

Communicable diseases surveillance

Highlights for 2nd quarter, 2006

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'.

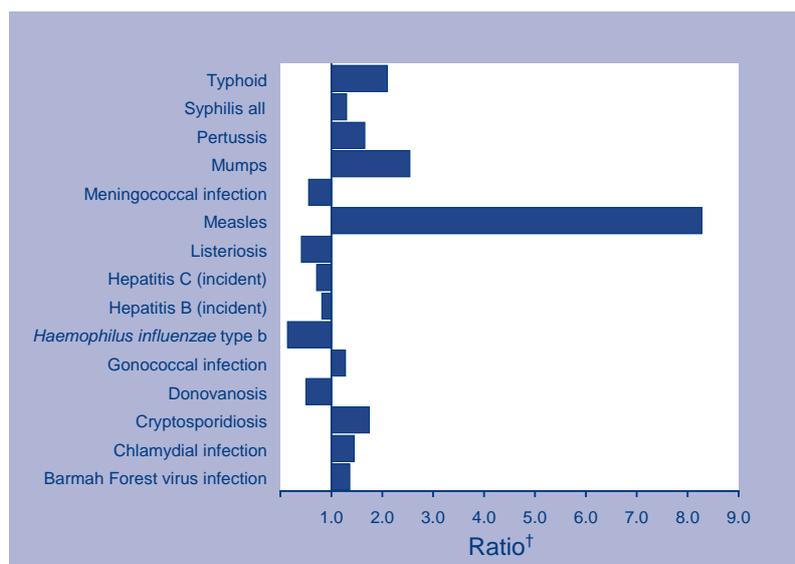
Figure 1 shows the changes in selected disease notifications with an onset in the second quarter of 2006, compared with the five year mean for the same period. The following diseases were above the five year mean: cryptosporidiosis, chlamydial infection, gonococcal infection, measles, mumps, pertussis, Barmah Forest virus infection, and typhoid. Diseases for which the number of notifications was below the five year mean for the same period included hepatitis B, hepatitis C, listeriosis, and meningococcal infection.

Gastrointestinal illnesses

Cryptosporidiosis

There were 919 notifications of cryptosporidiosis during the quarter which is 1.7 times the five year mean for the same period. All jurisdictions reported cases but the majority were from Victoria (360), Queensland (203) and New South Wales (182). This continued a trend reported in the first quarter. Four hundred and forty-seven (72%) notifications had information on the infecting species and all were identified as *Cryptosporidium parvum* infection.

Figure 1. Selected* diseases from the National Notifiable Diseases Surveillance System, comparison of provisional totals for the period 1 April to 31 June 2006 with historical data*



* 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.

After observing a marked increase in the number of cryptosporidiosis notifications, the Communicable Disease Control Unit in Victoria attempted to gather risk factor information (using telephone interview or postal questionnaire) for all cases notified between 1 January and 31 May 2006. In the second quarter, a total of 14 swimming pools were associated with two or more confirmed cases of cryptosporidiosis. An additional outbreak was linked to a special school. Control measures for implicated pools included hyperchlorination and advice to facility managers about preventing contamination and control measures. Person-to-person spread was the suspected mode of transmission in the school and infection control advice was provided to the manager by environmental health officers, (Joy Gregory and James Fielding, personal communication).

Typhoid

There were 21 notifications of typhoid during the quarter which was 2.1 times the five year mean for the same period. Notifications were mainly from New South Wales (4), Victoria (5) and four each from Western Australia and Queensland. The imported status in the notifications showed 16 were imported from overseas, four were locally-acquired and one was unknown.

Sexually transmissible infections

Chlamydial infections

There were 11,192 notifications of chlamydial infection in the quarter which was 1.4 times the five year mean. The highest rates of notification continued to be in the 20–24 year age group, for both females (1,477 cases per 100,000 population) and males (846 cases per 100,000 population).

Gonococcal infections

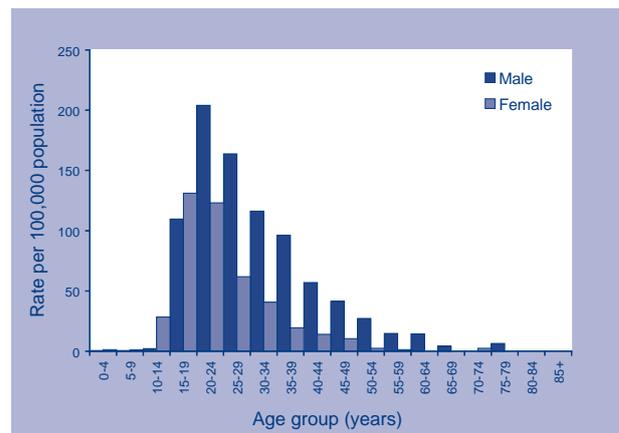
There were 2,294 notifications of gonococcal infection in the quarter which was 1.3 times the five year mean. There was a higher incidence in men, compared to women (2:1). The highest rates of notification were report in the 20–24 year age group for males (204 cases per 100,000 population) and the 15–19 year age group for females (131 cases per 100,000 population) (Figure 2).

Vaccine preventable diseases

Measles

There were 96 cases of measles reported in the quarter, which is 8.3 times the five year mean for the same period. Cases were reported from New South Wales (46 cases), Western Australia (25 cases), Tasmania (11), South Australia (8), Victoria (4) and one each in

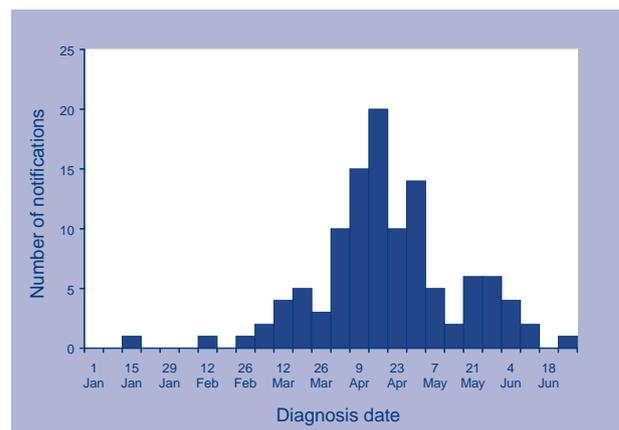
Figure 2. Notification rates of gonococcal infections, Australia, 1 April to 30 June 2006, by age group and sex



Queensland and the Australian Capital Territory. Of the 96 cases, 40 were male and 56 female; 23 were aged less than 5 years and the remainder were aged between 5 and 30 years. All of the children with vaccination status recorded were unvaccinated.

One national outbreak occurred during this quarter, with cases notified from all States and Territories except the Northern Territory. The outbreak began at Easter 2006 and subsided in June 2006 (Figure 3). Two smaller outbreaks occurred at the end of the 1st quarter.

Figure 3. Measles notifications, Australia, 1 January to 30 June 2006



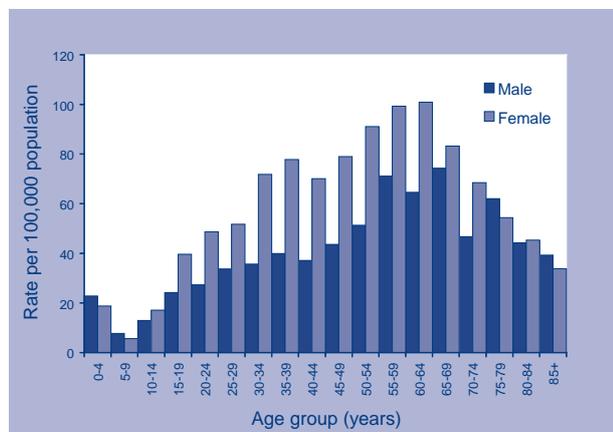
Mumps

There were 84 notifications of mumps in the quarter, which was 2.4 times the five year mean for the same period. There were 46 male and 42 female cases with an age range from 3 to 74 years.

Pertussis

There were 2,482 pertussis notifications were received in the quarter which was 1.7 times the five year mean for the same period. The majority of notifications were reported by New South Wales (1,143) and Queensland (486). Infants less than one year accounted for 1.4 per cent (35 cases) of the 2,482 notifications. The highest rate of infection in females occurred in the 60–64 year age group, (100 cases per 100,000 population). The highest rate in males was 74 cases per 100,000 population in the 65–69 year age group (Figure 4).

Figure 4. Notification rates of pertussis, Australia, 1 April to 30 June 2006, by age group and sex



Vectorborne diseases

Barmah Forest virus infection

There were 635 cases of Barmah Forest virus (BFV) infection in the quarter which was 1.4 times the five year mean for the same period. The majority of cases were from Queensland (288 cases) and New South Wales (218). Nationally, the infection rate was 13.8 cases per 100,000 population, but it was higher in the Northern Territory at 67.1 cases per 100,000 population (34 cases) and Queensland with 29.1 cases per 100,000 population.

Other bacterial infections

Meningococcal infection

There were 69 notifications of meningococcal infection in the quarter which was 0.6 times the five-year mean. Of the 69 cases, 47 (68%) were serogroup B, 5 (7%) were serogroup C, 2 were serogroup Y, 1 was serogroup A, and the serogroups of the remaining 14 cases was unknown. There were three deaths reported in the quarter, one each in patients with serogroup B, C and not typed.

Of the serotype C cases, one was aged less than one year and the remainder were aged 17 to 31 years. No cases were vaccinated.