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Communicable Disease Report

Salmonella enteritidis PT 8 and turkey meat

An outbreak of food poisoning has been reported in association with a buffet meal, which took place at the end of January in a working men's club in the North of England. Twenty-one of the 150 guests became ill within 24-48 hours. Symptoms included vomiting, diarrhoea, abdominal pain and rigors. *Salmonella enteritidis* PT 8 has been isolated from ten cases.

Investigation revealed that turkey meat left over from a Christmas meal at a nearby turkey factory had been distributed among the factory catering staff and their relatives, and had been used to prepare sandwiches for the buffet a month later. A sample of the leftover turkey was found to be positive for *S. enteritidis* PT 8. Another outbreak of infection with the same organism, affecting three other individuals among the catering staff and their relatives in early January, has since come to light. A cohort investigation of 74 individuals who attended the buffet shows a positive association between illness and the consumption of turkey (relative risk 4.2; confidence interval 2 - 8.9).

Phage type 8 was the most prevalent strain of *S. enteritidis* isolated from humans in England and Wales before the major increase in phage type 4 in recent years but, currently, is reported at a fiftieth of the level of phage type 4 reports, and most non-human isolates are obtained from eggs and chicken meat. This report is possibly the first to be associated with turkey in the UK, although turkey meat accounts for most outbreaks of food poisoning during the Christmas period (*Communicable Disease Report* 1991; **1**: 231).

Salmonella typhimurium DT 203 update

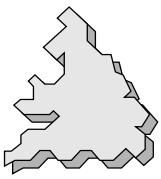
Further investigation of the outbreak of food poisoning in the Halifax area due to *Salmonella typhimurium* DT 203 (*Communicable Disease Report* 1992; **2**: 25) has revealed that the contaminated beef used to prepare the sandwiches had been imported from Uruguay and that the beef implicated in an earlier outbreak of infection with the same phage type in Blackpool was obtained from the same country via the same supplier. Inadequate cooking is presumed to have allowed the organism to survive in both instances.

Poliomyelitis in Jordan

A report has been received, via the Medical Advisory Service for Travellers, of 12 recent cases of poliomyelitis in an unspecified area of Jordan. The authorities have instituted a major immunisation programme. Routine recommendations to travellers to this area include immunisation against polio, as well as typhoid and tetanus, and protection against hepatitis A.

British Society for Microbial Technology

The seventh annual scientific meeting of the British Society for Microbial Technology will be held on Wednesday 20 May 1992 at the Central Public Health Laboratory, Colindale. The programme will cover general aspects of imported infections, specific conditions such as the haemorrhagic fevers, rabies, diphtheria, melioidosis and brucellosis, and problems related to the importation of antibiotic-resistant strains. Further information is available from Val Bevan, Department of Microbiology, Hope Hospital, Eccles Road, Salford M6 8HD (telephone 061 789 7373, ext 5031).



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Respiratory tract infections, England and Wales: laboratory reports, weeks 92/07 – 10

Laboratory reports	Number of reports received 92/07	92/08	92/09	92/10	Total reports 92/07-10	Cumulative total 1992
Adenovirus (excluding EM faeces)	59	72	62	60	253	543
Coronavirus	–	2	5	3	10	22
Influenza A	112	158	202	132	604	1181
Influenza B	1	2	2	4	9	33
Parainfluenza	8	13	17	3	41	103
RS virus	291	207	145	111	754	5968
Rhinovirus	7	7	5	16	35	94

Comment

Adenovirus (excluding EM faeces and Group F): 41 patients had eye infections, 14 had pneumonia, 18 had bronchiolitis and 3 had croup.

Influenza A: (339 single titres; 144 rising titres; 102 isolates): 158 patients had pneumonia, 19 had bronchiolitis and 5 had croup. F 21y, F 32y and F 33y all had meningism; M 32y, M43y and F 23y all had encephalitis; M 10y with Henoch- Schönlein purpura. Outbreaks were reported at an old people's home and a school.

Influenza B: one patient had bronchiolitis.

Parainfluenza: type 1, 5; type 2, 26; type 3, 9; type 4, 1. One patient had pneumonia, 8 had bronchiolitis, and 1 had croup.

RS virus: 24 patients had pneumonia, 252 had bronchiolitis and 2 had croup. Four regions reported more than 10% of cases: Northern (91 cases), Trent (89), Wessex (123) and W Midlands (147). 80% of cases were aged less than one year.

Rhinovirus: one patient had pneumonia and 4 had bronchiolitis.

Laboratory reports	Number of reports received 92/07	92/08	92/09	92/10	Total reports 92/07-10	Cumulative total 1992
Chlamydia psittaci	7	4	5	1	17	64
Coxiella burnetii	–	–	1	–	1	9
Legionella pneumophila	–	–	2	1	3	23
Mycoplasma pneumoniae	38	57	41	59	195	665

Chlamydia psittaci: nine patients had pneumonia. Seven patients had contact with birds: parrots 2, cockatoo 1, chickens 1, unspecified 2. A veterinary surgeon had both bird and animal contact.

Coxiella burnetii: one patient was a veterinary student.

Legionella pneumophila: all three patients were males (age range 39 - 84 years) and all had pneumonia. M 84y, who had recently travelled to Spain, died.

Mycoplasma pneumoniae: 79 patients had pneumonia and 4 had bronchiolitis. Four patients had neurological complications (meningitis, encephalitis, transverse myelitis and related neurological disease), and 5 had skin manifestations (1 with erythema nodosum, 1 with erythema multiforme, and 3 with a rash). Three regions reported more than 10% of cases: S Western (29 cases), Wessex and Oxford (24 each). 37% of cases were aged less than 20 years.

Mycobacterial infections, England and Wales: laboratory reports, weeks 92/07 – 10

Mycobacterium tuberculosis 90: 50 males, 39 females, 1 sex not stated. Pulmonary infections 68: 39 males (2 HIV-1 antibody positive), 28 females, 1 sex not stated. Twenty patients were sputum positive. One patient was aged less than 15 years and 19 were aged 65 years or over. M 32y and F 35y died. There were 6 isolates from pleural aspirates and 1 post mortem lung. Disseminated 4: 3 males (1 HIV-1 antibody positive), one of whom died, and 1 female. Meningitis 1: female. Lymph nodes 5: 2 males, 3 females. Three from the Indian subcontinent. Genitourinary 5: 2 males, 3 females. Bone / joint 3: 1 male, 2 female. Two from the Indian subcontinent. Abdomen 1: male. Abscess 2: 1 male, 1 female. Heart 1: male.

M. bovis 3: M 31y (peritoneal fluid); M 62y and female, age not stated, both with lymphadenopathy.

M. kansasii 4: M 40y, male, age not stated, F 68y and F 72y all with pulmonary infection.

M. xenopi 1: M 70y with pulmonary infection.

***Avium intracellulare* group** 20: four males and 1 female all with pulmonary infection; F 2y and F 5y with lymph-adenopathy; thirteen males aged 34 - 53 years all HIV-1 antibody positive (9 blood, 2 faeces, 1 liver, 1 bone marrow).

M. malmoense 2: M 62y with pulmonary infection; F 3y (lymph nodes).

M. chelonei 1: M 36y (faeces).

M. marinum 1: M 20y (abscess).

Bacteraemia and bacterial meningitis, England and Wales: weeks 92/07 – 10

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: blood only	No. of reports received: CSF only or CSF & blood	Age: <1m	Age: ≥65y	Total received	Cumulative total 1992
Staphylococci						
S. aureus	358	2	15	150	360 (12) *	999
Coagulase negative	160	3	21	50	163	516
Streptococci						
group A	50	1	1	27	51	138
group B	40	4	19	8	44	147
group C & G	21	–	–	16	21	70
enterococci	112	–	3	54	112	299
a- and non-haemolytic	98	–	8	33	98	266
S. pneumoniae	301	29	2	158	330	1184

* methicillin-resistant strains of *Staphylococcus aureus*

Bacteraemia

Staphylococci:

***S. aureus*:** 18 of 89 patients with IV-lines were on haemodialysis. Twenty-two patients had pneumonia, including F 58y with empyema. Four patients had joint prostheses. Three male patients had AIDS and 2 male patients were HIV-1 antibody positive. Eleven patients had UTI / GU surgery. Seven women had post partum infection, including 5 after Caesarean section. M 66y had infected vascular graft. M 51y, M 78y and F 75y had burns. M 56y and M 71y had psoriasis. M 14y had infected chickenpox.

Thirteen methicillin-resistant strains were reported: NW Thames 2 (1 blood isolate; 1 blood and urine isolates); SE Thames 5 (3 blood isolates; 1 blood and skin isolates; 1 skin isolate); SW Thames 1 (blood and pus isolates); Oxford 1 (blood isolate); S Western 3 (all blood isolates); N Western 1 (blood isolate).

Also reported: M 16y and F 14y (peritoneal dialysate isolates); M 36y with CSF shunt had subphrenic abscess (shunt and pus isolates); F 74y (joint isolate).

Coagulase negative: 5 of 86 patients with IV-lines were on haemodialysis; M 28y with AIDS.

Also reported: M 63y with joint prosthesis (joint isolate).

Streptococci:

group A: 21 patients had skin infection. Six patients aged 32-82 years had pneumonia. F 27y had puerperal infection and F 24y had septic abortion. F 71y had burns. F 41y with joint prosthesis *(Pseudomonas aeruginosa* also isolated from pus).

group B: 19 neonates. Five patients had skin infection, including F 46y with recurrent erysipelas. Two women had post partum infection.

group C, 5 and **group G**, 16: ten patients had skin infection. M 78y had burns. M 59y and M 82y had osteomyelitis and endocarditis.

enterococci: *S. bovis* 8; *S. faecalis* 62; *S. faecium* 19. M 60y and M 67y were on haemodialysis. Fifteen patients had biliary tract disease / surgery, including one after ERCP. Thirteen patients had UTI / GU surgery. M 72y was on peritoneal dialysis. F 72y had infected vascular graft.

Also reported: M 71y (peritoneal dialysate isolate; *Escherichia coli* also isolated).

α- and non-haemolytic: *S. acidominimus* 1; *S. hominis* 1; *S. lactis* 2; *S. milleri* 20; *S. mitior* 2; *S. mitis* 22; *S. morbillorum* 1; *S. salivarius* 4; *S. sanguis* 33. *S. milleri*, 2 premature neonates; M 40y had infected vascular graft; M 48y had mastoiditis; F 45y had pyelonephritis. Three patients had biliary tract disease / surgery. Two women had post partum infection.

Also reported: *S. sanguis*, F 93y (pleural fluid isolate).

S. pneumoniae: 151 patients had pneumonia, including 5 children aged less than 4 years. M 32y and M 35y were HIV-1 antibody positive. Twenty-three patients were immuno-suppressed, including 6 with myeloma, 5 with leukaemia, 6 with lymphoma, 3 with organ transplants and 2 on chemotherapy. M 2d, and his mother who had endometritis (both blood isolates and mother's genital isolate). M 4m (middle ear isolate also) and M 5m both had otitis media; M 10m had mastoiditis.

Also reported: F 8y with septic arthritis (synovial fluid isolate); F 80y (pleural fluid isolate).

Laboratory reports	Total bacteraemia	Acute bone/joint	Age <15y	Age ≥65y	IV/CVP lines	Pace-makers	Endocarditis (with prostheses)	IVDA (with endocarditis)
Staphylococci								
S. aureus	358	28	6	9	89	10	14 (3)	3 (1)
Coagulase negative	160	2	–	–	86	2	9 (6)	1 (–)
Streptococci								
group A	50	4	1	–	–	–	–	–
group B	40	1	–	–	–	–	–	–
group C & G	21	4	–	3	–	–	2 (–)	–
enterococci	112	1	–	–	20	–	11 (2)	–
α- and non-haemolytic	98	4	2	–	9	–	21 (2)	–
S. pneumoniae	301	5	2	2	2	–	2 (1)	–

Meningitis

Staphylococci:

S. aureus: M 44y after neurosurgery and M 64y with CSF shunt. M 44y, injecting drug user (blood isolate only). M 63y had infected subdural haematoma.

Coagulase negative: M 1m, M 47y and F 58y all with CSF shunts.

Streptococci:

group A: M 3y had wound infection after neurosurgery (extradural pus isolate); M 10y had subdural abscess (blood and pus isolates; *Bacteroides sp* also isolated from blood); M 60y had otitis media.

group B: M 4m (blood isolate only); M 14d and F 18d; F 2d (blood and CSF isolates); F 24y had post partum infection after epidural anaesthesia (blood and CSF isolates).

S. milleri: M 20y had subdural abscess / empyema (blood and pus isolates); M 25y had brain abscess (pus isolate).

S. pneumoniae: 20 patients aged 1 month - 80 years (all blood and CSF isolates), including M 47y with leukaemia, M 57y after nasal polypectomy, and M 66y and F 10m with otitis media. Nine patients aged 1-92 years (all CSF isolates), including M 40y and M 52y with otitis media, and M 63y and F 23y after neurosurgery. Seven patients aged 14-75 years had meningitis with no CSF isolate (all blood isolates). M 70y and F 93y (both PM brain isolates).

Unusual infections

Cardiobacterium hominis: F 72y had endocarditis.

Kluyvera sp: F 78y (blood and urine isolates).

Providencia stuartii: M 80y had urinary tract infection (blood and urine isolates).

Short courses in parasitology

Two short courses in parasitology will take place at the Liverpool School of Tropical Medicine in June and July 1992. A course in diagnostic parasitology will take place from 22-26 June, and will be repeated from 29 June - 3 July. The cost of this course is £275. A course in the laboratory diagnosis of malaria will take place from 7-10 July. This course costs £250. These courses are primarily aimed at PHLS staff with interests in parasitology, microbiology and haematology. A 10% discount is available on both courses for IMLS members. Further details are available from Dr J M Jewsbury, Liverpool School of Tropical Medicine,

Laboratory diagnosis of parasites

A one week course on the laboratory diagnosis of parasites will be held at the London School of Hygiene and Tropical Medicine from 29 June to 3 July 1992. The cost of this course will be £330, which includes meals but not accommodation. A three day course on the laboratory diagnosis of malaria will be held from 24-26 June. The cost of this course will be £209, which again includes meals but not accommodation. Further details are available from J E Williams, Department of Parasitology, London School of Hygiene and Tropical Medicine, Keppel Street, London WC1E 7HT (telephone 071 927 2318).

Data are for England and Wales only, unless otherwise stated.

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