

Communicable Diseases Report, NSW, November–December 2007

**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 **Infectious Diseases**.

Tables 1 and 2 and Figure 1 show reports of communicable diseases received through to the end of November and December 2007 in NSW.

Meningococcal disease

In NSW, meningococcal disease was notified in eight people in November and 12 people in December. In total, 108 cases were notified in the 12 months to December 2007, including five deaths. Of the 2007 cases, nine were due to serogroup C meningococcal bacteria and 73 were due to serogroup B. In 2006, 102 cases were notified including six deaths.

Enteric Diseases

In November, NSW public health units investigated 58 outbreaks of gastroenteritis, including two suspected to be foodborne and 56 suspected to be caused by person-to-person spread. The two suspected foodborne outbreaks involved groups of 11 and three people, respectively, at different restaurants; no specimens were available for testing from either outbreak. Among the 56 suspected person-to-person outbreaks, 39 were in age care facilities and affected 657 people, 11 were in hospitals that affected 85 people, five were in child-care centres and affected 45 children, and one was in a school and affected 16 children. For comparison, 70 outbreaks were reported in October 2007 and 29 were reported in November 2006.

In December, NSW public health units investigated 10 outbreaks of gastroenteritis, including three suspected to be foodborne outbreaks and seven suspected to be caused by person-to-person spread. The three foodborne outbreaks were caused by salmonellosis and consumption of undercooked or raw eggs was suspected to be a possible source of infection. No links between the outbreaks were identified. Of the seven outbreaks of gastroenteritis, four were in aged care facilities and affected 31 people, two

were in hospitals and affected eight people, and one was in a child-care centre and affected six children.

Increase in reported cases of shiga toxin-producing *Escherichia coli*

Shiga toxin-producing *E. coli* (STEC) are bacteria that can cause serious gastrointestinal disease characterised by diarrhoea, which in some cases can be bloody. In a small proportion of cases STEC can progress to haemolytic uraemic syndrome (HUS), which results in kidney failure, bleeding and anaemia. Infections tend to increase in the warmer months.¹

In November, NSW public health units were notified of seven cases of STEC (3 serotype O157, 1 serotype O111, and 1 serotype O26) and three cases of HUS. The ages of the cases ranged from 2 to 71 years. Seven cases were male and three female. Seven cases resided in the Hunter New England Area, two in South East Sydney Illawarra Area and one in the Greater Southern Area. The HUS cases were all children aged 2 to 5 years; STEC (untyped) was also identified in one of the HUS cases. Although 10 cases within a month appears unusually high, the total number of cases in 2007 (16 STEC and 11 HUS cases) is similar to previous years. Interviews with the cases or their carers did not identify a likely common source of infection.

In December, NSW public health units were notified of seven STEC (1 serotype O157, 1 serotype O111, 1 serotype O55 and 4 of unknown serotype) and two HUS cases. The age of cases ranged from 11 months to 75 years. Six were female and three male. All HUS cases were adults aged over 40 years. This number of STEC and HUS cases reported in December 2007 is slightly higher than the number seen in December 2006.

STEC infection can be transmitted through:

- eating contaminated food (undercooked hamburgers, unwashed salad, fruit, vegetables and unpasteurised milk or milk products)
- drinking or swimming in contaminated water
- person-to-person contact; for example, contact with faeces of an infected child when changing a nappy
- contact with infected animals.^{2,3}

The most important ways to prevent infection with STEC and other foodborne diseases are to:

- cook hamburgers and sausages thoroughly to at least 71°C. Although colour alone is not necessarily a good

indicator, do not eat hamburgers or sausages if there is any pink meat inside

- wash hands well after handling raw meat
- use different knives and cutting boards for raw meat preparation and other food preparation
- wash raw vegetables and fruits thoroughly
- refrigerate perishable food until ready to eat
- wash hands well after touching animals or their faeces.

For more information see: http://www.health.nsw.gov.au/infect/pdf/stec_cdfs.pdf.

Listeriosis

In December, four cases of listeriosis were reported in NSW, two male and two female. The age of cases ranged from 28 to 75 years. Cases reported eating a range of high-risk foods; however, no common source of infection was identified. One case was a pregnant woman; she and her babies recovered.

Listeriosis is usually caused by ingestion of contaminated food and has been associated with consumption of undercooked or raw meat, runny eggs, soft cheeses, unpasteurised milk and pre-prepared and unwashed vegetables. Those at highest risk are unborn babies, the elderly, immune compromised people and pregnant women. Listeriosis is particularly important for pregnant women as the infection can cause foetal death.⁴

Increase in reported cases of cryptosporidiosis

There were 153 cases of cryptosporidiosis reported as having their onset date in November and 84 in December in NSW. This compares with 34 cases in October. The highest rate of infection was in children under five years of age (see: <http://www.health.nsw.gov.au/data/diseases/cryptosporidiosis.html>) and in rural areas.

Cryptosporidiosis is a diarrhoeal disease caused by a parasitic infection of the intestine. The most common symptoms include diarrhoea, abdominal cramps and sometimes fever, nausea and vomiting. Symptoms may last a few weeks in some people.⁵

Public health officers interviewed cases who report a range of possible risk factors, including contact with farm animals, drinking untreated water and swimming.

In the past, large outbreaks in NSW have been caused by people swimming in contaminated pools.⁶ Pools can easily be contaminated by infectious swimmers. To keep pools free from contamination, people should not swim in a pool or spa until at least two weeks after they have completely recovered from a diarrhoeal illness.

References

1. Tarr PI, Gordon CA, Chandler WL. Shiga-toxin-producing *Escherichia coli* and haemolytic uraemic syndrome. *Lancet* 2005; 365: 1073–86.
2. Heymann D, ed. *Control of communicable diseases manual*, 18th edn. Washington: American Public Health Association, 2004:160–4.
3. Razzaq S. Hemolytic Uremic Syndrome: An Emerging Health Risk. *Am Fam Physician* 2006; 74: 991–7.
4. Heymann D, ed. *Control of communicable diseases manual*, 18th edn. Washington: American Public Health Association, 2004:309–315.
5. Heymann D, ed. *Control of communicable diseases manual*, 18th edn. Washington: American Public Health Association, 2004:138–41.
6. Black M, McAnulty J. The investigation of an outbreak of cryptosporidiosis in New South Wales in 2005. *NSW Public Health Bull* 2006; 17: 76–9. doi:10.1071/NB06018

Figure 1. Reports of selected communicable diseases, NSW, January 2002 to December 2007, 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%
5–24y	27%
25–64y	53%
65+ y	13%
Rural	46%

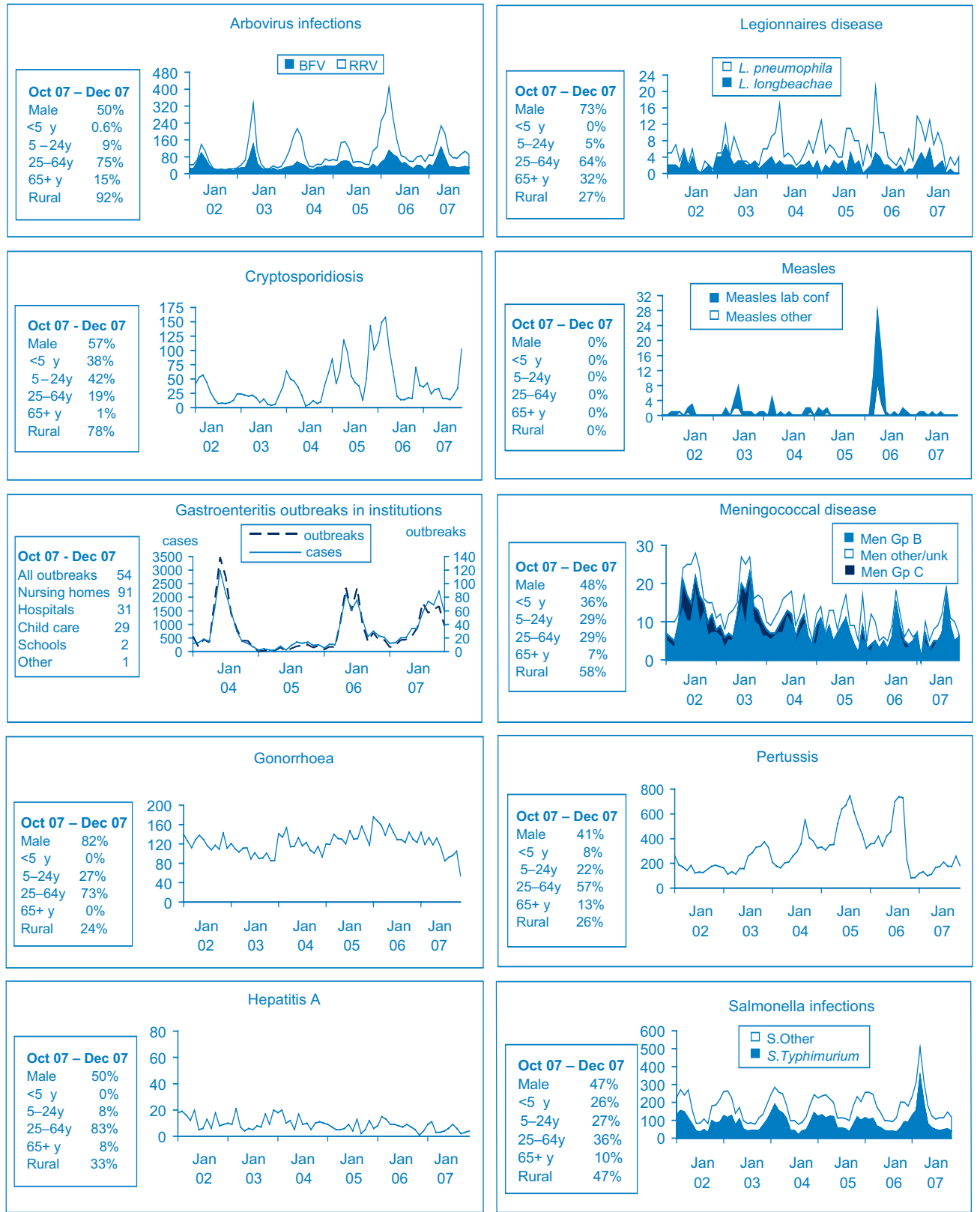


Table 1. Reports of notifiable conditions received in November 2007 by Area Health Services

Condition	Area Health Service (2007)										Total For Nov.	Total To date ^c										
	Greater Southern GMA	Greater Southern SA	Greater Western FWA	Greater Western MAC	MWA	Hunter/New England HUN	NEA	MNC	North Coast NRA	Central Coast CCA			Northern Syd/ Central Coast NSA	South East Syd/ILL	South East Syd/ILL SES	Sydney South West CSA	Sydney West WEN	WSA	JHS			
Blood-borne and sexually transmitted																						
Chancroid ^d	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Chlamydia (genital) ^b	39	25	10	14	40	132	43	47	55	61	77	33	194	-	38	96	3	-	934	11548		
Gonorrhoea ^b	2	2	-	1	1	15	-	1	2	2	8	5	25	-	6	10	-	-	81	1291		
Hepatitis B – acute viral ^b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	48		
Hepatitis B – other ^a	3	-	-	1	1	4	1	4	6	5	31	4	38	1	5	46	-	-	159	2945		
Hepatitis C – acute viral ^b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	33		
Hepatitis C – other ^a	17	10	5	4	7	46	10	33	25	30	27	30	38	1	18	34	22	-	366	4825		
Hepatitis D – unspecified ^b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	-	
Lymphogranuloma venereum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Syphilis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	87	1096	
Vector-borne																						
Barmah Forest virus ^a	-	2	-	2	1	10	-	11	8	1	-	1	-	-	-	-	-	-	36	545		
Ross River virus ^a	6	1	1	8	1	22	6	14	6	3	2	4	4	2	1	2	-	-	84	762		
Arboviral infection (other) ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	70		
Malaria ^a	-	1	-	-	-	-	1	1	1	-	-	-	2	-	1	2	-	-	9	99		
Zoonoses																						
Anthrax ^d	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Brucellosis ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	
Leptospirosis ^a	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	2	11	-	
Lysavirus ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Psittacosis ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	31	
Q fever ^a	1	1	-	5	-	2	11	1	2	-	-	3	-	-	-	-	-	-	26	201	-	
Respiratory and other																						
Blood lead level ^b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Influenza ^a	-	1	1	1	3	5	-	2	5	-	-	-	4	-	5	5	-	-	10	239	-	
Invasive pneumococcal infection ^a	3	-	-	-	1	8	-	8	2	-	3	-	5	4	2	3	-	-	29	1731	-	
Legionella longbeachae infection ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	6	-	-	45	502	-	
Legionella pneumophila infection ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	-	-	-	26	-	
Legionnaires disease (other) ^b	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	4	60	-	
Leptospirosis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-
Meningococcal infection (invasive) ^a	1	1	-	-	-	2	-	1	-	2	-	-	1	-	-	1	-	-	8	99	3	
Tuberculosis	-	-	-	-	-	1	-	-	-	-	3	2	5	-	1	8	-	-	20	349	-	
Vaccine-preventable																						
Adverse event after immunisation ^b	3	-	-	-	3	-	-	-	-	1	1	2	-	-	-	2	-	-	13	204	-	
H. influenzae b infection (invasive) ^b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	-	
Measles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4	-	
Mumps ^a	1	-	-	-	-	-	-	-	-	-	6	-	31	-	2	5	-	-	47	245	-	
Pertussis	9	6	1	6	1	12	5	2	4	6	40	12	45	42	6	46	-	-	253	1865	-	
Rubella ^a	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	13	-	
Tetanus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	
Enteric																						
Botulism	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cholera ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cryptosporidiosis ^a	19	1	1	7	10	9	23	6	17	-	7	3	2	2	4	6	-	-	123	392	-	
Giardiasis ^a	3	1	-	1	2	10	5	4	2	11	26	6	31	-	3	21	-	-	126	1819	-	
Haemolytic uraemic syndrome	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	11	-	
Hepatitis A ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	4	61	-	
Hepatitis E ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	9	-	
Listeriosis ^a	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	1	-	-	2	20	-	
Salmonellosis ^a	6	13	1	5	5	18	10	4	14	6	17	3	26	12	5	13	-	-	173	2368	-	
Shigellosis ^a	-	-	-	-	-	-	-	-	-	-	2	-	1	-	-	-	-	-	5	65	-	
Typhoid ^d	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	37	-	
Verotoxin-producing E. coli ^a	-	-	-	-	-	4	1	-	-	-	-	-	-	1	-	-	-	-	6	14	-	
Miscellaneous																						
Creutzfeldt-Jakob disease	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	-	
Meningococcal conjunctivitis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-

^aLaboratory-confirmed cases only. ^bHIV and AIDS data are reported separately in the Public Health Bulletin quarterly; includes cases with unknown postcode. ^cFrom 1 January 2005; Hunter/New England AHS also comprises Great Lakes, Gloucester and Greater Taree LGAs; Sydney West also comprises Greater Lithgow LGA. ^dNEB: Data is 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. ^eNSW: Data is 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.

GMA, Greater Murray Area; SA, Macquarie Area; FWA, Far West Area; WSA, Western Sydney Area; MWA, Mid Western Area; MNC, North Coast Area; NEA, New England Area; CCA, Central Coast Area; HUN, Hunter Area; SES, South Eastern Sydney Area; ILL, Illawarra Area; SWS, South Western Sydney Area; WEN, Wentworth Area; WSA, South West Area.

Table 2. Reports of notifiable conditions received in December 2007 by Area Health Services

Condition	Area Health Service (2007)											Total For Dec. ^c	Total To date ^c								
	Greater Southern GMA	Greater Southern SA	FWA	Greater Western MAC	MWA	HUN	HUN/ New England	North Coast MNC	NRA	Central Coast CCA	Northern Syd/ Central Coast NSA			Syd/Illawarra ILL	South Eastern SES	Sydney West WEN	Sydney South West CSA	Sydney West WSA	JHS		
Blood-borne and sexually transmitted																					
Chancroid ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Chlamydia (genital) ^a	27	19	5	9	23	82	32	19	32	46	67	28	146	12	6	30	77	1	681	12416	
Gonorrhoea ^a	1	-	-	-	2	13	-	-	2	2	8	-	38	6	1	-	6	-	83	1398	
Hepatitis B - acute viral ^a	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	2	62	
Hepatitis B - other ^a	5	-	2	1	2	5	3	-	5	2	24	5	29	6	6	4	30	-	132	3178	
Hepatitis C - acute viral ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34	
Hepatitis C - other ^a	7	5	2	3	6	35	8	12	24	24	14	20	19	10	3	16	15	16	240	5236	
Hepatitis D - unspecified ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	
Lymphogranuloma venereum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Syphilis	1	1	-	1	2	2	1	3	-	1	5	1	33	1	5	-	4	-	63	1167	
Vector-borne																					
Barmah Forest virus ^a	-	-	-	1	1	8	1	2	8	-	-	1	-	-	-	-	-	-	22	572	
Ross River virus ^a	11	-	3	9	-	20	3	10	5	5	-	3	-	-	1	-	4	-	73	838	
Arboviral infection (other) ^a	-	-	-	-	-	1	-	1	1	-	-	-	-	1	-	-	-	-	5	75	
Malaria ^a	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	2	-	4	103	
Zoonoses																					
Anthrax ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Brucellosis ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	
Leptospirosis ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	
Lyssavirus ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Psittacosis ^a	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	2	34	
Q fever ^a	-	-	-	-	1	-	2	-	-	-	-	-	-	-	-	-	-	-	6	207	
Respiratory and other																					
Blood lead level ^a	3	-	-	2	-	1	-	1	1	-	1	-	1	-	-	-	-	-	8	248	
Influenza ^a	2	2	-	-	1	1	-	1	1	-	1	1	2	-	-	3	6	-	21	1763	
Invasive pneumococcal infection ^a	1	1	1	-	1	5	-	1	1	-	2	1	1	1	1	2	3	-	19	522	
Legionella longbeachae infection ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	30	
Legionella pneumophila infection ^a	1	-	-	-	-	-	-	-	-	1	1	-	2	3	1	-	-	-	9	70	
Legionnaires' disease (other) ^a	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	
Leprosy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	4	
Meningococcal infection (invasive) ^a	-	1	-	-	-	2	-	1	1	2	4	1	1	1	1	-	1	-	14	112	
Tuberculosis	-	-	-	-	-	2	-	-	-	1	-	-	8	-	-	-	2	-	11	371	
Vaccine-preventable																					
Adverse event after immunisation ^b	1	-	-	1	-	1	-	-	-	-	-	-	1	-	-	-	2	-	8	214	
<i>H. influenzae b</i> infection (invasive) ^b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	
Measles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	
Mumps ^a	1	-	-	-	-	-	-	-	1	5	5	5	23	2	2	1	10	-	50	304	
Pertussis	1	1	-	-	2	16	1	3	8	3	40	4	26	31	12	10	29	-	187	2059	
Rubella ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	
Tetanus	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	5	
Enteric																					
Botulism	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cholera ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	
Cryptosporidiosis ^a	17	4	-	3	12	9	20	3	11	6	5	2	3	4	9	1	3	-	112	510	
Giardiasis ^a	4	2	-	2	4	15	2	1	1	4	20	8	13	3	2	6	14	-	101	1946	
Haemolytic uraemic syndrome	-	-	-	-	-	-	-	-	-	-	1	1	-	-	1	-	-	-	2	13	
Hepatitis A ^a	-	-	-	-	-	1	-	-	1	-	1	-	1	-	1	-	-	-	5	66	
Hepatitis E ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	9	
Listeriosis ^a	-	-	-	-	-	1	-	-	-	-	1	-	1	-	-	1	-	-	4	24	
Salmonellosis ^a	6	6	-	5	3	17	3	6	14	8	19	3	12	5	8	6	21	-	142	2543	
Shigellosis ^a	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	2	65	
Typhoid ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	37	
Verotoxin-producing <i>E. coli</i> ^b	2	-	-	-	-	2	2	-	-	-	-	-	-	-	-	1	-	-	7	21	
Miscellaneous																					
Creutzfeldt-Jakob disease	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	
Meningococcal conjunctivitis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	

^alaboratory-confirmed cases only. ^bHIV and AIDS data are reported separately in the Public Health Bulletin quarterly; includes cases with unknown postcode. NB: From 1 January 2005, Hunter/New England AHS also comprises Great Lakes, Gloucester & Greater Taree LGAs. Sydney West also comprises Greater Lithgow LGA. NB: Data is 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. GMA, Greater Murray Area; MAC, Macquarie Area; NSA, Northern Sydney Area; FWA, Far West Area; WSA, Western Sydney Area; CSA, Central Sydney Area; MWA, Mid Western Area; SWS, South Western Sydney Area; HUN, Hunter Area; NEA, New England Area; CCA, Central Coast Area; WEN, Wentworth Area; ILL, Illawarra Area; SES, South Eastern Sydney Area; NRA, Northern Rivers Area; CSA, Southern Area; MWA, Mid Western Area; SWS, South Western Sydney Area; JHS, Justice Health Service; MNC, North Coast Area.