

Communicable Disease Report

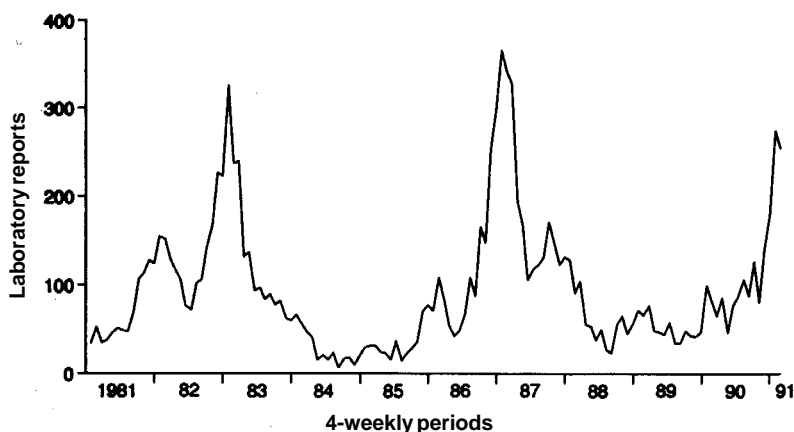
Influenza, England and Wales

Influenza activity in England and Wales appears to be returning to a low level. The RCGP consultation rate for 'epidemic influenza', which peaked at 37 per 100,000 in the week ending 5 February, has fallen to 14 (provisional) in the week to 5 March. A similar fall in consultations for 'influenza' is reported from the CDSC Welsh Unit sentinel practice scheme. Apart from the one previously reported isolate of influenza A subtype H₁N₁, confirmed laboratory reports are confined to influenza B infections.

Mycoplasma pneumoniae surveillance

Reports of *Mycoplasma pneumoniae* continue to increase in line with the expected 4 yearly cycle. The diagnosis should be considered in cases of community acquired pneumonia, particularly in children and young adults.

Laboratory reports of *Mycoplasma pneumoniae* infections, England and Wales



Application of molecular techniques to clinical diagnosis

The Association of Clinical Microbiologists will hold a scientific meeting at the Central Public Health Laboratory, Colindale on Friday 26 April 1991; it is open to non-members and is free of charge. Presentations will include Retroviral receptors (Prof R Weiss), Diagnostic microbiology (Dr P Hawkey), Hepatitis C (Dr J Garson) and Legionella (Dr N Saunders).

Further details are available from Dr Moyra McConnell, Division of Enteric Pathogens, Central Public Health Laboratory (telephone 081 200 4400).

Chemoprophylaxis for meningococcal disease: amendment

The dose of rifampicin for meningococcal prophylaxis in patients aged over 1 year is 10 mg/kg 12 hourly for 2 days, up to a maximum of 600 mg per dose. For children aged between 3 and 12 months, the dose is 5mg/kg. These dosages are consistent with those given in the British National Formulary.

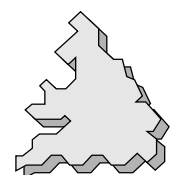
Respiratory tract infections:
weeks 91/07 - 10

Mycobacterial infections:
weeks 91/07 - 10

Bacteraemia and bacterial meningitis:
weeks 91/07 - 10

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weeks 91/07 - 10

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PHLS

Public Health Laboratory Service

Respiratory tract infections, England and Wales: laboratory reports weeks 91/07 - 10

Laboratory reports	Number of reports received				Total reports 91/07-10	Cumulative total 1991
	91/07	91/08	91/09	91/10		
Adenovirus (excluding EM faeces)	40	73	46	20	179	499
Coronavirus	-	1	-	-	1	6
Influenza A	4	8	4	2	18	57
Influenza B	114	183	142	141	580	839
Parainfluenza	11	5	8	12	36	63
RS virus	349	438	306	324	1417	4526
Rhinovirus	10	10	1	11	32	79

Comment

Adenovirus (excluding EM faeces): 44 patients had eye infections. 12 patients had pneumonia and 18 had bronchiolitis. M 34y was HIV-1 antibody positive.

Influenza A: (1 isolate), H₁N₁, M 42y (W Midlands). 2 patients had pneumonia.

Influenza B (167 isolates; 107 rising titres; 14 microscopy): one region reported more than 10% cases: S Western (128 cases).

Ages: 43% of cases were aged 15-44 years and 11% were aged 65 years or more.

105 patients had pneumonia; 23 had bronchiolitis; 3 had croup. M 69y had polyneuropathy; M 28y had post infectious myeloradiculopathy; M 7y and M 14y had encephalitis; F 61y had Guillain Barré syndrome. F 12y had lung abscess; M 52y had *Staphylococcus aureus* pneumonia.

Parainfluenza: type 1, 17; type 3, 18; type 4, 1. 2 patients had pneumonia; 6 had bronchiolitis; 3 had croup.

RS virus: 3 regions reported more than 10% cases: Northern (232 cases), Trent (197) and W Midlands (84). 83% of patients were aged less than 1 year. 15 patients had pneumonia, 323 had bronchiolitis and 2 had croup.

Rhinovirus: 1 patient had pneumonia and 3 had bronchiolitis.

Chlamydia psittaci: 13 patients had pneumonia. 7 patients had contact with birds, including budgerigars 4, parrot 1, hens, ducks and parakeets 1, 1 man worked on a bird farm. F 8y also had infection with *Mycoplasma pneumoniae*.

Coxiella burnetii: M 40y travelled to Pakistan; M 66y with hepatitis, also had raised *C. psittaci* titre.

Legionella pneumophila: 12 males (includes 1 Pontiac fever) and 6 females; age range 31-76 years. 7 patients had pneumonia. Immunocompromised M 49y and F 76y died. One case was associated with an industrial site in the north-west of England (CDR 1991, 1, 33).

M 40y worked as maintenance engineer in hospital. Recent travel abroad 5: Spain 2, Lanzarote, Malta, Turkey one each.

Mycoplasma pneumoniae: 3 regions reported more than 10% cases: Trent (28 cases), E Anglia (33) and S Western (35). 22% of patients were aged less than 10 years; 59% were aged 10-44 years.

110 patients had pneumonia. 3 boys and 1 girl aged 5-8 years had Stevens Johnson syndrome. 3 children and 2 adults had other rashes; F 18y had a rash and meningitis. M 7y had meningitis. M 32y had Guillain Barré syndrome.

Laboratory reports	Number of reports received				Total reports 91/07-10	Cumulative total 1991
	91/07	91/08	91/09	91/10		
Chlamydia psittaci	8	7	3	5	23	94
Coxiella burnetii	2	-	-	-	2	11
Legionella pneumophila	8	1	1	8	18	35
Mycoplasma pneumoniae	56	92	46	47	241	624

Outbreaks of influenza B: 1991

Thirteen outbreaks of influenza-like illness, associated with one or more confirmed infections due to influenza B virus, were reported to CDSC and/or the Virus Reference Laboratory (VRL) from England and Wales in January and February 1991. Eight of these outbreaks were in schools.

A large outbreak occurred in a school in Leicestershire, when approximately 100 out of nearly 500 boarding pupils developed an influenza-like illness. The outbreak began in mid-January and influenza B virus was isolated from three of the affected pupils. About half of the school had

received influenza vaccination in the previous autumn and a study of the effectiveness of the vaccine in this group is being conducted.

Other school outbreaks were reported from Dorset (Dorchester PHL), Somerset (Bath PHL), Bishops Stortford, Worcester (2 outbreaks) and from Cardiff, Oxford and Reading PHLs. Outbreaks were also reported from a psychiatric unit (Exeter PHL), a psychogeriatric ward (Guildford PHL), a paediatric and geriatric ward in one hospital (Gloucester PHL), a camp for 16-19 year olds

(Dorchester PHL) and a ship (Plymouth PHL).

The VRL reports two different strains of influenza B virus from both sporadic cases and outbreaks this year: strains similar to B/Victoria/2/87 and others similar to B/Yamagata/16/88 - B/Panama/45/90.

These listed outbreaks are undoubtedly only a small proportion of all outbreaks occurring during this period.

The Respiratory Diseases Section of CDSC would be pleased to hear, at any time, about outbreaks of respiratory disease, including suspected influenza, and the VRL would be equally pleased to receive specimens.

Respiratory Diseases Section, CDSC
Virus Reference Laboratory, CPHL

Mycobacterial infections, England and Wales: laboratory reports weeks 91/07 - 10

Mycobacterium tuberculosis 96: 52 males, 39 females, 5 not stated.

Pulmonary infections 73: 48 males, 23 females, 2 not stated. 24 were sputum smear positive. 2 were HIV-1 antibody positive. There were 2 patients aged less than 15 years and 20 aged 65 years or more. 4 isolates were from pleural aspirates.

Disseminated 1: M 39y with miliary disease.

Meningitis 1: F 65y (CSF isolate).

Lymph nodes 6: 5 females, 1 not stated (1 from ISC).

Bone/joint 5: 4 females, 1 not stated. 2 patients with spinal infections were from ISC.

Abdomen 4: 1 male, 3 females.

Abscess 3: all females with neck abscesses.

Skin 3: 2 males (1 hand, 1 chest wall), 1 female (ankle).

M. bovis 3: M 66y (urine), M 66y (aspirate from sub-mental node) and F 78y (neck abscess).

M. kansasii 1: F 24y with pulmonary infection.

M. xenopi 2: M 58y and F 49y, both pulmonary infections.

Avium-intracellulare group 6: M 43y and F 83y, both pulmonary infections. M 38y who died and M 43y (both blood isolates); M 36y and one sex and age not stated (both sputum isolates), all HIV-1 antibody positive.

M. malmoense 5: F 43y, M 63y, M 65y and male age not stated, all pulmonary infections (2 sputum smear positive); F 58y, with pulmonary infection and bronchial carcinoma.

M. fortuitum 2: F 10y with submandibular lymph nodes. M 23y with cystic fibrosis (sputum smear positive).

M. marinum 1: M 71y with fish tank granuloma.

Bacteraemia and bacterial meningitis, England and Wales: weeks 91/07 - 10

Laboratory reports	No. of reports received		Age		Total received	Cumulative total for 1991
	blood only	CSF only or CSF & blood	<1m	≥65y		
Staphylococci						
S. aureus	362	3	11	152	365 (1)*	953
Coagulase negative	188	4	16	36	192	459
Streptococci						
group A	50	1	1	23	51	144
group B	38	7	16	12	45	127
group C & G	25	—	1	18	25	77
enterococci	100	—	4	41	100	259
α and non-haemolytic	95	1	5	26	96	250
S. pneumoniae	370	26	2	188	396	1097

* methicillin-resistant strains of *Staphylococcus aureus*

Bacteraemia

Staphylococci

S. aureus: F 3y had CSF shunt; 18/72 patients with IV/CVP-lines were on haemodialysis; 16 patients had pneumonia/lung abscess and 20 had UTI/GU surgery including 6 women with post partum infections.

Also reported: M 21y with septic arthritis (joint isolate).

Coagulase negative: 4/111 patients with IV/CVP-lines were on haemodialysis.

Streptococci

group A: 23 patients had skin infections; 5 had pneumonia, including F 35y with chickenpox who died; F 37y had peritonitis; F 26y had post abortum infection. M 66y had Ludwig's angina.

group B: 12 neonates; 4 women with post partum infections and 2 elderly patients with UTI/GU surgery.

group C, 5 and **group G**, 20: 5 patients had skin infections and 2 had pneumonia.

enterococci: *S. avium* 1; *S. bovis* 10; *S. durans* 1; *S. faecalis* 52; *S. faecium* 14. 18 patients had UTI/GU surgery including one woman with post partum infection; 9 had biliary tract disease/surgery.

α- and non-haemolytic: *S. acidominimus* 3; *S. milleri* 22; *S. mitis* 14; *S. morbillorum* 2; *S. salivarius* 8; *S. sanguis* 38; *S. thermophilus* 1. 5 patients had biliary tract disease/surgery.

Also reported: **S. milleri**, F 74y with liver abscess (pus).

S. pneumoniae: 42 children aged 4 years or less including 4 neonates, 6 children with pneumonia and one with mastoiditis. 168 other patients had pneumonia including two pairs of siblings; 2 women had post partum infections. Also reported: M 59y with mycotic femoral aneurysm three months after chest infection; F 76y with peritonitis (aspirate).

	Total bacteraemia	Acute bone/joint	Age		IV/CP lines	Pace- makers	Endocarditis (with prostheses)	IVDA (with endocarditis)
			<15y	≥65y				
Staphylococci								
S. aureus	362	28	12	9	72	7	16 (-)	1 (-)
Coagulase negative	188	-	-	-	111	1	5 (3)	-
Streptococci								
group A	50	2	-	-	-	-	-	-
group B	38	1	-	1	2	-	-	-
group C & G	25	1	-	1	1	-	1 (-)	-
enterococci	100	-	-	-	17	1	6 (3)	1 (-)
α and non-haemolytic	95	1	-	1	8	1	15 (1)	-
S. pneumoniae	370	4	1	2	-	1	1 (-)	-

Meningitis

Staphylococcus aureus: preterm F 1d; M 52y with hepatic failure; M 78y; M 82y (blood, PM spleen).

Coagulase negative: preterm M 9d; M 9m, F 44y and F 55y with CSF shunts.

Streptococci: group A: F 6y with pharyngitis and otitis media.

group B: 4 neonates; 2 babies aged 1-2 months and one infant age not stated.

S. sanguis: F 84y.

S. pneumoniae: 12 children aged 4 years or less (blood isolate only, 1) including one with pneumonia; 19 patients aged 5-64 years (blood isolate only, 5) and 5 patients aged 65 years or more (blood isolate only, 4).

Also reported: M 66y with pneumonia and endocarditis (blood, brain, sputum isolates) and F 83y, found dead (brain).

Unusual infections

Branhamella catarrhalis: M 8y with leukaemia had fever (blood isolates)

Diphtheroids: 2 patients with leukaemia and IV-lines (both

blood isolates).

Neisseria pharyngis: male infant (blood isolate).

Request for isolates of *Corynebacterium diphtheriae*

A rapid assay for the diphtheria toxin gene, using the polymerase chain reaction, has been developed in the Department of Medical Microbiology at St Bartholomew's Hospital, London. We would like to assay as many different isolates of *C. diphtheriae* and related species, eg *C. ulcerans* and *C. ovis*, as possible. Dr M J Pallen, telephone 071-601 8408 or 071-601 8410, Department of Medical Microbiology, St Bartholomew's Hospital, West Smithfield, London EC1A 7BE, would be grateful for any such isolates.

Course in communicable disease control

The University of Warwick, in conjunction with CDSC and the West Midlands Institute of Public and Environmental Health, will hold a 2-week course in communicable disease control, focusing on practical aspects of surveillance, prevention and control of communicable disease and infection and associated environmental health issues, from 7-17 May 1991. The course is particularly relevant to doctors, including trainees, who may be required to take part in CCDC/MOEH-type rotas.

Further details can be obtained from Dr G T Pollock, School of Postgraduate Medical Education, University of Warwick, Coventry CV4 7AL (telephone 0203 523913 or 673896).

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