

# 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*

Notifications of all vaccine preventable diseases are lower in this period than for the same period last year. In particular pertussis notifications are lower than those seen in the epidemic of late 1997 and early 1998. A rise in pertussis notifications is seen regularly in spring and, after a small rise in that period of 1998, notifications have fallen to levels which are the lowest since 1992 for this time of the year.

### *Arboviruses*

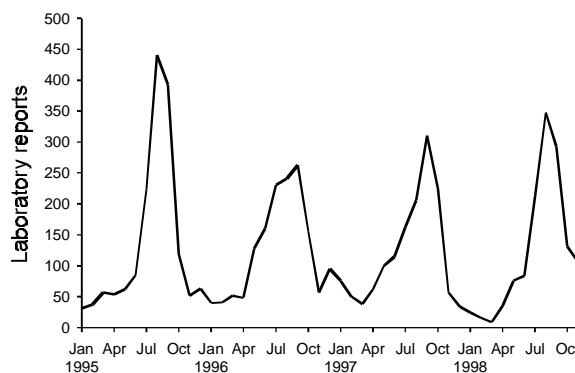
Notifications for Dengue continue to be high with most notifications coming from Queensland. The male to female ratio is 2.25:1.

Ross River virus notifications are high as can be expected in the warmer months of the year, although this period's notifications are considerably higher than for the same period last year. The highest numbers of notifications are in NSW and Qld, the male to female ratio is 1:1.1 and most cases (77%) are in persons in the 20 to 59 year age groups.

### *Rotavirus*

The number of reports of rotavirus continued to decline after peaking in August 1998 (Figure 1); this is characteristic of the annual trend. There were 106 reports received this period. New South Wales received the highest number of laboratory reports (52) followed by South Australia (47). The male to female ratio was 1:1.3, with 86 per cent of reports for children in the 1-4 year age group.

**Figure 1. Rotavirus laboratory reports, 1995 to 1998, by month of specimen collection**



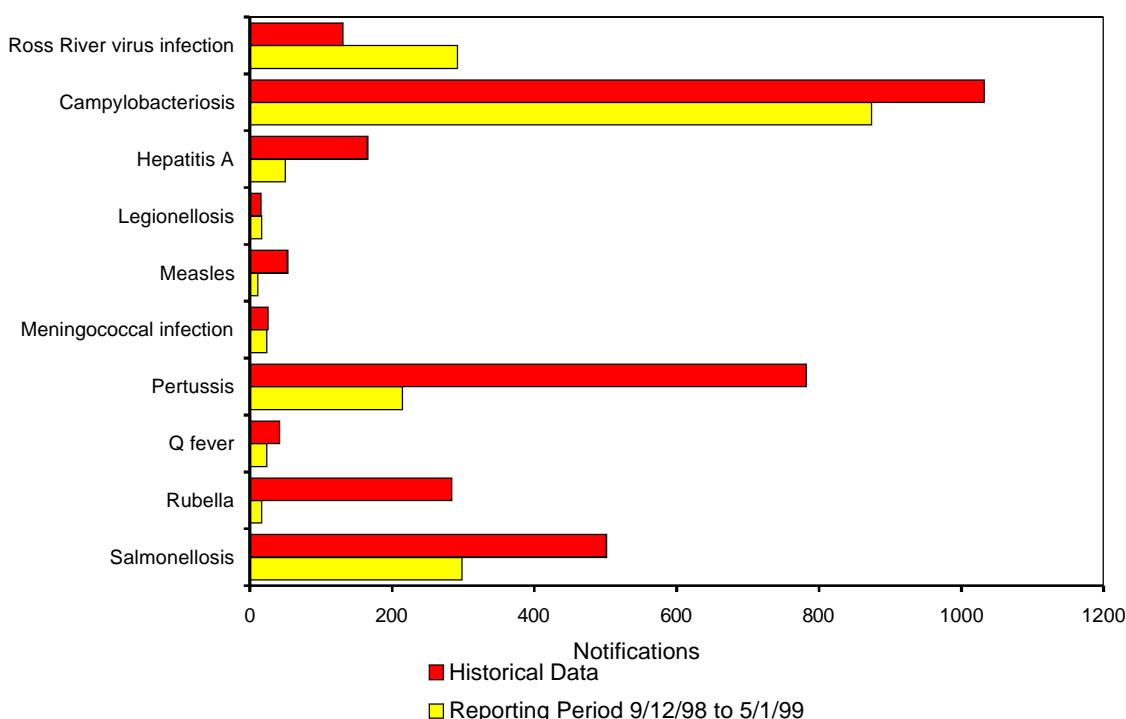
# Tables

There were 4,122 notifications to the National Notifiable Diseases Surveillance System (NNDSS) in the four week period, 9 December 1998 to 5 January 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 2).

There were 1,307 reports received by the CDI Virology and Serology Laboratory Reporting Scheme (LabVISE) in the four week period, 3 to 30 December 1998 (Tables 3 and 4).

The Australian Sentinel Practice Research Network (ASPREN) data for weeks 44 to 47, ending 29 November 1998, are included in this issue of *CDI* (Table 5).

**Figure 2. Selected National Notifiable Diseases Surveillance System reports, and historical data<sup>1</sup>**



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 9 December 1998 to 5 January 1999**

Disease <sup>1,2</sup>	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	This	This	Full year 1998	Full year 1997
									period 1998/99	period 1997/99		
Diphtheria	0	0	0	0	0	0	0	0	0	0	0	0
<i>H. influenzae</i> type b infection	0	0	0	0	0	0	0	0	0	7	33	53
Measles <sup>3</sup>	3	1	0	1	0	1	3	2	11	67	225	852
Mumps	0	1	0	2	0	0	4	4	11	9	176	191
Pertussis	20	58	0	71	20	0	41	5	215	1,237	5,696	10,668
Rubella <sup>4</sup>	0	3	1	4	0	0	6	3	17	56	765	1,446
Tetanus	0	0	0	0	0	0	0	0	0	1	4	8

NN. Not Notifiable

1. No notification of poliomyelitis has been received 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. The total number of measles notifications for 1998 has been revised downwards because of a reclassification of 79 cases previously notified as measles by Victoria. These cases have been reclassified as not measles following results of serology.
4. Includes congenital rubella.

**Table 2. Notifications of diseases received by State and Territory health authorities in the period 9 December 1998 to 5 January 1999**

Disease <sup>1,2,3,4</sup>	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	This period 1998/99	This period 1997/98	Full year 1998 <sup>5</sup>	Full year 1997
Arbovirus infection (NEC)	0	0	0	5	0	0	10	0	15	3	84	18
Barmah Forest virus infection	0	9	0	14	0	0	1	0	24	29	555	704
Brucellosis	0	0	0	2	0	0	0	0	2	4	45	41
Campylobacteriosis <sup>6</sup>	27	-	8	221	234	25	265	94	874	875	13,137	11,848
Chlamydial infection (NEC) <sup>7</sup>	4	NN	14	223	65	9	3	95	500	534	8,797	9,126
Chancroid	0	0	0	0	0	0	0	0	0	0	1	1
Cholera	0	0	0	0	0	0	0	0	0	0	5	3
Dengue	0	2	1	51	1	0	0	1	56	5	558	210
Donovanosis	0	NN	0	0	NN	0	0	0	0	9	36	45
Gonococcal infection <sup>8</sup>	4	80	31	87	15	0	1	54	272	367	5,274	4,689
Haemolytic uraemic syndrome <sup>9</sup>	NN	0	NN	0	1	0	NN	0	1	1	11	4
Hepatitis A	0	24	0	12	3	0	4	7	50	174	2,420	3,076
Hepatitis B incident	0	1	0	0	0	0	4	0	5	9	228	247
Hepatitis B unspecified <sup>10</sup>	8	98	0	52	0	0	149	12	319	335	6,716	7,114
Hepatitis C incident <sup>11</sup>	1	1	0	-	5	0	1	6	14	9	341	81
Hepatitis C unspecified <sup>5,10</sup>	22	305	16	173	66	28	160	65	835	1,246	19,599	19,689
Hepatitis (NEC)	0	0	0	0	0	0	0	NN	0	1	2	6
Hydatid infection	0	0	0	0	0	0	4	0	4	2	46	61
Legionellosis	1	0	0	0	8	0	7	1	17	16	260	161
Leprosy	0	0	0	0	1	0	0	0	1	3	2	14
Leptospirosis	0	3	0	8	0	0	2	0	13	9	190	126
Listeriosis	0	1	0	0	0	0	3	1	5	3	54	71
Malaria	2	9	0	7	1	3	8	2	32	39	688	746
Meningococcal infection	0	6	0	5	3	0	6	4	24	34	421	499
Ornithosis	0	NN	0	0	0	0	6	0	6	3	56	46
Q Fever	0	7	0	12	0	0	4	1	24	35	578	593
Ross River virus infection	0	104	11	77	23	0	46	31	292	107	3,074	6,683
Salmonellosis (NEC)	3	0	26	111	19	9	85	45	298	389	5,895	7,004
Shigellosis <sup>6</sup>	1	-	4	6	2	0	1	11	25	43	604	799
SLTEC, VTEC <sup>12</sup>	NN	0	NN	NN	2	0	NN	NN	2	3	16	20
Syphilis <sup>13</sup>	0	24	4	73	0	0	0	4	105	91	1,570	1,293
TTP <sup>14</sup>	0	0	0	0	0	0	0	0	0	0	1	0
Tuberculosis	2	9	0	4	6	1	12	5	39	79	829	1,008
Typhoid <sup>15</sup>	0	0	0	1	0	0	2	0	3	6	72	77
Yersiniosis (NEC) <sup>6</sup>	0	-	0	6	4	1	0	0	11	10	208	245

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

- Nationally reportable from August 1998.
- Unspecified numbers should be interpreted with some caution as the magnitude may be a reflection of the numbers of tests being carried out.
- Includes hepatitis D and E.
- Infections with *Shiga*-like toxin (verotoxin) producing *E. Coli* (SLTEC/VTEC) became nationally reportable in August 1998.
- Includes congenital syphilis.
- Thrombotic thrombocytopenic purpura became nationally reportable in August 1998.
- NSW, Qld, Vic: includes paratyphoid.
- NN Not Notifiable.
- NEC Not Elsewhere Classified.
- Elsewhere Classified.
- NA Not applicable, as reporting for this condition did not commence until 1998.

**Table 3. Virology and serology laboratory reports by State or Territory<sup>1</sup> for the reporting period 3 to 30 December 1998, and total reports for the year**

	State or Territory <sup>1</sup>								Total this period	Total reported in CD/ in 1999	
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA			
<b>Measles, mumps, rubella</b>											
Measles virus		1			1		1			3	3
Rubella virus				1	3			1		5	5
<b>Hepatitis viruses</b>											
Hepatitis A virus			3		12			7		22	22
<b>Arboviruses</b>											
Ross River virus		1	6		19	1	1	20		48	48
Barmah Forest virus			2					3		5	5
Flavivirus (unspecified)							1			1	1
<b>Adenoviruses</b>											
Adenovirus type 1		1			5		3			9	9
Adenovirus type 2					1		1			2	2
Adenovirus type 3					3		4			7	7
Adenovirus type 4					1					1	1
Adenovirus type 6					3					3	3
Adenovirus type 40								2		2	2
Adenovirus not typed/pending		44			40	1		17		102	102
<b>Herpes viruses</b>											
Cytomegalovirus		2			22		9	2		35	35
Varicella-zoster virus	2	14			46	2	7	22		93	93
Epstein-Barr virus			6		152	1	10	48		217	217
<b>Other DNA viruses</b>											
Contagious pustular dermatitis (Orf virus)								1		1	1
Parvovirus		2			6		4	6		18	18
<b>Picornavirus family</b>											
Coxsackievirus B4					2					2	2
Coxsackievirus B5							1			1	1
Echovirus type 4		2								2	2
Echovirus type 6		2								2	2
Echovirus type 9	1	8			1					10	10
Echovirus type 11	1	12								13	13
Echovirus type 14		1								1	1
Echovirus type 17		1								1	1
Echovirus type 18		7								7	7
Echovirus type 22		6								6	6
Echovirus type 30		10								10	10
Poliovirus type 1 (uncharacterised)		1			1					2	2
Poliovirus type 2 (uncharacterised)		5			1					6	6
Poliovirus type 3 (uncharacterised)		2								2	2
Rhinovirus (all types)	1	28			7		2	5		43	43
Enterovirus not typed/pending		7	2				3	23		35	35
<b>Ortho/paramyxoviruses</b>											
Influenza A virus		54			39		1	1		95	95
Influenza B virus		1			5					6	6
Parainfluenza virus type 1					4					4	4
Parainfluenza virus type 3	1	12			41		3	5		62	62
Respiratory syncytial virus		4			42	1		10		57	57

**Table 3. Virology and serology laboratory reports by State or Territory<sup>1</sup> for the reporting period 3 to 30 December 1998, and total reports for the year (continued)**

	State or Territory <sup>1</sup>								Total this period	Total reported in <i>CDI</i> in 1999
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA		
<b>Other RNA viruses</b>										
HTLV-1								1	1	1
Rotavirus		52		1	47	2	1	3	106	106
Norwalk agent							1		1	1
Small virus (like) particle								1	1	1
<b>Other</b>										
<i>Chlamydia trachomatis</i> not typed		12	1		70	2		39	124	124
<i>Chlamydia psittaci</i>							3		3	3
<i>Mycoplasma pneumoniae</i>		3			65		24	4	96	96
<i>Mycoplasma hominis</i>		1							1	1
<i>Coxiella burnetii</i> (Q fever)					1		1	1	3	3
<i>Salmonella</i> species								1	1	1
<i>Bordetella pertussis</i>		4					13	2	19	19
<i>Legionella pneumophila</i>					1				1	1
<i>Legionella longbeachae</i>					7			2	9	9
<b>TOTAL</b>	<b>6</b>	<b>300</b>	<b>20</b>	<b>2</b>	<b>648</b>	<b>10</b>	<b>94</b>	<b>227</b>	<b>1,307</b>	<b>1,307</b>

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

**Table 4. Virology and serology laboratory reports by contributing laboratories for the reporting period 3 to 30 December 1998**

State or Territory	Laboratory	Reports
New South Wales	Institute of Clinical Pathology & Medical Research, Westmead	230
	New Children's Hospital, Westmead	45
	Royal Prince Alfred Hospital, Camperdown	30
South Australia	Institute of Medical and Veterinary Science, Adelaide	648
Tasmania	Northern Tasmanian Pathology Service, Launceston	6
	Royal Hobart Hospital, Hobart	4
Victoria	Royal Children's Hospital, Melbourne	46
	Victorian Infectious Diseases Reference Laboratory, Fairfield	50
Western Australia	PathCentre Virology, Perth	158
	Western Diagnostic Pathology	90
<b>TOTAL</b>		<b>1,307</b>

**Table 5. Australian Sentinel Practice Research Network reports, weeks 44 to 47, 1998**

Week number	44		45		46		47	
Week ending on	8 November 1998		15 November 1998		22 November 1998		29 November 1998	
Doctors reporting	53		57		58		53	
Total encounters	6560		7401		6854		6546	
Condition	Rate per 1,000		Rate per 1,000		Rate per 1,000		Rate per 1,000	
	Reports	encounters	Reports	encounters	Reports	encounters	Reports	encounters
Influenza	17	2.6	9	1.2	16	2.3	14	2.1
Rubella	2	0.3	3	0.4	1	0.1	0	0.0
Measles	0	0.0	0	0.0	0	0.0	0	0.0
Chickenpox	13	2.0	13	1.8	15	2.2	14	2.1
Pertussis	0	0.0	0	0.0	0	0.0	0	0.0
HIV testing (patient initiated)	7	1.1	10	1.4	12	1.8	10	1.5
HIV testing (doctor initiated)	2	0.3	7	0.9	3	0.4	0	0.0
Td (ADT) vaccine	41	6.3	51	6.9	39	5.7	45	6.9
Pertussis vaccination	43	6.6	56	7.6	54	7.9	36	5.5
Reaction to pertussis vaccine	1	0.2	1	0.1	1	0.1	2	0.3
Ross River virus infection	1	0.2	0	0.0	1	0.1	2	0.3
Gastroenteritis	85	13.0	98	13.2	103	15.0	86	13.1

Correction: This table has been reprinted as the columns were misaligned in *CDI* 1998;22:13  
 No Australian Sentinel Practice Research Network report is available for the current period.

*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 1998;22:4-5.*

*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 1998;22:8.*

*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 1998. CDI reports the consultation rates for all of these. For further information, including case definitions, see CDI 1998;22:5-6.*

# Additional Reports

## *Serious Adverse Events Following Vaccination Surveillance Scheme*

*The Serious Adverse Events Following Vaccination Surveillance Scheme is a national surveillance scheme which monitors the serious adverse events that occur rarely following vaccination. More details of the scheme were published in CDI 1997:21;8.*

*Acceptance of a report does not imply a causal relationship between administration of the vaccine and the medical outcome, or that the report has been verified as to the accuracy of its contents.*

*It is estimated that 250,000 doses of vaccines are administered every month to Australian children under the age of six years.*

### **Results for the reporting period 2 September 1998 to 31 January 1999.**

There were 320 reports of serious adverse events following vaccination for this reporting period (Table 6). Onset dates were from 1995 to 1998, the majority (92%) being in 1998. Reports were received from Australian Capital Territory (25), New South Wales (38), Northern Territory (9), Queensland (63), South Australia (11), Victoria (43) and Western Australia (131). No reports were

received from Tasmania for this period. The majority of reports received from Western Australia were from 1998 (88%).

The most frequently reported events following vaccination were persistent screaming (170 cases, 53%), followed by other reactions (56 cases, 17.5%), temperature of 40.5° C or more (34 cases, 10.6%) and hypotonic/hyporesponsive episodes (38 cases, 11.9%). One death within 30 days of immunisation was reported from Victoria. The cause of death was unclear according to the coroner's report.

Of the 38 reactions associated with MMR vaccine, 37 were since August 1998 when the measles immunisation campaign was initiated. The reports associated with the measles campaign will be published in CDI at a later date.

Forty of the 320 cases were hospitalised. There were 6 cases that had not recovered at the time of reporting while 303 cases had recovered. There was incomplete information on follow-up on 11 cases.

Two hundred and fifty (78%) cases were associated with Diphtheria-Tetanus-Pertussis (DTP), vaccine either alone or in combination with other vaccines. Of these, 60 per cent of reports were associated with the first dose of DTP and 28 per cent with the second dose.

**Table 6. Adverse events following vaccination reported in the period 2 September 1998 to 31 January 1999**

Event	Vaccines									Reporting States or Territories <sup>2</sup>	Total reports for this period <sup>2</sup>
	DTP	DTP/Hib	DTP/OPV/Hib	DTP/OPV/MMR	DTP/OPV	DTP/OPV/Hib/Hep B	MMR	Hep B	Other <sup>1</sup>		
Persistent screaming	82	2	73		2	4			6	ACT, NSW, Qld, Vic, WA	170
Hypotonic/hyporesponsive episode	10	2	21			2	1	1	1	ACT, NSW, Qld, Vic, WA	38
Temperature of 40.5°C or more	26		5			1	2			ACT, Qld, WA	34
Convulsions	1	1	3				4		2	ACT, NSW, Qld, SA, Vic, WA	12
Anaphylaxis			1				3			NSW, NT	4
Shock							1	1		NT, Vic	2
Death			1							Vic	1
Other	3	2	6	2			27	6	7	ACT, NSW, NT, Qld, SA, Vic, WA	56
Not stated											
<b>TOTAL</b>	<b>122</b>	<b>7</b>	<b>110</b>	<b>2</b>	<b>2</b>	<b>7</b>	<b>38</b>	<b>8</b>	<b>16</b>		<b>317<sup>3</sup></b>

1. Includes influenza, DTPa, CDT, OPV, Hepatitis B, pneumococcal, BCG and ADT vaccines and rabies immunoglobulin (HRIG).
2. Includes 1 event for each of the following vaccines: Hib/other (convulsions), OPV/Hib (persistent screaming), Hib, Hep/other, OPV (other).
3. 3 cases have missing events

## 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 1 to 31 August 1998, as reported to 30 November 1998, are included in this issue of *CDI* (Tables 7 and 8).

**Table 7. New diagnoses of HIV infection, new diagnoses of AIDS and deaths following AIDS occurring in the period 1 to 31 August 1998, by sex and State or Territory of diagnosis**

										Totals for Australia			
		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	This period 1998	This period 1997	Year to date 1998	Year to date 1997
HIV diagnoses	Female	0	4	0	1	0	0	2	1	8	6	60	46
	Male	0	25	1	2	0	0	13	2	43	52	425	483
	Sex not reported	0	0	0	0	0	0	0	0	0	0	6	11
	Total <sup>1</sup>	0	29	1	3	0	0	15	3	51	58	491	541
AIDS diagnoses	Female	0	0	0	0	0	0	0	0	0	1	7	20
	Male	0	4	0	2	0	0	3	0	9	31	120	217
	Total <sup>1</sup>	0	4	0	2	0	0	3	0	9	32	127	237
AIDS deaths	Female	0	0	0	1	0	0	0	0	1	0	6	9
	Male	0	2	0	0	1	0	3	0	6	19	64	160
	Total <sup>1</sup>	0	2	0	1	1	0	3	0	7	19	70	170

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 August 1998, by sex and State or Territory**

		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Australia
HIV diagnoses	Female	22	563	7	131	54	4	197	95	1,073
	Male	183	10,396	99	1,841	637	77	3,699	866	17,798
	Sex not reported	0	259	0	0	0	0	24	0	283
	Total <sup>1</sup>	205	11,237	106	1,978	691	81	3,933	964	19,195
AIDS diagnoses	Female	8	160	0	45	20	2	64	23	322
	Male	82	4,392	32	768	323	41	1,554	337	7,529
	Total <sup>1</sup>	90	4,563	32	815	343	43	1,625	362	7,873
AIDS deaths	Female	2	113	0	29	15	2	46	16	223
	Male	62	3,063	23	533	220	27	1,216	241	5,385
	Total <sup>1</sup>	64	3,183	23	564	235	29	1,268	258	5,624

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

## Childhood Immunisation Coverage

Tables 9 and 10 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 July and 30 September 1997 and at 24 months of age for the

cohort born between 1 July and 30 September 1996, according to the Australian Standard Vaccination Schedule (Tables 9 and 10).

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

**Table 9. Percentage of children immunised at 1 year of age, preliminary results by disease and State for the birth cohort 1 July to 30 September 1997; assessment date 30 September 1998.**

Vaccine	State or Territory								Australia
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	
Total number of children	1,055	22,820	889	12,522	4,771	1,610	15,738	6,438	65,843
DTP (%)	89.1	84.5	80.1	88.3	87.5	85.8	86.9	85.4	86.1
OPV (%)	89.5	84.2	79.3	87.2	87.6	86.1	87.1	85.4	85.9
Hib (%)	89.0	83.8	83.2	88.6	87.5	85.8	86.8	85.4	86.0
<b>Fully Immunised (%)</b>	88.6	82.5	75.3	85.9	86.6	85.1	86.0	84.3	84.5
Change in fully immunised since last quarter (%)	+3.6	+0.2	-0.7	+0.1	+1.3	-1.1	-0.2	+1.1	+0.2

**Table 10. Proportion of children immunised at 2 years of age, preliminary results by disease and State for the birth cohort 1 July to 30 September 1996; assessment date 30 September 1998.<sup>1</sup>**

Vaccine	State or Territory								Australia
	ACT	NSW	NT <sup>1</sup>	Qld	SA	Tas	Vic	WA	
Total number of children	1,135	22,836	929	12,623	4,864	1,753	15,987	6,624	66,751
DTP (%)	82.2	79.3	66.3	84.0	80.6	78.7	80.4	77.6	80.2
OPV (%)	87.4	83.3	77.1	89.1	85.7	85.9	86.6	79.1	85.0
Hib (%)	80.4	79.4	71.6	84.0	80.8	79.2	80.7	77.9	80.4
MMR (%)	85.9	83.0	77.4	89.5	83.9	84.8	86.9	80.6	85.0
<b>Fully Immunised (%)<sup>2</sup></b>	75.4	66.8	54.8	75.9	67.2	67.7	70.0	61.6	68.8
Change in fully immunised since last quarter (%)	+5.7	+3.0	+4.1	+3.1	+1.6	+0.7	+2.3	+2.4	+2.7

1. The 12 months age data for this cohort was published in *CDI 1998;22:123*.

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 6203 6185.

## *Sentinel Chicken Surveillance Programme*

*Sentinel chicken flocks are used to monitor flavivirus activity in Australia. The main viruses of concern are Murray Valley encephalitis (MVE) and Kunjin which cause the potentially fatal disease Australian encephalitis in humans. Currently 26 flocks are maintained in the north of Western Australia, seven in the Northern Territory, nine in New South Wales and ten in Victoria. The flocks in Western Australia and the Northern Territory are tested year round but those in New South Wales and Victoria are tested only from November to March, during the main risk season.*

*Results are coordinated by the Arbovirus Laboratory in Perth and reported bimonthly. For more information see CDI 1998;22:7*

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### **NOVEMBER-DECEMBER 1998**

Sentinel chicken serology was carried out for 24 of the 27 flocks in Western Australia in November and December 1998. There were no seroconversions to flaviviruses recorded during this period.

Serum samples from 5 of the 7 Northern Territory sentinel chicken flocks were tested in our laboratory in October and November 1998. Samples from four flocks were tested in December 1998. There were no seroconversions to flaviviruses recorded during this period.

The sentinel chicken programme in Victoria commenced at the beginning of November 1998. There were no seroconversions to flaviviruses recorded in November or December 1998.

\*Details of the locations of all chicken flocks are given in *CDI 22(1): 7-8.(1998)*.