

Communicable Diseases Surveillance

Highlights

Communicable Diseases Surveillance consists of data from various 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 (LabWISE) is a sentinel surveillance scheme. The Australian Sentinel Practice Research Network (ASPEN) 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 ASPEN are referred to as 'consultations' or 'encounters' while data from the LabWISE scheme are referred to as 'laboratory reports'.

Vaccine Preventable Diseases

Meningococcal disease

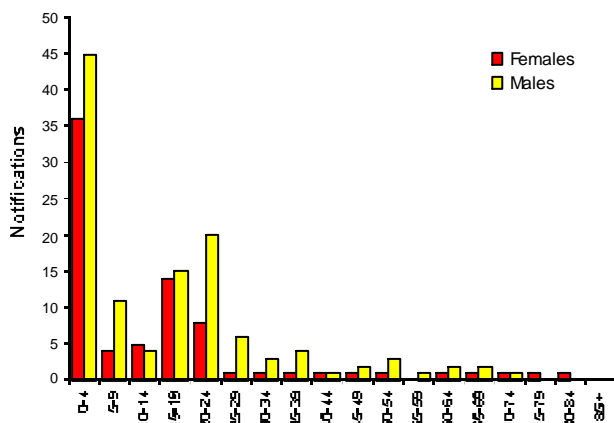
There have been 193 notifications of meningococcal disease so far this year. This is an overall increase of 40 notifications for the same reporting period in 1998 (Table 1).

Table 1. Notifications of meningococcal disease, States and Territories, Jan-June 1998 and 1999

	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Aus
1998	1	66	5	36	5	4	22	19	158
1999	0	83	5	29	8	6	39	23	193

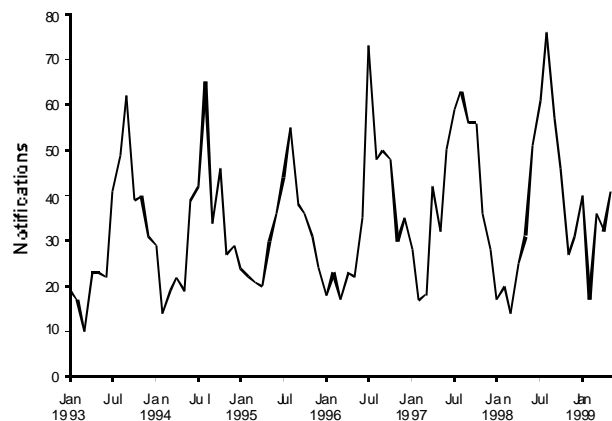
Sixty two per cent of these notifications were from males. Most notifications were in the 0-4 age group (Figure 1.)

Figure 1. Notifications of meningococcal disease, January – June 1999, by age group and sex



Higher rates of meningococcal disease were evident in males in most age groups compared to females. The peak month of onset of meningococcal disease is usually August (Figure 2).

Figure 2. Notifications of meningococcal disease, Australia, 1993 to 1999, by month of onset



Measles

The number of measles notifications remains low, with the outbreak among young adults in Victoria confirmed as having ended. With the end of this outbreak notifications for measles have returned to the low figures seen in December 1998.

Arboviruses

Ross River virus

Although a higher than normal number of notifications for Ross River virus infection has been reported (2,777 this year to date), the very high number of cases seen in 1992 (approximately 5,800) and 1996 (approximately 7,850) is not expected. Further investigation of the notifications for the year to date show that the number of notifications is beginning to decline in line with the usual annual cycle of a greater number of cases during the warmer months of the year.

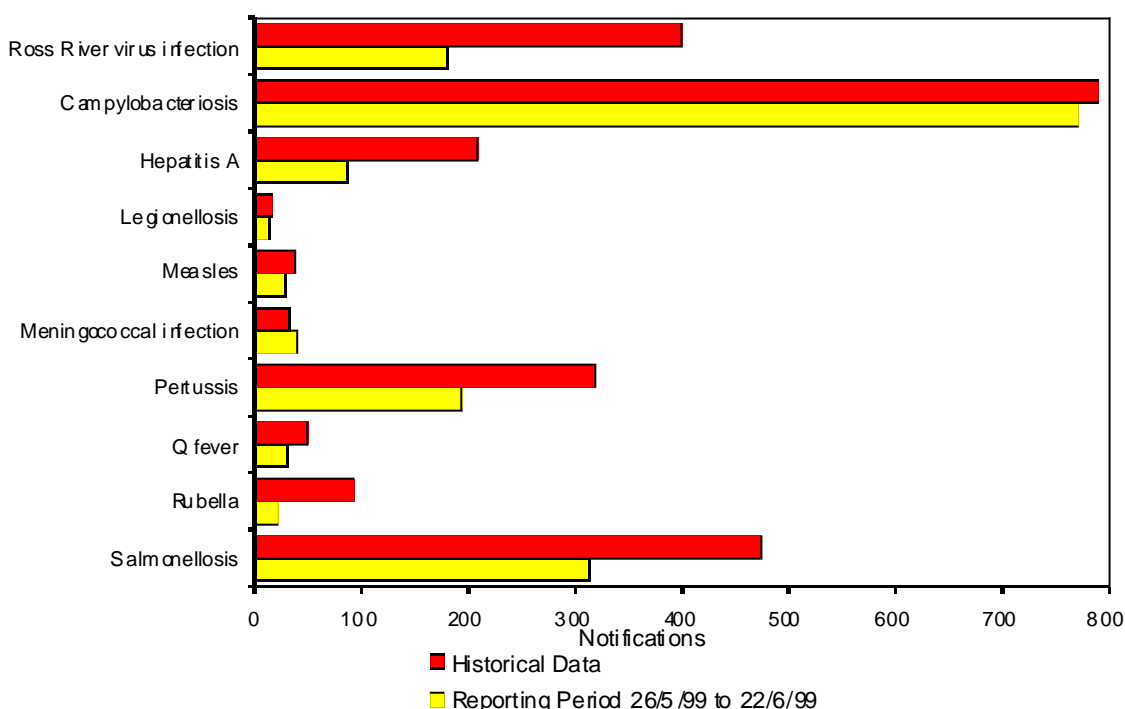
Tables

There were 5,790 notifications to the National Notifiable Diseases Surveillance System (NNDSS) in the four week period, 26 May to 22 June 1999 (Tables 1 and 2). The numbers of reports for selected diseases have been compared with historical data for corresponding periods in the previous three years (Figure 3).

There were 3,099 reports received by the *CDI/Virology* and Serology Laboratory Reporting Scheme (LabVISE) in the four week period, 20 May to 16 June 1999 (Tables 3 and 4).

The Australian Sentinel Practice Research Network (ASPREN) data for weeks 21 to 24, ending 20 June 1999, are included in this issue of *CDI* (Table 5).

Figure 3. 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 1. Notifications of diseases preventable by vaccines recommended by the NHMRC for routine childhood immunisation, received by State and Territory health authorities in the period 26 May to 22 June 1999

Disease ^{1,2}									This period 1999	This period 1998	Year to date 1999	Year to date 1998
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA				
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	0	1	2	20	14
Measles	3	3	0	0	0	0	6	1	13	23	166	176
Mumps	1	1	0	2	0	1	7	1	13	11	77	79
Pertussis	5	58	0	27	15	12	67	10	194	317	1,557	3,724
Rubella ³	2	2	0	5	0	0	9	4	22	67	166	364
Tetanus	0	0	0	0	0	0	0	0	0	1	0	3

NN. Not Notifiable

- No notification of poliomyelitis has been received since 1978.
- 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.

- Includes congenital rubella.

Table 2. Notifications of diseases received by State and Territory health authorities in the period 26 May to 22 June 1999

Disease ^{1,2,3,4}	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	This period 1999	This period 1998	Year to date 1999	Year to date 1998
Arbovirus infection (NEC)	0	0	1	1	0	0	1	1	4	5	66	42
Barmah Forest virus infection	0	0	0	14	0	0	1	4	19	32	232	352
Brucellosis	0	0	0	2	0	0	0	0	2	1	11	20
Campylobacteriosis ⁵	26	-	21	138	211	29	254	92	771	647	5,918	4,989
Chancroid	0	0	0	0	0	0	0	0	0	0	0	1
Chlamydial infection (NEC) ⁶	10	NN	68	262	84	17	280	111	832	826	7,817	5,112
Cholera	0	0	0	0	0	0	0	0	0	0	2	3
Dengue	0	0	0	0	0	0	0	6	6	17	146	286
Donovanosis	0	NN	0	0	NN	0	0	1	1	3	9	19
Gonococcal infection ⁷	3	76	89	78	26	1	0	67	340	408	2,343	2,490
Haemolytic uraemic syndrome ⁸	NN	1	0	0	1	0	NN	0	2	0	13	6
Hepatitis A	0	37	0	12	16	0	13	9	87	180	820	1,570
Hepatitis B incident	0	12	0	5	2	0	4	2	25	17	167	128
Hepatitis B unspecified ⁹	6	153	0	48	0	3	191	108	509	606	3,196	3,438
Hepatitis C incident	1	0	0	-	5	0	1	3	10	31	155	135
Hepatitis C unspecified ⁹	29	359	20	173	67	26	414	50	1,138	1,594	9,339	10,557
Hepatitis (NEC) ¹⁰	0	2	0	0	0	0	1	NN	3	2	7	9
Hydatid infection	0	0	0	0	0	0	4	0	4	2	16	16
Legionellosis	0	6	1	1	3	0	3	0	14	16	151	122
Leprosy	0	0	0	0	0	0	0	0	0	0	0	2
Leptospirosis	0	4	0	14	0	0	0	0	18	10	240	78
Listeriosis	0	1	0	0	0	0	0	1	2	1	21	27
Malaria	1	12	3	8	2	0	8	3	37	151	358	382
Meningococcal infection	0	9	1	10	1	1	11	7	40	37	197	133
Ornithosis	0	NN	0	0	0	0	0	0	0	5	39	18
Q Fever	0	12	0	18	0	0	0	1	31	36	222	259
Ross River virus infection	1	0	0	130	1	5	3	41	181	155	2,777	2,216
Salmonellosis (NEC)	4	43	22	103	33	7	55	47	314	486	4,728	4,522
Shigellosis ⁵	0	-	13	4	2	0	8	7	34	41	311	333
SLTEC, VTEC ¹¹	NN	0	0	NN	1	0	NN	NN	1	3	13	7
Syphilis ¹²	0	26	50	60	1	2	0	16	155	106	919	639
TTP ¹³	0	0	0	0	0	0	0	0	0	0	0	0
Tuberculosis	0	60	2	5	1	1	30	2	101	110	698	610
Typhoid ¹⁴	0	3	0	0	0	0	4	1	8	2	36	50
Yersiniosis (NEC) ⁵	0	-	0	2	0	0	0	1	3	17	83	138

1. Diseases preventable by routine childhood immunisation are presented in Table 1.
 2. For HIV and AIDS, see Tables 6 and 7.
 3. 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.
 4. No notifications have been received during 1999 for the following rare diseases: lymphogranuloma venereum, plague, rabies, yellow fever, or other viral haemorrhagic fevers.
 5. Not reported for NSW because it is only notifiable as 'foodborne disease' or 'gastroenteritis in an institution'.
 6. WA: genital only.
 7. NT, Qld, SA and Vic: includes gonococcal neonatal ophthalmia.
 8. Nationally reportable from August 1998.

9. Unspecified numbers should be interpreted with some caution as the magnitude may be a reflection of the numbers of testings being carried out.
 10. Includes hepatitis D and E.
 11. Infections with *Shiga*-like toxin (verotoxin) producing *E. Coli* (SLTEC/VTEC) became nationally reportable in August 1998.
 12. Includes congenital syphilis.
 13. Thrombotic thrombocytopenic purpura became nationally reportable in August 1998.
 14. NSW, Qld: includes paratyphoid.
 NN Not Notifiable.
 NEC Not Elsewhere Classified.
 - Elsewhere Classified.

Table 3. Virology and serology laboratory reports by State or Territory¹ for the reporting period 20 May to 16 June 1999, and total reports for the year

	State or Territory ¹								Total this period	Total reported in CD/in 1999
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA		
Measles, mumps, rubella										
Measles virus		1	2	1	3		13	5	25	143
Mumps virus								11	11	37
Rubella virus				12	2			4	18	56
Hepatitis viruses										
Hepatitis A virus		2	2	9	6		2	37	58	229
ARBOVIRUSES										
Ross River virus		7	17	124	2		7	128	285	1,183
Barmah Forest virus		1	4	29			2	10	46	129
Dengue not typed		1	1					13	15	45
Murray Valley encephalitis virus								1	1	2
Kunjin virus			1					2	3	5
Adenoviruses										
Adenovirus type 1							4		4	16
Adenovirus type 2							1		1	8
Adenovirus type 3					4		5		9	27
Adenovirus type 4					1		3		4	7
Adenovirus type 37							4		4	12
Adenovirus type 40			1					11	12	38
Adenovirus not typed/pending		23		8	24		44	41	140	643
Herpes viruses										
Herpes virus type 6								3	3	6
Cytomegalovirus		28	1	24	24		51	24	152	642
Varicella-zoster virus		15	4	36	36		63	66	220	933
Epstein-Barr virus		21	8	84	67		18	109	307	1,379
Other DNA viruses										
Papovavirus group								5	5	10
Molluscum contagiosum								4	4	10
Contagious pustular dermatitis								3	3	11
Poxvirus group not typed							1		1	2
Parvovirus	1		1	3	3		42	16	66	227
Picornavirus family										
Coxsackievirus A9							3		3	3
Coxsackievirus A10							1		1	1
Echovirus type 4							1		1	3
Echovirus type 9		1				1			2	25
Echovirus type 11		6					1		7	43
Echovirus type 19		1							1	2
Poliovirus type 3 (uncharacterised)		1							1	3
Rhinovirus (all types)		25		1	4			20	50	201
Enterovirus type 71 (BCR)							1		1	1
Enterovirus not typed/pending		3	2	4			9	96	114	440

Table 3. Virology and serology laboratory reports by State or Territory¹ for the reporting period 20 May to 16 June 1999, and total reports for the year (continued)

	State or Territory ¹								Total this period	Total reported in CD/in 1999
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA		
Ortho/paramyxoviruses										
Influenza A virus		39	1	13	26		37	20	136	399
Influenza A virus H1N1							1		1	2
Influenza A virus H3N2							4		4	7
Influenza B virus		3		1	3		5	11	23	71
Parainfluenza virus type 1		2		1	1		1		5	24
Parainfluenza virus type 2		2			4		18	6	30	55
Parainfluenza virus type 3		11		2	6		15	11	45	342
Respiratory syncytial virus		212	1	33	23	1	32	51	353	801
Other RNA viruses										
HTLV-1			1					1	2	8
Rotavirus		62		1	17		27	89	196	552
Astrovirus							1		1	2
Norwalk agent							15		15	49
Other										
<i>Chlamydia trachomatis not typed</i>		39	27	111	49	2	20	158	406	1,546
<i>Chlamydia psittaci</i>							15		15	47
<i>Chlamydia</i> species				2					2	8
<i>Mycoplasma pneumoniae</i>		25	2	29	7		56	27	146	659
<i>Coxiella burnetii</i> (Q fever)		3		12			7	4	26	91
<i>Rickettsia</i> - Spotted fever group								1	1	1
<i>Rickettsia</i> spp - other								2	2	5
<i>Salmonella</i> species								2	2	4
<i>Bordetella pertussis</i>		6		38			52	9	105	355
<i>Legionella pneumophila</i>					1			1	2	8
<i>Legionella longbeachae</i>					1			1	2	25
TOTAL	1	540	76	578	314	4	582	1,004	3,099	11,587

Table 4. Virology and serology laboratory reports by contributing laboratories for the reporting period 20 May to 16 June 1999

State or Territory	Laboratory	Reports
New South Wales	Institute of Clinical Pathology & Medical Research, Westmead	18
	New Children's Hospital, Westmead	110
	Royal Prince Alfred Hospital, Camperdown	113
	South West Area Pathology Service, Liverpool	274
Queensland	Queensland Medical Laboratory, West End	590
	Townsville General Hospital	39
South Australia	Institute of Medical and Veterinary Science, Adelaide	314
Tasmania	Northern Tasmanian Pathology Service, Launceston	3
Victoria	Monash Medical Centre, Melbourne	64
	Royal Children's Hospital, Melbourne	236
	Victorian Infectious Diseases Reference Laboratory, Fairfield	281
Western Australia	PathCentre Virology, Perth	787
	Princess Margaret Hospital, Perth	124
	Western Diagnostic Pathology	146
TOTAL		3,099

Table 5. Australian Sentinel Practice Research Network reports, weeks 21 to 24, 1999

Week number	21		22		23		24	
Week ending on	30 May 1999		6 June 1999		13 June 1999		20 June 1999	
Doctors reporting	59		60		58		48	
Total encounters	7,590		7,632		7,610		5,525	
Condition	Rate (per 1,000 Reports encounters)		Rate (per 1,000 Reports encounters)		Rate (per 1,000 Reports encounters)		Rate (per 1,000 Reports encounters)	
Influenza	66	8.7	65	8.5	62	8.1	80	14.5
Rubella	1	0.1	1	0.1	4	0.5	0	0.0
Measles	1	0.1	1	0.1	0	0.0	0	0.0
Chickenpox	12	1.6	13	1.7	6	0.8	11	2.0
New diagnosis of asthma	12	1.6	18	2.4	16	2.1	7	1.3
Post operative wound sepsis	6	0.8	11	1.4	11	1.4	5	0.9
Gastroenteritis	70	9.2	73	9.6	82	10.8	35	6.3

The 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 1999;23:55.

LabVISE is a sentinel reporting scheme. 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 1999;23:58.

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 in 1999. CDI reports the consultation rates for seven of these. For further information, including case definitions, see CDI 1999;23:55-56.

Additional Reports

National Influenza Surveillance, 1999

Three types of data are included in National Influenza Surveillance, 1999. These are sentinel general practitioner surveillance conducted by the Australian Sentinel Practice Research Network, Department of Human Services (Victoria), Department of Health (New South Wales) and the Tropical Influenza Surveillance Scheme, Territory Health (Northern Territory); laboratory surveillance data from the Communicable Diseases Intelligence Virology and Serology Laboratory Reporting Scheme, LabVISE, and the World Health Organization Collaborating Centre for Influenza Reference and Research; and absenteeism surveillance conducted by Australia Post. For further information about these schemes, see CDI 1999; 23:56.

Sentinel general practitioner surveillance

An increase in consultation rates for influenza-like illness reported by the ASPREN, NSW and Victorian schemes was apparent in April (Figure 1). Rates for influenza-like illness recorded by ASPREN were lower this year than for

the same period in 1998. In contrast, the consultation rates

Figure 1. Sentinel general practitioner influenza consultation rates, 1999, by scheme and week

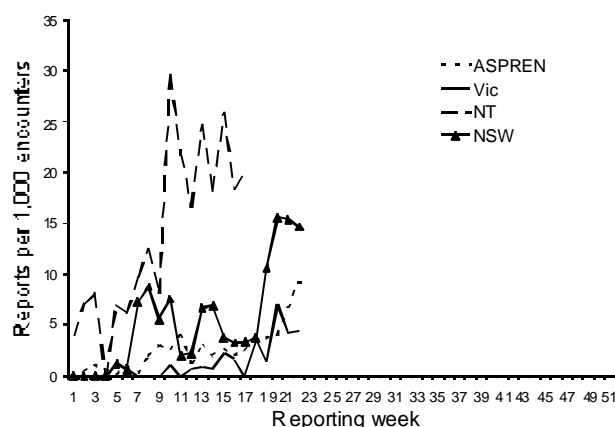


Figure 5. Laboratory reports of influenza, 1998-99, by week of specimen collection

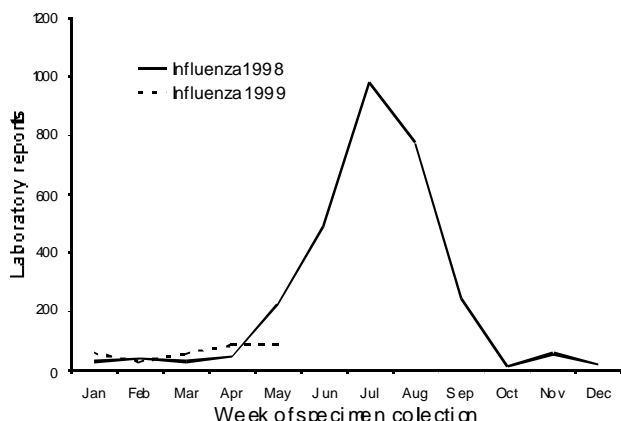
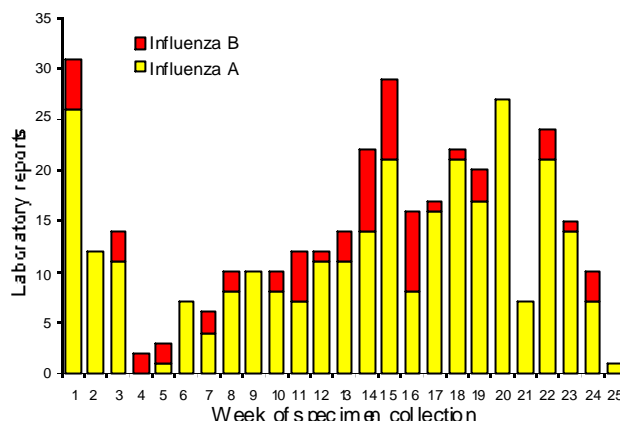


Figure 6. Laboratory reports of influenza, 1999, by type and by month of specimen collection



for influenza activity reported by the Tropical Influenza Surveillance Scheme showed higher rates from March to May than for the same period in 1998. Victorian rates were similar to those recorded for the corresponding period in 1998.

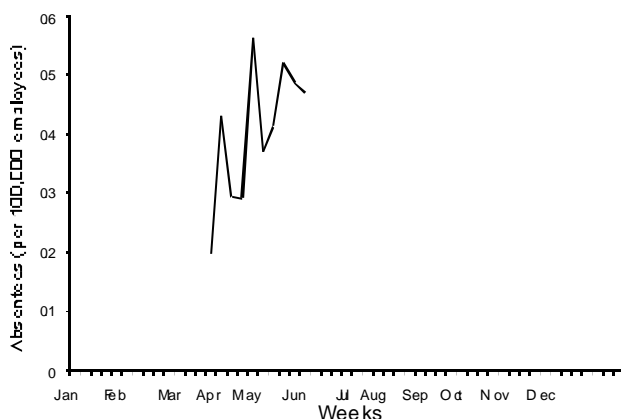
Laboratory surveillance

Figure 5 shows the number of laboratory reports for 1998 and 1999. Data for 1999 is provided only for January to May. For the year to date there have been 354 laboratory reports of influenza. Of these 290 (82%) were influenza A and 64 (18%) were influenza B (Figure 6). Of the influenza A that have been typed, 7 strains have been characterised as influenza H3N2 and 2 strains as influenza H1N1.

Absenteeism surveillance

Australia Post reports employees absent if they are not at work for three or more consecutive days in one week. The average rates for May were 0.45% which is higher than for May 1998 (0.28%)(Figure 7).

Figure 7. Absenteeism rates in Australia Post, 1999



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, and annually in HIV/AIDS and related diseases in Australia Annual Surveillance Report. The reports are 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; <http://www.med.unsw.edu.au/nchechr>.

HIV and AIDS diagnoses and deaths following AIDS reported for 1 to 28 February 1999, as reported to 31 May 1999, are included in this issue of CDI (Tables 6 and 7).

Table 6. New diagnoses of HIV infection, new diagnoses of AIDS and deaths following AIDS occurring in the period 1 to 28 February 1999, by sex and State or Territory of diagnosis

		State or Territory								Totals for Australia			
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	This period 1999	This period 1998	Year to date 1999	Year to date 1998
HIV diagnoses	Female	1	3	0	1	0	0	2	0	7	7	10	10
	Male	0	18	0	8	1	0	8	2	37	56	79	118
	Sex not reported	0	0	0	0	0	0	0	0	0	2	1	2
	Total ¹	1	21	0	9	1	0	10	2	44	65	90	130
AIDS diagnoses	Female	0	0	0	1	0	0	0	0	1	0	1	2
	Male	0	2	1	5	0	0	0	1	9	26	14	52
	Total ¹	0	2	1	6	0	0	0	1	10	26	15	54
AIDS deaths	Female	0	0	0	0	0	0	0	0	0	0	0	0
	Male	0	3	0	1	0	0	0	0	4	14	20	26
	Total ¹	0	3	0	1	0	0	0	0	4	14	21	26

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

Table 7. Cumulative diagnoses of HIV infection, AIDS and deaths following AIDS since the introduction of HIV antibody testing to 31 May 1999, by sex and State or Territory

		State or Territory								Australia
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
HIV diagnoses	Female	23	585	8	132	57	5	201	105	1,116
	Male	188	10,535	104	1,878	651	77	3,765	876	18,074
	Sex not reported	0	258	0	0	0	0	25	0	283
	Total ¹	211	11,397	112	2,017	708	82	4,004	984	19,515
AIDS diagnoses	Female	8	170	0	46	20	3	67	26	340
	Male	85	4,521	34	791	326	44	1,586	344	7,731
	Total ¹	93	4,703	34	839	346	47	1,660	372	8,094
AIDS deaths	Female	2	113	0	30	15	2	47	16	225
	Male	63	3,125	24	554	224	28	1,238	245	5,501
	Total ¹	65	3,246	24	586	239	30	1,291	262	5,743

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