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BACKGROUND
- Mumps is an acute viral illness that classically presents with parotitis.
- Complications can include orchitis, hearing loss and meningitis.
- 2 measles-mumps-rubella (MMR) doses recommended for university students since 2006 (ACIP).
- Recent large mumps outbreaks have frequently involved universities.

UNIVERSITY OF IOWA
- >30,000 students
- 2-dose MMR requirement
- Began in 2003, fully implemented in 2012
- Required for course registration
- Mass MMR vaccination campaign
- Nov 10, 11, 13, 16, 17, 19, 2015
- Students < 25 years old
- >4,500 doses administered

INVESTIGATION METHODS
- Review of state and county reportable disease records, state public health laboratory results, and medical visits
- Investigation of student cases
  - Medical chart abstractions
  - Interviews
  - Vaccination records
- Data collected on demographics, university activities and affiliations, mumps contacts and exposures
- Analysis of case count and age distribution before and after 21 days (one incubation period) post last mass vaccination clinic
- Analysis of Mumps RT-PCR test results by time from illness onset

CONCLUSIONS
- A large, university-based mumps outbreak occurred in 2015-2016 despite high MMR coverage in students.
- The case count declined in the target population after a mass 3rd MMR vaccination campaign.
- Coordinated response by state, local and university partners to promote early case detection and isolation of cases likely led to reduced case count.

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