Polio Eradication

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The goal of polio eradication in the Western Pacific Region is within reach. The last case of polio seen in the region occurred in Cambodia in March 1997 and the region aims to be certified polio-free by the World Health Organization (WHO) in the year 2000. The Global Commission for Certification of Eradication of Poliomyelitis has specified three criteria to be fulfilled by countries in order that they may be certified polio-free:

- absence of wild poliovirus for 3 years in the presence of adequate Acute Flaccid Paralysis (AFP) surveillance in children under the age of 15 years;
- a National Certification Committee in each country to validate and submit the certification documentation; and
- the establishment of mechanisms to detect and respond to the importation of wild poliovirus.

Active surveillance of AFP in children under 15 years was established in Australia in March 1995 through the Australian Paediatric Surveillance Unit. However, as polio has not been seen in Australia for over 20 years it is generally not considered as a differential diagnosis in a child with AFP. Similarly, paediatricians may omit to report cases of AFP when an alternative diagnosis to poliomyelitis has been proven. This may have affected the number of AFP cases being reported and investigated by paediatricians. To comply with WHO's certification requirements all cases of AFP should be investigated as potential cases of polio. This maximises the chance that cases of polio imported into Australia would be detected, and detection of even one case of polio is considered an outbreak in a non-endemic country. It is also essential that population immunity be maintained at a high level to prevent spread of infection in the event of an imported case. AFP surveillance in the region must be continued in

the post-certification period until the time global eradication is achieved. In the meantime, paediatricians are urged to report and investigate all cases of AFP. This includes stool testing, which is considered the gold standard for excluding polio in an AFP case even when the diagnosis of polio is unlikely.

The next major objective will be the containment of poliovirus. Materials that may be infected or potentially infected with wild poliovirus in laboratories and research institutions, will need to be rendered non-infectious or destroyed. Achievement of polio eradication will make polio the second infectious disease after smallpox, to be eradicated.

The current issue of *CDI* includes an article by Kennett et al regarding the last case of polio reported in Australia in 1986 and its reclassification as 'vaccine associated'.¹ In the 'Current Issues on Immunisation,' Burgess and McIntyre discuss issues related to vaccine associated paralytic poliomyelitis in Australia.² A forthcoming issue of *CDI* will include both a report on the Surveillance of Acute Flaccid Paralysis scheme over the past four years by D'Souza et al and a report from the Australian National Polio Reference Laboratory, which was established at the Victorian Infectious Disease Reference Laboratory in 1994.

References

- Kennett ML, Brussen KA, Wood DJ et al. Australia's last reported case of wild poliovirus infection. *Commun Dis Intell* 1999;23:77-79.
- 2. Burgess MA, McIntyre PB. Vaccine-associated paralytic poliomyelitis. *Commun Dis Intell* 1999;23:80-81.
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