

ORAL ABSTRACTS

1340. Mumps Outbreak among a Highly Vaccinated University Community-New York City, NY, January-April 2014

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Background. On 1/14/14, a vaccinated student presented with parotitis. Mumps IgM testing was negative and polymerase chain reaction (PCR) was not performed, resulting in a missed diagnosis and subsequent outbreak at a New York City (NYC) university.

Methods. Mumps case investigations included patient interviews and review of medical and immunization records. Laboratory testing included mumps IgM, IgG, and PCR testing. The CSTE case definition was used to classify cases. Cases were considered linked to the university outbreak if they attended or had epidemiologic linkage to the university. Epidemiologic, clinical and laboratory data for outbreak cases residing in NYC are included in the analysis.

Results. Fifty-five NYC residents were identified from the 58 cases of mumps linked to the university from 1/12/2014 through 4/11/2014. Among the 55 NYC residents, 53 (96.4%) were university students and 2 (3.6%) had other epidemiologic links to the university. The median age was 20 years (range 18-37 years). All cases had parotitis; two cases were hospitalized, including one of two cases that had orchitis. Among the 55 cases, 53 (96.4%) cases had received ≥ 1 mumps-containing vaccine, 1 (1.8%) case was unvaccinated due to religious exemption, and 1 (1.8%) had unknown vaccination status. Of the 37 cases that had both PCR and IgM testing, 27 (73%) were PCR-positive and none were IgM-positive. Control measures included home isolation of cases during the infectious period and exclusion of unvaccinated students from class.

Conclusion. Mumps outbreaks can occur in highly vaccinated populations. Mumps should be considered in patients with parotitis regardless of vaccination status. PCR is the preferred testing method; providers should not rely on IgM testing alone. High vaccination coverage and control measures likely limited the extent of the outbreak.

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