

Communicable Diseases Surveillance

Communicable Diseases Surveillance consists of data from several sources. The National Notifiable Diseases Surveillance System (NNDSS) is conducted under the auspices of the Communicable Diseases Network Australia New Zealand. The *CDI* Virology and Serology Laboratory Reporting Scheme (LabVISE) is a sentinel surveillance scheme. The Australian Sentinel Practice Research Network (ASPREN) is a general practitioner-based sentinel surveillance scheme. In this report, data from the NNDSS are referred to as 'notifications' or 'cases', whereas those from ASPREN are referred to as 'consultations'. Data from the LabVISE scheme are referred to as 'laboratory reports'.

Vaccine preventable diseases

Although the epidemic of pertussis in Australia continues, the number of notifications is declining, which is consistent with the seasonal drop expected in the first few months of the year. The majority of reports of pertussis with onset in 1998 have been for children aged 0 to 4 years (15%), 5 to 9 years (20%) and 10 to 14 years (15%). The male:female ratio was 1:1.1.

Measles notifications have remained relatively low for the past 3 years, with a small increase in activity in the last quarter of 1997, as would be expected for the time of year (Figure 1). The majority of cases with onset in 1998 were reported from Victoria (34%), New South Wales (25%) and Queensland (18%). In 1997 and 1998 most cases were in children under 5 years of age (75%), with an overall male:female ratio of 1.0:1 (Figure 2).

Arboviruses

The number of notifications of Ross River virus infection remains low for the time of year (Figure 3). Similarly few cases of Barmah Forest virus infection have been notified compared to recent years (Figure 4).

One hundred and seven cases of dengue were notified this period, bringing the total for the year so far to 183. All but 10 of the current notifications had a recorded date of onset before March (Figure 5). Of the 186 cases with onset since

Figure 1. Notifications of measles, 1991 to 1998, by month of onset

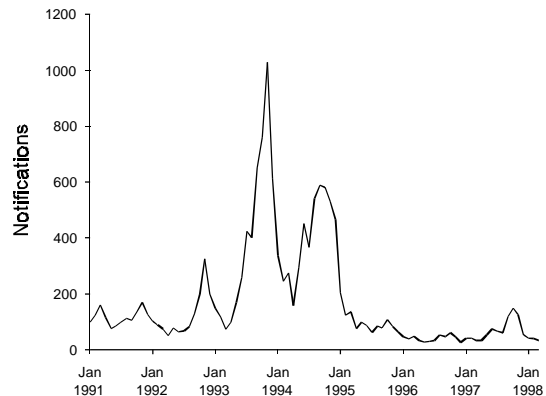


Figure 2. Notifications of measles, 1997 and 1998, by age group and sex

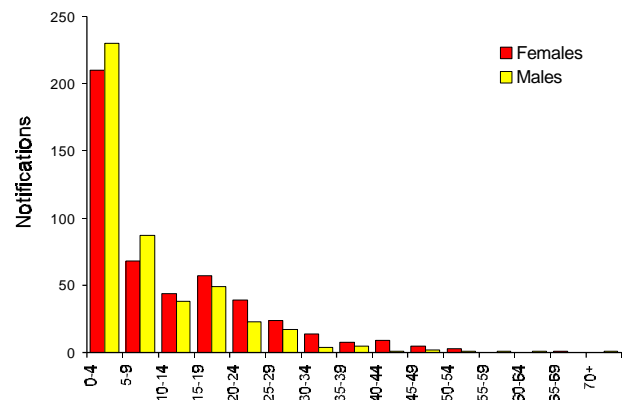


Figure 3. Notifications of Ross River virus infection, 1991 to 1998, by month of onset

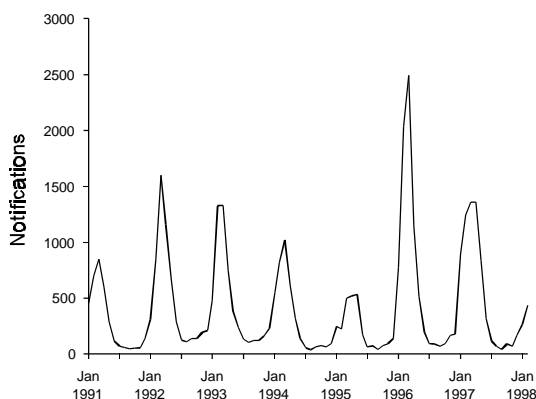


Figure 4. Notifications of Barmah Forest virus infection, 1995 to 1998, by month of onset

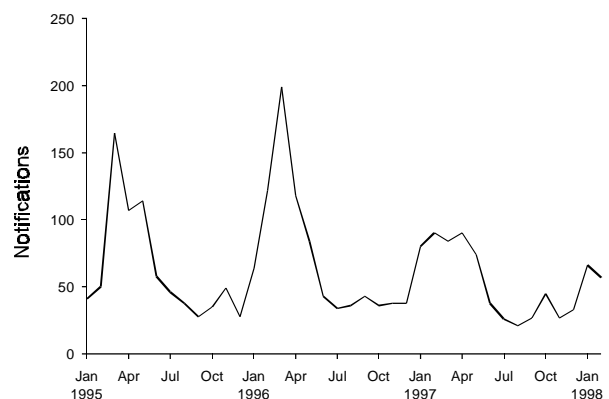
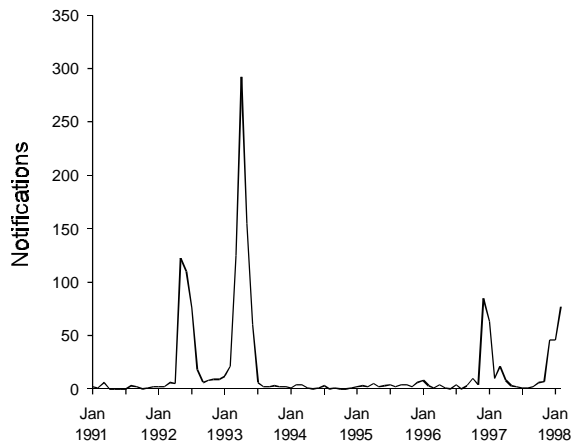


Figure 5. Notifications of dengue, 1991 to 1998, by month of onset



November 1997, 140 (75%) were residents of the Queensland Statistical Division of Far North. In the 1996-97 outbreak, a similar pattern was observed, a larger proportion (88%) being residents of the same Statistical Division of Far North. In the recent outbreak the male:female ratio was 1.3:1 and 66% of cases were aged between 25 and 59 years (Figure 6).

Enteric infections

Hepatitis A was notified for 240 persons this period, of which 113 (47%) were from Queensland. The number of cases rose in January and February but remain below the peak seen in early 1997 (Figure 7). Of the 740 cases reported with onset in 1998 so far, 31% were for the 20 to 29 years age group, the male:female ratio for this group being 2.3:1 (Figure 8).

Fifty-six laboratory reports of hepatitis A were received by the sentinel laboratory scheme LabVISE this period, 68% of which were from Queensland. Included were 37 males and 19 females, a male:female ratio of 2.0:1. Forty-one per cent of reports were for those in the 25-44 years age group.

The number of notifications of salmonellosis rose in late 1997 and early 1998 but remain below the level seen for the same period last year (Figure 9). Overall for 1997, 6,830 notifications of this disease were reported with onset

Figure 7. Notifications of hepatitis A, 1995 to 1998, by month of onset

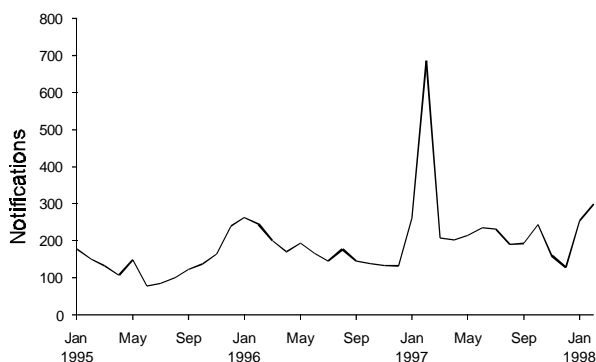
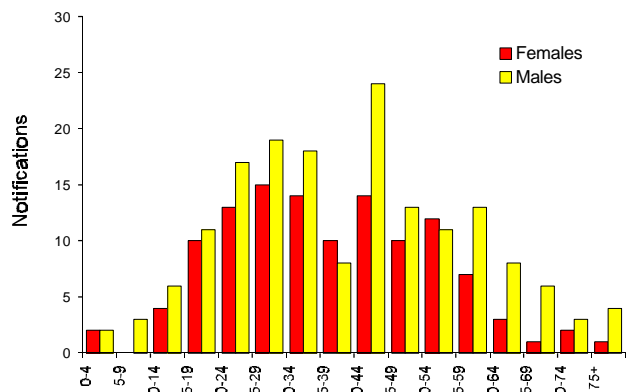


Figure 6. Notifications of dengue, 1997 and 1998, by age group and sex



in that year, of which 36% were for children under the age of 5 years.

The number of cases of campylobacteriosis reported to the NNDSS remains low compared to the same period last year. One thousand eight-hundred and forty-one notifications with onset in 1998 have been received so far. Of these 18% of cases were under the age of 5 years and 22% were in the 20-29 years age group.

The LabVISE scheme recorded 5 cases of echovirus type 11 this reporting period, all from New South Wales. Of these 4 had specimen collection dates in January, which is usually the peak month for enterovirus activity in Australia. Included were 3 males aged 0 to 5 years and 2 females both of whom were in the 15-44 years age group.

Rhinovirus

The number of rhinovirus laboratory reports has fallen in recent months after peaking last September. For 1997 a total of 550 laboratory reports was received of which 85% were for children under the age of 5 years.

Correction: The laboratory report of Stratford virus from Western Australia in last issue of *CDI* was incorrect. This was a case of Japanese encephalitis which was acquired in Vietnam. The patient presented with late neuropsychiatric sequelae.

Figure 8. Notifications of hepatitis A, 1998, by age group and sex

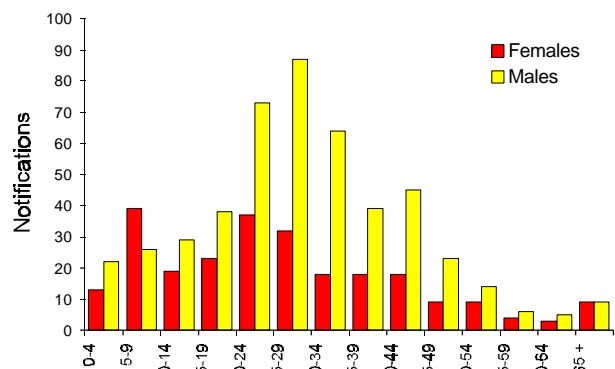
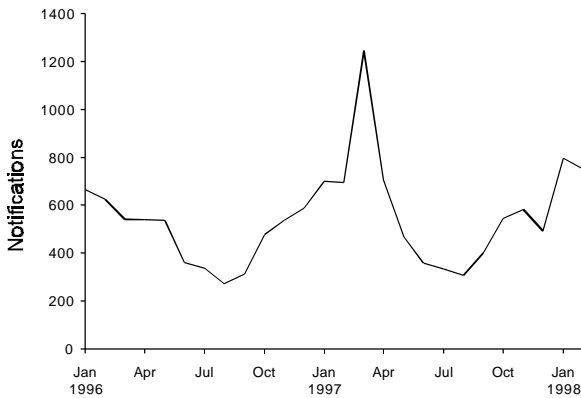


Figure 9. Notifications of salmonellosis, 1996 to 1998, by month of onset



There were 5,078 notifications received for this four-week period, 4 to 31 March 1998 (Tables 1, 2 and 3). The numbers of reports for selected diseases have been compared with historical data for corresponding periods in the previous three years (Figure 10).

NNDSS is conducted under the auspices of the Communicable Diseases Network Australia New Zealand. The system coordinates the national surveillance of more than 40 communicable diseases or disease groups endorsed by the National Health and Medical Research Council (NHMRC). Notifications of these diseases are made to State and Territory health authorities under the provisions of their respective public health legislations. De-identified core unit data are supplied fortnightly for collation, analysis and dissemination. For further information, see CDI 1998;22:4-5.

There were 1,047 reports received in the CDI Virology and Serology Laboratory Reporting Scheme (LabVISE) this four week period, 26 February to 25 March (Tables 4 and 5). Twenty-one laboratories contribute data on the laboratory identification of viruses and other organisms. Data are collated and published in Communicable Diseases Intelligence every four weeks. These data should be interpreted with caution as the number and type of reports received is subject to a number of biases. For further information, see CDI 1998;22:8.

Table 1. Notifications of rare¹ diseases received by State and Territory health authorities in the period 4 to 31 March 1998

Disease ²	Total this period	Reporting States or Territories	Total notifications 1998
Brucellosis			13
Cholera	1	Qld	2
Hydatid infection	1	Vic	6
Leprosy			1

1. Fewer than 60 cases of each of these diseases were notified each year during the period 1988 to 1998.
2. No notifications have been received during 1998 for the following rare diseases: botulism, lymphogranuloma venereum, plague, rabies, yellow fever, or other viral haemorrhagic fevers.

The Australian Sentinel Practice Research Network (ASPREN) data for weeks 9 to 12 ending 29 March 1998 are included in this issue of CDI (Table 6). ASPREN currently comprises about 100 general practitioners from throughout the country. Up to 9,000 consultations are reported each week, with special attention to 12 conditions chosen for sentinel surveillance. CDI reports the consultation rates for all of these. For further information, including case definitions, see CDI 1998;22:5-6.

HIV and AIDS Surveillance

National surveillance for HIV disease is coordinated by the National Centre in HIV Epidemiology and Clinical Research (NCHECR), in collaboration with State and Territory health authorities and the Commonwealth of Australia. Cases of HIV infection are notified to the National HIV Database on the first occasion of diagnosis in Australia, by either the diagnosing laboratory (ACT, New South Wales, Tasmania, Victoria) or by a combination of laboratory and doctor sources (Northern Territory, Queensland, South Australia, Western Australia). Cases of AIDS are notified through the State and Territory health authorities to the National AIDS Registry. Diagnoses of both HIV infection and AIDS are notified with the person's date of birth and name code, to minimise duplicate notifications while maintaining confidentiality.

Tabulations of diagnoses of HIV infection and AIDS are based on data available three months after the end of the reporting interval indicated, to allow for reporting delay and to incorporate newly available information. More detailed information on diagnoses of HIV infection and AIDS is published in the quarterly Australian HIV Surveillance Report, available from the National Centre in HIV Epidemiology and Clinical Research, 376 Victoria Street, Darlinghurst NSW 2010. Telephone: (02) 9332 4648 Facsimile: (02) 9332 1837.

HIV and AIDS diagnoses and deaths following AIDS reported for October 1998, as reported to 31 January 1998, are included in this issue of CDI (Tables 7 and 8).

Table 2. Notifications of diseases preventable by vaccines recommended by the NHMRC for routine childhood immunisation, received by State and Territory health authorities in the period 4 to 31 March 1998

Disease ^{1,2}	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	This period 1998	This period 1997	Year to date 1998	Year to date 1997
Diphtheria	0	0	0	0	0	0	0	0	0	0	0	0
<i>H. influenzae</i> type b infection	0	1	0	0	0	0	0	2	3	2	6	15
Measles	3	11	0	6	0	0	13	3	36	41	129	119
Mumps	1	7	0	0	1	0	6	3	18	22	45	46
Pertussis	0	190	3	100	54	2	10	29	388	629	2,472	2,261
Rubella ³	0	5	2	15	2	1	11	7	43	74	154	453
Tetanus	0	0	0	0	0	0	0	0	0	1	1	2

NN. Not Notifiable

1. No notifications of poliomyelitis have been reported since 1986.
2. Totals comprise data from all States and Territories. Cumulative figures are subject to retrospective revision, so there may be discrepancies

between the number of new notifications and the increment in the cumulative figure from the previous period.

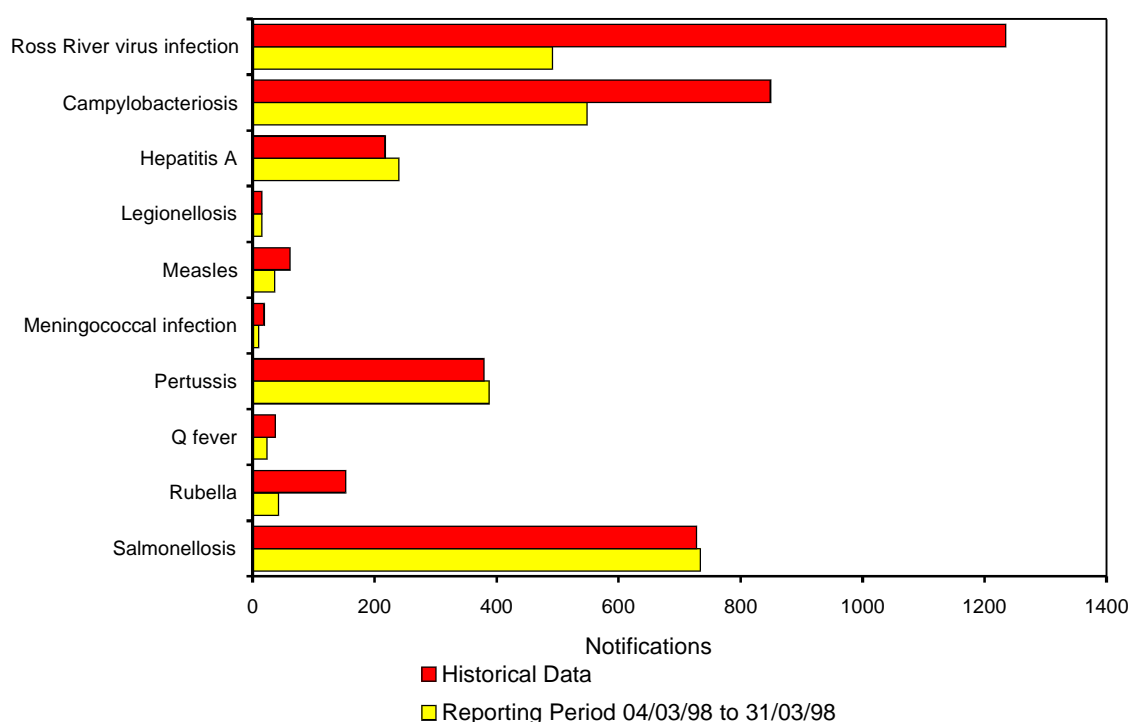
3. Includes congenital rubella

Table 3. Notifications of other diseases received by State and Territory health authorities in the period 4 to 31 March 1998

Disease ^{1,2}	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	This period 1998	This period 1997	Year to date 1998	Year to date 1997
Arbovirus infection (NEC) ³	0	6	2	3	0	0	0	1	12	15	25	56
Barmah Forest virus infection	0	10	-	38	0	0	0	-	50	85	172	237
Campylobacteriosis ⁴	40	-	18	274	78	11	20	107	548	778	2,175	2,983
Chlamydial infection (NEC) ⁵	10	NN	68	254	0	18	142	141	633	665	2,155	2,006
Dengue	0	5	0	100	0	0	0	2	107	11	183	101
Donovanosis	0	NN	3	0	NN	0	0	0	3	7	13	8
Gonococcal infection ⁶	1	53	99	96	0	1	46	101	397	334	1,244	849
Hepatitis A	4	88	4	113	10	0	11	10	240	224	822	1,159
Hepatitis B incident	0	2	2	3	0	0	0	0	7	19	40	58
Hepatitis C incident ⁷	0	3	0	-	0	0	-	-	3	1	19	2
Hepatitis C unspecified	29	NN	30	207	NN	13	3	91	373	660	1,297	2,103
Hepatitis (NEC)	0	4	0	0	0	0	0	NN	4	1	5	7
Legionellosis	0	2	1	2	1	0	9	0	15	12	55	38
Leptospirosis	0	3	1	6	0	0	2	0	12	4	39	30
Listeriosis	0	6	0	0	1	0	0	0	7	7	20	24
Malaria	3	12	3	0	1	0	11	8	38	40	163	164
Meningococcal infection	0	0	0	5	2	0	2	1	10	15	48	63
Ornithosis	0	NN	0	0	0	1	0	0	1	5	5	22
Q Fever	1	5	0	15	0	0	1	2	24	36	95	138
Ross River virus infection	0	34	17	400	5	2	8	26	492	1,193	1,079	2,849
Salmonellosis (NEC)	12	128	66	331	56	6	74	61	734	774	2,396	2,171
Shigellosis ⁴	3	-	9	16	7	0	4	15	54	75	188	256
Syphilis ⁸	2	36	23	28	0	2	0	4	95	123	304	333
Tuberculosis	0	16	3	10	4	1	31	2	67	86	241	264
Typhoid ⁹	0	5	0	0	0	0	1	0	6	9	34	27
Yersiniosis (NEC) ⁴	0	-	0	9	0	0	1	0	10	29	82	99

1. For HIV and AIDS, see Tables 7 and 8. For rarely notified diseases, see Table 1.
2. Totals comprise data from all States and Territories. Cumulative figures are subject to retrospective revision so there may be discrepancies between the number of new notifications and the increment in the cumulative figure from the previous period.
3. NT: includes Barmah Forest virus.
4. Not reported for NSW because it is only notifiable as 'foodborne disease' or 'gastroenteritis in an institution'.
5. WA: genital only.

6. NT, Qld, SA and Vic: includes gonococcal neonatal ophthalmia.
 7. Qld, Vic and WA incident cases of Hepatitis C are not separately reported.
 8. Includes congenital syphilis
 9. NSW, Vic: includes paratyphoid.
- NN Not Notifiable.
NEC Not Elsewhere Classified
- Elsewhere Classified.

Figure 10. Selected National Notifiable Diseases Surveillance System reports, and historical data¹

1. The historical data are the averages of the number of notifications in the corresponding 4 week periods of the last 3 years and the 2 week periods immediately preceding and following those.

Table 4. Virology and serology laboratory reports by State or Territory¹ for the reporting period 26 February to 25 March 1998, and total reports for the year

	State or Territory ¹								Total this period	Total reported in CDI in 1998
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA		
Measles, mumps, rubella										
Measles virus							9	1	10	30
Mumps virus							1		1	9
Rubella virus		1		6				4	11	35
Hepatitis viruses										
Hepatitis A virus		4	4	38			1	9	56	115
Arboviruses										
Ross River virus		1	12	85			2	22	122	348
Barmah Forest virus			2						2	10
Dengue not typed								1	1	6
Kunjin virus								1	1	1
Flavivirus (unspecified)				5					5	23
Adenoviruses										
Adenovirus not typed/pending		12		1			5	1	19	163
Herpes viruses										
Herpes virus type 6								1	1	2
Cytomegalovirus		7		26	1		19	4	57	267
Varicella-zoster virus		13		24			16	12	65	360
Epstein-Barr virus		6	9	33			8	53	109	494
Other DNA viruses										
Parvovirus				2			5		7	42

Table 4. Virology and serology laboratory reports by State or Territory¹ for the reporting period 26 February to 25 March 1998, and total reports for the year, continued

	State or Territory ¹								Total this period	Total reported in <i>CDI</i> in 1998	
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA			
Picornavirus family											
Echovirus type 9							1			1	1
Echovirus type 11		5								5	8
Poliovirus type 2 (uncharacterised)		1								1	1
Rhinovirus (all types)		9					2	5		16	136
Enterovirus not typed/pending		3		5			1	7		16	95
Ortho/paramyxoviruses											
Influenza A virus		1						2		3	121
Influenza B virus								3		3	45
Parainfluenza virus type 1		7		1			13			21	53
Parainfluenza virus type 3		1					2	13		16	154
Respiratory syncytial virus		5		4			3	2		14	218
Other RNA viruses											
Rotavirus		5								5	90
Astrovirus							5			5	8
Norwalk agent							4			4	17
Other											
<i>Chlamydia trachomatis</i> not typed		22	89	59			1	108		279	1,030
<i>Chlamydia</i> species		7								7	9
<i>Mycoplasma pneumoniae</i>		8	3	45			33	5		94	470
<i>Coxiella burnetii</i> (Q fever)				7			1	2		10	25
<i>Bordetella pertussis</i>		1	1	32			32	13		79	509
TOTAL		119	120	373	1		164	270		1,047	4,896

1. State or Territory of postcode, if reported, otherwise State or Territory of reporting laboratory.

Table 5. Virology and serology laboratory reports by contributing laboratories for the reporting period 26 February to 25 March 1998

State or Territory	Laboratory	Reports
New South Wales	Institute of Clinical Pathology & Medical Research, Westmead	54
	New Children's Hospital, Westmead	26
	Royal Prince Alfred Hospital, Camperdown	20
Queensland	Queensland Medical Laboratory, West End	397
Victoria	Monash Medical Centre, Melbourne	65
	Royal Children's Hospital, Melbourne	38
	Victorian Infectious Diseases Reference Laboratory, Fairfield	64
Western Australia	PathCentre Virology, Perth	137
	Western Diagnostic Pathology	246
TOTAL		1,047

Table 6. Australian Sentinel Practice Research Network reports, weeks 9 to 12, 1998

Week number	9		10		11		12	
Week ending on	8 March 1998		15 March 1998		22 March 1998		29 March 1998	
Doctors reporting	51		55		53		49	
Total consultations	6,831		7,018		7,298		6,609	
Condition	Reports	Rate per 1,000 consultations	Reports	Rate per 1,000 consultations	Reports	Rate per 1,000 consultations	Reports	Rate per 1,000 consultations
Influenza	13	1.9	14	2.0	11	1.5	10	1.5
Rubella	1	0.1	3	0.4	2	0.3	0	0.0
Measles	1	0.1	0	0.0	0	0.0	0	0.0
Chickenpox	5	0.7	3	0.4	7	1.0	5	0.8
Pertussis	3	0.4	1	0.1	1	0.1	3	0.5
HIV testing (patient initiated)	14	2.0	8	1.1	15	2.1	9	1.4
HIV testing (doctor initiated)	6	0.9	7	1.0	4	0.5	4	0.6
Td (ADT) vaccine	48	7.0	58	8.3	55	7.5	46	7.0
Pertussis vaccination	44	6.4	36	5.1	39	5.3	41	6.2
Reaction to pertussis vaccine	3	0.4	0	0.0	2	0.3	0	0.0
Ross River virus infection	0	0.0	1	0.1	0	0.0	0	0.0
Gastroenteritis	99	14.5	90	12.8	94	12.9	87	13.2

Table 7. New diagnoses of HIV infection, new diagnoses of AIDS and deaths following AIDS occurring in the period 1 to 31 October 1997, by sex and State or Territory of diagnosis

										Totals for Australia			
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	This period 1997	This period 1996	Year to date 1997	Year to date 1996
HIV diagnoses	Female	0	4	1	0	0	0	1	0	6	3	64	59
	Male	0	20	0	1	3	0	10	5	39	72	539	686
	Sex not reported	0	4	0	0	0	0	0	0	4	1	25	5
	Total ¹	0	28	1	1	3	0	11	5	49	76	628	751
AIDS diagnoses	Female	0	0	0	1	0	0	0	0	1	2	21	25
	Male	0	5	0	2	1	0	4	2	14	38	244	536
	Total ¹	0	5	0	3	1	0	4	2	15	40	265	561
AIDS deaths	Female	0	0	0	0	0	0	1	0	1	0	11	15
	Male	0	3	0	0	2	0	6	1	12	34	188	413
	Total ¹	0	3	0	0	2	0	7	1	13	34	200	428

1. Persons whose sex was reported as transgender are included in the totals.

Table 8. Cumulative diagnoses of HIV infection, AIDS and deaths following AIDS since the introduction of HIV antibody testing to 31 October 1997, by sex and State or Territory

		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
HIV diagnoses	Female	21	504	6	114	49	4	191	81	970
	Male	179	10,642	92	1,773	623	77	3,637	834	17,857
	Sex not reported	0	2,066	0	1	0	0	28	1	2,096
	Total ¹	200	13,225	98	1,893	672	81	3,866	919	20,954
AIDS diagnoses	Female	7	157	0	42	19	2	59	23	309
	Male	80	4,301	30	745	318	41	1,495	333	7,343
	Total ¹	87	4,469	30	789	337	43	1,561	358	7,674
AIDS deaths	Female	2	112	0	27	14	2	43	14	214
	Male	52	3,025	23	522	214	26	1,190	240	5,292
	Total ¹	54	3,144	23	551	228	28	1,239	255	5,522

1. Persons whose sex was reported as transgender are included in the totals.