

Measles outbreak among young adults in Victoria

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Abstract

An outbreak of laboratory confirmed measles involving 30 young adults and an infant is reported. Of the young adult cases, 17 (57%) were hospitalised. After a trip to India, the primary case returned to Sydney early in January 2001 and then visited Melbourne infecting several individuals. Secondary spread appears to have occurred at a nightclub. On the basis of RNA typing the measles strain involved is of genotype 'D'. *Commun Dis Intell* 25;2001:12.

Keywords: measles, vaccine, surveillance, overseas travel

The Communicable Diseases Section at the Victorian Department of Human Services was advised in mid-afternoon 1 February 2001 of a suspected case of measles in a 19-year-old female who had been admitted to the Royal Melbourne Hospital. The following day 2 more cases (a 28-year-old male and a 22-year-old male) were reported. As of 16 February 2001, 31 laboratory-confirmed cases had been identified. All but one of these (a 10-month-old female) were aged between 15 and 34 years. The previous measles outbreak in Victoria affected a similar age group.¹

Young Australian adults (born between January 1970 and December 1983) are at greater risk of measles infection because either they have not had a wild measles virus infection or have not been adequately immunised. Measles-containing vaccines were first available in Australia in 1968. The two-dose Measles-Mumps-Rubella vaccination program was introduced in 1994, so very few of those within the affected age group are likely to have received two doses of a measles-containing vaccine.² As with the 1999 outbreak, the hospitalisation rate among this group has been high. Seventeen cases (57%) have been hospitalised.

The primary case in the current outbreak was a 19-year-old male with no documented history of previous vaccination who had returned to Sydney on 4 January 2001 after holidaying in India. He visited Melbourne from 17 to 20 January 2001 during his infectious period. Onset of rash in the primary case was 20 January. Onset of rash in the remaining cases was between 28 January and 13 February. Eight cases have been directly linked to the primary case including the 10-month-old child who had attended the same restaurant on the same night as the primary case. The 3

most recent cases (rash onset 9 February to 13 February 2001) appear to represent the next wave of transmission; 2 of these are known to have attended the same nightclub on the same night.

The Victorian Infectious Diseases Reference Laboratory has harvested measles virus RNA from 13 of the cases. Initial genotyping of the virus strain places it within genotype "D"; subsequent analysis will allow more specific genotyping. Virus culture in B95a cells has yielded at least 5 isolates and is ongoing.

We encourage both clinicians and laboratories to continue to notify on suspicion of measles, and NOT to delay notification pending laboratory confirmation of the diagnosis.

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References

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