

Communicable Disease Report

A case of poliomyelitis

A case of paralytic polio has been notified in a 41 year old man who died within 24 hours of the onset of paralysis. An initial diagnosis of Guillain-Barré syndrome was changed to polio after post-mortem histology of the spinal cord became available. There was no history of vaccination, contact with a vaccinated individual or foreign travel.

Nineteen cases of paralytic polio occurred in England and Wales between 1985 and 1990, of which 12 were vaccine-associated and five were imported; the source of infection was not identified in two cases. The diagnosis should be considered in any patient with acute flaccid or bulbar paralysis and appropriate laboratory investigation undertaken. If possible, at least two faecal samples should be taken, 24-48 hours apart, as soon as possible after the onset of paralysis and submitted for virus culture. A throat swab may also be useful if taken early on. CSF should be obtained from patients with meningo-encephalitis. Acute and convalescent sera should be examined for neutralising antibodies. Necropsy specimens (from brain stem, spinal cord and descending colon) should be obtained from all fatal cases. The characterisation of virus isolates as wild or vaccine-like is undertaken by the Virus Reference Laboratory and the National Institute for Biological Standards and Control.

Arrangements for communicable disease control

An executive letter [EL(91)123], issued jointly by the Department of the Environment and the Department of Health on 23 October, sets out the collaborative arrangements which should be in place between health authorities and local authorities to provide an effective communicable disease control service. It consolidates previous guidance but also seeks to clarify the role and responsibilities of consultants in communicable disease control (CCDCs) in relation to both health and local authorities. It also affirms the need to ensure that contracts between purchasers and providers include formal arrangements to enable CCDCs to undertake their work effectively.

The summary states that:

1. Health authorities and local authorities should have up-to-date joint plans covering the structures and procedures for managing infectious disease control in their areas, both on a day-to-day basis and if an outbreak occurs.
2. Consultants in communicable disease control should already have been provided with the support they need to enable them to carry out their duties effectively. Suitable deputising arrangements for the CCDC are necessary.
3. Health authorities should make formal arrangements for the CCDC to have access to provider units, including NHS Trusts, and ensure that hospital infection control plans are up-to-date and take account of previous guidance.

Enquiries concerning this guidance should be addressed to Dr Elizabeth Tebbs, Department of Health, Room 103, Eileen House, 80-94 Newington Causeway, London SE1 6EF (telephone 071 972 2886).

Virus infections:
weeks 91/42 - 45

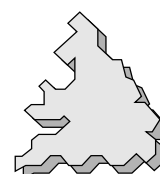
Animal-associated infections:
weeks 91/42 - 45

Bacteraemia and bacterial meningitis:
weeks 91/42 - 45

Unusual infections

Selected bacterial infections:
weeks 91/42 - 45

Notice



Virus infections, England and Wales: laboratory reports, weeks 91/42 – 45

| Laboratory reports | Number of reports received | | | | Total reports 91/42-45 | Cumulative total 1991 |
|--------------------|----------------------------|-------|-------|-------|---------------------------|-----------------------------|
| | 91/42 | 91/43 | 91/44 | 91/45 | | |
| Coxsackie A | 1 | 2 | – | 2 | 5 | 62 |
| Coxsackie B | 6 | 5 | 6 | 4 | 21 | 403 |
| Echovirus | 13 | 26 | 21 | 34 | 94 | 611 |
| Measles | 2 | – | 2 | 1 | 5 | 43 |
| Mumps | 1 | – | 1 | 1 | 3 | 42 |
| Parvovirus B19 | 3 | 13 | 9 | 9 | 34 | 685 |
| Rubella | 1 | 2 | 2 | – | 5 | 228 |

Coxsackie A: A7, 1; A9, 4.

Three infants aged less than 4 months (nasopharyngeal aspirate and faecal isolates).

Coxsackie B: B1, 2; B2, 3; B3, 6; B4, 5; B5, 4; B6, 1.

Fourteen children aged less than 15 years, including 5, 1-5 years and 6 babies aged less than one year. Two patients had myocarditis/pericarditis.

Echovirus: type 4, 2; type 5, 1; type 9, 21; type 11, 4; type 17, 1; type 18, 19; type 19, 1; type 22, 15; type 23, 3; type 24, 1; type

25, 2; type 26, 1; type 29, 2; type 30, 19; type 32, 1; untyped 1. Twenty-seven patients presented with meningitis (CSF isolate 13, throat isolate only 8, faecal isolate only 6): 12 children aged less than 15 years, including 4, 1-5 years and 3 babies aged less than 1 year; 12 adults and 3 age not stated.

Types 9, 18 and 30 continue to predominate but overall there has been a marked reduction in echovirus reports. Only one region reported more than 15 cases: S Western (32).

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

| Notifications | | | | | Total 91/42-45 | Cumulative total 1991 |
|---------------|-------|-------|-------|-------|-------------------|--------------------------|
| | 91/42 | 91/43 | 91/44 | 91/45 | | |
| Measles | 187 | 176 | 179 | 189 | 731 | 8561 |
| Mumps | 59 | 68 | 62 | 69 | 258 | 2582 |
| Rubella | 124 | 118 | 82 | 92 | 416 | 6466 |

Measles: F 15y presented with subacute sclerosing panencephalitis; 4 adults.

Mumps: M 3m presented with meningitis (serology only); 2 adults.

Parvovirus (B19): three regions reported 4 or more cases: S Western (10), N Western (4) and Wales (10).

Ages: 2 children aged less than 15 years; 28 adults aged 15 or more years (4 pregnant); 4 age not stated. Twelve patients presented with rash and 16 had acute arthritis.

Rubella: only three regions reported cases: Northern (2), NE Thames (1) and Wessex (2).

Ages: all adults aged 15-44 years (4 males, 1 female).

Animal-associated infections, England and Wales: laboratory reports, weeks 91/42 – 45

Borrelia burgdorferi 3: M 25y, with erythema migrans 15 months ago and neurological symptoms this September, was exposed to tick bites in south west Scotland; M 82y with erythema migrans for 3 weeks, lives in the New Forest; F 62y with annular erythema 2 years ago, and now with diffuse rash, works outdoors near Thetford.

Brucella sp 1: M 55y had recently travelled in Europe and South Africa.

Cowpox 1: F 10y lives on a farm.

Leptospira 2: *L. hardjo*, M 40y, a cowman. *Leptospira sp*, M 64y who died.

Orf paravaccinia 1: F 31y, with milker's nodule after handling a calf, was one of three people reportedly affected at a theme-park farm.

Pasteurella multocida 16: 6 patients had dog bites, including M 79y with IV-line (blood isolate); one had a cat bite and another a fox bite; 6 had wounds; M 78y with chronic sinusitis (antral washings); F 75y with septic arthritis had knee joint prosthesis (blood, joint isolates).

Toxocara sp 7: F 2y with eosinophilia; M 3y failed to thrive; siblings aged 3 and 4 years with previous visceral infections; 2 adult men with eye lesions and one patient with fever and malaise.

Toxoplasma 58: 25 patients with lymphadenopathy (one histology suggestive); 11 with eye lesions; 8 patients were HIV-1 antibody positive, including one with a brain lesion; one other was immunocompromised.

Bacteraemia and bacterial meningitis, England and Wales: laboratory reports, weeks 91/42 – 45

| Laboratory reports | No of reports received | | Age | | Total received | Cumulative total 1991 |
|--------------------------------------|------------------------|-------------------------|------|-------|----------------|-----------------------|
| | Blood only | CSF only or CSF & blood | < 1m | ≥ 65y | | |
| <i>Neisseria meningitidis</i> | 23 | 41 | – | 1 | 64 (26) * | 883 |
| group A | 1 | – | | | 1 (1) * | |
| B | 15 | 32 | | | 47 (19) * | |
| C | 5 | 6 | | | 11 (5) * | |
| Y | 1 | – | | | 1 (1) * | |
| ungrouped | 1 | 3 | | | 4 | |
| <i>Haemophilus influenzae</i> | 76 | 65 | 3 | 3 | 141 (3) § | 971 |
| type b | 44 | 51 | | | 95 (2) § | |
| <i>Listeria monocytogenes</i> | 6 | 2 | – | 4 | 8 | 74 |

*sulphonamide-resistant

§β-lactamase producing

Neisseria meningitidis: two regions reported more than 10% of cases: W Midlands (10 cases) and N Western (10).

Twenty-six sulphonamide-resistant strains were reported: **group A**, 1 (Trent); **group B**, 19 (Northern 2, Yorkshire 2, Trent, E Anglia 2, SE Thames, Wessex 2, W Midlands 5,

Mersey, N Western 2, Wales); **group C**, 5 (Northern, Trent, SW Thames, W Midlands, N Western); **group Y**, 1 (SE Thames). Twenty patients presented with rash. F 24y with bacteraemia was an injecting drug user.

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

| Notifications | 91/42 | 91/43 | 91/44 | 91/45 | Total 91/42-45 | Cumulative total 1991 |
|---------------------------|-------|-------|-------|-------|----------------|-----------------------|
| Total meningitis | 53 | 47 | 70 | 66 | 236 | 2412 |
| Meningococcal meningitis | 18 | 19 | 20 | 28 | 85 | 999 |
| Meningococcal septicaemia | 5 | 6 | 4 | 9 | 24 | 244 |

Age distribution recorded on laboratory reports

| Laboratory reports | Age (years) | | | | | | | | | | Not stated |
|--------------------------------------|-------------|----|----|----|---|-----|-------|-------|-------|-----|------------|
| | <1 | 1 | 2 | 3 | 4 | 5-9 | 10-14 | 15-19 | 20-24 | ≥25 | |
| <i>Neisseria meningitidis</i> | 17 * | 8 | 3 | 3 | 2 | 5 | 5 | 8 | 3 | 8 | 2 |
| <i>Haemophilus influenzae</i> | 49 § | 33 | 16 | 14 | 7 | 2 | – | 2 | 2 | 12 | 4 |

* includes 5 aged ≤3 months

§ includes 11 aged ≤3 months

Haemophilus influenzae: two regions reported more than 10% of cases: Northern (18 cases) and Trent (18).

Four ampicillin-resistant strains were reported: M 1y (blood isolate, S Western); M 4y (blood isolate, W Midlands); F 2y (blood isolate, Wessex); F 15y (CSF isolate, Northern). M 4m had sudden infant death syndrome (blood isolate). M 69y and female, age not stated, had biliary tract disease (blood isolates).

Three patients were immunocompromised: M 64y with myeloma, F 8y on steroids and F 64y with leukaemia and hypogammaglobulinaemia (all blood isolates).

Also reported: M 3y (endotracheal aspirate isolate) and F 2y (throat isolate), both with epiglottitis; F 1y with septic arthritis/osteomyelitis (joint isolate).

H. aphrophilus: F 56y with osteomyelitis and spinal abscess

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

| Clinical features | Age in years | | | | Not stated |
|---------------------------------|--------------|-------|-------|-----|------------|
| | ≤3 | 4-14 | 15-64 | ≥65 | |
| Meningitis (blood isolate only) | 9 (9) | 2 (2) | – | – | – |
| Epiglottitis | 15 | 2 | 1 | – | – |
| Pneumonia | 3 | 1 | 2 | 3 | – |
| Septic arthritis/osteomyelitis | 2 | – | – | – | – |
| Facial cellulitis | – | – | – | – | – |

(abscess isolate); M 2y had *Streptococcus milleri* also (brain isolate).

H. parainfluenzae: immunocompromised F 78y with leukaemia (blood isolate); M 84y.

Listeria monocytogenes: meningitis: M 41y with AIDS; F 81y. Bacteraemia: F 50y on steroids; M 44y with Hodgkin's disease; F 85y with clinical meningitis; M 56y, M 75y and F 81y.

Unusual infections

Aerococcus viridans: M 71y had endocarditis (blood isolate).

Agrobacterium radiobacter: F 11y had conjunctivitis (eye isolate).

Diphtheroids: F 45y on haemodialysis (blood isolate).

Flavobacterium sp 2: *F. indologenes*, M 63y with leukaemia and IV-line had fever (blood isolate). *F. meningosepticum*, F 28y with leukaemia had fever (blood isolate).

Gemella sp: F 37y had chest wall abscess (abscess aspirate).

Lactobacillus casei: F 33y, with IV-line after bone marrow

transplant, had fever (blood isolate).

Micrococcus luteus: immunosuppressed male, age not stated, with IV-line (blood isolate).

Moraxella catarrhalis: M 7m had cough and fever (blood isolate).

Providencia rettgeri: M 78y (blood isolate).

Rothia dentocariosa: pregnant F 31y had intra-abdominal abscess (blood and peritoneal isolates).

Selected bacterial infections, England and Wales: laboratory reports, weeks 91/42 – 45

Bordetella pertussis 42: 3 regions reported 4 or more cases: Trent (9), NE Thames (8) and N Western (9).

Ages: 19 babies aged less than 6 months, including 11 aged less than 3 months; 3 infants aged 6-11 months; 13 children aged 1-5 years; 5 aged more than 6 years and 2 age not stated.

Corynebacterium sp 3: *C. diphtheriae gravis* (non toxigenic), F 7y with sore throat (no history of recent travel). *C. jeikeium*, M 67y with neutropenia and IV-line (blood isolate). *Corynebacterium sp*, M 39y with IV-line (blood and IV-line tip isolates).

Public Health Medicine Environmental Health Group

The Public Health Medicine Environmental Health Group is holding its next meeting on Friday 13 December at the Central Public Health Laboratory, London. Contributions include papers on 'an outbreak of hepatitis B', 'tuberculosis in a school teacher', 'a DHA's response to an HIV infected health worker', 'an outbreak of typhoid fever in London' and 'ten years' experience of managing meningococcal meningitis in Birmingham'. Further information can be obtained from Dr Catherine Quigley, Department of Public Health, Trafford Health Authority, Moorside Road, Urmston, Manchester M31 3FP (telephone 061 746 8555).

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