

COMMUNICABLE DISEASES REPORT, NEW SOUTH WALES, FOR NOVEMBER AND DECEMBER 2005

For updated information, including data and facts on specific diseases, visit www.health.nsw.gov.au and click on **Infectious Diseases**.

TRENDS

Tables 2 and 3 and Figure 1 show reports of communicable diseases received through to the end of November and December 2005 for each area health service in NSW.

ENTERIC DISEASE

Cryptosporidiosis

The number of people reported with cryptosporidiosis increased from 51 cases in October to 143 cases in November. There were 100 cases in December. Cryptosporidiosis occurs after ingestion of the parasite *Cryptosporidium* and is characterised by watery diarrhoea, abdominal cramps, vomiting and occasionally fever. Symptoms can last for many weeks or even months in some people. No specific treatment is recommended, other than supportive care.

In response to the increase, NSW public health units were asked to interview all patients, using a standard form to identify risk factors for illness. Interviews identified no single source for the outbreak. However, most cases (75 per cent) were from rural parts of the state, and some people reported having direct contact with farm animals, visiting farms, drinking untreated water, or swimming in rivers and pools. The Department of Primary Industries reports that there has been a recent increase in calves with scours (diarrhoea that can be caused by *Cryptosporidium* infection). While investigations continue, these data suggest that the outbreak may have begun when a small number of people acquired the illness from infected animals, either through direct contact, contact with the animals' faeces, or from contaminated waterways in which they swam or from which they drank untreated water. Once in humans, the infection is readily transmitted through person-to-person contact. A major public health concern is that recovering cases will unwittingly carry the parasite into swimming pools where the chlorine resistance of the organism allows it to remain infectious for weeks. Consequently, swimmers who swallow small amounts of pool water will be at increased risk of acquiring the infection. A massive outbreak of cryptosporidiosis occurred across NSW in 1998 after several pools were contaminated in this way.¹

To avoid infection people should:

- thoroughly wash their hands with soap and running water for at least 10 seconds after handling animals or their manure; before handling food; after using the toilet; and after changing nappies
- avoid getting water in their mouth when swimming
- avoid drinking untreated water.

Water taken directly from a creek, river or lake should be brought to a rolling boil (and allowed to cool) before drinking. Otherwise the water should be filtered and disinfected using a treatment system certified against the standards to remove *Cryptosporidium* (for example, AS/NZS 4348 or NASI/NSF 53).

To avoid contaminating swimming facilities, people who have had a diarrhoeal illness should not enter a swimming area for at least one week after complete recovery.

Reference

1. Puech MC, McAnulty JM, Lesjak M, Shaw N, Heron L, Watson JM. A statewide outbreak of cryptosporidiosis in New South Wales associated with swimming at public pools. *Epidemiol Infect* 2001; 126: 389–96.

Other enteric infections

Several outbreaks of other enteric diseases were reported in November and December. Notable among these were:

- an increase in cases of infection with *Salmonella typhimurium* phage type 44 (STm44) across NSW with a total of 14 cases reported in November, including one cluster of five people who had consumed, on different days, a chicken Caesar salad wrap from a retailer in the South Eastern Sydney/Illawarra area. The NSW Food Authority (NSWFA) confirmed that the wrap was prepared using raw egg. Samples of product from the establishment tested negative for *Salmonella*, but a further trace-back of eggs by the NSWFA is underway. In December a further 32 cases of STm44 were reported. Among these were three clusters:
 - seven people who attended a dinner party in the South Eastern Sydney/Illawarra area. Two of the seven were confirmed as having STm44 infection, and one of these two was admitted to hospital. Among the foods eaten was a tiramisu cake prepared using raw egg
 - four people from the Central Coast. The source of the cluster remains unclear, and the investigation is continuing
 - three people in a residential facility on the North Coast.
- an outbreak of seven cases of *Salmonella Singapore* infection in the Sydney West area in December. Public health unit staff interviewed the patients and found that the source was likely to have been food served at a wedding and then served as leftovers at a church gathering the next day. In addition to the seven confirmed cases, many other wedding guests reported diarrhoeal illness after the wedding. Among high risk items served at the wedding (and as leftovers) were home prepared potato salad, pork and meatballs.

- an increase in cases of infection with *Salmonella typhimurium* phage type 135a across the state
- an outbreak of gastroenteritis among 23 of 29 attendees of a party in November, most likely due to *Clostridium perfringens* contamination of prepared foods
- nine cases of **scombroid fish poisoning** linked to eating fish in the Sydney South West and South Eastern Sydney/Illawarra areas in November. Scombroid poisoning occurs after a person ingests fish that contains high levels of histamine that has been produced in the flesh, generally when the fish has been mishandled. Symptoms develop within a few hours of eating the fish, and include tingling and burning around the mouth, facial flushing, sweating, nausea, vomiting, headaches and palpitations. Eight of the cases reported eating tuna before the onset of the illness, and the remaining patient could not specify the type of fish consumed

Notification of both STm135a and STm44 infections have increased in several Australian states in recent weeks. A national investigation, including multi-state case-control studies, is underway in an attempt to identify the likely sources of infection.

Nine cases of infection with **verotoxigenic *E. coli*** have been notified in the Hunter area in 2005, including six notified since 28 November. No links among the cases have been detected to date. The recent increase in notification may relate to changes in laboratory testing procedures by the reporting laboratory.

AVIAN INFLUENZA

In December, under the *NSW Public Health Act 1991*, the diagnosis of avian influenza in humans became notifiable by doctors, hospitals and laboratories. Avian influenza is primarily a disease of birds, and human infection is very rare. Currently it is unlikely that people with avian influenza will present to doctors in Australia, but if they do, it is important that they be identified and isolated as quickly as possible. A doctor may suspect that a patient has avian influenza if the person:

- has a fever and respiratory symptoms, and
- has travelled to a part of the world where avian influenza is prevalent (currently mainly in parts of Asia and eastern Europe) within seven days of onset of symptoms, and
- had contact with poultry, dead birds, or patients (or samples from patients) with avian influenza.

The patient should be advised to wear a surgical mask, be isolated, and be managed as clinically appropriate. The local public health unit should be informed.

On 23 December 2005, the Department of Primary Industries reported that a chicken from a backyard flock in Wentworth (Greater Western Area Health Service) had tested positive, in preliminary testing, for avian influenza. Some of the chickens in the small flock had died in the preceding weeks. A thorough investigation by animal health experts, however, found that the cause of death in the chicken was Marek's disease (a common viral disease of poultry), and in repeat testing, avian influenza was ruled out. As a precaution, public health unit staff identified the people who had had contact with the chickens, and prepared for further actions (such as accessing personal protective equipment and the antiviral neuraminidase inhibitors) had the diagnosis been confirmed.

Pandemic planning

The NSW Health Interim Influenza Pandemic Action Plan was released in November 2005. The *Plan* is available on the NSW Health web site (see: www.health.nsw.gov.au/infect/pandemic_flu.html), with links to other resources including advice on infection control. NSW Health will keep this page updated with the latest information on pandemic preparedness, as well as information on the current avian influenza outbreak occurring overseas. NSW Health is working with a range of doctors (including nominees of the NSW General Practice Council) and scientists to better define the roles of different health care workers in the event of a pandemic.

HIV SURVEILLANCE

Notifications of people newly diagnosed with HIV infection in NSW from 1981 through to June 2005 are shown in Table 1. The annual number of notifications had been generally declining in NSW from the mid-1980s until 2001, when there were 338 notifications. However, case notifications increased in 2002 and again in 2003 to 415 (a 23 per cent increase over the 2-year period). Notifications declined a little in 2004 (to 404), but in the first half of 2005 alone, 230 have been reported, indicating a further rise. Among the 2005 notifications to date, men who have sex with men were slightly more commonly reported (72 per cent) than in previous recent years (less than 70 per cent). The increase in notifications among women seen in 2004 (60 compared with less than 33 in previous recent years) does not appear to have been sustained in 2005; the reason for this short-lived increase is unclear. ☒

TABLE 1

CHARACTERISTICS OF NEW SOUTH WALES RESIDENTS DIAGNOSED WITH NEW HIV NOTIFICATIONS, 1981 TO JUNE 2005

	1981–1999		2000		2001		2002		2003		2004		Jan–June 2005		1981–June 2005	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Gender																
Female	591	5.0	30	8.5	30	8.9	30	7.7	32	7.7	60	14.9	14	6.1	787	5.7
Male	10881	92.8	313	88.7	306	90.5	352	89.8	374	90.1	341	84.4	216	93.9	12783	92.2
Transgender	22	0.2	0	0.0	0	0.0	4	1.0	0	0.0	0	0.0	0	0.0	26	0.2
Not stated	231	2.0	10	2.8	2	0.6	6	1.5	9	2.2	3	0.7	0	0.0	261	1.9
Age (years)																
0–2	24	0.2	2	0.6	0	0.0	1	0.3	0	0.0	1	0.2	0	0.0	28	0.2
3–12	36	0.3	1	0.3	0	0.0	0	0.0	2	0.5	0	0.0	1	0.4	40	0.3
13–14	12	0.1	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0	13	0.1
15–19	187	1.6	2	0.6	3	0.9	1	0.3	3	0.7	6	1.5	2	0.9	204	1.5
20–24	1390	11.9	28	7.9	23	6.8	25	6.4	35	8.4	30	7.4	21	9.1	1552	11.2
25–29	2408	20.5	44	12.5	61	18.0	62	15.8	59	14.2	58	14.4	34	14.8	2726	19.7
30–39	4459	38.0	147	41.6	146	43.2	180	45.9	167	40.2	161	39.9	81	35.2	5341	38.5
40–49	2186	18.6	76	21.5	71	21.0	85	21.7	89	21.4	98	24.3	60	26.1	2665	19.2
50–59	702	6.0	38	10.8	20	5.9	26	6.6	45	10.8	32	7.9	22	9.6	885	6.4
60 +	243	2.1	7	2.0	9	2.7	12	3.1	15	3.6	17	4.2	9	3.9	312	2.3
Not reported	78	0.7	8	2.3	5	1.5	0	0.0	0	0.0	0	0.0	0	0.0	91	0.7
Exposure																
Male Homosexual–bisexual	6988	59.6	235	66.6	218	64.5	251	64.0	288	69.4	256	63.4	165	71.7	8401	60.6
Male homosexual–bisexual and IDU*	289	2.5	8	2.3	18	5.3	14	3.6	10	2.4	9	2.2	2	0.9	350	2.5
Injecting Drug Use	383	3.3	19	5.4	19	5.6	9	2.3	11	2.7	16	4.0	4	1.7	461	3.3
Heterosexual	724	6.2	60	17.0	54	16.0	58	14.8	62	14.9	73	18.1	27	11.7	1058	7.6
Haemophilia–Coagulation Disorders	114	1.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	114	0.8
Blood–tissue Recipient	137	1.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	137	1.0
Vertical	34	0.3	3	0.8	0	0.0	1	0.3	2	0.5	1	0.2	1	0.4	42	0.3
Undetermined	3045	26.0	21	5.9	22	6.5	44	11.2	39	9.4	47	11.6	25	10.9	3243	23.4
Not Stated	11	0.1	7	2.0	7	2.1	15	3.8	3	0.7	2	0.5	6	2.6	51	0.4
Residence																
Greater Sydney**	6204	52.9	300	85.0	299	88.5	335	85.5	322	77.6	320	79.2	189	82.2	7969	57.5
Rest of New South Wales	730	6.2	44	12.5	37	10.9	39	9.9	64	15.4	58	14.4	21	9.1	993	7.2
Unknown	4791	40.9	9	2.5	2	0.6	18	4.6	29	7.0	26	6.4	20	8.7	4895	35.3
Total	11725	100.0	353	100.0	338	100.0	392	100.0	415	100.0	404	100.0	230	100.0	13857	100.0

Data source: NSW HIV / AIDS database, Communicable Diseases Branch, NSW Department of Health.

Note: Recent HIV data may contain duplicates; Data excludes notifications where a previous diagnosis occurred in another Australian jurisdiction.

*IDU = injecting drug use

** Greater Sydney = Northern Sydney Area, South Eastern Sydney Area, Central Sydney Area, South Western Sydney Area, Wentworth Area, and Western Sydney Area.

FIGURE 1

REPORTS OF SELECTED COMMUNICABLE DISEASES, NSW, JAN 2000 TO DEC 2005, 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 yrs	7%
5–24 yrs	27%
25–64 yrs	53%
65+ yrs	13%
Rural	46%

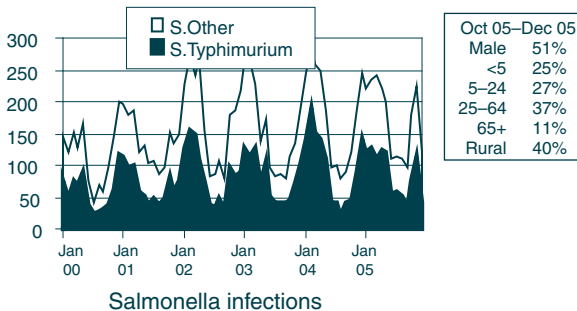
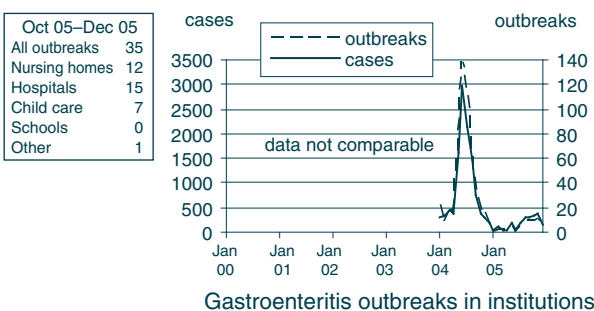
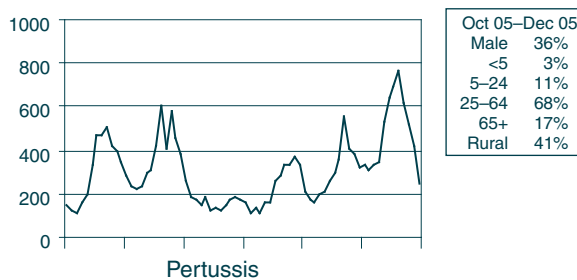
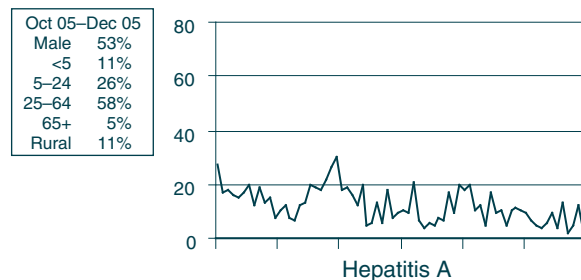
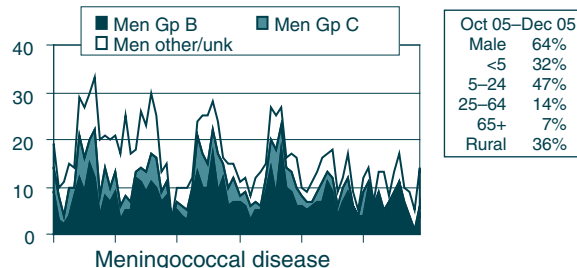
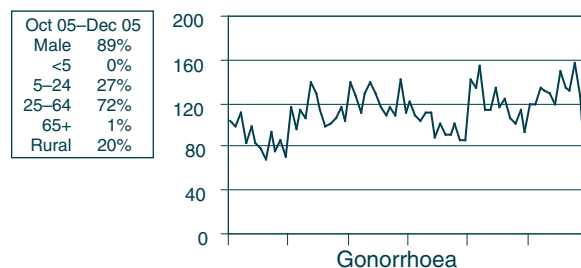
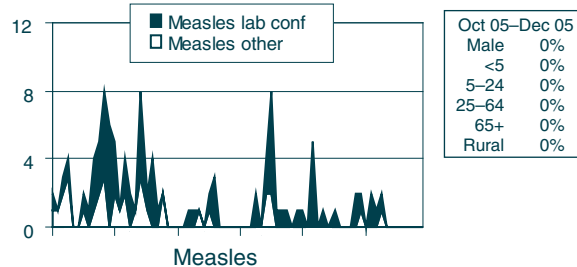
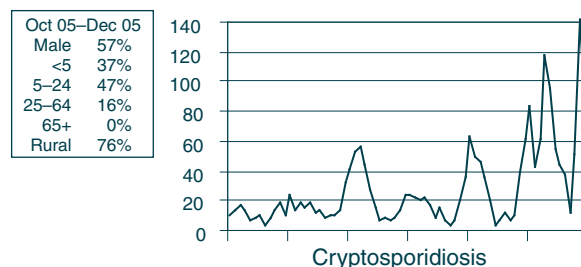
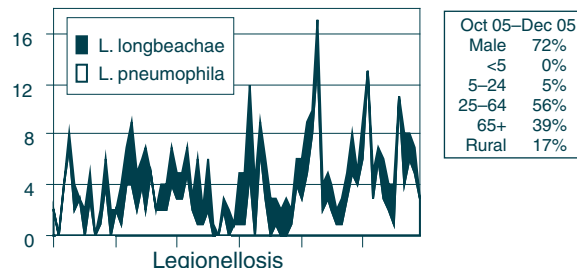
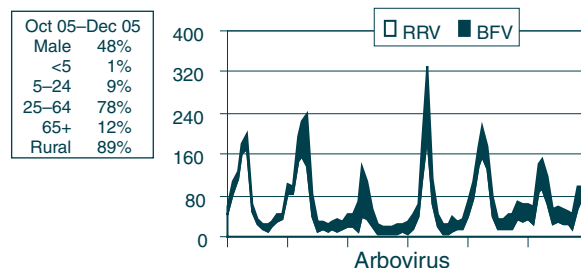


TABLE 2 REPORTS OF NOTIFIABLE CONDITIONS RECEIVED IN NOVEMBER 2005 BY AREA HEALTH SERVICES

Condition	Greater Southern				Greater Western			Hunter / New England		Area Health Service (2005)				Sydney South West				Sydney West		Total for Nov+	To date+	
	GMA	SA	FWA	MAC	MWA	HUN	NEA	MNC	NRA	CCA	NSA	ILL	SES	CSA	SWS	WEN	WSA	JHS				
Blood-borne and sexually transmitted ^d																						
Chancroid*	35	13	7	12	26	107	32	24	56	48	81	52	169	88	39	26	70	3	901	10350	-	
Chlamydia (genital)*	1	-	-	-	-	14	4	3	2	2	5	4	49	21	9	1	4	1	120	1428	-	
Gonorrhoea*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Hepatitis B-acute viral*	1	1	-	-	3	8	3	3	1	6	25	4	39	41	43	3	30	3	216	3271	-	
Hepatitis B-other*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Hepatitis C-acute viral*	12	19	4	8	14	38	6	37	34	43	22	31	61	67	55	22	50	44	575	6188	1	
Hepatitis C-other*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	14	-	
Hepatitis D-unspecified*	-	-	-	-	1	1	5	-	1	-	2	2	14	9	13	-	10	-	59	821	-	
Syphilis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Vector-borne																						
Barmah Forest virus*	1	-	-	1	1	3	3	20	9	1	-	1	-	-	1	-	-	-	41	438	-	
Ross River virus*	7	1	-	2	-	2	3	6	4	2	-	-	4	1	1	-	-	-	33	458	-	
Arboviral infection (other)*	-	-	-	-	-	-	-	-	-	-	1	-	2	3	-	1	1	-	8	43	-	
Malaria*	-	-	-	-	-	4	-	-	-	-	-	-	2	-	-	-	2	-	9	194	-	
Zoonoses																						
Anthrax*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Brucellosis*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	
Leptospirosis*	-	-	-	-	-	1	1	1	1	-	-	-	-	-	-	-	-	-	4	37	-	
Lyssavirus*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Psittacosis*	1	-	-	-	-	5	-	-	1	-	-	-	2	-	-	1	-	-	10	123	-	
Q fever*	-	1	-	-	-	4	1	2	2	-	-	-	-	-	-	-	-	-	10	126	-	
Respiratory and other																						
Blood lead level*	-	-	-	-	1	7	-	-	1	1	1	-	1	1	3	2	-	-	18	227	-	
Influenza*	-	1	-	-	1	1	1	2	5	-	3	-	25	-	1	1	6	-	48	1318	-	
Invasive pneumococcal infection*	-	2	-	2	4	7	-	3	3	1	6	1	2	2	3	1	6	-	43	629	-	
Legionella longbeachae infection*	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	2	20	-	
Legionella pneumophila infection*	-	-	1	-	1	-	-	-	-	-	1	-	1	-	-	-	3	-	7	61	-	
Legionnaires' disease (other)*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	
Leprosy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	
Meningococcal infection (invasive)*	-	-	-	-	-	-	-	-	1	-	2	-	-	-	-	-	-	-	3	118	-	
Tuberculosis	-	1	-	-	-	1	-	-	-	-	1	1	7	1	-	2	1	-	16	353	-	
Vaccine-preventable																						
Adverse event after immunisation (AEFI)**	2	-	-	-	-	-	-	-	-	1	-	-	3	-	-	-	-	-	6	95	-	
H. Influenzae b infection (invasive)*	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	7	-	
Measles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	
Mumps*	-	-	-	-	-	-	-	1	2	-	-	-	1	-	1	-	-	-	5	102	-	
Pertussis	40	24	1	38	8	33	9	11	19	15	48	16	81	43	38	33	60	-	517	5570	-	
Rubella*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	
Tetanus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Enteric																						
Botulism	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cholera*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cryptosporidiosis*	14	-	1	16	3	12	31	5	3	3	2	6	4	3	1	7	2	-	113	733	-	
Giardiasis*	2	-	1	5	3	13	2	2	1	5	13	3	28	3	6	7	8	-	102	1309	-	
Haemolytic uraemic syndrome	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	5	-	
Hepatitis A*	1	-	-	-	-	-	-	-	-	-	-	-	1	-	3	4	1	-	11	78	-	
Hepatitis E*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	-	
Listeriosis*	-	2	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	4	23	-	
Salmonellosis*	12	6	-	2	3	15	9	12	10	8	20	12	33	6	30	10	29	-	218	1994	-	
Shigellosis*	1	-	1	-	-	-	-	-	-	-	1	-	1	3	-	2	1	-	11	129	-	
Typhoid*	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	2	28	-	
Verotoxin producing E. coli*	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	2	8	-	
Miscellaneous																						
Creutzfeldt-Jacob disease	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	
Meningococcal conjunctivitis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	
* lab-confirmed cases only																						
+ includes cases with unknown postcode																						
** AEFIs notified by the school vaccination teams during the National Meningococcal C Program are not included in these figures. These notifications are reviewed regularly by a panel of experts and the results will be published quarterly in the NSW Public Health Bulletin.																						
N.B: From 1st Jan 2005, Hunter/New England AHS also comprises Great Lakes, Gloucester & Greater Taree LGAs; Sydney West also comprises Greater Lithgow LGA																						
GMA = Greater Murray Area	MAC = Macquarie Area	NEA = New England Area	CCA = Central Coast Area	SES = South Eastern Sydney Area	WEN = Wentworth Area																	
SA = Southern Area	MWA = Mid Western Area	NRA = Northern Rivers Area	NSA = Northern Sydney Area	CSA = Central Sydney Area	WSA = Western Sydney Area																	
FWA = Far West Area	HUN = Hunter Area	NRA = Northern Rivers Area	ILL = Illawarra Area	SWS = South Western Sydney Area	JHS = Justice Health Service																	

