

Communicable Disease Report

***Clostridium difficile* infection in Manchester**

Over the past two months, *Clostridium difficile* has been isolated from nearly 50 patients with gastrointestinal symptoms, in two North Manchester hospitals. About one-third of the total occurred in the early stages of an outbreak on two adjacent geriatric wards. Since then, other cases have occurred in other wards, predominantly among elderly patients. Nearly all cases have a history of oral antibiotic usage. The deaths of six patients were judged to have been due, at least in part, to *C. difficile* infection.

Control measures have included: stopping admissions to affected wards; moving symptomatic cases onto one specific ward (as far as practicable); ensuring that all staff practise scrupulous hand hygiene; instituting full enteric precautions; providing additional ward cleaning, and reviewing the use of antibiotics on affected wards.

Water contamination incident

High counts (50-130 per ml) of *Escherichia coli* were detected in routine samples taken on 8 January from a service reservoir at Chessington and three other points in the supply system serving over 30,000 premises and around 90,000 people in parts of Kingston, Esher and Richmond.

A water boiling notice was issued on 9 January and lifted on 14 January. Other action taken by Thames Water included taking the reservoir out of service, extra chlorination of the affected part of the system and setting up a freephone advice line.

Repeat sampling has not shown evidence of continuing contamination and initial enquiries do not suggest an increase in gastrointestinal infection in the affected area.

The consultant for communicable disease control, Dr Barry Walsh (telephone 081 789 6611 extn 2883), is leading an investigation into the incident and would be interested to receive reports of cases of gastrointestinal infection since 3 January that may be linked to this incident.

The Warwick Course in Communicable Disease Control

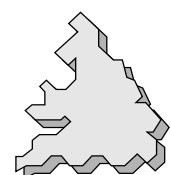
The School of Postgraduate Medical Education at the University of Warwick will host the ninth Warwick course in communicable disease control from 5 - 15 May 1992. The course will focus on the practical aspects of surveillance, prevention and control of communicable disease and relevant environmental health issues. The course is designed to meet the requirements of doctors seeking training in communicable disease control as recommended in the nationally approved modular training programme. It is also relevant for trainees in public health medicine and medical microbiology, and those who feel the need for updating in this specialty. The cost of the nine day course is £295. Further details can be obtained from the School of Postgraduate Medical Education, University of Warwick, Coventry CV4 7AL (telephone 0203 523913).

Influenza update

Respiratory tract infections:
weeks 91/51 - 92/02

Mycobacterial infections:
weeks 91/51 - 92/02

Bacteraemia and bacterial meningitis:
weeks 91/51 - 92/02



Influenza update

England and Wales: Consultations (per 100,000 population) for new episodes of 'epidemic influenza' have risen from 7.5 (later corrected to 16.0) in the week ending 29 December 1991 to 22.0 (provisional) in the week ending 5 January 1992. Rates for 'influenza-like illness' rose from 55.0 to 89.7 (provisional) (RCGP data - Figure). In Wales, consultations for 'influenza' rose from 43 (per 100,000 population) to 66 in the same period (CDSC Welsh Unit scheme). Illness is reported in all age groups in both England and Wales. Applications to the Emergency Bed Service for hospital bed placements in the London area continue at their usual level for the time of year. The number of deaths (4) attributed to 'influenza' on death certificates showed no increase in the last week of 1991 and the number from all respiratory causes combined (777) was at the level anticipated for this time of year.

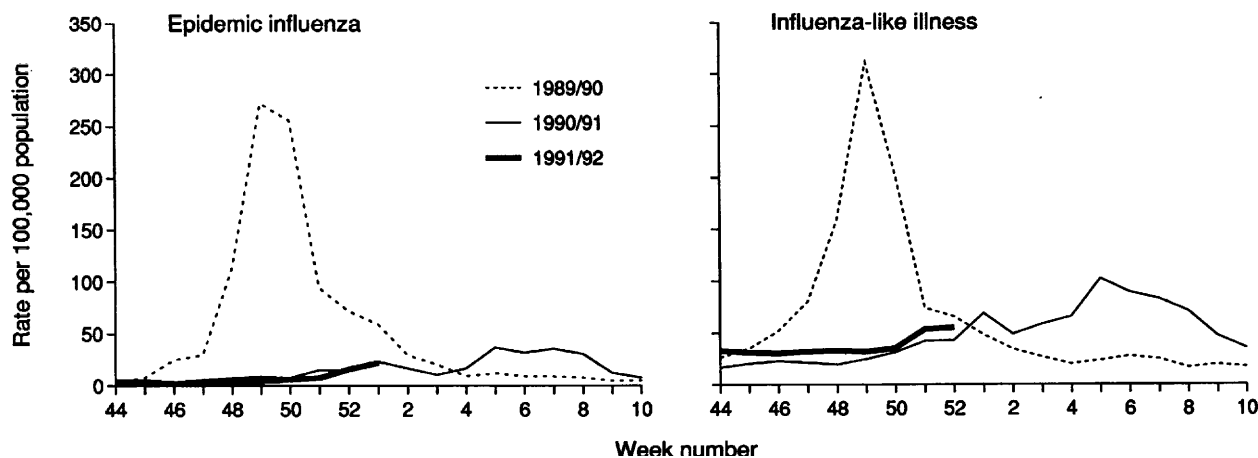
Thirty-seven reports of influenza A virus infection were received from laboratories in England and Wales in week 92/02, compared with 15 in the previous week. Nine influenza B infections were also reported. The PHLS Virus Reference Laboratory confirmed 30 influenza A isolates, of which 28 were of the H₃N₂ subtype and 2 of the H₁N₁ subtype. One influenza B isolate was also confirmed.

Europe: Reports of influenza-like illness in Scotland are being received at the usual levels for the time of year in the absence of significant influenza virus activity (Communicable Disease [Scotland] Unit). Increases in influenza activity, associated with influenza A subtype H₃N₂, have been reported from France, Holland and Spain in December but is reported as low in most other European countries and Scandinavia.

United States: A high level of influenza activity is reported for the third successive week with widespread or regional activity in 31 states and influenza-associated mortality reported at 'epidemic' levels. 99% of isolates have been of type A and 80% of these have been of the H₃N₂ subtype.

Comment: Despite many reports from around the country of influenza-like, or respiratory, illness in the community, the recent increases in indices of influenza activity are relatively modest (Figure). The number of laboratory reports, while confirming the presence of influenza virus in the community, is no greater than is often seen in years of limited influenza activity. RSV infections continue to be reported in high numbers, and these, along with other respiratory viruses such as adenovirus and parainfluenza virus, may account for much of the current influenza-like and minor respiratory illness.

Figure RCGP rates for epidemic influenza and influenza-like illness in England and Wales



Respiratory tract infections, England and Wales: laboratory reports, weeks 91/51 - 92/02

Laboratory reports	Number of reports received				Total reports 91/51 - 92/02	Cumulative total 1991
	91/51	91/52	92/01	92/02		
Adenovirus (excluding EM faeces)	13	27	50	68	158	2334
Coronavirus	-	-	2	3	5	56
Influenza A	4	4	15	37	60	133
Influenza B	1	1	1	9	12	1980
Parainfluenza	9	9	6	23	47	624
RS virus	982	559	1595	1589	4725	11124
Rhinovirus	6	8	23	8	45	368

Comment

Adenovirus (excluding EM faeces and Group F): 35 patients had eye infections, 7 had pneumonia, and 17 had bronchiolitis. Male, age not stated, with meningitis.

Coronavirus: three cases in a day nursery.

Influenza A (14 single titres; 5 rising titres; 22 isolates, 5 of subtype H₃N₂): nine patients had pneumonia, 6 had bronchiolitis.

Influenza B (11 single titres; 1 isolate): two patients had pneumonia.

Parainfluenza: type 1, 7; type 2, 19; type 3, 18; untyped, 3. Two patients had pneumonia, 17 had bronchiolitis and 3 had croup.

RS virus: one region reported more than 10% of cases: Trent (580). 83% of patients were aged less than 1 year. Thirty patients had pneumonia, 1619 had bronchiolitis and 12 had croup. An outbreak in a ward of elderly patients was reported.

Rhinovirus: one patient had pneumonia, 12 had bronchiolitis.

Laboratory reports	Number of reports received				Total reports 91/51 - 92/02	Cumulative total 1991
	91/51	91/52	92/01	92/02		
<i>Chlamydia psittaci</i>	6	1	11	12	30	410
<i>Coxiella burnetii</i>	–	1	2	1	4	76
<i>Legionella pneumophila</i>	–	1	–	3	4	151
<i>Mycoplasma pneumoniae</i>	63	68	83	112	326	3179

Chlamydia psittaci: twenty patients had pneumonia. One patient had endocarditis. Five patients had contact with birds: cockatiel 1, pigeons 1, parrots 2, unspecified 1.

Coxiella burnetii: one patient had endocarditis, 1 had contact with farm animals.

Legionella pneumophila: four males aged 43-71 years with pneumonia. Recent travel abroad 1: Spain and Italy.

Mycoplasma pneumoniae: three regions reported more than 10% of cases: SE Thames (63), Oxford (39), and S Western (38). 93 cases (28%) were aged less than 10 years. 160 patients had pneumonia and 2 had bronchiolitis. One patient had transverse myelitis, 1 had encephalitis and 2 had meningitis. Eleven patients had skin manifestations including 3 with Stevens-Johnson syndrome, and 8 with rashes.

Mycobacterial infections, England and Wales: laboratory reports, weeks 91/51 – 92/02

Mycobacterium tuberculosis 76: 39 males, 30 females, 7 sex not stated. Pulmonary infections 50: 29 males, 19 females, 2 sex not stated. 15 were sputum smear positive. Five patients were aged less than 15 years and 15 were aged 65 years or over. M 22d, M 37y and M 54y died. There were 3 isolates from pleural aspirates. Disseminated 3: 1 male (died), 2 females. Lymph nodes 10: 2 males, 3 females, 5 sex not stated. Four from the Indian subcontinent. Genito-urinary 2: 1 male, 1 female. Bone/joint 3: 1 male, 2 females. One from the Indian subcontinent. Abdomen 1: female. Abscess 5: 4 males, 1

female. Skin 1: female.

M. kansasii 2: M 53y and M 60y both had pulmonary infection.

M. xenopi 1: F 74y had pulmonary infection.

Avium-intracellulare group 7: M 7y (lymph nodes); F 2y with lymphadenopathy (pus); F 2y with parotid abscess and F 4y with facial abscess. Male patient and F 74y had pulmonary infection; HIV-1 antibody positive M 27y (blood, sputum).

M. malmoense 4: 3 females and 1 male aged 50-67 years all had pulmonary infection.

M. fortuitum 1: male, age not stated with pulmonary infection.

Bacteraemia and bacterial meningitis, England and Wales: weeks 91/51 – 92/02

Laboratory reports of blood and CSF isolates of bacteria are grouped into 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 1. 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		
Staphylococci						
<i>S. aureus</i>	376	4	9	171	380 (4) *	4379
Coagulase negative	268	3	25	58	271	2551
Streptococci						
group A	31	–	–	14	31	531
group B	63	7	22	20	70	722
group C & G	38	1	1	21	39	430
enterococci	140	2	8	69	142	1476
α- and non-haemolytic	105	4	5	30	109	1461
<i>S. pneumoniae</i>	410	35	5	211	445	3837

* methicillin-resistant strains of *Staphylococcus aureus*

Bacteraemia

Staphylococci:

S. aureus: 19 of 87 patients with IV-lines were on haemodialysis. Eight of 29 patients with septic arthritis/osteomyelitis had prosthetic joints. Eighteen patients had pneumonia; 15 had UTI/GU surgery; 5 had post partum infection. Four patients aged 26-76 years had burns. F 5m had infected chickenpox. Two patients had haemophilia, including HIV-1 antibody positive M 54y.

Four methicillin-resistant strains were reported: NE Thames 2 (blood isolates); N Western 1 (blood and IV-line tip isolate); Trent 1 (blood isolate). Also reported: 3 male patients aged 19-42 years with septic arthritis/osteomyelitis (all joint isolates); M 83y on CAPD (peritoneal dialysate isolate).

Coagulase negative: 5 of 138 patients with IV-lines were on haemodialysis. F 22y with CSF shunt (blood isolate). Also reported: six patients aged 22-61 years (peritoneal dialysate isolate).

Streptococci:

group A: 12 patients had skin infection. M 83y had joint prosthesis; F 20y had puerperal infection; F 38y died (skin, cervical, peritoneal fluid and blood isolates).

group B: 22 neonates. Eight patients had skin infection; 4 had post partum infection. Also reported: M 10y (peritoneal dialysate isolate); F 33y (placental isolate) whose baby died of group B infection.

group C, 9 and group G, 29: 14 patients had skin infection.

M 36y on haemodialysis; F 92y with joint prosthesis; M 24y with systemic lupus erythematosus had endophthalmitis.

enterococci: *S. bovis* 11; *S. faecalis* 61; *S. faecium* 23. One of 29 patients with IV-lines was on haemodialysis. Twelve patients had biliary tract disease/surgery including one after ERCP. Fifteen patients had UTI/GU surgery. Also reported: M 40y (peritoneal dialysate isolate).

α- and non-haemolytic: *S. lactis* 1; *S. milleri* 18; *S. mitis* 32; *S. mutans* 3; *S. salivarius* 6; *S. sanguis* 30. Four patients had biliary tract disease/surgery; M 71y and F 31y on haemodialysis.

S. milleri, M 70y and M 76y (both blood isolates), and F 58y (blood and liver isolates) all had liver abscess; F 71y had endocarditis. Also reported: *S. milleri*, F 25y with premature rupture of membranes (amniotic fluid isolate).

S. pneumoniae: 178 patients had pneumonia, including 9 children aged less than 4 years. HIV-1 antibody positive M 13y; F 10y had peritonitis; F 81y had pericarditis; M 42y and F 58y had epiglottitis. F 35y (blood and PM lung isolates) and F 56y (blood isolate) had previous splenectomy. M 1y (blood and various PM isolates). Four patients aged 1-68 years had otitis media. 23 patients were immunosuppressed, including 7 with leukaemia, 6 with myeloma, 3 with lymphoma and one with a renal transplant. Also reported: pregnant F 33y (pleural fluid and vaginal isolates); F 53y (PM lung, pericardial and pleural fluid isolates); M 56y and F 10m (pleural fluid isolates); female adult (PM heart valve and meningeal isolates).

Laboratory reports	Total bacteraemia	Acute bone/joint	Age		IV/CVP lines	Pace-makers	Endocarditis (with prostheses)	IVDA (with endocarditis)
			<15y	≥65y				
Staphylococci								
<i>S. aureus</i>	376	29	7	14	87	9	14 (3)	3 (1)
Coagulase negative	268	1	-	-	138	3	13 (8)	-
Streptococci								
group A	31	4	-	3	-	-	1 (-)	-
group B	63	-	-	-	2	-	3 (-)	1 (-)
group C & G	38	-	-	-	1	1	-	-
enterococci	140	1	-	1	29	-	8 (2)	-
α- and non-haemolytic	105	-	-	-	10	-	26 (4)	2 (-)
<i>S. pneumoniae</i>	410	5	1	4	1	-	2 (-)	-

Meningitis

Staphylococci:

S. aureus: M 7d (blood, CSF, IV-line tip isolates); M 3m; M 8m with CSF shunt (CSF and blood isolates); M 63y with CSF shunt.

Coagulase negative: M 3m and M 11y with CSF shunt; M 19y with hypogammaglobulinaemia (CSF isolate; *Streptococcus mitis* and *S. sanguis* also isolated).

Streptococci:

group A: F 1m had meningitis (blood and nasopharyngeal aspirate isolates).

group B: M 1d (blood and CSF isolates); M 14d (blood, CSF and umbilical isolates); F 1d (blood, CSF, gastric aspirate and external ear isolates); F 1d (CSF and umbilical isolates); F 15d

and F 1m; F 86y (blood and CSF isolates).

group C: F 82y.

S. faecalis: M 25d (blood and CSF isolates).

S. faecium: M 4m with CSF shunt.

S. mitis 3: M 3m, and M 7m after neurosurgery; M 19y with hypogammaglobulinaemia (CSF isolate; *S. sanguis* and a staphylococcus also isolated).

S. pneumoniae: 25 patients aged 3 days - 86 years had both CSF and blood isolates. Seven patients aged 5 months - 81 years had CSF isolate. Child 8y (CSF isolate), M 53y (blood, CSF and middle ear isolates), and F 63y (blood and CSF isolates) all had otitis media. Eight patients aged 3 months - 67 years had meningitis with no CSF isolate (all blood isolates only).

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