9 cases: Yorkshire (20).
Ages: 19 children aged less than 15 years; 63 adults aged 15-44 years and 9 aged 45 years or more; 2 patients age not stated. 57 patients had rash and 49 had arthritis / arthralgia. Three had aplastic crises.
Particles were seen with red blood cells on electron microscopy of spleen of stillborn hydropic fetus, and B19 DNA was positive.
The number of reports received shows little evidence, as yet, of the expected seasonal rise.
**Rubella**: 2 regions reported more than 4 cases: SW Thames (5), and S Western (9).
Ages: 6 children aged less than 15 years; 25 adults aged 15-44 years, including 14 women (3 pregnant); 3 adults aged 45 years or more. Nine patients presented with arthralgia. F 1y was found to have sensineural deafness.
The number of cases reported remains steady without any sign of the usual seasonal increase.
**Herpes simplex**: two neonatal infections were reported: F 10 days with rash (skin isolate) and M 22 days with hepatosplenomegaly and thrombocytopenia (urine isolate).

## Selected bacterial infections, England and Wales: laboratory reports 91/18 - 21

***Bordetella pertussis*** 19: only one region reported more than 2 cases: N Western (5).
Ages: 7 aged less than 6 months (5 aged 3 months or less); 1 aged 6-11 months; 7 aged 1-5 years; 4 aged 6-14 years.
***Streptococcus group A***: F 9y with Henoch-Schönlein purpura (anti-DNAse B).

## Bacteraemia and bacterial meningitis, England and Wales: laboratory reports, weeks 91/18 - 21

| Laboratory reports | No of reports received: Blood only | No of reports received: CSF only or CSF & blood | Age: <1m | Age: ≥65y | Total received | Cumulative total for 1991 |
|---|---|---|---|---|---|---|
| ***Neisseria meningitidis*** | 19 | 48 | 1 | 2 | 67 (18) * | 555 |
| group A | – | – | | | – | |
| B | 10 | 33 | | | 43 (11) * | |
| C | 6 | 10 | | | 16 (7) * | |
| Y | 1 | – | | | 1 (–) | |
| ungrouped | 2 | 5 | | | 7 (–) | |
| ***Haemophilus influenzae*** | 35 | 48 | – | 10 | 83 (9) § | 516 |
| type b | 11 | 37 | | | 48 (6) § | |
| ***Listeria monocytogenes*** | 3 | 2 | – | 3 | 5 | 29 |

* sulphonamide-resistant § β-lactamase producing

***Neisseria meningitidis***: 4 regions reported more than 10% of cases: Northern (7 cases), Trent (11), W Midlands (7) and N Western (9).

Eleven patients presented with rash and F 4y had bilateral meningococcal conjunctivitis for 4 days before onset of bacteraemia (blood, eye, throat isolates). M 18y with heart valve prosthesis developed endocarditis.

18 sulphonamide-resistant strains were reported: **group B**, 11 (Northern, Yorkshire 2, NE Thames, Oxford, Wessex 2, S Western, W Midlands, and N Western 2); **group C**, 7 (Yorkshire, Trent, NW Thames, SE Thames, Oxford, S Western and N Western).

Also reported: **group B**, M 6m with meningitis (latex agglutination on PM brain extract). **Group C**, M 2y with septicaemia (PM nasopharyngeal isolate); M 21y with meningitis (throat isolate); M 4y with meningitis (CSF microscopy only).

**Notifications to OPCS of meningitis and meningococcal infections, England and Wales**

| Notifications | 91/18 | 91/19 | 91/20 | 91/21 | Cumulative total for 1991 |
|---|---|---|---|---|---|
| Total meningitis | 61 | 43 | 53 | N/A | 1198 |
| Meningococcal meningitis | 31 | 18 | 30 | N/A | 629 |
| Meningococcal septicaemia | 5 | 4 | 6 | N/A | 138 |

N/A not available

**Age distribution laboratory reports**

| Laboratory reports | Age (years): <1 | 1 | 2 | 3 | 4 | 5–9 | 10–14 | 15–19 | 20–24 | ≥25 | Not stated |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ***Neisseria meningitidis*** | 21* | 4 | 6 | 4 | 5 | 4 | 1 | 10 | 3 | 5 | 4 |
| ***Haemophilus influenzae*** | 35§ | 15 | 6 | 4 | 2 | 1 | – | 1 | – | 15 | 4 |

* includes 6 aged ≤3 months § includes 3 aged ≤3 months

***Haemophilus influenzae***: 4 regions reported more than 10% of cases: Trent (8 cases), NE Thames (9), SE Thames (11 and W Midlands (9).

Nine β-lactamase producing strains were reported (6 in children aged 3 years or less and 3 in adults): Northern, E Anglia, SE Thames 2, SW Thames, Wessex, Oxford, S Western and W Midlands. Five other ampicillin-resistant strains were also reported (4 in children aged 3 years or less and 1 in an adult): E Anglia, NE Thames, S Western, N Western and Wales.

Also reported: **type b**, M 4y with epiglottitis (PM epiglottis).

***H. parainfluenzae***: M 71y with pneumonia (blood isolate) and F 21y with perihepatitis and subphrenic abscess (pus isolate) had **group G** *streptococci* also.

***Haemophilus sp***: pregnant F 23y (blood isolate).

***Listeria monocytogenes***: meningitis: M 89y with carcinomatosis, and M 83y. Bacteraemia: pregnant F 28y, diabetic F 82y and female age not stated.

Also reported: 17 week gestation fetus (superficial swabs).

**H. influenzae clinical features recorded on laboratory reports**

| Clinical features | Age (years): ≤3 | 4–14 | 15–64 | ≥65 | Not stated |
|---|---|---|---|---|---|
| Meningitis (blood isolate only) | 47 (2) | 2 (–) | – | – | 1 (–) |
| Epiglottitis | 2 | 1 | – | – | – |
| Pneumonia | 2 | – | 4 | 1 | – |
| Septic arthritis/osteomyelitis | 1 | – | – | – | – |
| Facial cellulitis | 1 | – | – | – | – |

## Unusual infections

***Aerococcus viridans***: M 49y with chest infection (blood isolate).
***Bacillus cereus***: F 13y with leukaemia (blood and IV-line tip isolates).
***Branhamella catarrhalis***: F 69y (blood isolate).
***Corynebacterium jeikeium***: M 69y with leukaemia and IV-line (blood isolate).
***Corynebacterium pseudotuberculosis***: M 79y (blood isolate).
***Haemophilus aphrophilus***: F 74y with sinusitis (antral washings).
***Lactobacillus sp*** 2: M 34y with endocarditis (7 blood isolates). *L. acidophilus*, F 52y (blood isolate).
***Propionibacterium acnes***: F 89y (blood isolate).
***Stomatococcus mucilaginosis***: M 69y with leukaemia (blood isolate).

## Animal-associated infections, England and Wales: laboratory reports weeks 91/18 - 21

***Borrelia burgdorferi*** 4: patient aged 26 years with polymyositis; M 36y with facial palsy; F 37y with polyarthropathy 8 weeks after a tick bite; patient aged 63 years 4 months after insect bite in France.
***Echinococcus granulosus***: man with liver cyst.
***Orf paravaccinia*** 6: 5 adults aged 23-59 years including a farmworker and a woman who handled lambs; 1 patient age not stated.
***Pasteurella*** 19: *P. haemolytica* 1; *P. multocida* 14; *P. pneumotropica* 1; *pasteurella sp* 3. 9 patients had dog bites; 6 had cat bites or scratches; 1 had an infected wound.
Three patients aged 65 years or more and one age not stated had bacteraemia: M 67y after cat bite; F 76y with Waldenstrom's macroglobulinaemia had pleural empyema; M 81y had chronic leg ulcer; a woman with tropical spastic paraparesis had osteomyelitis.
**Toxocara** 3: F 4y and M 76y with eye lesions; F 32y from Jamaica.
**Toxoplasma** 51: 15 patients had lymphadenopathy (histology suggestive 4); 16 had eye lesions; 2 men were known to be HIV-1 antibody positive.

## Malaria imported into the United Kingdom

An article with this title was published in the April review issue of the *Communicable Disease Report*. Its authors wish to inform readers that, in addition to the information they presented on Regional origins (their table 3, page R47), they also have available a complete breakdown of the 76 countries in which malaria (listed by species) was contracted. This can be obtained from Professor D J Bradley, Tropical Health Epidemiology Unit, London School of Hygiene and Tropical Medicine, Keppel Street, London WC1E 7HT (telephone 071 927 2216).

## Pathogenesis of invasive infections

The Division of Hospital Infection is collaborating with other workers to evaluate pathogenicity factors and serological responses in patients with deep-seated infections including endocarditis, meningitis and septicaemia. Currently, these organisms include group B β-haemolytic *streptococci* (in adults), coagulase negative *staphylococci* and unusual Gram positive organisms such as *Stomatococcus sp.*

Any hospitals who have sera and organisms from such cases are invited to contact Dr Cookson in the Division of Hospital Infection at Colindale.

**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**