



**COUNTY OF ORANGE
HEALTH CARE AGENCY**

**PUBLIC HEALTH
EPIDEMIOLOGY & ASSESSMENT**

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April 14, 2016

Third Mumps Case Identified in College Student from Orange County

An Orange County college student was diagnosed with mumps last week, the third Orange County student diagnosed with mumps in the last two months. All three attend college outside of Orange County, but all three were in the County when they became ill and were diagnosed. Outbreaks of mumps have occurred at college campuses around the country since late 2015. As students travel to and from school during spring break, community exposure to mumps cases may occur.

Providers should consider the diagnosis of mumps in patients with an appropriate clinical presentation, particularly in college students, those with a history of international travel, or exposure to a known mumps case. **Notify the Orange County Health Care Agency Epidemiology Program immediately at 714-834-8180 with any suspect cases.**

- Mumps illness often begins with a nonspecific prodrome that includes muscle aches, loss of appetite, malaise, headache, or fever. Parotid swelling then begins 1-2 days later, often unilateral at first but eventually becoming bilateral in 70% of cases.

Laboratory Testing

- The preferred method of diagnosis is mumps PCR testing of a buccal swab specimen. Virus may be detected for up to 9 days after parotitis onset. The Orange County Health Care Agency Laboratory can expedite mumps PCR testing.
- Testing can also include serum mumps IgM and IgG, though these tests can be unreliable, particularly in previously-immunized patients.

Handling of Laboratory Specimens

- Please contact OC Epidemiology and Assessment, 714-834-8180, to arrange transport of specimens to the Orange County Public Health Laboratory.
- Place buccal specimens in liquid viral or universal transport media and keep refrigerated.
- For serum testing, collect 7-10 ml of blood in a red top or serum separator tube and keep refrigerated.
- Detailed descriptions of specimen collection procedures can be found at: <http://www.cdc.gov/mumps/lab/detection-mumps.html>
- If your facility has pre-printed OCPHL laboratory slips, please include one for each specimen.
- If you do not have pre-printed laboratory slips, please enter OC Epidemiology & Assessment as the "Client" and your facility information as "Other Client" in the following fillable form: <http://ocphlab.com/civicaX/filebank/blobdload.aspx?BlobID=20884>

Infection Control

- Mumps virus is transmitted by direct exposure to respiratory secretions or droplets of infected persons.
- Infectiousness is probably highest from 2 days before to 5 days after onset of parotitis.

Vaccination

- Mumps vaccine is given as part of the Measles, Mumps and Rubella (MMR) vaccine.
- All children are recommended to receive a first MMR at 12-15 months and a second MMR at 4-6 years.
- **All college students who have had fewer than two doses of MMR vaccine should receive catch up vaccination.**
- The CDC estimates that approximately 90% of persons are protected after two MMR doses.
- Breakthrough infection can occur despite vaccination, and most cases seen in college outbreaks have occurred in fully vaccinated patients.

Multistate Outbreak of Infections Caused by *Elizabethkingia anophelis*

The U.S. Centers for Disease Control and Prevention (CDC), in coordination with public health departments in Wisconsin, Michigan, and Illinois, is investigating an outbreak of infections due to *Elizabethkingia anopheles*. CDC is requesting notification of any invasive infection (blood or other sterile site) due to *Elizabethkingia* species diagnosed since January 1, 2016. As of April 13, 2016, 61 invasive *Elizabethkingia* infections have been reported, including 20 deaths. All case-patients except two were residents of Wisconsin. Most patients were older than 65 years with serious underlying health conditions. **Local laboratories and hospitals are asked to notify the Orange County Health Care Agency Epidemiology Program at 714-834-8180 with any *Elizabethkingia* infections.**

No source has been identified for this outbreak thus far. The majority of infections identified to date have been bloodstream infections, but some patients have had *Elizabethkingia* isolated from other sites, such as respiratory systems or joints.

Elizabethkingia is a gram-negative organism often found in the environment (water and soil) but rarely causes infections. Because *Elizabethkingia anopheles* can be misidentified as *E. meningoseptica*, hospitals are requested to report any *Elizabethkingia* species from a sterile site and retain the isolate. Retrospective cases identified since January 1, 2016 should also be reported.

More details on this investigation can be found on the CDC website:
<http://www.cdc.gov/elizabethkingia/outbreaks/index.html>