Communicable diseases surveillance

Highlights for 3rd 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’.

Figure 1 shows the changes in selected disease notifications with an onset in the third quarter of 2007 (July to September), compared with the 5-year mean for the same period.

Notifications were above the 5-year mean for chlamydia, influenza (laboratory confirmed), mumps, typhoid and syphilis of less than 2 years duration. Notifications were below the 5-year mean for hepatitis A, meningococcal infection and rubella.

Sexually transmissible infections

Syphilis infections

There were 288 cases of syphilis (less than 2 years duration) reported to NNDSS in the third quarter of 2007, giving a national notification rate of five cases per 100,000 population (Figure 2). Males in the 35–39 year age group (29 cases per 100,000 population) and females in the 20–24 year age group (4 cases per 100,000 population) had the highest rates of notification. The Northern Territory recorded the highest notification rate with 29 cases per 100,000 population, however this was 18% less notifications compared with the same period in 2006.

Compared to the same period in 2006, the number of syphilis (less than 2 years duration notifications) have increased nationally by 38%. The major increases have been in Victoria (57%) and New South Wales (30%).

Figure 1. Selected* diseases from the National Notifiable Diseases Surveillance System, comparison of provisional totals for the period 1 July to 30 September 2007 with historical data*

![Figure 1: Selected* diseases from the National Notifiable Diseases Surveillance System, comparison of provisional totals for the period 1 July to 30 September 2007 with historical data*](image)

* 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.
Vaccine preventable diseases

Influenza

Laboratory-confirmed influenza is a nationally notifiable disease in all states and territories except South Australia, however data are reported from all state or territory health departments to the N N D S S.

The 2007 influenza season began in late May with a very gradual increase in notifications. From 15 July there was a steep rise in influenza notifications in several jurisdictions, particularly Queensland and Western Australia. Nationally, notifications peaked in mid August.

The total number of laboratory-confirmed influenza notifications to N N D S S for the third quarter was 8,958 cases (91% of year-to-date notifications); this was 3.3 times the 5-year mean for the same period. The number of notifications was more than three times the number reported for the same period in the previous four seasons (Figure 3). The majority of notifications were from Queensland with 3,861 cases (43%).

During the third quarter of 2007, the highest rate of notifications occurred in the Australian Capital Territory with 427 cases per 100,000 population, followed by Queensland (374 cases per 100,000), the Northern Territory (316 cases per 100,000), Tasmania (302 cases per 100,000), South Australia (163 cases per 100,000), Western Australia (153 cases per 100,000), Victoria (107 cases per 100,000) and New South Wales (78 cases per 100,000). The rate of notification of influenza infection for Australia was 170 cases per 100,000 population.

Measles

Four notifications of measles were reported in the third quarter of 2007. There were two males and two females reported aged between 1 and 22 years. One case was a student from Japan, two cases had returned from overseas (from Indonesia and the Middle East), and one case had no history of travel. One case was unvaccinated and three cases had an unknown vaccination history.

Acknowledgments

Thanks go to staff of the Surveillance Policy and Systems Section of the Australian Government Department of Health and Ageing and all our state and territory data managers.