

Communicable Disease Report

Three cases of toxigenic *Corynebacterium ulcerans* infection

Three apparently unlinked cases of infection with toxigenic *Corynebacterium ulcerans* were identified in the Northern and Yorkshire NHS Region in January 2000. All three cases lived in rural areas, denied exposure to raw milk, and had neither travelled abroad recently nor been in close contact with anyone who had. The three cases spanned a wide age range. All had sore throats: one, an elderly woman who was admitted to hospital and died of pneumonia, had a pharyngeal membrane; neither of the other two cases (a girl and a woman who works at a riding school) required admission to hospital. Contact screening identified no carriers.

The management of toxigenic *C. ulcerans* infections is the same as for infections with toxigenic *C. diphtheriae* and includes prompt investigation, barrier nursing, and commencement of antitoxin and antibiotic treatment before test results appear, as detailed in the recently published guidelines¹. Specimens from clinically suspected cases of diphtheria should be sent urgently to Streptococcus and Diphtheria Reference Unit (SDRU) of the Respiratory and Systemic Infection Laboratory (RSIL) (tel 020 8200 4400), which has a 24 hour on-call service for this purpose². All close contacts should be followed up irrespective of the severity of the index case and treated to prevent incubating disease and interrupt carriage. If the toxigenic *C. ulcerans* infection is identified late, when contacts are unlikely to be incubating disease, it may be appropriate to wait until the results of screening are available and restrict treatment to carriers. Cases and contacts should be brought up to date with their vaccination.

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Fatal neonatal salmonella meningitis linked to pet reptile

A 3 week old baby recently developed salmonella meningitis and died. Isolates from Margate General Hospital and St Thomas' Hospital have been identified as *Salmonella rubislaw* by the PHLS Laboratory of Enteric Pathogens (LEP). The baby's mother is also infected with *S. rubislaw*. The family keep a water dragon lizard and a chinchilla. Salmonellas isolated from the water dragon's drinking water and a piece of wood from its cage have been identified as *S. rubislaw*.

Only seven human infections with *S. rubislaw* were reported in England and Wales in 1998 and six in 1999. In December 1999, LEP reported on a 6 month old baby in the North East whose *S. rubislaw* infection was linked to an orange skink.

The increasing popularity of exotic pets is bringing to light the risks of keeping reptiles, particularly in households that include people at increased risk of invasive infection such as young children, elderly people, and those with impaired immunity¹⁻³.

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Malaria in Mexico and the Dominican Republic

Two recent cases of vivax malaria in Canadian travellers were contracted in Cancun, a resort area at the north eastern tip of the Yucatan Peninsula of Mexico. In general, malaria in Mexico is confined to a few rural areas rarely visited by tourists. In view of this outbreak, however, any tourists visiting Cancun or nearby areas are now recommended to start taking chloroquine 300 mg base (2 tablets) weekly (adult dose; adjust appropriately for children) a week before departure and continue until four weeks after return (advice not included in current guidelines¹). Vivax malaria may also present up to a year (or more) after return from an endemic area. Although late presentations are very unlikely to be life threatening those who have travelled in the preceding year should seek medical advice, mentioning their travel, if they develop fever.

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General outbreaks of foodborne illness, England and Wales: weeks 02 - 05/00

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
West Kent	<i>Salmonella enteritidis</i> PT4	Prison	January	3	3	Ice cream	M
Newcastle and North Tyneside	<i>S. enteritidis</i> PT4	Community	January	9	9	None	-
Camden and Islington	<i>S. enteritidis</i> PT4	Hospital	January	>1	1	None	-

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

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

Details of serotypes of the 592 salmonella infections recorded in December are given in the adjacent table. In January 2000, 500 salmonella infections were recorded and preliminary information was received about three outbreaks (see table above).

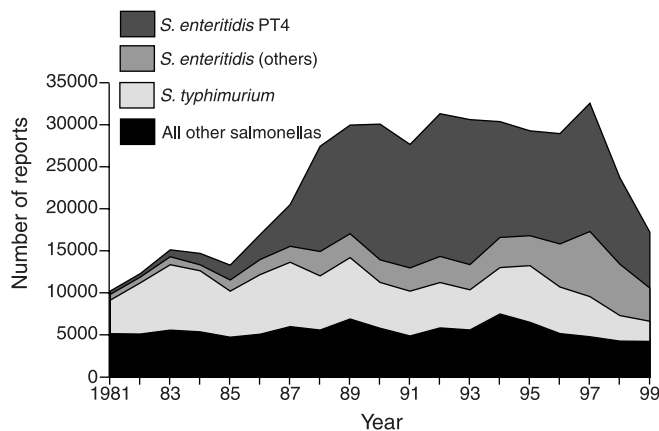
	December 1999
Salmonella (provisional total)	592
<i>S. enteritidis</i> (PT4)	199
<i>S. enteritidis</i> (other PTs)	121
<i>S. typhimurium</i>	80
<i>S. virchow</i>	20
Others (typed)	172

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

Salmonella infections in humans, England and Wales: 1981 to 1999

Just over 17000 salmonella infections were reported in 1999, 27% less than in 1998 and the lowest level recorded since 1986. Almost 6000 fewer *Salmonella enteritidis* infections were reported in 1999 than in 1998, compared with a fall of just over 6600 between 1997 and 1998. The number of reports of *S. enteritidis* PT4 fell by about 3600 and numbers of infection caused by other phage types of *S. enteritidis* fell by just over 2000. Reports of *S. typhimurium* and other salmonellas fell by 637 and 38 respectively between 1998 and 1999.

Figure Salmonella infections in humans: 1981 to 1999



Common gastrointestinal infections, England and Wales: laboratory reports, weeks 02-05/00

Laboratory reports	Number of reports received				Total reports 02-05/00	Cumulative totals for weeks 01-05 2000 1999	
	02/00	03/00	04/00	05/00			
<i>Campylobacter</i>	469	775	1019	619	2882	3773	4214
<i>Escherichia coli</i> O157*	2	4	2	7	15	18	26
<i>Shigella sonnei</i>	7	13	19	3	42	46	85
Rotavirus	152	161	325	282	920	1046	1329
SRSV	23	41	42	19	125	178	384
<i>Cryptosporidium</i>	68	129	102	22	321	389	220
<i>Giardia</i>	33	77	109	75	294	371	377

* Vero cytotoxin producing isolates (data from LEP)

Typhoid and paratyphoid, England and Wales: laboratory reports, October to December 1999

Organism and phage type*	Number of cases	Infection acquired abroad			Excretors (E) and carriers (C)
		Yes	No	Not reported	
<i>S. typhi</i>					
A	4	3	–	1	–
D2	2	–	–	2	–
E1	9	4	–	5	–
E9	3	2	–	1	–
M1	4	3	–	1	–
Degraded Vi-17	3	1	–	2	–
Vi-negative	2	1	–	1	–
Other PTs†	6	2	–	4	–
Totals	33	16	–	17	–
<i>S. paratyphi</i> A					
1	5	4	–	1	–
1A	2	1	–	1	–
4	5	2	–	3	–
11	4	4	–	–	–
13	14	12	–	2	–
RDNC	2	2	–	–	–
Other PTs‡	2	1	–	1	–
Totals	34	26	–	8	–
<i>S. paratyphi</i> B					
Battersea	4	1	–	3	–
Taunton	6	4	–	2	–
Totals	10	5	–	5	–

Thirty-three cases of *Salmonella typhi* infection were reported in the fourth quarter of 1999. Sixteen cases were known to have been infected abroad (Indian subcontinent 14, South Africa 1, West Africa 1). In 17 cases the country of infection was not stated.

Thirty-four cases of *S. paratyphi* A infection were reported. Twenty-six cases were known to have been infected abroad (all Indian subcontinent). In eight cases the country of infection was not stated.

Ten cases of *S. paratyphi* B infection were reported. Five cases had recently been abroad (Bolivia 2, Morocco 1, Sri Lanka 1, Turkey 1). In five cases the country of infection was not stated.

* all isolates were confirmed and phage typed by LEP

† B2, 29, Degraded, Degraded Vi-15, Untypable Vi, Untypable Vi-1 (one each)

‡ 3, 9 (one each)

Is group B streptococcal infection in infants a preventable disease?

The Association of Medical Microbiologists and PHLS are holding a symposium on group B streptococcal (GBS) infection in infants in the Wilson Lecture Theatre at the PHLS Central Public Health Laboratory in Colindale at 1330 on Friday 3 March 2000. Topics will include the biology and epidemiology of GBS, a study being carried out with the British Paediatric Surveillance Unit, vaccine developments, the use of antibiotic prophylaxis, and an obstetrician's viewpoint on the proposed prevention strategies. The symposium is aimed at consultant microbiologists and clinical scientists, but others are welcome to attend. For further details contact Dr Albert Mifsud, PHLS Group B Streptococcus Working Group, PHLS Collaborating Centre, Department of Microbiology, Royal London Hospital, 37 Ashfield Street, London E1 1BB (tel 0171 377 7242).

Borna disease virus: a veterinary and public health problem?

Borna disease virus (BDV) is endemic in parts of Europe, infects several species, and causes a rare meningoencephalitis in horses and sheep. It has not been clearly linked to any human disease, but may be associated with neuropsychiatric disorders. A workshop on BDV being held on Thursday 23 and Friday 24 March 2000 at the Heritage Park Hotel, Rhondda, Wales aims to bring together agencies and researchers in the United Kingdom interested in the diagnosis, pathology, and epidemiology of BDV in human and animal populations; enhance opportunities for collaboration; present the latest research findings on BDV; and provide guidance for veterinary and public health policy makers in developing surveillance and research programmes. Abstracts for short 15 minute oral presentations or posters are welcomed (deadline 29 February). The fee of £69 includes meals; delegates must arrange accommodation separately. Further details are available on the internet at <<http://www.cdsc.wales.nhs.uk/bcon.htm>> or from Susan Hahné, CDSC Welsh Unit, Abton House, Wedal Road, Cardiff CF14 3QX (tel 029 20 521997; fax 029 20 521987).

Three cases of toxigenic *Corynebacterium ulcerans* infection (continued from page 49)

Toxigenic *C. ulcerans* is known to cause diphtheria^{1,2}, which (like toxigenic *C. diphtheriae* infection) can be fatal¹. *C. ulcerans* caused five of the 10 cases of pharyngeal diphtheria identified in the United Kingdom between 1993 and 1999. Risk factors associated with toxigenic *C. ulcerans* infection include raw dairy products and overseas travel, but the sources of many cases are not identified. Other modes of transmission may exist including person to person spread¹. Cases in England and Wales are followed up using a surveillance questionnaire designed by the SDRU and the PHLS Communicable Disease Surveillance Centre (CDSC)³.

1. Bonnet JM, Begg NT. Control of diphtheria: guidance for consultants in communicable disease control. *Commun Dis Public Health* 1999; **2**: 242-9.
2. Efstratiou A, George RC. Laboratory guidelines for the diagnosis of infections caused by *Corynebacterium diphtheriae* and *C. ulcerans*. *Commun Dis Public Health* 1999; **2**: 250-7.
3. White JM, Efstratiou A. Incidence of diphtheria and other infections caused by *Corynebacterium diphtheriae* and *C. ulcerans* in England and Wales 1986-93. *PHLS Microbiology Digest* 1995; **12**: 23-5.

Fatal neonatal salmonella meningitis linked to pet reptile (continued from page 49)

1. Ward L. Salmonella perils of pet reptiles. *Commun Dis Public Health* 2000; **3**: 1-2 (in press).
2. Cyriac J, Wozniak ER. Infantile salmonella meningitis associated with gecko-keeping. *Commun Dis Public Health* 2000; **3**: 66-7 (in press).
3. CDC. Reptile-associated salmonellosis - selected states, 1996-1998. *MMWR Morb Mortal Wkly Rep* 1999; **48**:1009-13.

Malaria in Mexico and the Dominican Republic (continued from page 49)

For some months concern has been expressed about an increased level of malaria transmission in the Dominican Republic, a Caribbean country that shares a large island with Haiti. This is the more dangerous falciparum malaria, but it remains susceptible to chloroquine. Visitors from the United Kingdom to the Dominican Republic are already recommended to take chloroquine prophylaxis (dose as above¹), but it may be useful to emphasise the need to travellers. Spain now takes a similar line, although published guidelines from the World Health Organization recommend the use of chloroquine only for travellers to certain malarious areas of the Dominican Republic seldom visited by tourists².

1. Bradley DJ, Warhurst DC. Guidelines for the prevention of malaria in travellers from the United Kingdom. *Commun Dis Rep CDR Rev* 1997; **7**: R137-52.
2. Tello O. Cases of malaria imported into Spain from the Dominican Republic. *Eurosurveillance Weekly* 2000; **4**: 000113 (<http://www.eurosurv.org/2000/000113.html>)

Data are for England and Wales only, unless otherwise stated. Weekly numbers are provisional and should not be used to indicate trends.

Registered as a newspaper.

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*). Data published here – and an expanded form of table 2 with data to district level – are also available in an electronic format to Epinet subscribers on the PHLs network.

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 04†			Cumulative totals from mid-year to week 04‡			
		51/99	52/99	01/00	02/00	03/00	04/00	1998 (i)	1999 (ii)	2000 (iii)	97/98(a)	98/99(b)	99/00(c)	
Tuberculosis	Cases¶	105	44	113	140	123	107	382	438	483	3231	3591	3517	
Scarlet fever	Cases	47	16	44	39	37	37	326	270	157	1619	1402	877	
Malaria	Cases	7	7	14	17	20	24	110	72	75	986	637	709	
Leptospirosis	Cases	2	–	–	2	2	–	2	1	4	16	21	15	
Food poisoning formally notified	Cases	1210	375	1081	1054	1011	1078	5784	4654	4224	60148	58602	51612	
	Cases	602	153	617	541	584	602	3385	2763	2344	34514	33630	27874	
	Cases	608	222	464	513	427	476	2399	1891	1880	25634	24972	23738	
Typhoid fever presumed contracted	Cases	1	–	3	–	1	1	7	11	5	91	75	68	
	abroad§	–	–	3	–	1	1	5	9	5	77	67	63	
	GB	1	–	–	–	–	–	2	2	–	14	8	5	
Paratyphoid fever presumed contracted	Cases	4	–	–	1	1	1	6	2	3	61	68	66	
	abroad§	4	–	–	1	1	1	6	1	3	58	60	63	
	GB	–	–	–	–	–	–	–	1	–	3	8	3	
Dysentery	Cases	33	6	19	24	24	21	90	107	88	1113	1239	903	
Viral hepatitis	hepatitis A	Cases	51	28	50	54	80	83	214	253	267	2018	1939	2053
	hepatitis B	Cases	33	7	27	23	27	21	102	153	98	1210	889	942
	hepatitis C	Cases	12	9	9	19	23	25	66	49	76	439	544	552
	other and unknown	Cases	3	8	12	9	25	31	29	39	77	213	418	488
		Cases	3	4	2	3	5	6	17	12	16	156	88	71
Meningitis	meningococcal	Cases	39	17	95	119	77	53	236	323	344	1187	1274	1240
	influenzal (<i>Haemophilus influenzae</i>)	Cases	21	6	60	79	41	32	149	202	212	640	699	678
	other specified	Cases	1	–	3	1	3	1	1	3	8	19	18	26
	unspecified	Cases	12	6	26	27	25	14	68	84	92	400	393	383
		Cases	5	5	6	12	8	6	18	34	32	128	164	153
Meningococcal septicaemia (without meningitis)	Cases	37	27	97	90	87	34	173	327	308	799	984	1008	
Acute encephalitis	infective	Cases	–	–	–	–	–	–	3	3	–	18	18	8
	post-infective	Cases	–	–	–	–	–	–	3	2	–	11	11	8
		Cases	–	–	–	–	–	–	–	1	–	7	7	–
Whooping cough	Cases	10	4	16	6	13	10	154	67	45	1866	853	635	
Tetanus	Cases	–	–	–	–	–	–	–	1	–	5	8	2	
Measles	Cases	30	29	81	54	42	50	373	205	227	2232	1676	1336	
Mumps	Cases	35	15	51	40	45	31	138	131	167	1032	872	1012	
Rubella	Cases	23	4	24	39	21	40	236	141	124	1728	1287	947	
Ophthalmia neonatorum	Cases	3	–	2	3	3	4	15	13	12	129	109	88	
Special cases														
Cholera	Cases	1	–	1	–	1	–	3	2	2	23	24	17	
Diphtheria	Cases	–	1	–	–	–	3	2	2	3	10	16	11	

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 04/00 (standard 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	7	6	4	1	4	4	26	11	7	64	57	–
Cumbria	–	–	–	–	–	1	1	–	–	3	4	–
Durham	–	–	–	–	1	2	–	–	–	10	5	–
North Yorkshire	1	1	1	–	–	–	–	1	1	8	10	–
Northumberland	–	–	–	–	–	–	–	–	1	1	4	–
Tyne and Wear¶	1	1	–	–	–	1	1	1	2	5	10	–
West Yorkshire¶	4	4	3	1	1	–	11	6	3	22	21	–
City of Kingston upon Hull	–	–	–	–	1	–	10	2	–	–	–	–
Darlington	–	–	–	–	1	–	–	–	–	3	1	–
East Riding of Yorkshire	–	–	–	–	–	–	1	1	–	2	1	–
Hartlepool	–	–	–	–	–	–	–	–	–	2	–	–
Middlesbrough	1	–	–	–	–	–	–	–	–	5	–	–
Redcar and Cleveland	–	–	–	–	–	–	–	–	–	–	–	–
Stockton-on-Tees	–	–	–	–	–	–	2	–	–	1	–	–
York	–	–	–	–	–	–	–	–	–	2	1	–
Trent	5	–	5	1	4	2	2	4	6	51	40	–
Derbyshire	–	–	1	–	–	–	–	–	–	4	1	–
Leicestershire	–	–	2	–	–	2	–	3	1	10	3	–
Lincolnshire	–	–	–	–	2	–	–	–	1	3	5	–
Nottinghamshire	1	–	–	–	2	–	–	–	2	13	6	–
South Yorkshire¶	2	–	2	1	–	–	1	–	–	11	12	–
Derby	–	–	–	–	–	–	–	–	–	–	–	–
Leicester	–	–	–	–	–	–	1	–	2	3	4	–
North East Lincolnshire	2	–	–	–	–	–	–	–	–	1	2	–
North Lincolnshire	–	–	–	–	–	–	–	–	–	5	2	–
Nottingham	–	–	–	–	–	–	–	1	–	–	5	–
Rutland	–	–	–	–	–	–	–	–	–	1	–	–
Eastern	2	2	3	1	7	–	1	5	8	76	67	–
Bedfordshire	–	1	–	–	2	–	–	–	–	5	6	–
Cambridgeshire	–	–	–	–	–	–	–	–	1	3	3	–
Essex	1	–	–	1	2	–	–	–	1	17	9	–
Hertfordshire	–	1	3	–	3	–	–	1	2	17	15	–
Norfolk	–	–	–	–	–	–	–	–	4	8	20	–
Suffolk	1	–	–	–	–	–	1	–	–	7	9	–
Luton	–	–	–	–	–	–	–	2	–	5	5	–
Peterborough	–	–	–	–	–	–	–	2	–	9	–	–
Southend-on-Sea	–	–	–	–	–	–	–	–	–	4	–	–
Thurrock	–	–	–	–	–	–	–	–	–	1	–	–
London	13	4	8	8	5	1	8	48	1	128	9	19
Greater London	13	4	8	8	5	1	8	48	1	128	9	19
South East	6	2	10	2	4	–	13	6	11	99	104	2
Buckinghamshire	–	–	–	–	–	–	–	2	1	1	10	–
East Sussex	–	–	–	–	–	–	1	–	–	8	4	–
Hampshire	1	–	1	–	–	–	1	–	1	14	23	–
Kent	–	–	3	–	1	–	–	–	2	6	7	1
Northamptonshire	–	–	–	–	–	–	2	–	–	6	12	1
Oxfordshire	–	–	–	–	–	–	3	1	3	3	11	–
Surrey	–	–	2	1	2	–	1	2	–	16	12	–
West Sussex	–	–	1	–	–	–	2	–	3	6	20	–
Bracknell Forest	–	–	–	1	–	–	–	–	1	4	–	–
Brighton and Hove	–	–	–	–	–	–	1	1	–	6	–	–
Isle of Wight	–	–	–	–	–	–	–	–	–	–	–	–
Medway Towns	–	1	–	–	1	–	–	–	–	2	–	–
Milton Keynes	–	–	1	–	–	–	–	–	–	7	–	–
Newbury	–	–	1	–	–	–	2	–	–	4	–	–
Portsmouth	1	–	–	–	–	–	–	–	–	7	–	–
Reading	–	–	1	–	–	–	–	–	–	–	2	–
Slough	1	–	–	–	–	–	–	–	–	–	1	–
Southampton	–	–	–	–	–	–	–	–	–	2	2	–
Windsor and Maidenhead	3	1	–	–	–	–	–	–	–	2	–	–
Wokingham	–	–	–	–	–	–	–	–	–	5	–	–
South West	1	1	5	2	3	–	4	6	5	57	55	3
Cornwall and Isles of Scilly	–	–	–	–	1	–	–	–	–	3	5	–
Devon	–	–	–	1	1	–	–	–	1	5	2	–
Dorset	–	–	–	–	1	–	2	–	–	4	8	–
Gloucestershire	1	–	1	–	–	–	–	2	–	7	1	–
Somerset	–	–	2	–	–	–	1	1	1	16	–	1
Wiltshire	–	1	–	1	–	–	–	1	1	14	–	–
Bath and NE Somerset	–	–	–	–	–	–	–	–	–	1	3	–
Bournemouth	–	–	–	–	–	–	1	–	–	–	1	–
Bristol	–	–	1	–	–	–	–	1	1	–	15	1
North Somerset	–	–	1	–	–	–	–	–	–	1	4	–
Plymouth	–	–	–	–	–	–	–	–	–	–	9	–
Poole	–	–	–	–	–	–	–	–	–	2	2	1
South Gloucestershire	–	–	–	–	–	–	–	–	–	–	4	–
Swindon	–	–	–	–	–	–	–	1	–	3	–	–
Torbay	–	–	–	–	–	–	–	–	1	1	1	–

Area	Measles	Mumps	Rubella	Dysentery	Scarlet fever	Whooping cough	Viral hepatitis	TB all forms*	Meningitis†	Food poisoning notified§	ascertained#	Malaria
West Midlands	–	6	1	4	3	–	9	15	4	44	62	–
Shropshire	–	–	–	–	–	–	5	1	–	2	7	–
Staffordshire	–	2	–	–	2	–	–	–	1	13	1	–
Warwickshire	–	–	1	–	–	–	–	–	–	5	8	–
West Midlands†	–	3	–	3	1	–	1	14	3	17	35	–
Worcestershire	–	1	–	–	–	–	1	–	–	4	2	–
<i>Hereford</i>	–	–	–	1	–	–	–	–	–	1	5	–
<i>Stoke-on-Trent</i>	–	–	–	–	–	–	–	–	–	2	1	–
<i>Telford and Wrekin</i>	–	–	–	–	–	–	2	–	–	–	3	–
North West	15	9	2	2	3	2	11	10	9	58	59	–
Cheshire	–	1	–	–	1	–	–	–	–	8	7	–
Cumbria	–	–	–	–	–	–	–	–	–	1	6	–
Greater Manchester†	9	2	–	–	2	2	8	4	4	11	17	–
Lancashire	5	3	2	–	–	–	1	2	1	27	5	–
Merseyside†	1	2	–	1	–	–	2	3	3	8	12	–
<i>Blackburn</i>	–	1	–	–	–	–	–	–	–	1	2	–
<i>Blackpool</i>	–	–	–	–	–	–	–	1	1	2	8	–
<i>Halton</i>	–	–	–	–	–	–	–	–	–	–	–	–
<i>Warrington</i>	–	–	–	1	–	–	–	–	–	–	2	–
Wales	1	1	2	–	4	1	9	2	2	25	23	–
<i>Blaenau Gwent</i>	–	–	–	–	–	–	–	–	–	–	1	–
<i>Bridgend</i>	–	–	–	–	–	–	–	–	–	–	–	–
<i>Caerphilly</i>	–	–	–	–	–	–	–	–	–	2	4	–
<i>Cardiff</i>	–	–	–	–	1	–	1	–	1	3	5	–
<i>Carmarthenshire</i>	–	–	1	–	–	–	2	–	–	–	–	–
<i>Ceredigion</i>	–	–	–	–	–	–	–	–	–	–	–	–
<i>Conwy</i>	–	–	–	–	–	–	1	–	–	2	–	–
<i>Denbighshire</i>	–	1	–	–	1	–	4	–	–	1	1	–
<i>Flintshire</i>	–	–	–	–	–	–	–	–	1	1	2	–
<i>Gwynedd</i>	–	–	–	–	–	–	–	–	–	3	2	–
<i>Isle of Anglesey</i>	–	–	–	–	–	1	–	–	–	2	1	–
<i>Merthyr Tydfil</i>	–	–	–	–	–	–	–	–	–	–	–	–
<i>Monmouthshire</i>	1	–	1	–	2	–	–	–	–	–	3	–
<i>Neath and Port Talbot</i>	–	–	–	–	–	–	–	–	–	–	–	–
<i>Newport</i>	–	–	–	–	–	–	–	–	–	–	1	–
<i>Pembrokeshire</i>	–	–	–	–	–	–	–	1	–	–	–	–
<i>Powys</i>	–	–	–	–	–	–	1	–	–	–	–	–
<i>Rhondda, Cynon, Taff</i>	–	–	–	–	–	–	–	–	–	4	–	–
<i>Swansea</i>	–	–	–	–	–	–	–	–	–	–	–	–
<i>Torfaen</i>	–	–	–	–	–	–	–	–	–	4	–	–
<i>Vale of Glamorgan</i>	–	–	–	–	–	–	–	–	–	2	3	–
<i>Wrexham</i>	–	–	–	–	–	–	–	1	–	1	–	–

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

Unitary authorities are shown in italics.

Notifications in week 04/00 of infectious diseases not shown in table 2

Diphtheria: three cases; one in each of Greater London, Merseyside, and Somerset (strains known to be non-toxicogenic).

Meningitis influenzal (*Haemophilus influenzae*): one case; in Wiltshire.

Meningitis – meningococcal: 32 cases; four in Greater Manchester and in Norfolk, two in each of Hertfordshire, Kent, Leicester, Merseyside, and Tyne and Wear, and one in each of Bracknell Forest, Bristol, Cambridgeshire, Cardiff, Devon, Flintshire, Greater London, Lincolnshire, Northumberland, North Yorkshire, Oxfordshire, Torbay, West Midlands, and West Sussex.

Meningococcal septicaemia (without meningitis): 34 cases; four in West Midlands, three in Merseyside and in Tyne and Wear, two in each of Cornwall and Isles of Scilly, Greater Manchester, Lancashire, and Warwickshire, and one in each of

Bracknell Forest, Bridgend, Cardiff, Conwy, Derbyshire, Devon, Greater London, Hampshire, Hertfordshire, Kent, Leicestershire, Neath and Port Talbot, Norfolk, Northamptonshire, Pembrokeshire, and South Yorkshire.

Ophthalmia neonatorum: four cases; one in each of Merseyside, Stockton-on-Tees, Tyne and Wear, and West Midlands.

Paratyphoid fever: one case; presumed to have been contracted abroad – from East Sussex.

Typhoid fever: one case; of unknown origin – from Greater London.

No cases of acute encephalitis, acute poliomyelitis, anthrax, cholera, leptospirosis, 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 04/00

District	County	Observed number	Expected number	Ratio observed/expected	District	County	Observed number	Expected number	Ratio observed/expected
Dysentery					Meningitis influenzae (<i>Haemophilus influenzae</i>)				
Islington	Greater London	4	0.07	56.46	West Wiltshire	Wiltshire	1	0.00	476.26
Food poisoning (all)					Mumps				
Blackpool	Blackpool	10	3.20	3.12	Hyndburn	Lancashire	2	0.05	37.44
Breckland	Norfolk	13	2.33	5.57	Islington	Greater London	2	0.10	19.47
Fylde	Lancashire	7	1.55	4.51	Tamworth	Staffordshire	2	0.05	39.34
Guildford	Surrey	10	2.61	3.84	Rubella				
Harrogate	North Yorkshire	11	3.03	3.63	Barnet	Greater London	4	0.24	16.81
Mendip	Somerset	9	2.05	4.38	Mendip	Somerset	2	0.08	25.29
Northampton	Northamptonshire	12	3.95	3.04	Stevenage	Hertfordshire	3	0.07	42.92
South Bedfordshire	Bedfordshire	8	2.31	3.46	Scarlet fever				
Sutton	Greater London	14	3.63	3.85	Monmouthshire	Monmouthshire	2	0.06	34.88
Wakefield	West Yorkshire	15	6.61	2.27	Waverley	Surrey	2	0.08	25.43
Wandsworth	Greater London	13	5.52	2.35	West Lindsey	Lincolnshire	2	0.05	38.16
West Lancashire	Lancashire	9	2.30	3.92	Tuberculosis *				
Food poisoning (formally notified)					Birmingham	West Midlands	9	2.10	4.28
Breckland	Norfolk	6	1.30	4.60	Brent	Greater London	5	0.51	9.85
East Hampshire	Hampshire	7	1.28	5.48	Camden	Greater London	4	0.38	10.46
Fylde	Lancashire	7	0.87	8.07	Hackney	Greater London	4	0.40	9.96
Greenwich	Greater London	10	2.46	4.07	Hounslow	Greater London	4	0.42	9.48
Lambeth	Greater London	10	3.05	3.28	Tower Hamlets	Greater London	4	0.36	11.19
Macclesfield	Cheshire	7	1.77	3.96	Waltham Forest	Greater London	4	0.46	8.74
Mendip	Somerset	9	1.15	7.85	Viral hepatitis (all)				
Peterborough	Peterborough	9	1.85	4.85	Bolton	Greater Manchester	8	0.43	18.79
Salisbury	Wiltshire	7	1.29	5.43	City of Kingston upon Hull	City of Kingston upon Hull	10	0.43	23.21
St Albans	Hertfordshire	6	1.51	3.98	Denbighshire	Denbighshire	4	0.15	27.22
Sutton	Greater London	14	2.03	6.90	Islington	Greater London	5	0.28	17.86
Wandsworth	Greater London	13	3.08	4.21	North Shropshire	Shropshire	2	0.09	22.91
West Lancashire	Lancashire	9	1.28	7.02	Wakefield	West Yorkshire	8	0.51	15.72
Malaria					Whooping cough				
Hackney	Greater London	12	0.09	133.18	Durham	Durham	2	0.02	126.09
Newham	Greater London	4	0.11	37.75	Salford	Greater Manchester	2	0.05	43.34
Tower Hamlets	Greater London	2	0.08	24.94					
Measles									
Hackney	Greater London	5	0.22	22.95					
Haringey	Greater London	5	0.21	24.02					
Manchester	Greater Manchester	4	0.48	8.27					
Rossendale	Lancashire	2	0.07	29.66					
Windsor and Maidenhead	Windsor and Maidenhead	3	0.13	23.71					
Meningitis (all)									
Breckland	Norfolk	3	0.11	26.14					
Meningitis (meningococcal)									
Breckland	Norfolk	3	0.07	43.29					
Canterbury	Kent	2	0.08	23.94					

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.

† Excluding prophylaxis