

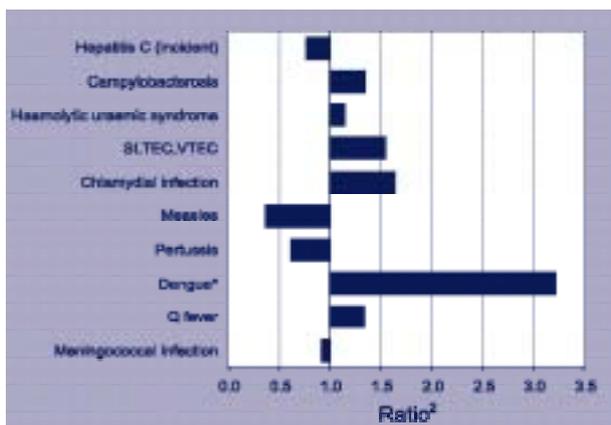
# Communicable Diseases Surveillance

## Highlights for 1st quarter, 2003

*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. This additional information has enabled the reporting of more informative highlights each quarter.*

*The NNDSS is conducted under the auspices of the Communicable Diseases Network Australia. NNDSS collates data on notifiable communicable diseases from State or Territory health departments. The Virology and Serology Laboratory Reporting Scheme (LabVISE) is a sentinel surveillance scheme which collates information on laboratory diagnosis of communicable diseases. In this report, data from the NNDSS are referred to as 'notifications' or 'cases', and those from ASPREN are referred to as 'consultations' or 'encounters' while data from the LabVISE scheme are referred to as 'laboratory reports'.*

**Figure 1. Selected<sup>1</sup> diseases from the National Notifiable Diseases Surveillance System, comparison of provisional totals for the period 1 January to 31 March 2003 with historical data<sup>2</sup>**



1. Selected diseases are chosen each quarter according to current activity.
  2. Ratio of current quarter total to mean of corresponding quarter for the previous five years.
- \* Notifications above or below the 5-year mean for the same period plus- or minus- two standard deviations.

## Gastrointestinal disease

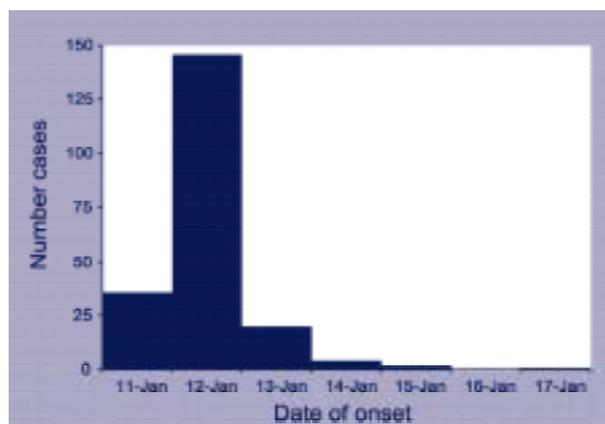
### Salmonellosis

There were 2,747 notifications of salmonellosis (Table 2) in the first quarter of 2003—an increase of 6.7 per cent over the five year average for the same period. Most cases were sporadic.

A large outbreak of salmonellosis was associated with Vietnamese take-away food in Footscray, Victoria. Up to 213 cases were notified between 11 and 17 January 2003 (Figure 2), and 22 patients were hospitalised. One death, possibly associated with the outbreak occurred, in a 49-year-old male.

The causative agent, *S. Typhimurium* phage type 135, was isolated from egg-butter made in the restaurant which was used as an ingredient in pork rolls. As a result of the outbreak the premises were closed for a period and staff were trained in food handling procedures. Broader surveillance of premises selling similar products also occurred.

**Figure 2. Notifications of cases of *S. Typhimurium* phage type 135, Fitzroy, Victoria, January 2003**



## Listeriosis

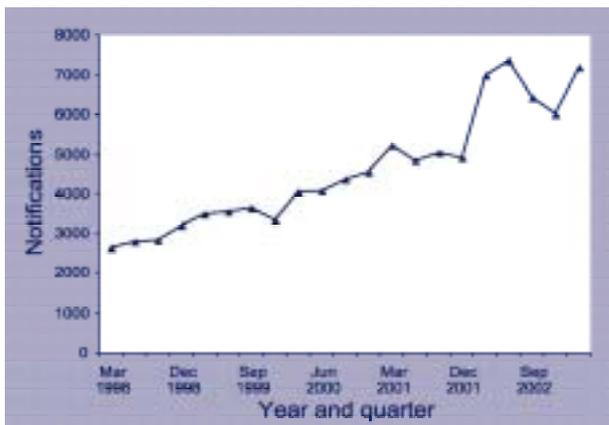
There were 20 cases of listeriosis reported during the first quarter 2003. Three materno-foetal infections were reported, two from Western Australia and one from Victoria. The remaining cases occurred in older (age range 58–82 years) or immunocompromised persons. No outbreaks were identified.

## Sexually transmissible diseases

### Chlamydial infections

Notifications of chlamydial infections have continued their increase of the last few years (Figure 3). There were 7,230 notifications for the first quarter of 2003, which represents an increase of three per cent over the number (7,215) for the same period in 2002. The national notification rate was 36.7 cases per 100,000 population.

**Figure 3. Trends in notifications of chlamydial infections, Australia, January 1998 to March 2003, by quarter**



Nationally, there was a 20 per cent increase from the fourth quarter of 2002 (8,160 notifications) to the first quarter 2003. Increases by jurisdictions ranged from 13 to 38 per cent. Notifications from the Northern Territory decreased by 10 per cent, from 436 to 393 notifications, however they also recorded the highest notification rate, 199 cases per 100,000 population.

### Gonococcal infection

For the first quarter of 2003, 1,679 cases of gonorrhoea were notified, an increase of nine per cent over the five year average for the same period. The highest number of notifications were recorded in Western Australia (392) and the Northern Territory (327).

Eleven notifications were received from Tasmania. Ten of the cases were males, aged between 18 and 46 years, and nine of the 10 were living in the greater Hobart area. This epidemic follows similar outbreaks among men who have sex with men that occurred in Sydney during the late 1990s, and in Melbourne.<sup>1,2</sup>

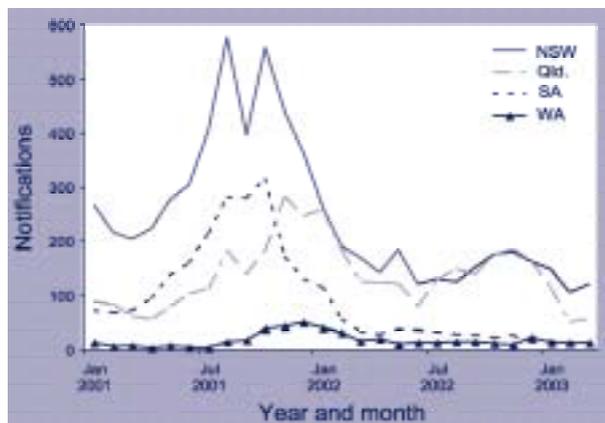
## Vaccine preventable diseases

### Pertussis

During the first quarter of 2003, 862 cases of pertussis were notified to the NNDSS. This number is 40 per cent less than the average number for the same period (1,421) over the previous five years. Decreases in notification numbers for all states and territories were recorded, and ranged between 23 and 73 per cent. Pertussis notifications by month (2000–2003) in selected jurisdictions are shown in Figure 4. Australia experiences periodic epidemics of pertussis, in three-to-four year cycles. With the last epidemic year in 2001, notification numbers for the present year represent an inter-epidemic year, with totals below the five year mean in all jurisdictions.

The largest number of notifications were reported in New South Wales (379 notifications, 64% of 5-year mean) and Queensland (226 notifications, 66% of 5 year mean). The highest rates in Queensland were in the southern Statistical Divisions outside Brisbane and the other South-East Queensland population centres.

**Figure 4. Trends in notifications of pertussis, New South Wales, Queensland, South Australia and Western Australia, January 2001 to March 2003, by month of onset**



The largest number of notifications were in the 10–14 year age group, which accounted for 15 per cent of notifications. Overall, 525 notifications (62%) were for adults aged 20 years or more. The number aged less than five years was 89 (10% of total) cases with 48 (7%) cases aged less than one year. For cases aged less than one year, the highest number of notifications were in Queensland (16), New South Wales (13) and Western Australia (11). No deaths from pertussis were reported in the quarter. The high proportion of adult and teenage cases indicates that these groups may be a significant source of the virus, from whom partially or unimmunised infants are contracting pertussis.

## *Vectorborne diseases*

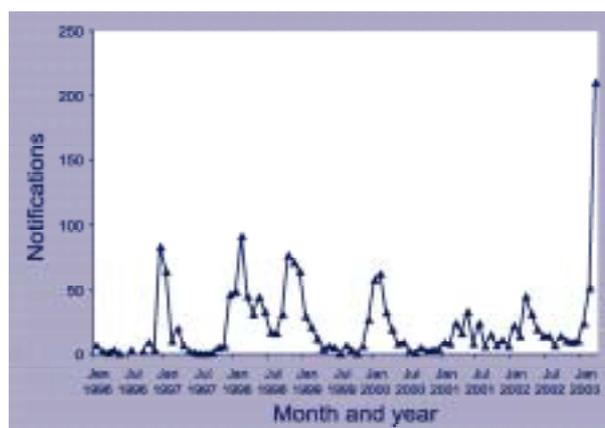
### **Dengue**

There were 336 notifications of dengue reported to NNDSS for the first quarter of 2003. This represents more than three times the average number notified for the same period during the previous five years.

Twenty-eight imported cases were notified from New South Wales, but most of the remainder were from Queensland (287, 84%), where an outbreak of dengue serogroup 2 began in Cairns in mid-February. The index case in the outbreak was a woman who contracted the disease in New Guinea and became ill in Cairns on 22 January. Three secondary cases had an onset of disease in mid-February. The Queensland Dengue Area Response Team was then deployed to issue alerts and identify the source of the outbreak. During March, over 200 further cases were notified. Two cases were notified from Townsville but these infections were shown to be acquired in Cairns. The epidemic has continued into May, and over 400 cases have been reported to date.

The last outbreak of dengue in the Cairns region in 1997–1999, was caused by the dengue serogroup 3 virus.<sup>3</sup> Because the present outbreak of dengue is serotype 2, there has been concern of the possibility of cases of dengue haemorrhagic fever. However to date there has been no reports of this, or of deaths, arising from the Cairns outbreak. The relation of the present outbreak to the 1997 outbreak is illustrated in Figure 5.

**Figure 5. Trends in notifications dengue fever, Australia, June 1996 to March 2003, by month of onset**



Coincident with the outbreak, eight cases of imported dengue in Cairns have also been identified. These originated in Papua New Guinea and Bali. Major outbreaks of dengue (serotypes 1 and 3) in have occurred in the Western Pacific Region and are continuing to occur.

### **Kunjin**

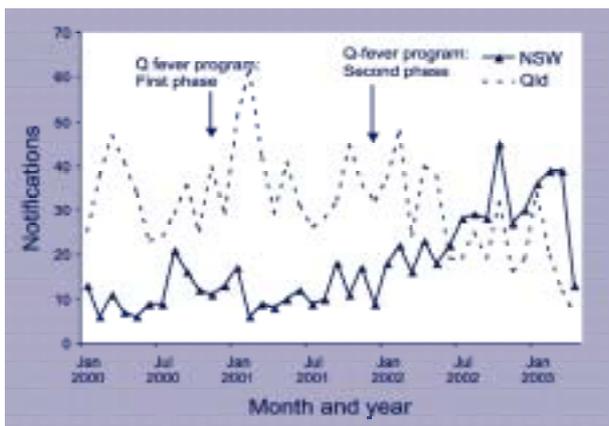
Four cases of Kunjin were notified during the first quarter of 2003. The cases, all male, were reported from Queensland, between 6 February and 13 March. The ages ranged between 34 and 56 years.

As flavivirus infections often occur in travellers in rural regions, and clinical symptoms may develop weeks after infection, the possibility exists that some of the cases may have been contracted in another jurisdiction.

### **Q fever**

There were 199 notifications of Q fever reported in the first quarter of 2003. This is similar to the same period in 2002 (190), but is 33 per cent higher than the five-year average for the same period (149 notifications). The recent trends demonstrates a probable decrease in notifications in Queensland (72 notifications for the present quarter) (Figure 6). This is offset though by the increase observed for New South Wales (113 notifications). The lower rates recorded for Victoria and Western Australia have remained relatively consistent with six and four notifications for these states during the first quarter of 2003, respectively. One case each was notified from the Australian Capital Territory and the Northern Territory. The last notified case from Tasmania was in August 2001.

**Figure 6. Notifications of Q fever, New South Wales and Queensland, January 2000 to March 2003, by month of onset**



The Commonwealth Government's Q fever vaccination program commenced in October 2000.<sup>4</sup> As a result of this program notifications have initially increased in all jurisdictions due to identification of cases through screening.

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#### *References*

1. Donovan B, Bodsworth NJ, Rohrsheim R, McNulty A, Tapsall JW. Increasing gonorrhoea reports — not only in London. *Lancet* 2000;355:1908.
2. Victorian Department of Human Services. Surveillance report. *Victorian Infectious Diseases Bulletin* 2002;5:7–15.
3. Hanna JN, Ritchie SA, Phillips DA, Serafin IL, Hills SL, van den Hurk AF, *et al.* An epidemic of dengue 3 in far north Queensland, 1997–1999. *Med J Aust* 2001;174:178–182.
4. NSW Health Department. Q fever register developed to address health concern in the meat industry. *New South Wales Public Health Bulletin* 2002;13:113.