

Communicable Diseases Report, NSW, March and April 2012

Communicable Diseases Branch NSW Department of Health

For updated information, including data and facts on specific diseases, visit www.health.nsw.gov.au and click on **Public Health** and then **Infectious Diseases**. The communicable diseases site is available at: <http://www.health.nsw.gov.au/publichealth/infectious/index.asp>.

Figure 1 and Tables 1 and 2 show notifications of communicable diseases received in March and April 2012 in New South Wales (NSW).

Enteric infections

Outbreaks of suspected foodborne disease

Ten outbreaks of gastrointestinal disease, thought to be due to the consumption of microbiologically contaminated food and which affected a total of 103 people, were reported in March and April 2012. This is higher than the number of outbreaks reported for the same period last year. These outbreaks were linked to restaurants ($n=6$), take-away shops ($n=2$) and commercial caterers ($n=2$). Of the 10 outbreaks; six were identified through complaints to the NSW Food Authority, three were reported directly to a public health unit, and one was detected through monitoring laboratory notifications of *Salmonella* clustered in time and space. Stool samples were tested in six of these outbreaks: *Salmonella* Typhimurium was found to be the cause in all of these.

There was insufficient data to draw conclusions about the likely cause for four outbreaks. In one of these outbreaks the cases had consumed a Bombe-Alaska from a Chinese restaurant. This dessert is covered with meringue made with raw egg and is known to be a high-risk food for salmonellosis because the meringue undergoes little or no cooking; any pathogens present in the egg therefore may cause illness. In three other outbreaks illness occurred in those who had consumed sandwich rolls and other items from Vietnamese bakeries or a crepe and kebab shop. Cross-contamination from raw ingredients is thought to

be the cause of these outbreaks. Another outbreak occurred in people who ate bacon and egg burgers at a restaurant and the exact point of contamination of this well-cooked food could not be determined. In the final outbreak, illness was statistically significantly associated with eating a lamb salad however no pathogen, mechanism for contamination or bacterial growth or toxin could be identified.

Outbreaks of gastroenteritis in institutional settings

In March and April 2012, 108 outbreaks of gastroenteritis in institutions were reported, affecting 1805 people. This is 59% higher than for the same period last year (68 outbreaks). Thirty-seven outbreaks occurred in aged-care facilities, 61 in child-care centres, seven in hospitals, two in residential care units and one in a military facility. All of these outbreaks appear to have been caused by person-to-person spread of a viral illness. In 54 (50%) outbreaks one or more stool specimens were collected. Norovirus was detected in the specimens from 23 (43%) of these outbreaks. Rotavirus was detected in two (4%) outbreaks. In 16 (30%) outbreaks no pathogens were detected in stool specimens. Results for 13 outbreaks are outstanding.

Viral gastroenteritis increases in winter months. Public health units encourage institutions to submit stool specimens from case-patients for testing during an outbreak to help determine the cause of the outbreak (for further information see: *Guidelines for the public health management of gastroenteritis outbreaks due to norovirus or suspected viral agents in Australia* available at: <http://www.health.gov.au/internet/publications/publishing.nsf/Content/cdadna-norovirus.htm-1>).

Respiratory infections

Influenza

Influenza activity in NSW, as measured by the number of people who presented with influenza-like illness to 59 of the state's largest emergency departments, was low during March and April 2012. In addition, laboratory surveillance identified only low numbers of influenza-positive specimens, although these were more than is usual for this time of year.

In March, there were:

- 106 presentations to emergency departments (rate 0.5 per 1000 presentations)
- 49 cases of laboratory-confirmed influenza including:
 - 33 (67%) influenza A
 - 16 (33%) influenza B.

In April, there were:

- 110 presentations to emergency departments (rate 0.7 per 1000 presentations)
- 56 cases of laboratory-confirmed influenza including:
 - 45 (80%) influenza A
 - 11 (20%) influenza B.

For a more detailed report on respiratory activity in NSW see: http://www.health.nsw.gov.au/PublicHealth/Infectious/influenza_reports.asp.

Legionnaires' disease

There were 19 cases of Legionnaires' disease reported in March and April 2012. Of these, 15 cases were due to *Legionella pneumophila* and two cases were due to *Legionella longbeachae*. Despite careful interviews with case-patients for common exposures and a review of the potential sources of infection (including cooling towers), no common environmental sources were identified for these cases.

Legionella bacteria can cause severe pneumonia if aerosolised water or dust that contains the bacteria is inhaled by susceptible people. Some air-conditioning cooling towers have been identified as the source of Legionnaires' disease outbreaks in the past as they can become contaminated by *Legionella* bacteria which are then aerosolised. There are requirements for building owners to register their cooling towers with local councils and to maintain cooling towers to minimise the growth of *Legionella* bacteria in the cooling tower water. For further information see: http://www.health.nsw.gov.au/factsheets/environmental/legion_control.html.

Vaccine-preventable diseases

Meningococcal disease

Eleven cases of meningococcal disease were notified in NSW in March and April 2012 (three in March and eight in April); the age of the case-patients ranged from four months to 48 years and included five case-patients aged under 5 years. Eight cases were due to serogroup B (for which there is no vaccine), two cases were unable to be typed and one had missing information. There were no deaths notified in this period.

The number of cases is unchanged from the same period in 2011. Of the 11 cases notified in 2011, six were due to serogroup B, one to serogroup W135, one to serogroup Y and for the remaining cases the serogroup was unknown. The ages of those affected ranged from 1 to 80 years, with four cases notified in children aged under 5 years.

It is recommended that a single dose of vaccine for meningococcal disease be given to all children at the age of 12 months as well as to those individuals at high risk of disease.¹

Measles

Three cases of measles were notified in NSW in March and April 2012. A 25 year-old man who acquired measles in Thailand infected his 9 month-old nephew and a soccer team contact after his return to Australia.

These are the first measles cases notified in 2012, following notifications in every month in 2011. The number of cases has decreased from the same period in 2011, when there were 36 cases.

It is recommended that young adults travelling overseas should be up-to-date with their vaccinations, including that for measles.

Sexually transmissible infections

Gonorrhoea

There has been an increase in the number of cases of gonorrhoea notified in NSW, with 970 reported in the first quarter of 2012 compared to 608 in the same period in 2011. The increase in gonorrhoea notifications has been noted across most local health districts and in both men and women. The highest risk group continues to be men aged 25–44 years (who account for nearly 50% of all notifications).

Part of the increase in the reporting of gonorrhoea may be due to more testing and better laboratory diagnoses. Campaigns have aimed to increase testing rates for sexually transmissible infections in those at highest risk. A number of laboratories have also recently introduced new testing strategies which may be resulting in more cases of gonorrhoea being identified.

Gonorrhoea is a type of bacteria that can infect the urethra (the tube that carries urine from the bladder to outside), throat and anus in both men and women and the cervix (neck of the womb) in women. It can be effectively treated by a single dose of antibiotics. Using a condom for vaginal or anal sex can significantly reduce the risk of catching gonorrhoea and other sexually transmissible infections.

References

1. National Health and Medical Research Council. The Australian Immunisation Handbook. 9th ed. Canberra: Australian Government Department of Health and Ageing; 2008.

Figure 1. Reports of selected communicable diseases, NSW, January 2004 to April 2012, by month of onset.

Preliminary data: case counts in recent months may increase because of reporting delays.
 Laboratory-confirmed cases only, except for measles, meningococcal disease and pertussis.

BFV = Barmah Forest virus infections, RRV = Ross River virus infections,
 lab conf = laboratory confirmed,

Men Gp C and Gp B = meningococcal disease due to serogroup C and serogroup B infection,
 other/unk = other or unknown serogroups.

NB: Multiple series in graphs are stacked, except gastroenteritis outbreaks.

NB: Outbreaks are more likely to be reported by nursing homes and hospitals than by other institutions.

NSW Population	
Male	50%
<5 y	7%
5-24 y	27%
25-64 y	53%
65+ y	13%
Rural	46%

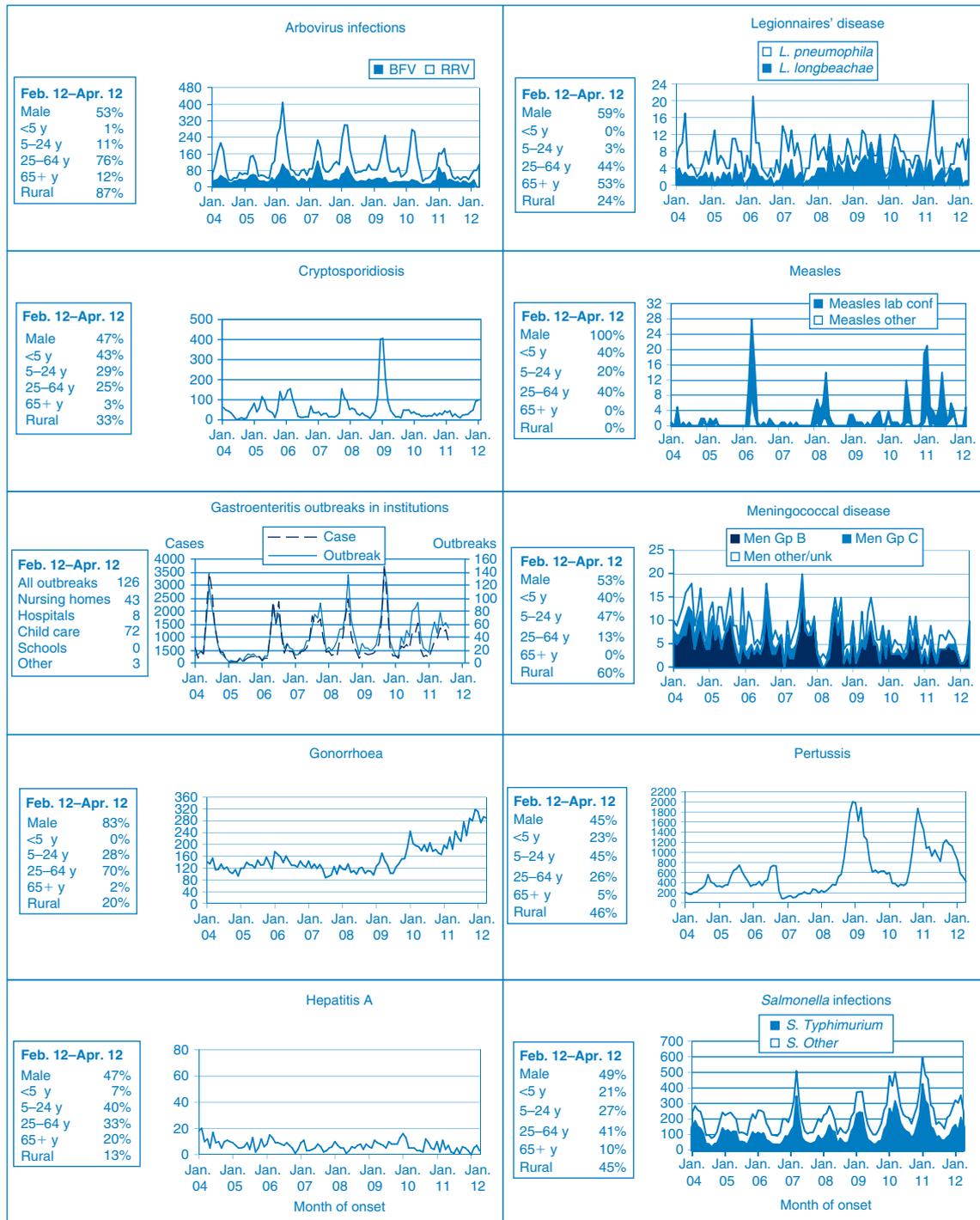


Table 1. Notifications of scheduled medical conditions received in March 2012 by Local Health District, NSW

Condition	Local Health District										Total							
	Murrumbidgee	Southern NSW	Western NSW	Far West	Hunter New England	Northern NSW	Mid North Coast	Central Coast	Northern Sydney	South Eastern Sydney		Illawarra Shoalhaven	Sydney	South Western Sydney	Western Sydney	Nepean Blue Mountains	Justice Health	For March ^b
Bloodborne and sexually transmitted																		
Chancroid ^a	63	41	73	17	301	103	63	95	160	311	117	209	161	152	79	14	1959	5759
Chlamydia (genital) ^a	-	-	4	3	28	7	2	3	13	96	11	64	36	31	14	3	315	1007
Gonorrhoea ^a	-	-	-	-	1	-	-	-	-	1	-	1	1	-	-	-	3	7
Hepatitis B – acute viral ^a	1	-	2	1	5	-	4	3	31	30	4	43	42	43	-	-	209	618
Hepatitis B – other ^a	-	-	-	-	2	-	1	-	-	-	-	-	-	-	-	-	3	12
Hepatitis C – acute viral ^a	8	7	15	9	22	16	11	28	17	36	16	26	41	26	12	24	316	856
Hepatitis C – other ^a	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	1	2
Hepatitis D – unspecified ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	5
Lymphogranuloma venereum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
Syphilis	1	1	-	1	2	1	-	2	3	15	3	10	8	6	1	-	54	166
Vectorborne																		
Barmah Forest virus ^a	3	2	4	1	4	19	7	-	-	-	2	-	-	-	-	-	42	95
Ross River virus ^a	5	2	9	9	29	12	6	1	1	-	2	2	-	1	2	-	79	177
Arboviral infection (other) ^a	1	1	-	-	3	-	2	1	6	-	1	3	3	2	1	-	24	89
Malaria ^a	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	2	13
Zoonoses																		
Anthrax ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brucellosis ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Leptospirosis ^a	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	2	5
Lyssavirus ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psittacosis ^a	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	5
Q fever ^a	1	3	-	-	2	2	-	-	-	-	1	-	-	-	-	-	9	31
Respiratory and other																		
Blood lead level ^a	8	2	4	11	1	1	-	2	1	1	1	5	4	4	8	-	48	105
Influenza ^a	4	1	7	-	-	2	2	4	17	20	2	5	18	21	4	-	107	240
Invasive pneumococcal infection ^a	-	1	2	-	1	-	-	-	6	3	1	1	3	2	2	-	22	62
<i>Legionella longbeachae</i> infection ^a	-	-	-	-	-	-	-	-	-	-	-	1	2	2	-	-	2	8
<i>Legionella pneumophila</i> infection ^a	-	-	-	-	-	-	-	-	1	-	-	1	1	1	1	-	5	26
Legionnaires' disease (other) ^a	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	2
Leprosy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Meningococcal infection (invasive) ^a	-	1	-	-	-	-	1	-	-	-	-	-	1	1	-	-	4	8
Tuberculosis	-	1	-	-	3	-	-	-	3	2	-	-	-	2	-	-	11	54
Vaccine-preventable																		
Adverse event after immunisation	5	-	3	1	-	-	-	-	3	-	2	2	1	1	-	-	18	38
<i>H. influenzae b</i> infection (invasive) ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Measles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mumps ^a	-	-	-	-	1	-	-	-	-	-	-	2	1	1	2	-	7	22
Pertussis	12	21	28	5	68	57	12	22	46	38	48	32	43	80	52	564	2164	
Rubella ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5
Tetanus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Enteric																		
Botulism	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cholera ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cryptosporidiosis ^a	-	-	2	-	14	4	1	2	18	15	2	5	-	11	6	-	80	182
Giardiasis ^a	4	4	4	3	31	2	4	9	53	47	17	21	16	24	12	251	639	
Haemolytic uraemic syndrome	-	-	-	-	-	-	-	1	-	-	-	2	1	3	-	7	11	2
Hepatitis A ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Hepatitis E ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Listeriosis ^a	-	-	-	-	1	-	-	-	-	-	-	-	2	-	-	3	3	11
Rotavirus ^a	3	7	3	1	12	5	44	2	14	12	16	4	3	8	7	74	195	
Salmoneellosis ^a	13	7	12	-	56	14	1	19	37	39	16	30	29	39	8	363	1035	
Shigellosis ^a	-	-	-	-	-	1	1	1	3	4	1	1	2	1	1	13	47	
Typhoid ^a	-	-	-	-	-	1	-	-	2	-	-	3	2	1	-	9	15	
Verotoxin producing <i>E. coli</i> ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5
Miscellaneous																		
Creutzfeldt-Jakob disease	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	1
Meningococcal conjunctivitis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

^aLaboratory-confirmed cases only. ^bIncludes cases with unknown postcode. N.B. Data are current and accurate as at the preparation date. The number of cases reported is, however, subject to change, as cases may be entered at a later date or retracted upon further investigation. Data is reported as of public health unit office.

Table 2. Notifications of scheduled medical conditions received in April 2012 by Local Health District, NSW

Condition	Murrumbidgee										Local Health District										Total	
	Southern NSW	Western NSW	Far West	Hunter New England	Northern NSW	Mid North Coast	Central Coast	Northern Sydney	South Eastern Sydney	Illawarra Shoalhaven	Sydney	South Western Sydney	Western Sydney	Nepean Blue Mountains	Justice Health	For April ^b	Year to date ^b					
Bloodborne and sexually transmitted																						
Chancroid ^a	40	30	56	4	209	73	28	84	109	295	83	161	123	160	58	21	1535					
Chlamydia (genital) ^a	7	1	1	18	7	7	4	4	28	87	10	55	31	22	8	1	281					
Gonorrhoea ^a	2	5	1	6	2	2	6	6	12	29	4	25	32	33	3	3	163					
Hepatitis B – acute viral ^a	11	6	1	1	12	9	28	21	28	28	19	27	36	19	12	28	297					
Hepatitis C – acute viral ^a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1153					
Hepatitis D – unspecified ^a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3					
Lymphogranuloma venereum	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	6					
Syphilis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	186					
Vectorborne																						
Barmah Forest virus ^a	4	2	2	1	17	4	4	7	2	1	1	1	1	1	1	1	30					
Ross River virus ^a	16	2	16	5	16	20	4	7	2	2	1	2	1	1	1	1	92					
Arboviral infection (other) ^a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15					
Malaria ^a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4					
Zoonoses																						
Anthrax ^a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	12					
Brucellosis ^a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Leptospirosis ^a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Lyssavirus ^a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Psittacosis ^a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Q fever ^a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	43					
Respiratory and other																						
Blood lead level ^b	6	2	2	5	1	1	1	1	1	2	2	10	24	26	4	1	118					
Influenza ^a	1	2	2	2	1	2	4	4	3	5	3	2	5	5	3	4	361					
Invasive pneumococcal infection ^a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	97					
<i>Legionella longbeachae</i> infection ^a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10					
<i>Legionella pneumophila</i> infection ^a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	32					
Legionnaires' disease (other) ^a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4					
Leptosy	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16					
Meningococcal infection (invasive) ^a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	62					
Tuberculosis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	8					
Vaccine-preventable																						
Adverse event after immunisation	1	1	2	3	1	2	2	2	2	2	1	1	1	1	1	1	13					
<i>H. influenzae b</i> infection (invasive) ^a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3					
Measles	12	14	18	1	53	13	8	7	38	30	35	10	26	62	53	379						
Mumps ^a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	7					
Pertussis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2543					
Rubella ^a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5					
Tetanus	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Enteric																						
Botulism	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Cholera ^a	2	3	3	1	9	4	9	9	32	18	3	10	4	18	2	1	297					
Cryptosporidiosis ^a	5	2	15	1	21	2	5	7	38	32	13	17	12	18	7	1	834					
Giardiasis ^a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2					
Haemolytic uraemic syndrome	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Hepatitis A ^a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Hepatitis E ^a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Listeriosis ^a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Rotavirus ^a	7	11	7	2	23	15	12	9	34	42	11	18	29	13	9	32	227					
Salmonellosis ^a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1277					
Shigellosis ^a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	53					
Typhoid ^a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	19					
Verotoxin producing <i>E. coli</i> ^a	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	7					
Miscellaneous																						
Creutzfeldt-Jakob disease	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Meningococcal conjunctivitis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					

^aLaboratory-confirmed cases only. ^bIncludes cases with unknown postcode. NB: Data are current and accurate as at the preparation date. The number of cases reported is, however, subject to change, as cases may be entered at a later date or retracted upon further investigation. Data is reported as of public health unit office.