Communicable Diseases Surveillance

Presentation of NNDSS data for April 2000

In the March 2000 issue an additional summary table was introduced. Table 1 presents 'date of notification' data, which is a composite of three components: (i) the true onset date from a clinician, if available, (ii) the date the laboratory test was ordered, or (iii) the date reported to the public health unit. Table 2 presents data by report date for information only. In Table 2 the report date is the date the public health unit received the report.

Table 1 now includes the following summary columns: total current month 2000 data; the totals for previous month 2000 and corresponding month 1999; a 5 year mean which is calculated using previous, corresponding and following month data for the previous 5 years (MMWR Weekly Feb 25, 2000:49(07);139-146); year to date figures; the mean for the year to date figures for the previous 5 years; and the ratio of the current month to the mean of the last 5 years.

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'.

Bloodborne diseases

There were 1,233 notifications of hepatitis C in April 2000. This was a decrease from March 2000 (2,015), April last year (1,782), and the mean of the last 5 years (1,333). A total of 7,194 notifications of hepatitis C have been received for the year to date 2000. This was an increase from the year to date mean of the last 5 years (5,224). Of the notifications for April 2000, 15 were reported as hepatitis C incident cases. Seventy-five per cent of incident case notifications were in the 20 to 39 years age range. The male to female ratio was 1:1.1.

Gastrointestinal diseases

There were 444 notifications of salmonellosis in April 2000. This was a decrease from March 2000 (711), April last year (741) and the mean of the last 5 years (715). Forty-four per cent of cases (194) were in the 0-5 years age group. The male to female ratio was 1.1:1.

There were 4 notifications of typhoid in April 2000 and the ages ranged from 9 to 36 years. Four States currently report SLTEC/VTEC. There were 3 cases reported in April 2000, all from South Australia. There was also one case of HUS from New South Wales (NSW) in a male aged 2 years.

Quarantinable diseases

There were no cases of cholera, plague, rabies, yellow fever or viral haemorrhagic fever in April 2000.

Sexually transmissible diseases

There were 984 notifications of chlamydial infection in April 2000, which was a decrease from March 2000 (1,412) and April last year (1,242) but greater than the mean of the last 5 years (851). A total of 4,864 notifications of chlamydial infection have been received for the year to date 2000, which was a 47% increase from the year to date mean of the last 5 years (3,300). Most cases of chlamydial infection were reported from Queensland (30%) and Western Australia (25%). Eighty-six per cent of the cases were aged 15 to 34 years. The male to female ratio was 1:1.5.

There were 385 notifications of gonococcal infection in April 2000, which was a decrease from March 2000 (536), April last year (517) and the mean of the last 5 years (423). Most cases were reported from the Northern Territory (24%) and Western Australia (24%), with Queensland reporting 21% and Victoria 18%. The ages of cases ranged from 14 to 69 years, with 85% of gonococcal notifications aged 15 to 39 years. The male to female ratio was 2.6:1.

A total of 98 syphilis notifications were received in April 2000, which was a decrease from March 2000 (169), April last year (169) and the mean of the last 5 years (149). The year to date 2000 figure (531) was also lower than the year to date mean of the last 5 years (577). Most of the notifications were reported from Queensland (66%) and New South Wales (25%). Fifty per cent of syphilis cases were aged 20 to 34 years. The male to female ratio was 1.2:1.

Vaccine preventable diseases

There was a continuing decrease in the total number of vaccine preventable disease notifications with a total of 169 notifications in April 2000. This was mainly the result of the continuing decrease in notifications of pertussis.

There were no notifications of diphtheria, tetanus or poliomyelitis.

Two cases of *Haemophilus influenzae* type b were reported from Queensland. Both cases were male with unknown immunisation status: one case was a child aged under 1 year and the other an adult aged 40 years.

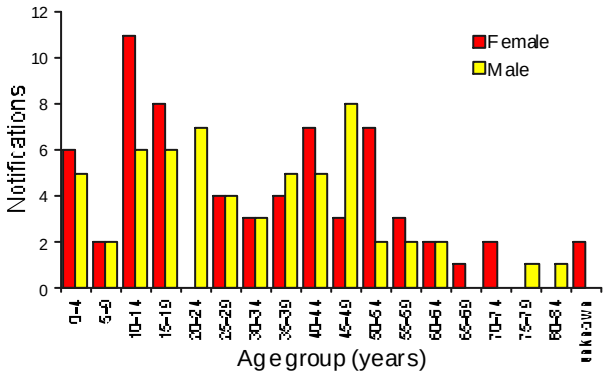
The number of notifications of measles, mumps and rubella were lower than for the same period in 1999 and for the mean of the last 5 years. However, an increase in the number of notifications of measles occurred in April 2000 (20) compared with March 2000 (11). Most measles notifications were from South Australia (30%), Victoria (30%) and NSW (13%). Measles notifications were most common in those aged under 5 years (10, 50%), with 3 cases aged under 1 year, 3 cases aged 1 year, 2 cases aged 3 years and 2 cases aged 4 years. The male to female ratio in this age group was 12.3:1. The immunisation status for this age group was reported as unknown for all but 3 cases: one child under 1 year was not immunised and 2 children aged 3 and 4 years were reported as partially immunised.

A similar pattern was seen for rubella notifications with 15 cases in April 2000 and 11 cases in March 2000. Most rubella notifications were from Queensland (47%) and Victoria (47%). Rubella notifications were most frequent in those aged under 5 years (5, 33%) and in those aged 15 to 39 years (5, 33%). Amongst those aged under 5 years, there were 4 cases aged under one year and 1 case aged 2 years. The male to female ratio in this age group was 1.5:1. For all of these rubella notifications the immunisation status was recorded as unknown, but cases under 1 year are age-ineligible for vaccination. Of concern females predominated (4, 80%) amongst those aged 15 to 39 years.

Pertussis cases for April 2000 (124) had decreased when compared with March 2000 (208) and the mean of the last 5 years (331). Pertussis notifications were most frequent in NSW (44%), Victoria (19%) and Queensland (17%). Cases of pertussis occurred in all age groups with peaks in the 0-4 (11), 10-19 (31) and 40-49 (23) years age ranges, with an overall male to female ratio of 0.9:1 (Figure 1). Immunisation status was reported for 11% of all pertussis notifications.

A total of 38 reports of meningococcal infection were received for April 2000, higher than the number of notifications for March 2000 (25), for April last year (33), and for the mean of the last 5 years (27). Most meningococcal cases were from NSW (39%), Victoria (29%) and Western Australia (18%). Meningococcal notifications were most frequent in those under 30 years of age with a predominance in the 0-4 and 15-24 years age ranges. The overall male to female ratio was 1.3:1. Serotype information was provided for 34% (13/38) of cases. Forty-six percent were serotype B and 54% were serotype C.

Figure 1. Notifications of pertussis, April 2000, by age group and sex



Vectorborne diseases

There were 14 notifications for dengue in April 2000, which was a decrease from March 2000 (33), but an increase from April last year (7) and the mean of the last 5 years (13). The majority of cases were from the Northern Territory (71%, all imported). A total of 167 notifications of dengue were received for the year to date 2000. This was an increase from the year to date mean of the last 5 years (85).

There were 422 notifications of Ross River virus infection in April 2000, which was a decrease from March 2000 (748), from April last year (804) and the mean of the last 5 years (854). The notifications decreased for all States and Territories in April 2000, except for the Northern Territory which reported 15 cases in this period compared with 7 cases in March 2000. The majority of notifications were still from Queensland (33%), Western Australia (21%) and NSW (20%). Forty-nine per cent of cases were aged 30 to 49 years. The male to female ratio was 1:1.

There were 59 notifications of malaria in April 2000, which was a decrease from March 2000 (93) and from the mean of the last 5 years (61), but an increase from April last year (50). The cases were due to *Plasmodium vivax* (33); *P. falciparum* (13); and 1*P. falciparum/P. vivax* co-infection. More than two thirds of the notifications were reported from Queensland (40) and all cases were imported. Seventy-five per cent of notifications were aged 20 to 44 years. The male to female ratio was 4.9:1.

There were 13 notifications of arbovirus infection (NEC) in April 2000, which was a decrease from March 2000 (15), but an increase from April last year (4) and the mean of the last 5 years (6). Most cases were reported from Victoria (46%), the Northern Territory (31%), Western Australia (15%) and Queensland (8%). Eight cases of Murray Valley Encephalitis were reported from Western Australia including 2 cases with onset dates in May 2000. There was one case in a male aged under 1 year with the remainder of the cases aged from 30 to 69 years. The male to female ratio was 3:1.

Other diseases

There were 124 notifications of legionellosis in April 2000, which was an increase from March 2000 (28), from April last year (22) and from the mean of the last 5 years (20).

The ages ranged from 25 to 89 years with a male to female ratio of 1.7:1 (Figure 2). Of these notifications 109 (88%) were due to *L. pneumophila* , 13 (10%) *L. longbeachae*, and 2 (2%) unknown/other (Figure 3).

A total of 207 notifications of legionellosis were received for the year to date 2000. This was an increase from the year to date mean of the last 5 years (78). The majority of the cases notified in April 2000 and for the year to date 2000 were associated with outbreaks in Victoria (87%) (Figures 4 and 5). This included the outbreak at Melbourne Aquarium, which was briefly discussed in *CDI* in April 2000.

Figure 2. Notifications of legionellosis, April 2000, by age group and sex

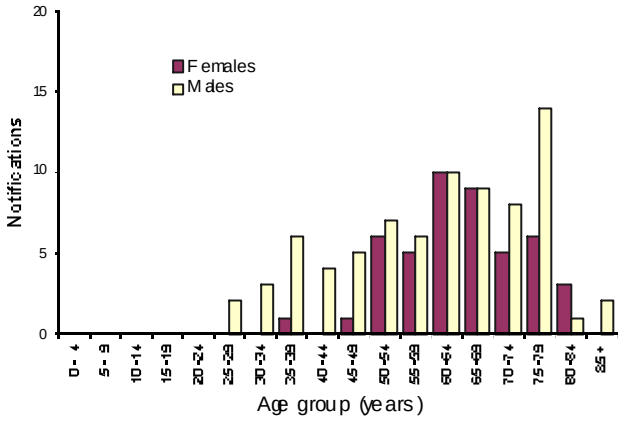


Figure 3. Notifications of legionellosis, January to April 2000, by serogroup

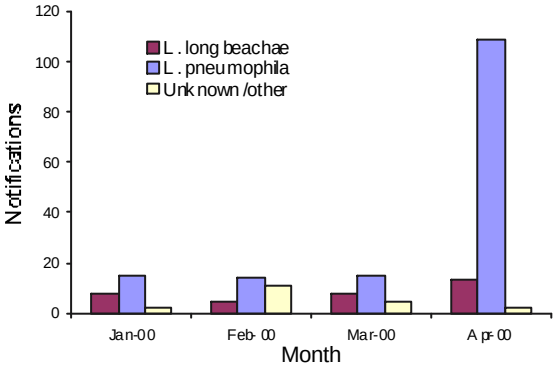


Figure 4. Notifications of legionellosis, 1991 to April 2000, Victoria and Australia, by month of notification

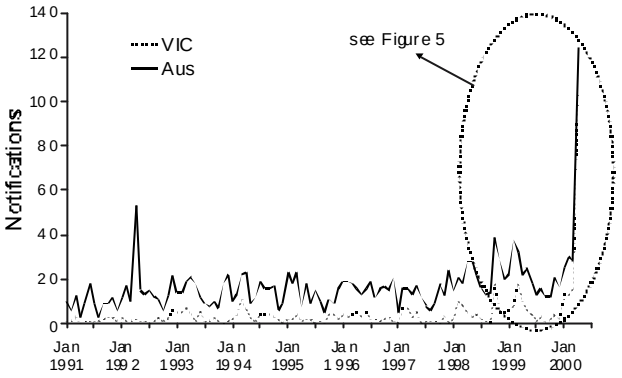
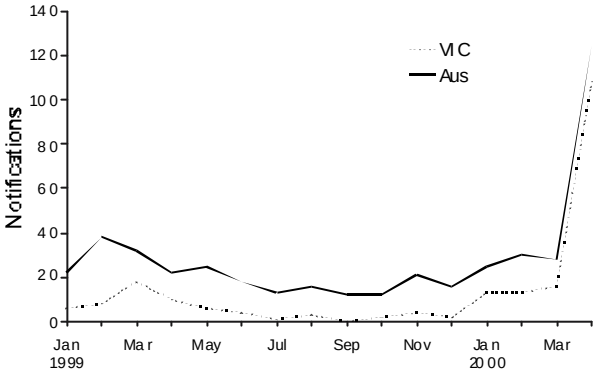


Figure 5. Notifications of legionellosis, January 1999 to April 2000, by month of notification



Parainfluenza viruses

The Virology and Serology Laboratory Reporting Scheme (LabVISE) is a voluntary scheme that receives reports from sentinel laboratories around Australia. LabVISE reports showed an outbreak of respiratory illness due to parainfluenza type 1. The outbreak commenced in March 2000 and has continued throughout April. Reports of parainfluenza type 2 are low compared with the same period in 1999 and reports of parainfluenza type 3 are dropping after an outbreak that peaked in late winter and early spring 1999. Ninety-three per cent of parainfluenza type 1 reports were in children in the 0-4 years age group. More males than females were affected, with a male to female ratio of 1.25:1.

Historical data recorded by LabVISE show that outbreaks of parainfluenza virus type 2 and parainfluenza virus type 1 occur in the autumn months of alternate years. The last recorded outbreak of parainfluenza type 1 occurred in autumn 1998. By contrast Australia has recorded outbreaks of parainfluenza type 3 each year during winter and early spring. (Figure 6).

Figure 6. Parainfluenza virus laboratory reports, 1996-2000, by type and month of specimen collection