

Communicable Diseases Surveillance

Presentation of NNDSS data

With the move to a quarterly reporting system in *Communicable Diseases Intelligence*, the summary tables have changed to fall in line with a quarterly report. Table 2 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 4 presents the crude incidence of diseases by State or Territory for the current reporting quarter.

Table 2 now includes the following summary columns: total current quarter data, totals for previous quarter; total for same quarter in previous year; a 5-year mean for the same quarter and the ratio of the current quarter to the mean of the first quarter for the last 5 years.

Notifiable diseases 2001

The Communicable Diseases Network Australia has revised the list of diseases that are reportable to the NNDSS. From 2001, the following diseases are notifiable. All jurisdictions are working towards reporting against the new national list. Dates of first transmission of a dataset consistent with the new list will vary across Australia depending on changes to public health legislation and IT system development. The following new diseases have been added to the NNDSS database: anthrax, Murray Valley encephalitis, Kunjin virus infection, cryptosporidiosis, influenza (laboratory-confirmed), Australian bat lyssavirus infection and invasive pneumococcal disease (laboratory-confirmed). Data on the following diseases will no longer be collected: chancroid infection, hydatid disease, lymphogranuloma venereum, and yersiniosis.

Anthrax is an acute bacterial disease of the skin and rarely an inhalation disease affecting the oropharynx, mediastinum or intestinal tract. Since this is a serious disease and has been developed as a potential biological weapon, the surveillance of anthrax is increasingly important. Anthrax is acquired primarily by contact with livestock and occurred at very low levels in Australia (less than 8 notifications per 10 million per year) between 1917 and 1990.

Arboviruses: From 1996 to 2000, the category 'Arboviruses: Not Elsewhere Classified (NEC)' included Murray Valley encephalitis (MVE), Kunjin, Japanese encephalitis (JE), Kokobera and Stratford viruses. From 2001, MVE, Kunjin and JE will be notified separately.

Both MVE and Kunjin viruses are flaviviruses transmitted by mosquitoes.

Murray Valley encephalitis: While only 1 in 1,000 people infected with MVE virus will develop encephalitis, the case fatality rate is about 20 per cent, with a further 40 per cent surviving with residual permanent neurological damage. MVE virus is enzootic in the Kimberley region of Western Australia and the top end of the Northern Territory. Cases occur sporadically in Queensland. Disease outbreaks in more southerly regions of Australia are rare, with the last major outbreak occurring in 1974. The MVE virus is a flavivirus, transmitted by mosquitoes. Avian hosts play an important role in the life cycle of the virus and are useful for sentinel surveillance.

Kunjin. Infection with Kunjin virus occasionally causes encephalitis, but less frequently than the MVE virus. While both viruses share vertebrate and vector hosts, the epidemiology of Kunjin virus differs from that of MVE virus. Kunjin virus appears to be more widely distributed geographically in Australia and is closely related to the West Nile virus.

Cryptosporidiosis is a protozoal infection of the gastrointestinal tract. The main route of transmission is faecal-oral and up to 5 per cent of the human population excretes the oocytes in their faeces. Cryptosporidiosis is a significant infection in people affected by HIV/AIDS.

Continuous monitoring of influenza is a critical public health issue in the 21st century, due to the possibility of rapidly evolving pandemics causing widespread morbidity and mortality, particularly among the elderly and immuno-compromised. National laboratory-based influenza surveillance will link with ASPREN and State-based influenza surveillance schemes.

Australian bat lyssavirus infections are notifiable from this quarter. Two deaths in Queensland (in 1996 and 1998) associated with lyssavirus infection dramatised the risk of this disease for people exposed to bats. A prevalence of lyssavirus infection in bats in southern Queensland of 6 per cent has been reported (McCall, 2000).

Invasive laboratory-confirmed pneumococcal disease will also be notifiable. This will build on existing pneumococcal surveillance in the Northern Territory, New South Wales and Western Australia. These infections will be important to monitor as a new conjugate vaccine is introduced in Australia in 2001.