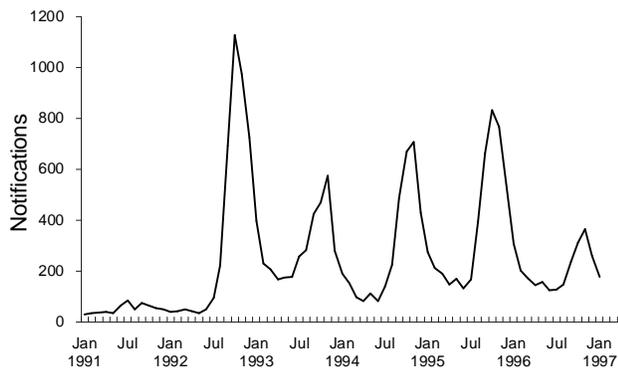
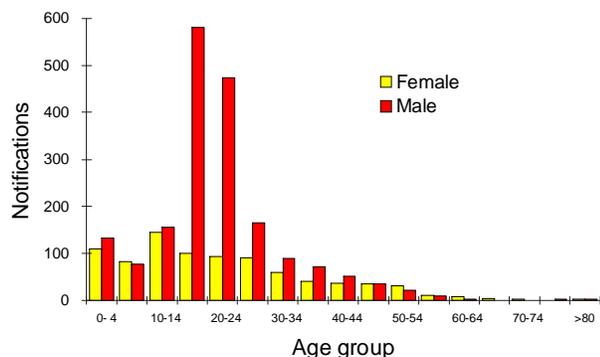


# Communicable Diseases Surveillance

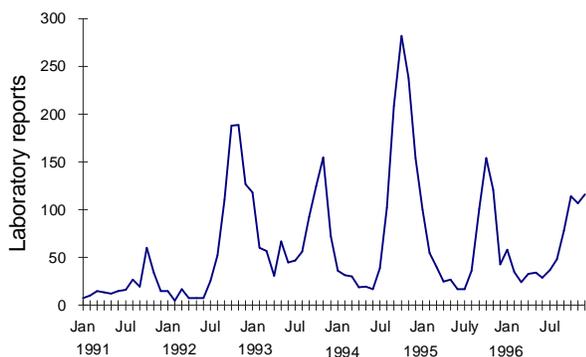
**Figure 1. Rubella notifications by month of onset, 1991 to 1997**



**Figure 2. Rubella notifications, 1996, by age group and sex**



**Figure 3. Rubella laboratory reports, 1991 to 1996, by month of specimen collection**



## Rubella

Rubella is an acute viral infection of children and adults. Clinical symptoms include mild fever, maculopapular rash and lymphadenopathy. The virus is important as it has the potential to damage the developing foetus following maternal infection during pregnancy. Congenital rubella syndrome occurs in up to 90% of infants born to mothers who acquired infection during the first trimester of pregnancy. It may result in foetal death or congenital defects such as deafness, heart disease and mental retardation.

Rubella is transmitted by contact with the nasopharyngeal secretions of infected persons. Patients are infectious for at least one week before and four days following the onset of rash. The incubation period is 14 to 21 days.

The National Health and Medical Research Council recommends that all infants of 12 months of age and adolescents in the 10 - 16 years age group receive rubella vaccine. The aim of rubella vaccination is to prevent congenital rubella syndrome by preventing the circulation of rubella virus in the community.

Outbreaks of rubella have been recorded in Australia by the National Notifiable Diseases Surveillance System (NNDSS) in the spring months of each year since 1992 (Figure 1). The highest monthly number of notifications, 1,126, was recorded in October 1992. The peak in 1996 occurred in November and was lower than those recorded in recent years (Figure 1).

Between 1992 and 1996 more than 2,000 cases of rubella were reported for women of childbearing age. Each year the highest number of rubella cases was reported for the 15 - 19 years age group (Figure 2), with more males being reported than females. This probably reflects the lack of immunity in males as most would not have been immunised. In 1996 the male:female ratio was 2.1:1.

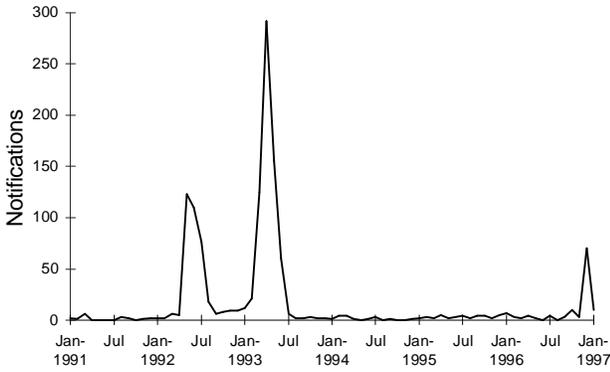
The LabVISE laboratory reporting scheme recorded a similar epidemic pattern to that recorded by the NNDSS, with peak reporting in the spring of each year since 1992 (Figure 3). As this is a sentinel reporting scheme it is not possible to compare absolute numbers of reports with NNDSS. However the seasonal trends recorded by both schemes are similar.

## Dengue

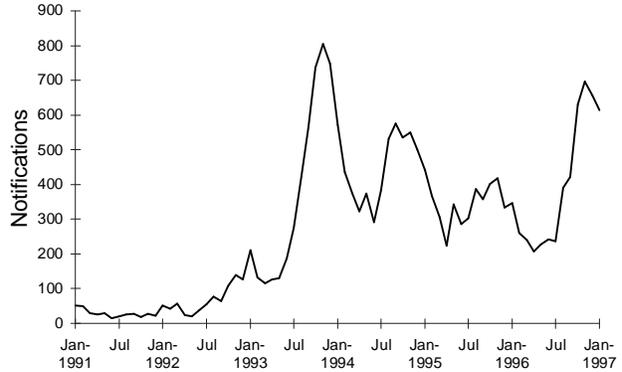
There were 108 reports of dengue to the National Notifiable Diseases Surveillance System for 1996, with 70 cases having onset in December (Figure 4). The number of cases reported for 1996 was higher than for any year since more than 600 cases were reported for 1993. Eleven cases have been reported with onset dates in 1997. The majority of cases (72%) were reported from Queensland, where an outbreak of dengue 2 occurred in the Torres Strait (see *CDI* 1997;21:33). In 1996 the male:female ratio was 1:1.1, and 69% of cases were in the 20 - 54 years age range.

The LabVISE scheme recorded 29 reports of dengue 2 this reporting period. All were from Queensland and had

**Figure 4. Dengue notifications 1991 to 1997, by month of onset**



**Figure 6. Pertussis notifications 1991 to 1997, by month of onset**



specimen collection dates in December 1996. The male:female ratio was 1.4:1 and 35% were in the 25 - 44 years age range. This is the highest monthly total since June 1993. Eleven reports of untyped dengue were also received for December.

## 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

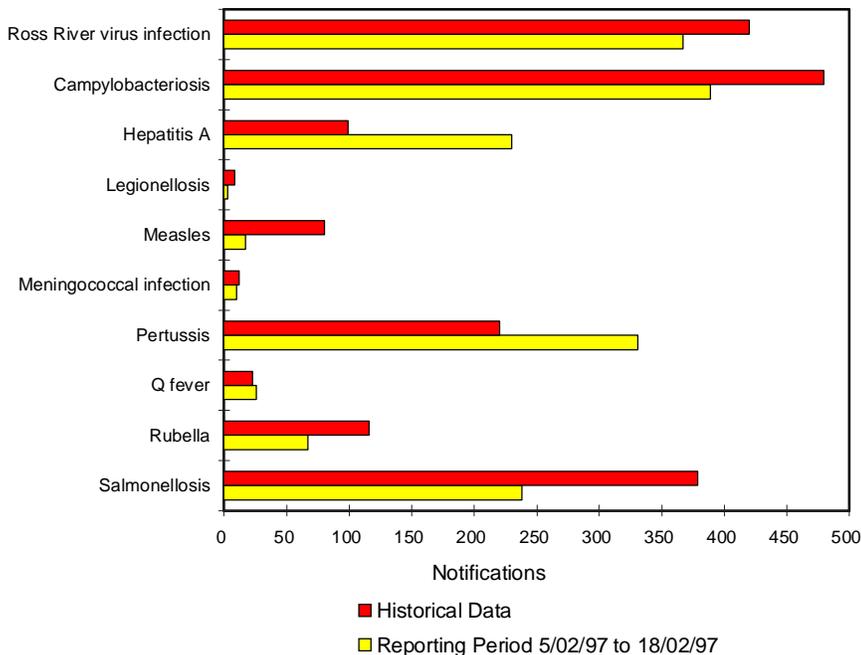
provisions of their respective public health legislations. De-identified core unit data are supplied fortnightly for collation, analysis and dissemination. For further information, see CDI 1997;21:5.

### Reporting period 5 to 18 February 1997

There were 1,972 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 5).

The number of pertussis cases has continued to increase, with 331 reports for the current period. More than 800 reports have been received with onset dates in 1997 (Figure 6). The male: female ratio was 1:1.3 and 36% of cases were aged under 10 years.

**Figure 5. 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.

**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 5 to 18 February 1997**

Disease <sup>1,2</sup>	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	This period 1997	This period 1996	Year to date 1997	Year to date 1996
Diphtheria	0	0	0	0	0	0	0	0	0	0	0	0
<i>Haemophilus influenzae</i> type B	0	1	0	0	0	0	0	0	1	3	10	9
Measles	0	2	0	7	1	3	2	2	17	21	61	82
Mumps	0	2	0	NN	0	0	1	0	3	3	19	17
Pertussis	13	62	2	39	99	4	97	15	331	153	1143	537
Rubella	3	1	0	33	11	0	13	6	67	121	282	547
Tetanus	0	0	0	0	0	0	0	0	0	0	1	1

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 5 to 18 February 1997**

Disease <sup>1,2</sup>	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	This period 1997	This period 1996	Year to date 1997	Year to date 1996
Arbovirus Infection (NEC) <sup>3,4</sup>	0	3	4	0	0	0	3	2	12	4	43	16
Barmah Forest virus infection	0	14	0	14	1	0	2	-	31	45	86	88
Campylobacteriosis <sup>5</sup>	12	-	9	169	64	14	71	50	389	505	1652	1696
Chlamydial infection (NEC) <sup>6</sup>	6	NN	6	105	0	13	0	44	174	277	845	937
Dengue	0	0	1	23	0	-	0	2	26	3	81	7
Donovanosis	0	NN	0	0	NN	0	0	0	0	3	1	9
Gonococcal infection <sup>7</sup>	3	4	11	36	0	2	0	9	65	141	320	453
Hepatitis A	6	90	3	88	8	1	32	2	230	114	391	398
Hepatitis B incident	0	1	0	2	0	0	0	1	4	11	22	36
Hepatitis C incident	0	0	0	-	0	0	-	-	0	3	2	7
Hepatitis C unspecified	13	NN	13	94	NN	13	4	15	152	398	864	1218
Hepatitis (NEC)	0	0	0	1	0	0	0	NN	1	2	5	5
Legionellosis	0	0	0	2	0	0	0	1	3	9	22	26
Leptospirosis	0	1	0	3	0	1	0	0	5	6	19	31
Listeriosis	0	0	0	0	0	0	1	0	1	1	12	8
Malaria	1	7	0	0	0	0	1	0	9	26	80	96
Meningococcal infection	1	2	0	2	0	1	3	1	10	12	43	37
Ornithosis	0	NN	0	0	0	0	3	0	3	2	14	11
Q Fever	0	15	0	8	0	0	3	0	26	16	68	56
Ross River virus infection	1	72	27	85	53	2	115	12	367	564	878	867
Salmonellosis (NEC)	3	47	12	80	37	12	24	23	238	317	1006	1048
Shigellosis <sup>5</sup>	0	-	9	6	8	0	1	7	31	29	111	97
Syphilis	0	10	6	13	0	0	0	3	32	65	129	171
Tuberculosis	1	2	0	13	2	0	10	2	30	54	105	161
Typhoid <sup>8</sup>	0	0	0	2	0	0	2	1	5	12	13	27
Yersiniosis (NEC) <sup>5</sup>	0	-	0	14	4	0	0	0	18	17	60	46

1. For HIV and AIDS, see *CDI* 1997;21:52. 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 rare<sup>1</sup> diseases received by State and Territory health authorities in the period 5 to 18 February 1997**

Disease <sup>2</sup>	Total this period	Reporting States or Territories	Total notifications 1997
Bruceellosis	2	Qld	9
Cholera			1
Hydatid infection			2
Leprosy	1	NSW	1

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

Notifications of hepatitis A have still not substantially increased above previous years, despite the large outbreak in New South Wales (see *CDI* 1997;21:46).

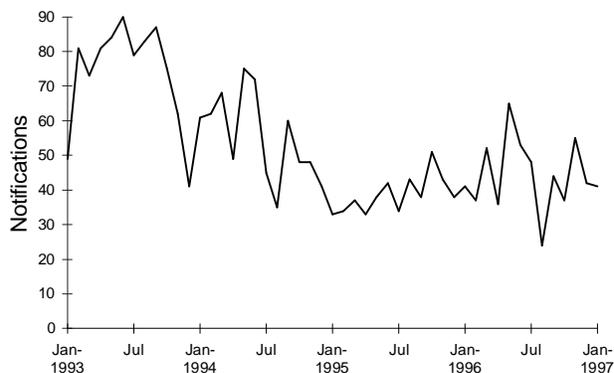
There were 336 cases reported with onset dates in 1997, with 133 (40%) from New South Wales and 107 (32%) from Queensland. The male:female ratio was 1.6:1 with 42% of cases in males in the 20 - 54 years age range.

Twenty-six cases of Q fever were reported for this period, but the numbers of cases with onset dates in December and January was not higher than in previous years (Figure 7). In 1996, 53% of cases were reported from New South Wales and 32% from Queensland. The male:female ratio was 5.7:1, with 95% of cases in the 15 - 64 years age range.

## Australian Sentinel Practice Research Network

The Australian Sentinel Practice Research Network (ASPREN) comprises 99 sentinel general practitioners from throughout the country. Approximately 9,000 consultations are recorded each week for 12 conditions.

**Figure 7. Q fever notifications 1993 to 1997, by month of onset**



Of these, *CDI* reports the consultation rates for chickenpox, HIV testing (doctor initiated), HIV testing (patient initiated), influenza, measles, pertussis, Ross River virus infection, rubella and gastroenteritis. For further information including case definitions see *CDI* 1997;21:6.

Data for weeks 6 and 7 ending 9 and 16 February respectively are included in this issue of *CDI* (Table 4). The consultation rate for influenza-like illness has remained at low levels since the beginning of October. The consultation rate for gastroenteritis has remained low during the last 6 reporting weeks. Consultation rates for chickenpox have continued to decline from the higher rates reported during December. The numbers of reported cases of measles, rubella and pertussis have remained low. Consultation rates for Ross River virus infection remain low. HIV testing accounted for 4 per thousand consultations in the current reporting weeks, three-quarters of these tests being patient-initiated.

**Table 4. Australian Sentinel Practice Research Network reports, weeks 6 and 7, 1997**

Condition	Week 6, to 9 February 1997		Week 7, to 16 February 1997	
	Reports	Rate per 1,000 encounters	Reports	Rate per 1,000 encounters
Chickenpox	14	1.8	15	2.1
Gastroenteritis	88	11.6	85	12.0
HIV testing (doctor initiated)	7	0.9	7	1.0
HIV testing (patient initiated)	21	2.8	21	3.0
Influenza	14	1.8	15	2.1
Measles	1	0.1	1	0.1
Pertussis	0	0.0	3	0.4
Ross River virus infection	4	0.5	2	0.3
Rubella	4	0.5	1	0.1

# LabVISE

The Virology and Serology Laboratory 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 1997;21:8-9.

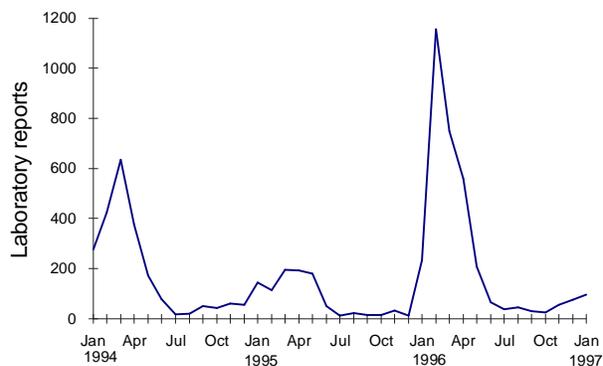
There were 1,245 reports received in the CDI Virology and Serology Reporting Scheme this period (Tables 5 and 6).

Ross River virus infection was reported for 107 patients this period. The male:female ratio was 1.3:1 and 84% of patients were in the 25 - 64 years age group. Diagnosis was by IgM detection (105) and four-fold rise in titre (2). Ninety-seven reports have been received so far for January, which is low for the time of year (Figure 8). However data for this month may be incomplete.

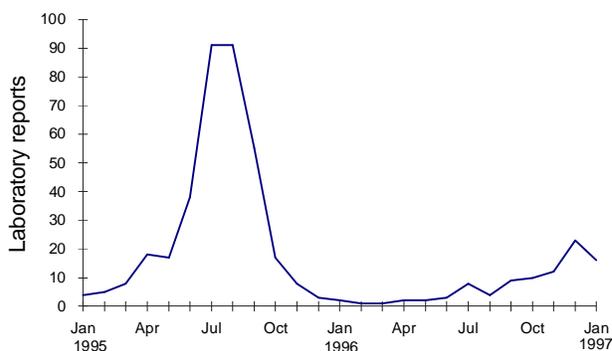
The number of laboratory reports of influenza B has risen in recent months (Figure 9). A total of 16 reports have been received with specimen collection dates in 1997. These were from Western Australia (5), Victoria (7), South Australia (3) and the Australian Capital Territory (one). For 1996 and 1997 the male:female ratio was 1.4:1 and 32% of reports were for children under the age of 5 years.

Rotavirus was reported for 74 patients this fortnight, most (77%) of which were from Western Australia. Most reports were for males, with the male:female ratio 1.6:1, and 68% were for children in the 1 - 4 years age group. The number of reports is high for the time of year (Figure 10).

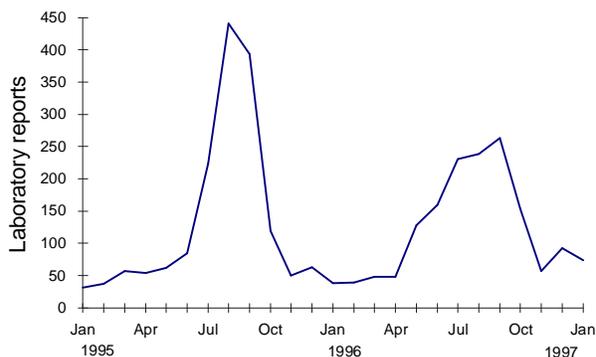
**Figure 8. Ross River virus laboratory reports, 1994 to 1997, by month of specimen collection**



**Figure 9. Influenza B laboratory reports, 1995 to 1997, by month of specimen collection**



**Figure 10. Rotavirus laboratory reports 1995 to 1997, by month of specimen collection**



**Table 5. Virology and serology laboratory reports by State or Territory<sup>1</sup> for the reporting period 30 January to 12 February 1997, 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 in CDI in 1997
	NSW	NT	Qld	SA	Tas	Vic	WA			
<b>Measles, mumps, rubella</b>										
Measles virus			1			2		3	13.8	12
Mumps virus			1					1	2.7	7
Rubella virus	1		38	4	1	1		45	36.3	263
<b>Hepatitis viruses</b>										
Hepatitis A virus	8	4	57	3				72	28.5	159
Hepatitis E virus			1					1	.2	1
<b>Arboviruses</b>										
Ross River virus	8	12	67	6		14		107	198.0	287
Barmah Forest virus		2	8			1		11	13.3	52
Dengue type 2			29					29	.0	29
Dengue not typed			11					11	1.3	15
Flavivirus (unspecified)			1			1		2	1.2	7
<b>Adenoviruses</b>										
Adenovirus type 2						2		2	1.0	12
Adenovirus type 3						1		1	3.0	11
Adenovirus type 5						1		1	.0	2
Adenovirus not typed/pending	3		8	7		10	31	59	29.8	237
<b>Herpes viruses</b>										
Cytomegalovirus	4		33	1	1	13	14	66	53.0	249
Varicella-zoster virus	4	1	41	13		11	4	74	59.5	334
Epstein-Barr virus	8	5	111	26		8		158	96.0	660
<b>Other DNA viruses</b>										
Parvovirus	1			1		7		9	7.8	102
<b>Picornavirus family</b>										
Echovirus type 7	1							1	.2	14
Rhinovirus (all types)	4			1		1		6	9.7	146
Enterovirus not typed/pending			5					5	23.7	141
<b>Ortho/Paramyxoviruses</b>										
Influenza A virus		1	23			1	1	26	7.8	115
Influenza B virus				1		2	5	8	1.5	57
Influenza virus - typing pending				17			2	19	.0	59
Parainfluenza virus type 1							1	1	1.7	18
Parainfluenza virus type 3	2		3			3	12	20	13.7	281
Parainfluenza virus typing pending				17				17	.0	56
Respiratory syncytial virus	4		1	1		2	5	13	16.7	144
<b>Other RNA viruses</b>										
Rotavirus	1			7	3	6	57	74	21.3	231

**Table 5. Virology and serology laboratory reports by State or Territory<sup>1</sup> for the reporting period 30 January to 12 February 1997, 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 in CDI in 1997
	NSW	NT	Qld	SA	Tas	Vic	WA			
<b>Other</b>										
<i>Chlamydia trachomatis</i> - A-K					1			1	.0	1
<i>Chlamydia trachomatis</i> not typed	7	8	105	36			8	164	139.5	948
<i>Chlamydia psittaci</i>						6		6	4.3	26
<i>Chlamydia</i> species	2		2					4	7.3	8
<i>Mycoplasma pneumoniae</i>	8	1	32	4	2	14	1	62	19.8	413
<i>Coxiella burnetii</i> (Q fever)			5			1		6	6.7	68
<i>Rickettsia australis</i>			1		1	1		3	.2	6
<i>Rickettsia</i> spp - other						1		1	.2	1
<i>Bordetella pertussis</i>	3	1	29		1	115		149	29.0	505
<i>Legionella longbeachae</i>			2					2	.8	8
<i>Leptospira pomona</i>			2					2	.3	6
<i>Leptospira hardjo</i>			2					2	.7	6
<i>Leptospira australis</i>					1			1	.2	1
<b>TOTAL</b>	<b>69</b>	<b>35</b>	<b>619</b>	<b>145</b>	<b>11</b>	<b>225</b>	<b>141</b>	<b>1,245</b>	<b>850.7</b>	<b>5,698</b>

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 6. Virology and serology laboratory reports by contributing laboratories for the reporting period 30 January to 12 February 1997**

State or Territory	Laboratory	Reports
New South Wales	Institute of Clinical Pathology & Medical Research, Westmead	10
	Royal Alexandra Hospital for Children, Camperdown	9
	Royal Prince Alfred Hospital, Camperdown	3
	South West Area Pathology Service, Liverpool	17
Queensland	Queensland Medical Laboratory, West End	575
	State Health Laboratory, Brisbane	105
South Australia	Institute of Medical and Veterinary Science, Adelaide	144
Tasmania	Northern Tasmanian Pathology Service, Launceston	11
Victoria	Monash Medical Centre, Melbourne	9
	Royal Children's Hospital, Melbourne	157
	Victorian Infectious Diseases Reference Laboratory, Fairfield Hospital	63
Western Australia	Princess Margaret Hospital, Perth	142
<b>TOTAL</b>		<b>1,245</b>