

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 (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' or 'encounters' while data from the LabVISE scheme are referred to as 'laboratory reports'.

Vaccine preventable diseases

The number of measles cases is higher in this period, largely because of the outbreak which is mainly in Victoria.

Details of the outbreak are summarised below and on the web page at: '<http://www.health.gov.au/pubhlth/alert.htm>'.

Statistics at 15 April 1999 relating to the Victorian outbreak

- the index case was a young adult who had returned from Bali;
- the date of onset for the index case was 11 February 1999;
- 66 cases of measles have been reported to Victorian Health authorities;
- 25 persons have been admitted to hospital;
- all 6 cases aged between 0 and 8 years were unimmunised and
- 5 cases of vaccine failure have been identified (all had received one dose of a measles-only vaccine).

The number of notifications for pertussis infection remains relatively low, with the number of cases having onset in February 1999 being the lowest since July 1996.

Tables

There were 7,238 notifications to the National Notifiable Diseases Surveillance System (NNDSS) in the four week period, 3 to 30 March 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 1).

There were 1,542 reports received by the *CDI* Virology and Serology Laboratory Reporting Scheme (LabVISE) in the four week period, 25 February to 24 March 1999 (Tables 3 and 4).

The Australian Sentinel Practice Research Network (ASPREN) data for weeks 9 to 12, ending 28 March 1999, are included in this issue of *CDI* (Table 5).

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 3 to 30 March 1999

Disease ^{1,2}	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	This period 1999	This period 1998	Year to date 1999	Year to date 1998
Diphtheria	0	0	0	0	0	0	0	0	0	0	0	0
<i>H. influenzae</i> type b infection	0	1	1	1	0	0	1	0	4	3	13	6
Measles	2	4	0	2	0	1	48	2	59	29	98	100
Mumps	1	2	0	1	0	0	4	3	11	18	28	48
Pertussis	5	70	1	58	7	6	103	4	254	503	961	2,664
Rubella ³	3	2	1	8	1	0	8	2	25	53	85	179
Tetanus	0	0	0	0	0	0	0	0	0	0	0	2

NN. Not Notifiable

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

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 2. Notifications of diseases received by State and Territory health authorities in the period 3 to 30 March 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 ⁵
Arbovirus infection (NEC)	0	0	0	3	0	1	8	0	12	5	28	17
Barmah Forest virus infection	0	24	0	24	0	0	1	1	50	63	160	180
Brucellosis	0	0	0	1	0	0	0	0	1	2	5	14
Campylobacteriosis ⁶	44	-	27	280	338	32	306	80	1,107	867	3,439	3,049
Chancroid	0	0	0	0	0	0	0	0	0	0	0	0
Chlamydial infection (NEC) ⁷	20	NN	53	392	74	20	208	143	910	826	2,753	2,430
Cholera	0	0	0	0	0	0	0	0	0	1	1	2
Dengue	0	1	0	12	0	0	0	2	15	106	124	185
Donovanosis	0	NN	0	0	NN	0	0	0	0	3	5	17
Gonococcal infection ⁸	4	74	88	118	22	2	0	73	381	391	1,213	1,194
Haemolytic uraemic syndrome ⁹	NN	1	NN	1	0	0	NN	0	2	1	7	2
Hepatitis A	3	49	6	42	9	1	18	21	149	266	487	842
Hepatitis B incident	3	3	4	2	3	1	0	2	18	19	77	68
Hepatitis B unspecified ¹⁰	3	136	0	65	0	2	157	11	374	614	1,489	1,797
Hepatitis C incident	12	0	0	-	3	0	0	8	23	33	81	64
Hepatitis C unspecified ^{5,10}	23	505	39	254	77	35	362	69	1,364	1,965	4,875	5,576
Hepatitis (NEC) ¹¹	0	0	0	0	0	0	0	NN	0	2	1	6
Hydatid infection	0	0	0	0	0	0	2	0	2	1	7	9
Legionellosis	0	2	0	3	4	1	20	4	34	19	93	55
Leprosy	0	0	0	0	0	0	0	0	0	0	0	1
Leptospirosis	0	1	1	24	0	0	4	0	30	12	97	38
Listeriosis	0	2	0	0	0	0	2	0	4	7	14	20
Malaria	3	12	2	31	2	0	3	0	53	40	221	162
Meningococcal infection	0	17	0	6	0	0	5	6	34	11	96	47
Ornithosis	0	NN	0	0	0	0	2	0	2	1	16	6
Q Fever	0	11	0	33	0	0	1	1	46	37	127	125
Ross River virus infection	1	161	8	479	4	11	24	23	711	580	1,870	1,104
Salmonellosis (NEC)	6	127	46	296	482	32	177	58	1,224	800	3,019	2,591
Shigellosis ⁶	1	-	15	18	12	0	17	10	73	61	178	180
SLTEC, VTEC ¹²	NN	0	NN	NN	3	0	NN	NN	3	1	10	4
Syphilis ¹³	1	27	41	72	1	1	0	0	143	116	454	321
TTP ¹⁴	0	0	0	0	0	0	0	0	0	0	0	0
Tuberculosis	1	50	1	8	0	2	31	1	94	94	337	320
Typhoid ¹⁵	0	3	0	0	2	0	2	1	8	9	21	35
Yersiniosis (NEC) ⁶	1	-	0	13	4	0	0	0	18	12	59	84

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, botulism, plague, rabies, yellow fever, or other viral haemorrhagic fevers.

5. Data from Victoria for 1998 are incomplete.

6. Not reported for NSW because it is only notifiable as 'foodborne disease' or 'gastroenteritis in an institution'.

7. WA: genital only.

8. NT, Qld, SA and Vic: includes gonococcal neonatal ophthalmia.

9. Nationally reportable from August 1998.

10. Unspecified numbers should be interpreted with some caution as the magnitude may be a reflection of the numbers of testings being carried out.

11. Includes hepatitis D and E.

12. Infections with *Shiga*-like toxin (verotoxin) producing *E. Coli* (SLTEC/VTEC) became nationally reportable in August 1998.

13. Includes congenital syphilis.

14. Thrombotic thrombocytopenic purpura became nationally reportable in August 1998.

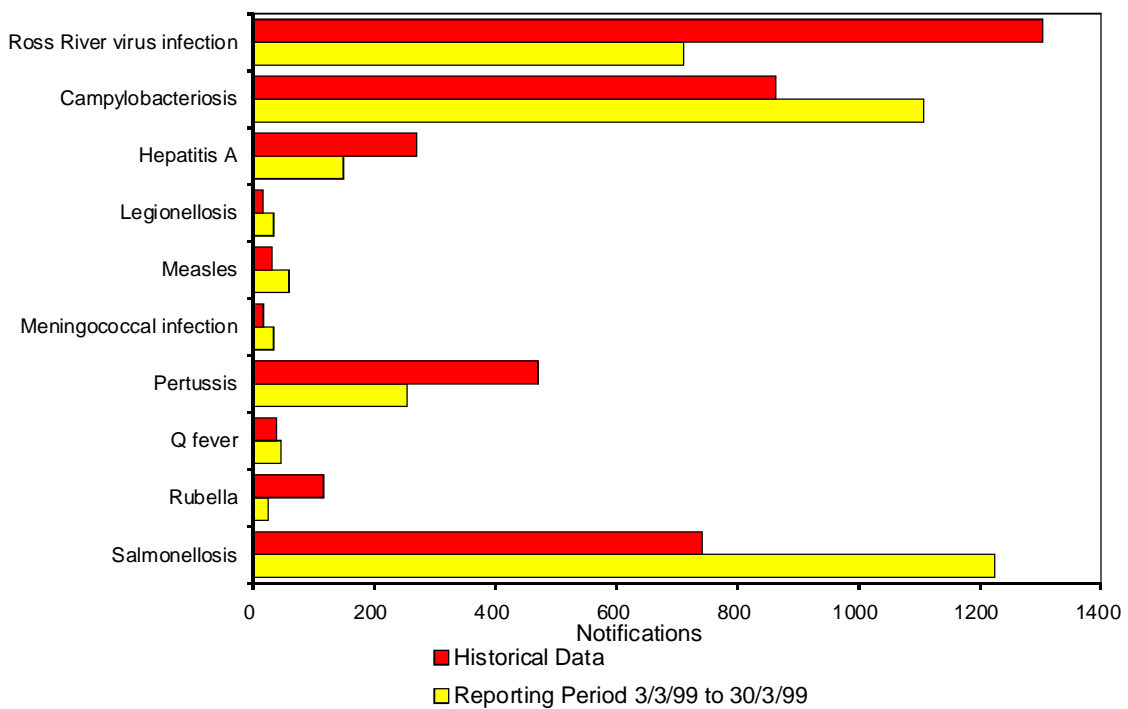
15. NSW, Qld: includes paratyphoid.

NN Not Notifiable.

NEC Not Elsewhere Classified.

- Elsewhere Classified.

Figure 1. 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 3. Virology and serology laboratory reports by contributing laboratories for the reporting period 25 February to 24 March 1999

State or Territory	Laboratory	Reports
New South Wales	Institute of Clinical Pathology & Medical Research, Westmead	22
	New Children's Hospital, Westmead	114
	Royal Prince Alfred Hospital, Camperdown	41
	South West Area Pathology Service, Liverpool	57
Queensland	Queensland Medical Laboratory, West End	473
	Townsville General Hospital	20
Tasmania	Northern Tasmanian Pathology Service, Launceston	6
	Royal Hobart Hospital, Hobart	10
Victoria	Monash Medical Centre, Melbourne	29
	Royal Children's Hospital, Melbourne	76
	Victorian Infectious Diseases Reference Laboratory, Fairfield	131
Western Australia	PathCentre Virology, Perth	525
	Princess Margaret Hospital, Perth	38
TOTAL		1,542

Table 4. Virology and serology laboratory reports by State or Territory¹ for the reporting period 25 February to 24 March 1999, and total reports for the year

	State or Territory ¹								Total this period	Total reported in <i>CDI</i> in 1999
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA		
Measles, mumps, rubella										
Measles virus		1					35	2	38	48
Mumps virus								7	7	16
Rubella virus			1	1		1	1	1	5	21
Hepatitis viruses										
Hepatitis A virus			1	4		2		16	23	111
Arboviruses										
Ross River virus		7	5	196			5	42	255	569
Barmah Forest virus		1	1	6				4	12	34
Dengue type 3				1					1	23
Dengue not typed						1		5	6	17
Kunjin virus								1	1	1
Flavivirus (unspecified)				3					3	11
Adenoviruses										
Adenovirus type 2							1		1	6
Adenovirus type 3							4		4	13
Adenovirus type 4							2		2	3
Adenovirus type 5							1		1	1
Adenovirus type 7							1		1	1
Adenovirus type 10							1		1	1
Adenovirus type 19	1								1	1
Adenovirus type 37							2		2	4
Adenovirus type 40								5	5	18
Adenovirus not typed/pending		38		1	1	1	8	17	66	361
Herpes viruses										
Herpes virus type 6								2	2	2
Cytomegalovirus		7		19			25	11	62	311
Varicella-zoster virus		14		25			8	48	95	520
Epstein-Barr virus		5	2	51		1	13	36	108	729
Other DNA viruses										
Molluscum contagiosum								1	1	3
Parvovirus				3		1	14	15	33	114
Picornavirus family										
Coxsackievirus B5							1		1	2
Echovirus type 2							1		1	1
Echovirus type 5		1							1	2
Echovirus type 6		6							6	9
Echovirus type 9		1							1	17
Echovirus type 11	1	5							6	25
Echovirus type 22		5							5	11
Echovirus type 30		4							4	18
Poliovirus type 1 (uncharacterised)							2		2	6
Poliovirus type 1 (vaccine strain)						1			1	1
Rhinovirus (all types)		16						15	31	113
Enterovirus not typed/pending		1	3				6	69	79	227

Table 4. Virology and serology laboratory reports by State or Territory¹ for the reporting period 25 February to 24 March 1999, and total reports for the year (continued)

	State or Territory ¹								Total this period	Total reported in <i>CDI</i> in 1999
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA		
Ortho/paramyxoviruses										
Influenza A virus		8		1			5	11	25	194
Influenza B virus								8	8	28
Parainfluenza virus type 2								1	1	8
Parainfluenza virus type 3		32		1	1		1	15	50	248
Respiratory syncytial virus	1	38	1	24		2	4	40	110	273
Other RNA viruses										
HTLV-1				1					1	4
Rotavirus		10					4	49	63	286
Norwalk agent							9		9	29
Other										
<i>Chlamydia trachomatis</i> - A-K							1		1	1
<i>Chlamydia trachomatis</i> not typed		31	18	75		7	2	109	242	798
<i>Chlamydia psittaci</i>							2	1	3	20
<i>Chlamydia</i> spp typing pending								1	1	1
<i>Chlamydia</i> species				1					1	3
<i>Mycoplasma pneumoniae</i>		12	1	15			35	7	70	382
<i>Coxiella burnetii</i> (Q fever)		1		12			2	2	17	48
<i>Rickettsia</i> spp - other								1	1	3
<i>Bordetella pertussis</i>		4		13			35	4	56	171
<i>Legionella pneumophila</i>								1	1	5
<i>Legionella longbeachae</i>								3	3	20
<i>Cryptococcus</i> species		1							1	1
<i>Leptospira hardjo</i>								1	1	2
TOTAL	3	250	33	453	2	17	233	551	1,542	5,899

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

Table 5. Australian Sentinel Practice Research Network reports, weeks 9 to 12, 1999

Week number	9		10		11		12	
Week ending on	7 March 1999		14 March 1999		21 March 1999		28 March 1999	
Doctors reporting	50		47		56		54	
Total encounters	6401		6574		7427		7669	
Condition	Reports	Rate per 1,000 encounters	Reports	Rate per 1,000 encounters	Reports	Rate per 1,000 encounters	Reports	Rate per 1,000 encounters
Influenza	18	2.8	27	4.1	10	1.3	24	3.1
Rubella	2	0.3	0	0.0	0	0.0	2	0.3
Measles	0	0.0	0	0.0	0	0.0	2	0.3
Chickenpox	8	1.2	5	0.8	9	1.2	11	1.4
New diagnosis of asthma	5	0.8	11	1.7	10	1.3	5	0.7
Post operative wound sepsis	6	0.9	13	2.0	12	1.6	12	1.6
Gastroenteritis	62	9.7	65	9.9	67	9.0	60	7.8

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

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/ncherc>.

HIV and AIDS diagnoses and deaths following AIDS reported for 1 to 30 November 1998, as reported to 28 February 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 30 November 1998, by sex and State or Territory of diagnosis

										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	2	7	0	1	2	0	1	0	13	8	87	73
	Male	3	32	1	5	5	0	18	1	65	52	588	651
	Sex not reported	0	1	0	0	0	0	0	0	1	0	8	12
	Total ¹	5	40	1	6	7	0	19	1	79	60	683	737
AIDS diagnoses	Female	0	1	0	0	0	0	0	0	1	0	13	24
	Male	0	3	0	2	1	0	1	0	7	26	216	295
	Total ¹	0	4	0	2	1	0	1	0	8	26	229	319
AIDS deaths	Female	0	0	0	0	0	0	0	0	0	2	8	14
	Male	0	3	0	2	0	0	2	0	7	10	106	201
	Total ¹	0	3	0	2	0	0	2	0	7	12	114	216

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 28 February 1999, by sex and State or Territory

		State or Territory							Australia	
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
HIV diagnoses	Female	23	579	8	132	57	4	199	100	1,102
	Male	187	10,488	102	1,859	647	77	3,738	869	17,967
	Sex not reported	0	259	0	0	0	0	24	0	283
	Total ¹	210	11,345	110	1,998	704	81	3,974	972	19,394
AIDS diagnoses	Female	8	168	0	45	20	2	65	25	333
	Male	83	4,498	32	780	326	43	1,563	343	7,668
	Total ¹	91	4,677	32	827	346	45	1,635	370	8,023
AIDS deaths	Female	2	113	0	30	15	2	47	16	225
	Male	62	3,082	24	540	224	28	1,228	244	5,432
	Total ¹	64	3,202	24	572	239	30	1,281	261	5,673

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

Childhood Immunisation Coverage

Tables 8 and 9 provide the latest quarterly report on childhood immunisation coverage from the Australian Childhood Immunisation Register (ACIR).

The data show the percentage of children fully immunised at age 12 months for the cohort born between

1 October and 31 December 1997 and at 24 months of age for the cohort born between 1 October and 31 December 1996, according to the Australian Standard Vaccination Schedule.

A full description of the methodology used can be found in *CDI 1998;22:36-37*.

Table 8. Percentage of children immunised at 1 year of age, preliminary results by disease and State for the birth cohort 1 October to 31 December 1997; assessment date 31 December 1998

Vaccine	State or Territory							Australia	
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Total number of children	1,062	22,009	823	11,700	4,594	1,547	15,520	6,067	63,322
Diphtheria, Tetanus, Pertussis (%)	88.1	84.2	80.2	88.6	88.2	87.8	87.2	85.5	86.3
Poliomyelitis (%)	88.0	83.7	79.3	87.4	88.1	87.9	87.3	85.4	85.9
Haemophilus influenzae type b (%)	87.9	84.3	81.7	88.9	88.3	87.8	87.5	85.3	86.4
Fully Immunised (%)	87.7	82.7	74.6	86.5	87.5	87.2	86.5	84.4	84.9
Change in fully immunised since last quarter (%)	-0.9	+0.2	-0.7	+0.6	+0.9	+2.1	+0.5	+0.1	+0.4

Table 9. Proportion of children immunised at 2 years of age, preliminary results by disease and State for the birth cohort 1 October to 31 December 1996; assessment date 31 December 1998¹

Vaccine	State or Territory								Australia
	ACT	NSW	NT ¹	Qld	SA	Tas	Vic	WA	
Total number of children	1,113	22,251	890	11,824	4,671	1,654	16,145	6,318	64,866
Diphtheria, Tetanus, Pertussis (%)	83.4	79.2	66.1	84.3	80.9	81.9	81.8	79.4	80.9
Poliomyelitis (%)	88.4	83.2	70.9	89.7	85.5	88.5	87.6	82.5	85.6
Haemophilus influenzae type b (%)	82.3	79.2	69.7	84.2	80.8	81.9	82.1	79.4	81.0
Measles, Mumps, Rubella (%)	88.1	84.3	74.7	90.5	85.4	87.2	87.8	84.3	86.4
Fully Immunised (%)²	77.7	66.9	54.6	77.5	68.1	71.6	72.0	66.0	70.3
Change in fully immunised since last quarter (%)	+2.3	+0.1	-0.2	+1.6	+0.9	+3.9	+2.0	+4.4	+1.5

1. The 12 months age data for this cohort was published in *CDI* 1998;22:170.

2. These data relating to 2 year old children should be considered as preliminary. The proportions shown as "fully immunised" appear low when compared with the proportions for individual vaccines. This is at least partly due to poor identification of children on immunisation encounter forms.

Acknowledgment: These figures were provided by the Health Insurance Commission (HIC), to specifications provided by the Commonwealth Department of Health and Aged Care. For further information on these figures or data on the Australian Childhood Immunisation Register please contact the Immunisation Section of the HIC: Telephone 02 6124 6607.