

## Communicable Disease Report

### Escherichia coli O 157

Twenty-four cases of haemorrhagic colitis, associated with a verotoxin producing, urease positive strain of *E. coli* O 157, have now been reported to CDSC (see CDR 1991, 1, 21 and 25). The most recent date of onset was on 2 February. Isolations from the stools of 21 of these 24 cases have been confirmed by the Division of Enteric Pathogens (DEP) as a phage type 31 variant. Three of the 24 cases suffered from haemolytic uraemic syndrome (HUS). All 24 cases are recovering.

Following the case-control study in the North Western Region, which showed a statistically significant association between illness and the consumption of burgers from a single retail outlet, descriptive epidemiology of cases elsewhere in England and Wales, and Scotland, suggested that other outlets may have been involved. The Chief Medical Officer therefore issued a warning on 15 February advising caterers and the public that burgers should be thoroughly cooked right through.

Laboratories are invited to submit any cultures of *E. coli* O 157 from humans to DEP, who would also be pleased to receive faecal specimens from any patients with HUS or haemorrhagic colitis culture negative for *E. coli* O 157, with onset of illness in January or February. Serum samples should be submitted with faecal samples if possible. CDSC would be grateful for information on any cases of HUS.

### Cholera

A major outbreak of cholera (el Tor) is reported in Peru since late January. More than 20,000 cases have been reported in twelve cities in coastal regions; 77 deaths have been declared. Cholera is unusual in South America and the extent of this outbreak is causing much concern. Travellers to this area should avoid drinking unsterilised water and eating uncooked food especially seafoods.

### Gentamicin-resistant *Enterococcus faecium*

The Division of Hospital Infection (DHI) at Colindale wishes to inform microbiologists that they have recently received some *Enterococcus faecium* isolates with high level resistance to gentamicin (MIC >1000mg/l) from patients in Lancashire, London and Ireland. In some instances these isolates have caused serious infection. All were sensitive to vancomycin and did not produce  $\beta$ -lactamase. DHI would be happy to receive, and advise on, any future isolates.

### Infection control in the community - looking to the future

The Association of Medical Microbiologists and the Faculty of Public Health Medicine are holding a joint one-day meeting on Friday 19 April at the Royal Institute of British Architects, London. The role and future needs of the CCDC will be addressed. The meeting, which is sponsored by Smith Kline Beecham, is open to members of both organisations and their guests, particularly trainees and environmental health officers. Further information is available from Dr P J Wilkinson, Public Health Laboratory, Derriford Hospital, Plymouth PL6 8DH (telephone 0752 792366; fax 0752 771561).

### Salmonella infections:

weeks 91/04-07

### Other gastrointestinal tract infections:

weeks 91/04-07

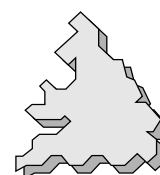
### Gastrointestinal virus infections:

weeks 91/04-07

### Bacteraemia and bacterial meningitis:

weeks 91/04-07

### Notice



## Salmonella infections, England and Wales: laboratory reports weeks 91/04 – 07

Serotype	Reports to CDSC					Reports from DEP
	91/04	91/05	91/06	91/07	Total	Total
<i>S. enteritidis</i> (PT4)	142 (104)	121 (67)	120 (102)	123 (83)	506 (356)	503 (415)
<i>S. typhimurium</i>	101	41	34	38	214	221
<i>S. virchow</i>	19	10	8	10	47	49
<i>S. newport</i>	11	9	5	6	31	24
<i>S. agona</i>	11	3	8	1	23	6
<i>S. hadar</i>	6	8	4	3	21	19
<i>S. saint-paul</i>	5	3	4	3	15	11
<i>S. heidelberg</i>	2	6	1	4	13	10
<i>S. infantis</i>	2	4	4	1	11	12
Other serotypes	37	15	29	22	103	186
Total	336	220	217	211	984	1041

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

7 each: *S. derby*, *S. kedougou*, *S. montevideo*.

*S. blockley* (6); *S. indiana* (5).

4 each: *S. bredeney*, *S. kentucky*, *S. reading*, *S. stanley*.

3 each: *S. bareilly*, *S. bovis-morbificans*, *S. give*, *S. javiana*, *S. panama*, *S. senftenberg*.

2 each: *S. anatum*, *S. braenderup*, *S. brandenburg*, *S. colindale*, *S. london*, *S. manhattan*, *S. new brunswick*, *S. rissen*, *S. tennessee*, *S. weltvreden*.

1 each: *S. abony*, *S. agama*, *S. albania*, *S. braenderup*, *S. cerro*, *S. drypool*, *S. dublin*, *S. emek*, *S. johannesburg*, *S. kaapstad*, *S. lexington*, *S. mbandaka*, *S. ohio*, *S. oranienburg*, *S. portsmouth*, *S. waycross*, *S. 4,12:d:-*.

### Comment

*S. agona*: CDSC has received 31 reports this year compared with 17 in the same period in 1990. Most cases have been reported from Yorkshire (10) and Trent (10) regions and 4 of the remainder gave a history of recent foreign travel. The ages of the patients showed a wide range. CDSC

would be grateful for information on any possible vehicles for these infections.

*S. enteritidis* PT 4: 56/105 guests at a party in January had diarrhoea and 'flu-like symptoms 24-36 hours later (18/20 persons tested were positive).

*S. enteritidis* PT 34: CDSC has received 6 reports of this phage type so far this year. Five were in adults aged 18-42 years, age was not given for one. All had probable dates of onset in January and a history of recent travel to Bulgaria.

*S. senftenberg*: CDSC has received a report from Northern Ireland of isolations from 12 out of 18 7oz packets of creamed coconut on retail sale, produced in the West Midlands. DEP has confirmed these isolates as *S. senftenberg*. No cases have been associated with this product. This serotype has been isolated from desiccated coconut over many years.

*S. typhimurium* DT 193: 3/27 patients in a geriatric unit had diarrhoea last December; two patients became ill following admission of the index case two days before (3/47 persons tested were positive).

## Food poisoning notifications from OPCS

	Number of notifications				Total notifications 91/04-07	Cumulative total 1991
	91/04	91/05	91/06	91/07		
Formally notified#	484	446	422	474	1826	3322
Otherwise ascertained#	187	223	146	168	724	1381

# provisional

### Comment

*Clostridium perfringens* serotype 11: 136/1000 Sorting Office staff had diarrhoea and abdominal pain about 12 hours after a Christmas lunch (see CDR 1991, 1, 2);

epidemiological evidence indicated that turkey was the likely vehicle of infection (14/17 persons tested were positive).

## Typhoid and paratyphoid, England and Wales: laboratory reports weeks 91/04-07

*S. typhi*: 7 cases aged 7 - 46 years were reported, all from Indian subcontinent.

*S. paratyphi* A: 10 cases aged 6 - 47 years were reported. Far East 1, Indian subcontinent 8, and the child of one of these.

*S. paratyphi* B: 2 cases in M 4y who had not been abroad, and male, age not stated, from Chile.

### Comment

*S. paratyphi* A phage type 1: M 25y who visited Indonesia also had phage type 4 isolated from faeces.

Notifications: 15 cases of typhoid and 8 of paratyphoid fever were statutorily notified (weeks 91/04-07)

**Other gastrointestinal tract infections: weeks 91/04 – 07**

Laboratory reports	Number of reports received				Total reports 91/04–07 (acquired abroad)	Cumulative total 1991
	91/04	91/05	91/06	91/07		
<i>Campylobacter</i>	391	468	330	340	1529 (127)	2763
<i>Shigella</i>	115	66	43	53	277 (85)	598
Enteropathogenic <i>E. coli</i> (children <3 years)	14	20	13	9	56 (1)	95
<i>Aeromonas</i>	3	4	–	3	10 (–)	19
<i>Plesiomonas</i>	1	1	2	2	6 (4)	10
<i>Vibrio</i>	1	–	1	2	4 (4)	7
<i>Clostridium difficile</i>	19	13	20	18	70 (–)	112
<i>Yersinia</i>	2	12	10	11	35 (2)	54

**Comment**

**Campylobacter:** 20 family outbreaks were reported.

**Shigella:** *S. boydii* 4 (3 abroad); *S. dysenteriae* 3 (abroad); *S. flexneri* 67 (29 abroad); *S. sonnei* 203 (50 abroad).

Eighteen family outbreaks were reported; there was one community outbreak in Wales (7/21 positive).

Notifications of dysentery for weeks 91/04–07 were 62, 64, 84 and 89 respectively; the cumulative total for 1991 is 558.

**Aeromonas:** *A. caviae* 3; *A. hydrophila* 5; *A. sobria* 1; *aeromonas sp* 1.

**Plesiomonas shigelloides:** 6 (4 abroad).

**Vibrio:** *V. cholerae* non O1, 2 (abroad); *V. parahaemolyticus* 2 (abroad).

**Clostridium difficile:** 2 regions reported more than 10% cases: Yorkshire (20 cases) and NE Thames (14).

**Yersinia:** *Y. enterocolitica* 27 (2 abroad); *Y. frederiksenii* 5; *Y. pseudotuberculosis* 1; *Yersinia sp* 2. *Y. enterocolitica*; one family outbreak was reported.

Laboratory reports	Number of reports received				Total reports 91/04–07 (acquired abroad)	Cumulative total 1991
	91/04	91/05	91/06	91/07		
Cryptosporidium	103	113	72	54	342 (8)	597
<i>Entamoeba histolytica</i>	8	11	11	58	88 (54)	143
Giardia	138	127	84	100	449 (122)	814
<i>Blastocystis hominis</i>	1	3	2	9	15 (–)	18
<i>Dientamoeba fragilis</i>	1	2	2	7	12 (2)	13

**Cryptosporidium:** 3 regions reported more than 10% cases: SE Thames (44 cases); SW Thames (60) and S Western (45).

Eight family outbreaks were reported.

**Entamoeba histolytica:** two family outbreaks were reported.

**Giardia:** 3 regions reported more than 10% cases:

Yorkshire (83 cases), NE Thames (56) and SW Thames (50). Fifteen family outbreaks were reported.

**Taenia 11:** *T. saginata* 9. India 1; Ethiopia 1.

**Trichostrongylus 3.**

**Trichuris 38.** Africa 6; ISC 6; Middle East 2; Far East 2.

**Gastrointestinal virus infections, England and Wales: laboratory reports weeks 91/04 - 07**

Laboratory reports	Number of reports received				Total reports 91/04–07	Cumulative total 1991
	91/04	91/05	91/06	91/07		
Adenovirus (EM faeces)	29	32	14	26	101	195
Adenovirus type 40/41	–	1	3	–	4	9
Astrovirus	16	17	10	6	49	116
Calicivirus	3	1	6	2	12	26
Rotavirus	639	662	513	597	2411	4337
SRSV	10	22	7	20	59	101

**Adenovirus (EM faeces):** 3 regions reported more than 10% cases: SE Thames (28 cases), S Western (13) and W Midlands (11). One family outbreak was reported.

**Adenovirus 40/41:** Northern region reported 3 cases.

**Astrovirus:** 3 regions reported more than 5 cases: Mersey (14), Yorkshire (7) and N Western (6). One family outbreak was reported.

**Calicivirus:** 2 regions reported more than 2 cases: Mersey

(4) and NE Thames (3).

**Rotavirus:** 2 regions reported more than 10% cases: Yorkshire (409 cases) and W Midlands (310). Nineteen outbreaks were reported, 17 family outbreaks and 2 in residential homes for the elderly.

**SRSV:** Yorkshire reported 32 cases. 11 outbreaks were reported, 7 in geriatric wards, 2 in residential homes for the elderly and 2 in hotels.

**Bacteraemia and bacterial meningitis, England and Wales: weeks 91/04 - 07**

Laboratory reports	No. of reports received		Age		Total received	Cumulative total for 1991
	Blood only	CSF only or CSF & blood	<1m	≥65y		
<i>Citrobacter sp</i>	18	—	—	14	18	28
<i>Enterobacter sp</i>	54	—	2	21	54	105
<i>Escherichia coli</i>	548	7	12	307	555	978
<i>Klebsiella sp</i>	102	—	1	45	102	202
<i>Proteus sp</i>	109	1	1	69	110	196
<i>Salmonella sp</i>	10	—	—	5	10	37

**Bacteraemia**

*Citrobacter sp*: *C. freundii* 13; *C. koseri* 2.

*Enterobacter sp*: *E. aerogenes* 6; *E. cloacae* 33; *E. agglomerans* 4.

*Klebsiella sp*: *K. aerogenes* 32; *K. oxytoca* 17; *K. ozaenae* 2;

*K. pneumoniae* 31.

*Proteus sp*: *P. mirabilis* 79; *P. morgani* 12; *P. vulgaris* 5.

	Total bacteraemia	UTI/GU surgery (pregnant)	Biliary tract disease (ERCP)	Leukaemia/bone marrow suppression (with IV-lines)	Intra-vascular lines
<i>Citrobacter sp</i>	18	2 (-)	—	3 (1)	1
<i>Enterobacter sp</i>	54	13 (-)	3 (-)	4 (1)	12
<i>Escherichia coli</i>	548	205 (7)	63 (2)	53 (3)	8
<i>Klebsiella sp</i>	102	33 (-)	14 (1)	15 (4)	13
<i>Proteus sp</i>	109	62 (2)	1 (-)	1 (-)	2

*Salmonella sp*: *S. enteritidis* 4 (PT 4, 2): M 60y and M 85y with D & V; M 6y with leukaemia and M 87y (both blood isolate only). *S. reading*, diabetic F 56y with offensive vaginal discharge (blood, urine, HVS, faeces). *S. typhimurium* 3: 3 patients aged 65 years or more, all with gastrointestinal symptoms or faecal isolate also. *S. virchow*

2: M 16y and M 23y with gastrointestinal symptoms. Also reported: *S. agona*, F 6y (urine only). *S. enteritidis* 4 (all PT 4): M 50y, F 84y and M 91y (all urine isolates); M 74y with diarrhoea (wound). *S. newport*, M 6m with perianal abscess. *S. senftenberg*, F 35y with infected ankle bursa (biopsy isolate).

**Meningitis**

*Escherichia coli*: 3 neonates; 2 infants aged 1 month; F 56y with urinary tract infection; M 84y.

*Klebsiella oxytoca*: preterm F 3m, on ventilator, had post-

haemorrhagic hydrocephalus (blood, dural tap isolates). *Proteus mirabilis*: M 70y with mastoid infection and cerebral abscess.

**Unusual infections**

*Bacillus sp*: M 19y with leukaemia and M 67y (both blood isolates).

*Campylobacter sp* 2: one child aged 3 years and M 23y with diarrhoea and vomiting (both blood isolates).

*Erwinia sp*: diabetic M 58y with fever (blood isolate).

*Escherichia hermannii*: M 43y with leukaemia (blood

isolate).

*Yersinia enterocolitica* 3: M 41y with fever, splenomegaly and hepatic granulomata, has farm contact with goats (blood isolate). Diabetic M 67y with fever; F 79y with three week history of hip pain (both blood isolates).

**Infectious and parasitic diseases update 1991**

This course, organised by the Department of Clinical Sciences at the London School of Hygiene and Tropical Medicine, will take place at the School between 10 and 14 June 1991. It will cover a wide range of infectious diseases and will be of interest to microbiologists, infectious disease physicians and physicians concerned with the control of infection in the community. Further details and application forms are available from Dr S G Wright, Department of Clinical Sciences, London School of Hygiene and Tropical Medicine, Keppel Street, London WC1E 7HT (Fax 071 637 4314).

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