

# COMMUNICABLE DISEASES SURVEILLANCE

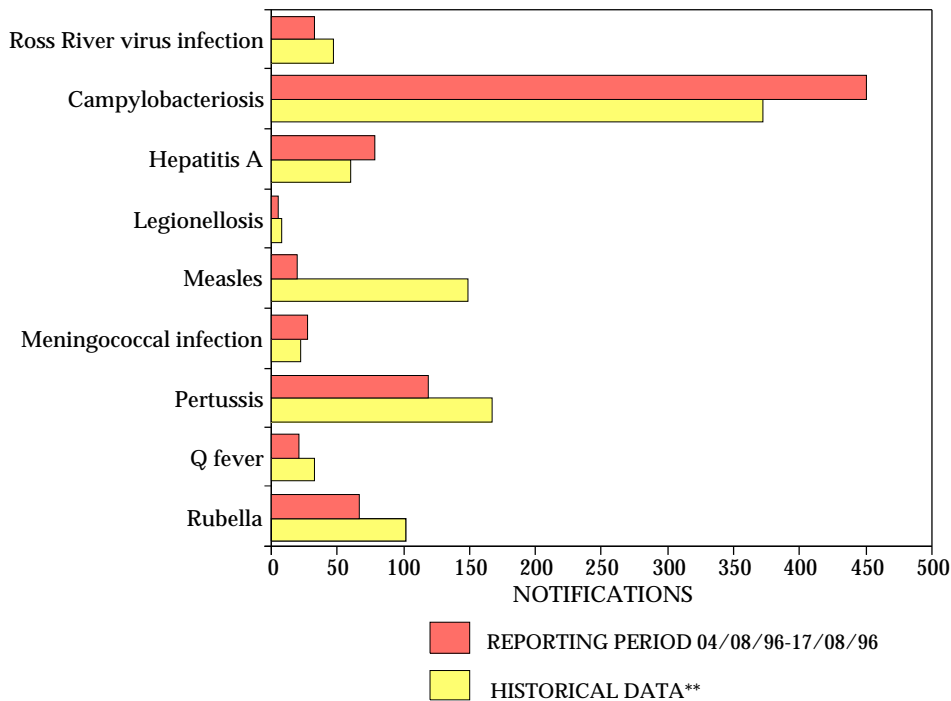
## National Notifiable Diseases Surveillance System

The NNDSS is conducted under the auspices of the Communicable Diseases Network Australia-New Zealand. The system coordinates the national surveillance of 41 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 legislation. De-identified core unit data are supplied fortnightly for collation, analysis and dissemination. For further information, see *CDI 1996;20:9-10*.

### Reporting period 4 to 17 August 1996

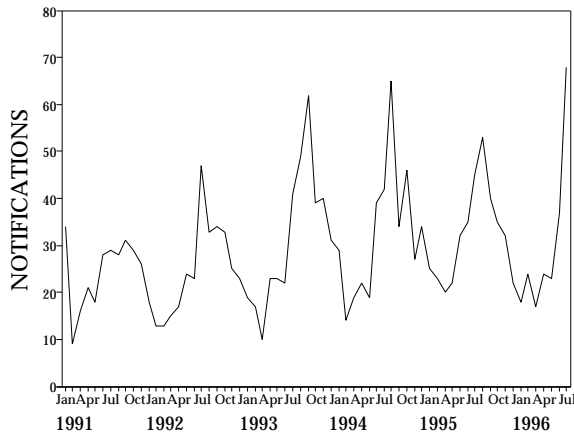
There were 1,831 notifications received for this two-week period (Tables 1, 2 and 3). The number of reports for selected diseases has been compared with average data for this period in the previous three years (Figure 1).

**Figure 1. 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 9 previous 2-week reporting periods: the corresponding periods of the last 3 years and the periods immediately preceding and following those.

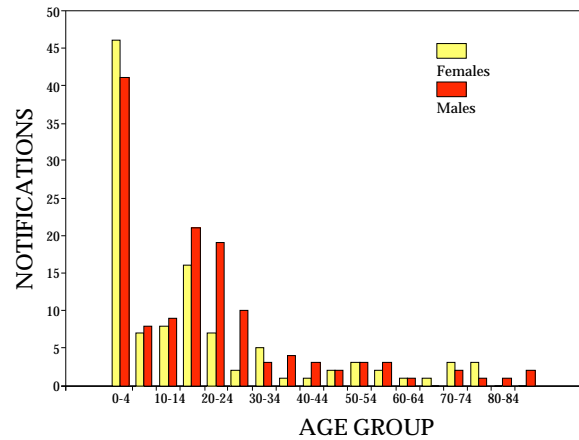
**Figure 2. Meningococcal infection notifications, 1991 to 1996, by month of onset**



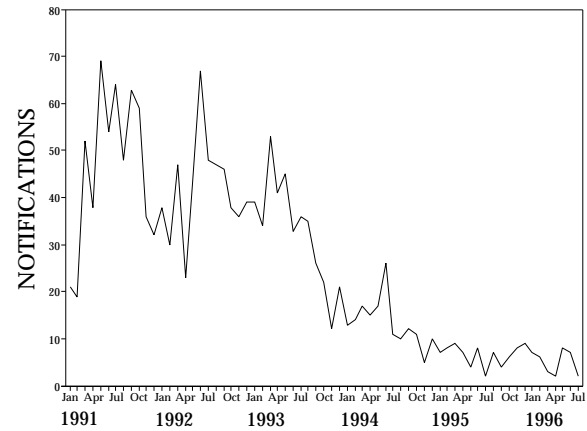
There were 27 notifications of **meningococcal infection** received for the current fortnight. Recent reports include 68 cases with onset in July, the highest monthly total for the past 6 years (Figure 2). During 1996, population rates of notification have been similar for all States and Territories, although recent reports have included higher numbers from New South Wales. The highest number of notifications for 1996 were for children under 5 years of age; a secondary peak was seen in the 15-19 years age group (Figure 3).

The number of notifications of ***Haemophilus influenzae* type b infection** have remained at low levels over the past two years (Figure 4), but have not yet declined to the extremely low levels seen in some other countries with immunisation programs.

**Figure 3. Meningococcal infection notifications, 1996, by age group and sex**



**Figure 4. *Haemophilus influenzae* type b infection notifications, 1991 to 1996, by month of onset**



**Table 1. Notifications of diseases preventable by vaccines<sup>1</sup> recommended by the NHMRC for routine childhood immunisation, received by State and Territory health authorities in the period 4 to 17 August 1996**

DISEASE	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	TOTALS FOR AUSTRALIA <sup>2</sup>			
									This period 1996	This period 1995	Year to date 1996	Year to date 1995
Diphtheria	0	0	0	0	0	0	0	0	0	0	0	0
<i>Haemophilus influenzae</i> b infection	0	0	0	1	0	0	0	0	1	2	40	49
Measles	1	5	0	4	0	3	5	1	19	32	300	972
Mumps	0	1	0	NN	1	2	2	0	6	3	76	96
Pertussis	0	28	0	25	19	3	42	1	118	134	1911	2636
Rubella	0	6	0	27	8	0	23	4	68	96	1593	1481
Tetanus	0	0	0	0	0	0	0	0	0	0	1	3

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.

**Table 2. Notifications of other diseases<sup>1</sup> received by State and Territory health authorities in the period 4 to 17 August 1996**

DISEASE	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	TOTALS FOR AUSTRALIA <sup>2</sup>			
									This period	This period	Year to date	Year to date
									1996	1995	1996	1995
Arbovirus Infection (NEC) <sup>3,4</sup>	0	0	1	0	0	0	3	0	4	9	139	350
Barmah Forest virus infection	0	4	-	10	0	0	-	-	14	9	614	333
Ross River virus infection	0	5	4	17	0	-	0	6	32	25	7296	2247
Dengue	0	0	1	0	0	-	0	0	1	4	27	21
Campylobacteriosis <sup>5</sup>	7	-	5	86	112	22	162	56	450	418	7431	6514
Chlamydial infection (NEC) <sup>6</sup>	6	NN	25	107	0	20	60	37	255	221	4658	3901
Donovanosis	0	NN	0	0	NN	0	0	0	0	2	32	51
Gonococcal infection <sup>7</sup>	1	14	38	37	0	0	15	42	147	106	2413	1900
Hepatitis A	14	31	4	16	0	0	13	0	78	29	1541	984
Hepatitis B incident	1	0	0	2	0	0	1	0	4	8	139	222
Hepatitis C incident	0	0	0	-	0	-	-	-	0	5	15	72
Hepatitis C unspecified	7	NN	9	107	NN	28	149	31	331	410	6005	5907
Hepatitis (NEC)	0	0	0	0	0	0	2	NN	2	1	16	16
Legionellosis	0	3	0	0	1	0	1	0	5	8	120	133
Leptospirosis	0	0	0	0	0	0	0	0	0	8	156	84
Listeriosis	0	0	0	1	0	0	1	0	2	1	38	43
Malaria	0	5	0	0	1	1	3	3	13	15	543	425
Meningococcal infection	0	10	0	8	1	3	4	1	27	17	241	214
Ornithosis	0	NN	0	0	0	0	2	0	2	3	58	84
Q fever	0	8	0	11	0	0	0	2	21	22	337	297
Salmonellosis (NEC)	0	25	10	38	4	5	24	16	122	145	4010	4329
Shigellosis <sup>5</sup>	0	-	3	5	2	0	4	6	20	22	453	534
Syphilis	0	27	6	8	0	1	0	0	42	72	943	1240
Tuberculosis	2	10	1	4	0	2	10	0	29	36	716	721
Typhoid <sup>8</sup>	0	0	0	1	1	0	1	0	3	2	56	44
Yersiniosis (NEC) <sup>5</sup>	0	-	0	6	2	0	2	0	10	8	165	230

- For HIV and AIDS, see *CDI* 20;17:377. For rarely notified diseases, see Table 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.
- Tas: includes Ross River virus and dengue.
- NT, Vic and WA: includes Barmah Forest virus.
- NSW: only as 'foodborne disease' or 'gastroenteritis in an institution'.
- WA: genital only.
- NT, Qld, SA and Vic: includes gonococcal neonatal ophthalmia.
- NSW, Vic: includes paratyphoid.
- NN Not Notifiable.  
NEC Not Elsewhere Classified.  
- Elsewhere Classified.

**Table 3. Notifications of rare<sup>1</sup> diseases received by State and Territory health authorities in the period 4 to 17 August 1996**

DISEASES	Total this period	Reporting States or Territories	Year to date 1996
Brucellosis	1	Vic	24
Chancroid	0		1
Cholera	0		4
Hydatid infection	4	ACT 1, NSW 2, Tas 1	29
Leprosy	0		8

- Fewer than 60 cases of each of these diseases were notified each year during the period 1988 to 1995.
- No notifications have been received during 1996 for the following rare diseases: botulism; lymphogranuloma venereum; plague; rabies; yellow fever; or other viral haemorrhagic fevers.

## National Influenza Surveillance

*Australian Sentinel Practice Research Network; Communicable Diseases Intelligence Virology and Serology Reporting Scheme Contributing Laboratories, New South Wales Department of Health; Victorian Department of Health; World Health Organisation Collaborating Centre for Influenza Reference and Research.*

*National Influenza Surveillance is conducted from May to September each year. Data are combined from a number of sources to provide an indication of influenza activity. Included are sentinel general practitioner surveillance, absenteeism data from a national employer, and laboratory data from LabVISE and the World Health Organization Collaborating Centre for Influenza Reference and Research. For further information, see CDI 1996;20:9-12.*

The absenteeism rate recorded by Australia Post has fallen in recent weeks (Figure 5). No new data are available from the sentinel general practitioner schemes this fortnight (Figure 6).

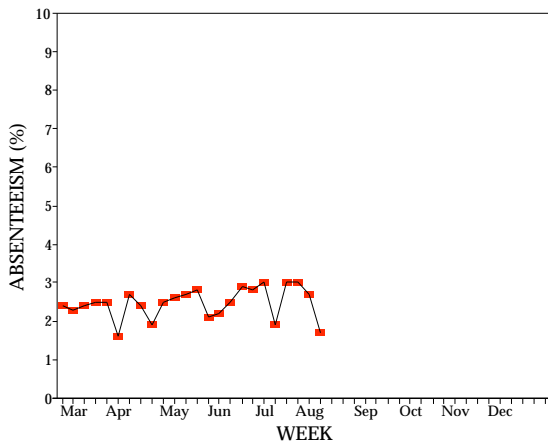
There were 298 laboratory reports of influenza A received this fortnight, diagnosed by virus isolation (150), antigen detection (65), four-fold rise in titre (11) and single high titre (72). In July, 690 reports were received, the highest

number for a single month ever recorded by this scheme (Figure 7). For the year to date, 1,121 reports of influenza A virus have been received, of which 50 were of the H<sub>3</sub>N<sub>2</sub> subtype. No reports of H<sub>1</sub>N<sub>1</sub> have been received by the LabVISE scheme this season. For 1996, 54% of reports of influenza A were received for children under the age of 5 years (Figure 8).

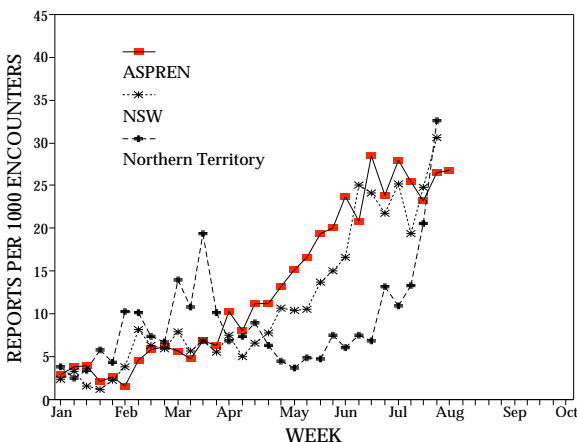
Few reports of influenza B continue to be received (Figure 9).

The World Health Organization Collaborating Centre for Influenza Reference and Research, Melbourne, has received 270 influenza isolates for characterisation from Australian laboratories so far this season. With the exception of three isolates (two strains of influenza B and one of influenza A H<sub>1</sub>N<sub>1</sub>), these were all influenza A H<sub>3</sub>N<sub>2</sub> subtype viruses. The majority of the isolates characterised to date were antigenically close to A/Johannesburg/33/94 or to A/Wuhan/359/95. However there was evidence of some antigenic heterogeneity among isolates. Some strains which showed reduced reactivity with the current reference serum panel are being further investigated.

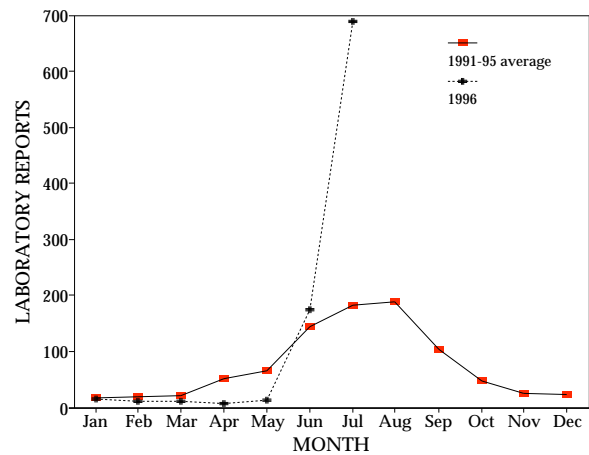
**Figure 5. Australia Post absenteeism, 1996, by week**



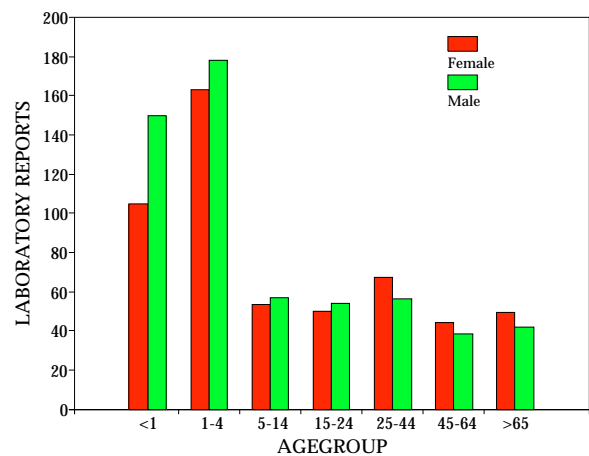
**Figure 6. Sentinel general practitioner influenza-like illness consultation reports per 1,000 encounters, 1996, by week**



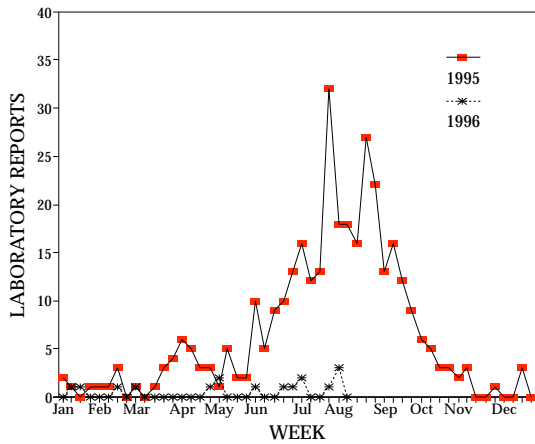
**Figure 7. Influenza A laboratory reports, 1991 to 1995 average and 1996 by month of specimen collection**



**Figure 8. Influenza A laboratory reports, 1996, by age group and sex**



**Figure 9. Influenza B laboratory reports, 1996, by method of diagnosis and week of specimen collection**



Predominantly influenza A H<sub>3</sub>N<sub>2</sub> isolates were also received from New Zealand. These were antigenically similar to the Australian isolates but a larger percentage of strains showed low reactivity with the reference serum panel.

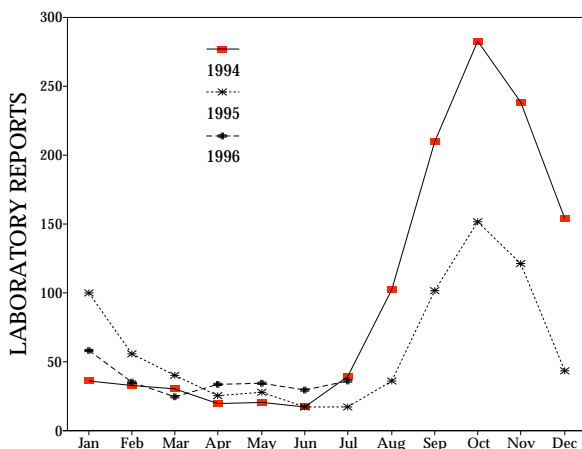
The small numbers of Australasian influenza A H<sub>1</sub>N<sub>1</sub> and influenza B isolates characterised to date were A/Texas/36/91-like and B/Indiana/1/95-like respectively. B/Indiana-like strains reacted well with B/Beijing/184/95 antiserum but could be distinguished from the vaccine strain.

**LabWISE**

*The Virology and Serology Reporting Scheme, LabWISE, 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 each fortnight. 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 1996;20:9-12.*

There were 1,774 reports received in the CDIVirology and Serology Reporting Scheme this period (Tables 4 and 5).

**Figure 10. Rubella laboratory reports, 1994 to 1996, by month of specimen collection**



In the last fortnight 22 reports of rubella virus were received. Included were 5 females in the 15 to 44 year age group. The number of reports is average for the time of year (Figure 10).

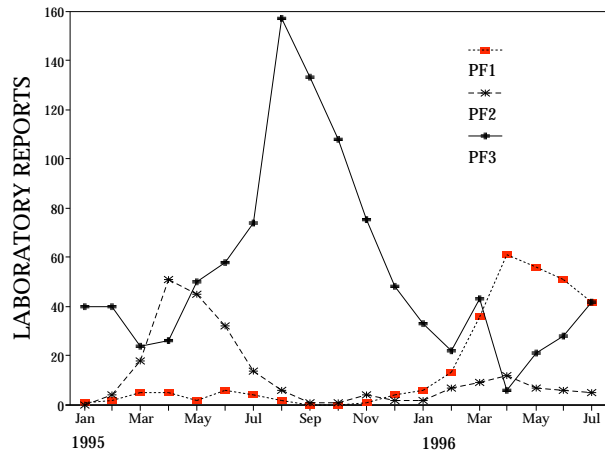
One report of coxsackievirus type B5 was received this fortnight. Recent outbreaks of meningitis due to this virus have been reported from Cyprus (280 cases) and England and Wales (95 cases).

Reports of parainfluenza virus type 1 continue to fall while those for parainfluenza virus type 3 have risen in recent months (Figure 11).

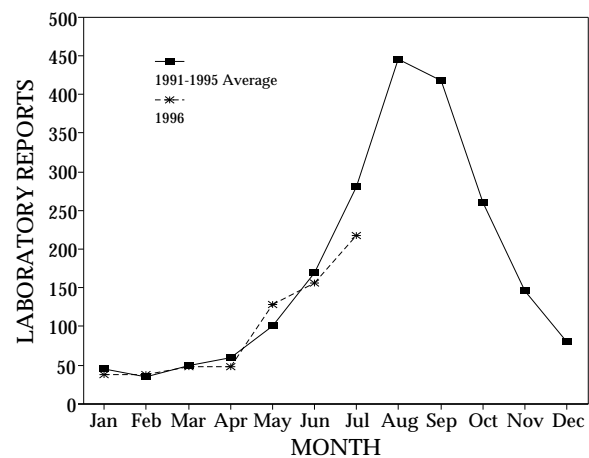
There were 486 reports of respiratory syncytial virus received this period. Diagnosis was by virus isolation (250), antigen detection (225) and single high titre (11). Four hundred and forty-six (94%) reports were for children under the age of 5 years. The number of reports is average for the time of year.

Rotavirus was reported for 127 patients this period, 29% of whom were under the age of one year and 93% under the age of 5 years. The number of reports received was slightly below average in the month of July (Figure 12).

**Figure 11. Parainfluenza virus type 1, 2 and 3 laboratory reports, 1995 to 1996, by month of specimen collection**



**Figure 12. Rotavirus laboratory reports, 1991 to 1995 average, and 1996, by month of specimen collection**



**Table 4. Virology and serology laboratory reports by State or Territory<sup>1</sup> for the reporting period 8 to 21 August 1996, historical data<sup>2</sup>, and total reports for the year**

	State or Territory <sup>1</sup>								Total this fortnight	Historical data <sup>2</sup>	Total reported this year
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA			
<b>MEASLES, MUMPS, RUBELLA</b>											
Measles virus				1					1	16.0	36
Mumps virus				1					1	3.0	29
Rubella virus		2		14	2		2	2	22	18.7	374
<b>HEPATITIS VIRUSES</b>											
Hepatitis A virus		1	1	2			1	3	8	14.5	313
Hepatitis D virus				1					1	.5	10
Hepatitis E virus								1	1	.5	2
<b>ARBOVIRUSES</b>											
Ross River virus			6	7	2		1	5	21	6.7	3,050
Barmah Forest virus				4			1		5	2.7	170
Dengue not typed								2	2	.7	12
<b>ADENOVIRUSES</b>											
Adenovirus type 1					1		2		3	2.3	14
Adenovirus type 3					2				2	1.2	62
Adenovirus type 5							1		1	1.3	4
Adenovirus type 6					1				1	.2	1
Adenovirus type 40								2	2	.0	26
Adenovirus not typed/pending		6	1	29	10		8	13	67	42.5	957
<b>HERPES VIRUSES</b>											
Herpes simplex virus type 1							7	1	8	171.8	2,715
Herpes simplex virus type 2							3	1	4	183.8	2,680
Herpes simplex not typed/pending							2		2	19.2	292
Cytomegalovirus		5	1	16	9		24	10	65	64.8	1,153
Varicella-zoster virus		3	1	24	9		24	9	70	37.8	861
Epstein-Barr virus		11	2	34	21		8	22	98	57.5	1,400
<b>OTHER DNA VIRUSES</b>											
Parvovirus				4			14		18	4.2	121
<b>PICORNA VIRUS FAMILY</b>											
Coxsackievirus B5							1		1	.2	2
Echovirus type 7					1		3		4	.0	7
Poliovirus type 1 (uncharacterised)							1		1	.8	12
Poliovirus type 2 (uncharacterised)							2		2	.5	13
Rhinovirus (all types)		4		12	1		16	6	39	41.2	503
Enterovirus not typed/pending				13			8	12	33	34.2	611
<b>ORTHO/PARAMYXOVIRUSES</b>											
Influenza A virus		21	1	102	86		38	45	293	95.2	1,110
Influenza A virus H <sub>3</sub> N <sub>2</sub>							5		5	8.8	50
Influenza B virus		1		1	1				3	23.8	37
Influenza virus - typing pending								2	2	.5	3
Parainfluenza virus type 1		2		9	9		2	1	23	10.3	274
Parainfluenza virus type 2					3				3	2.7	57
Parainfluenza virus type 3		3		7	1		4	14	29	26.0	383
Parainfluenza virus typing pending								1	1	3.2	11
Respiratory syncytial virus		74		63	127	5	115	102	486	327.7	3,176
Paramyxovirus (unspecified)							3		3	.0	15
<b>OTHER RNA VIRUSES</b>											
HTLV-1								2	2	.0	6
Rotavirus		50			10		48	19	127	177.3	935
Norwalk agent							1		1	1.8	32
Small virus (like) particle							1		1	.5	12

**Table 4. Virology and serology laboratory reports by State or Territory<sup>1</sup> for the reporting period 8 to 21 August 1996, historical data<sup>2</sup>, and total reports for the year, continued**

	State or Territory <sup>1</sup>								Total this fortnight	Historical data <sup>2</sup>	Total reported this year
	ACT	NSW	NT	Qld	SA	Tas	Vic	WA			
<b>OTHER</b>											
<i>Chlamydia trachomatis</i> not typed		5	15	39	29	1	20	44	153	89.2	2,676
<i>Chlamydia psittaci</i>							4		4	4.0	68
<i>Mycoplasma pneumoniae</i>		10		8	14		11	9	52	23.3	471
<i>Coxiella burnetii</i> (Q fever)		9		2			4	4	19	5.5	135
<i>Rickettsia australis</i>				3					3	1.0	15
<i>Rickettsia tsutsugamushi</i>			1	1			1		3	.8	8
<i>Neisseria gonorrhoeae</i>								39	39	.0	143
<i>Bordetella pertussis</i>						1	7	1	9	19.2	319
<i>Bordetella</i> species		1		14					15	7.8	204
<i>Cryptococcus</i> species								1	1	.2	6
<i>Leptospira</i> species		1		1					2	.2	44
<i>Entamoeba histolytica</i>							1		1	.0	13
<i>Schistosoma</i> species							6	5	11	3.7	204
<b>TOTAL</b>		209	29	412	339	7	400	378	1,774	1,559.3	25,837

1. State or Territory of postcode, if reported, otherwise State or Territory of reporting laboratory.
2. The historical data are the averages of the numbers of reports in 6 previous 2 week reporting periods: the corresponding periods of the last 2 years and the periods immediately preceding and following those.

**Table 5. Virology and serology laboratory reports by contributing laboratories for the reporting period 8 to 21 August 1996**

STATE OR TERRITORY	LABORATORY	REPORTS
New South Wales	Institute of Clinical Pathology & Medical Research, Westmead	36
	Royal Alexandra Hospital for Children, Camperdown	52
	Royal North Shore Hospital, St Leonards	40
	Royal Prince Alfred Hospital, Camperdown	2
	South West Area Pathology Service, Liverpool	58
Queensland	Queensland Medical Laboratory, West End	241
	State Health Laboratory, Brisbane	200
South Australia	Institute of Medical and Veterinary Science, Adelaide	339
Tasmania	Northern Tasmanian Pathology Service, Launceston	7
Victoria	Microbiological Diagnostic Unit, University of Melbourne	19
	Monash Medical Centre, Melbourne	45
	Royal Children's Hospital, Melbourne	148
	Victorian Infectious Diseases Reference Laboratory, Fairfield Hospital	191
Western Australia	PathCentre Virology, Perth	191
	Princess Margaret Hospital, Perth	140
	Royal Perth Hospital	14
	Western Diagnostic Pathology	51
<b>TOTAL</b>		1774