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 (*MMWR 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 November, 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'.*

In November 2000, compared with the 5-year mean, there was an increase in reports of chlamydial infection (ratio 1.5), *Haemophilus influenzae* type b (ratio 1.6), Barmah Forest virus (ratio 1.5), legionellosis (ratio 1.2) and meningococcal infection (Ratio 1.2) (Figure 10, Table 1).

Gastrointestinal illness

There continues to be fewer notifications of *Campylobacter* and *Salmonella* than in previous years with rates of 113.8/100,000 population for *Campylobacter* (Figure 1) and 27.0/100,000 population for *Salmonella*. Tasmania had the highest rate for *Campylobacter* (171.0/100,000 population) and the Northern Territory the highest rate for *Salmonella* (192.9/100,000 population).

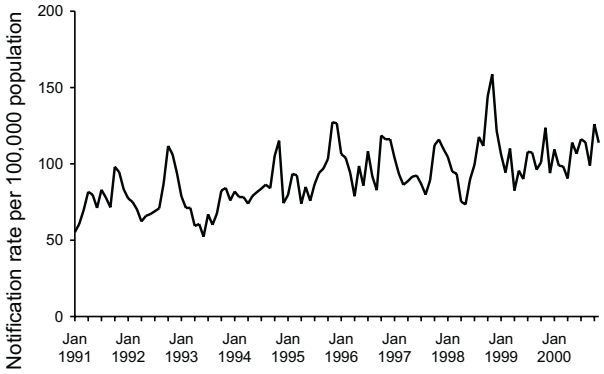
The Communicable Disease Control Branch in South Australia is investigating an apparent cluster of cases of *Campylobacter* infection in residents of a small rural community. To determine the source of the cluster, hypothesis-generating interviews were conducted with cases. A case-control study found a statistically significant association between *Campylobacter* infection and the consumption of raw milk.

South Australia is also investigating an outbreak of gastroenteritis in an aged residential care facility. Norwalk virus has been detected in several faecal specimens.

Shiga toxin producing *Escherichia coli* was detected in South Australia in a 4-year-old male. The parents reported extensive contact with calves and other farm animals.

New South Wales reported one case of typhoid in a 67-year-old female.

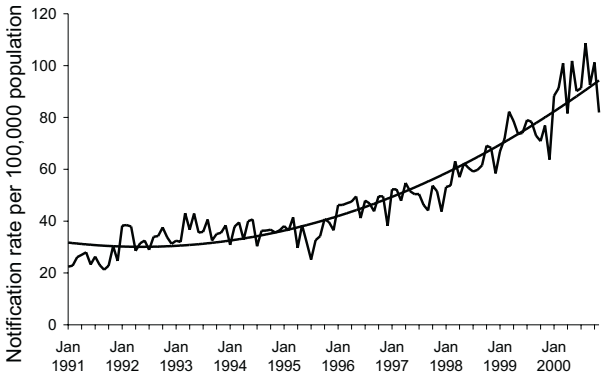
Figure 1. Notification rate of campylobacteriosis, Australia, 1 January 1991 to 30 November 2000, by month of notification



Chlamydial infection

There were 1297 notifications of chlamydial infection in November 2000 – a notification rate of 81.9/100,000 population which is an increase from previous years (Figure 2). Of these cases, 77 per cent were in the 15 to 29 years age group and the male:female ratio was 0.6:1. The Northern Territory continues to have the highest rate for chlamydial infection (429.3/100,000 population).

Figure 2. Notification rate of chlamydial infection, Australia, 1 January 1991 to 30 November 2000, by month of notification

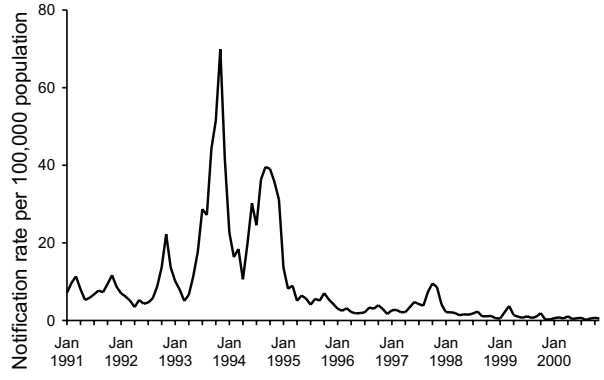


Vaccine preventable diseases

With the exception of *Haemophilus influenzae* type b, there were fewer reports of all vaccine preventable diseases this month than for the 5-year mean for November. Of the *Haemophilus influenzae* type b cases, 3 were males (aged 2, 12 and 49 years) and 3 were females (aged 53 and 58 years, and age unknown).

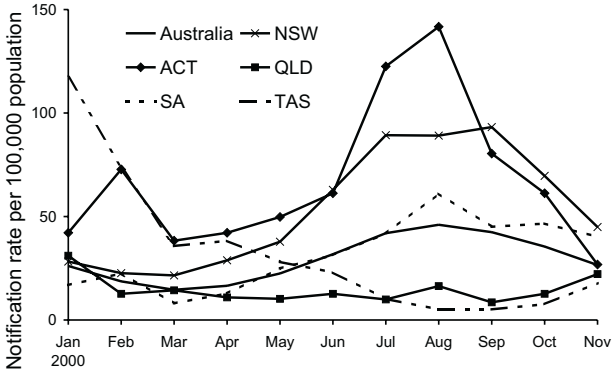
Measles cases continue to be at their lowest level since the national notification system began (Figure 3). Of the 8 cases reported in November 2000, 7 were reported in New South Wales and one in Victoria. The cases included 2 four-year-old females (partially vaccinated), 2 one-year-old males (one unvaccinated and one vaccination status unknown), 2 infants under the age of one year (not yet vaccinated), a 5-year-old male (partially vaccinated) and a 21-year-old male (vaccination status unknown).

Figure 3. Notification rate of measles, Australia, 1 January 1991 to 30 November 2000, by month of notification



Pertussis notifications are down from last month (420 cases with a rate of 26.6/100,000 population compared with 561 cases with a rate of 35.5/100,000 population). Since August 2000 (when the national rate peaked at 46.0/100,000 population) the rates for New South Wales, the Australian Capital Territory and South Australia have decreased, while those for Queensland and Tasmania have increased (Figure 4). The rates for Western Australia and the Northern Territory remain unchanged.

Figure 4. Notification rate for pertussis, Australia, Australian Capital Territory, New South Wales, Queensland, South Australia and Tasmania, 1 January to 30 November 2000, by month of notification

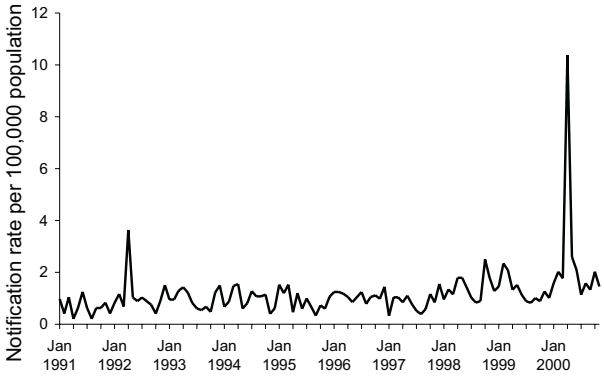


Legionellosis

There were 23 notifications of legionellosis in November 2000 a notification rate of 1.5/100,000 population (Figure 5). All of the cases in New South Wales (2) and South Australia (4) were *Legionella longbeachae* and all of the cases in Victoria (11) and Queensland (3) were *L. pneumophila*. For the other cases information on the *Legionella* species involved was not available.

According to the Melbourne Age (6 January) a man who died on 12 December 2000 from legionnaires' disease was probably infected while a patient at the Royal Melbourne Hospital. The man was being treated for an unrelated condition when he displayed fever symptoms later diagnosed as legionnaires' disease. On the date the patient died, the hospital commissioned tests of its air-conditioning cooling towers. Samples from 2 of the towers contained several strains of *Legionella*, including the one the patient contracted. Three other people known to have visited the hospital have also been diagnosed with legionnaires' disease. Samples are being tested to see whether strains responsible match those in the cooling tower water.

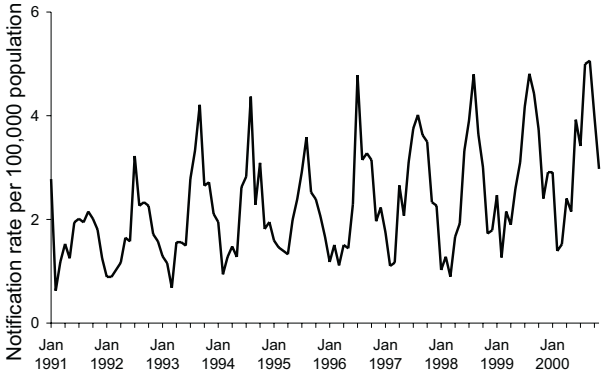
Figure 5. Notification rate for legionellosis, Australia, 1 January 1991 to 30 November 2000, by month of notification



Meningococcal infections

There were 47 notifications of invasive meningococcal disease in November 2000 – a notification rate of 3.0/100,000 population (Figure 6). Of these cases, 34 per cent were under 5 years of age and 23 per cent were in the 10 to 19 years age group. The serogroups were available for 27 cases; these were serogroup B (44%) and serogroup C (56%).

Figure 6. Notification rate of invasive meningococcal disease, Australia, 1 January 1991 to 30 November 2000, by month of notification



Vectorborne diseases

Barmah Forest virus infection notifications have increased since last month (57 cases with a rate of 3.6/100,000 population compared with 43 cases with a rate of 2.7/100,000 population) and from the 5-year mean (37 cases). Queensland reported the highest rate (13.7/100,000 population) and the majority of cases (40) (Figure 7).

Ross River Virus notifications have also increased since last month (129 cases with a rate of 8.2/100,000 population compared with 124 cases with a rate of 7.8/100,000 population; Figure 8) with the highest rate being in South Australia (25.7/100,000 population).

During the past 9 weeks, 56 cases of Ross River virus infection have been notified in South Australia. Of these, 46 notifications have been received for residents of the West Coast region. Laboratory notifications in small numbers have been received for residents of Adelaide, Murray Bridge, Mount Gambier, York Peninsula, Adelaide Hills and the Riverland. Literature on the prevention of Ross River virus infection has been distributed to local council and tourist information centres located in the West Coast region of South Australia.

In a press release dated 27 December 2000 (sourced through ProMED) the Department of Human Services, South Australia has warned visitors to take particular care to avoid being bitten by mosquitoes. The warning follows an increase in reported cases of Ross River virus across

Figure 7. Notification rate of Barmah Forest virus, Australia and Queensland, 1 January 1995 to 30 November 2000, by month of notification

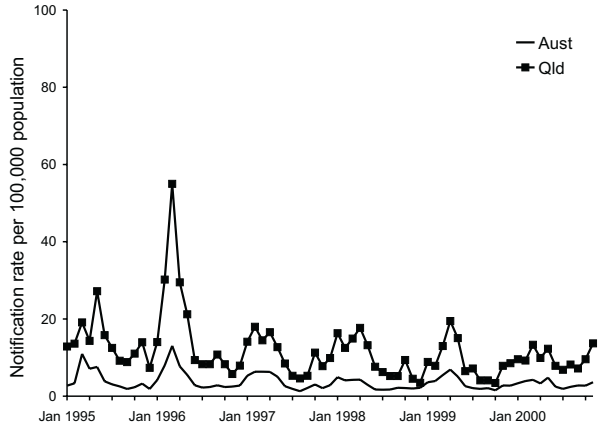
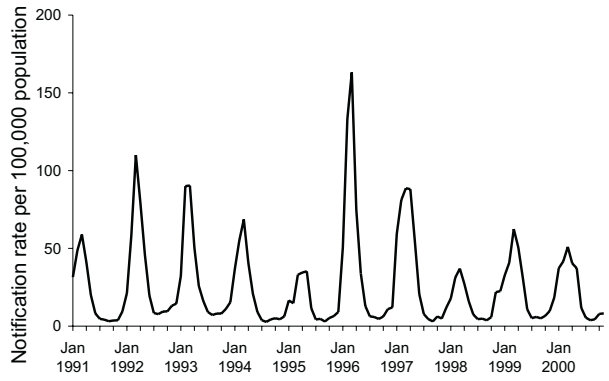


Figure 8. Notification rate of Ross River virus, Australia, 1 January 1991 to 30 November 2000, by month of notification



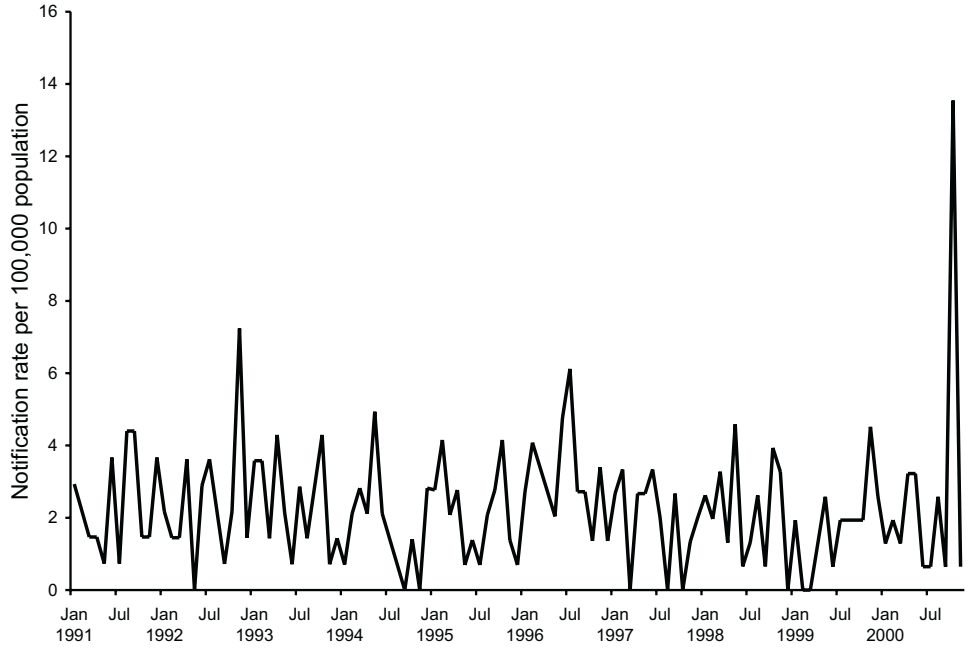
different parts of the State. Cases of Ross River virus infection have been reported on the West Coast, Kangaroo Island, and near Lake Albert. People living or on holiday in South Australia should take protective measures against mosquitoes by covering exposed skin with appropriate clothing and using repellents. The State Government recently launched a television and radio community awareness campaign called 'Don't Let the Bloodsuckers Bite'. Brochures are also being distributed to local councils in rural areas.

According to an Australian Broadcasting Corporation news report (8 January 2001) a warning about the threat of Ross River virus has been issued by the Northern Territory Centre for Disease Control. Mosquitoes are in high numbers in the Katherine, Barkly and Gove regions because of flooding. The centre reports 9 cases in Katherine (more than normally expected) and 9 in East Arnhem and Darwin in the past 2 weeks.

Malaria in illegal entrants - Western Australia

The malaria cases notified in October 2000 from Western Australia (Figure 9) were primarily among a boatload of 48 illegal entrants who arrived in the Kimberley via Ashmore Reef and were sent to Curtin Detention Centre. Among this group there were 9 falciparum cases, 7 vivax cases and a single combined falciparum/vivax infection. Three falciparum cases required hospital admission. Just prior to departing for Australia the group had spent 1 to 3 weeks on Sabo Island in Indonesia and it is assumed they were infected there as mosquitoes were prevalent and there was no mosquito control or antimalarial prophylaxis. (*Information provided by Dr Gary Dowse, based on a report by Dr Richard Thomas, published in the* Kimberley Public Health Bulletin*, November 2000*).

Figure 9. Notification rate of malaria, Western Australia, 1 January 1991 to 30 November 2000, by month of notification



Case report: Murine typhus acquired in Bali

Contributed by Dr Gary Dowse, Communicable Diseases Control Branch, Health Department of Western Australia (edited)

We have been notified of a case of murine typhus (*R. typhi*) in a woman who attended a conference of about 360 travel consultants in Bali from approximately 27 November to 1 December 2000. During this period registrants were confined to a 5-star hotel except for an evening function on the other side of the island. On that occasion the woman walked barefoot through some damp grass, but otherwise had no obvious exposure risks. After the Conference she stayed at another 5-star hotel for 4 days before returning to Perth. Her illness onset was 7 December. Exposure in Perth is very unlikely so it seems that her infection was almost certainly acquired in Bali.