

Communicable Diseases Surveillance

National Notifiable Diseases Surveillance System

The National Notifiable Diseases Surveillance System (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

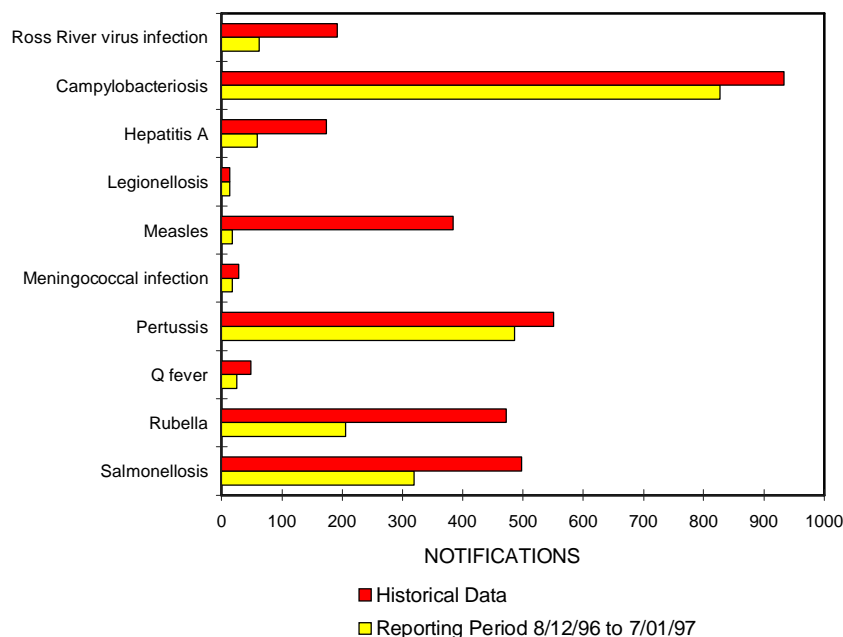
collation, analysis and dissemination. For further information, see CDI 1997;21:5.

Reporting period 8 December 1996 to 7 January 1997 inclusive.

There were 3,243 notifications received for this four-week period (Tables 1, 2 and 3). The number of reports for selected diseases have been compared with average data for this period in the previous three years (Figure 1).

Eight hundred and twenty-seven notifications of campylobacteriosis were received this period. The 0-4 years age group accounted for 180 (22%) of these. Infection is the most frequently reported in this age group.

Figure 1. Selected National Notifiable Diseases Surveillance System reports, and historical data¹



- The historical data are the averages of the number of notifications in 9 previous 1-month 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 8 December 1996 to 7 January 1997

| Disease ^{1,2} | ACT | NSW | NT | Qld | SA | Tas | Vic | WA | This | This | Total | Total |
|--------------------------------------|-----|-----|----|-----|-----|-----|-----|----|---------|---------|---------------|---------------|
| | | | | | | | | | period | period | notifications | notifications |
| | | | | | | | | | 1996-97 | 1995-96 | 1996 | 1995 |
| Diphtheria | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| <i>Haemophilus influenzae</i> type B | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 12 | 51 | 74 |
| Measles | 0 | 0 | 6 | 5 | 0 | 1 | 6 | 0 | 18 | 59 | 489 | 1324 |
| Mumps | 0 | 0 | 0 | NN | 0 | 0 | 1 | 1 | 2 | 7 | 122 | 153 |
| Pertussis | 10 | 1 | 1 | 71 | 183 | 6 | 210 | 4 | 486 | 295 | 4257 | 4297 |
| Rubella | 1 | 0 | 0 | 47 | 124 | 0 | 32 | 1 | 205 | 454 | 2747 | 4379 |
| Tetanus | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 7 |

NN Not Notifiable.

- No notifications of poliomyelitis have been reported since 1986.

- 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 8 December 1996 to 7 January 1997

| Disease ^{1,2} | ACT | NSW | NT | Qld | SA | Tas | Vic | WA | This period 1996-97 | This period 1995-96 | Total notifications 1996 | Total notifications 1995 |
|--|-----|-----|----|-----|-----|-----|-----|----|---------------------|---------------------|--------------------------|--------------------------|
| Arbovirus Infection (NEC) ^{3,4} | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 1 | 99 | 67 |
| Barmah Forest virus infection | 0 | 0 | - | 14 | 1 | 0 | 0 | - | 15 | 22 | 778 | 756 |
| Ross River virus infection | 0 | 0 | 10 | 40 | 7 | 0 | 3 | 2 | 62 | 42 | 7763 | 2602 |
| Dengue | 0 | 0 | 0 | 2 | 0 | - | 0 | 0 | 2 | 3 | 42 | 34 |
| Campylobacteriosis ⁵ | 23 | - | 15 | 254 | 192 | 49 | 273 | 21 | 827 | 854 | 11985 | 10933 |
| Chlamydial infection (NEC) ⁶ | 8 | NN | 35 | 156 | 0 | 33 | 106 | 9 | 347 | 467 | 7343 | 6411 |
| Donovanosis | 0 | NN | 0 | 0 | NN | 0 | 0 | 0 | 0 | 10 | 46 | 85 |
| Gonococcal infection ⁷ | 1 | 0 | 66 | 71 | 0 | 0 | 16 | 11 | 165 | 303 | 3790 | 3259 |
| Hepatitis A | 4 | 0 | 8 | 10 | 9 | 0 | 25 | 3 | 59 | 159 | 2113 | 1600 |
| Hepatitis B incident | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 4 | 16 | 190 | 322 |
| Hepatitis C incident | 0 | 0 | 0 | - | 0 | 0 | - | - | 0 | 3 | 36 | 69 |
| Hepatitis C unspecified | 23 | NN | 21 | 108 | NN | 19 | 204 | 7 | 382 | 544 | 8960 | 9601 |
| Hepatitis (NEC) | 0 | 0 | 0 | 0 | 0 | 1 | 0 | NN | 1 | 1 | 18 | 12 |
| Legionellosis | 0 | 0 | 0 | 4 | 5 | 0 | 2 | 2 | 13 | 10 | 181 | 160 |
| Leptospirosis | 0 | 0 | 0 | 4 | 0 | 0 | 3 | 0 | 7 | 12 | 224 | 148 |
| Listeriosis | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 3 | 7 | 65 | 58 |
| Malaria | 1 | 0 | 0 | 34 | 2 | 0 | 10 | 0 | 47 | 37 | 832 | 625 |
| Meningococcal infection | 1 | 0 | 0 | 4 | 2 | 3 | 8 | 0 | 18 | 21 | 414 | 382 |
| Ornithosis | 0 | NN | 0 | 0 | 0 | 0 | 8 | 0 | 8 | 17 | 77 | 176 |
| Q Fever | 0 | 0 | 0 | 19 | 2 | 0 | 4 | 0 | 25 | 26 | 516 | 473 |
| Salmonellosis (NEC) | 8 | 0 | 21 | 158 | 42 | 15 | 65 | 11 | 320 | 377 | 5691 | 5895 |
| Shigellosis ⁵ | 1 | - | 18 | 13 | 6 | 1 | 4 | 2 | 45 | 37 | 662 | 734 |
| Syphilis | 1 | 0 | 38 | 11 | 0 | 0 | 1 | 2 | 53 | 93 | 1435 | 1829 |
| Tuberculosis | 1 | 0 | 0 | 4 | 1 | 0 | 34 | 1 | 41 | 92 | 1078 | 1073 |
| Typhoid ⁸ | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 4 | 77 | 69 |
| Yersiniosis (NEC) ⁵ | 0 | - | 0 | 15 | 2 | 0 | 1 | 0 | 18 | 12 | 268 | 306 |

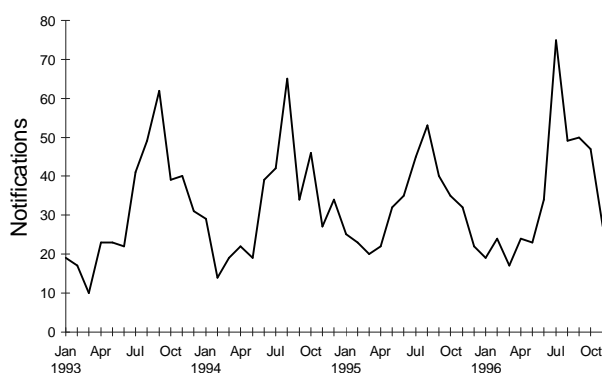
- For HIV and AIDS, see Tables 4 and 5. For rarely notified diseases, see Table 3.
- Totals comprise data from all States and Territories. Cumulative figures are subject to retrospective revision so there may be discrepancies between the number of new notifications and the increment in the cumulative 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 rare¹ diseases received by State and Territory health authorities in the period 8 December 1996 to 7 January 1997

| Disease ² | Total this period | Reporting States or Territories | Total notifications 1996 |
|----------------------|-------------------|---------------------------------|--------------------------|
| Brucellosis | 3 | Qld | 38 |
| Chancroid | | | 1 |
| Cholera | | | 4 |
| Hydatid infection | 3 | Qld | 45 |
| Leprosy | | | 9 |

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

Figure 2. Meningococcal infection notifications, 1993 to 1996, by month of onset



Gonococcal infection was reported for 165 persons this period. Persons in the 15-34 years age group represented 80% of the total notifications. The male: female ratio was 1.3:1.

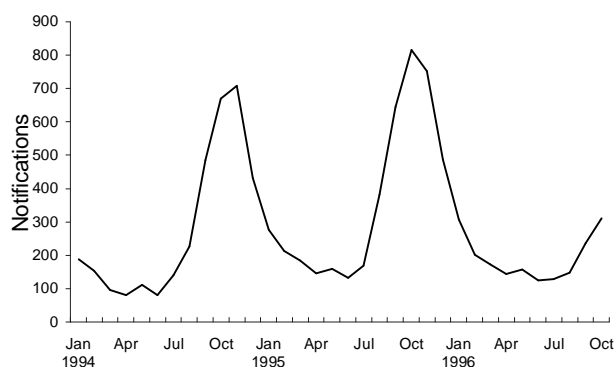
There were 18 cases of meningococcal infection reported this period. Eight of these were in the 0-4 years age group. The peak in notifications for meningococcal disease is usually in the winter months (Figure 2).

Pertussis was reported for 478 persons this period. Numbers of notifications continue to be high, with 210 and 183 cases reported in Victoria and South Australia respectively. One hundred and eight and 124 cases were seen in the 5-9 and 10-14 years age groups respectively.

Rubella was reported for 205 persons this period, with 124 notifications from South Australia. The number of notifications has been high in recent months, following a seasonal pattern similar to that recorded during the last three years (Figure 3). One hundred and two cases (50%) were for adults aged 15-24 years. There was a predominance of males, with the male:female ratio being 2.9:1.

Salmonellosis was reported for 320 persons this period. One hundred and forty of the cases were in the 0-4 years age group. Included were apparent clusters of 3 or more

Figure 3. Rubella notifications, 1994 to 1996, by month of onset



cases in postcode regions of Queensland (6), Victoria (1), South Australia (1) and Tasmania (1). Notifications of salmonellosis are expected to rise in January and February.

Table 4. New diagnoses of HIV infection, new diagnoses of AIDS and deaths following AIDS occurring in the period 1 to 31 August 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 | 1 | 0 | 0 | 1 | 0 | 0 | 2 | 4 | 3 | 50 | 60 |
| | Male | 0 | 23 | 0 | 13 | 5 | 1 | 15 | 2 | 59 | 68 | 516 | 526 |
| | Sex not reported | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 8 |
| | Total ¹ | 0 | 24 | 0 | 13 | 6 | 1 | 15 | 4 | 63 | 71 | 571 | 596 |
| AIDS diagnoses | Female | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 10 | 24 |
| | Male | 0 | 7 | 0 | 2 | 0 | 0 | 1 | 0 | 10 | 66 | 250 | 481 |
| | Total ¹ | 0 | 7 | 0 | 2 | 0 | 0 | 1 | 0 | 10 | 71 | 260 | 506 |
| AIDS deaths | Female | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 13 | 28 |
| | Male | 0 | 10 | 0 | 1 | 2 | 0 | 1 | 3 | 17 | 44 | 280 | 418 |
| | Total ¹ | 0 | 10 | 0 | 1 | 2 | 0 | 1 | 3 | 17 | 46 | 293 | 447 |

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 August 1996, by sex and State or Territory

| | | ACT | NSW | NT | Qld | SA | Tas | Vic | WA | Australia |
|----------------|--------------------|-----|-------|----|------|-----|-----|------|-----|-----------|
| HIV diagnoses | Female | 15 | 571 | 3 | 102 | 45 | 4 | 169 | 76 | 985 |
| | Male | 171 | 10159 | 84 | 1647 | 582 | 76 | 3437 | 778 | 16934 |
| | Sex not reported | 0 | 2048 | 0 | 0 | 0 | 0 | 42 | 0 | 2090 |
| | Total ¹ | 186 | 12786 | 87 | 1754 | 627 | 80 | 3657 | 856 | 20033 |
| AIDS diagnoses | Female | 5 | 138 | 0 | 30 | 18 | 2 | 48 | 17 | 258 |
| | Male | 76 | 3887 | 26 | 668 | 284 | 32 | 1373 | 293 | 6639 |
| | Total ¹ | 81 | 4035 | 26 | 700 | 302 | 34 | 1428 | 312 | 6918 |
| AIDS deaths | Female | 2 | 104 | 0 | 24 | 13 | 2 | 37 | 11 | 193 |
| | Male | 50 | 2815 | 21 | 470 | 197 | 21 | 1084 | 220 | 4878 |
| | Total ¹ | 52 | 2925 | 21 | 496 | 210 | 23 | 1127 | 232 | 5086 |

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

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 (Australian Capital Territory, 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 August 1996, as reported to 30 November 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. 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* 1997;21:6.

Data for weeks 50, 51 and 52 ending 15, 22 and 29 December 1996 respectively are included in this issue of *CDI* (Table 6). The consultation rate for influenza-like illness has remained at low levels since the beginning of October. There has been no appreciable change in the consultation rate for gastroenteritis over recent months. Consultation rates for chickenpox for the current reporting weeks are higher than rates reported during winter and spring. The numbers of reported cases of rubella and pertussis have remained low. Four cases of measles were reported, compared with only three cases in the previous eight months.

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 *CDI* 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 1,099 reports received in this period (Tables 7 and 8).

Sixty-two reports of Ross River virus were received this period. The total number of laboratory reports received during 1996 were the highest on record (3,208). The majority of reports were between January and May (Figure 4).

Figure 4. Ross River virus laboratory reports, 1994 to 1996, by month of specimen collection

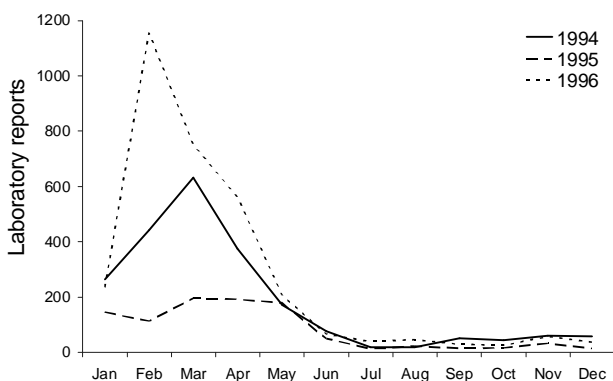
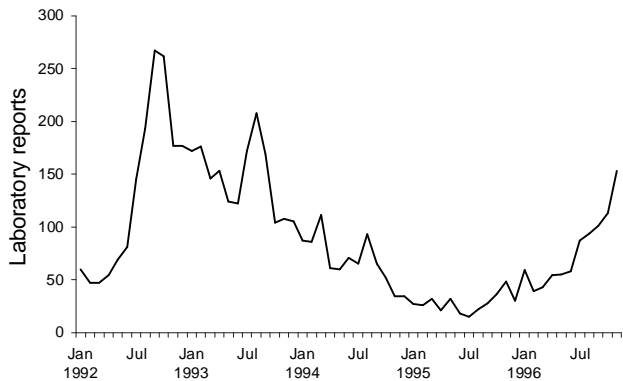


Table 6. Australian Sentinel Practice Research Network reports, weeks 50, 51 and 52, 1996

| Condition | Week 50, to 15 December 1996 | | Week 51, to 22 December 1996 | | Week 52, to 29 December 1996 | |
|-----------------|------------------------------|---------------------------|------------------------------|---------------------------|------------------------------|---------------------------|
| | Reports | Rate per 1,000 encounters | Reports | Rate per 1,000 encounters | Reports | Rate per 1,000 encounters |
| Influenza | 18 | 2.3 | 14 | 1.7 | 15 | 3.4 |
| Rubella | 9 | 1.2 | 2 | 0.2 | 1 | 0.2 |
| Measles | 3 | 0.4 | 1 | 0.1 | 0 | 0.0 |
| Chickenpox | 37 | 4.7 | 28 | 3.5 | 22 | 5.0 |
| Pertussis | 7 | 0.9 | 3 | 0.4 | 5 | 1.1 |
| Gastroenteritis | 150 | 19.2 | 146 | 18.1 | 96 | 21.8 |

Figure 5. *Mycoplasma pneumoniae* laboratory reports, 1992 to 1996, by month of specimen collection



Reports of *Mycoplasma pneumoniae* continued to increase during November (Figure 5). A total of 93 reports were received this period with diagnosis by IgM detection (41), single high titre (34), total antibody detection (12), four-fold rise in titre (4), IgA detection (one) and virus isolation (one). The majority of reports (59%) were for children under 15 years of age.

There were 97 reports of Epstein-Barr virus received this period with diagnosis by IgM detection (91), total antibody detection (5) and antigen detection (one). The total number of laboratory reports received for 1996 is the highest on record (Figure 6).

Laboratory reports of parvovirus may be declining after peaking in November (Figure 7), only one report was received this period.

Figure 6. Epstein-Barr virus laboratory reports, 1985 to 1996, by month of specimen collection

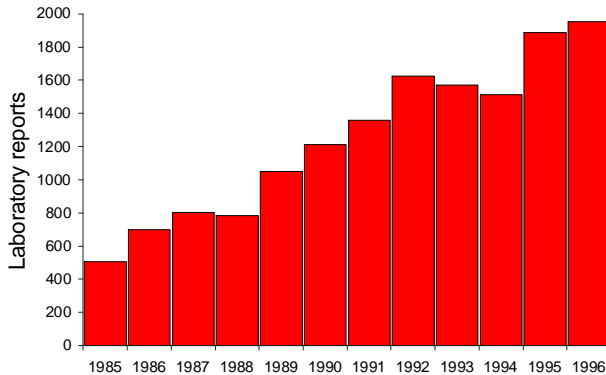


Figure 7. Parvovirus laboratory reports, 1993 to 1996, by month of specimen collection

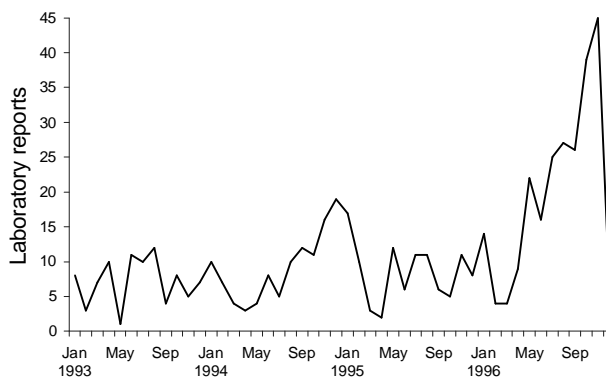


Table 7. Virology and serology laboratory reports by State or Territory¹ for the reporting period 12 December 1996 to 1 January 1997, historical data², and total reports for the year

| | State or Territory ¹ | | | | | | | | Total this fortnight | Historical data ² | Total 1996 |
|--|---------------------------------|-----------|-----------|------------|------------|----------|------------|------------|----------------------|------------------------------|---------------|
| | ACT | NSW | NT | Qld | SA | Tas | Vic | WA | | | |
| Measles, mumps, rubella | | | | | | | | | | | |
| Measles virus | | | | 2 | | | | | 2 | 24.7 | 60 |
| Rubella virus | | | | 5 | 19 | | 1 | 9 | 34 | 62.8 | 821 |
| Hepatitis viruses | | | | | | | | | | | |
| Hepatitis A virus | | | 5 | | 5 | | | 12 | 22 | 18.7 | 415 |
| Hepatitis D virus | | | | | 2 | | | | 2 | .7 | 22 |
| Arboviruses | | | | | | | | | | | |
| Ross River virus | | | 6 | 8 | 2 | | | 46 | 62 | 20.0 | 3236 |
| Barmah Forest virus | | | 1 | 5 | | | | 3 | 9 | 8.3 | 227 |
| Dengue not typed | | | | | | | | 1 | 1 | .2 | 17 |
| Adenoviruses | | | | | | | | | | | |
| Adenovirus type 40 | | | | | | | | 1 | 1 | .0 | 34 |
| Adenovirus not typed/pending | | 3 | | 32 | 6 | | 7 | 12 | 60 | 67.3 | 1426 |
| Herpes viruses | | | | | | | | | | | |
| Cytomegalovirus | | 2 | | 12 | 2 | | 10 | 5 | 31 | 67.2 | 1518 |
| Varicella-zoster virus | | 4 | | 6 | 10 | | 3 | 14 | 37 | 48.8 | 1209 |
| Epstein-Barr virus | | 12 | | 4 | 25 | | 12 | 44 | 97 | 87.2 | 2217 |
| Other DNA viruses | | | | | | | | | | | |
| Parvovirus | | | | | 1 | | | | 1 | 6.5 | 258 |
| Picornavirus family | | | | | | | | | | | |
| Coxsackievirus B2 | | 1 | | | | | | | 1 | .8 | 15 |
| Coxsackievirus B4 | | 1 | | | | | | | 1 | .0 | 8 |
| Echovirus type 7 | | | | | | | 2 | | 2 | .0 | 16 |
| Poliovirus type 1 (uncharacterised) | | 1 | | | | | | | 1 | .7 | 14 |
| Poliovirus not typed/pending | | | | | | | | 1 | 1 | .0 | 2 |
| Rhinovirus (all types) | | 5 | | 12 | | | | 8 | 25 | 37.7 | 755 |
| Enterovirus not typed/pending | | 1 | | 18 | | | | 25 | 44 | 43.0 | 880 |
| Ortho/Paramyxoviruses | | | | | | | | | | | |
| Influenza A virus | | 1 | | 41 | | | | | 42 | 9.0 | 1580 |
| Influenza B virus | | | | 6 | 5 | | | 3 | 14 | 3.5 | 80 |
| Influenza virus - typing pending | | | | | | | | 1 | 1 | .0 | 21 |
| Parainfluenza virus type 1 | | | | | 2 | | | 3 | 5 | 1.0 | 319 |
| Parainfluenza virus type 2 | | | | 6 | | | | 1 | 7 | 1.2 | 79 |
| Parainfluenza virus type 3 | | 11 | | 24 | 3 | | 14 | 5 | 57 | 45.8 | 863 |
| Respiratory syncytial virus | | 1 | | 2 | | | 4 | 1 | 8 | 36.7 | 4124 |
| Other RNA viruses | | | | | | | | | | | |
| Rotavirus | | 3 | | | 20 | 2 | 5 | 5 | 35 | 61.2 | 1640 |
| Norwalk agent | | | | | | | 1 | | 1 | 2.8 | 43 |
| Other | | | | | | | | | | | |
| <i>Chlamydia trachomatis</i> not typed | | 25 | 54 | | 25 | 1 | 10 | 74 | 189 | 100.2 | 3975 |
| <i>Chlamydia</i> species | | 1 | | | | | | | 1 | 2.8 | 53 |
| <i>Mycoplasma pneumoniae</i> | | 19 | 1 | 8 | 4 | 1 | 26 | 34 | 93 | 16.7 | 987 |
| <i>Coxiella burnetii</i> (Q fever) | | 6 | | 16 | | | | 2 | 24 | 12.2 | 218 |
| <i>Bordetella pertussis</i> | | | | | | | 164 | 11 | 175 | 26.5 | 951 |
| <i>Legionella longbeachae</i> | | | | | | | | 3 | 3 | .3 | 20 |
| <i>Cryptococcus</i> species | | | | | | | | 1 | 1 | 1.0 | 21 |
| <i>Leptospira pomona</i> | | | | 4 | | | | | 4 | .2 | 8 |
| <i>Leptospira hardjo</i> | | | | 3 | 1 | | | | 4 | .5 | 24 |
| <i>Leptospira</i> species | | 1 | | | | | | | 1 | 1.0 | 64 |
| TOTAL | | 98 | 67 | 214 | 132 | 4 | 259 | 325 | 1,099 | 817.0 | 28,211 |

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 12 December 1996 to 1 January 1997

| State or Territory | Laboratory | Reports |
|--------------------|--|-------------|
| New South Wales | Institute of Clinical Pathology & Medical Research, Westmead | 44 |
| | Royal Alexandra Hospital for Children, Camperdown | 6 |
| | Royal Prince Alfred Hospital, Camperdown | 23 |
| | South West Area Pathology Service, Liverpool | 24 |
| Queensland | State Health Laboratory, Brisbane | 216 |
| South Australia | Institute of Medical and Veterinary Science, Adelaide | 131 |
| Tasmania | Northern Tasmanian Pathology Service, Launceston | 4 |
| Victoria | Microbiological Diagnostic Unit, University of Melbourne | 10 |
| | Monash Medical Centre, Melbourne | 30 |
| | Royal Children's Hospital, Melbourne | 219 |
| Western Australia | PathCentre Virology, Perth | 197 |
| | Royal Perth Hospital | 6 |
| | Western Diagnostic Pathology | 189 |
| TOTAL | | 1099 |