

## Health Update:

### Update 2: Mumps Outbreak in Missouri

February 15, 2017

This document will be updated as new information becomes available. The current version can always be viewed at <http://www.health.mo.gov>.

The Missouri Department of Health & Senior Services (DHSS) is now using 4 types of documents to provide important information to medical and public health professionals, and to other interested persons:

**Health Alerts** convey information of the highest level of importance which warrants immediate action or attention from Missouri health providers, emergency responders, public health agencies or the public.

**Health Advisories** provide important information for a specific incident or situation, including that impacting neighboring states; may not require immediate action.

**Health Guidances** contain comprehensive information pertaining to a particular disease or condition, and include recommendations, guidelines, etc. endorsed by DHSS.

**Health Updates** provide new or updated information on an incident or situation; can also provide information to update a previously sent Health Alert, Health Advisory, or Health Guidance; unlikely to require immediate action.

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February 15, 2017

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**SUBJECT: Update 2: Mumps Outbreak in Missouri**

On November 18, 2016, the Missouri Department of Health and Senior Services (DHSS) released a Health Advisory entitled “Mumps Cases in Central Missouri.” The purpose of this Advisory was to alert health care providers of the outbreak of mumps among Missouri college students, to provide guidance on clinical and laboratory diagnosis, and to provide guidance on measures to control infection transmission. This notification is available at:

<http://health.mo.gov/emergencies/ert/alertsadvories/pdf/advisory111816.pdf>

On December 8, 2016, DHSS released a Health Update entitled “Update 1: Mumps Outbreak in Missouri.” The purpose of this Update was to provide current information on the status of the mumps outbreak at the University of Missouri in Columbia. This notification is available at:

<http://health.mo.gov/emergencies/ert/alertsadvories/pdf/hu12816.pdf>

**This Health Update provides new information on the status of the outbreak, as well as on additional cases reported in Missouri. The new information is in blue.**

The Columbia/Boone County Department of Public Health and Human Services (CBCDPHHS), other local public health agencies (LPHAs) in Missouri, and DHSS continue to receive additional reports of mumps cases among persons associated with the University of Missouri in Columbia (MU). A total of 361 laboratory-confirmed and probable cases of mumps associated with the MU outbreak have been reported as of February 7, 2017. Additionally, mumps activity was reported at 14 other colleges or universities during this same time period.

A third dose of MMR vaccine has been used during prior mumps outbreaks in university settings. While no national recommendation exists and the effectiveness of a third MMR dose has not been clearly established, the Centers for Disease Control and Prevention (CDC) has provided guidelines for considering its use during outbreaks. Factors that might trigger this recommendation include outbreaks among populations with 2-dose MMR vaccination (coverage of > 90%), intense exposure settings such as universities, evidence of sustained transmission (>2 weeks), and high attack rates (>5 cases per 1,000 population). In December, after it had been determined that these criteria had been met, MU in collaboration with CBCDPHHS and DHSS began recommending a third dose of MMR vaccine for MU students unless otherwise contraindicated. As of February 7, 2017, more than 2,325 MU students were reported to have received a third dose of MMR vaccine.

Mumps continues to have a presence on the MU campus despite the implementation of traditional control measures, the recommendation for a third dose of MMR vaccine, and a reduced student population on campus during the winter break. In response to continued new case reports, MU has scheduled a mass vaccination clinic for MU students to ensure the availability of a third dose of MMR vaccine.

There is evidence that mumps is also circulating outside higher education institutions. Twenty-two counties in Missouri, including Boone County, have had at least one

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confirmed or probable mumps case reported since August 22, 2016. As of February 7, 2017, the statewide case count was 396 during this time period. Health care providers should maintain a high index of suspicion for mumps among persons with symptoms compatible with the disease, and mumps should not be ruled out because of history of appropriate vaccination in a person with suspected mumps. Additionally, health care providers should consider evaluating patients for MMR catch-up dose(s) as appropriate.

DHSS and CDC recommend the following infection control measures for patients known or suspected of having mumps:

- In a health care setting: use droplet precautions, in addition to standard precautions, for 5 days after onset of parotitis.
- Isolation from the community: The patient should stay home, not go to school or work, and avoid prolonged, close contact with other people until at least 5 days after onset of parotitis.
- Cover mouth and nose with a tissue or in the elbow when coughing or sneezing, not the hands.
- Wash hands often with soap and water.
- Avoiding sharing drinks or eating utensils.
- Disinfecting frequently-touched surfaces, such as toys, doorknobs, tables, and counters.

Persons who were contacts of a mumps case during the 2 days prior through 5 days after onset of parotitis in a diseased person should be identified, assessed for evidence of immunity (see <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6204a1.htm>, Table 3), and offered vaccine as appropriate. In addition, all contacts should be educated on the symptoms of mumps, instructed to watch for symptoms from 12 to 25 days after the last exposure, and told to isolate themselves and contact their medical provider and their local health department if symptoms develop.

The Missouri State Public Health Laboratory (MSPHL) provides laboratory support for the diagnosis of mumps infections occurring in Missouri. Laboratory testing should be performed if mumps is suspected. Specimen collection should include a buccal or oral swab specimen in viral transport; **AND** blood specimens. **Note:** before any specimen is sent to MSPHL, DHSS must first be consulted for approval of testing as resources are limited, and to ensure appropriate testing. Health care providers caring for a patient suspected of having mumps should contact their LPHA, or DHSS at 573/751-6113 or 800/392-0272 (24/7), to report suspected cases of mumps and to discuss testing at MSPHL.

For more information and guidance on mumps including, but not limited to, the challenges and availability of laboratory testing, laboratory results interpretation, controlling transmission, and links to additional resources, please visit the DHSS Health Advisory “Mumps Cases in Central Missouri” released on November 18, 2016, at: <http://health.mo.gov/emergencies/ert/alertsadvories/pdf/advisory111816.pdf>

Questions should be directed to DHSS’ Bureau of Communicable Disease Control and Prevention at 573/751-6113 or 800/392-0272 (24/7).