

ration of the WHO. It includes experts from the Gabonese Ministry of Health, the International Medical Research Centre in Franceville, Gabon, Coopération Française and WHO.

The Ebola virus is one of the most pathogenic viral agents known to man, causing death in 80% or more of infected cases, but its natural host is still unknown. Scientific investigations have just begun in Côte d'Ivoire, in the Tai forest, to identify the natural reservoir of the virus. This research, which is coordinated by WHO, is being undertaken by scientific teams from Belgium, Canada, France and the United States of America, with the collaboration of scientists from the United Kingdom.

The primary mode of transmission of the virus is contact with contaminated blood and secretions of body fluids. Contaminated needles and syringes were the cause of transmission in previous cases in Zaire. The virus is not easily transmitted however, and requires intimate contact

with an infected person, such as close nursing without protective clothing, or with contaminated injection equipment.

Last February, an outbreak of Ebola haemorrhagic fever killed 21 persons, from a total of 37 cases, in the same province of Gabon (Ogooué-Ivindo).

Cholera, Africa

Guinea-Bissau reported 143 cases with 7 deaths from 6 to 14 October in the districts of Bissau and Gabu. Senegal and Togo also reported cholera cases in the past week.

Dengue, India

The National Institute of Communicable Diseases, Delhi reported 5,930 cases of dengue and dengue haemorrhagic fever up to 22 October 1996. There were 251 deaths. Reports came from hospitals in Delhi. Dengue virus type 2 has been isolated.

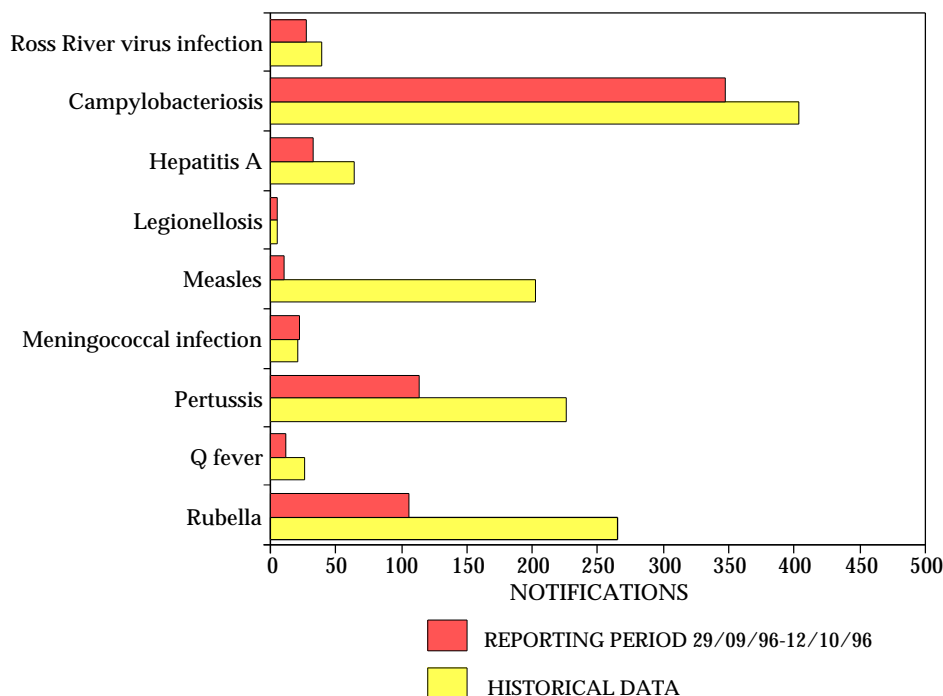
COMMUNICABLE DISEASES SURVEILLANCE

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 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 1996;20:9-10.

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

Reporting period 29 September to 12 October 1996

There were 1,655 notifications received for this two-week period (Tables 1, 2 and 3). The numbers of reports for selected diseases have been compared with average data for this period in the previous three years (Figure 1).

Eleven notifications of **measles** were received in this reporting period. The number of cases remains low (Figure 2).

Pertussis was reported for 151 persons this period. Included were 7 apparent clusters of 3 or more cases in postcode regions of New South Wales, Victoria, Queensland and South Australia. While the number of cases has risen slightly in recent months, it remains below the level reported for the same period in the years 1993 to 1995 (Figure 3). For the year to date the male:female ratio was 1:1.4 and most reports (46%) were for those under the age of 15 years (Figure 4).

One hundred and six notifications of **rubella** were received this period. The number of cases has risen slightly in recent weeks but remains low for the time of year (Figure 5).

The number of notifications of **hepatitis A** continues to fall after peaking in January (Figure 6). For the year to date more males have been reported than females, the male:female ratio is 2.2:1.

Figure 4. Pertussis notifications, 1996, by age group and sex

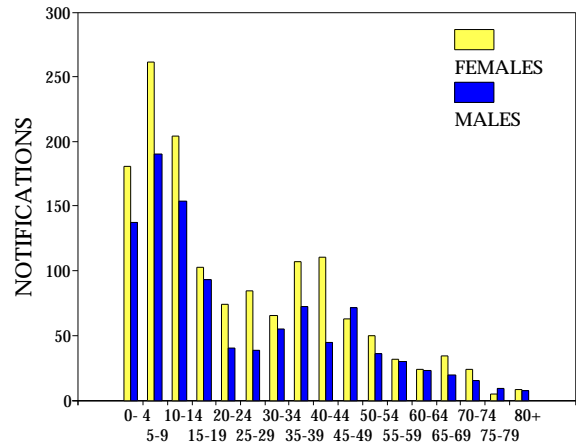


Figure 2. Measles notifications, 1991 to 1996, by month of onset

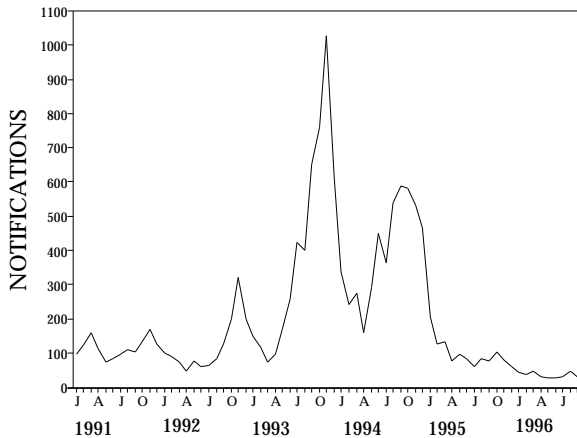


Figure 3. Pertussis notifications, 1993 to 1996, by month of onset

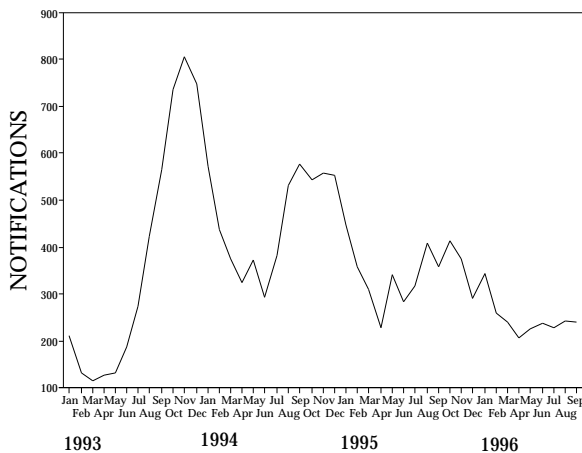


Figure 5. Rubella notifications, 1994 to 1996, by month of onset

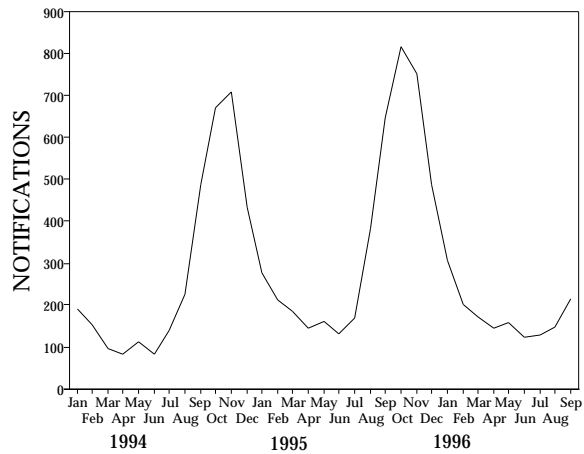


Figure 6. Hepatitis A notifications, 1994 to 1996, by month of onset

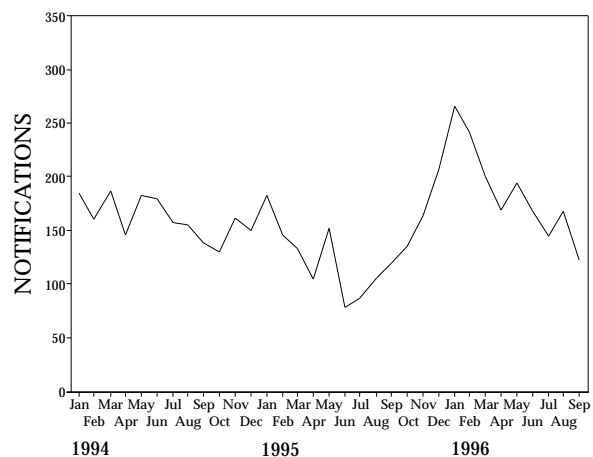


Table 1. Notifications of diseases preventable by vaccines recommended by the NHMRC for routine childhood immunisation, received by State and Territory health authorities in the period 29 September to 12 October 1996

DISEASE ¹	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	TOTALS FOR AUSTRALIA ²			
									This period	This period	Year to date	Year to date
									1996	1995	1996	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	46	55
Measles	1	3	0	2	0	1	4	0	11	42	363	1119
Mumps	0	1	0	NN	0	0	1	1	3	6	93	118
Pertussis	0	39	0	29	37	0	44	2	151	171	2490	3293
Rubella	1	15	0	53	16	0	11	10	106	385	1907	2600
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 received by State and Territory health authorities in the period 29 September to 12 October 1996

DISEASE ¹	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	TOTALS FOR AUSTRALIA ²			
									This period	This period	Year to date	Year to date
									1996	1995	1996	1995
Arbovirus Infection (NEC) ^{3,4}	0	0	1	0	0	0	0	1	2	4	87	60
Barmah Forest virus infection	0	2	-	13	0	0	0	-	15	12	710	660
Ross River virus infection	0	3	4	18	0	0	1	1	27	25	7499	2416
Dengue	0	0	0	0	0	-	0	0	0	2	30	25
Campylobacteriosis ⁵	8	-	5	95	99	9	75	56	347	423	9024	8122
Chlamydial infection (NEC) ⁶	7	NN	2	114	0	8	53	30	214	281	5761	4864
Donovanosis	0	NN	0	0	NN	0	0	0	0	2	38	60
Gonococcal infection ⁷	1	17	9	32	0	0	9	29	97	116	2986	2444
Hepatitis A	1	20	0	7	0	0	0	5	33	60	1791	1194
Hepatitis B incident	0	1	0	2	0	1	0	0	4	7	163	258
Hepatitis C incident	0	0	0	-	0	-	-	-	0	1	23	63
Hepatitis C unspecified	10	NN	0	78	NN	10	77	22	197	398	7168	7515
Hepatitis (NEC)	0	0	0	0	0	0	0	NN	0	0	17	10
Legionellosis	0	2	0	0	1	0	0	2	5	4	142	137
Leptospirosis	0	0	0	3	0	1	1	0	5	4	175	95
Listeriosis	0	3	0	0	0	0	1	1	5	1	55	49
Malaria	2	7	0	0	0	0	8	0	17	11	677	513
Meningococcal infection	0	9	3	6	0	1	3	0	22	15	330	307
Ornithosis	0	NN	0	0	0	0	1	0	1	7	54	96
Q fever	0	5	0	7	0	0	0	0	12	13	409	360
Salmonellosis (NEC)	2	24	6	42	4	5	18	18	119	152	4457	4777
Shigellosis ⁵	0	-	2	7	3	0	0	3	15	9	521	606
Syphilis	1	30	2	9	0	0	0	1	43	78	1182	1499
Tuberculosis	0	15	0	2	3	0	15	0	35	45	843	799
Typhoid ⁸	0	1	0	0	0	0	0	0	1	2	72	59
Yersiniosis (NEC) ⁵	0	-	0	6	1	0	0	0	7	10	197	256

1. For HIV and AIDS, see Tables 4 and 5. For rarely notified diseases, see Table 3.

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. Tas: includes Ross River virus and dengue.

4. NT, Vic and WA: includes Barmah Forest virus.

5. NSW: only as 'foodborne disease' or 'gastroenteritis in an institution'.

6. WA: genital only.

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

8. NSW, Vic: includes paratyphoid.

NN Not Notifiable.

NEC Not Elsewhere Classified.

- Elsewhere Classified.

Table 3. Notifications of rare¹ diseases received by State and Territory health authorities in the period 29 September to 12 October 1996

DISEASES ²	Total this period	Reporting States or Territories	Year to date 1996
Brucellosis	0		25
Chancroid	0		1
Cholera	0		4
Hydatid infection	1	Vic	32
Leprosy	1	WA	9

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

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

Table 4. New diagnoses of HIV infection, new diagnoses of AIDS and deaths following AIDS occurring in the period 1 to 31 May 1996, by sex and State or Territory of diagnosis

		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	TOTALS FOR AUSTRALIA			
										This period 1996	This period 1995	Year to date 1996	Year to date 1995
HIV diagnoses	Female	0	2	0	0	0	0	0	0	2	14	35	42
	Male	2	33	1	17	3	0	12	0	68	71	310	346
	Sex not reported	0	0	0	1	0	0	0	0	1	1	4	7
	Total ¹	2	35	1	18	3	0	12	0	71	86	349	397
AIDS diagnoses	Female	0	1	0	0	0	0	0	0	1	3	3	16
	Male	0	12	0	6	2	0	1	2	23	69	161	314
	Total ¹	0	13	0	6	2	0	1	2	24	72	164	331
AIDS deaths	Female	0	1	0	1	0	0	1	0	3	4	9	19
	Male	0	7	0	3	3	0	4	1	18	51	146	272
	Total ¹	0	8	0	4	3	0	5	1	21	56	155	292

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

Table 5. Cumulative diagnoses of HIV infection, AIDS and deaths following AIDS since the introduction of HIV antibody testing to 31 May 1996, by sex and State or Territory

		ACT	NSW	NT	Qld	SA	Tas	Vic	WA	AUSTRALIA
	Male	170	10061	83	1604	571	70	3393	760	16712
	Sex not reported	0	2049	0	1	0	0	42	0	2092
	Total ¹	186	12682	87	1708	615	74	3611	835	19798
AIDS diagnoses	Female	5	134	0	28	18	2	47	17	251
	Male	75	3824	26	656	276	32	1341	292	6522
	Total ¹	80	3968	26	686	294	34	1395	311	6794
AIDS deaths	Female	2	101	0	23	13	2	37	11	189
	Male	50	2701	20	457	192	21	1063	215	4719
	Total ¹	52	2808	20	482	205	23	1106	227	4923

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

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) 332 4648 Facsimile: (02) 332 1837.

HIV and AIDS diagnoses and deaths following AIDS reported for May 1996, as reported to 31 August 1996, are included in this issue of CDI (Tables 4 and 5).

Australian Sentinel Practice Research Network

The Australian Sentinel Practice Research Network (ASPREN) comprises 99 sentinel general practitioners from throughout the country. A total of approximately 9,000 consultations are recorded each week for 12 conditions. Of these, CDI reports the consultation rate for influenza, rubella, measles, chickenpox, pertussis and gastroenteritis. For further information including case definitions see CDI 1996;20:98-99.

Data for weeks 40 and 41 ending 6 and 13 October respectively are included in this issue of CDI (Table 6). The consultation rate for influenza-like illness has declined to low levels from peak rates of 28 to 31 per 1,000 consultations in late June and July. There has been no appreciable change in the consultation rate for gastroenteritis over the last three months. Consultation rates for chickenpox remain higher than the rates for August and early September. Very few cases of rubella, measles and pertussis have been reported during the last six reporting weeks.

Table 6. Australian Sentinel Practice Research Network reports, weeks 40 and 41, 1996

Condition	Week 40, to 6 October 1996		Week 41, to 13 October 1996	
	Reports	Rate per 1,000 encounters	Reports	Rate per 1,000 encounters
Influenza	45	6.8	23	4.0
Rubella	2	0.3	1	0.2
Measles	0	0	0	0
Chickenpox	11	1.7	13	2.3
Pertussis	0	0	2	0.3
Gastroenteritis	101	15.3	105	18.3

Sentinel Chicken Surveillance Programme

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5. Department of Health and Community Services, Darwin, NT.

Sentinel chicken flocks are used to monitor flavivirus activity in Australia. The main viruses of concern are Murray Valley encephalitis (MVE) and Kunjin that cause the potentially fatal disease Australian encephalitis in humans. These viruses are enzootic in parts of the north-east Kimberley region of Western Australia and the Northern Territory but are epizootic in other areas of the Kimberley and in north Queensland. MVE virus is also responsible for occasional severe epidemics of Australian encephalitis in eastern Australia. The most recent was in 1974 when there were 13 fatalities and cases were reported from all mainland States. Since then, 48 cases have been reported and all but one of these were from the north of Australia.

Since 1974, a number of sentinel chicken flocks have been established in Australia to provide an early warning of increased MVE virus activity. These programs are supported by individual State health departments. Each State has a contingency plan which will be implemented if one or more chickens in a flock seroconverts to MVE virus.

Currently 22 flocks are maintained in the north of Western Australia, eight in the Northern Territory and ten in Victoria. The flocks in Western Australia and the Northern Territory are tested all year round but those in Victoria are tested only from November to March, during the main MVE risk season. New South Wales and Queensland have previously used these sentinel systems to monitor flavivirus activity but have not maintained flocks during 1996.

Results are coordinated by the Arbovirus Laboratory in Perth and reported bimonthly.

Sentinel chicken serology was carried out for 17 of the 22 flocks in Western Australia in July and August 1996. There were no seroconversions during this period.

There were no seroconversions during the 1995-96 wet season in the Kimberley region of Western Australia. This was the first wet season with no evidence of flavivirus activity in the north of Western Australia since surveillance began using sentinel chicken flocks in 1982.

Five flocks of sentinel chickens from the Northern Territory were also tested in July and August. There were no seroconversions to flaviviruses.

LabVISE

The Virology and Serology Reporting Scheme, 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 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 680 reports received in the *CDI* Virology and Serology Reporting Scheme this period (Tables 7 and 8).

Laboratory reports of **parvovirus** in July and August have been the highest recorded since 1992 (Figure 7). In the last fortnight, 11 reports were received, with diagnosis by IgM detection (10) and nucleic acid detection (1).

There were 49 reports of ***Bordetella pertussis*** this period, all were from Victoria. Diagnosis was by IgA detection (47) and antigen detection (2). Eighteen reports were for children aged 5-14 years and one report was for a child aged under 12 months.

Reports of **parainfluenza virus type 3** increased in September but remain below the number reported for the same period in 1995 (Figure 8). In the last fortnight, 51 reports were received. Diagnosis was by antigen detection (23), virus isolation (22), single high titre (5) and four-fold rise in titre (1).

There were 34 reports of **influenza A** in the last fortnight, 22 of which were from Western Australia. Of the total, 53% (18) were for patients 65 years of age or older.

Figure 7. Parvovirus laboratory reports, 1992 to 1996, by month of specimen collection

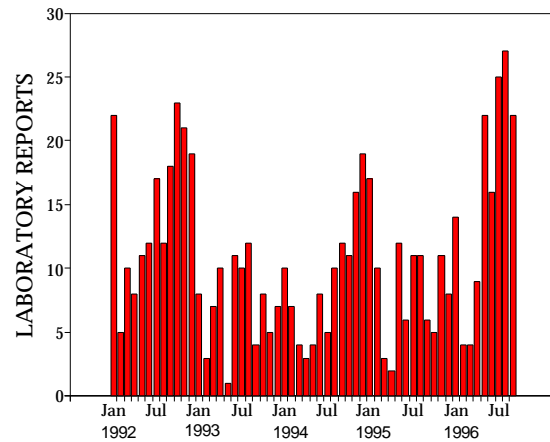


Figure 8. Parainfluenza virus type 3 laboratory reports, 1994, 1995 and 1996, by month of specimen collection

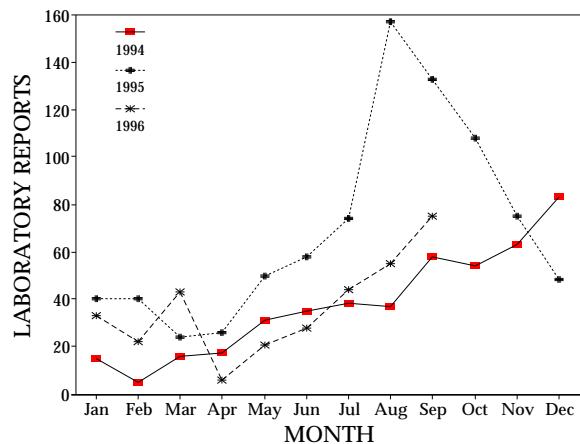


Table 7. Virology and serology laboratory reports by State or Territory¹ for the reporting period 3 to 16 October 1996, historical data², and total reports for the year

	State or Territory ¹							Total this fortnight	Historical data ²	Total reported this year
	ACT	NSW	NT	Qld	SA	Vic	WA			
MEASLES, MUMPS, RUBELLA										
Measles virus						2		2	33.8	44
Mumps virus						1		1	2.8	33
Rubella virus							10	10	72.2	477
HEPATITIS VIRUSES										
Hepatitis A virus			3			2	3	8	14.7	352
ARBOVIRUSES										
Ross River virus			1				1	2	15.0	3,093
Barmah Forest virus			1				2	3	5.8	187
ADENOVIRUSES										
Adenovirus type 2						1		1	2.5	24
Adenovirus type 7						2		2	.7	23
Adenovirus type 8						1		1	.3	5
Adenovirus type 40							1	1	.0	29
Adenovirus not typed/pending		10		12		8	19	49	41.7	1,171
HERPES VIRUSES										
Cytomegalovirus		2		7		7	9	25	63.8	1,328
Varicella-zoster virus		1				14	9	24	37.7	996
Epstein-Barr virus		5	4			11	25	45	60.8	1,625
OTHER DNA VIRUSES										
Molluscum contagiosum							2	2	.2	5
Poxvirus group not typed						1		1	.2	3
Parvovirus	2	1				7	1	11	3.2	165
PICORNA VIRUS FAMILY										
Coxsackievirus A16						1		1	.0	5
Coxsackievirus B2		1				3		4	.2	7
Coxsackievirus B4						2		2	.3	5
Coxsackievirus B5						1		1	.0	8
Echovirus type 7						2		2	.0	14
Rhinovirus (all types)		3		8		8	8	27	33.0	618
Enterovirus not typed/pending		1		6		4	10	21	35.5	741
ORTHO/PARAMYXOVIRUSES										
Influenza A virus		2	3			7	22	34	21.0	1,446
Influenza B virus							5	5	9.0	51
Parainfluenza virus type 1		1		1			1	3	.3	300
Parainfluenza virus type 3		3		13		6	29	51	32.5	525
Parainfluenza virus typing pending							3	3	1.8	18
Respiratory syncytial virus	1	17		3		32	18	71	113.8	3,929
Paramyxovirus (unspecified)						2		2	.8	18
OTHER RNA VIRUSES										
HTLV-1							1	1	.2	8
Rotavirus		57			1	30	8	96	134.0	1,379
Small virus (like) particle						1		1	2.0	14
OTHER										
<i>Chlamydia trachomatis</i> not typed		3	18			6	34	61	86.0	3,079
<i>Mycoplasma pneumoniae</i>		10				21	16	47	26.2	634
<i>Coxiella burnetii</i> (Q fever)		3					1	4	7.8	155
<i>Bordetella pertussis</i>						49		49	33.0	505
<i>Legionella longbeachae</i>							1	1	.7	14
<i>Cryptococcus</i> species							2	2	.2	8
<i>Schistosoma</i> species			1			1	1	3	5.2	228
TOTAL	3	120	31	50	1	233	242	680	898.8	23,484

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 8. Virology and serology laboratory reports by contributing laboratories for the reporting period 3 to 16 October 1996

STATE OR TERRITORY	LABORATORY	REPORTS
New South Wales	Institute of Clinical Pathology & Medical Research, Westmead	26
	Royal Alexandra Hospital for Children, Camperdown	51
	South West Area Pathology Service, Liverpool	40
Queensland	State Health Laboratory, Brisbane	50
Victoria	Microbiological Diagnostic Unit, University of Melbourne	6
	Monash Medical Centre, Melbourne	13
	Royal Children's Hospital, Melbourne	153
	Victorian Infectious Diseases Reference Laboratory, Fairfield Hospital	67
Western Australia	PathCentre Virology, Perth	137
	Princess Margaret Hospital, Perth	61
	Royal Perth Hospital	11
	Western Diagnostic Pathology	65
TOTAL		680

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