

## Recent increases in mumps incidence in Australia: the "forgotten" age group in the 1998 Australian Measles Control Campaign

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**TO THE EDITOR:** We concur with Aratchige and colleagues that mumps in young adults is a "forgotten" disease,<sup>1</sup> and believe that mumps control in Australia has suffered from both the successes and failures of our measles elimination program. Among residents of Sydney's eastern and southern suburbs, 100 cases of mumps were notified in the second half of 2007. Sixty-three per cent of those who contracted the disease were aged 20–29 years, and 65% were male. This compares with an average of 13.6 cases (range, 4–32 cases) notified per annum from 1999 to 2006.

During the second half of 2007, one institution managed three cases of severe orchitis in men aged 25–29 years whose diagnosis was confirmed by a positive mumps IgM test. In all three, initial fever and transient parotitis were followed after 7–10 days by severe testicular pain and swelling. Fever and testicular pain continued for a further 1–2 weeks, precluding their return to work. None had been vaccinated.

Although mumps vaccine was introduced in Australia in 1980, mumps control has not been an explicit priority compared with measles.<sup>2</sup> It seems that public health authorities in industrialised countries have assumed that measles control efforts based on two doses of the

measles–mumps–rubella (MMR) vaccine would lead to simultaneous mumps control. While doubt has been cast over the effectiveness of this approach and raised the possibility of a three-dose schedule,<sup>3</sup> we agree with the view of Schmid and colleagues that public health authorities should focus on adequate vaccination coverage and adherence to the recommended two-dose MMR vaccination scheme.<sup>4</sup>

The Australian birth cohort reported by Aratchige et al to have a dip in mumps immunity was the cohort born in the years 1978–1982.<sup>1</sup> This group may have avoided natural measles (as well as mumps), missed the Measles Control Campaign in 1998 (which targeted primary-school children with MMR vaccine), and was subject to an ineffective national effort in 2001 to target young adults with MMR vaccine.<sup>2</sup> At the time of the 2007 mumps outbreak, this cohort was aged 25–29 years and was the hardest hit. Concerted action to raise the level of two-dose coverage among young adults is urgently needed.

Novel strategies exist for targeting this highly communication-aware age group through convergent Internet and mobile phone technologies. Social network sites such as MySpace and Facebook are heavily used by young people, and the proportion of mobile phones with Internet access is increasing. Sporting clubs and major entertainment events are another avenue to be considered with respect to both their physical and virtual locations (eg, posters at the clubs or events, advertisements on their websites). A comprehensive guide has recently been produced for Internet-based prevention of sexually transmitted diseases.<sup>5</sup> It is well and truly time to adapt such methods to the promotion of MMR vaccination.

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1 Aratchige PE, McIntyre PB, Quinn HE, Gilbert GL. Recent increases in mumps incidence in Australia: the "forgotten" age group in the 1998 Australian Measles Control Campaign. *Med J Aust* 2008; 189: 434–437.

## LETTERS

- 2 Gidding HF, Wood J, MacIntyre CR, et al. Sustained measles elimination in Australia and priorities for long term maintenance. *Vaccine* 2007; 25: 3574-3580.
  - 3 Dayan GH, Quinlisk MP, Parker AA, et al. Recent resurgence of mumps in the United States. *N Engl J Med* 2008; 358: 1580-1589.
  - 4 Schmid D, Holzmann H, Popow-Kraupp TH, et al. Mumps vaccine failure or vaccination scheme failure? *Clin Microbiol Infect* 2007; 13: 1138-1139.
  - 5 National Coalition of STD Directors. National guidelines for Internet-based STD and HIV prevention: accessing the power of the Internet for public health. <http://www.ncsddc.org/upload/wysiwyg/documents/IGE.pdf> (accessed Dec 2008). □
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