

# Communicable diseases surveillance

## Highlights for 1st quarter, 2007

Communicable diseases 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 and 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' while data from the LabVISE scheme are referred to as 'laboratory reports'.

### Gastrointestinal diseases

#### Botulism

One case of botulism in a 25-year-old male was reported this quarter from Victoria. *Clostridium botulinum* toxin type A was isolated from the discarded residue of a pre-packaged nachos meal that the case had eaten, which was therefore suspected as the source of the case's illness. The Department of Human Services in Victoria triggered the National Food Incident Protocol as a precautionary measure and there was a voluntary recall of the food product (James Fielding, personal communication).

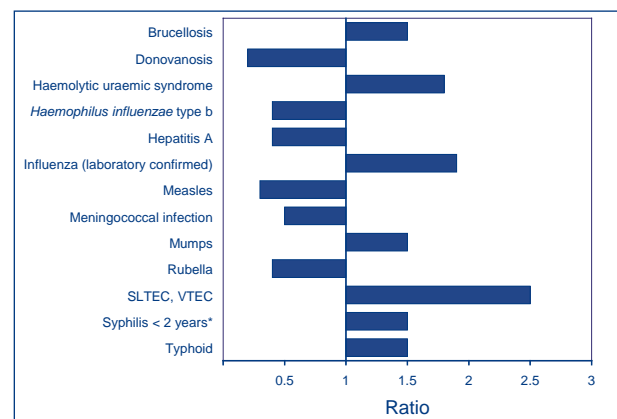
Botulism notifications in Australia are rare. Since 1998 there have been 13 cases of botulism notified nationally; 11 cases were intestinal (infant) botulism and 2 cases were adult botulism. The last adult case was notified in 1999.

Foodborne botulism has an incubation period of 12 to 36 hours and symptoms include blurry vision, lethargy and dizziness, followed by respiratory distress and paralysis. It cannot be transmitted from person to person.<sup>1</sup>

#### Typhoid

During the quarter there were 37 notifications of typhoid which was 1.5 times the 5-year mean for the same period. Notifications were from New South Wales (12), Victoria (10) and Western Australia (7) and 4 from South Australia, 3 from Queensland and 1 from Tasmania. There were 21 male and 16 female cases with an age range from 4 to 87 years. Notifications showed 32 cases acquired the infection overseas. One case was acquired locally by person-to-person transmission from recent refugee arrivals. The source of infection in the other 4 cases was unknown.

**Figure 1. Selected\* diseases from the National Notifiable Diseases Surveillance System, comparison of provisional totals for the period 1 January to 31 March 2007 with historical data<sup>†</sup>**



\* Selected diseases are chosen each quarter according to current activity. Five year averages and the ratios of notifications in the reporting period in the five year mean should be interpreted with caution. Changes in surveillance practice, diagnostic techniques and reporting, may contribute to increases or decreases in the total notifications received over a five year period. Ratios are to be taken as a crude measure of current disease activity and may reflect changes in reporting rather than changes in disease activity.

† Ratio of current quarter total to mean of corresponding quarter for the previous five years.

‡ Some Victorian data for this period may be incomplete.

#### Listeriosis

Fifteen notifications of listeriosis were received during the quarter, which was 80% of the 5-year mean for the same period. Those at highest risk of listeriosis are neonates, the elderly, immunocompromised individuals, pregnant women and alcoholic, cirrhotic or diabetic adults.<sup>1</sup>

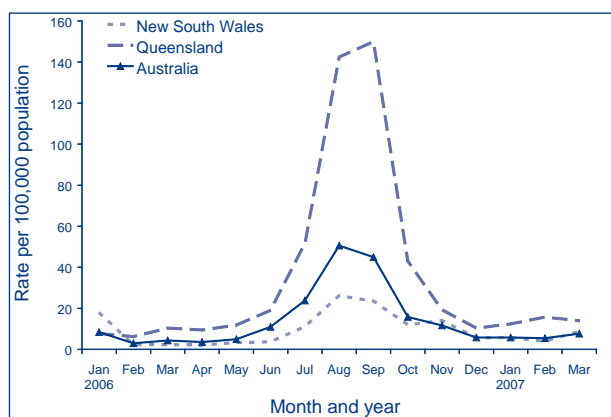
The majority of cases for this quarter were from New South Wales (5 cases), Victoria (4 cases), Queensland (3 cases) and 1 case each from South Australia, Tasmania and Western Australia. There were 5 male and 10 female cases. There was 1 neonate and the adults' ages ranged between 23 to 90 years. The highest rate of notifications was in the 80–84 year age group.

## Vaccine preventable diseases

### Influenza

There were 334 cases of laboratory-confirmed influenza in the first quarter of 2007. This was 1.9 times the 5-year mean for the same period. The majority of notifications were from New South Wales (32%) and Queensland (41%) (Figure 2). Seventy-eight per cent of the national laboratory-confirmed influenza notifications were type A, 15% type B and 7% unknown.

**Figure 2. Notification rates of laboratory confirmed influenza, Queensland, New South Wales and Australia, 2006 to 2007**



### Measles

There were 4 cases of measles reported in the quarter. Cases were reported from New South Wales (2 cases), Queensland (1 case) and Victoria (1 case). Of the 4 cases, 3 were male and 1 was female. Two of the cases were aged 1 year or less and were unvaccinated, 1 child had travelled overseas and the other child was indigenous and had an unknown source. Two cases were aged between 30–34 years. Of the 2 adult cases 1 was unvaccinated and the vaccination history of the other was unknown. Both had recent overseas travel.

### Meningococcal

There were 47 notifications of meningococcal infection during the quarter; half the 5-year mean for the same period. There were serogroup data available on 36 of the notified cases in the quarter. Thirty-one (66%) were serogroup B, 4 (9%) were serogroup C, 1 (2%) was W135 and in 11 (23%) the serogroup was unknown. Two meningococcal deaths were reported, 1 due to serogroup B and 1 to serogroup C. The 4 cases of serogroup C were aged between 24–57 years and had not been vaccinated.

### Zoonoses

#### Anthrax

One case of cutaneous anthrax was notified this quarter in a 35-year-old male knackery worker from Victoria. The case noticed a pimple on his left forearm 2 weeks after he gutted the first cow from the affected farm. Four days later the case was admitted to hospital, febrile and with a large necrotic lesion and extensive cellulitis extending from hand to the axilla. Penicillin-sensitive *Bacillus anthracis* was cultured. The case had contact with 2 cattle that were subsequently confirmed to have died from anthrax and was part of an outbreak among cattle from 10 farms in northern Victoria. An outbreak of anthrax among cattle occurred in the same area in 1997 (James Fielding, personal communication).

Human cases of anthrax are rare in Australia; only 2 other cases of anthrax have been notified since 1998 (1 case in 1998 from Queensland and 1 case in 2006 from New South Wales).

### References

1. Heymann, D 2004, *Control of Communicable Diseases Manual*, 18th edition, American Public Health Association, Washington.

### Acknowledgments

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