

# The seroepidemiology of measles in Xi'an, China

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## Abstract

The number of measles cases reported worldwide has increased in recent years, and in 2015, there was a measles outbreak in Xi'an, China. However, the epidemiology of measles and the seroepidemiology of healthy people after 2015 have not been fully understood. We collected fingertip blood samples from healthy people around each suspected measles case in Xi'an in 2016-2018 and tested IgG using ELISA. Eighty measles cases were reported in Xi'an in 2016-2018, with an average annual incidence of 0.29 per 100,000 persons. Children aged [?] 5 years and adults aged 25-29 accounted for a large proportion of measles cases. More than half of the cases in the 0-year group were under 8 months. A total of 5476 blood samples from healthy people were collected. Apart from 1-4 years and over 40, other age groups' seroprevalence was 93%. Our findings suggest that the first vaccine shot should be administered at 6 months or earlier, the second at 12 months, and the third at 10 years, and couples prepared for [pregnancy](javascript:showjdsdw('showlj\_1','lj\_1')) should be vaccinated with another dose. The findings may provide novel insights into measles elimination.

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