

Communicable Disease Report

***Clostridium novyi* is likely cause of 'serious unexplained illness' as cases continue to be reported**

Evidence from several laboratories suggests that the recent cases of 'serious unexplained illness' among injecting drug users (IDUs) in Britain¹ may have resulted from infection with the bacterium *Clostridium novyi* type A. Greater Glasgow Health Board has announced that bacteria of the *Clostridium* family have now been isolated from nine of the affected IDUs by laboratories in Glasgow². Two of these have been confirmed as *C. novyi* type A by the PHLS Anaerobe Reference Unit and the same type of bacterium has also been identified in tissue from a third patient by the Centers for Disease Control and Prevention in Atlanta. The remaining six isolates appear to be *C. novyi* type A but have yet to be fully identified. The PHLS has confirmed that the *C. novyi* isolates produce toxin.

A total of 20 cases (11 fatal) of this illness have been reported in England and Wales. The first case was admitted to hospital on 24 April and the most recent on 9 June. A review of clinical records has shown that ten of these cases, all from the North West Region, met the specific case definition described last week¹. In addition, a further case of wound botulism in an IDU in North East England has been confirmed.

The illness is characterised by extensive localised inflammation and oedema at an injecting site, often followed by rapid deterioration with circulatory collapse, a clinical course that is consistent with a toxin-mediated cause. Other abnormal findings have included very high white blood cell counts (often rising to $> 30 \times 10^9/L$ within a few hours), haemoconcentration, abnormal clotting, ST segment abnormalities on electrocardiography, and raised creatine kinase. continued on page 216

Safety of meningitis vaccine

The Department of Health's deputy chief medical officer (CMO) issued statements this week to reassure parents¹ and professionals (Public Health Link CEM/CMO/2000/8) about the safety of the conjugate vaccine against serogroup C meningococcal disease. The announcement was made in response to news media reports questioning the safety of the vaccine.

The deputy CMO offered a reminder that 1530 cases of group C meningococcal meningitis and septicaemia (150 fatal) had been reported in the United Kingdom (UK) in 1999. Clinical trials of the group C vaccine in about 8000 infants, children, and young adults in the UK and in over 20 000 in other countries (Canada, Holland, United States) showed that it evoked an excellent immune response in all age groups (with evidence of long term protection), was well tolerated, and caused no serious side effects. The vaccine has already reduced the number of cases of group C meningococcal disease in the age groups targeted for immunisation by 75%².

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NINSS reports on surgical site infection and hospital acquired bacteraemia

The Nosocomial Infection National Surveillance Scheme (NINSS) recently issued reports on the surveillance of surgical site infection and hospital acquired bacteraemia in English hospitals^{1,2}. NINSS is a system to monitor hospital acquired infection (HAI) and help hospitals to reduce their incidence of infection by identifying areas where clinical practice and infection control procedures may need to be reviewed. The scheme was set up and funded by the Department of Health and the PHLS³. continued on page 216

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Bacteraemia, England and Wales: laboratory reports, weeks 20-23/00

	Reports received weeks 20-23 blood (cerebrospinal fluid with or without blood)		Cumulative total to week 23		Ranking (cumulative total 2000)	
	2000	1999	2000	1999	Section	Overall
Gram negative bacteria						
<i>Acinetobacter sp</i>	36 (1)	42 (1)	269	304	8	16
<i>Aeromonas sp</i>	3	6	16	18	17	31
<i>Branhamella/Moraxella sp</i>	6 (1)	4	41	50	15	28
<i>Campylobacter sp</i>	4 (2)	10	47	50	14	27
<i>Citrobacter sp</i>	30	28	155	161	10	20
<i>Enterobacter sp</i>	86	116 (3)	611	658	4	9
<i>Escherichia coli</i>	751	825	4558	4837	1	2
<i>Haemophilus influenzae</i> ¹	19	21	151	149	11	21
<i>H. influenzae</i> type b	– (1)	1	11	9	18	32
<i>Klebsiella sp</i>	154 (2)	213	1126	1157	2	6
<i>Neisseria meningitidis</i>	48 (13)	56 (9)	496	489	6	11
<i>Proteus sp</i>	129	120	717	713	3	8
<i>Providencia sp</i>	5	6	29	26	16	30
<i>Pseudomonas aeruginosa</i>	80	89	582	576	5	10
<i>Pseudomonas sp</i> ²	69	73	403	429	7	14
<i>Salmonella typhi</i> and <i>S. paratyphi</i>	24	33	85	99	12	23
<i>Salmonella sp</i> ³	15	21 (2)	71	78	13	24
<i>Serratia sp</i>	28 (1)	33	217	210	9	17
Totals	1487	1697	9585	10013		
Gram positive bacteria						
<i>Bacillus sp</i>	7	8	41	52	11	28
<i>Corynebacterium sp</i> and diphtheroids	4	11 (1)	54	69	10	26
<i>Listeria sp</i>	1 (2)	2 (1)	7	30	12	34
Staphylococci:						
<i>S. aureus</i>	734 (3)	747 (7)	5135	4708	1	1
coagulase negative ⁴	237 (4)	308 (6)	1806	1753	3	4
Streptococci:						
group A	58	48	449	393	6	12
group B	47 (4)	61 (4)	363	336	7	15
group C	9	12 (1)	67	58	9	25
group G	39	31	189	210	8	18
<i>Enterococcus sp</i> ⁵	235 (2)	229 (1)	1485	1517	4	5
α- and non-haemolytic	120 (1)	114 (2)	776	801	5	7
<i>S. pneumoniae</i>	190 (7)	218 (14)	2179	2276	2	3
Totals	1681	1789	12551	12203		
Anaerobic bacteria						
Anaerobic cocci ⁶	14	12	87	94	3	22
<i>Bacteroides sp</i> ⁷	49	65	409	437	1	13
<i>Clostridium sp</i>	29	25	173	179	2	19
Totals	92	102	669	710		
<i>Mycobacterium avium/intracellulare</i>	1	3	9	9		33
Overall totals	3261	3591	22814	22935		

1. Includes all *H. influenzae* except type b2. Includes all *Pseudomonas sp* and *Pseudomonas*-like *sp* except *P. aeruginosa*3. Includes all salmonellas except *S. typhi* and *S. paratyphi*4. Includes all staphylococci *sp* except *S. aureus*, and also includes *Micrococcus sp* and *Aerococcus sp*5. *Enterococcus avium*, *E. casseliflavus*, *E. durans*, *E. faecalis*, *E. faecium*, *E. gallinarum*, *Enterococcus sp*, *Streptococcus bovis*, group D streptococci6. Includes *Peptococcus sp*, *Peptostreptococcus sp*, *Veillonella sp*7. Includes *Bacteroides sp*, *Fusobacterium sp*, *Prevotella sp*, *Porphyromonas sp*

Viral hepatitis, England and Wales: laboratory reports, weeks 17 - 20/00

Laboratory reports	Number of reports received				Total for weeks 17-20/00	Cumulative total for 2000
	17/00	18/00	19/00	20/00		
Hepatitis A (IgM)	14	6	49	13	82	417
Hepatitis E (IgM/IgG)	–	–	–	–	–	1
Acute hepatitis B	3	7	13	10	33	233
HBsAg other	11	6	9	6	32	229
HBsAg*	2	1	7	19	29	96
Hepatitis C	45	62	126	92	325	1751

* category not yet determined

Hepatitis A

A total of 82 cases were reported, compared with 115 in the equivalent four week period in 1999. A history of travel abroad in the six weeks before onset was recorded for six cases (Indian subcontinent 1; country not stated 5). Two cases were associated with outbreaks in London region.

Hepatitis E

No cases were reported.

Laboratory reports	Age (years)					Not stated	Total
	<1	1-14	15-44	45-64	≥65		
Hepatitis A (IgM)	–	10	54	12	5	1	82
Hepatitis E (IgM/IgG)	–	–	–	–	–	–	–
Acute hepatitis B	–	1	26	2	2	2	33
HBsAg other	1	–	23	7	–	1	32
HBsAg*	–	–	20	5	3	1	29
Hepatitis C	2	2	246	63	8	4	325

* category not yet determined

Hepatitis B

Thirty-three cases (25 men and 8 women) of acute hepatitis B were reported. Information about risk exposure was available for 21 cases: injecting drug use 11 (8 men aged 17 to 41 years and 3 women aged 24 to 33 years); sexual intercourse between men and women 7 (4 men aged 29 to 44 years and 3 women aged 22 to 40 years); sexual intercourse between men 3 (aged 27 to 65 years).

Hepatitis C

A total of 325 cases of hepatitis C infection were reported. Reports were received from the following regions: Northern and Yorkshire 15; Trent 20; Eastern 45; London 29; South East 51; South and West 116; West Midlands 25; Wales 24.

***Clostridium novyi* is likely cause of 'serious unexplained illness' as cases continue to be reported** (continued from page 213)

Doctors should be alerted to the speed with which cases can deteriorate and the need for rapid assessment and treatment¹. Guidance for doctors on the condition and its management has been circulated to consultants in communicable disease control (CCDCs) throughout England and Wales and Northern Ireland. Possible cases should be reported to CCDCs and to the investigation team at the PHLS Communicable Disease Surveillance Centre (tel: 020 8200 6868 ext 4238, 3430, 4930, 3436, 3036, 4462).

1. CDSC. Serious unexplained illness among drug injectors. *Commun Dis Rep CDR Wkly* 2000; **10**: 203,6.
2. Greater Glasgow Health Board. Likely cause of injector outbreak in Glasgow identified. Press release, 15 June 2000 <www.show.scot.nhs.uk/gghb/homepage>.

Safety of meningitis vaccine (continued from page 213)

Health professionals, encouraged to report all suspected reactions attributable to the new vaccine, had made 4764 reports by 1 June 2000. Most of the reactions reported were transient and self limiting. For the first time, reports were accepted on a pilot basis from nursing staff in addition to doctors, dentists, pharmacists, and coroners. In the context of the 13.5 million distributed doses, the rate of reported serious suspected adverse reactions is less than 1 in 10 000, comparable with that for other immunisation programmes.

The deputy CMO is not planning an urgent review of the immunisation campaign, and said that the vaccine is undergoing the same rigorous monitoring as any new vaccine and that the Committee on Safety of Medicines is reviewing the reported suspected adverse reactions, in line with usual practice. The vaccine is not live and cannot cause meningitis, but it protects against group C meningococcal disease only – one of several possible causes of meningitis – and takes some days to give protection. Parents and young people are advised to remain aware of the signs and symptoms of meningitis but recommended to continue to take up the opportunity to be immunised¹.

1. Department of Health. *Safety of the meningitis C vaccine programme*. Press statement, 12 June 2000. (2000/0347) <<http://pipe.ccta.gov.uk/coi/coipress.nsf/70e1fa6684c1d3f380256735005750fb/66bba0534f883736802568fc005142c5?OpenDocument>>.
2. CDSC. Meningococcal disease falls in vaccine recipients. *Commun Dis Rep CDR Wkly* 2000; **10**: 133,6.

NINSS reports on surgical site infection and hospital acquired bacteraemia (continued from page 213)

Ninety-six English hospitals in the eight NHS regions took part in surveillance of surgical site infection between October 1997 and September 1999¹. Data from 28 407 operations in 12 categories of surgery yielded reports of 1212 infections (4.3%), the incidence of which varied between hospitals for all surgical categories. Limb amputation and large bowel surgery most commonly led to infection in the nine surgical categories in which at least 10 hospitals undertook work. The more serious deep or organ/space (as opposed to superficial) infections accounted for at least 25% of surgical site infections in most categories. The incidence of surgical site infection rose with the number of risk factors from the US National Nosocomial Infections Surveillance System risk index (health of patient before surgery, duration of operation, wound class [likelihood of wound contamination during surgery]) for abdominal hysterectomy, coronary artery bypass grafts, hip prosthesis, large bowel surgery, and vascular surgery. For knee prosthesis, limb amputation, or open reduction of a long bone fracture the trend was less clear. Forty-seven per cent of the pathogens identified as causing infections were staphylococci: 81% of these were *Staphylococcus aureus*, 61% of which were resistant to methicillin (MRSA). MRSA was the commonest cause of surgical site infection in large bowel and vascular surgery, limb amputation, and open reduction of long bone fractures.

The 61 hospitals that took part in the surveillance of hospital acquired bacteraemia from May 1997 to April 1999 provided data on over a million patients, among whom 3824 episodes of bacteraemia were identified in 3629 patients (3.6 patients per 1000 admissions; mean of 0.6 bacteraemias per 1000 patient days)². Rates of hospital acquired bacteraemia varied widely between specialties within hospitals, the highest being in general and paediatric intensive care units (ICUs) and haematology units. Six specialties accounted for 72% of all bacteraemias: haematology, general ICUs, general medicine, general surgery, geriatric medicine, and nephrology. Nearly a half of the isolates causing hospital acquired bacteraemia were staphylococci: 24% were *S. aureus*, 47% of which were MRSA. More than one organism was identified in 11% of hospital acquired bacteraemias. Two thirds of bacteraemias whose source was known were associated with an intravascular device (most commonly central intravenous catheters) or with other devices, such as urinary catheters or ventilators.

Rates of HAI, stratified by operation type and risk index for surgical site infection and clinical specialty for hospital acquired bacteraemia, vary between hospitals. This variation within defined groups of patients provides an opportunity to review and compare clinical and infection control practice within and between hospitals. NINSS can advise on the interpretation and further investigation of results for hospitals with higher than average rates. Copies of these reports, details of the scheme, and registration forms for hospitals not yet taking part are available from the Nosocomial Infection Surveillance Unit, PHLS Central Public Health Laboratory, 61 Colindale Avenue, London NW9 5HT.

1. Nosocomial Infection National Surveillance Scheme. *Surveillance of surgical site infection in English hospitals 1997-1999*. London: PHLS, 2000.
2. Nosocomial Infection National Surveillance Scheme. *Surveillance of hospital-acquired bacteraemia in English hospitals 1997-1999*. London: PHLS, 2000.
3. CDSC. New scheme for surveillance of hospital acquired infections. *Commun Dis Rep CDR Wkly* 1996; **6**: 91,4.

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). 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 22 [†]			Cumulative totals from mid-year to week 22 [‡]		
		17/00	18/00	19/00	20/00	21/00	22/00	1998 (i)	1999 (ii)	2000 (iii)	97/98(a)	98/99(b)	99/00(c)
Tuberculosis	Cases [¶]	100	147	148	158	129	107	2408	2617	2939	5257	5770	5918
Scarlet fever	Cases	56	34	58	48	29	28	1992	1201	1082	3285	2333	1803
Malaria	Cases	7	14	23	12	31	14	477	309	325	1353	874	957
Leptospirosis	Cases	–	–	1	1	–	–	11	11	12	25	31	23
Food poisoning formally notified	Cases	1048	1134	1707	1852	2020	1686	30508	30249	28276	84872	84197	75576
	Cases	538	527	862	969	1032	799	17484	17748	14858	48613	48615	40769
	Cases	510	607	845	883	988	887	13024	12501	13418	36259	35582	34807
Typhoid fever presumed contracted	Cases	4	5	4	4	2	1	49	71	55	133	135	119
	abroad [§]	4	5	4	3	2	1	42	61	52	114	119	111
	GB	–	–	–	1	–	–	7	10	3	19	16	8
Paratyphoid fever presumed contracted	Cases	–	1	5	1	5	2	47	51	30	102	117	92
	abroad [§]	–	1	5	1	5	2	45	48	28	97	107	87
	GB	–	–	–	–	–	–	2	3	2	5	10	5
Dysentery	Cases	33	30	35	45	30	32	565	610	578	1588	1742	1391
Viral hepatitis	Cases	64	43	75	85	59	50	1263	1374	1424	3067	3060	3214
Hepatitis A	Cases	31	19	31	37	26	20	655	717	569	1763	1453	1414
Hepatitis B	Cases	19	11	15	29	16	16	333	314	410	706	809	888
Hepatitis C	Cases	10	11	26	17	11	12	191	266	387	375	645	799
Other and unknown	Cases	4	2	3	2	6	2	84	77	58	223	153	113
Meningitis meningococcal	Cases	40	48	57	48	34	30	1006	1066	1099	1957	2017	1994
	Cases	20	28	28	18	23	14	603	611	611	1094	1108	1075
	Cases	–	1	–	1	–	–	12	10	19	30	25	37
	Cases	13	16	17	17	9	10	285	312	335	617	621	627
other specified	Cases	7	3	12	12	2	6	106	133	134	216	263	255
Meningococcal septicaemia (without meningitis)	Cases	49	28	34	36	33	22	734	992	929	1360	1649	1623
Acute encephalitis infective post-infectious	Cases	–	2	1	–	–	–	11	12	5	26	27	13
	Cases	–	1	1	–	–	–	9	8	3	17	17	11
	Cases	–	1	–	–	–	–	2	4	2	9	10	2
Whooping cough	Cases	8	16	11	16	12	13	679	454	236	2391	1240	828
Tetanus	Cases	–	–	–	–	–	–	–	1	–	5	8	2
Measles	Cases	40	60	53	58	39	35	1970	1128	1186	3829	2599	2280
Mumps	Cases	46	50	65	46	46	38	719	692	1007	1613	1433	1840
Rubella	Cases	40	42	41	45	34	24	1802	961	840	3294	2107	1654
Ophthalmia neonatorum	Cases	–	2	9	4	3	2	87	77	72	201	173	148
Special cases													
Cholera	Cases	–	1	1	–	2	1	24	11	11	44	33	26
Diphtheria	Cases	1	–	–	–	1	2	7	11	9	15	25	16
Typhus	Cases	–	–	–	1	–	–	–	3	1	–	9	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 22/00 (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	2	9	3	4	3	1	3	6	2	68	110	3
Cumbria	–	1	–	–	–	–	–	–	–	10	10	–
Durham	1	–	–	–	1	–	–	–	–	2	12	–
North Yorkshire	–	–	1	–	–	–	–	–	–	13	13	–
Northumberland	–	–	1	1	–	–	–	–	1	–	7	–
Tyne and Wear¶	–	–	–	–	–	–	–	–	–	8	24	1
West Yorkshire¶	1	7	1	3	1	1	2	5	1	25	41	1
City of Kingston upon Hull	–	–	–	–	–	–	1	–	–	3	–	–
Darlington	–	–	–	–	–	–	–	–	–	1	3	–
East Riding of Yorkshire	–	1	–	–	–	–	–	–	–	–	–	–
Hartlepool	–	–	–	–	–	–	–	1	–	1	–	–
Middlesbrough	–	–	–	–	–	–	–	–	–	–	–	1
Redcar and Cleveland	–	–	–	–	–	–	–	–	–	–	–	–
Stockton-on-Tees	–	–	–	–	1	–	–	–	–	1	–	–
York	–	–	–	–	–	–	–	–	–	4	–	–
Trent	2	4	6	4	3	–	11	8	5	75	119	2
Derbyshire	–	–	2	–	–	–	–	–	1	20	11	–
Leicestershire	–	–	2	–	–	–	–	–	–	7	10	–
Lincolnshire	2	–	–	2	–	–	2	–	–	6	25	–
Nottinghamshire	–	–	1	–	1	–	–	–	–	10	14	–
South Yorkshire¶	–	4	1	1	1	–	5	7	1	10	10	2
Derby	–	–	–	–	–	–	–	–	–	7	2	–
Leicester	–	–	–	–	–	–	–	–	–	–	1	–
North East Lincolnshire	–	–	–	–	–	–	3	–	–	13	32	–
North Lincolnshire	–	–	–	–	1	–	1	–	2	–	4	–
Nottingham	–	–	–	1	–	–	–	1	1	–	10	–
Rutland	–	–	–	–	–	–	–	–	–	2	–	–
Eastern	1	2	1	1	2	–	–	3	4	59	100	–
Bedfordshire	1	1	–	–	–	–	–	1	1	2	7	–
Cambridgeshire	–	–	–	–	–	–	–	–	–	6	7	–
Essex	–	–	–	1	–	–	–	1	–	22	13	–
Hertfordshire	–	–	–	–	1	–	–	1	1	2	19	–
Norfolk	–	1	–	–	–	–	–	–	–	7	18	–
Suffolk	–	–	1	–	–	–	–	–	–	8	32	–
Luton	–	–	–	–	1	–	–	–	–	4	4	–
Peterborough	–	–	–	–	–	–	–	–	–	5	–	–
Southend-on-Sea	–	–	–	–	–	–	–	–	2	3	–	–
Thurrock	–	–	–	–	–	–	–	–	–	–	–	–
London	11	1	–	9	5	6	10	59	2	125	42	4
Greater London	11	1	–	9	5	6	10	59	2	125	42	4
South East	6	–	8	3	10	3	10	5	3	139	145	2
Buckinghamshire	1	–	–	1	–	–	1	–	1	–	7	–
East Sussex	1	–	–	–	–	1	–	–	–	6	10	–
Hampshire	–	–	1	–	–	–	1	2	–	10	28	–
Kent	3	–	1	–	2	1	3	1	–	20	12	–
Northamptonshire	–	–	–	–	2	–	1	–	1	5	19	–
Oxfordshire	–	–	–	–	–	–	–	–	–	4	29	1
Surrey	1	–	1	–	1	1	1	1	–	37	9	–
West Sussex	–	–	–	–	1	–	1	–	–	16	18	–
Bracknell Forest	–	–	–	1	–	–	–	–	–	3	1	–
Brighton and Hove	–	–	–	–	2	–	–	1	–	2	–	1
Isle of Wight	–	–	–	–	–	–	–	–	–	–	–	–
Medway Towns	–	–	–	–	–	–	1	–	–	6	–	–
Milton Keynes	–	–	–	–	–	–	1	–	–	1	3	–
Newbury	–	–	–	–	1	–	–	–	–	4	–	–
Portsmouth	–	–	–	–	–	–	–	–	–	6	–	–
Reading	–	–	–	1	–	–	–	–	–	2	1	–
Slough	–	–	–	–	–	–	–	–	–	2	1	–
Southampton	–	–	1	–	–	–	–	–	–	2	7	–
Windsor and Maidenhead	–	–	2	–	1	–	–	–	–	6	–	–
Wokingham	–	–	2	–	–	–	–	–	1	7	–	–
South West	1	1	–	–	2	–	2	4	2	118	106	–
Cornwall and Isles of Scilly	–	1	–	–	–	–	–	–	–	6	21	–
Devon	–	–	–	–	–	–	1	1	1	6	24	–
Dorset	–	–	–	–	–	–	–	–	–	22	–	–
Gloucestershire	–	–	–	–	1	–	1	3	–	6	–	–
Somerset	1	–	–	–	–	–	–	–	1	34	–	–
Wiltshire	–	–	–	–	–	–	–	–	–	15	–	–
Bath and NESomerset	–	–	–	–	–	–	–	–	–	–	10	–
Bournemouth	–	–	–	–	–	–	–	–	–	6	–	–
Bristol	–	–	–	–	–	–	–	–	–	–	19	–
North Somerset	–	–	–	–	–	–	–	–	–	2	9	–
Plymouth	–	–	–	–	1	–	–	–	–	–	12	–
Poole	–	–	–	–	–	–	–	–	–	8	–	–
South Gloucestershire	–	–	–	–	–	–	–	–	–	–	3	–
Swindon	–	–	–	–	–	–	–	–	–	13	–	–
Torbay	–	–	–	–	–	–	–	–	–	–	8	–

Area	Measles	Mumps	Rubella	Dysentery	Scarlet fever	Whooping cough	Viral hepatitis	TB all forms*	Meningitis†	Food poisoning notified§	ascertained#	Malaria
West Midlands	6	10	5	4	2	–	2	11	2	60	107	–
Shropshire	–	–	–	–	–	–	–	–	–	–	14	–
Staffordshire	1	–	–	–	1	–	–	–	–	14	11	–
Warwickshire	–	–	–	–	–	–	–	–	1	10	12	–
West Midlands‡	4	9	4	4	–	–	2	10	1	27	46	–
Worcestershire	–	1	1	–	1	–	–	1	–	5	4	–
<i>Hereford</i>	–	–	–	–	–	–	–	–	–	4	14	–
<i>Stoke-on-Trent</i>	1	–	–	–	–	–	–	–	–	–	4	–
<i>Telford and Wrekin</i>	–	–	–	–	–	–	–	–	–	–	2	–
North West	6	11	1	4	1	2	8	7	5	124	109	2
Cheshire	–	–	–	–	–	–	–	–	–	18	14	–
Cumbria	–	–	–	–	–	–	–	–	–	22	12	–
Greater Manchester‡	4	2	1	3	1	1	2	7	1	21	30	2
Lancashire	–	–	–	–	–	–	2	–	–	47	27	–
Merseyside	1	1	–	–	–	1	1	–	4	16	12	–
<i>Blackburn</i>	1	8	–	–	–	–	3	–	–	–	3	–
<i>Blackpool</i>	–	–	–	–	–	–	–	–	–	–	7	–
<i>Halton</i>	–	–	–	–	–	–	–	–	–	–	–	–
<i>Warrington</i>	–	–	–	1	–	–	–	–	–	–	4	–
Wales	–	–	–	3	–	1	4	4	5	31	49	1
<i>Blaenau Gwent</i>	–	–	–	–	–	–	–	–	–	–	5	–
<i>Bridgend</i>	–	–	–	–	–	–	–	–	–	4	–	–
<i>Caerphilly</i>	–	–	–	–	–	–	–	–	1	5	1	–
<i>Cardiff</i>	–	–	–	–	–	–	1	–	–	–	5	–
<i>Carmarthenshire</i>	–	–	–	1	–	1	–	–	–	–	–	–
<i>Ceredigion</i>	–	–	–	2	–	–	2	1	–	2	–	–
<i>Conwy</i>	–	–	–	–	–	–	–	1	–	7	1	–
<i>Denbighshire</i>	–	–	–	–	–	–	1	1	–	1	1	–
<i>Flintshire</i>	–	–	–	–	–	–	–	–	1	1	5	–
<i>Gwynedd</i>	–	–	–	–	–	–	–	–	–	–	6	1
<i>Isle of Anglesey</i>	–	–	–	–	–	–	–	–	–	2	1	–
<i>Merthyr Tydfil</i>	–	–	–	–	–	–	–	–	–	3	–	–
<i>Monmouthshire</i>	–	–	–	–	–	–	–	–	–	–	–	–
<i>Neath and Port Talbot</i>	–	–	–	–	–	–	–	–	–	–	–	–
<i>Newport</i>	–	–	–	–	–	–	–	–	3	2	10	–
<i>Pembrokeshire</i>	–	–	–	–	–	–	–	–	–	3	–	–
<i>Powys</i>	–	–	–	–	–	–	–	1	–	–	1	–
<i>Rhondda, Cynon, Taff</i>	–	–	–	–	–	–	–	–	–	–	5	–
<i>Swansea</i>	–	–	–	–	–	–	–	–	–	–	–	–
<i>Torfaen</i>	–	–	–	–	–	–	–	–	–	–	–	–
<i>Vale of Glamorgan</i>	–	–	–	–	–	–	–	–	–	–	4	–
<i>Wrexham</i>	–	–	–	–	–	–	–	–	–	1	4	–

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

Unitary authorities are shown in italics.

Notifications in week 22/00 of infectious diseases not shown in table 2

Cholera: one case; in Nottingham.

Wear, West Midlands, West Sussex, and Wrexham.

Diphtheria: two cases; in Greater London and in South Yorkshire (both known to be non-toxicogenic strains).

Ophthalmia neonatorum: two cases; in Carmarthenshire and in Worcestershire.

Meningitis (meningococcal): 14 cases; three in Newport, two in Southend-on-Sea and in North Lincolnshire, and one in each of Caerphilly, Flintshire, Greater London, Northamptonshire, Northumberland, West Midlands, and West Yorkshire.

Paratyphoid fever: two cases; both presumed to have been contracted abroad – from Cardiff and from Nottingham.

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

Meningococcal septicaemia (without meningitis): 22 cases; four in West Yorkshire, two in each of Brighton and Hove, Greater London, Northumberland, and Oxfordshire, and one in each of East Riding of Yorkshire, Hertfordshire, Isle of Anglesey, Isle of Wight, Merseyside, Shropshire, Tyne and

No cases of acute encephalitis, acute poliomyelitis, anthrax, leptospirosis, meningitis influenzal (*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 22/00

District	County	Observed number	Expected number	Ratio observed/expected	District	County	Observed number	Expected number	Ratio observed/expected
Dysentery					Meningitis (all)				
Ceredigion	Ceredigion	2	0.04	46.03	Newport	Newport	3	0.08	37.70
South Holland	Lincolnshire	2	0.04	45.49	North Lincolnshire	North Lincolnshire	2	0.09	22.68
Wandsworth	Greater London	3	0.16	18.29	Southend-on-Sea	Southend-on-sea	2	0.10	20.15
Food poisoning (all)					Meningitis (meningococcal)				
Babergh	Suffolk	8	2.57	3.11	Newport	Newport	3	0.04	80.78
Basingstoke and Deane	Hampshire	14	4.80	2.91	North Lincolnshire	North Lincolnshire	2	0.04	48.59
Eden	Cumbria	9	1.56	5.77	Southend-on-Sea	Southend-on-sea	2	0.05	43.18
Hereford	Hereford	18	4.74	3.80	Mumps				
Leeds	West Yorkshire	49	23.63	2.07	Birmingham	West Midlands	5	0.85	5.89
Newport	Newport	12	4.47	2.68	Blackburn	Blackburn	8	0.13	63.50
North East Lincolnshire	North East Lincolnshire	45	5.22	8.62	Bradford	West Yorkshire	6	0.41	14.68
Oxford	Oxfordshire	13	4.39	2.96	Walsall	West Midlands	3	0.20	14.73
Pendle	Lancashire	17	2.78	6.12	Rubella				
Sedgemoor	Somerset	10	3.30	3.03	Windsor and Maidenhead	Windsor and Maidenhead	2	0.06	32.93
South Lakeland	Cumbria	27	3.27	8.25	Wokingham	Wokingham	2	0.07	28.91
Teignbridge	Devon	15	3.74	4.01	Scarlet fever				
Waveney	Suffolk	13	3.51	3.70	Brighton and Hove	Brighton and Hove	2	0.08	24.25
West Lancashire	Lancashire	24	3.59	6.68	Kettering	Northamptonshire	2	0.04	46.08
Worthing	West Sussex	11	3.21	3.43	Tuberculosis *				
Food poisoning (formally notified)					Brent	Greater London	11	0.51	21.68
Burnley	Lancashire	6	1.39	4.33	Doncaster	South Yorkshire	4	0.61	6.60
Conwy	Conwy	7	1.72	4.08	Haringey	Greater London	5	0.44	11.33
Crewe and Nantwich	Cheshire	7	1.75	3.99	Newham	Greater London	6	0.47	12.70
Epsom and Ewell	Surrey	7	1.07	6.55	Waltham Forest	Greater London	4	0.46	8.74
Leeds	West Yorkshire	24	11.20	2.14	Viral hepatitis (all)				
Macclesfield	Cheshire	9	2.34	3.84	Blackburn	Blackburn	3	0.14	22.12
Mendip	Somerset	7	1.52	4.60	Ceredigion	Ceredigion	2	0.07	29.46
Merton	Greater London	12	2.77	4.34	Doncaster	South Yorkshire	3	0.28	10.60
North Dorset	Dorset	6	0.88	6.83	Hackney	Greater London	3	0.19	15.98
North East Derbyshire	Derbyshire	7	1.53	4.57	North East Lincolnshire	North East Lincolnshire	3	0.15	19.38
North East Lincolnshire	North East Lincolnshire	13	2.47	5.26	Whooping cough				
Pendle	Lancashire	17	1.32	12.91	Ealing	Greater London	2	0.07	26.76
Poole	Poole	8	2.14	3.73	Hackney	Greater London	2	0.06	35.30
Sedgemoor	Somerset	10	1.56	6.40	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.				
South Lakeland	Cumbria	22	1.55	14.19					
South Somerset	Somerset	9	2.32	3.88					
Swindon	Swindon	13	2.68	4.84					
Taunton Deane	Somerset	6	1.52	3.94					
Thanet	Kent	8	1.94	4.13					
West Dorset	Dorset	7	1.39	5.05					
Wolverhampton	West Midlands	11	3.77	2.91					
Malaria									
Greenwich	Greater London	3	0.06	52.45					
Measles									
Ealing	Greater London	4	0.20	19.88					
Haringey	Greater London	3	0.15	20.59					
Swale	Kent	2	0.08	24.04					

* excluding prophylaxis