

Communicable Disease Report

Outbreak of cryptosporidiosis in Northern Ireland

Ninety-seven confirmed cases of cryptosporidiosis were reported in Northern Ireland between 17 August and 7 September 2000. Epidemiological and water investigations are being managed by the Eastern Health and Social Services Board and the Water Service in Northern Ireland.

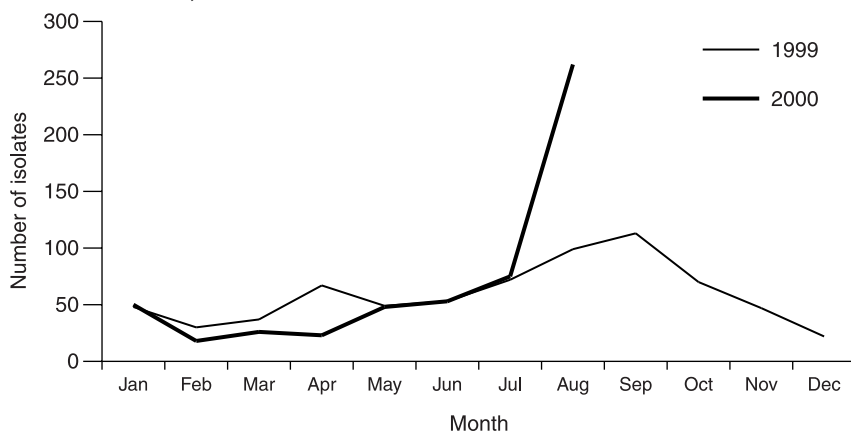
On 21 August a general practitioner reported that ten cases of vomiting and diarrhoea had occurred during the weekend of 19 and 20 August. On the same day the consultant in communicable disease control received reports of two patients with cryptosporidiosis and advised the Water Service, which began additional sampling. Twenty-one laboratory confirmed cases had been received from a discrete geographic area south west of Belfast by 25 August. Although no oocysts had been detected in water samples the outbreak control team agreed to issue precautionary advice to elderly people and to those with medical conditions that increase susceptibility to the infection while investigations continued. 'Boil water' notices were issued to 65 000 people on 31 August and 1 September after oocysts were detected in continuous filter samples of the water supply for the area.

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National increase in *Salmonella typhimurium* DT104 – update

Two hundred and sixty-five cases of infection with *Salmonella typhimurium* DT104 resistant to ampicillin, chloramphenicol, streptomycin, sulphonamides, spectinomycin, and tetracyclines (R-type ACSSuSpT) have now been confirmed by the PHLS Laboratory of Enteric Pathogens (LEP) since 1 August 2000, compared with 97 during the same period in 1999 (figure)^{1,2}. The dates of onset of illness (known for 106 patients) range from 31 July to 17 August. Thirty-eight of the strains examined so far possess an additional plasmid (>1.0 MDa). Plasmid analysis of all isolates of *S. typhimurium* DT104 (R-type ACSSuSpT) referred to LEP since 1 August 2000 is continuing. Cases have been reported from all regions, 99 by West Midlands region. Equal numbers of males and females have been affected. People of all ages have been affected, but most cases have been teenagers and young adults.

Figure Laboratory isolates of *S. typhimurium* DT104 R-type ACCSSuSpT: England and Wales, 1999 and 2000



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General outbreaks of foodborne illness, England and Wales: weeks 32-35/00

Preliminary information has been received about the following outbreaks. Final information will be published in the quarterly report

Health authority	Organism	Place of outbreak	Month of outbreak	Number ill	Cases positive	Suspect vehicle	Evidence
Manchester	<i>Salmonella bredeney</i> PT12	Not known	August	7	7	Chicken	–
Liverpool	<i>S. bredeney</i> PT4	Community	August	5	5	None	–
Gwent	<i>S. enteritidis</i> PT4	Bakeries	June	13	13	Cakes	
East Riding	<i>S. enteritidis</i> PT4	Caterer	August	17	17	None	–
Lincolnshire	<i>S. enteritidis</i> PT4	Reception	August	>1	>1	Chicken	–
West Sussex	<i>S. enteritidis</i> PT4	Not Known	August	>1	>1	None	–
Sefton	<i>S. enteritidis</i> PT4	Restaurant	April	2	2	None	–
North Yorkshire	<i>S. enteritidis</i> PT4	Reception	August	2	2	None	–
Shrewsbury	<i>S. enteritidis</i> PT4	Buffet	August	>1	>1	None	–
Avon	<i>S. enteritidis</i> PT6	Café	August	>1	>1	None	–
East and North Hertfordshire	<i>S. enteritidis</i> PT21	Lunch	August	2	2	None	–
South Cheshire	<i>S. indiana</i>	Care home	August	>1	>1	None	–
Calderdale and Kirklees	<i>S. typhimurium</i> DT7	Restaurant	August	3	3	None	–
National	<i>S. typhimurium</i> DT104	National	August	265	265	None	–
Buckinghamshire	Campylobacter	Private house	June	19	1	Buffet	–
Buckinghamshire	Scombrototoxin	Café	July	2	*	Tuna	M
Co Durham	Unknown	Function room	July	20	0	Rice	D

M (microbiological): identification of an organism of the same type from cases and in the suspect vehicle, or vehicle ingredient(s), or detection of toxin in faeces or food

D (descriptive): other evidence, usually descriptive, reported by local investigators as indicating the suspect vehicle

* not applicable

Salmonella infections, England and Wales: reports to the PHLS (salmonella data set*)

Details of serotypes of the 1831 salmonella infections recorded in July are given in the adjacent table. In August 2000, 2262 salmonella infections were recorded and preliminary information was received about 14 outbreaks (see table above).

* figures quoted from the PHLS salmonella data set are for isolates confirmed and typed by PHLS Laboratory of Enteric Pathogens (LEP)

	July 2000
Salmonella (provisional total)	1831
<i>S. enteritidis</i> (PT4)	696
<i>S. enteritidis</i> (other PTs)	522
<i>S. typhimurium</i>	271
<i>S. virchow</i>	25
Others (typed)	317

Common gastrointestinal infections, England and Wales: laboratory reports, weeks 32-35/00

Laboratory reports	Number of reports received				Total reports 32-35/00	Cumulative totals for weeks 01-35	
	32/00	33/00	34/00	35/00		2000	1999
<i>Campylobacter</i>	1111	1512	1144	769	4536	35905	38219
<i>Escherichia coli</i> O157*	17	28	20	28	93	527	674
<i>Shigella sonnei</i>	10	9	10	8	37	480	653
Rotavirus	36	222	39	13	310	15967	13787
SRSV	10	33	24	28	95	1660	1538
<i>Cryptosporidium</i>	45	92	102	95	334	2769	2659
<i>Giardia</i>	60	108	79	31	278	2521	2743

* Vero cytotoxin producing isolates (data from LEP)

Giardiasis in England and Wales

Just over 2500 cases of giardiasis were reported to the PHLS Communicable Disease Surveillance Centre in the first 35 weeks of 2000, 8% less than in the same period of 1999. A total of 4240 cases were reported in 1999, 12% less than the 4798 cases reported in 1998. A downward has been trend seen since 1990 (figure 1).

All regions reported cases in 1999. As in 1998, the South East reported the largest number (figure 2). Almost half (48%) of cases were aged 15 to 44 years.

Figure 1 Laboratory reports of giardiasis: England and Wales, 1988 to 1999*

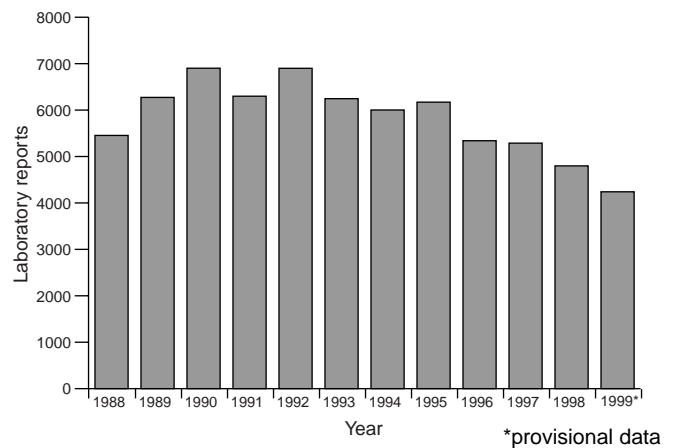
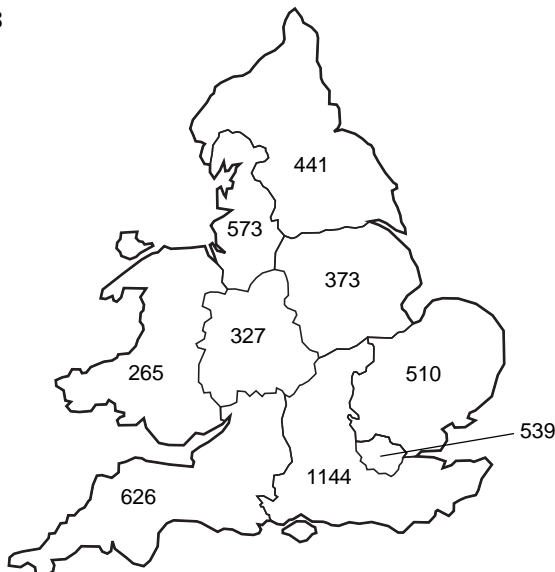
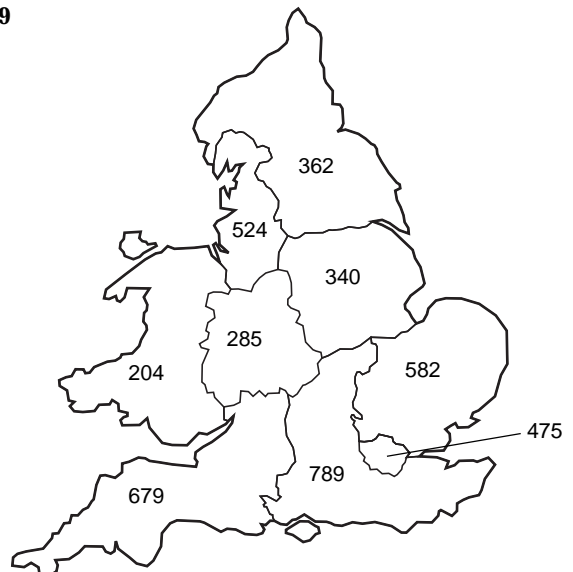


Figure 2 Regional distribution of giardiasis cases: England and Wales, 1998 and 1999

(a) 1998



(b) 1999



Epidemiology and control of communicable diseases and environmental hazards

The annual PHLS conference on the epidemiology and control of communicable diseases and environmental hazards held at the PHLS Communicable Disease Surveillance Centre (CDSC) in Colindale takes place on Monday 6 November to Wednesday 8 November 2000. It is aimed primarily at consultants in communicable disease control, but will also interest medical microbiologists and environmental health and nursing professionals involved in the control of communicable disease and environmental hazards.

The conference will address important public health issues that have arisen in the past year and provide fresh perspectives on established areas of disease prevention and control. The programme will include sessions on immunisation, hospital infection, primary care/NHS direct, primary care surveillance, imported infections, environment, and blood/sex/prions. Short papers on recent outbreaks and surveillance initiatives will also be presented. If you wish to attend, please contact Vivienne Fitch at CDSC, 61 Colindale Avenue, London NW9 5EQ (tel 020 8200 6868 ext 4569; fax 020 8200 7868; email vfitch@phls.nhs.uk).

Outbreak of cryptosporidiosis in Northern Ireland (continued from page 323)

Detailed investigation of the water supply system showed that the water samples leaving the water treatment works were clear but that ingress had occurred at a section of a seven mile long conduit to local service reservoirs close to a septic tank. This conduit was built in 1890 and travels under farm land at depths varying from 1 to 8.5 metres. Cryptosporidiosis has not been associated with this water supply zone before. The Water Service has decided to bypass part of the existing conduit using new pipeline currently under construction, which will take about two weeks to implement.

National increase in *Salmonella typhimurium* DT104 – update (continued from page 323)

Thirty-three cases have been interviewed using detailed questionnaires designed to help generate hypotheses. Twelve patients presented with bloody diarrhoea. Seven patients were admitted to hospital, two with septicaemia, and one subsequently died. The maximum length of hospital stay was four days. The duration of illness ranged from three days to three weeks. Consultant medical microbiologists are asked to continue to ensure that group B salmonellas (O4: i) are forwarded to LEP as quickly as possible for confirmation and further typing.

1. CDSC. Increase in laboratory reports of *Salmonella typhimurium* DT104. *Commun Dis Rep CDR Wkly* 2000; **10**: 301.
2. CDSC. National increase in *Salmonella typhimurium* DT104 – update. *Commun Dis Rep CDR Wkly* 2000; **10**: 311,4.

Notifications of infectious diseases

Doctors in England and Wales have a statutory duty to notify a 'proper officer' of the local authority (usually the consultant in communicable disease control) of cases of certain infectious diseases (*CDR Review 1993; 3: R19-25*). Notifications of infectious diseases, not all of which are microbiologically confirmed, prompt local investigation and action to control the diseases. Proper officers are required each week to inform the Registrar

General of the number of cases of each disease that have been notified. The responsibility for collating the weekly returns from proper officers, and publishing analyses of local and national trends has been transferred to CDSC from ONS (*CDR Weekly 1997; 7: 145*). An expanded form of table 2 with data to district level is available on a quarterly basis on the PHLS website <www.phls.co.uk/facts/noid.htm>.

Table 1 Notifications of infectious diseases* in the past 6 weeks, with totals for the current year compared with corresponding periods of the two preceding years

		Week						Cumulative totals to week 34 [†]			Cumulative totals from mid-year to week 34 [‡]			
		29/00	30/00	31/00	32/00	33/00	34/00	1998 (i)	1999 (ii)	2000 (iii)	97/98(a)	98/99(b)	99/00(c)	
Tuberculosis	Cases [¶]	151	141	132	125	118	157	3948	4243	4622	1014	1079	1100	
Scarlet fever	Cases	40	33	22	21	23	15	2620	1596	1422	413	228	221	
Malaria	Cases	21	11	35	15	26	29	710	606	640	165	233	195	
Leptospirosis	Cases	2	–	–	1	1	–	18	13	18	6	1	5	
Food poisoning formally notified ascertained	Cases	2259	2075	2116	2132	2090	2184	57938	57105	54445	17954	18091	17358	
	Cases	1164	1041	1069	1090	1020	1122	33063	32695	27995	10166	10154	8699	
	Cases	1095	1034	1047	1042	1070	1062	24875	24410	26450	7788	7937	8659	
Typhoid fever presumed contracted	Cases	2	3	2	1	5	3	78	109	87	20	22	23	
	abroad [§]	2	3	1	1	4	2	68	96	81	17	22	20	
	GB	–	–	1	–	1	1	10	13	6	3	–	3	
Paratyphoid fever presumed contracted	Cases	–	1	1	–	1	2	78	81	50	23	18	9	
	abroad [§]	–	–	1	–	1	1	72	77	45	20	17	7	
	GB	–	1	–	–	–	1	6	4	5	3	1	2	
Dysentery	Cases	32	26	26	35	28	21	1002	973	937	321	247	231	
Viral hepatitis	hepatitis A	Cases	77	97	80	77	82	59	1991	2185	2362	494	551	610
	hepatitis B	Cases	25	18	24	32	23	16	972	1083	904	193	252	192
	hepatitis C	Cases	25	25	23	25	31	25	544	549	682	153	163	197
	hepatitis C	Cases	23	51	22	12	24	15	366	455	662	129	124	182
	other and unknown	Cases	4	3	11	8	4	3	109	98	114	19	12	39
Meningitis meningococcal	Cases	69	57	62	51	61	58	1403	1456	1788	282	259	486	
	influenzal (<i>Haemophilus influenzae</i>)	Cases	22	20	24	24	17	22	793	804	883	138	125	178
	other specified	Cases	1	–	3	–	2	–	18	17	29	4	6	7
Meningococcal septicaemia (without meningitis)	unspecified	Cases	40	32	29	22	37	30	427	448	662	101	97	249
	unspecified	Cases	6	5	6	5	5	6	165	187	214	39	31	52
Acute encephalitis infective post-infectious	Cases	28	30	30	29	18	12	1026	1351	1248	174	223	205	
	Cases	–	–	–	–	–	1	15	15	6	4	3	1	
	Cases	–	–	–	–	–	–	12	11	4	3	3	1	
Whooping cough	Cases	–	–	–	–	–	–	3	4	2	1	–	–	
	Cases	21	21	16	21	15	14	1034	734	433	243	187	146	
	Cases	21	21	16	21	15	14	1034	734	433	243	187	146	
Tetanus	Cases	–	–	–	–	1	–	6	1	1	6	–	1	
Measles	Cases	64	69	46	49	29	33	2806	1707	1818	549	363	382	
Mumps	Cases	49	34	40	45	53	26	1104	1140	1515	258	285	343	
Rubella	Cases	44	47	42	30	23	25	2530	1444	1306	468	304	284	
Ophthalmia neonatorum	Cases	2	7	1	3	1	5	132	118	112	30	31	24	
Special cases														
Cholera	Cases	1	1	1	1	1	1	36	18	19	10	4	8	
Anthrax	Cases	–	–	–	–	1	–	–	1	1	–	–	1	
Diphtheria	Cases	–	–	–	–	–	1	12	18	10	3	2	1	

All figures include late returns

* includes notifications from Port Health Authorities

† Cumulative totals commencing week ended (i) 2 Jan (ii) 8 Jan (iii) 7 Jan

‡ Cumulative totals from mid-year commencing week ended (a) 5 July (b) 4 July (c) 9 July

§ Includes cases of unstated origin

¶ Excluding chemoprophylaxis

Table 2 Notifications of infectious diseases in week 34/00 (health regions, counties, and unitary authorities)

Area	Measles	Mumps	Rubella	Dysentery	Scarlet fever	Whooping cough	Viral hepatitis	TB all forms*	Meningitis†	Food poisoning notified§	ascertained#	Malaria
Northern and Yorkshire	3	4	3	5	5	1	14	30	6	109	133	4
Cumbria	–	–	–	–	–	–	–	–	–	11	13	1
Durham	–	1	–	–	2	–	1	–	–	10	11	–
North Yorkshire	–	–	–	–	1	–	1	1	–	22	10	–
Northumberland	–	–	–	–	–	–	–	1	1	–	3	–
Tyne and Wear¶	–	–	–	–	–	–	–	8	3	15	26	1
West Yorkshire¶	2	3	2	4	1	1	3	17	1	20	35	2
City of Kingston upon Hull	–	–	–	–	1	–	5	–	–	4	2	–
Darlington	–	–	–	–	–	–	1	–	–	1	3	–
East Riding of Yorkshire	1	–	1	–	–	–	1	2	1	5	27	–
Hartlepool	–	–	–	–	–	–	1	–	–	6	–	–
Middlesbrough	–	–	–	–	–	–	–	–	–	2	–	–
Redcar and Cleveland	–	–	–	–	–	–	–	–	–	–	–	–
Stockton-on-Tees	–	–	–	1	–	–	1	–	–	8	–	–
York	–	–	–	–	–	–	–	1	–	5	3	–
Trent	4	2	5	1	1	–	4	16	13	132	168	2
Derbyshire	–	–	–	–	1	–	–	–	1	14	22	–
Leicestershire	1	–	–	–	–	–	–	1	–	27	8	–
Lincolnshire	–	–	1	1	–	–	–	–	2	13	24	–
Nottinghamshire	1	–	1	–	–	–	–	–	1	29	35	–
South Yorkshire¶	1	1	3	–	–	–	3	6	4	30	28	1
Derby	1	1	–	–	–	–	–	–	1	8	15	–
Leicester	–	–	–	–	–	–	–	9	–	4	15	–
North East Lincolnshire	–	–	–	–	–	–	1	–	2	3	10	1
North Lincolnshire	–	–	–	–	–	–	–	–	1	2	4	–
Nottingham	–	–	–	–	–	–	–	–	1	–	7	–
Rutland	–	–	–	–	–	–	–	–	–	2	–	–
Eastern	2	1	5	2	2	3	3	5	4	139	116	1
Bedfordshire	–	–	2	–	–	–	–	–	1	11	6	–
Cambridgeshire	–	–	–	–	–	–	–	–	–	13	3	1
Essex	–	–	–	–	–	–	–	–	–	28	11	–
Hertfordshire	–	–	1	1	–	1	3	1	–	17	51	–
Norfolk	–	–	–	–	1	–	–	–	3	5	22	–
Suffolk	1	1	–	–	–	2	–	1	–	27	20	–
Luton	–	–	1	–	1	–	–	3	–	7	3	–
Peterborough	–	–	–	–	–	–	–	–	–	11	–	–
Southend-on-Sea	1	–	1	1	–	–	–	–	–	9	–	–
Thurrock	–	–	–	–	–	–	–	–	–	11	–	–
London	5	2	1	2	–	4	13	60	8	176	40	19
Greater London	5	2	1	2	–	4	13	60	8	176	40	19
South East	5	5	7	4	3	3	6	9	8	181	156	1
Buckinghamshire	–	–	–	–	–	–	–	–	1	10	8	–
East Sussex	–	–	–	–	–	–	–	–	–	12	8	–
Hampshire	–	2	–	2	1	–	–	2	–	25	19	–
Kent	–	–	2	–	1	–	3	–	–	24	21	1
Northamptonshire	–	2	–	–	1	–	2	4	–	12	20	–
Oxfordshire	–	–	4	–	–	–	–	–	–	–	15	–
Surrey	–	–	–	1	–	–	–	–	3	23	13	–
West Sussex	–	–	–	–	–	–	–	–	1	22	23	–
Bracknell Forest	1	–	–	–	–	–	–	–	–	2	–	–
Brighton and Hove	–	–	–	–	–	–	–	–	1	8	–	–
Isle of Wight	–	–	–	–	–	–	–	–	–	–	–	–
Medway Towns	–	–	–	–	–	–	–	–	–	1	–	–
Milton Keynes	–	–	–	–	–	–	–	2	–	2	11	–
Newbury	1	–	–	–	–	–	–	–	–	4	1	–
Portsmouth	–	–	–	1	–	–	–	–	–	8	–	–
Reading	–	–	–	–	–	1	–	–	1	8	2	–
Slough	1	–	–	–	–	–	–	–	–	2	2	–
Southampton	–	1	–	–	–	–	1	–	–	–	6	–
Windsor and Maidenhead	–	–	1	–	–	2	–	–	–	6	1	–
Wokingham	2	–	–	–	–	–	1	1	1	12	6	–
South West	2	1	2	–	1	–	7	8	8	113	143	–
Cornwall and Isles of Scilly	–	–	1	–	–	–	–	–	–	5	29	–
Devon	–	–	–	–	–	–	–	1	–	10	19	–
Dorset	–	–	–	–	–	–	2	–	–	7	25	–
Gloucestershire	1	–	–	–	–	–	–	1	–	11	1	–
Somerset	1	–	–	–	1	–	–	–	–	23	–	–
Wiltshire	–	1	1	–	–	–	–	1	–	27	–	–
Bath and NE Somerset	–	–	–	–	–	–	–	–	–	1	2	–
Bournemouth	–	–	–	–	–	–	3	1	–	2	6	–
Bristol	–	–	–	–	–	–	1	1	2	3	14	–
North Somerset	–	–	–	–	–	–	–	1	2	4	11	–
Plymouth	–	–	–	–	–	–	–	–	2	–	13	–
Poole	–	–	–	–	–	–	–	–	–	3	8	–
South Gloucestershire	–	–	–	–	–	–	–	–	2	–	11	–
Swindon	–	–	–	–	–	–	–	1	–	16	–	–
Torbay	–	–	–	–	–	–	1	1	–	1	4	–

Area	Measles	Mumps	Rubella	Dysentery	Scarlet fever	Whooping cough	Viral hepatitis	TB all forms*	Meningitis†	Food poisoning notified‡	ascertained‡	Malaria
West Midlands	8	4	1	2	1	1	1	17	3	98	140	1
Shropshire	–	–	–	1	–	1	–	–	–	1	14	–
Staffordshire	1	1	–	–	–	–	–	–	1	30	6	1
Warwickshire	5	–	–	–	–	–	–	1	–	4	15	–
West Midlands¶	2	3	–	1	1	–	1	13	1	46	76	–
Worcestershire	–	–	1	–	–	–	–	1	1	15	10	–
<i>Hereford</i>	–	–	–	–	–	–	–	–	–	1	4	–
<i>Stoke-on-Trent</i>	–	–	–	–	–	–	–	2	–	1	11	–
<i>Telford and Wrekin</i>	–	–	–	–	–	–	–	–	–	–	4	–
North West	2	5	1	4	1	–	9	4	4	73	120	–
Cheshire	–	–	–	–	–	–	–	–	2	17	28	–
Cumbria	–	–	–	–	–	–	–	–	–	1	8	–
Greater Manchester¶	–	2	1	2	–	–	5	2	1	26	38	–
Lancashire	1	2	–	–	1	–	1	–	–	21	5	–
Merseyside	–	–	–	1	–	–	1	2	1	4	19	–
<i>Blackburn</i>	–	–	–	–	–	–	–	–	–	–	6	–
<i>Blackpool</i>	–	–	–	–	–	–	–	–	–	1	7	–
<i>Halton</i>	–	–	–	–	–	–	–	–	–	1	–	–
<i>Warrington</i>	1	1	–	1	–	–	2	–	–	2	9	–
Wales	2	2	–	1	1	2	2	8	4	101	46	1
<i>Blaenau Gwent</i>	–	–	–	–	–	–	–	–	1	–	–	–
<i>Bridgend</i>	–	–	–	–	–	–	–	–	–	11	–	–
<i>Caerphilly</i>	–	–	–	–	1	–	–	–	–	6	3	–
<i>Cardiff</i>	–	1	–	–	–	–	–	4	–	10	12	–
<i>Carmarthenshire</i>	1	–	–	–	–	–	2	1	2	–	1	–
<i>Ceredigion</i>	–	–	–	–	–	–	–	–	–	1	2	–
<i>Conwy</i>	–	1	–	–	–	–	–	–	–	6	3	–
<i>Denbighshire</i>	–	–	–	–	–	–	–	–	–	6	2	–
<i>Flintshire</i>	–	–	–	–	–	–	–	–	–	4	6	–
<i>Gwynedd</i>	–	–	–	–	–	–	–	–	1	–	–	–
<i>Isle of Anglesey</i>	1	–	–	–	–	–	–	–	–	–	–	–
<i>Merthyr Tydfil</i>	–	–	–	–	–	–	–	1	–	4	–	–
<i>Monmouthshire</i>	–	–	–	–	–	–	–	–	–	1	6	–
<i>Neath and Port Talbot</i>	–	–	–	–	–	–	–	–	–	19	–	–
<i>Newport</i>	–	–	–	–	–	2	–	1	–	–	–	1
<i>Pembrokeshire</i>	–	–	–	1	–	–	–	–	–	6	4	–
<i>Powys</i>	–	–	–	–	–	–	–	–	–	–	–	–
<i>Rhondda, Cynon, Taff</i>	–	–	–	–	–	–	–	–	–	9	–	–
<i>Swansea</i>	–	–	–	–	–	–	–	–	–	11	–	–
<i>Torfaen</i>	–	–	–	–	–	–	–	–	–	–	–	–
<i>Vale of Glamorgan</i>	–	–	–	–	–	–	–	1	–	3	–	–
<i>Wrexham</i>	–	–	–	–	–	–	–	–	–	4	7	–

* Excluding prophylaxis. † All forms. ‡ Formally notified. # Ascertained by other means. ¶ Metropolitan county.

Unitary authorities are shown in italics.

Notifications in week 34/00 of infectious diseases not shown in table 2

Acute encephalitis: one infective case; in Norfolk.

Cholera: one case; in Blackburn

Diphtheria: one case; in Somerset (known to be a non-toxicogenic strain).

Meningitis (meningococcal): 22 cases; three in Norfolk, and one in each of Bedfordshire, Blaenau Gwent, Brighton and Hove, Buckinghamshire, Cheshire, Derbyshire, Greater London, Greater Manchester, Gwynedd, Merseyside, North East Lincolnshire, Northumberland, Nottingham, Nottinghamshire, Tyne and Wear, West Midlands, West Sussex, West Yorkshire, and Worcestershire.

Meningococcal septicaemia (without meningitis): 12 cases; two in Nottinghamshire, and one in each of Cardiff, Denbighshire, Flintshire, Greater London, Greater Manchester, Hertfordshire, Leicestershire, South Gloucestershire, Warrington, and Warwickshire.

Ophthalmia neonatorum: five cases; in each of Derbyshire, Greater London, Milton Keynes, West Midlands, and West Yorkshire.

Paratyphoid fever: two cases; one presumed to have been contracted abroad – from West Midlands, and one presumed to have been contracted in Great Britain – from Greater London.

Typhoid fever: three cases; one presumed to have been contracted abroad – from Greater London, one presumed to have been contracted in Great Britain – from Lancashire, and one of unknown origin – from Greater Manchester.

No cases of acute poliomyelitis, anthrax, leptospirosis, meningitis influenzae (*Haemophilus influenzae*), plague, rabies, relapsing fever, smallpox, tetanus, typhus, viral haemorrhagic fever, or yellow fever were notified.

Table 3 Weekly analysis report of notifications above expected rates in week 34/00

District	County	Observed number	Expected number	Ratio observed/expected	District	County	Observed number	Expected number	Ratio observed/expected
Dysentery					Meningitis (all)				
Kirklees	West Yorkshire	3	0.16	19.06	Bexley	Greater London	3	0.25	12.15
Food poisoning (all)					Mole Valley	Surrey	2	0.09	22.47
Allerdale	Cumbria	11	4.05	2.72	Sheffield	South Yorkshire	4	0.59	6.75
Amber Valley	Derbyshire	14	4.85	2.89	Mumps				
Babergh	Suffolk	10	3.33	3.00	Fareham	Hampshire	2	0.05	40.81
Bassetlaw	Nottinghamshire	20	4.50	4.44	Rubella				
Bolton	Greater Manchester	23	11.21	2.05	Oxford	Oxfordshire	2	0.06	34.94
Dacorum	Hertfordshire	20	5.68	3.52	South Oxfordshire	Oxfordshire	2	0.06	32.50
Derby	Derby	23	9.79	2.35	Tuberculosis*				
Doncaster	South Yorkshire	26	12.37	2.10	Barnet	Greater London	5	0.95	5.27
Dudley	West Midlands	28	13.19	2.12	Birmingham	West Midlands	9	3.09	2.91
East Hertfordshire	Hertfordshire	15	5.18	2.90	Ealing	Greater London	9	0.89	10.15
East Riding of Yorkshire	East Riding of Yorkshire	32	13.02	2.46	Enfield	Greater London	5	0.79	6.30
Ellesmere Port and Neston	Cheshire	12	3.42	3.51	Hackney	Greater London	5	0.59	8.48
Neath and Port Talbot	Neath and Port Talbot	19	5.89	3.22	Islington	Greater London	6	0.53	11.33
North Wiltshire	Wiltshire	16	5.13	3.12	Kirklees	West Yorkshire	15	1.18	12.75
Penwith	Cornwall and Isles of Scilly	10	2.53	3.95	Leicester	Leicester	9	0.90	10.03
South Hams	Devon	10	3.34	2.99	Southwark	Greater London	5	0.70	7.10
St Edmundsbury	Suffolk	14	3.93	3.56	Tower Hamlets	Greater London	4	0.52	7.63
Swindon	Swindon	16	7.34	2.18	Wellingborough	Northamptonshire	3	0.21	14.49
Vale Royal	Cheshire	14	4.84	2.89	Viral hepatitis (all)				
West Devon	Devon	8	1.97	4.06	Bolton	Greater Manchester	4	0.30	13.21
West Lindsey	Lincolnshire	11	3.27	3.36	Bournemouth	Bournemouth	3	0.18	16.35
Wokingham	Wokingham	18	5.99	3.00	City of Kingston upon Hull	City of Kingston upon Hull	5	0.31	16.32
Food poisoning (Formally notified)					Newham	Greater London	6	0.26	23.04
Babergh	Suffolk	10	1.71	5.85	North Dorset	Dorset	2	0.06	30.84
Bassetlaw	Nottinghamshire	9	2.31	3.89	Whooping cough				
Brentwood	Essex	7	1.56	4.50	Ealing	Greater London	2	0.08	24.85
Bridgend	Bridgend	11	2.83	3.88	Ipswich	Suffolk	2	0.03	62.38
Canterbury	Kent	10	2.93	3.41	Newport	Newport	2	0.04	49.63
Epsom and Ewell	Surrey	7	1.50	4.66	Windsor and Maidenhead	Windsor and Maidenhead	2	0.04	56.45
Greenwich	Greater London	16	4.58	3.49	Note: This table shows those districts from which the rates of notifications reported this week were significantly higher than expected (P<0.005). The number of notifications in each district is shown in the third column (observed). The number expected if the national rate is applied to the district population is shown in the fourth column (expected). The fifth column shows by how many times the number of notifications exceeds the expected number (ratio observed/expected). Caution must be exercised when interpreting this table, as listing is wholly dependent on comparable reporting of notifiable infectious diseases from all districts of England and Wales and on local patterns of disease.				
Harborough	Leicestershire	7	1.56	4.47					
Lambeth	Greater London	14	5.68	2.47					
Macclesfield	Cheshire	11	3.29	3.34					
Neath and Port Talbot	Neath and Port Talbot	19	3.03	6.28					
North Wiltshire	Wiltshire	16	2.64	6.07					
Peterborough	Peterborough	11	3.46	3.18					
South Cambridgeshire	Cambridgeshire	10	2.74	3.65					
St Edmundsbury	Suffolk	9	2.02	4.46					
Sutton	Greater London	15	3.78	3.97					
Swindon	Swindon	16	3.77	4.25					
Thurrock	Thurrock	11	2.85	3.85					
West Wiltshire	Wiltshire	8	2.38	3.36					
Wokingham	Wokingham	12	3.08	3.90					
Wolverhampton	West Midlands	18	5.30	3.40					
Malaria									
Haringey	Greater London	3	0.12	25.08					
Redbridge	Greater London	5	0.13	39.24					
Tower Hamlets	Greater London	3	0.10	30.96					
Measles									
Nuneaton and Bedworth	Warwickshire	4	0.08	50.15					
Wokingham	Wokingham	2	0.10	21.03					

* excluding prophylaxis

General outbreaks of foodborne illness in humans, England and Wales: quarterly report

Table 1 Final information on general outbreaks¹ of foodborne illness: January to March 2000

Local authority	Organism	Location of food prepared or served	Number ill ²	Cases positive	Suspect vehicle ³	Evidence ⁴
Trafford	<i>Salmonella bredeney</i>	Retailer	13	8	Chicken portions	M
Maidstone	<i>S. enteritidis</i> PT4	Prison	5	4	Ice cream	M
North Tyneside	<i>S. enteritidis</i> PT4	Community	17	11	None	–
Crawley	<i>S. enteritidis</i> PT4	Canteen	47	26	Chicken portions	M+S
Suffolk Coastal	<i>S. enteritidis</i> PT4	Residential institution	10	10	None	–
Leicester City	<i>S. enteritidis</i> PT4	Restaurant	14	11	Chicken patties	S
North Tyneside	<i>S. enteritidis</i> PT4	Public house	13	8	Quiche and tuna sandwiches	S
Wrexham	Scombrototoxin	Restaurant	13	*	Tuna sandwiches	M
Brent	SRSV	Hall	72	3	None	–
Chester	SRSV	Hotel	32	1	None	–
Southampton	Unknown	Restaurant	9	0	Unshelled prawns	D

1. General outbreaks involve members of more than one household
2. The number known to have been ill
3. Local investigations may not provide conclusive evidence of vehicles of infection. Vehicles are therefore designated 'suspect'.
4. M (microbiological): identification of an organism of the same type from cases and in the suspect vehicle, or vehicle ingredient(s), or detection of toxin in faeces or food

- S (statistical): a significant statistical association between consumption of the suspect vehicle(s) and being a case
D (descriptive): other evidence, usually descriptive, reported by local investigators as indicating the suspect vehicle
* not applicable
NA (information not available): summary report not yet received

Table 2 Outbreaks¹ of salmonella infection: April to June 2000

Outbreak type	<i>S. enteritidis</i>		<i>S. typhimurium</i>	Other serotypes	Total
	PT4	Other PTs			
General ²	7	3	3	2	15
Household ³	27	24	10	16	77
Acquired abroad ⁴	4	14	2	4	24
Total	38	41	15	22	116

1. An 'outbreak' represents two or more related laboratory confirmed infections in humans of whom at least one was ill, or two or more related cases of illness in humans of whom at least one had confirmed infection with salmonella
2. 'General outbreaks' involve members of more than one household
3. 'Family outbreaks' involve members of one household only
4. Family and general outbreaks in which infection was acquired outside England and Wales

SALMONELLA SEROTYPES RECORDED IN THE PHLS SALMONELLA DATA SET

April to June 2000

All serotypes recorded in the PHLS salmonella data set in the second quarter of 2000 are listed below. There were more than ten reports of 20 serotypes (table), two to ten reports of 54 serotypes, and one report of 45 serotypes.

	April to June 2000 (provisional)
Salmonella (total)	2830
S. agona	20
S. blockley	20
S. braenderup	19
S. brandenburg	11
S. bredeney	12
S. derby	11
S. enteritidis	1539
S. hadar	73
S. heidelberg	37
S. infantis	35
S. java	28
S. mississippi	16
S. montevideo	31
S. newport	29
S. oranienberg	27
S. panama	15
S. stanley	32
S. thompson	26
S. typhimurium	481
S. virchow	68
Others (unnamed)	35
Others (typed)	265

Two to ten reports of each of the following serotypes were received (number of reports in brackets):

(4) <i>S. agama</i>	(5) <i>S. kentucky</i>
(4) <i>S. ajiobo</i>	(2) <i>S. kingston</i>
(4) <i>S. albany</i>	(6) <i>S. kintambo</i>
(5) <i>S. anatum</i>	(2) <i>S. kisangani</i>
(3) <i>S. arechavaleta</i>	(5) <i>S. kottbus</i>
(6) <i>S. arizonae</i>	(2) <i>S. lanka</i>
(7) <i>S. bareilly</i>	(4) <i>S. litchfield</i>
(2) <i>S. bonn</i>	(2) <i>S. liverpool</i>
(2) <i>S. cairina</i>	(2) <i>S. manhattan</i>
(3) <i>S. chester</i>	(8) <i>S. mbandaka</i>
(3) <i>S. coeln</i>	(4) <i>S. mikawasima</i>
(2) <i>S. colindale</i>	(2) <i>S. muenchen</i>
(2) <i>S. corvallis</i>	(2) <i>S. muenster</i>
(3) <i>S. cubana</i>	(3) <i>S. nima</i>
(6) <i>S. dublin</i>	(6) <i>S. ohio</i>
(3) <i>S. durbin</i>	(9) <i>S. oslo</i>
(4) <i>S. durham</i>	(2) <i>S. pomona</i>
(10) <i>S. emek</i>	(4) <i>S. poona</i>
(3) <i>S. give</i>	(3) <i>S. potsdam</i>
(2) <i>S. gold-coast</i>	(4) <i>S. richmond</i>
(2) <i>S. haardt</i>	(2) <i>S. rubislaw</i>
(8) <i>S. haifa</i>	(8) <i>S. saint-paul</i>
(2) <i>S. halle</i>	(3) <i>S. schwarzengrund</i>
(2) <i>S. havana</i>	(7) <i>S. senftenberg</i>
(7) <i>S. indiana</i>	(2) <i>S. stanleyville</i>
(5) <i>S. javiana</i>	(2) <i>S. wagenia</i>
(7) <i>S. kedougou</i>	(8) <i>S. welteureden</i>

One report of each of the following serotypes was received:

<i>S. abony</i>	<i>S. chameleon</i>	<i>S. hindmarsh</i>	<i>S. leeuwarden</i>	<i>S. ngozi</i>
<i>S. adelaide</i>	<i>S. chicago</i>	<i>S. hull</i>	<i>S. livingstone</i>	<i>S. reading</i>
<i>S. amsterdam</i>	<i>S. duisburg</i>	<i>S. hvittingfoss</i>	<i>S. lomita</i>	<i>S. ruiru</i>
<i>S. ank</i>	<i>S. eastbourne</i>	<i>S. isangi</i>	<i>S. london</i>	<i>S. seremban</i>
<i>S. bardo</i>	<i>S. florida</i>	<i>S. itami</i>	<i>S. madigan</i>	<i>S. sofia</i>
<i>S. bargny</i>	<i>S. friedenau</i>	<i>S. johannesburg</i>	<i>S. meleagridis</i>	<i>S. sundsvall</i>
<i>S. barranguilla</i>	<i>S. giessen</i>	<i>S. kaapstad</i>	<i>S. miami</i>	<i>S. tado</i>
<i>S. bovis-morbificans</i>	<i>S. grumpensis</i>	<i>S. kitenge</i>	<i>S. napoli</i>	<i>S. tel-el-kebir</i>
<i>S. cerro</i>	<i>S. hartford</i>	<i>S. larochelle</i>	<i>S. newington</i>	<i>S. urbana</i>