# 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'.

#### Meningococcal disease

The number of notifications of meningococcal disease has increased again this reporting period. However, the

number of cases reported to date in 1998 (248) remains lower than for the same period in 1997 (273).

#### Vaccine preventable diseases

The number of pertussis notifications remains low in most States, although a relatively high number continue to be reported from Queensland. There has been a decrease in the number of cases for Australia (by onset date) in each successive month from October 1997 to July 1998.

With the exception of a relatively high number of rubella cases in Queensland the number of notifications for all other vaccine preventable diseases also remains low.

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.

### **Tables**

There were 3,368 notifications to the National Notifiable Diseases Surveillance System (NNDSS) for this four week period, 22 July to 18 August 1998 (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 1).

There were 2,563 reports received by the *CDI* Virology and Serology Laboratory Reporting Scheme (LabVISE) this four week period, 16 July to 12 August 1998 (Tables 3 and 4).

The Australian Sentinel Practice Research Network (ASPREN) data for weeks 28 to 31 ending 9 August 1998 are included in this issue of *CDI* (Table 5).

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 22 July to 18 August 1998

| Disease <sup>1,2</sup>         | ACT | NSW | NT | Qld | SA | Tas | Vic | WA | This period 1998 | This<br>period<br>1997 | Year to<br>date<br>1998 | Year to date 1997 |
|--------------------------------|-----|-----|----|-----|----|-----|-----|----|------------------|------------------------|-------------------------|-------------------|
| Diphtheria                     | 0   | 0   | 0  | 0   | 0  | 0   | 0   | 0  | 0                | 0                      | 0                       | 0                 |
| H. influenzae type b infection | 0   | 0   | 0  | 1   | 0  | 0   | 0   | 0  | 1                | 5                      | 22                      | 33                |
| Measles <sup>3</sup>           | 2   | 8   | 0  | 6   | 0  | 4   | 3   | 5  | 28               | 62                     | 236                     | 371               |
| Mumps                          | 1   | 3   | 1  | 4   | 1  | 1   | 2   | 2  | 15               | 9                      | 107                     | 125               |
| Pertussis                      | 3   | 72  | 0  | 83  | 37 | 3   | 66  | 5  | 269              | 794                    | 4,556                   | 4,861             |
| Rubella <sup>4</sup>           | 3   | 5   | 0  | 44  | 2  | 1   | 10  | 4  | 69               | 85                     | 487                     | 868               |
| Tetanus                        | 0   | 0   | 0  | 0   | 0  | 0   | 0   | 0  | 0                | 1                      | 3                       | 7                 |

NN. Not Notifiable

- 1. No notification of poliomyelitis has been received 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.
- 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.
- Includes congenital rubella.

Table 2. Notifications of diseases received by State and Territory health authorities in the period 22 July to 18 August 1998 (diseases preventable by routine childhood immunisation are presented in Table 1)

| Disease <sup>1,2,3</sup>                | ACT | NSW | NT  | Qld | SA  | Tas | Vic | WA  | This period 1998 | This<br>period<br>1997 | Year to date 19984 | Year to<br>date<br>1997 |
|---|-----|-----|-----|-----|-----|-----|-----|-----|------------------|------------------------|--------------------|-------------------------|
| Arbovirus infection (NEC) <sup>5</sup>  | 0   | 0   | 0   | 0   | 0   | 0   | 4   | 1   | 5                | 1                      | 70                 | 104                     |
| Barmah Forest virus infection           | 0   | 5   | 0   | 14  | 0   | 0   | 3   | 0   | 22               | 26                     | 402                | 515                     |
| Brucellosis                             | О   | 2   | 0   | 2   | 0   | 0   | 0   | 0   | 4                | 2                      | 28                 | 19                      |
| Campylobacteriosis <sup>4,6</sup>       | 31  | -   | 11  | 290 | 195 | 24  | 165 | 101 | 817              | 855                    | 6,358              | 7,188                   |
| Chancroid                               | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                | 0                      | 1                  | 1                       |
| Chlamydial infection (NEC) <sup>7</sup> | 7   | NN  | 60  | 260 | 63  | 25  | 103 | 131 | 649              | 697                    | 6,684              | 5,900                   |
| Cholera                                 | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                | 1                      | 3                  | 2                       |
| Dengue                                  | 1   | 2   | 2   | 7   | 1   | 0   | 0   | 1   | 14               | 1                      | 359                | 193                     |
| Donovanosis                             | 0   | NN  | 0   | 0   | NN  | 0   | 0   | 2   | 2                | 6                      | 24                 | 23                      |
| Gonococcal infection <sup>8</sup>       | 1   | 58  | 100 | 81  | 9   | 2   | 47  | 86  | 384              | 304                    | 3,438              | 2,892                   |
| Hepatitis A                             | 3   | 41  | 7   | 65  | 7   | 0   | 5   | 8   | 136              | 210                    | 1,977              | 2,163                   |
| Hepatitis B incident4                   | 0   | 1   | 3   | 1   | 0   | 1   | 6   | 0   | 12               | 18                     | 143                | 158                     |
| Hepatitis C incident <sup>9</sup>       | 0   | 5   | 0   | -   | 5   | 0   | -   | -   | 10               | 4                      | 104                | 49                      |
| Hepatitis C unspecified4                | 22  | NN  | 22  | 201 | NN  | 28  | 8   | 74  | 355              | 786                    | 4,158              | 6,086                   |
| Hepatitis (NEC)                         | 0   | 0   | 0   | 0   | 0   | 0   | 0   | NN  | 0                | 1                      | 4                  | 14                      |
| Hydatid infection                       | 0   | 0   | 0   | 2   | 0   | 0   | 2   | 1   | 5                | 4                      | 26                 | 28                      |
| Legionellosis                           | 0   | 1   | 0   | 1   | 1   | 0   | 0   | 1   | 4                | 6                      | 159                | 104                     |
| Leprosy                                 | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0                | 0                      | 2                  | 7                       |
| Leptospirosis                           | 0   | 1   | 1   | 10  | 0   | 0   | 1   | 0   | 13               | 5                      | 109                | 80                      |
| Listeriosis                             | 0   | 2   | 0   | 0   | 0   | 0   | 0   | 0   | 2                | 8                      | 36                 | 56                      |
| Malaria                                 | 2   | 11  | 3   | 25  | 3   | 1   | 8   | 3   | 56               | 52                     | 545                | 536                     |
| Meningococcal infection                 | 0   | 19  | 6   | 9   | 4   | 5   | 5   | 7   | 55               | 51                     | 248                | 273                     |
| Ornithosis                              | 0   | NN  | 0   | 0   | 0   | 0   | 3   | 1   | 4                | 2                      | 24                 | 37                      |
| Q Fever                                 | 1   | 8   | 0   | 14  | 3   | 0   | 4   | 0   | 30               | 47                     | 346                | 395                     |
| Ross River virus infection              | 0   | 6   | 5   | 26  | 1   | 1   | 0   | 3   | 42               | 121                    | 2,366              | 6,296                   |
| Salmonellosis (NEC)                     | 2   | 44  | 14  | 100 | 20  | 4   | 61  | 26  | 271              | 321                    | 5,235              | 4,839                   |
| Shigellosis <sup>6</sup>                | 3   | -   | 4   | 4   | 4   | 3   | 7   | 7   | 32               | 51                     | 406                | 553                     |
| Syphilis <sup>10</sup>                  | 1   | 36  | 33  | 30  | 7   | 0   | 0   | 6   | 113              | 100                    | 891                | 821                     |
| Tuberculosis                            | 4   | 8   | 2   | 16  | 0   | 0   | 15  | 4   | 49               | 74                     | 616                | 650                     |
| Typhoid <sup>11</sup>                   | 0   | 2   | 0   | 0   | 0   | 0   | 0   | 0   | 2                | 6                      | 52                 | 55                      |
| Yersiniosis (NEC) <sup>6</sup>          | 0   | -   | 0   | 8   | 3   | 0   | 0   | 0   | 11               | 20                     | 162                | 179                     |

- 1. For HIV and AIDS, see Tables 6 and 7.
- 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. 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. Two notifications of infant botulism have been received in 1998.
- 4. Data from Victoria for 1998 are incomplete.
- 5. NT: includes Barmah Forest virus.
- Not reported for NSW because it is only notifiable as 'foodborne disease' or 'gastroenteritis in an institution'.

- 7. WA: genital only
- 8. NT, Qld, SA and Vic: includes gonococcal neonatal ophthalmia.
- Qld, Vic and WA incident cases of Hepatitis C are not separately reported.
- 10. Includes congenital syphilis
- 11. NSW, Qld, Vic: includes paratyphoid.
- NN Not Notifiable.

**NEC Not Elsewhere Classified** 

Elsewhere Classified.

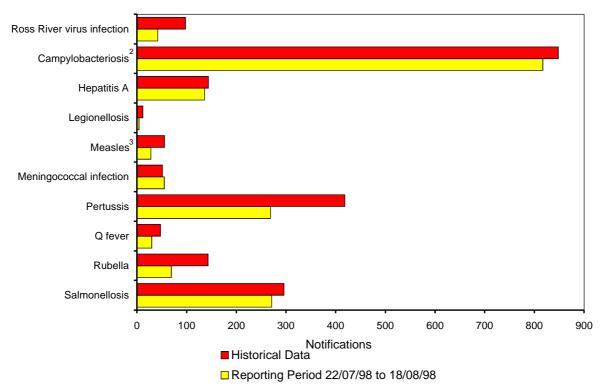


Figure 1. Selected National Notifiable Diseases Surveillance System reports, and historical data<sup>1</sup>

Table 3. Virology and serology laboratory reports by State or Territory<sup>1</sup> for the reporting period 16 July to 12 August 1998, and total reports for the year

|                                  |     |     | T-4-14b:- | Total reported |    |     |     |    |                   |                          |
|----------------------------------|-----|-----|-----------|----------------|----|-----|-----|----|-------------------|--------------------------|
|                                  | ACT | NSW | NT        | Qld            | SA | Tas | Vic | WA | Total this period | in <i>CDI</i> in<br>1998 |
| Measles, mumps, rubella          |     |     |           |                |    |     |     |    |                   |                          |
| Measles virus                    |     |     |           |                | 1  |     | 3   | 3  | 7                 | 46                       |
| Mumps virus                      |     | 1   |           |                |    |     |     | 4  | 5                 | 27                       |
| Rubella virus                    |     | 1   |           | 8              | 2  |     |     | 1  | 12                | 75                       |
| Hepatitis viruses                |     |     |           |                |    |     |     |    |                   |                          |
| Hepatitis A virus                |     | 5   | 1         | 12             | 6  | 1   |     | 11 | 36                | 288                      |
| Arboviruses                      |     |     |           |                |    |     |     |    |                   |                          |
| Ross River virus                 |     |     | 2         | 12             | 1  |     |     | 10 | 25                | 554                      |
| Barmah Forest virus              |     |     |           | 2              |    |     |     |    | 2                 | 24                       |
| Dengue not typed                 |     |     |           |                |    |     |     | 2  | 2                 | 25                       |
| Murray Valley encephalitis virus |     |     |           |                |    |     |     | 1  | 1                 | 2                        |
| Japanese encephalitis virus      |     |     |           |                |    |     |     | 1  | 1                 | 1                        |
| Flavivirus (unspecified)         |     |     |           | 5              |    |     |     |    | 5                 | 49                       |

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.

<sup>2.</sup> Data from Victoria for 1998 are incomplete.

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.

Table 3. Virology and serology laboratory reports by State or Territory<sup>1</sup> for the reporting period 16 July to 12 August 1998, and total reports for the year, continued

|  |     |     | ;  | State or | Territory | <b>,</b> 1 |     |     | Total this | Total reported in <i>CDI</i> in |
|--|-----|-----|----|----------|-----------|------------|-----|-----|------------|---------------------------------|
|  | ACT | NSW | NT | Qld      | SA        | Tas        | Vic | WA  | period     | 1998                            |
| Adenoviruses                               |     |     |    |          |           |            |     |     |            |                                 |
| Adenovirus type 3                          |     |     |    |          |           |            | 5   |     | 5          | 26                              |
| Adenovirus type 7                          |     |     |    |          |           |            | 1   |     | 1          | 15                              |
| Adenovirus type 40                         |     |     |    |          |           |            | 1   |     | 1          | 5                               |
| Adenovirus not typed/pending               |     | 12  |    | 7        | 15        |            | 4   | 13  | 51         | 471                             |
| Herpes viruses                             |     |     |    |          |           |            |     |     |            |                                 |
| Herpes virus type 6                        |     |     |    |          |           |            |     | 1   | 1          | 3                               |
| Cytomegalovirus                            |     | 13  | 1  | 17       | 2         |            | 21  | 9   | 63         | 492                             |
| Varicella-zoster virus                     |     | 6   | 1  | 25       | 9         |            | 39  | 23  | 103        | 818                             |
| Epstein-Barr virus                         |     | 6   | 3  | 38       | 23        | 2          | 8   | 39  | 119        | 1,109                           |
| Other DNA viruses                          |     |     |    |          |           |            |     |     |            |                                 |
| Papovavirus group                          |     | 1   |    |          |           |            |     |     | 1          | 1                               |
| Molluscum contagiosum                      |     |     |    |          |           |            |     | 1   | 1          | 2                               |
| Contagious pustular dermatitis (Orf virus) |     |     |    |          |           |            |     | 1   | 1          | 8                               |
| Parvovirus                                 |     |     |    | 4        | 2         |            | 1   | 8   | 15         | 129                             |
| Picorna virus family                       |     |     |    |          |           |            |     |     |            |                                 |
| Coxsackievirus B4                          |     |     |    |          |           |            | 1   |     | 1          | 4                               |
| Echovirus type 5                           |     |     |    |          |           |            | 1   |     | 1          | 2                               |
| Echovirus type 11                          |     |     |    |          |           |            | 1   |     | 1          | 24                              |
| Poliovirus type 2 (uncharacterised)        |     |     |    |          |           |            | 1   |     | 1          | 5                               |
| Poliovirus type 3 (uncharacterised)        |     |     |    |          |           |            | 1   |     | 1          | 1                               |
| Rhinovirus (all types)                     |     | 6   |    |          | 6         |            | 3   | 21  | 36         | 309                             |
| Enterovirus not typed/pending              |     |     |    | 5        |           |            |     | 23  | 28         | 308                             |
| Ortho/paramyxoviruses                      |     |     |    |          |           |            |     |     |            |                                 |
| Influenza A virus                          |     | 43  | 3  | 37       | 169       |            | 88  | 130 | 470        | 1,545                           |
| Influenza B virus                          |     | 1   |    |          | 5         |            | 2   | 8   | 16         | 125                             |
| Influenza virus - typing pending           |     |     |    |          |           |            |     | 1   | 1          | 2                               |
| Parainfluenza virus type 1                 |     |     |    |          | 10        |            |     | 2   | 12         | 244                             |
| Parainfluenza virus type 2                 |     |     |    |          | 2         |            |     | 1   | 3          | 29                              |
| Parainfluenza virus type 3                 |     | 1   |    | 1        | 2         |            | 1   | 12  | 17         | 223                             |
| Respiratory syncytial virus                |     | 207 |    | 28       | 78        | 10         | 229 | 328 | 880        | 2,081                           |
| Other RNA viruses                          |     |     |    |          |           |            |     |     |            |                                 |
| HTLV-1                                     |     |     |    |          |           |            |     | 1   | 1          | 13                              |
| Rotavirus                                  |     | 20  |    |          | 18        | 12         | 64  | 75  | 189        | 533                             |
| Other                                      |     |     |    |          |           |            |     |     |            |                                 |
| Chlamydia trachomatis not typed            |     | 39  | 31 | 44       | 28        | 3          | 7   | 117 | 269        | 2,555                           |
| Chlamydia psittaci                         |     |     |    |          |           |            |     | 1   | 1          | 33                              |
| Mycoplasma pneumoniae                      |     | 17  | 3  | 50       | 15        | 3          | 27  | 1   | 116        | 905                             |
| Coxiella burnetii (Q fever)                |     |     |    | 6        | 1         |            |     |     | 7          | 79                              |
| Bordetella pertussis                       |     |     | 3  | 14       |           |            | 30  | 5   | 52         | 762                             |
| Legionella longbeachae                     |     |     |    |          |           |            |     | 2   | 2          | 27                              |
| TOTAL                                      |     | 379 | 48 | 315      | 395       | 31         | 539 | 856 | 2,563      | 13,979                          |

<sup>1.</sup> 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 16 July to 12 August 1998

| State or Territory | Laboratory  | Reports |
|--------------------|---|---------|
| New South Wales    | Royal Prince Alfred Hospital, Camperdown                      | 122     |
|                    | South West Area Pathology Service, Liverpool                  | 243     |
| Queensland         | Queensland Medical Laboratory, West End                       | 331     |
|                    | Townsville General Hospital                                   | 20      |
| South Australia    | Institute of Medical and Veterinary Science, Adelaide         | 392     |
| Tasmania           | Northern Tasmanian Pathology Service, Launceston              | 31      |
| Victoria           | Monash Medical Centre, Melbourne                              | 158     |
|                    | Royal Children's Hospital, Melbourne                          | 194     |
|                    | Victorian Infectious Diseases Reference Laboratory, Fairfield | 184     |
| Western Australia  | PathCentre Virology, Perth                                    | 474     |
|                    | Princess Margaret Hospital, Perth                             | 329     |
|                    | Western Diagnostic Pathology                                  | 85      |
| TOTAL              |   | 2,563   |

Table 5. Australian Sentinel Practice Research Network reports, weeks 28 to 31, 1998

| Week number                     | 28           |                                 | :       | 29                              | ;       | 30                              | 31            |                                 |  |
|---------------------------------|--------------|---------------------------------|---------|---------------------------------|---------|---------------------------------|---------------|---------------------------------|--|
| Week ending on                  | 19 July 1998 |                                 | 26 Ju   | ly 1998                         | 2 Aug   | ust 1998                        | 9 August 1998 |                                 |  |
| Doctors reporting               |              | 59                              | (       | 60                              |         | 57                              | 55            |                                 |  |
| Total encounters                | 7,           | 729                             | 8,      | 152                             | 7,      | 208                             | 7,483         |                                 |  |
| Condition                       | Reports      | Rate per<br>1,000<br>encounters | Reports | Rate per<br>1,000<br>encounters | Reports | Rate per<br>1,000<br>encounters | Reports       | Rate per<br>1,000<br>encounters |  |
| Influenza                       | 139          | 18.0                            | 121     | 14.8                            | 135     | 18.7                            | 163           | 21.8                            |  |
| Rubella                         | 0            | 0.0                             | 0       | 0.0                             | 3       | 0.4                             | 0             | 0.0                             |  |
| Measles                         | 1            | 0.1                             | 2       | 0.2                             | 0       | 0.0                             | 0             | 0.0                             |  |
| Chickenpox                      | 13           | 1.7                             | 14      | 1.7                             | 14      | 1.9                             | 13            | 1.7                             |  |
| Pertussis                       | 1            | 0.1                             | 1       | 0.1                             | 1       | 0.1                             | 2             | 0.3                             |  |
| HIV testing - patient initiated | 12           | 1.6                             | 13      | 1.6                             | 15      | 2.1                             | 23            | 3.1                             |  |
| HIV testing - doctor initiated  | 6            | 0.8                             | 7       | 0.9                             | 3       | 0.4                             | 3             | 0.4                             |  |
| Td (ADT) vaccine                | 36           | 4.7                             | 28      | 3.4                             | 46      | 6.4                             | 54            | 7.2                             |  |
| Pertussis vaccination           | 36           | 4.7                             | 54      | 6.6                             | 44      | 6.1                             | 34            | 4.5                             |  |
| Reaction to pertussis vaccine   | 2            | 0.3                             | 0       | 0.0                             | 0       | 0.0                             | 0             | 0.0                             |  |
| Ross River virus infection      | 0            | 0.0                             | 0       | 0.0                             | 1       | 0.1                             | 1             | 0.1                             |  |
| Gastroenteritis                 | 57           | 7.4                             | 85      | 10.4                            | 81      | 11.2                            | 80            | 10.7                            |  |

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