

Communicable Disease Report

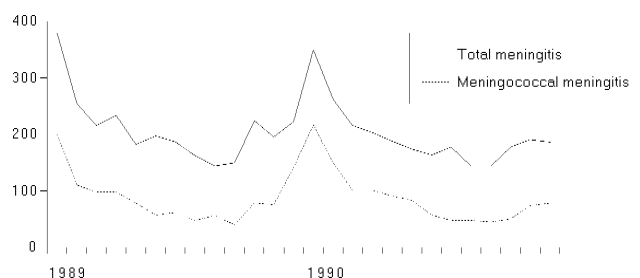
Meningitis surveillance

The two main data sets used in surveillance of meningitis are:

- statutory notifications of clinical cases by doctors to Proper Officers for infectious disease control. These are reported to OPCS and published in the Registrar General's Weekly Return.
- laboratory reports of organisms isolated from the cerebrospinal fluid (CSF) of patients with meningitis.

These data sets are complementary. Neither gives the absolute number of cases and there is considerable overlap between the two recording systems.

Notifications to OPCS of meningitis (England and Wales)



Laboratory reports to CDSC of meningitis (England, Wales and Ireland)



The figures show 4-weekly totals taken from both these sources for 1989 and 1990. Although *Neisseria meningitidis* (meningococcus) and *Haemophilus influenzae* are the commonest causes of bacterial meningitis, many other bacteria, viruses and other organisms may cause the condition. In some patients no causative organism is isolated and in others an isolate is only made from blood cultures; such cases are not included in the laboratory reporting system although they are notifiable.

Ciguatera fish poisoning

In late December, three people in the same household had symptoms including nausea, vomiting, diarrhoea, tingling mouth and fingers, headache, painful gums and tongue, hypertension and generalised itching. One elderly person was admitted to hospital. Onset was 3-4 hours after eating cooked fresh red snapper. Food remnants are being tested for toxin.

Two previous incidents have been recorded in the United Kingdom. A sporadic case was reported in 1979, and a husband and wife were affected in 1980. In both incidents fish was either purchased in the Caribbean or was eaten there before flying to the UK.

Virus infections:
weeks 90/50-91/01

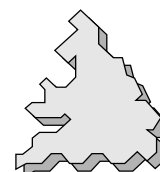
Bacteraemia and bacterial meningitis:
weeks 90/50-91/01

Notifications of meningitis:
weeks 90/49-52

Animal-associated infections:
weeks 90/50-91/01

Cryptosporidium outbreak:
Kent

Notices



Virus infections, England and Wales: weeks 90/50–91/01

Laboratory reports	Number of reports received				Total reports 90/50-91/01	Cumulative total for 1990
	90/50	90/51	90/52	91/01		
Coxsackie A	3	9	8	3	23	236 [§]
Coxsackie B	11	13	9	2	35	521 [§]
Echovirus	11	20	6	9	46	637 [§]
Measles	—	2	—	—	2	73 [§]
Mumps	1	1	1	1	4	89 [§]
Parvovirus B19	4	23	7	11	45	1753 [§]
Rubella	4	4	—	2	10	679 [§]

[§] The cumulative totals for 1990 include reports from Ireland (Northern and Republic), Channel Islands and the Isle of Man.

Coxsackie A: A7, 7; A9, 13; A16, 2 and A21, 1.

Four patients had meningitis (A9): 3 adults, 1 age not stated (CSF isolate 4).

A16, two children had hand, foot and mouth disease.

Comment: 198 coxsackie A reports in 1990 were of type A9 infections (84%); this virus accounts for most of the coxsackie A infections every year. Only 11 cases of A16 infection were recorded.

Coxsackie B: B1, 9; B3, 12; B4, 13; B5, 1.

B3, F 16y had encephalitis.

B4, F 19y had meningitis (CSF).

Comment: three coxsackie B viruses (B1, B2 and B4) each accounted for about a quarter of the infections reported in

1990.

No unusual reports were received.

Echovirus: type 1, 2; type 5, 5; type 6, 3; type 7, 2; type 9, 4; type 11, 4; type 17, 3; type 22, 8; type 25, 2; types 14, 15, 18, 19, 23, 1 each.

14 patients aged 4 months - 51 years had meningitis (CSF 8); 5 were type 9 infections.

Comment: echovirus type 22 accounted for 203 reports (32%) in 1990; this virus is commonly reported every year. Three other echoviruses (types 7, 9 and 11) each accounted for about 7% of reports. Echovirus type 4 (41 reports) has not been in circulation in the UK in recent years; a small number of cases of meningitis was reported in 1990.

Notifications

	Number of reports received				Total reports 90/50-91/01	Cumulative total for 1990
	90/50	90/51	90/52	91/01		
Measles	176	206	N/A	N/A	N/A	13200
Mumps	58	50	N/A	N/A	N/A	4254
Rubella	102	116	N/A	N/A	N/A	11419

N/A not available

Measles: 2 adults were reported.

Comment: the number of cases of measles in which the diagnosis is confirmed by laboratories is always a small proportion of total infections. Nevertheless, the laboratory data reflect the lowest number of notifications of measles ever recorded. The number of notifications for the period week 50–01 in the last 5 winters ranged from 693–8010.

Mumps: 2 children are reported: one with mumps meningitis and the other with sudden deafness. One man had orchitis and a male, age not stated, had meningitis.

Parvovirus B19. Ages: 4 children aged less than 15 years;

33 adults aged 15–44 years and 2 aged 45–64 years; 6 age not stated. Three regions reported more than 5 cases: S Western (10), W Midlands (7) and N Western (6). As usual, most of the patients had rash and/or arthralgia; 3 had aplastic crises (2 with sickle cell disease, 1 with hereditary spherocytosis).

Rubella. Ages: 2 children aged less than 15 years, including one neonate with congenital infection; 6 adults aged 15–44 years, including one woman and 2 aged 45–64 years.

Selected bacterial infections, England and Wales: 90/50 - 91/01

Bordetella pertussis 30: 2 regions reported more than 3 cases of whooping cough: Trent (7) and Oxford (6). Ages: 16 aged less than 6 months, including one neonate and 13 babies aged 3 months or less; 3 aged 6–11 months; 6 aged 1–5 years; 5 aged 6–14 years.

The number of reports received has fallen considerably when compared with recent 4 week periods. Of concern,

however, is the high proportion of very young babies among the cases reported. Notifications of whooping cough to OPCS have also declined.

Chlamydia trachomatis: F 8m (nasopharyngeal aspirate).
Streptococcus group A: M 6y with nephritis and acute arthritis; M 32y with rheumatic fever (both ASO titre, DNase B titre).

Bacteraemia and bacterial meningitis, England and Wales: weeks 90/50 – 91/01

Laboratory reports	No of reports received		Age		Total received	Cumulative total for 1990
	Blood only	CSF only or CSF & blood	<1m	≥65y		
<i>Neisseria meningitidis</i>	18	37	1	3	55 (16) *	1224 [§]
group A	–	1			1 (–) *	
B	10	25			35 (13) *	
C	4	5			9 (3) *	
ungrouped	4	6			10 (–)	
<i>Haemophilus influenzae</i>	70	62	2	8	132 (8) #	1210 [§]
type b	36	45			81 (3) #	
<i>Listeria monocytogenes</i>	3	1	–	2	4	88 [§]

* sulphonamide-resistant

β -lactamase producing[§] The cumulative totals for 1990 include reports from Ireland (Northern and Republic), Channel Islands and the Isle of Man.

Neisseria meningitidis: only one region reported more than 10% cases: N Western (10 cases). 15 patients presented with rash and M 31y also had acute arthritis.

16 sulphonamide-resistant strains were reported: **group B**, 13 (Northern 2, Yorkshire 2, E Anglia, NW Thames, SE Thames, Oxford, S Western 1 each, W Midlands 2 and

N Western 2); **group C**, 3 (Northern, E Anglia, SW Thames).

Also reported: **group B**, M 1y and F 14y with meningitis (throat only).

M 18y with rash and meningitis, clinical diagnosis only.

Laboratory reports	Age (years)										Not stated
	<1	1	2	3	4	5-9	10-14	15-19	20-24	≥25	
<i>Neisseria meningitidis</i>	19*	8	3	2	1	2	2	–	6	12	–
<i>Haemophilus influenzae</i>	38#	29	19	19	6	3	–	1	–	12	5

* includes 5 aged ≤3 months

includes 8 aged ≤3 months

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

	90/49	90/50	90/51	90/52	91/01
Total meningitis	48	42	52	44	N/A
Meningococcal meningitis	15	12	23	28	N/A
Meningococcal septicaemia	3	5	2	5	N/A

N/A not available

Haemophilus influenzae: only one region reported more than 10% cases: W Midlands (17 cases).

Of the 105 children aged 3 years or less: 61 had meningitis (7 blood isolate only), including one preterm neonate, and 1 of 4 children with pneumonia; 19 had epiglottitis; 5 had cellulitis (4 facial) and 5 had acute bone/joint infections including M 1m. 7 young children had β -lactamase producing strains and 3 had ampicillin-resistant strains. Of the 27 other patients: 9 had meningitis (4 children aged 4-5 years; F 8y with β -lactamase producing strain; F 62y, F 64y, F 82y and one female, age not stated); 4 had

epiglottitis (F 4y, M 8y, F 37y and male, age not stated); 5 had pneumonia.

Also reported: 3 children aged less than 2 years with septic arthritis (joint isolates).

***H. parainfluenzae* 3**: F 5m with cellulitis; M 53y; and male, age not stated (all blood isolates).

Listeria monocytogenes: M 64y, who had diarrhoea before admission, presented with meningitis (CSF, liver). 3 immunocompromised adults had bacteraemia (leukaemia/lymphoma 2; transplant 1).

Unusual organisms

Branhamella catarrhalis: F 1y died suddenly (blood, lung).

Haemophilus haemoglobinophilus: M 6y with dental abscess (blood).

H. paraphrophilus: F 2y with cerebral abscess had *Streptococcus milleri* also (pus).

Laboratory reports of animal-associated infections, England and Wales: weeks 90/50-91/01

Echinococcus granulosus 2: male, age not stated, and Italian F 59y both with liver cysts.

Fasciola hepatica 1: man from Middle East.

Leptospirosis 4: *L. hardjo* 2: M 43y, veterinary surgeon, and M 57y, working with cattle, both presented with fever.

L. icterohaemorrhagiae 1, M 32y after falling into farm pool which was known to be rat-infested. M 62y, pig farmer, with acute hepato-renal failure.

Pasteurella sp 22: *P. multocida* 17; *pasteurella sp* 2. 10 patients had infected dog bites; 2 had cat bites/scratches;

and 2 had infected wounds. F 25y had septic arthritis after penetrating traumatic injury (joint isolate). F 70y, who owned a cat, had chronic osteomyelitis (bone). M 2y with leukaemia; M 31y with infected pressure sore; M 81y with cellulitis of hand (all 3 blood isolates).

Toxocara 2.

Toxoplasma 40: eye lesions 11; lymphadenopathy 18 (histology suggestive 5); HIV antibody positive 2. F 36y, and her baby with congenital infection. F 68y with bilateral Bell's palsy (CSF antibody).

Cryptosporidium outbreak: Kent

Twenty-six primary cases of cryptosporidiosis have been identified in north-east Kent. The age of those affected ranges from 1-85 years and the onset of illness was in early December in the ten cases interviewed so far.

Local Health Authorities are investigating the possibility of a common source of infection. The Consultant in Public Health Medicine (Dr R. Sims) or CDSC would be grateful for information on cases thought to be associated with this incident.

Anniversary of discovery of congenital rubella

A one day meeting to mark the fiftieth anniversary of Sir Norman Gregg's discovery that rubella causes congenital defects, and the silver jubilee of the Department of Virology at St Thomas Hospital, will be held on Wednesday 27 February 1991 at the Royal Society of Medicine, London.

For further information please contact: Concorde Service Ltd, 10 Wendell Road, London W12 9RT (telephone 081-743 3106; Fax 081-743 1010).

Viruses and malignancy

A one day meeting of the Section of Clinical Immunology and Allergy will be held at the Royal Society of Medicine on Monday 11 March 1991.

For further information please contact Samantha Rex, Sections Office, Royal Society of Medicine, 1 Wimpole Street, London W1N 8AE (telephone 071-408 2119; Fax 071-355 3197).

**From week 91/01 data in CDR will be from England and Wales only, unless otherwise stated.
Because of this change, 4-weekly averages for the previous 5 years will not be included.**

Weekly numbers are provisional and should not be used to indicate trends