

Communicable Disease Report

***Salmonella enteritidis* phage type 4**

(i) Bodybuilders' protein drinks

Five people who attend a bodybuilding gym in the Trent region became infected with *Salmonella enteritidis* phage type 4 over an eight day period in June/July. Three of the five were hospitalised. High protein drinks, to which raw eggs may be added, are available at this club. All five cases are reported to have consumed raw egg in their protein drinks. *S. enteritidis* PT4 has been identified in one of two samples of protein powder which may have been cross-contaminated. A cohort study is in progress.

S. enteritidis infection has been reported previously in bodybuilders and in association with severe illness (see *Communicable Disease Report* 1990; (47): 3). Since that report, an article on the dangers of raw egg consumption has appeared in a bodybuilders' magazine in addition to the Chief Medical Officer's earlier warning to the general population.

(ii) Cold custard mix

An outbreak of *Salmonella enteritidis* PT4 infection was reported in South West Wales in early July. A case control study is being conducted in four local districts in conjunction with the CDSC (Welsh Unit). Preliminary results show an association between the consumption of custard slices and the development of illness (odds ratio 15.3).

In the last three years, there have been five reports to CDSC of salmonellosis associated with custard slices made with egg-free proprietary cold custard mix. From current evidence it is not possible to determine whether the cold custard mix implicated in these outbreaks was contaminated during manufacture or in the bakeries where the custard slices were made. Those responsible for the investigation of foodborne illness should be aware of the potential risks associated with this product. The Communicable Disease Surveillance Centre will be grateful for further information concerning this association.

Cholera update

There will be a joint Public Health Laboratory Service/Association of Medical Microbiologists seminar entitled 'Cholera Update' in the Lecture Theatre, Central Public Health Laboratory, Colindale, London at 1.30 pm on 1st November 1991.

Further details and an application form can be obtained from Dr C Roberts, PHLS HQ, 61 Colindale Avenue, London NW9 5DF. Please enclose a stamped addressed envelope.

Clinical Virology

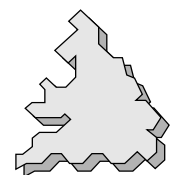
An update course in Clinical Virology organised by the Association of Clinical Microbiologists will be held at the City Hospital, Edinburgh on Wednesday 11 September 1991. Topics to be covered include: viruses and diarrhoea; reinfection, reactivation and primary infection; and post-viral fatigue syndrome. The course fee is £10 (ACM members) or £20 (non-members). Further information can be obtained from Dr K Liddell, Microbiology department, Law Hospital, Carlisle, Lanarkshire ML8 5ER (telephone 0698 351100 ext 118).

Respiratory tract infections:
weeks 91/27 - 30

Mycobacterial infections:
weeks 91/27 - 30

Bacteraemia and bacterial meningitis:
weeks 91/27 - 30

Unusual infections



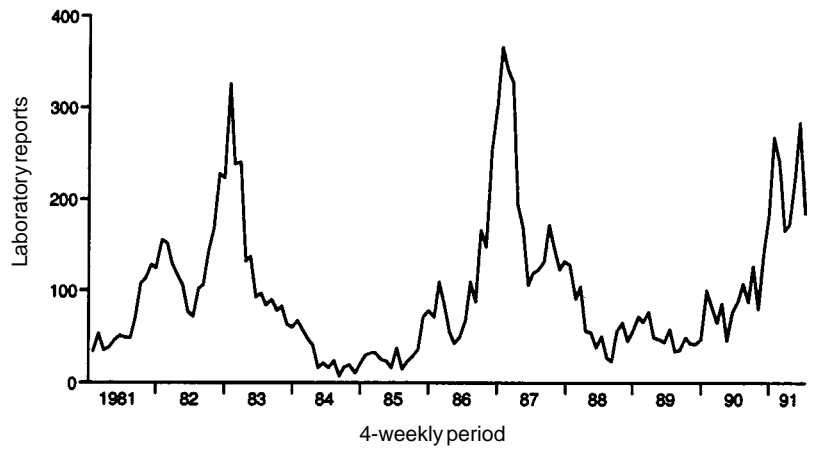
Mycoplasma pneumoniae surveillance

Reports of *Mycoplasma pneumoniae* continue to be received at a moderately high level consistent with the current epidemic (Figure). So far in 1991, 1660 reports have been received. Two regions have reported more than 10% of cases: S Western (245 cases) and E Anglia (195).

The five year age group with the highest reported incidence of cases is the 5-9 years' group (16% of reports), followed by the 30-34 years' group (13%) and the 35-39 years' group (10%).

The diagnosis should continue to be considered in cases of community-acquired pneumonia, particularly in children and young adults.

Laboratory reports of *Mycoplasma pneumoniae*, England and Wales



Respiratory tract infections, England and Wales: laboratory reports weeks 91/27 - 30

Laboratory reports	Number of reports received				Total reports 91/27-30	Cumulative total 1991
	91/27	91/28	91/29	91/30		
Adenovirus (excluding EM faeces)	63	81	60	52	256	1625
Coronavirus	1	3	1	2	7	31
Influenza A	2	1	3	2	8	98
Influenza B	9	5	2	1	17	1954
Parainfluenza	28	16	20	19	83	428
RS virus	13	11	21	20	65	6666
Rhinovirus	6	11	5	4	26	245

Comment

Adenovirus (excluding EM faeces): 78 patients had eye infections, 6 had pneumonia and 12 had bronchiolitis.

Influenza A (all single titres): 1 patient had pneumonia.

An influenza A infection, reported in week 91/26 on the basis of a four-fold rise in antibody titre, was confirmed by the Virus Reference Laboratory to be due to the H₁N₁ subtype.

Influenza B (all single titres): 3 patients had pneumonia.

Parainfluenza: type 1, 8; type 2, 7; type 3, 68. Six patients had pneumonia, 10 had bronchiolitis and 6 had croup. **Type 3:** 85% (58) of infections were in children less than five years old, and 60% were in infants under one year of age. Three regions reported more than 10% of cases: Northern (11 cases), Trent (10) and NW Thames (10).

RS virus: 3 patients had pneumonia and 8 had bronchiolitis.

Rhinovirus: 4 patients had bronchiolitis.

Chlamydia psittaci: 19 patients had pneumonia. Nine patients had contact with birds and/or animals, including 3 with

parrots, 1 with quails and budgerigars, 1 with a budgerigar and a canary and 1 with canaries. F 50y had erythema multiforme, M 36y had joint pains and mouth ulcers and M 36y had hepatitis.

Coxiella burnetii: 7 patients had pneumonia. Two patients had contact with sheep. M 58y had hepatitis.

Legionella pneumophila: 9 males and 2 females, age range 42-87 years. Eight patients had pneumonia (legionnaires' disease), one had respiratory symptoms (unspecified), and the other two had non-pneumonic legionellosis (Pontiac fever). Recent travel abroad: Algarve 1, Greece 2, India 1, Kenya 1, Malta 1, Spain 1, USA 1. One patient had been on a cruise.

Mycoplasma pneumoniae: 82 patients had pneumonia. M 6y and M 8y had Stevens-Johnson syndrome. F 4y, F 25y, F 34y and 1 male, 1 female, age not stated, had rashes. F 21y had Guillain-Barré syndrome.

Laboratory reports	Number of reports received				Total reports 91/27-30	Cumulative total 1991
	91/27	91/28	91/29	91/30		
Chlamydia psittaci	12	6	14	7	39	255
Coxiella burnetii	2	7	4	—	13	51
Legionella pneumophila	3	1	4	3	11	75
Mycoplasma pneumoniae	57	43	64	53	217	1660

Mycobacterial infections, England and Wales: laboratory reports weeks 91/27 – 30

Mycobacterium tuberculosis 130: 70 males, 55 females, 5 sex not stated.

Pulmonary infections 97: 56 males, 38 females, 3 sex not stated. 25 were sputum smear positive. 1 patient was aged under 15 years and 32 were aged 65 years or more; M 71y and F 75y died. Three isolates were from pleural aspirates and 2 were from lung biopsies. M 31y, M 44y and 1 male, age not stated, were HIV-1 antibody positive.

Disseminated 9: 4 males: M 31y (lymph nodes, sputum isolates); M 30y (sputum isolate); M 38y, HIV-1 antibody positive (blood isolate); and male, age not stated, with leucoerythroblastic anaemia (urine, gastric isolates). 5 females: F 20y from Indian subcontinent with abdominal abscess and lymph node disease; F 28y with neck abscess and pulmonary disease (sputum isolate); F 2y with meningitis and pulmonary disease (CSF, sputum isolates); F 22y with meningitis and F 57y with miliary disease.

Meningitis 2: M 74y died (PM brain) and M 5m.

Lymph nodes 10: 2 males, 6 females and 2 sex not stated. Two from Indian subcontinent.

Genitourinary 1: 1 male.

Bone/joint 4: 1 male, 3 females (all from Indian subcontinent); 3 with spinal infections and F 84y with joint infection involving a prosthesis.

Abdomen 1: 1 female.

Abscess 5: 3 males (one from Indian subcontinent), 2 with neck abscess. 2 females, 1 with parotid abscess and one with chest wall abscess.

Skin 1: 1 male.

M. bovis 1: F 35y with axillary abscess.

M. kansasii 3: M 66y (sputum smear positive), M 77y and male, age not stated. All pulmonary infections.

M. xenopi 2: M 68y and M 84y with pulmonary infection (1 sputum smear positive).

Avium-intracellare group 10: 4 HIV-1 antibody positive; M 35y and M 48y with pulmonary infections, and M 40y and M 47y with disseminated infections. Three other males (59y, 65y and 68y) had pulmonary infections. F 8y with lymphadenopathy (site not stated); M 1y (cervical lymphadenopathy) and F 65y with pulmonary disease.

M. malmoense 4: M 86y (died), M 80y and M 67y all with pulmonary infections (1 sputum smear positive).

Bacteraemia and bacterial meningitis, England and Wales: weeks 91/27 - 30

Laboratory reports	No. of reports received		Age		Total received	Cumulative total 1991
	blood only	CSF only or CSF & blood	<1m	≥65y		
Staphylococci						
S. aureus	392	2	11	160	394 (3*)	2266
Coagulase negative	228	7	13	48	235	1406
Streptococci						
group A	41	1	1	15	42	367
group B	48	12	24	7	60	418
group C & G	23	–	1	19	23	229
enterococci	98	3	3	46	101	808
α and non-haemolytic	106	–	2	28	106	809
S. pneumoniae	238	27	6	125	265	2679

* methicillin-resistant strains of *Staphylococcus aureus*

Bacteraemia

Staphylococci:

S. aureus: 38 of 103 patients with intravascular lines were on haemodialysis; 15 patients had pneumonia/lung abscess; 21 had UTI/GU surgery including 5 women with post partum infections; 3 had biliary tract disease; 3 had burns, including 2 with methicillin-resistant strains. M 61y with prosthetic heart valve had suppurative pericarditis (blood, pericardium fluid).

Also reported: M 1m and M 74y with septic arthritis (both joint isolates).

Coagulase negative: F 46y, F 48y, and male, age not stated, with CSF shunts; 3 patients had UTI/GU surgery; male, age not stated, with cerebral abscess. Six of 140 patients with intravascular lines were on haemodialysis.

Also reported: M 56y with infected aortic aneurysm (aneurysm wall).

Streptococci:

group A: 12 patients had skin infections, including 2 with chickenpox; 3 women had puerperal infections. F 62y and F 81y with pneumonia; F 62y with pleural effusion and biliary cirrhosis; M 8y with Henoch-Schönlein purpura and F 24y with polyarthritis; M 5y with leukaemia and M 25y with lymphadenopathy and previous splenectomy.

group B: 32 neonates; 9 women with puerperal infection and 4 patients with UTI/GU surgery; 2 patients with skin infections. M 35y with bone marrow transplant; M 41y and F 68y with leukaemia; M 48y on cytotoxic drugs.

group C, 5 and group G, 19: 9 patients had skin infections; 2 had UTI/GU surgery. M 67y with leukaemia and M 85y with myeloma.

enterococci: *S. avium* 1; *S. bovis* 11; *S. canis* 1; *S. faecalis* 67; *S. faecium* 17. Eleven patients had UTI/GU surgery; 14 had

biliary tract disease; 2 had received liver transplants; 1 was on haemodialysis; 6 patients had leukaemia; 2 had lymphoma and 2 had marrow dysplasia.

α- and non-haemolytic: *S. acidominimus* 2; *S. lactis* 1; *S. milleri* 26; *S. mitior* 19 (*S. mitis* 17); *S. morbillorum* 3; *S. mutans* 1; *S. salivarius* 4; *S. sanguis* 47. Three patients had UTI/GU surgery; 2 had biliary tract disease; 8 had leukaemia; 4 had

lymphoma; 2 had bone marrow transplants. *S. mitior*, M 38y with endocarditis after splenectomy for ITP. *S. sanguis*, F 39y HIV-1 antibody positive.

S. pneumoniae: 7 children and 95 adults had pneumonia. Ten patients had myeloma; 3, lymphoma; 3, leukaemia; 1, neutropenia; 4 had had a previous splenectomy and 3 were on immunosuppressive drugs.

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>	392	30	6	13	103	8	11 (1)	3 (-)
Coagulase negative	228	-	-	-	140	2	5 (2)	-
Streptococci								
group A	41	2	1	1	-	-	-	3 (-)
group B	48	2	1	-	1	1	4 (-)	-
group C & G	23	3	-	2	-	1	1 (-)	-
enterococci	98	-	-	-	17	-	7 (3)	-
α and non-haemolytic	106	2	1	-	9	-	34 (1)	-
<i>S. pneumoniae</i>	238	1	1	-	1	-	-	1

Meningitis

Staphylococci:

S. aureus: M 3m had cerebral abscess; F 23y.

Coagulase negative: F 8m, F 1y, F 11y and F 37y with CSF shunts; M 1y and F 40y after neurosurgery; M 78y.

Streptococci:

group A: F 5y and F 90y.

group B: 4 neonates; M 50y and M 61y.

S. faecalis: 26y (sex not stated).

S. faecium: F 59y with liver transplant.

S. milleri: M 28y.

S. pneumoniae: 12 children aged 4 years or less (blood isolate only, 4); 12 patients aged 5-64 years (blood isolate only, 3) including M 7y with previous splenectomy and vaccine prophylaxis; 9 patients aged 65 years or more (blood isolate only, 4).

Unusual infections

Diphtheroids: F 19y and female, age not stated, with leukaemia and IV-lines (blood isolates); female, age not stated (CSF isolate).

Hafnia alvei: M 82y (blood isolate).

Propionibacterium acnes: F 17y with CSF shunt (CSF isolate).

Providencia rettgeri (Proteus rettgeri): M 61y with urinary tract disease (blood isolate).

Veillonella sp: M 69y with leukaemia (blood isolate).

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