

## Communicable Disease Report

### Melon-associated Salmonellosis

The MMWR (16 August 1991) has reported a multi-state outbreak of *Salmonella poona* infection which affected over 400 people in North America and was found to be associated with the consumption of cantaloupe melons harvested in Texas. This follows an outbreak of *S. chester* in 1990 which affected at least 245 people in many parts of the United States and which was associated with cantaloupe melons imported from Mexico. The Food and Drug Administration (FDA) sampled imported melons at the US border in 1990 and 1991 and isolated many serotypes of salmonella from approximately 1% of rinds. The surfaces of melons may be contaminated with dirt, untreated water and animal excreta. Some, but not all, producers wash and dip melons in a chlorine solution.

Investigations in England and Wales of ten confirmed cases of *S. poona* and three cases of *S. chester* reported this year have not identified an association with eating melons imported from North or Central America. Less than 4% of imported melons in the UK come from North and Central America.

### Transfer of PHLS Anaerobe Reference Unit from Luton PHL to Cardiff PHL

The Anaerobe Reference Unit is currently attached to the Luton Public Health Laboratory at the Luton and Dunstable Hospital but, with the approaching retirement of the present Director, the Unit will be relocated from 1 October 1991 to the Public Health Laboratory, University Hospital of Wales, Heath Park, Cardiff CF4 4XW. The new Director will be Professor B I Duerden.

The main work of the Unit is the identification of anaerobic bacteria referred from other centres, including PHLS and NHS laboratories, universities, commercial companies, private laboratories, veterinary establishments and overseas laboratories. Most cultures received are 'polymicrobial' (mixtures of both aerobes and anaerobes) which require detailed 'sorting' before definitive work can begin. Although not nationally recognised, the Unit has built up a unique culture collection of over 3500 strains of anaerobes, which are stored at -70° C.

In addition, the Unit provides information to those interested in anaerobic equipment, methodology and disease syndromes. It also provides training services for visitors from all over the world, and evaluation services for anaerobic equipment. The research and development activities of the Unit have resulted in the publication of research papers on a range of topics; current interests include: elastase production by anaerobes and its clinical significance in bronchopulmonary infections, sporulation of *Clostridium perfringens*, taxonomic studies on Bacteroidaceae in relation to clinical disease, and studies on *C. difficile* in antibiotic-associated diarrhoea and anaerobes in bronchopulmonary infections.

During the period between 23 September and 14 October 1991 the existing Unit at Luton PHL will be transferring staff and equipment to the new site. It would be appreciated if non-urgent referrals could be submitted after 14 October as there is likely to be a delay in reports issued on specimens sent during the period of transfer. Any problems of an urgent nature should be directed to Dr JS Brazier (telephone 0582 490890 at Luton PHL, or 0222 742168 at Cardiff PHL).

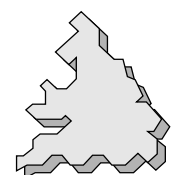
**Salmonella infections:**  
weeks 91/32 - 35

**Other gastrointestinal tract infections:**  
weeks 91/32 - 35

**Gastrointestinal virus infections:**  
weeks 91/32 - 35

**Bacteraemia and bacterial meningitis:**  
weeks 91/32 - 35

**Unusual infections**



## Salmonella infections, England and Wales: laboratory reports weeks 91/32 – 35

Serotype	Reports to CDSC				Total	Reports from DEP
	91/32	91/33	91/34	91/35		Total
<i>S. enteritidis</i> (PT4)	355 (257) *	338 (249) *	483 (369) *	348 (270) *	1524 (1145) *	2262 (1864) *
<i>S. typhimurium</i>	140	163	135	69	507	615
<i>S. virchow</i>	11	18	24	18	71	119
<i>S. newport</i>	8	12	12	4	36	28
<i>S. agona</i>	13	9	8	4	34	41
<i>S. bredeney</i>	6	5	11	4	26	27
<i>S. heidelberg</i>	7	3	3	3	16	9
<i>S. infantis</i>	5	1	4	6	16	10
<i>S. hadar</i>	6	4	4	1	15	13
<i>S. blockley</i>	4	–	1	6	11	16
<i>S. saint-paul</i>	3	2	3	3	11	5
<i>S. braenderup</i>	5	3	1	1	10	7
Other serotypes	40	38	34	20	132	208
Total	603	596	723	487	2409	3360

\* *S. enteritidis* PT4

Less than 10 laboratory reports of the following serotypes were received by CDSC during this period:

- 9: *S. montevideo*.  
 8: *S. thompson*.  
 7: *S. anatum*, *S. corvallis*, *S. derby*.  
 6: *S. give*, *S. muenchen*.  
 5: *S. bareilly*, *S. livingstone*, *S. schwarzengrund*, *S. stanley*.  
 4: *S. berta*, *S. kedougou*, *S. manhattan*.  
 3: *S. emek*, *S. senftenberg*.  
 2: *S. adelaide*, *S. cerro*, *S. durban*, *S. gold-coast*, *S. mbandaka*, *S. ohio*, *S. panama*.  
 1: *S. arechavaleta*, *S. binza*, *S. brandenburg*, *S. cubana*, *S. drypool*, *S. fremantle*, *S. havana*, *S. indiana*, *S. java*, *S. johannesburg*, *S. kapemba*, *S. kentucky*, *S. kingston*, *S. kottbus*, *S. liverpool*, *S. london*, *S. manchester*, *S. meleagridis*, *S. mgulani*, *S. mkamba*, *S. napolli*, *S. newington*, *S. oritamerin*, *S. poona*, *S. reading*,

*S. singapore*, *S. unnamed*, *S. wandsworth*, *S. weltevreden*, *S. zanzibar*.

### Comment

***S. enteritidis* PT 4:** 5 persons developed D&V after a barbecue which included chicken (5 persons were positive). 10/28 guests at a party in an hotel developed diarrhoea and abdominal pain 24-48 hours later (18 persons were positive).

**Untyped:** 18/29 students developed D&V 12 hours after eating omelettes containing onion and potato; the omelette mixture was lightly fried in the morning and stored at room temperature until late evening (9 persons were positive).

***S. typhimurium* DT 193:** a number of persons in the community were ill after eating donner and kofte kebabs from a local restaurant; the kebabs were prepared and cooked well in advance of sale in conditions of poor hygiene (donner kebab, kofte kebab and contents of fly killer were positive).

## Food poisoning notifications from OPCS

	Number of notifications				Total notifications 91/32–34	Cumulative total 1991
	91/32	91/33	91/34	91/35		
Formally notified §	978	1105	1062	875	4020	21695
Otherwise ascertained §	605	557	600	436	2198	11570

§ provisional

***Bacillus cereus*:** 5/5 persons were ill 11 hours after eating rice from a Chinese takeaway restaurant (fried rice was positive with more than 10<sup>7</sup> *B. cereus* serotype H/26 per gram).

***Clostridium perfringens* serotype 23:** 5/40 patients in a hospital had symptoms 18 hours after eating a sausage casserole (5/7 persons were positive, no food available for testing).

## Typhoid and paratyphoid, England and Wales: laboratory reports weeks 91/32 - 35

***S. typhi*:** 5 cases aged 1-29 years were reported, all from the Indian subcontinent. One excreter was reported (M 35y).

***S. paratyphi* A:** 5 cases aged 20-55 years were reported, all from the Indian subcontinent.

***S. paratyphi* B:** no cases were reported.

Notifications: 12 cases of typhoid and 6 of paratyphoid fever were statutorily notified (weeks 91/32-35).

## Other gastrointestinal tract infections: laboratory reports weeks 91/32 – 35

Laboratory reports	Number of reports received				Total reports 91/32-35 (acquired abroad)	Cumulative total 1991
	91/32	91/33	91/34	91/35		
<i>Campylobacter</i>	1027	921	924	521	3393 (304)	21693
<i>Shigella</i>	286	118	150	82	636 (80)	6003
Enteropathogenic <i>E.coli</i> (children <3 years)	17	17	30	19	83 (2)	459
<i>Aeromonas</i>	11	6	13	5	35 (9)	155
<i>Plesiomonas</i>	–	2	–	–	2 (–)	30
<i>Vibrio</i>	1	1	2	1	5 (5)	39
<i>Clostridium difficile</i>	15	33	22	17	87 (–)	622
<i>Yersinia</i>	11	17	9	6	43 (1)	270

### Comment

**Campylobacter:** one region reported more than 10% cases: W Midlands (417 cases). Forty-seven outbreaks were reported: 46 family outbreaks and one at a public house.

**Shigella:** *S. boydii* 4 (3 abroad); *S. dysenteriae* 4 (4 abroad); *S. flexneri* 46 (31 abroad); *S. sonnei* 582 (42 abroad). *S. sonnei*: continuing community outbreaks in Yorkshire and N Western. Twelve family outbreaks were reported.

Notifications of dysentery for this period were: 119, 129, 106 and 64 respectively; the cumulative total for 1991 is 5037.

**Aeromonas:** *A. hydrophila* 22 (5 abroad); *A. sobria* 10 (4 abroad); *Aeromonas sp* 3.

**Plesiomonas shigelloides:** 2.

**Vibrio:** *V. cholerae* O1 *el tor* Ogawa, F 55y who became ill before leaving India; *V. cholerae* non O1, 4 (all abroad).

**Clostridium difficile:** 3 regions reported more than 10% cases:

Northern (28 cases), Yorkshire (20) and SE Thames (12).

**Yersinia:** *Y. enterocolitica* 39; *Y. frederiksenii* 4 (1 abroad).

**Cryptosporidium:** 4 regions reported more than 10% cases: Yorkshire (36 cases), SE Thames (33), S Western (32) and N Western (43). Seven family outbreaks were reported.

**Giardia:** 3 regions reported more than 10% cases: NE Thames (54 cases), SW Thames (65) and N Western (50). Fourteen outbreaks were reported: 13 family outbreaks and 1 in a creche.

**Entamoeba histolytica:** one family outbreak was reported.

**Taenia sp** 6: *T. saginata* 3 (Ethiopia 1). *T. solium*, M 36y with cerebral cysticercosis. *Taenia* unspecified 2 (Ethiopia, Kenya).

**Trichostrongylus** 5: (Pakistan 1).

**Trichuris** 38: (Africa 4, Indian subcontinent 4, Argentina, China, Maldives, Papua New Guinea, 1 each).

Laboratory reports	Number of reports received				Total reports 91/32-35 (acquired abroad)	Cumulative total 1991
	91/32	91/33	91/34	91/35		
<i>Cryptosporidium</i>	88	78	105	46	317 (23)	3301
<i>Entamoeba histolytica</i>	45	6	27	3	81 (38)	664
<i>Giardia</i>	137	95	165	71	468 (124)	3663
<i>Blastocystis hominis</i>	14	18	8	4	44 (2)	134
<i>Dientamoeba fragilis</i>	6	5	4	–	15 (1)	46

## Gastrointestinal virus infections, England and Wales: laboratory reports weeks 91/32 - 35

Laboratory reports	Number of reports received				Total reports 91/32-35	Cumulative total 1991
	91/32	91/33	91/34	91/35		
Adenovirus (EM faeces)	13	20	29	7	69	885
Adenovirus type 40/41	–	–	1	–	1	60
Astrovirus	2	–	3	5	10	202
Calicivirus	4	1	–	–	5	67
Rotavirus	46	55	49	31	181	11338
SRSV	3	13	4	9	29	462

**Adenovirus** (EM faeces): 4 regions reported more than 10% cases: Northern (7 cases), Trent (15), S Western (7) and W Midlands (8).

**Astrovirus:** one region reported more than 2 cases: S Western (4 cases).

**Rotavirus:** 5 regions reported more than 10% cases: Northern

(22 cases), Yorkshire (29), NE Thames (23), S Western (19) and W Midlands (27).

**SRSV:** 4 regions reported more than 2 cases: Northern (9 cases), Yorkshire (3), S Western (6) and N Western (5).

Two outbreaks were reported: one in a hospital and one in a nursing home.

## Bacteraemia and bacterial meningitis, England and Wales: weeks 91/32 - 35

Laboratory reports	No. of reports received		Age		Total received	Cumulative total 1991
	Blood only	CSF only or CSF & blood	<1m	≥65y		
<i>Citrobacter sp</i>	20	–	1	4	20	139
<i>Enterobacter sp</i>	89	1	3	33	90	629
<i>Escherichia coli</i>	645	4	17	416	649	5116
<i>Klebsiella sp</i>	134	1	4	77	135	1063
<i>Proteus sp</i>	125	1	1	91	126	902
<i>Salmonella sp</i>	31	1	1	13	32	164

### Bacteraemia

***Citrobacter sp***: *C. freundii* 16; *C. koseri* 3.

***Enterobacter sp***: *E. aerogenes* 7; *E. agglomerans* 10; *E. cloacae* 62; *E. sakazakii* 1.

***Escherichia coli***: M 84y with neutropenia had septic arthritis (joint isolate also). Also reported: M 59y with liver abscess (pus).

***Klebsiella sp***: *K. aerogenes* 36; *K. oxytoca* 20; *K. ozaenae* 1; *K. pneumoniae* 64. *K. aerogenes*, M 47y with endocarditis had heart valve prosthesis.

***Proteus sp***: *P. mirabilis* 100; *P. morgani* 11; *P. vulgaris* 2.

***Salmonella sp***: *S. agona*, M 10m (faeces also). *S. bredeney* 2: M 25y with acute arthritis (blood isolate only) and F 62y (faeces also). *S. enteritidis* 19 (PT4, 8): 14 patients aged 4 months - 86 years with gastrointestinal symptoms and/or faecal isolate also; F 31y on steroids (blood isolate only); M 50y with gallstones had no gastrointestinal symptoms (blood isolate

only); M 56y with cirrhosis, M 86y and female, age not stated, all with bacteraemia only. *S. senftenberg*, M 73y (blood isolate only). *S. typhimurium* 5: 3 patients aged 48 - 80 years with gastrointestinal symptoms and/or faecal isolate also; M 82y and HIV-1 antibody positive F 42y with perforated gall bladder (both blood isolate only). *S. virchow* 3: all adults with gastrointestinal symptoms.

Also reported: *S. agona* 2: F 48y with cholestasis (bile and faeces) and F 63y (urine). *S. enteritidis* 4 (PT4,3): F 22y with sickle cell trait and osteomyelitis (bone); F 64y (urine and faeces); M 74y with renal failure (urine); M 78y with colonic perforation (faeces and peritoneum). *S. kentucky*, M 67y (urine and faeces). *S. newport*, F 56y (urine). *S. stanley*, F 70y (urine). *S. typhimurium*, M 2y with mastoid abscess and no history of diarrhoea (ear swab isolate). *S. virchow*, M 11y with dysuria (urine only).

Laboratory reports	Total bacteraemia	UTI/GU surgery (pregnant)	Biliary tract disease (ERCP)	Intravascular lines	Leukaemia/bone marrow suppression (with IV-lines)
<i>Citrobacter sp</i>	20	2 (–)	1 (1)	3	2 (1)
<i>Enterobacter sp</i>	89	16 (1)	10 (–)	11	11 (3)
<i>Escherichia coli</i>	645	261 (12)	71 (3)	16	45 (5)
<i>Klebsiella sp</i>	134	37 (–)	31 (4)	9	10 (2)
<i>Proteus sp</i>	125	73 (–)	3 (–)	4	2 (1)

### Meningitis

***Enterobacter intermedius***: F 14y with astrocytoma and CSF shunt.

***Escherichia coli***: 2 neonates; M 3m (blood isolate only); M 26y with meningomyelocoele; F 80y with urinary tract infection.

***Klebsiella oxytoca***: F 3d.

***Proteus mirabilis***: F 1m.

***Salmonella enteritidis* PT4**: M 6d (faeces also).

### Unusual infections

***Achromobacter sp***: M 77y (blood isolate).

***Bacillus sp*** 7: F 21y with leukaemia and intravascular line (blood and line-tip isolates); F 67y with cellulitis also had *Clostridium perfringens* (blood isolate); male, age not stated, with osteomyelitis (bone isolate). *B. cereus*: F 10y with leukaemia had IV-line (blood isolate); F 30y with septicaemic shock after childbirth (blood isolate); F 69y and F 75y (both blood isolates).

***Campylobacter sp*** 7: 5 patients aged 4 - 64 years with diarrhoea; F 75y after blood transfusion had no gastrointestinal

symptoms (all blood isolates); M 39y (urine isolate).

**Diphtheroids** 5: 4 immunocompromised patients aged 21 - 52 years including 2 of 3 patients with IV-lines (all blood isolates).

***Lactobacillus rhamnosus***: M 57y with liver abscess (blood, liver and ascitic fluid isolates).

***Propionibacterium sp***: preterm neonate (blood isolate).

***Yersinia enterocolitica*** 2: M 73y and F 77y (both blood isolates).

***Yersinia pseudotuberculosis***: neutropenic M 35y (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