

Communicable Diseases Report, NSW, July and August 2009

**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 then Infectious Diseases, or access the site directly at: <http://www.health.nsw.gov.au/publichealth/infectious/index.asp>.

Figure 4 and Tables 2 and 3 show reports of communicable diseases received through to the end of August 2009 in New South Wales (NSW).

Invasive meningococcal disease

Twenty-seven cases of invasive meningococcal disease were reported in July and August in NSW, bringing the total number of cases to 68 so far this year. Two adult deaths were reported during July and August 2009. In comparison to August in 2008, there were 51 cases reported and one death.

There has been a downward trend in meningococcal notifications across all area health services in NSW since 2000. The highest numbers of notifications are reported among children aged less than 5 years at onset, with a second peak in the 15–24 year age group.

A vaccine against meningococcal C was added to the National Immunisation Program Schedule in January 2003. Consequently, serogroup C meningococcal disease is now mainly seen in adults and in unimmunised children. Serogroup B is the most common form of meningococcal disease in NSW. Of the 27 cases notified during July and August, 14 cases were due to serogroup B and two cases were due to serogroup C.

A media alert was released in August, reminding the public to be alert for the symptoms of meningococcal disease during winter and spring, the peak seasons for infection. An alert was also sent to GPs throughout NSW, highlighting the importance of early diagnosis and treatment of meningococcal disease.

Pertussis (whooping cough)

Monthly notifications of pertussis continue to decline steadily from the peak of the outbreak in December 2008. There were 1207 cases notified with onset in July and August, compared with 2082 in the preceding 2 months. The decrease was noted across all area health services in NSW. Comparison of data over time must be undertaken with caution however because of: recent changes in the use of diagnostic technologies (including the increasing use of nucleic acid testing); and changes in case ascertainment over time (related to increased awareness of the disease among doctors and the broader community).

The highest number of cases continue to be reported for children aged less than 15 years at onset, specifically children aged 0–4 and 5–9 years. Because pertussis immunity wanes over time, many older children and adults are susceptible to infection and can be the source of new infections in infants. Timely immunisation of infants is important because unvaccinated infants are at the highest risk of infection and of associated complications.

Since March 2009 and for a limited time in NSW, free pertussis (dTpa) vaccine has been available for: all new parents; couples who are planning a pregnancy; grandparents; and any other adults who will regularly care for infants aged less than 12 months. From March to August this year, 122 326 letters were sent to new parents in NSW, highlighting the pertussis outbreak and informing them of the availability of the free vaccine.

Measles

One case of measles was notified in July in NSW, bringing the total for the year to 10. This case was reported in an infant (too young for the Measles-Mumps-Rubella (MMR) vaccine) on their return from overseas travel. Thirty-nine cases of measles were notified in 2008. The majority of measles cases notified so far this year have been in young people recently returned from overseas travel, or in their contacts.

Many people born between 1966 and 1980 remain susceptible to measles because most people in this age group have not been exposed to measles infection and those who were routinely immunised typically received only one dose. Two doses are required to provide a high level of protection. Anyone born after 1965 should ensure that they

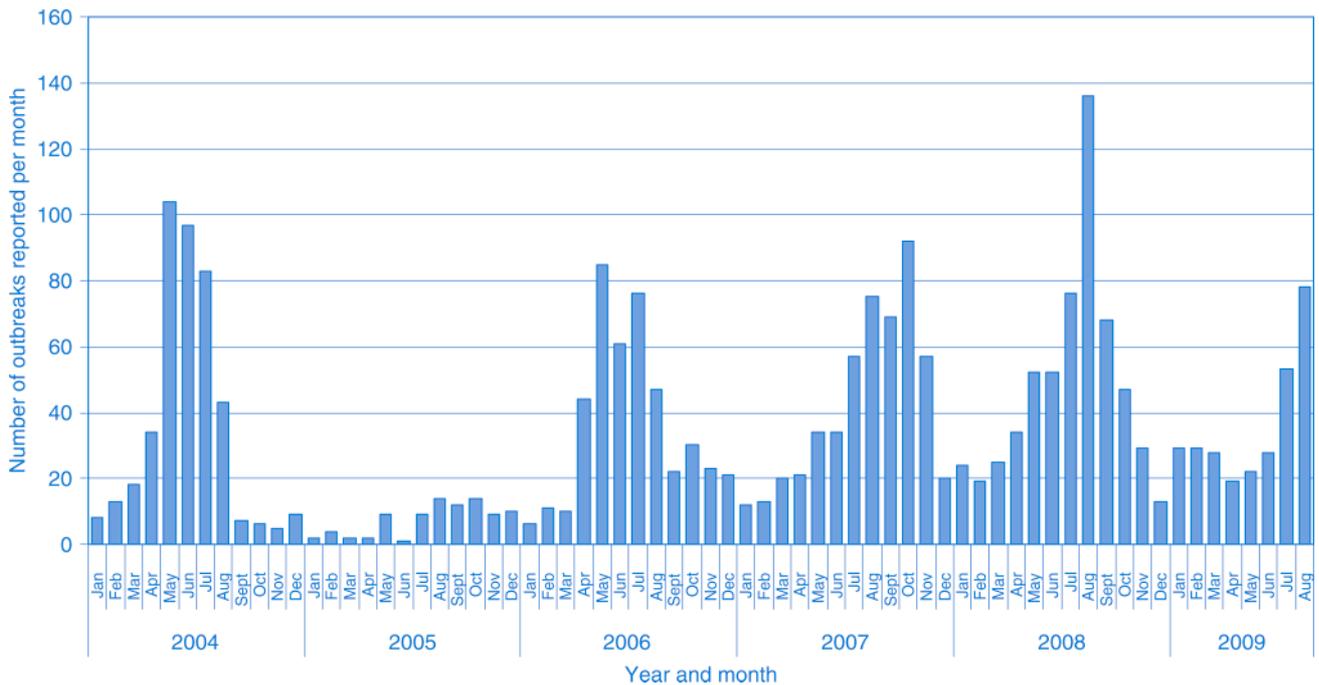


Figure 1. Number of outbreaks of gastrointestinal illness in institutions (e.g. aged-care facilities, child-care centres, schools, hospitals, etc.) reported to NSW Health for each month between 1 July 2004 and 31 August 2009.

have had two doses of MMR vaccine, unless they know they are immune.

Gastroenteritis in institutions

From 1 July 2004 to 31 August 2009, 747 outbreaks of gastrointestinal illness in institutions, affecting at least 16 256 people, were reported to NSW Health. Outbreaks of viral gastroenteritis are more commonly seen in winter months (Figure 1).

In 2009, between 1 July and 31 August, 131 outbreaks of gastrointestinal illness in institutions were reported, affecting 1804 people. This represents a small increase of 4% over the median number of outbreaks reported during the same time period from 2004 to 2008 ($n = 126$), and a significant decrease of 46% on the median number of people affected as a result of the outbreaks ($n = 3340$) (Table 1).

Twenty percent of the outbreaks were caused by norovirus, 4% by rotavirus, 1% by *Clostridium difficile* and *Campylobacter* respectively, and 75% were of unknown aetiology but were suspected to have been caused by person-to-person spread of a viral illness after investigating the epidemiological evidence and clinical symptoms of those affected. Fifty-five percent of the outbreaks occurred in aged-care facilities, 24% in hospitals, 20% in child-care centres, and 1% in a military facility.

Data collected on the number of presentations to emergency departments are consistent with the data shown in

Table 1. Number of outbreaks of gastrointestinal illness in institutions reported to NSW Health between 1 July 2009 and 31 August 2009 and number of people affected by these

	Number of outbreaks	Number of people affected
2004	126	3341
2005	23	295
2006	123	3340
2007	132	3265
2008	212	4211
Median 2004–2008	126	3340
2009	131	1804

this report, with no increase in presentations during the time period 1 July–31 August 2009 when compared with data collected from the previous 5 years.

In children aged 0–4 years, presentations to emergency departments for gastrointestinal illness during the period July–August 2009 decreased when compared with earlier years (Figure 2).

This decrease may be due to the introduction of the rotavirus vaccination into the National Immunisation Program in July 2007. The Eastern Sydney Laboratory Surveillance Program, based at the South Eastern Sydney Illawarra Public Health Unit, shows a reduction in the number of cases of rotavirus (Figure 3).

Category: age group
0-4 years

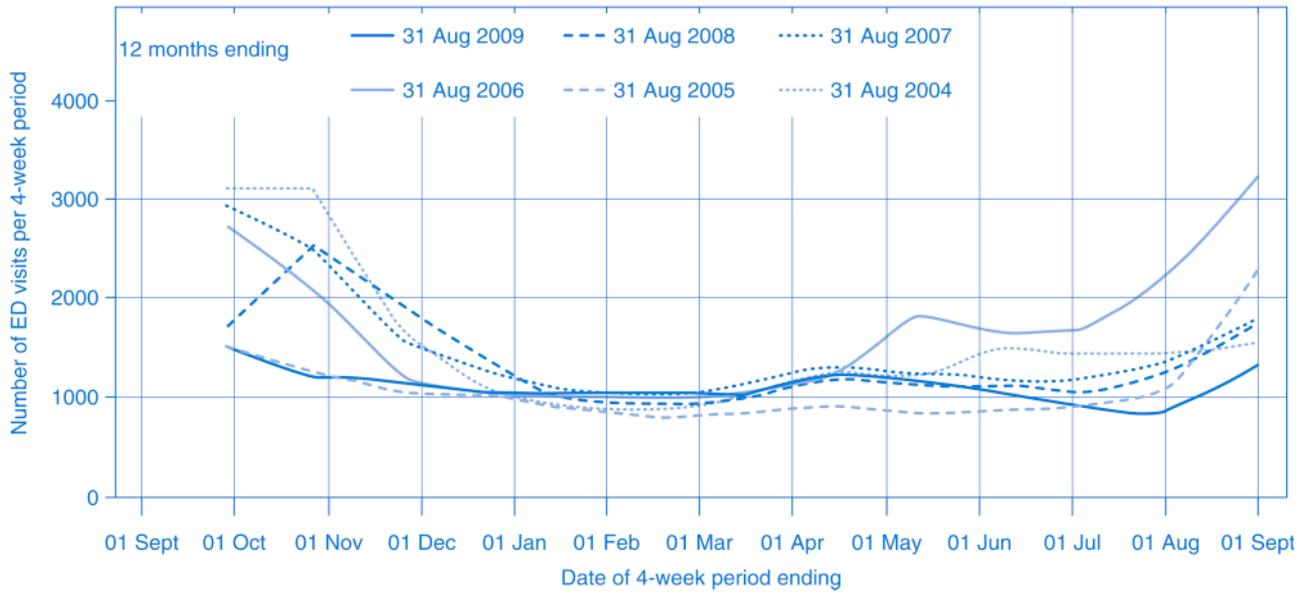


Figure 2. Emergency department visits for gastrointestinal illness in children aged 0-4 years by 4-week counts, ending 30 August 2009.

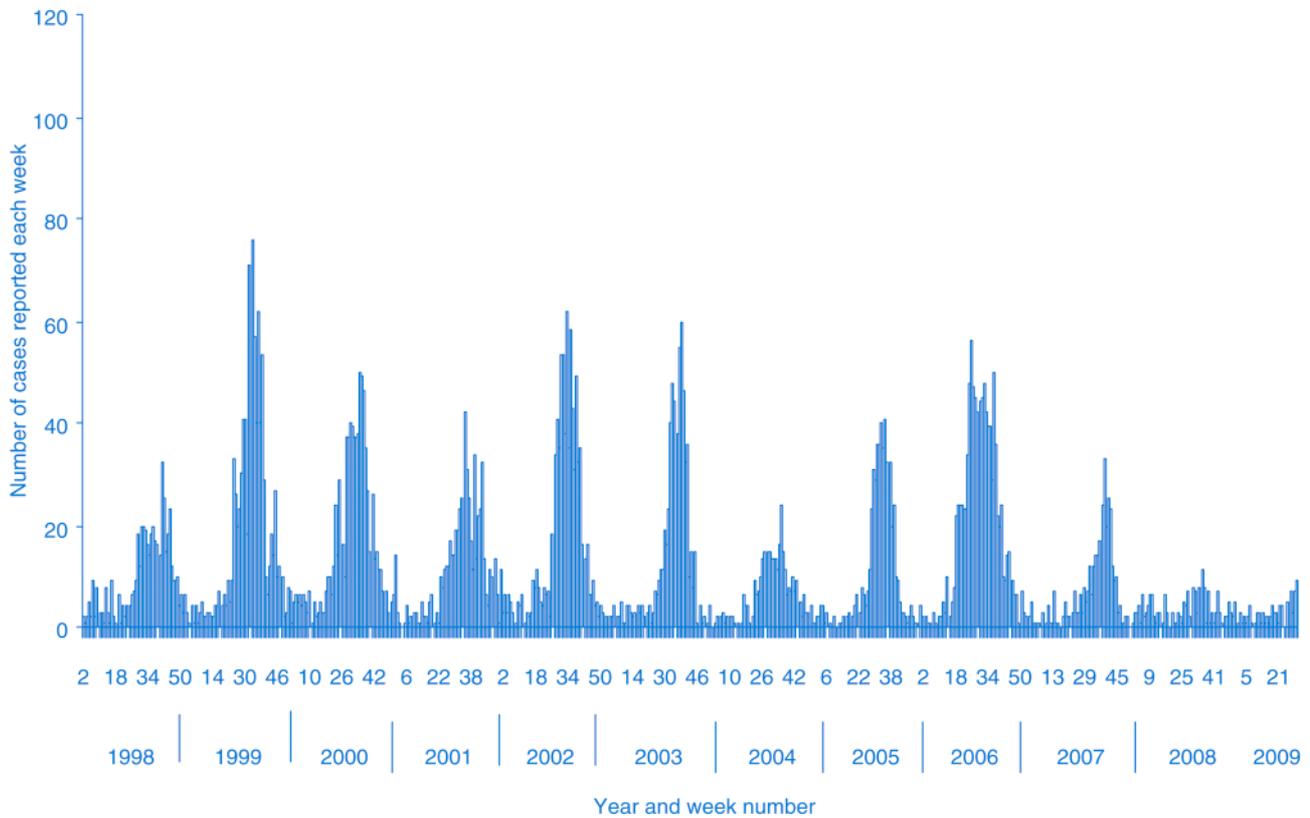


Figure 3. Number of cases of rotavirus reported each week by Eastern Sydney Laboratory Surveillance Program, 1998-2009.

Figure 4. Reports of selected communicable diseases, NSW, January 2004 to June 2009, 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%

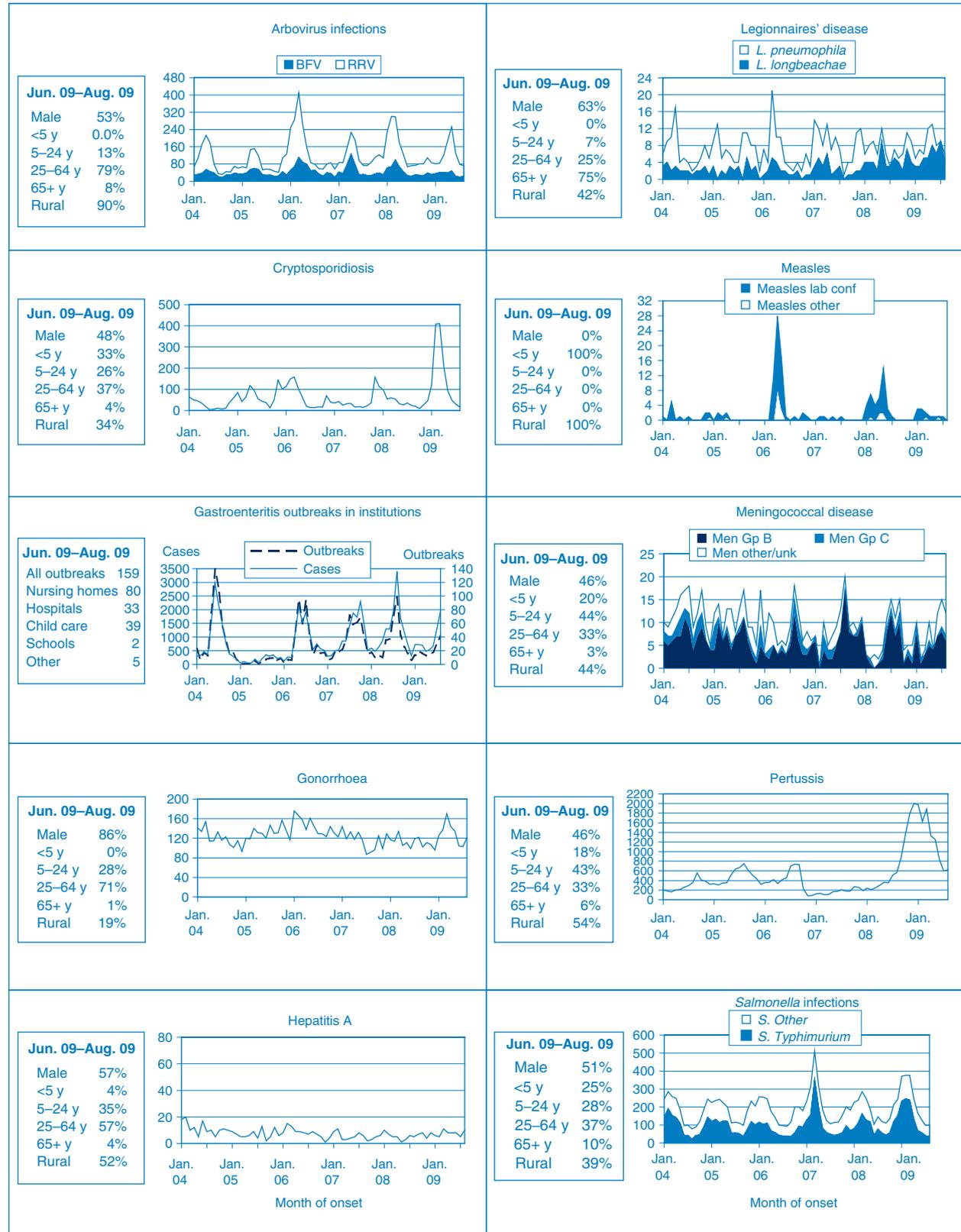


Table 2. Reports of notifiable conditions received in July 2009 by area health services

Condition	Area Health Service (2009)											Total Year to date ^b							
	Greater Southern			Greater Western			Hunter New England		North Coast				Northern Sydney Central Coast		South Eastern Sydney Illawarra		Sydney West		Sydney South West
	GMA	SA	FWA	MAC	MWA	HUN	NEA	MNC	NRA	CCA	NSA	ILL	SES	CSA	WEN	WSA	JHS	For July ^b	Total
Bloodborne and sexually transmitted																			
Chancroid ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlamydia (genital) ^a	68	24	13	24	34	158	25	28	50	61	67	64	246	125	55	114	22	1275	8794
Gonorrhoea ^a	1	-	3	-	2	5	-	1	-	1	9	4	35	21	-	5	-	102	913
Hepatitis B – acute viral ^a	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	2
Hepatitis B – other ^a	2	3	1	1	1	8	2	3	-	6	41	3	33	46	4	43	7	255	2220
Hepatitis C – acute viral ^a	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	2	19
Hepatitis C – other ^a	14	20	6	8	8	34	13	24	17	35	30	23	49	48	23	36	43	483	3791
Hepatitis D – unspecified ^a	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	5
Lymphogranuloma venereum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Syphilis	1	2	1	1	1	3	1	-	-	4	9	2	37	20	2	9	-	104	724
Vectorborne																			
Barmah Forest virus ^a	-	-	2	-	-	5	-	7	6	1	-	-	-	-	-	-	-	21	254
Ross River virus ^a	4	1	3	-	1	13	3	10	23	2	-	-	-	-	-	-	-	61	700
Arboviral infection (other) ^a	-	-	-	-	-	-	-	1	-	1	6	2	2	-	-	3	-	16	118
Malaria ^a	2	1	-	-	-	-	-	-	-	-	1	-	2	-	-	2	-	12	60
Zoonoses																			
Anthrax ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brucellosis ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Leptospirosis ^a	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	14
Lyssavirus ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psittacosis ^a	1	-	-	-	2	-	-	-	-	-	1	-	-	-	1	-	-	5	19
Q fever ^a	1	1	1	2	2	1	2	-	1	-	1	1	-	-	-	-	-	12	101
Respiratory and other																			
Blood lead level ^a	-	-	2	2	2	4	-	-	1	1	1	-	-	-	3	1	-	17	151
Invasive pneumococcal infection ^a	-	2	-	2	2	3	2	-	2	2	5	5	12	6	10	7	-	62	265
<i>Legionella longbeachae</i> infection ^a	-	-	-	-	-	-	-	1	1	1	-	4	-	1	-	1	-	9	35
<i>Legionella pneumophila</i> infection ^a	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	23
Legionnaires' disease (other) ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2
Leprosy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Meningococcal infection (invasive) ^a	-	-	-	1	-	2	1	-	1	-	2	1	2	1	-	3	-	14	54
Tuberculosis	-	1	-	-	-	1	-	-	3	2	2	1	7	3	7	14	-	42	248
Vaccine-preventable																			
Adverse event after immunisation	3	-	-	-	-	2	-	-	-	-	-	-	-	-	1	2	-	12	91
<i>H. influenzae b</i> infection (invasive) ^a	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	1	6
Measles	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	3	10
Mumps ^a	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	3	25
Pertussis	12	39	4	19	32	69	12	45	50	27	51	45	38	25	47	64	-	645	10034
Rubella ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
Tetanus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Enteric																			
Botulism	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cholera ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Cryptosporidiosis ^a	9	10	1	5	2	15	3	1	2	8	17	4	26	8	7	23	1	23	1333
Giardiasis ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	160	1298
Haemolytic uraemic syndrome	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Hepatitis A ^a	-	-	-	-	-	-	-	1	-	-	-	2	1	-	-	1	-	7	56
Hepatitis E ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	12
Hepatitis B ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	18
Listeriosis ^a	3	3	-	-	-	6	4	4	1	7	15	5	14	2	8	15	-	100	1816
Salmonellosis ^a	1	-	-	1	1	6	4	4	1	7	1	6	1	1	5	1	-	11	118
Shigellosis ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	30
Typhoid ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17
Verotoxin producing <i>E. coli</i> ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Miscellaneous																			
Creutzfeldt-Jakob disease	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9
Meningococcal conjunctivitis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2

^a laboratory-confirmed cases only. ^b 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: Influenza data has not been provided here since May 2009. See www.health.nsw.gov.au/PublicHealth/Infectious/z.asp#fl for up-to-date information. NB: From 1 January 2005, Hunter New England AHS also comprises Great Lakes, Gloucester and Greater Icare LGAs (LGA, Local Government Area). Sydney West also comprises Greater Lithgow LGA. NB: HIV and AIDS data are reported separately in the Public Health Bulletin quarterly. GMA, Greater Murray Area; MAC, Macquarie Area; FWA, Far West Area; HUN, Hunter Area; HUN, Hunter Area; SA, Southern Area; ILL, Illawarra Area; MNC, North Coast Area; MWA, Mid Western Area; NRA, Northern Rivers Area; WEN, Wentworth Area; WSA, Western Sydney Area; JHS, Justice Health Service.

Table 3. Reports of notifiable conditions received in August 2009 by area health services

Condition	Area Health Service (2009)											Total For August ^b	Total Year to date ^b							
	Greater Southern GMA	SA	FWA	Greater Western MAC	MWA	HUN	New England HUN	MNC	North Coast NRA	CCA	Northern Sydney Central Coast NSA			South Eastern Sydney Illawarra SES	CSA	Sydney South West SWS	WEN	Sydney West WSA	JHS	
Bloodborne and sexually transmitted																				
Chancroid ^a	-	23	6	20	30	131	34	36	60	50	94	63	204	116	94	39	112	6	1177	9971
Chlamydia (genital) ^a	50	-	1	-	-	4	-	4	2	3	11	4	35	27	14	2	11	-	120	1033
Gonorrhoea ^a	2	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	24
Hepatitis B – acute viral ^b	3	1	-	2	-	5	2	-	-	3	27	7	35	43	46	4	59	2	242	2462
Hepatitis B – other ^c	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19
Hepatitis C – acute viral ^a	9	8	6	11	16	42	7	23	18	25	26	23	52	40	55	24	31	27	449	4240
Hepatitis C – other ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	6
Hepatitis D – unspecified ^b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Lymphogranuloma venereum	-	3	8	1	2	3	-	1	4	3	6	1	30	22	10	2	7	-	104	828
Syphilis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vectorborne																				
Barmah Forest virus ^a	-	-	-	-	-	5	-	9	6	2	-	-	-	-	-	-	-	-	22	276
Ross River virus ^a	5	1	2	2	2	10	2	7	11	1	1	-	1	1	-	2	1	-	49	749
Arboviral infection (other) ^a	-	-	-	-	-	3	-	1	1	-	3	1	-	2	-	-	1	-	12	130
Malaria ^a	1	1	-	1	-	1	-	-	-	-	1	-	1	1	2	-	1	-	11	71
Zoonoses																				
Anthrax ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brucellosis ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Leptospirosis ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14
Lyssavirus ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psittacosis ^a	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
Q fever ^a	1	1	-	2	2	-	-	-	2	-	-	-	-	-	-	-	-	-	8	109
Respiratory and other																				
Blood lead level ^a	-	-	-	3	-	5	-	1	-	-	-	-	-	-	1	-	-	-	9	160
Invasive pneumococcal infection ^a	1	4	-	-	1	8	1	1	2	6	5	-	7	9	8	2	5	-	59	324
Legionella longbeachae infection ^a	-	-	-	-	1	-	-	-	-	1	-	-	1	2	-	2	-	-	7	42
Legionella pneumophila infection ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	24
Legionnaires' disease (other) ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leprosy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Meningococcal infection (invasive) ^a	1	1	-	-	1	2	-	1	1	1	2	1	2	3	1	-	4	-	13	67
Tuberculosis	1	2	-	-	-	1	-	1	1	1	2	1	8	2	2	-	4	-	25	273
Vaccine-preventable																				
Adverse event after immunisation	3	-	-	-	-	-	-	-	-	-	1	-	-	-	1	1	1	-	7	98
H. influenzae b infection (invasive) ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
Measles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
Mumps ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	27
Pertussis	27	38	3	10	35	93	21	20	41	24	45	32	63	35	30	49	54	-	620	10654
Rubella ^a	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	2	8
Tetanus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2
Enteric																				
Botulism	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cholera ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Cryptosporidiosis ^a	-	-	-	-	1	-	-	3	-	-	11	1	9	3	1	1	-	-	30	1363
Giardiasis ^a	5	8	1	-	3	16	7	3	-	2	34	9	33	16	8	8	11	-	164	1462
Haemolytic uraemic syndrome	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Hepatitis A ^a	3	-	-	-	-	1	-	-	-	-	2	-	1	-	3	-	-	-	10	66
Hepatitis E ^a	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	2	14
Listeriosis ^a	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	2	20
Salmonellosis ^a	5	1	-	-	1	12	6	2	3	4	11	2	16	10	15	9	16	-	113	1929
Shigellosis ^a	-	-	-	-	-	-	-	-	-	-	1	-	2	3	-	-	-	-	8	126
Typhoid ^b	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	4	34
Verotoxin producing E. coli ^a	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	18
Miscellaneous																				
Creutzfeldt-Jakob disease	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9
Meningococcal conjunctivitis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2

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