

Communicable Disease Report

Influenza surveillance

England and Wales: Telephone reports from different parts of the country reveal wide variations in the occurrence of influenza-like illness. Some areas report considerable influenza-like illness in the local community associated with increased hospital admissions for respiratory illness and some virologically confirmed infections due to influenza A virus. Some other areas report increased influenza-like illness in the community with few influenza virus infections confirmed in the laboratory. Yet other areas have seen little influenza-like illness in the community so far and almost no laboratory confirmed influenza infections.

Outbreaks of influenza A have been reported among elderly people in hospitals in London and Yorkshire. Indices from spotter practice schemes indicate some increase in influenza activity: consultations for 'influenza' from the CDSC Welsh scheme increased from 8.6 per 100,000 population in week 91/51 to 43.8 in week 91/52, but this increase was almost entirely due to reports from one practice. The RCGP rates for 'epidemic influenza' remained at 6-8 per 100,000 in the last three weeks of 1991, and the rate for 'influenza-like illness', which increased slightly from 35 to 53 in week 91/51, was 54 in week 91/52. A small increase was observed in applications for hospital beds in the London area in the week ending 4 January 1992.

Fifteen laboratory reports of influenza A infection in England and Wales were received by CDSC in the week ending 3 January 1992, compared with four in the previous week. The PHLS Virus Reference Laboratory has confirmed a total of 18 influenza virus isolates since September 1991, of which three were received last week. They have all been influenza A of the H₃N₂ subtype, of a strain similar to A/Beijing/353/89, which is similar to the strain reported from the United States, and which closely resembles the component contained in the vaccine.

Europe: Influenza activity has been reported in a number of European countries in the last few weeks and the predominant virus has been a similar influenza A subtype.

United States: The Centers for Disease Control continue to report widespread or regional influenza activity in 28 states of America with outbreaks reported in schools, nursing homes and a county jail. The H₃N₂ subtype still accounts for the majority (82%) of influenza A viruses subtyped, but H₁N₁ strains have been reported from the Mid and South Atlantic regions. Sporadic isolates of influenza B have been reported from Florida, Hawaii, Texas and Utah. From a baseline of 2%, the percentage of consultations to sentinel physicians for influenza-like illness had increased to 9% by the third week of December 1991. Excess deaths due to pneumonia and influenza have been reported for the first time in this influenza monitoring season.

Comment: Some of the influenza-like illness currently reported in the community in England and Wales is due to influenza virus infection, and much of the remainder to other respiratory pathogens such as respiratory syncytial virus. The proportion contributed by influenza virus may change but it is not yet clear whether this virus is responsible for the recent increases in influenza-like illness in the community. CDSC would be grateful for information on outbreaks of influenza-like illness, and physicians are encouraged to obtain suitable specimens for laboratory examination. The PHLS Virus Reference Laboratory would be pleased to receive, for confirmation and typing, any isolates of influenza virus.

Virus infections:
weeks 91/50 - 92/01

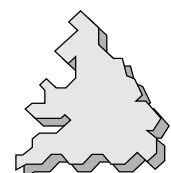
Selected bacterial infections:
weeks 91/50 - 92/01

Meningococcal infection

Bacteraemia and bacterial meningitis:
weeks 91/50 - 92/01

Unusual infections

Animal-associated infections:
weeks 91/50 - 92/01



Virus infections, England and Wales: laboratory reports, weeks 91/50 – 92/01

Laboratory reports	Number of reports received				Total reports 91/50 - 92/01	Cumulative total 1991
	91/50	91/51	91/52	92/01		
Coxsackie A	–	6	–	3	9	72
Coxsackie B	5	3	1	2	11	431
Echovirus	22	8	12	24	66	752
Measles	–	3	–	1	4	50
Mumps	1	1	3	4	9	52
Parvovirus B19	2	–	–	3	5	704
Rubella	2	1	1	4	8	239

Coxsackie A: A7, 1; A9, 7; A16, 1.

Four neonates (1 CSF, 3 faecal isolates); 2 infants aged 1-11 months (1 throat, 1 nasal isolate); two adults (throat isolates); one patient, age not stated.

Coxsackie B: B4, 5; B5, 3; B6, 2; B untyped, 1.

Three infants aged 1-11 months (all faecal isolates); 5 adults (1 faecal, 1 throat, 4 serum isolates), one of whom presented with myocarditis.

Echovirus: type 4, 1; type 7, 1; type 9, 8; type 13, 1; type 14, 2; type 16, 1; type 18, 9; type 22, 9; type 23, 2; type 25, 1; type 27, 3; type 30, 19.

Eighteen patients presented with meningitis (no CSF isolates): 8 children aged less than 15 years, including 5, 1-14 years and 3 babies aged less than 1 year; 18 adults.

Two regions reported more than ten cases: Northern (11) and Yorkshire (11).

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

Notifications	91/50	91/51	91/52	92/01	Total 91/50-51	Cumulative total 1991
Measles	155	146	NA	NA	301	9502
Mumps	64	46	NA	NA	110	2904
Rubella	123	82	NA	NA	205	7126

Measles: M 8y with encephalitis; 3 adults.

Mumps: six children (2 serology, 3 CSF isolates and 1 nasopharyngeal aspirate isolate); 3 adults (serology).

Parvovirus (B19): five adults (1 male, 4 female, one of whom

was pregnant).

Rubella: eight adults (6 male, 2 female, one of whom was pregnant).

NA not available

Selected bacterial infections, England and Wales: laboratory reports, weeks 91/50 – 92/01

Bordetella pertussis 6: Trent (1), NE Thames (2) and SW Thames (3).

Ages: 2 babies aged less than one month; 3 children aged 4-11 years and one patient, age not stated.

Meningococcal infection

Four clusters of meningococcal infection were reported to CDSC in December:

West Lambeth: Three unrelated children, all under two years of age, became ill within a five day period. All lived within a mile of each other but detailed enquiries have failed to establish a common link. *Neisseria meningitidis* of group B was isolated from each child. Chemoprophylaxis was offered to household contacts.

Mid-Staffordshire: Two brothers, aged four and five years, became ill within hours of each other. *N. meningitidis* of group C was isolated from both. Household contacts were offered chemoprophylaxis.

North-east Warwickshire: Meningitis due to *N. meningitidis* group C (type 2A, subtype P12) was diagnosed, during the first half of December, in three children attending the same primary school. Later, an indistinguishable strain was isolated from the mother of a child in the adjacent middle school. The mother subsequently died. In addition to household contacts

of cases, chemoprophylaxis was offered to all children attending the primary school and their siblings. Pupils at the primary school and their family members, staff at the primary school and pupils at the middle school were invited to attend a local health centre for vaccination with meningococcal A and C vaccine.

Sunderland: Five cases of meningococcal infection occurred in the second half of December. Three attended the local school but were in different years. The other two cases had links with the school through siblings and friends. In three cases (including two school attenders) infection was due to a group C organism. In the remaining two cases (one school attender) no organism was isolated. Chemoprophylaxis was offered to household contacts of all cases and vaccination offered to household contacts of cases of group C infection.

Comment: There were 1034 laboratory reports of *N. meningitidis* in England and Wales to CDSC in 1991 compared with 1241 in 1990. CSF isolates outnumber blood isolates by

about 2 : 1. Group C organisms accounted for 25% (264) of the reports in 1991 and 29% (362) in 1990. Household and kissing contacts of cases of meningococcal disease should be given appropriate chemoprophylaxis¹ followed by vaccine² (where an organism of group A or C has been identified in the index case). CDSC will be grateful for further information on clusters of meningococcal infection.

References

1. PHLS Meningococcal Infections Working Party. The epidemiology and control of meningococcal disease. *Communicable Disease Report* 1989; (8): 3-6.
2. Department of Health, Welsh Office, Scottish Home and Health Department. Immunisation against infectious disease. London: HMSO, 1990.

Bacteraemia and bacterial meningitis, England and Wales: weeks 91/50 – 92/01

Reports of blood and CSF isolates of bacteria are grouped into the following four categories and published in a weekly sequence:

1. Staphylococci and streptococci (excluding anaerobic cocci).
2. Enterobacteriaceae ie, *Citrobacter*, *Enterobacter*, *Escherichia coli*, *Klebsiella*, *Proteus* and *Salmonella species*.
3. Environmental and anaerobic bacteria ie, *Bacteroides*, *Clostridia*, *Acinetobacter*, *Aeromonas*, *Pseudomonas*, *Serratia* and anaerobic cocci.
4. *Neisseria meningitidis*, *Haemophilus species* and *Listeria monocytogenes*.

This week's CDR contains reports for category 4. Less commonly reported causes of bacteraemia or bacterial meningitis are listed under **Unusual infections**.

Laboratory reports	No of reports received		Age		Total received	Cumulative total 1991
	Blood only	CSF only or CSF & blood	< 1m	≥ 65y		
Neisseria meningitidis						
group A	12	27	1	—	39 (9) *	971
B	—	—	—	—	—	—
C	8	18	—	—	26 (8) *	—
ungrouped	2	4	—	—	6 (1) *	—
Haemophilus influenzae	2	5	—	—	7 (-) *	—
type b	42	37	4	3	79 (3) §	1138
Listeria monocytogenes	18	27	—	—	45 (2) §	90
	6	—	—	—	6	—

*sulphonamide-resistant §β-lactamase producing

Neisseria meningitidis: five regions reported more than 10% of cases: Northern (6 cases), Yorkshire (4), Trent (4), E Anglia (4) and SE Thames (6).

Nine sulphonamide-resistant cases were reported: **group B**, 8 (Yorkshire, E Anglia 2, NW Thames, Wessex 3, N Western);

group C, 1 (Northern). Also reported: F 2y with clinical meningococcal meningitis whose mother had a positive *N. meningitidis* throat swab. M 6y with meningitis and a positive *N. meningitidis* group B throat swab.

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

Notifications	91/50	91/51	91/52	92/01	Total 91/50-51	Cumulative total 1991
Total meningitis	45	48	NA	NA	93	2695
Meningococcal meningitis	22	16	NA	NA	38	1105
Meningococcal septicaemia	4	4	NA	NA	8	270

NA not available

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	
Neisseria meningitidis	12 *	6	1	1	1	2	1	7	4	4	—
Haemophilus influenzae	33 §	21	8	4	—	—	—	—	—	12	1

* includes 2 aged ≤3 months

§ includes 8 aged ≤3 months

Haemophilus influenzae: three regions reported more than 10% of cases: Trent (9 cases), SE Thames (11) and Wales (8). Three ampicillin-resistant strains were reported: M 8m and M 9m (both Trent) and 5m sex not stated (SE Thames). Also reported: M 2y, M 3y, F 1y, F 5y with septic arthritis/osteomyelitis (3 joint isolates, 1 pus isolate); M 41y (brain and

lung isolates); F 4y with epiglottitis (throat isolate); F 4y (throat isolate).

Listeria monocytogenes: bacteraemia: F 69y and F 78y were immunocompromised. M 69y with Easton-Lambert syndrome. F 1d with meningitis (no CSF isolate); M 89y died.

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)	6 (5)	-	1	-	1
Epiglottitis	7	-	1	-	-
Pneumonia	-	-	1	2	-
Septic arthritis/osteomyelitis	11	-	-	-	-
Facial cellulitis	1	-	-	-	-

Unusual infections

Agrobacterium radiobacter: F 74y with lung abscess (blood isolate).

Bacillus sp: M 33y, injecting drug user, with chronic hepatitis and liver failure (blood isolate; coagulase negative staphylococcus also isolated).

Bifidobacterium adolescentis: M 72y (blood isolate; *Escherichia coli* also isolated).

Flavobacterium indologenes: F 72y with leukaemia had IV-line and prosthetic heart valve (blood isolate).

Moraxella catarrhalis: F 2y with congenital heart disease had previous cardiac surgery (blood isolate).

Propionibacterium sp: F 1d had aspirated meconium (blood isolate).

Providencia stuartii: F 81y with urinary catheter (blood isolate).

Streptococcus adjacens: M 71y had endocarditis (blood isolate).

Vibrio alginolyticus: F 19y had otitis externa (external ear isolate).

Animal-associated infections, England and Wales: laboratory reports, weeks 91/50 – 92/01

Borrelia burgdorferi 14 (all serology): M 44y, resident near a Lyme disease endemic area, with joint stiffness after tick bite, and M 42y with arthritis after tick bite in Germany, both had erythema migrans; M 42y with leg pain (CSF isolate also) and F 75y both had bilateral facial palsy; F 42y, resident in an endemic area, with arthralgia and F 62y with general malaise and muscular pains, both had suspected acrodermatitis chronica atrophicans; M 38y; M 40y after tick bite in an endemic area of Germany 3-4 months previously; M 44y with sweats and exhaustion; M 45y, resident in an endemic area, with back pain and Bell's palsy after insect bite; M 53y with arthralgia, myalgia and lethargy; M 70y with rash, arm pain and meningitis after tick bite (CSF isolate only); F 71y with rash, arthralgia and abdominal pain, lives in the New Forest; male, age not stated, a deer hunter.

Brucella sp 2: *Brucella melitensis* 1 (blood isolate): M 72y had recently returned from the Gulf; *Brucella sp* 1 (serology): M 40y, resident in Sussex, with PUO, polyarthritis and bilateral knee effusions, had travelled to Europe last summer.

Leptospira sp 5 (all serology): *L. hardjo* 2: M 20y, a dairy farmer, with severe headaches and influenza-like illness; M 30y, a cowman. *Leptospira sp* 3: M 34y, a canoeist, with lymphadenopathy and influenza-like illness; M 45y; M 56y with jaundice and vomiting, died.

Pasteurella sp 14: *P. haemolytica* 1: M 64y with leukaemia (blood isolation); *P. multocida* 13: 4 patients had dog bites, 3 had cat bites/scratches including F 83y (blood isolate) and 3 reported animal contact including M 6w (blood and CSF isolates) and M 50y (blood isolate); M 65y with septic finger and F 83y with pneumonia (both blood isolates); F 63y with otitis media (middle ear isolate).

Toxocara sp 4: M 8y with retinal granuloma; F 4y with eosinophilia and pica; F 9y; F 51y with uveitis.

Toxoplasma gondii 36: 14 patients had lymphadenopathy (histology suggestive 4); 8 were immunocompromised including 5 HIV-1 antibody positive; 5 patients had eye lesions; F 29y with cerebral toxoplasmosis; male, age not stated, with myocarditis.

Data are for England and Wales only, unless otherwise stated.
Weekly numbers are provisional and should not be used to indicate trends