Communicable Diseases Surveillance

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’.

Vaccine preventable diseases

A total of 466 notifications for vaccine preventable diseases was received during this reporting period, similar to the last period (440) and again lower than the same period in 1998 (498). The total number of notifications for the year to date for 1999 (4,323) was reduced by 37% compared with 1998 (6,896), primarily due to a decrease in pertussis and rubella notifications (Table 1). The number of measles notifications decreased from 37 cases in the last reporting period to 17 cases in this period, mostly reflecting a decrease in notifications from Victoria. Overall the number of year to date cases of measles for 1999 (274) was similar to 1998 (280).

The number of notifications of Haemophilus influenzae type b for this period increased from 1 case in the previous reporting period to 4 cases. Overall, the number of year to date cases of Haemophilus influenzae type b was higher in 1999 (46) than for the same period in 1998 (29). This was mainly due to an early outbreak in June 1999 in New South Wales in which 12 cases were notified. The ratio of males to females for Haemophilus influenzae type b so far this year was the same as the ratio for cases in 1998, 1:1.3 (CDI1999;23:11).

The total number of pertussis notifications to date in 1999 was 3,499 cases, a 39% decrease from the same period in 1998 (5,721) (Figure 1). The number of cases notified in this reporting period decreased in all States (Figure 2), including Tasmania where an outbreak was recently reported. There were more notifications for females than males (male to female ratio 1:1.4), especially for females aged 25 to 69 years old (Figure 3). The number of notifications peaked in the 10-14 year age group (616, 18%).

Figure 1. Notifications of pertussis, Australia, 1998 and 1999, by month of onset

Figure 2. Notifications of pertussis, Australia, 1999, by State and month of onset

Figure 3. Notifications of pertussis, Australia, 1999, by age group and sex
Meningococcal infection

The number of meningococcal infection notifications fell in this reporting period to 33 from 66 in the previous period, representing a reverse in the trend for increasing numbers of notifications in the previous three reporting periods. The reduction in the number of meningococcal infection notifications occurred in all States and Territories, except the Northern Territory and South Australia. The overall number of meningococcal infection notifications for the year to date in 1999 (498) was higher than for the corresponding year to date in 1998 (394). The highest number of notified cases occurred in New South Wales (208; 41%), followed by Victoria (118; 24%) and Queensland (71; 14%). The male to female ratio was 1.4:1. Notifications were highest in the 0-4 (183; 37%) and 15-19 (84; 17%) year age groups.

Vectorborne disease

Notifications of Ross River virus infection remained steady in this period (72) and were similar to the previous two reporting periods (66 and 67 respectively) and the same period in 1998 (79). Most notifications (73%) were received from Queensland. Overall, the number of year to date cases for 1999 (4,188) increased by 65% compared with the number of year to date cases for 1998 (2,534). This was the result of higher numbers in the months of January to May (Figure 4). The laboratory reports for Ross River virus were also mostly received from Queensland (78%) and reflected the seasonal trend for onset of disease. This showed a similar pattern to previous years.

Other

The number of notified cases of tuberculosis (TB) in this period (46) increased compared with the previous period (29), but decreased compared with the same period in 1998 (73). Most cases were from the Northern Territory (9) and New South Wales (21). Those cases from the Northern Territory represented an increase due to a backlog of reports caused by the diversion of resources during the East Timorese crisis. None of these notifications were from the East Timorese as these data have been stored separately and not included in the NNDSS data to date. Overall, the number of year to date cases of TB has decreased in 1999 (793) compared with 1998 (829).

Foodborne diseases

The number of listeriosis notifications has returned to normal level with 5 notifications in this period.

The decrease was seen in those States with the most reports in the previous period, that is, New South Wales and Western Australia.

Laboratory reports

Parainfluenza virus type 3 laboratory reports were high in this period. Australia records a peak of parainfluenza type 3 activity in the latter months of each year (Figure 5). LabVISE received 18 reports of measles from Western Australia, however, only 3 cases were detected during this reporting period.

The large number of reports of Varicella-zoster virus, Group A Streptococcus and Treponema pallidum (Table 3) represent presentation of the data by the date reported to CDI. They do not indicate an increase in recent cases, but are results from the previous months that were reported in this period. The date of collection of the specimen, indicating as close as possible the date of illness, is available in LabVISE data, and from January 2000 the presentation of LabVISE data will be by date of specimen collection.