

# Communicable Diseases Report, NSW, September and October 2008

**Communicable Diseases Branch,  
NSW Department of Health**

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Figure 1 and Tables 1 and 2 show reports of communicable diseases received through to the end of October 2008 in New South Wales (NSW).

## Mumps

Six cases of mumps were notified in September and a further two cases were notified in October, bringing the total number of cases to 82 in NSW this year. This is a significant reduction from 2007, where more than 300 cases were notified. However, as infection often occurs with minimal symptoms, the true number of cases is likely to be higher than reported in all years.

Mumps is a vaccine-preventable disease spread by droplet infection and direct contact with the saliva of people with the infection. Maximum infectiousness occurs from 2 days before to 4 days after onset of illness.

Symptoms include fever, loss of appetite, tiredness and headaches followed by swelling and tenderness of the salivary glands. One or both of the parotid salivary glands (in front of and below the ears) are often affected.

Mumps is usually a more severe illness in people infected after puberty. Complications are uncommon but can include encephalitis, meningitis, hearing loss, orchitis in post-pubertal boys and men, and ovarian inflammation in women.

To help prevent the spread, exclusion of people with mumps from work, school, child care and other settings is currently recommended for up to 9 days from the onset of

swelling or until fully recovered, whichever is sooner. Immunisation against mumps takes place with the measles, mumps, rubella (MMR) vaccine, which is given routinely at 12 months and 4 years of age.

## Hepatitis D

One case of hepatitis D was notified in September, and a further case was notified in October, bringing the total number of cases to 11 in NSW this year. This is close to the average for recent years.

Hepatitis D is a rare infection that occurs only in people who already have hepatitis B virus (HBV) infection. Its importance lies particularly in the fact that co-infection with both viruses means greater risk of severe liver disease, including severe acute hepatitis, which can progress to chronic disease.

The modes of transmission for hepatitis D are similar to that for hepatitis B: exposure to infected blood and serous body fluids, contaminated needles, syringes or blood- and plasma-product transfusions. Sexual transmission may also occur but is less common than with HBV infection. Perinatal infection is rare. Infection may occur at the same time as a new HBV infection (co-infection) or when a person already infected with HBV develops chronic infection (super-infection).<sup>1</sup>

There is no vaccine for hepatitis D, however, vaccination against hepatitis B prevents hepatitis D virus infection.

## Shigella

An increase was detected in the number of shigellosis cases notified in NSW in September and October. Twelve men, mostly residents of inner Sydney, were notified with *Shigella sonnei* biotype g infection. A similar increase in *Sh. sonnei* biotype g was also recently detected in Victoria. These cases shared an unusual antibiotic-resistance pattern, which suggested that all of the cases were epidemiologically related.

Nine of the NSW cases were interviewed using a semi-structured, hypothesis-generating questionnaire. Interviewed cases reported illness lasting typically 6 to 7 days. Three cases required intravenous rehydration and antibiotics were prescribed for seven cases. No cases

reported travel either overseas or outside of NSW in the 7 days prior to onset. There were no common food exposures. One case reported contact with another ill person. None of the cases identified recent contact with someone with shigellosis.

All interviewed cases were men who have sex with men. Seven cases reported having sex in the 3 days prior to onset with one to five partners. Two cases attended sex on premises venues. Three cases attended private sex parties and two reported sexual activity at home. Six cases reported oral and anal sex, and four cases reported oro-anal sex.

All isolates were resistant to antibiotic treatment with streptomycin, sulphonamide, tetracycline, trimethoprim and naladixic acid, and had a reduced susceptibility to ciprofloxacin. This was the same resistance pattern as the Victorian isolates.

Alerts were published in Sydney's gay newspapers, advising people to avoid infection and seek treatment if they become sick. Alerts were faxed to general practitioners in metropolitan Sydney with advice to request stool specimens and test for shigellosis in men who have sex with men who present with diarrhoea.

No epidemiological links were identified between cases. Knowledge of shigellosis, and the transmission of *Shigella*,

was poor and few men identified that some sexual practices could be a risk factor for infection. Further work is recommended with this community to raise awareness of bacterial pathogens and prevention strategies.

All shigellosis infections should be treated for public health reasons as only a small inoculum is required for the infection to be transmitted to another person. Current Australian therapeutic guidelines recommend first-line treatment with norfloxacin, trimethoprim or ampicillin. As ampicillin is no longer available as an oral preparation in Australia, amoxicillin was identified as a suitable alternative for the purposes of treating cases related to this outbreak.

Shigellosis can be prevented by maintaining good general hygiene, including washing hands thoroughly after going to the toilet, after having sex and before eating. People with new onset diarrhoea should avoid having sex while they are unwell and should not prepare food for others.

#### Reference

1. CD Section, Public Health Group, Victorian Department of Human Services. The Blue Book – Guidelines for the control of infectious diseases. Melbourne: State of Victoria; 2005. Available from: <http://www.health.vic.gov.au/ideas/bluebook> (Cited 10 November 2008).

**Figure 1. Reports of selected communicable diseases, NSW, January 2004 to October 2008, 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 infection; RRV, Ross River virus infection; 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%

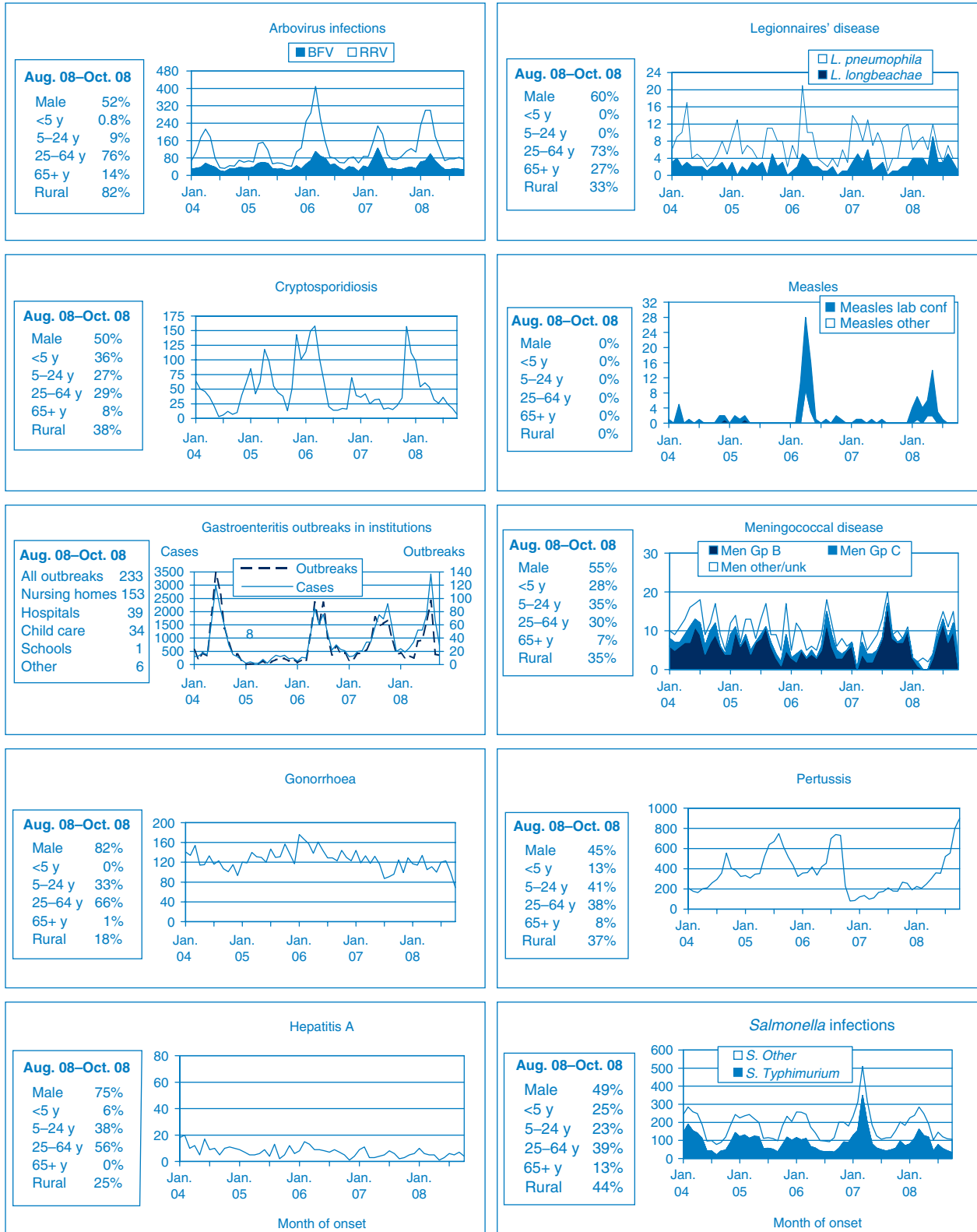


Table 1. Reports of notifiable conditions received in September 2008 by area health services

Condition	Area Health Service (2008)																Total Year to Date <sup>c</sup>	
	Greater Southern GMA SA	Greater Western FWA MAC MWA	Hunter New England HUN NEA	North Coast MNC NRA	Northern Sydney Central Coast CCA NSA	Sydney Illawarra ILL SES	Sydney South West CSA SWS	Sydney West WEN WSA	JHS	For Sep <sup>c</sup>								
<b>Bloodborne and sexually transmitted</b>																		
Chancroid <sup>d</sup>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Chlamydia (Genital) <sup>a</sup>	42	36	14	20	22	119	45	45	52	14	55	147	35	106	34	106	13	1026
Gonorrhoea <sup>a</sup>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Hepatitis B – acute viral <sup>a</sup>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Hepatitis B – other <sup>a</sup>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Hepatitis C – acute viral <sup>a</sup>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Hepatitis C – other <sup>a</sup>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Hepatitis D – unspecified <sup>a</sup>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Lymphogranuloma venereum	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Syphilis	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
<b>Vectorborne</b>																		
Barmah Forest virus <sup>a</sup>	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Ross River virus <sup>a</sup>	8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Arboviral infection (other) <sup>a</sup>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Malaria <sup>a</sup>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
<b>Zoonoses</b>																		
Anthrax <sup>a</sup>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Brucellosis <sup>a</sup>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Leptospirosis <sup>a</sup>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Lyssavirus <sup>a</sup>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Psittacosis <sup>a</sup>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Q fever <sup>a</sup>	3	1	3	1	–	3	–	–	–	–	–	–	–	–	–	–	–	–
<b>Respiratory and other</b>																		
Blood lead level <sup>a</sup>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Influenza <sup>a</sup>	16	20	1	6	1	57	29	28	62	8	30	31	9	103	10	103	2	20
Invasive pneumococcal infection <sup>a</sup>	3	4	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Legionella pneumophila infection <sup>a</sup>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Legionnaires' disease (other) <sup>a</sup>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Leptosy	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Meningococcal infection (invasive) <sup>a</sup>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Tuberculosis	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
<b>Vaccine-preventable</b>																		
Adverse event after immunisation	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
H. influenzae b infection (invasive) <sup>a</sup>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Measles	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Mumps <sup>a</sup>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Pertussis	16	12	–	13	20	36	6	11	74	17	28	77	2	183	44	183	–	737
Rubella <sup>a</sup>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Tetanus	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
<b>Enteric</b>																		
Botulism	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Cholera <sup>a</sup>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Cryptosporidiosis <sup>a</sup>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Giardiasis <sup>a</sup>	3	7	–	1	2	14	3	–	–	–	–	–	–	–	–	–	–	–
Haemolytic uraemic syndrome	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Hepatitis A <sup>a</sup>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Hepatitis E <sup>a</sup>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Listeriosis <sup>a</sup>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Salmonellosis <sup>a</sup>	3	2	–	3	1	14	4	10	9	2	7	8	1	7	5	16	2	99
Shigellosis <sup>a</sup>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Typhoid <sup>a</sup>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Verotoxin-producing E. coli <sup>a</sup>	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
<b>Miscellaneous</b>																		
Creutzfeldt-Jakob disease	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Meningococcal conjunctivitis	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

<sup>a</sup>Laboratory-confirmed cases only. <sup>b</sup>HIV and AIDS data are reported separately in the Public Health Bulletin quarterly. Includes cases with unknown postcode. <sup>c</sup>For Sep: 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. Historical Area Health Service configurations are included for continuity/ comparison purposes and to highlight regional differences. <sup>d</sup>From 1 January 2005, Hunter New England AHS also comprises Great Lakes, Gloucester and Greater Taree LGAs (LGA, Local Government Area), Sydney West also comprises Greater Lithgow LGA. GMA, Greater Murray Area; MAC, Macquarie Area; MWA, Mid Western Area; NEA, New England Area; NRA, Northern Rivers Area; SES, South Eastern Sydney Area; SWS, South Western Sydney Area; WSA, Western Sydney Area; WEN, Wentworth Area; WSA, Southern Area; JHS, Justice Health Service.

Table 2. Reports of notifiable conditions received in October 2008 by area health services

Condition	Area Health Service (2008)													For Oct <sup>c</sup>	Total Year to date <sup>c</sup>	
	Greater Southern GMA SA	Greater Western FWA MAC MWA	Hunter New England HUN NEA	North Coast MNC	Northern Sydney Central Coast CCA NSA	Sydney ILL Sydney ILLawarra SES	Sydney South West CSA SWS	Sydney West WEN WSA	JHS							
<b>Bloodborne and sexually transmitted</b>																
Chancroid <sup>d</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlamydia (genital) <sup>b</sup>	29	30	124	39	24	52	64	74	67	188	129	120	45	80	10	11934
Gonorrhoea <sup>b</sup>	1	-	13	-	3	-	4	6	4	35	19	7	4	8	-	1154
Hepatitis B - acute viral <sup>b</sup>	-	-	1	-	-	-	-	-	1	1	1	1	-	-	-	37
Hepatitis B - other <sup>a</sup>	1	2	2	-	2	4	3	12	9	29	25	42	3	37	5	2487
Hepatitis C - acute viral <sup>b</sup>	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	19
Hepatitis C - other <sup>a</sup>	15	11	49	14	11	27	32	7	32	37	16	19	12	34	38	4207
Hepatitis D - unspecified <sup>d</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11
Lymphogranuloma venereum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Syphilis	-	-	1	-	-	2	5	6	5	28	25	12	1	11	1	942
<b>Vectorborne</b>																
Barmah Forest virus <sup>a</sup>	2	2	7	2	10	9	2	1	-	-	-	-	-	-	-	35
Ross River virus <sup>a</sup>	4	2	14	8	11	6	-	1	1	1	1	1	1	1	-	1060
Arboviral infection (other) <sup>b</sup>	-	-	2	-	-	-	-	2	2	1	2	2	3	3	-	125
Malaria <sup>a</sup>	-	-	-	-	-	-	-	-	-	1	2	-	-	1	-	97
<b>Zoonoses</b>																
Anthrax <sup>d</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brucellosis <sup>a</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Leptospirosis <sup>a</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15
Lyssavirus <sup>a</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psittacosis <sup>a</sup>	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	37
Q fever <sup>a</sup>	1	1	1	4	1	3	-	-	1	-	-	-	-	-	13	140
<b>Respiratory and other</b>																
Blood lead level <sup>b</sup>	2	1	2	2	5	20	7	8	-	-	-	2	-	-	-	15
Influenza <sup>a</sup>	23	16	32	13	7	20	2	2	11	22	13	21	17	26	-	248
Invasive pneumococcal infection <sup>a</sup>	2	3	7	1	2	2	2	4	1	8	6	4	1	6	-	468
<i>Legionella longbeachae</i> infection <sup>a</sup>	-	-	1	-	1	-	1	-	-	-	1	-	-	1	-	39
<i>Legionella pneumophila</i> infection <sup>a</sup>	-	-	-	-	-	-	-	-	-	-	-	2	-	1	-	31
Legionnaires disease (other) <sup>b</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Leptosy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Meningococcal infection (invasive) <sup>a</sup>	-	-	-	-	-	-	-	-	-	1	1	1	2	-	-	5
Tuberculosis	-	-	-	-	-	1	1	5	1	5	3	-	2	7	-	373
<b>Vaccine-preventable</b>																
Adverse event after immunisation	-	-	1	-	1	2	1	1	-	-	2	4	-	2	-	15
<i>H. influenzae b</i> infection (invasive) <sup>b</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9
Measles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39
Mumps <sup>a</sup>	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	2
Pertussis	23	54	85	8	22	107	55	165	50	103	56	48	67	213	-	4438
Rubella <sup>a</sup>	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	14
Tetanus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
<b>Enteric</b>																
Botulism	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cholera <sup>a</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cryptosporidiosis <sup>a</sup>	-	-	2	-	-	-	3	2	-	1	1	1	-	2	-	446
Giardiasis <sup>a</sup>	2	-	13	1	2	1	2	14	6	30	7	9	4	15	1	1588
Haemolytic uraemic syndrome	-	-	-	-	-	-	-	-	1	1	3	1	-	-	-	10
Hepatitis A <sup>b</sup>	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	54
Hepatitis E <sup>b</sup>	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	11
Listeriosis <sup>a</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	30
Salmonellosis <sup>a</sup>	6	2	16	2	3	1	8	19	8	19	4	13	8	17	-	1855
Shigellosis <sup>a</sup>	-	-	1	-	1	1	1	1	1	11	2	1	1	1	-	17
Typhoid <sup>a</sup>	-	-	-	-	-	-	-	-	-	2	-	1	-	1	-	4
Verotoxin-producing <i>E. coli</i> <sup>a</sup>	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	11
<b>Miscellaneous</b>																
Creutzfeldt-Jakob disease	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Meningococcal conjunctivitis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

<sup>a</sup>laboratory-confirmed cases only; <sup>b</sup>HW and AIDS data are reported separately in the Public Health Bulletin quarterly; <sup>c</sup>includes 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. Historical Area Health Service configurations are included for continuity/comparison purposes and to highlight regional differences. NB: From 1 January 2005, Hunter New England AHS also comprises Great Lakes, Gloucester and Greater Taree LGAs (LGA, Local Government Area), Sydney West also comprises Greater Lithgow LGA. GMA, Greater Murray Area; MAC, Macquarie Area; NEA, New England Area; CCA, Central Coast Area; SES, South Coast Area; WEN, Wentworth Area; SA, Southern Area; NSA, Northern Sydney Area; CSA, Central Sydney Area; WSA, Western Sydney Area; FWA, Far West Area; HUN, Hunter Area; MWA, Mid Western Area; SWS, South Western Sydney Area; JHS, Justice Health Service.