Communicable Diseases Surveillance

Presentation of NNDSS data

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 p revious 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 (YTD) 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'.

Vaccine Preventable Diseases (VPD)

Overall, 219 notifications of VPDs with an onset date in May 2000 were received. Pertussis continued to be the most frequently notified VPD (Figure 1). There were no notifications of *Haemophilus influenzae* type b, diphtheria, tetanus or poliomyelitis.

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



There were five cases of measles in this period compared to 17 in April 2000. Four cases were from Queensland and the other case was from South Australia. Of the Queensland cases, one was imported and the other cases occurred in a family. Eighty per cent (4/5) of cases were female and the overall male to female ratio was 0.3:1. The immunisation status of all cases was recorded as unknown. Two of the cases were aged 2 and 5 years. Additional information identified the imported case as immunised.

There were 16 notifications of rubella in this period, similar to the number of notifications reported for April 2000 (17). Most cases were reported from Queensland (5/16, 31%) and Victoria (6/16, 38%). Cases occurred in a range of age groups with the maximum number of cases in the 25-29 year age group. Three cases were aged less than 1 year and one case was aged 6 years. Amongst those aged 0 to 29 years, all except one case were male; in contrast all those aged 30 years and above were female. The overall male to female ratio was 2.2:1. Immunisation status was recorded as unknown for 88% (14/16) of cases and two were recorded as not immunised.

The number of mumps notifications remained stable over this period with 17 notifications compared with 14 notifications for April 2000. Most cases (11/17, 65%) were from New South Wales with two reports from the Australian Capital Territory and four reports from Victoria. Mumps cases occurred in those aged less than 24 years with most (11/17, 65%) occurring in the 15-24 year age range. Three cases were in children aged 6 years and under (4, 5 and 6 years). The overall male to female ratio was 1.1:1. Immunisation status was reported as unknown in 76% of cases (13/17) and as not immunised in 6% (1/17). Two cases (2/17, 12%) were reported as partially immunised and one case (1/17, 6%) as fully immunised. There was no information on the immunisation status of the cases aged 4 and 5 years.

Pertussis cases in this period had decreased (181) compared with April 2000 (193) and the mean of the last five years (325). Pertussis notifications remained most frequent in New South Wales (71/181, 39%), Victoria (51/181, 28%) and Queensland (28/181, 15%). Cases of pertussis occurred in all age groups but peaked in those aged 10-14 years. Ten cases were in children aged 6 years and

under, with six children aged less than 1 year, two children aged 4 years and one child each aged 5 and 6 years. There was a slight female predominance, with an overall male to female ratio of 0.9:1. Immunisation status was reported as unknown or not immunised in 93% of cases. The nine cases reported as partially immunised were aged 4 to 14 years. Of the ten cases aged 6 years and under, one 4 year old was reported as partially immunised and the remainder were reported as unknown immunisation status.

Bloodborne diseases

There were 1,546 notifications of hepatitis C in May 2000. This was a decrease from May last year (1,770), but an increase from April 2000 (1,520) and the mean of the last five years (1,334). Overall, 9,157 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 five years (6,617). Of the notifications for May 2000, 14 were reported as hepatitis C incident cases. Thirty-six per cent of incident case notifications were in the 25-29 year age group. The male to female ratio was 1:1.2.

Gastrointestinal diseases

There were 584 notifications of salmonellosis in May 2000. This was an increase from April 2000 (525), from May last year (497) and from the mean of the last five years (521). Thirty-eight per cent of cases (220) were in the 0-4 year age group (Figure 2). The overall male to female ratio of cases was 1:1.2.

There were five notifications of typhoid in May 2000 (one case in New South Wales was confirmed by telecommunication as paratyphoid) and the ages ranged from 15 to 42 years. All four confirmed typhoid cases had a history of having been overseas prior to onset (two in Indonesia, one in the Philippines and Indonesia, and one in India).

Four States currently report SLTEC/VTEC. There was one case reported in May 2000 from South Australia.

Quarantinable diseases

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

Figure 2. Notifications of salmonellosis, Australia, May 2000, by age group and sex



Sexually transmissible diseases

There were 1,241 notifications of chlamydial infection in May 2000, which was an increase from April 2000 (1,142), from May last year (1,163) and from the mean of the last five years (828). Overall, 6,337 notifications of chlamydial infection have been received for the year to date 2000, which was a 52% increase from the year to date mean of the last five years (4,158). Most cases of chlamydial infection were reported from Queensland (35%) and Victoria (23%). Eighty-five per cent of the cases were aged 15 to 34 years. The overall male to female ratio was 1:1.6. The trend of the January 1991 to May 2000 monthly notifications demonstrates that the number of reports of chlamydial infections is increasing steadily (Figure 3). The increase was partially due to inclusion of New South Wales reporting of chlamydial infection (commenced in September 1998. Commun Dis Intell 1999;23:290) and the introduction of nucleic acid detection tests for chlamydia since 1995; the latter have improved the sensitivity of laboratory tests and made specimen collection easier, and this may have impacted on the notification rates (Halliday L, Petersen M. Communicable Diseases in the ACT 1993-1997. Health Series Number 20. Canberra: Australian Capital Territory Department of Health and Community Care, 1998).

There were 477 notifications of gonococcal infection in May 2000, a decrease from April 2000 (480) and May last year (510), but an increase from the mean of the last five years (415). Most cases were reported from the Northern Territory (29%), then Queensland (21%), Victoria (18%) and Western Australian (17%). The ages of cases ranged from 0 to 59 years, with 84% of gonococcal notifications aged 15 to 39 years. The male to female ratio was 1.9:1.

Overall 139 syphilis notifications were received in May 2000, a decrease from both May last year (183) and the mean of the last five years (142), but an increase from April 2000 (121). The year to date 2000 figure (701) was close to the year to date mean of the last five years (729). Most of the notifications were reported from Queensland (58%), followed by New South Wales (22%) and the Northern Territory (15%). Syphilis cases were aged 14 to 85 years with peaks in the 20 to 24 (34%), 30 to 39 (19%) and 50 to 59 (17%) year age ranges. The male to female ratio was 1:1.1.





Vectorborne diseases

There were only three notifications for dengue in May 2000, which was a decrease from both April 2000 (18) and the mean of the last five years (11), but similar to May last year (4). There were two imported cases reported from the balance of the Northern Territory, i.e. outside Darwin, and one from Far North Queensland. A total of 175 notifications of dengue was received for the year to date 2000. This was an increase from the year to date mean of the last five years (96).

There were 476 notifications of Ross River virus infection in May 2000, which was a decrease from April 2000 (568), from May last year (495) and from the mean of the last five years (524). Most notifications were still from Queensland (31%); however New South Wales reported 131 cases in this period compared with 85 cases in April 2000, while Western Australia reported 118 cases in this period compared with 90 cases in April 2000. The age of cases ranged from 3 to 99 years old with a mean of 41 years of age (Median 40 years; Mode 37 years). The overall male to female ratio was 1.2:1.

There were 71 notifications of Barmah Forest virus infection in May 2000, an increase from April 2000 (50), but a decrease from both May last year (81) and the mean of the last five years (74). New South Wales reported 29 cases in this period compared with nine cases in April 2000, and the Mid North Coast of New South Wales was the most common residential region of notifications (18). More cases occurred in the 40 to 49 year age range (22; 31%) with a male to female ratio of 1.6:1.

There were eight notifications of arbovirus infection (NEC) in May 2000, fewer than for April 2000 (17) (Figure 4) but more than for both May last year (1) and the mean of the last 5 years (4). Six cases were reported from Western Australia (Kimberley, two cases; Central, two cases; Pilbara, one case and Perth, one case) and Victoria (Wimmera, two cases). The cases were aged from 22 to 69 years, with five male and three female notifications. Two of the cases of arbovirus infection (NEC) were notified as Murray Valley Encephalitis with onset dates in the month of May and were reported in *CDI*2000;24:127.





There were 110 notifications of malaria in May 2000, which almost doubled the number from April 2000 (67), from May last year (51) and from the mean of the last 5 years (58). The notifications for the year to date 2000 totalled 449, an increase from the year to date mean of the last five years (367). Most malaria cases were reported from Queensland (53), New South Wales (22) and Victoria (20), and it can be assumed that all were imported. The cases were due to *P. vivax* (78), *P. falciparum* (12), *P. ovale* (2), and *P. falciparum/P. vivax* (1). Fifty-six per cent of notifications were aged 20 to 34 years. The male to female ratio was 4.2:1.

Other diseases

There were 35 notifications of legionellosis in May 2000, a decline from the peak in April 2000 (152), but still above the level for May last year (25) and the mean of the last five years (18) (Figure 5). Victoria is still the top reporting State (40%), followed by Queensland (17%), South Australia (17%), and New South Wales (14%). There was one male case under 1 year of age; the remaining notifications were mostly evenly distributed between the 20 to 85 year age groups, with a male to female ratio of 2.2:1. Of these notifications, 18 (51%) were due to *L. pneumophila*, 13 (37%) *L. longbeachae*, and the rest unknown/other.

Thirty four reports of meningococcal infection were received with an onset date in May 2000, less than the number of notifications from April 2000 (38) and the same as the mean of the last five years (34). Most meningococcal cases were from New South Wales (13/34, 38%), Victoria (7/34, 21%) and Western Australia (9/34, 26%). Meningococcal notifications were most frequent in those aged under 30 years, predominantly in those aged 0-4 and 15-24 years. The overall male to female ratio was 0.8:1. Serogroup information was provided for 32% (11/34) of cases; of these 72% (8/11) were serogroup B, and there was one case each of serogroup C, serogroup W and serogroup Y.



