Editorial: Notifiable disease reporting in the new millennium

The regulation of disease in Australia is vested in the States and Territories; the only specific public health powers vested in the Commonwealth under the Australian Constitution relate to quarantine under the *Quarantine Act 1908*.[1] There are recognised benefits to some degree of harmonisation of public health legislation across Australia;[2] with respect to the surveillance of communicable diseases all jurisdictions have reviewed, or are reviewing, their public health legislation to allow greater flexibility and responsiveness to the need for rapid additions to their notifiable diseases list.

The surveillance of a communicable disease is fundamental for disease prevention and control. The World Health Organization defines surveillance as the '*ongoing systematic collection, collation, analysis and interpretation of data; and the dissemination of information to those who need to know in order that action may be taken*'.[3] Last's definition states that surveillance generally uses *'…methods distinguished by their practicability, uniformity, and frequently their rapidity, rather than by complete accuracy. Its main purpose is to detect changes in trend or distribution in order to initiate investigative or control measures*.'[4]

Public Health Units in the various States and Territories are the bodies which receive reports of cases of notifiable and other infectious diseases of public health importance from clinicians, laboratories and other specified agencies within their jurisdiction. To enable the Commonwealth to monitor disease trends and estimate the burden of disease at a national level, data are forwarded to the Commonwealth Department of Health and Aged Care. In addition, reports of non-notifiable diseases are forwarded by various laboratories contributing to the Commonwealth's *Communicable Diseases Intelligence* Virology and Serology Reporting Scheme and by various other specialised surveillance networks as detailed elsewhere.[5] Also, the Commonwealth receives reports of non-notifiable communicable diseases under sentinel general practice surveillance collected by the Australian Sentinel Practice Research Network.[6] The Surveillance and Management Section, Communicable Diseases and Environmental Health Branch in the Population Health Division of the Department of Health and Aged Care is currently responsible for collating these surveillance data and reporting on them nationally.

There has long been a list of notifiable diseases which, over the years, has been modified as old diseases lose significance and new ones appear. Thus in 1977, for example, infantile diarrhoea, puerperal fever and scarlet fever were notifiable nationally. In the October 1978 revision they were deleted, whereas smallpox continued to be reported and Lassa fever was added.[7] In 1990 the Commonwealth and States and Territories agreed to work towards a national list. In 1991 the National Notifiable Diseases Surveillance System (NNDSS) was established and collection of data at a national level for this list commenced, and in 1994 the National Health and Medical Research Council published case definitions for a list of communicable diseases of national importance.[8] Since then additional diseases have been made notifiable in various States and Territories before being added to the national list; for example Australian bat lyssavirus and/or haemolytic uraemic syndrome were made notifiable in some jurisdictions in the 1990s depending on local imperatives.[9,10]

Although all jurisdictions adopted the 1994 case definitions for notification purposes (and as the basis of local surveillance case definitions) there still remained differences in which diseases they reported to the Commonwealth. This issue was resolved by the Strategic Steering Committee of the Communicable Diseases Network Australia New Zealand (CDNANZ) at its February 2000 meeting where it agreed to a revised national list of diseases to be reported to the NNDSS.[11] For the first time from 1 January 2001, exactly 100 years after Federation, all jurisdictions have agreed to legislate to report all the infectious diseases on the national list. Jurisdictions will also continue to keep diseases of local importance under surveillance as appropriate.

From 1 January 2001, in those jurisdictions that have updated their legislation, influenza will be notifiable when 'laboratory confirmed', while anthrax will again be notifiable nationally. Also new to the national list are cryptosporidiosis, Australian bat lyssavirus, lyssavirus (other) and invasive pneumococcal disease. 'Haemorrhagic fevers (quarantinable)' covers infections with Lassa, Ebola, Marburg and Crimea-Congo haemorrhagic fever viruses. Arbovirus infections formerly covered by 'arbovirus infection not otherwise specified' will be reported as Japanese encephalitis virus, Kunjin virus, and Murray Valley encephalitis (MVE) virus infections. The southerly spread of MVE to within 315 km of Perth is reported in this issue.[12] For others, such as hydatid infection, chancroid, lymphogranuloma venereum and yersiniosis, national notification will cease in 2001.

From the New Year, all jurisdictions will report against an expanded core dataset that will make the NNDSS more specific by the inclusion of, for example, information on organism typing. In addition, enhanced surveillance of certain high priority diseases is being negotiated. In collaboration with the Public Health Laboratory Network, members of the CDNANZ and some of its disease-specific working groups are revising case definitions and expanding data sets for these diseases which include tuberculosis, hepatitis C, measles, invasive meningococcal disease and invasive pneumococcal disease. As a result these diseases will be reported nationally in greater detail.

The need to maintain surveillance is emphasised in a recent review on the emergence of Japanese encephalitis in the Australasian region,[13] in the article on introduced dengue cases reported in this issue,[14] and by the recent rise in malaria cases diagnosed in new arrivals in Western Australia (*Special report*, p 394 this issue). These events again remind us of the need for continual vigilance in the area of communicable diseases.

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