

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 the crude incidence of diseases by State or Territory for the current reporting month. Table 3 presents data by report date for information only. In Table 3 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 (*Morb Mortal Wkly Rep*, 2000:49;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 for September, 2000

Communicable Disease Surveillance Highlights report on data from various sources, including the National Notifiable Diseases Surveillance System (NNDSS) and several disease specific surveillance systems that provide regular reports to Communicable Diseases Intelligence. These national data collections are complemented by intelligence provided by State and Territory communicable disease epidemiologists and/or data managers who have recently formed a Data Management Network. This additional information has enabled the reporting of more informative highlights each month.

The NNDSS is conducted under the auspices of the Communicable Diseases Network Australia New Zealand and the CDI Virology and Serology Laboratory Reporting Scheme (LabVISE) is a 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'.

Three types of data are included in National Influenza Surveillance, 2000. These are sentinel general practitioner surveillance conducted by the Australian Sentinel Practice Research Network (ASPREN), the Department of Human Services (Victoria), the Department of Health (New South Wales) and the Tropical Influenza Surveillance Scheme, Territory Health Services (Northern Territory); laboratory surveillance data from the Communicable Diseases Intelligence Virology and Serology Laboratory Reporting Scheme (LabVISE); and the World Health Organization Collaborating Centre for Influenza Reference and Research; and absenteeism surveillance conducted by Australia Post. Data from ASPREN are referred to as 'consultations' or 'encounters'. For further information about these schemes, see Commun Dis Intell 2000;24:9-10.

In September 2000 the number of reports of incident hepatitis B (ratio 1.5), chlamydial infection (ratio 1.5), mumps (ratio 1.3) legionellosis (ratio 1.2) and meningococcal infection (ratio 1.5) has increased compared with their 5 year-mean (Figure 9, Table 1).

Gastrointestinal infections

There were 1,334 notifications of gastrointestinal infections. All diseases had fewer reporting numbers this month than for the 5-year mean with the exception of Shiga-like toxin producing *Escherichia coli* (SLTEC/VTEC) which has only recently become notifiable and is still not notifiable in Queensland or Western Australia.

There were six cases of SLTEC/VTEC infection all in South Australia. One was in a one-year old child where the family had purchased beef in bulk from a local abattoir, and one was in a 90-year old resident of an aged care facility where no apparent source for the infection was identified.

Vaccine preventable diseases

All vaccine preventable diseases except mumps had fewer reports this month than for the 5-year mean. The increase in

the notification rate (1.2/100,000 population) for mumps was again due to an increase in Western Australia (3.9/100,000 population).

Although less than for the previous month, the pertussis notification rate of 26.1/100,000 population increased due to an increase in the Australian Capital Territory (61.7/100,000 population), New South Wales (53.7/100,000 population) and South Australia (26.9/100,000 population) (Figure 1). With this current increase in notifications, compared with previous increases in 1994/1995 (up to 130/100,000 population) and 1997/1998 (up to 250/100,000 population), less disease is presenting in children under the age of 10 years (18 per cent of cases this month; 33.6/100,000 population) (Figure 2).

Measles cases continue to be at their lowest level since the national notification system began (Figure 3). Of the 8 cases for September 2000, 5 were reported in New South Wales (all female: 2 were under one year of age, 2 were one-year old, and one was 23 years of age). Two were reported in the Australian Capital Territory (both males aged 29 and 38 years) and one was reported in South Australia (a 25-year old male).

Figure 1. Notification rate of pertussis, Australian Capital Territory, New South Wales, South Australia and Australia, 1 October 1999 to 30 September 2000

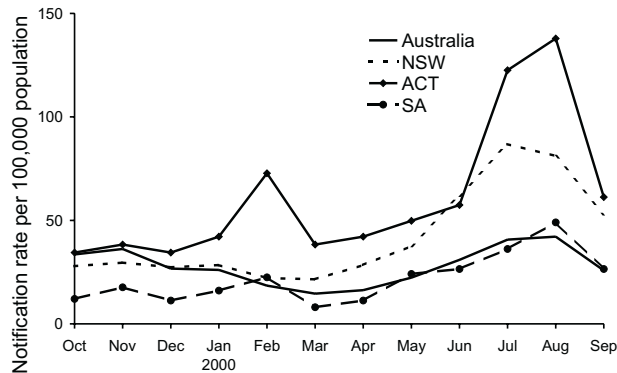


Figure 2. Notification rate of pertussis, Australia, 1 January 1991 to 30 September 2000, by all age groups and under 10 years of age

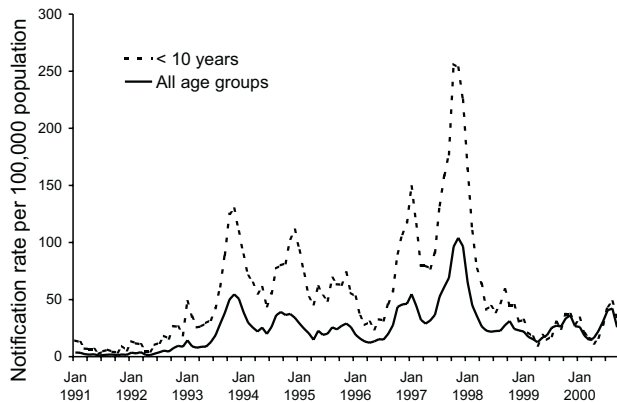
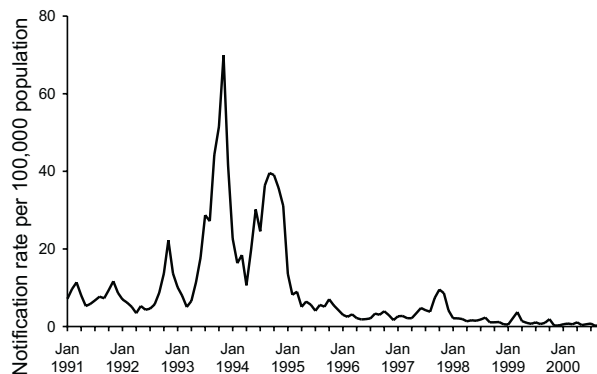


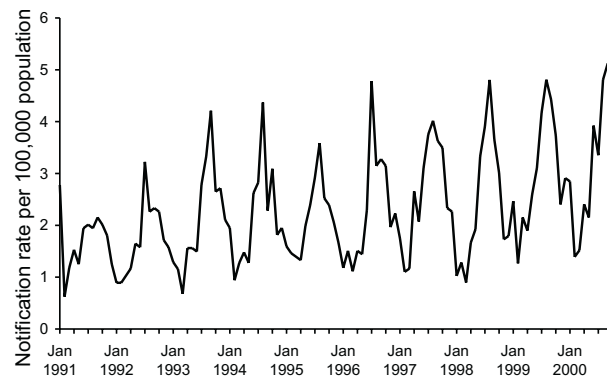
Figure 3. Notification rate of measles, Australia, 1 January 1991 to 30 September 2000



Meningococcal infections

There were 81 notifications of meningococcal infection in September 2000 (a notification rate of 5.2/100,000 population (Figure 4). Of these cases, 31 per cent were under 5 years of age and 32 per cent were in the 15-24 year age range. The serogroups were available for 51 cases; these were serogroups B, C, Y and W (41%, 55%, 2% and 2% respectively). There were also several deaths caused by meningococcal infections.

Figure 4. Notification rate of meningococcal infection, Australia, 1 January 1991



Legionellosis

There were 17 notifications of legionellosis in September 2000. The increase in the notification rate (1.1/100,000 population) was due to an increase in South Australia (6.5/100,000 population). Of these South Australian cases, 5 were caused by *Legionella longbeachae*. Two cases have been confirmed serologically. There was one male aged 64 and one female aged 43 years. In one case exposure to gardening and manure occurred prior to the onset of illness and in the second case no environmental exposures were identified. Three presumptive cases are awaiting further serology.

Influenza

Ten participating laboratories submitted 455 laboratory reports of influenza in September 2000, a substantial increase from 107 in August 2000, and an increase from 352 in September 1999 (Figure 5). Of the laboratory reports received in September 2000 (weeks 36-39), 285 were influenza A and 131 influenza B (Figure 6). The weekly proportion of influenza B among the total laboratory reports varied from 28 to 36 per cent in September 2000 which was higher than the same period last year (14% to 19%).

After peaking at the end of August, all of the influenza surveillance schemes reported a decline in the number of influenza-like illness consultation. The New South Wales Influenza Surveillance Scheme has reported the highest rate during the year 2000 influenza surveillance season (37 per 1,000 consultations in week 37 ending 17 September) (Figure 7).

Figure 5. Laboratory reports of influenza, Australia, 1999 to 2000, by month of specimen collection

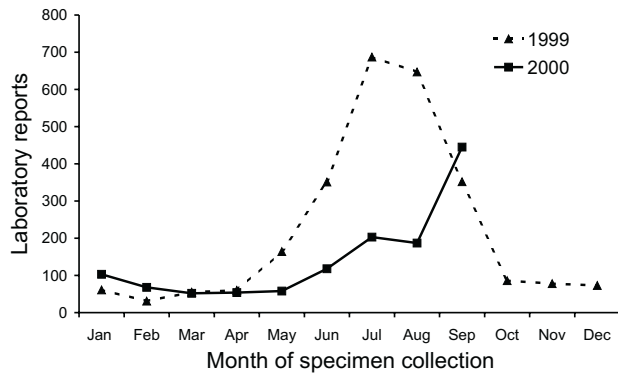


Figure 6. Laboratory reports of influenza, Australia, week 40 1999 to week 39 2000, by week of specimen collection

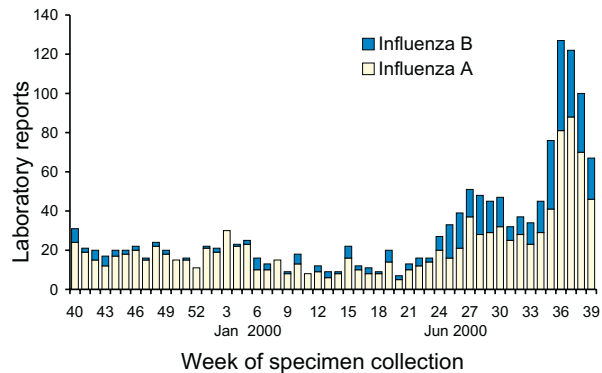
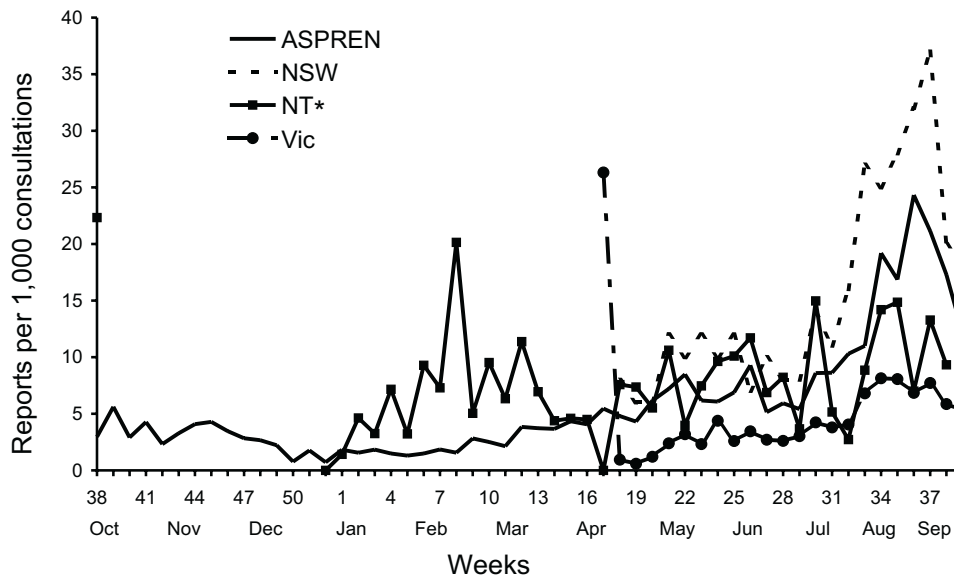


Figure 7. Sentinel general practitioner influenza consultations rates, week 38 1999 to week 39 2000, by surveillance scheme



* Data for week 39 not supplied

The percentage of Australia Post employees absent for three or more consecutive days in the first half of September 2000 (weeks 36 and 37 only) was the highest rate for the entire surveillance period in 2000, and was higher than the same period in 1999 (Figure 8). The first two distinctive peaks for absenteeism (weeks 15/16 and weeks 26/27) coincided with school holiday periods in most States. The rate in week 35 (ending 6 September) was the highest for the entire surveillance period in 2000 (1.1%) but this peak preceded the school holiday and Olympic Games period (weeks 37-39).

Figure 8. Absenteeism rates in Australia Post, week 14 to week 39 1999 and week 14 to week 37 2000

