

Communicable Disease Report

Legionnaires' disease – outbreak in the Netherlands

A large outbreak of legionnaires' disease has occurred among visitors to a flower show and consumer products exhibition in the Netherlands. The show and exhibition, which was held from 23-28 February, was attended by five to twelve thousand people daily, some of whom attended on more than one day. To date, 226 people are known to be ill, of whom 97 are confirmed cases of legionnaires' disease, 42 suspected cases and 87 have other symptoms as a result of their visiting the exhibition. The average age of the cases is 63 years for men and 65 years for women. Eighteen people so far have died. The consumer products exhibition, where whirlpool spas were operating, is the suspected source of infection and was on the main route through to the flower show. A sample from one of the whirlpools was positive by PCR for *Legionella pneumophila* but studies are continuing amongst visitors, staff and local residents to identify the source and extent of infection.

Whirlpool spas have been associated with legionnaires' disease in several venues. In England, an outbreak at a hotel in 1984 caused 23 cases. Three cases, one in 1992 and two in 1998 were associated with whirlpool spas installed in private households, and three cases in 1998 were associated with an outbreak where the spa pool was on public display at an open air retail outlet, and was found to have a design fault. Four outbreaks involving UK residents have occurred abroad, two at hotels in America, and two on cruise ships.

Guidelines for the maintenance and use of whirlpool spas have been produced by the PHLS¹ and are available from the Communications Division, PHLS Headquarters, 61 Colindale Avenue, London NW9 5DF (price £6.50, cheques payable to PHLS Board). Guidelines for the use of whirlpools on cruise ships are available from CDC, Atlanta².

1. PHLS Spa Pools Working Party. *Hygiene for spa pools*. London: PHLS, 1994.
2. Centers for Disease Control and Prevention. *Final recommendations to minimize transmission of legionnaires' disease from whirlpool spas on cruise ships*. Atlanta, Georgia: CDC, 1997.

Hospital-acquired malaria in Nottingham

There have been three cases of faciparum malaria acquired in the Infectious Diseases Unit at Nottingham City Hospital. Two patients, a woman aged 91 years and a man in his 40s are recovering; a third patient, aged 22 years, died of cerebral malaria in the community. All cases have been confirmed by the PHLS Malaria Reference Laboratory.

Immediate action comprised closing the ward, seeking the advice of a medical entomologist, and subsequent fumigation. Investigations into the mechanism of transmission are continuing, but it appears that infection was probably transmitted by flushing IV lines. Other patients who had IV lines at the same time have been followed up and offered mefloquine.

Transmission almost certainly occurred from a single point source on 1 March, when there were three other patients with falciparum malaria on the ward, all of whom acquired their infection in Africa.

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***Mycobacterium tuberculosis* infections, England and Wales: laboratory reports, weeks 05 - 12/99**

	Number of reports received				Cumulative totals for weeks 0 - 12	
	Male	Female	Not stated	Total	1999	1998
<i>M. tuberculosis</i>						
All cases (disseminated)	218 (2)	146 (1)	32	396 (3)	564 (3)	288
Site of isolate*						
pulmonary (smear positive)	124 (30)	75 (20)	16 (2)	215 (52)	322 (94)	181 (65)
lymph node	7	12	–	19	22	14
CNS (meningitis)	2 (1)	6 (5)	–	8 (6)	6 (7)	4 (4)
genitourinary	8	3	–	11	15	6
bone/joint (spinal)	3	2 (1)	1	6 (1)	8 (2)	6 (3)
gastrointestinal/peritoneal	–	–	–	–	1	2
non-pulmonary respiratory	16	5	2	23	29	15
abscess	10	7	1	18	27	14
other (unspecified)	54	29	12	95	128	47†
<i>M. bovis</i>	5	1	–	6	6	1

* The number of isolates may exceed the number of cases, as cases may have disease at more than one site

† Includes non-pulmonary respiratory (including pleural) disease, abscesses (site not stated), and other sites

Opportunist mycobacterial infections, England and Wales: laboratory reports, weeks 05 - 12/99

	Number of reports received				Cumulative totals for weeks 0 - 12	
	Male	Female	Not stated	Total	1999	1998
<i>Avium-intracellulare</i> group	34	33	–	67	92	71
pulmonary	22	16	–	38	55	31
lymph node	1	2	–	3	3	10
blood	3	1	–	4	7	6
other	10	14	–	24	30	24
<i>M. malmoense</i>	13	10	–	23	31	25
Site of isolate*						
pulmonary	10	7	–	17	25	19
lymph node	2	–	–	2	2	1
other	1	3	–	4	4	5
<i>M. kansasii</i>	11	8	1	20	27	15
<i>M. xenopi</i>	6	2	–	8	20	11
Other species	6	–	–	6†	9	6

* The number of isolates may exceed the number of cases, as cases may have disease at more than one site

† *M. marinum* 3; *M. fortuitum* 2; *M. chelonae* 1

Respiratory tract infections, England and Wales: laboratory reports, weeks 09 - 12/99

	Number of reports received				Total reports 09-12/99
	09/99	10/99	11/99	12/99	
Adenovirus (excluding EM faeces)	28	30	46	29	133
Coronavirus	–	–	–	1	1
Influenza A	135	73	96	77	381
Influenza B	23	18	20	32	93
Parainfluenza	2	4	2	9	17
RS virus	176	53	100	39	368
Rhinovirus	11	8	7	2	28

Adenovirus (excluding types 40, 41, group F, EM faeces): 52 patients had eye infections, five had pneumonia, and four had bronchiolitis. M 1y had impaired immunity, F 3y haematuria, and F 17y meningitis.

Coronavirus: one case was reported.

Influenza A: 48 patients had pneumonia and two bronchiolitis. M 2y had ataxia, M 6y lymphatic leukaemia, M 43y lymphadenopathy, M 48y impaired immunity, M 71y and M 82y renal failure, M 78y pneumococcal pneumonia and septicaemia, M 78y pulmonary fibrosis, F 58y had had a cardiac transplant, F 67y had chronic obstructive pulmonary disease, and F 76y pancytopenia. M 89y died. Three cases (F 81y, F 83y and F 84y) were part of a nursing home outbreak. Five regions reported more than 10% of cases: South Western (128 cases), Anglia and Oxford (56), Trent (50), Northern and Yorkshire (49), and Wales (43). Sixty-nine patients were aged under 15 years and 121 were aged 65 years or over.

Influenza B: 12 patients had pneumonia and one bronchiolitis. M 8y had conjunctivitis, M 19y polyarthralgia, M 34y hepatitis, M 53y eosinophilia. Three females aged between 14 and 17

years were part of a school outbreak. Five regions reported more than nine cases: North Western (23 cases), South Western (22), Anglia and Oxford (19), Trent (11), and Wales (10). Twenty-one patients were aged under 15 years and 11 were aged 65 years or over.

Parainfluenza (type 2, 2; type 3, 15): two patients had bronchiolitis. M 48y had had bone marrow transplant and F 5m had had gastric surgery. Nine patients were aged under 1 year.

Respiratory syncytial virus: 80 patients had bronchiolitis and 18 pneumonia. M 4y and F 5m had cystic fibrosis, M 33y arthralgia, M 72y sepsis, M 75y myelodysplasia, M 84y thrombocytopenia, and F 89y chronic obstructive pulmonary disease. Five regions reported over 10% of cases: South Thames (70 cases), Northern and Yorkshire (66), Trent (55), North Western (44), and West Midlands (44). Eighty-four per cent of patients were aged under 1 year.

Rhinovirus: two patients had bronchiolitis. M 2y had Down's syndrome and chronic lung disease. Eighteen patients were aged under 1 year.

	Number of reports received				Total reports 09-12/99
	09/99	10/99	11/99	12/99	
<i>Chlamydia sp</i>	11	6	5	3	25
<i>Coxiella burnetii</i>	–	–	–	1	1
<i>Legionella sp</i>	2	3	–	9	14
<i>Mycoplasma pneumoniae</i>	21	17	16	24	78

Respiratory chlamydia (*C. psittaci*, 18; *C. pneumoniae*, 5; *Chlamydia sp*, 2): five patients had pneumonia. M 43y and F 49y had contact with birds. F 19y had meningitis, and F 72y and F 74y both had chronic obstructive pulmonary disease.

Coxiella burnetii: M 33y had hepatitis.

Legionella: 12 patients were men aged 40 to 80 years. F 51y, F 58y who died. All had pneumonia. Four cases had dates of onset in 1998. Eight cases were associated with travel: Spain 3 (two were late reports of cases associated with an

outbreak in a hotel in Benidorm in 1998), France 2, and the United States 2, and a European tour 1.

Mycoplasma pneumoniae: 13 patients had pneumonia. M 7y, M 16y, F 6y, and F 42y had a rash. M 40y had lymphadenopathy, M 67y pancreatitis, and F 42y arthralgia. Five regions reported more than seven cases: South Western (20 cases), North Western (17), Wales (10), Anglia and Oxford (9), and Trent (9). Twenty-two patients were aged under 10 years.

Common animal associated infections, England and Wales: laboratory reports, weeks 09 - 12/99

Organism	Total reports for weeks 09 - 12		Cumulative totals for weeks 01 - 12	
	1999*	1998	1999*	1998
<i>Borrelia burgdorferi</i> ^{†‡}	–	4	4	19
<i>Leptospira hardjo</i> ^{†§}	–	–	–	–
<i>Leptospira icterohaemorrhagiae</i> ^{†§}	–	–	1	2
<i>Leptospira other</i> ^{†§}	3	1	8	4
<i>Pasteurella haemolytica</i>	–	–	–	–
<i>Pasteurella multocida</i>	10	12	52	36
<i>Pasteurella pneumotropica</i>	–	1	–	1
<i>Pasteurella spp</i>	8	–	12	1
<i>Toxocara canis</i>	–	–	–	–
<i>Toxocara cati</i>	–	–	–	–
<i>Toxocara spp</i>	2	–	5	2
<i>Toxoplasma gondii</i>	3	1	41	31
<i>Toxoplasma spp</i>	3	2	21	21

* provisional data. † by specimen date. ‡ Lyme disease Reference Laboratory and CDSC data. § Leptospira Reference Laboratory and CDSC data.

Common imported infections, England and Wales: laboratory reports, weeks 09 - 12/99

Organism	Total reports for weeks 09 - 12		Cumulative totals for weeks 01 - 12	
	1999*	1998	1999*	1998
Arbovirus	–	–	–	–
Dengue virus	–	2	7	10
<i>Ascaris spp</i>	10	10	37	37
Hookworms (unspecified)	7	6	21	23
<i>Ancylostoma duodenale</i>	–	–	–	–
<i>Necator americanus</i>	–	–	–	–
<i>Hymenolepis diminuta</i>	–	–	1	–
<i>Hymenolepis nana</i>	1	–	5	8
<i>Hymenolepis sp</i>	–	–	–	–
<i>Schistosoma haematobium</i>	7	5	27	22
<i>Schistosoma intercalatum</i>	1	–	1	–
<i>Schistosoma mansoni</i>	–	3	3	11
<i>Schistosoma sp</i>	–	–	14	5
<i>Strongyloides stercoralis</i>	1	1	2	13
<i>Strongyloides sp</i>	2	1	3	2

* provisional data.

Vaccines and vaccination – the Association of Clinical Microbiologists annual scientific meeting

The Association of Clinical Microbiologists (ACM) will hold its annual scientific meeting, on the topic of vaccines and vaccination, followed by its annual general meeting on Friday 21 May 1999 at the PHLS Central Public Health Laboratory. Presentations will cover childhood vaccines, travel vaccines, new approaches to vaccination, bacterial vaccines, mathematical modelling, and global and tropical issues. Accreditation for continuing professional development has been applied for. The fees are £10 for members of the ACM and £20 for non-members. Please contact Dr S Skidmore, Birmingham Public Health Laboratory, Birmingham Heartlands Hospital, Bordesley Green East, Birmingham B9 5ST (tel: 0121 766 6611; fax: 0121 772 6229) for further details and registration.

Bug Busters

The Microbiology department at King's Mill Centre, Sutton-in-Ashfield, Nottinghamshire is holding a one day seminar entitled 'Bug Busters' on Friday 21 May 1999. The sessions will consider the recent House of Lords report, the evolution and future of antimicrobial susceptibility testing methods and lessons from the national external quality assessment scheme, and present new insight into the molecular basis of antibiotic resistance. Fee £20 includes lunch. Please contact Mrs Sue Taylor or Mr John Cosford at King's Mill Centre, Sutton-in-Ashfield, Nottinghamshire NG17 4GL (tel: 01623 672225) for further details and application forms.

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 PHLIS 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 11 [†]			Cumulative totals from mid-year to week 11 [†]			
	06/99	07/99	08/99	09/99	10/99	11/99	1997 (i)	1998 (ii)	1999 (iii)	96/97(a)	97/98(b)	98/99(c)	
Typhoid fever	Cases	3	1	9	2	4	3	21	26	35	101	110	99
presumed contracted	Abroad [§]	3	1	7	2	4	2	20	22	30	89	94	88
	GB	–	–	2	–	–	1	1	4	5	12	16	11
Paratyphoid fever	Cases	2	2	4	2	1	1	10	13	19	57	68	85
presumed contracted	Abroad [§]	2	2	4	2	1	1	10	13	16	55	65	75
	GB	–	–	–	–	–	–	–	–	3	2	3	10
Dysentery	Cases	23	30	27	21	15	19	463	247	288	1710	1270	1420
Food poisoning	Cases	1124	1179	1380	1333	1438	1445	13304	15062	13741	61936	69426	67689
formally notified	Cases	621	688	864	779	848	761	8115	8673	7940	37675	39802	38807
ascertained	Cases	503	491	516	554	590	684	5189	6389	5801	24261	29624	28882
Tuberculosis	Cases [¶]	135	95	116	136	135	107	1261	1196	1293	4136	4045	4446
Whooping cough	Cases	25	17	12	18	25	26	578	391	203	2295	2103	989
Scarlet fever	Cases	64	71	55	53	72	58	1155	1126	695	2823	2419	1827
Meningitis	Cases	47	58	32	53	47	29	746	590	634	2073	1541	1585
meningococcal	Cases	22	28	20	31	26	19	423	363	370	895	854	867
influenzal (<i>Haemophilus influenzae</i>)	Cases	–	1	–	–	–	–	6	6	4	45	24	19
other specified	Cases	16	19	7	18	15	9	216	163	186	809	495	495
unspecified	Cases	9	10	5	4	6	1	101	58	74	324	168	204
Meningococcal septicaemia (without meningitis)	Cases	51	33	53	46	37	37	440	421	637	949	1047	1294
Tetanus	Cases	–	–	–	–	–	–	–	–	1	4	5	8
Measles	Cases	50	65	63	69	67	45	856	1037	622	2973	2896	2093
Mumps	Cases	26	23	35	32	34	41	431	391	361	1273	1285	1102
Rubella	Cases	47	37	54	49	41	52	736	868	465	2843	2360	1611
Viral hepatitis	Cases	66	56	57	65	82	57	557	620	696	1676	2424	2382
Malaria	Cases	16	10	9	18	7	6	162	309	145	1144	1185	710
Leptospirosis	Cases	–	1	2	1	–	–	5	8	6	17	22	26
Acute encephalitis	Cases	–	–	1	–	–	–	11	4	4	21	19	19
infective	Cases	–	–	–	–	–	–	7	4	2	13	12	11
post-infectious	Cases	–	–	1	–	–	–	4	–	2	8	7	8
Ophthalmia neonatorum	Cases	2	3	6	–	1	–	43	46	28	157	160	124
Special Cases													
Cholera	Cases	–	–	–	–	–	1	3	11	4	23	31	26
Anthrax	Cases	–	–	–	–	1	–	–	–	1	–	–	1
Diphtheria	Cases	–	1	2	–	–	2	5	6	8	12	14	22

All figures include late returns

* includes notifications from Port Health Authorities

† Cumulative totals commencing week ended (i) 5 Jan (ii) 3 Jan (iii) 2 Jan

‡ Cumulative totals from mid-year commencing week ended (a) 5 July (b) 4 July (c) 3 July

§ Includes cases of unstated origin

¶ Excluding chemoprophylaxis

Table 2 Notifications of infectious diseases in week 11/99 (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
North	1	2	7	–	5	6	5	1	–	37	123	–
Tyne and Wear¶	–	–	4	–	–	–	2	–	–	9	9	–
Cumbria	–	1	2	–	1	1	2	1	–	10	101	–
Durham	–	–	1	–	1	3	–	–	–	9	5	–
Northumberland	–	–	–	–	–	2	–	–	–	3	5	–
Hartlepool	1	–	–	–	–	–	–	–	–	3	–	–
Middlesbrough	–	–	–	–	–	–	–	–	–	–	3	–
Redcar and Cleveland	–	–	–	–	–	–	–	–	–	–	–	–
Stockton-on-Tees	–	1	–	–	3	–	1	–	–	1	–	–
Darlington	–	–	–	–	–	–	–	–	–	2	–	–
Yorkshire and Humberside	7	2	9	–	15	2	5	14	1	55	56	2
South Yorkshire¶	1	1	3	–	4	–	2	2	–	2	30	–
West Yorkshire¶	3	1	3	–	9	1	–	11	1	38	17	1
North Yorkshire	–	–	–	–	–	–	1	–	–	7	6	1
City of Kingston upon Hull	1	–	2	–	–	–	–	–	–	2	–	–
East Riding of Yorkshire	1	–	–	–	–	–	–	1	–	–	–	–
North East Lincolnshire	–	–	–	–	–	–	–	–	–	2	–	–
North Lincolnshire	1	–	1	–	–	–	–	–	–	1	–	–
York	–	–	–	–	2	1	2	–	–	3	3	–
East Midlands	3	1	8	1	4	5	3	12	4	63	58	1
Derbyshire	–	–	–	–	–	–	–	–	1	10	1	–
Leicestershire	–	–	2	1	1	1	–	3	–	19	12	–
Lincolnshire	–	–	–	–	–	4	–	–	–	2	10	–
Northamptonshire	–	1	–	–	2	–	3	–	1	8	11	–
Nottinghamshire	1	–	4	–	–	–	–	–	–	8	12	–
Derby	2	–	–	–	–	–	–	1	–	10	–	–
Leicester	–	–	2	–	1	–	–	7	1	1	4	1
Rutland	–	–	–	–	–	–	–	–	–	1	–	–
Nottingham	–	–	–	–	–	–	–	1	1	4	8	–
East Anglia	4	2	–	–	2	3	3	1	1	30	40	–
Cambridgeshire	1	–	–	–	–	–	1	–	–	6	9	–
Norfolk	1	2	–	–	–	3	1	1	–	5	20	–
Suffolk	1	–	–	–	2	–	–	–	1	17	11	–
Peterborough	1	–	–	–	–	–	1	–	–	2	–	–
South East	10	18	17	9	17	7	24	51	8	345	170	2
Greater London	4	12	6	3	9	3	14	37	4	134	31	2
Bedfordshire	–	–	–	–	–	–	–	–	1	3	8	–
Buckinghamshire	–	–	–	–	–	–	–	–	–	2	8	–
East Sussex	–	–	1	–	–	–	2	–	–	3	10	–
Essex	2	–	–	–	–	–	–	2	–	44	17	–
Hampshire	–	1	4	–	2	–	–	1	1	22	21	–
Hertfordshire	–	–	2	1	–	1	–	2	–	6	6	–
Kent	–	1	–	2	3	–	4	–	–	22	9	–
Oxfordshire	–	–	–	–	1	–	1	1	–	–	16	–
Surrey	1	2	1	–	1	–	1	5	1	31	14	–
West Sussex	–	–	–	–	–	–	–	1	–	15	6	–
Luton	–	–	1	–	–	–	–	1	–	3	3	–
Southend-on-Sea	–	–	–	–	–	–	–	1	–	2	–	–
Thurrock	–	–	–	–	–	–	–	–	–	5	–	–
Medway Towns	1	–	1	–	1	–	1	–	–	7	–	–
Bracknell Forest	–	1	1	1	–	–	–	–	1	4	–	–
Newbury	–	–	–	–	–	–	–	–	–	16	–	–
Reading	1	–	–	1	–	–	–	–	–	2	–	–
Slough	–	–	–	–	–	–	–	–	–	2	–	–
Windsor and Maidenhead	–	–	–	–	–	–	–	–	–	6	–	–
Wokingham	1	–	–	–	–	–	–	–	–	6	–	–
Milton Keynes	–	–	–	1	–	–	–	–	–	1	10	–
Brighton and Hove	–	1	–	–	–	2	–	–	–	3	–	–
Portsmouth	–	–	–	–	–	1	–	–	–	5	–	–
Southampton	–	–	–	–	–	–	1	–	–	1	11	–
Isle of Wight	–	–	–	–	–	–	–	–	–	–	–	–
South West	2	4	2	3	2	1	6	2	2	62	81	–
Cornwall and Isles of Scilly	–	–	–	2	–	–	–	–	–	4	13	–
Devon	1	–	–	–	1	1	–	–	–	7	10	–
Dorset	–	2	–	–	–	–	2	1	–	2	12	–
Gloucestershire	–	–	–	–	–	–	–	1	–	4	2	–
Somerset	–	–	–	–	–	–	2	–	–	19	–	–
Wiltshire	–	–	–	–	–	–	–	–	–	–	–	–
Bath and NE Somerset	–	–	–	–	–	–	–	–	–	5	1	–
Bristol	–	–	1	–	–	–	–	–	–	5	14	–
North Somerset	–	–	–	1	–	–	–	–	–	1	8	–
South Gloucestershire	–	–	–	–	–	–	–	–	–	–	7	–
Plymouth	–	1	–	–	1	–	–	–	–	11	–	–
Torbay	–	–	–	–	–	–	–	–	2	2	2	–
Bournemouth	1	1	1	–	–	–	1	–	–	–	7	–
Poole	–	–	–	–	–	–	1	–	–	2	5	–
Swindon	–	–	–	–	–	–	–	–	–	–	–	–

Area	Measles	Mumps	Rubella	Dysentery	Scarlet fever	Whooping cough	Viral hepatitis	TB all forms*	Meningitis†	Food poisoning notified‡	ascertained#	Malaria
West Midlands	4	6	6	3	7	–	3	15	6	61	93	1
West Midlands‡	4	4	4	2	3	–	2	11	2	28	37	1
Worcester	–	–	–	–	–	–	–	1	–	12	8	–
Shropshire	–	–	–	–	–	–	–	–	–	1	10	–
Staffordshire	–	–	–	1	1	–	1	1	4	16	3	–
Warwickshire	–	1	2	–	2	–	–	–	–	1	8	–
Hereford	–	–	–	–	1	–	–	–	–	2	6	–
The Wrekin	–	1	–	–	–	–	–	–	–	–	3	–
Stoke-on-Trent	–	–	–	–	–	–	–	2	–	1	18	–
North West	10	3	3	3	5	–	5	8	3	66	47	–
Greater Manchester‡	4	2	1	1	2	–	2	5	1	17	9	–
Merseyside‡	2	1	2	2	–	–	1	–	1	26	6	–
Cheshire	1	–	–	–	1	–	1	–	–	7	15	–
Lancashire	–	–	–	–	2	–	1	2	–	10	7	–
Halton	2	–	–	–	–	–	–	–	–	–	–	–
Warrington	–	–	–	–	–	–	–	–	–	–	3	–
Blackburn	–	–	–	–	–	–	–	–	–	–	–	–
Blackpool	1	–	–	–	–	–	–	1	1	6	7	–
Wales	4	3	–	–	1	2	3	3	4	42	16	–
Isle of Anglesey	–	–	–	–	–	–	–	–	–	1	–	–
Gwynedd	1	–	–	–	–	–	–	–	1	–	–	–
Conwy	1	–	–	–	–	–	1	–	–	3	–	–
Denbighshire	–	–	–	–	–	–	1	–	1	1	1	–
Flintshire	–	1	–	–	1	–	–	–	–	–	1	–
Wrexham	–	–	–	–	–	–	–	–	–	–	2	–
Powys	–	–	–	–	–	–	–	–	–	–	1	–
Ceredigion	–	–	–	–	–	–	–	–	–	–	–	–
Pembrokeshire	–	1	–	–	–	1	–	–	–	8	–	–
Carmarthenshire	–	–	–	–	–	–	–	–	1	3	–	–
Swansea	–	–	–	–	–	1	–	–	–	5	–	–
Neath and Port Talbot	–	–	–	–	–	–	–	–	–	2	–	–
Bridgend	–	–	–	–	–	–	–	–	–	3	–	–
Vale of Glamorgan	–	–	–	–	–	–	–	–	–	6	–	–
Rhondda, Cynon, Taff	1	–	–	–	–	–	–	2	1	5	–	–
Merthyr Tydfil	–	–	–	–	–	–	–	–	–	–	–	–
Caerphilly	–	–	–	–	–	–	–	–	–	2	–	–
Blaenau Gwent	–	–	–	–	–	–	–	–	–	–	4	–
Torfaen	–	–	–	–	–	–	–	–	–	2	–	–
Monmouthshire	–	–	–	–	–	–	–	–	–	–	3	–
Newport	–	–	–	–	–	–	–	–	–	–	2	–
Cardiff	1	1	–	–	–	–	1	1	–	1	2	–

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

Unitary authorities are shown in italics.

Notifications in week 11/99 of infectious diseases not shown in table 2

Cholera: one case; in Derbyshire.

Diphtheria: two cases; in North Yorkshire and Swansea (in both cases, the strains are known to be non-toxicogenic).

Meningitis – meningococcal: 19 cases; three in Greater London and Staffordshire, two in Devon and West Midlands, and one in each of Berkshire, Denbighshire, Greater Manchester, Hampshire, Lancashire, Leicestershire, Merseyside, Nottinghamshire, and West Yorkshire.

Meningococcal septicaemia (without meningitis): 37 cases; eight in West Midlands, three in Greater London and South Yorkshire, two in each of Carmarthenshire, Cheshire, City of Kingston upon Hull, Essex, North Lincolnshire, and North Yorkshire, and one in each of Cambridgeshire, Cornwall and Isle of Scilly, East Riding of Yorkshire, Greater Manchester,

Northamptonshire, Northumberland, Neath and Port Talbot, Rhondda Cynon Taff, Surrey, Tyne and Wear, and Warwickshire.

Paratyphoid fever: one case presumed to have been contracted abroad – from West Yorkshire.

Typhoid fever: three cases; two presumed to have been contracted abroad – from Hertfordshire and from West Midlands, and one presumed to have been contracted in Great Britain – from Lancashire.

No cases of acute encephalitis, acute poliomyelitis, anthrax, leptospirosis, meningitis influenzal (*Haemophilus influenzae*), ophthalmia neonatorum, 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 11/99

District	County	Observed number	Expected number	Ratio observed/expected	District	County	Observed number	Expected number	Ratio observed/expected
Dysentery					Mumps				
Dover	Kent	2	0.04	50.76	East Dorset	Dorset	2	0.05	38.18
Restormel	Cornwall and Isles of Scilly	2	0.03	60.35	Hackney	Greater London	3	0.18	16.79
Food poisoning					Rubella				
<i>All</i>					<i>All</i>				
Allerdale	Cumbria	93	2.68	34.67	Newark and Sherwood	Nottinghamshire	3	0.10	29.36
Blackpool	Lancashire	13	4.29	3.03	South Lakeland	Cumbria	2	0.09	23.37
Charnwood	Leicestershire	14	4.32	3.24	Scarlet fever				
Elmbridge	Surrey	12	3.42	3.51	Kettering	Northamptonshire	2	0.09	22.24
Ipswich	Suffolk	13	3.19	4.08	Rotherham	South Yorkshire	4	0.29	13.85
Leeds	West Yorkshire	35	20.27	1.73	Stockton-on-Tees	Stockton-on-Tees	3	0.21	14.30
Newbury	Berkshire	16	3.99	4.01	Tuberculosis†				
South Lakeland	Cumbria	9	2.81	3.21	Birmingham	West Midlands	8	2.10	3.80
Spelthorne	Surrey	8	2.50	3.20	Bradford	West Yorkshire	5	1.00	5.01
Stoke-on-Trent	Staffordshire	19	7.11	2.67	Brent	Greater London	6	0.51	11.82
Tendring	Essex	23	3.68	6.25	Leicester	Leicestershire	7	0.61	11.45
West Devon	Devon	8	1.30	6.14	Mole Valley	Surrey	3	0.16	18.27
<i>Formally notified</i>					<i>All</i>				
Derby	Derbyshire	10	3.42	2.93	Tower Hamlets	Greater London	3	0.19	15.75
East Hampshire	Hampshire	8	1.62	4.95	West Dorset	Dorset	2	0.10	20.23
Elmbridge	Surrey	10	1.80	5.56	Whooping cough				
Horsham	West Sussex	8	1.71	4.67	Brighton and Hove	East Sussex	2	0.07	30.35
Hounslow	Greater London	10	3.00	3.33	Durham	Durham	3	0.04	72.74
Ipswich	Suffolk	12	1.68	7.14	King's Lynn and W Norfolk	Norfolk	2	0.06	33.33
Leeds	West Yorkshire	29	10.68	2.72	South Kesteven	Lincolnshire	3	0.06	50.31
Lichfield	Staffordshire	7	1.38	5.09	Wansbeck	Northumberland	2	0.03	66.00
Newbury	Berkshire	16	2.10	7.61	Viral hepatitis				
Pembrokeshire	Pembrokeshire	8	1.67	4.79	<i>All</i>				
Plymouth	Devon	11	3.79	2.90	<i>All</i>				
Sedgemoor	Somerset	6	1.49	4.03	<i>All</i>				
Shepway	Kent	6	1.43	4.20	<i>All</i>				
Sutton	Greater London	9	2.57	3.50	<i>All</i>				
Tendring	Essex	23	1.94	11.86	<i>All</i>				
Thanet	Kent	8	1.85	4.33	<i>All</i>				
Malaria					<i>All</i>				
Newham	Greater London	2	0.03	75.51	<i>All</i>				
Meningitis					<i>All</i>				
<i>All</i>					<i>All</i>				
East Staffordshire	Staffordshire	2	0.06	35.53	<i>All</i>				
Tamworth	Staffordshire	2	0.04	49.40	<i>All</i>				
Torbay	Devon	2	0.07	28.78	<i>All</i>				
Meningococcal					<i>All</i>				
Enfield	Greater London	2	0.10	20.84	<i>All</i>				
Tamworth	Staffordshire	2	0.03	75.40	<i>All</i>				
Torbay	Devon	2	0.05	43.93	<i>All</i>				

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