The pages that follow contain information critical to protecting the health of your patients and the citizens of Colorado.

HAN ALERT

Number of pages including cover: 4

Subject: Alert - Mumps Outbreak in the Denver Metropolitan Area January 25, 2017

Message ID: 1/25/2017 2:45:00 PM
Recipients: HAN Community Members.
From: TRI-COUNTY HEALTH DEPARTMENT
Adams, Arapahoe and Douglas County, Colorado

Recipient Instructions: Tri-County Health Department is forwarding you the attached HAN. You may have already received this broadcast if you are on the CDPHE distribution list, however, we wanted to ensure you did not miss this important information. No response is required.

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You have received this message based upon the information contained within our Health Alert Network Notification System. If you have a different or additional e-mail or fax address that you would like us to use, or if you have additional questions, call 720-200-1477.

Categories of Health Alert Network Messages:

Health Alert: Conveys the highest level of importance; warrants immediate action or attention.
Health Advisory: Provides important information for a specific incident or situation; may not require immediate action.
Health Update: Provides updated information regarding an incident or situation; unlikely to require immediate action.
Info Service/Public Health Brief: Provides general information that is not necessarily considered to be of an emergent nature.

You may download a copy of this HAN from the TCHD website at http://www.tchd.org/259/Health-Alert-Network
HEALTH ALERT | Mumps outbreak in Denver metro area | Jan. 25, 2017
Health care providers: Please distribute widely in your office

Key points
- Denver Public Health, Tri-County Health Department and the Colorado Department of Public Health and Environment are investigating an outbreak of mumps among six residents of northeast Denver and northwest Aurora, though the number of cases likely is higher as mumps cases often go undetected or untested.
- This outbreak may be related to the large increase in mumps cases reported nationwide, with outbreaks in Arkansas, Oklahoma, Iowa, and Illinois. The Arkansas outbreak consists of more than 2,500 cases.
- Physicians are urged to consider a diagnosis of mumps in patients who present with acute onset of parotid or salivary gland swelling.
- If mumps is suspected, buccal swabs for PCR testing and/or a serum specimen for mumps IgM testing should be collected as soon as possible.
- People suspected of having mumps should be instructed to self-isolate at home until at least five days after the onset of salivary gland swelling.

Background information
Mumps is a viral infection that causes acute, painful swelling and tenderness of one or more of the salivary glands, typically the parotid glands (cheek and jaw area). Swelling is first visible in front of the lower part of the ear then extends downward and forward as fluid builds up in the skin and soft tissue of the face and neck. Swelling usually peaks in one to three days and then subsides during the next week. Often the angle of the jawbone below the ear is no longer visible and the jawbone cannot be felt because of swelling of the parotid. One parotid gland may swell before the other, and in 25 percent of patients, only one side swells. Other salivary glands (submandibular and sublingual) under the floor of the mouth also may swell but do so less frequently (10 percent). Other symptoms may include low-grade fever, malaise, loss of appetite, and headache, but approximately one third of infected people do not have clinically apparent illness so cases might go undetected. Severe complications from mumps are rare, but can include meningitis, oophoritis (inflammation of the ovaries and/or breast), sterility, orchitis (testicular inflammation), spontaneous abortion, or deafness. Despite high vaccination rates and an effective vaccine, cases are reported among vaccinated individuals because the vaccine is not 100 percent effective (estimated effectiveness for mumps...
for two doses of MMR is 88 percent) and vaccine-induced immunity can wane. Vaccination is the best way to be protected against mumps.

Mumps can be transmitted by direct contact with respiratory droplets or saliva from an infected person. The average incubation period is 16-18 days (range 12-25 days). A person with mumps is infectious from two days before through five days after onset of salivary gland swelling.

There were 17 cases of mumps reported in Colorado in 2016, compared to a five-year average of 5.6 cases per year. There was a rise in mumps cases nationally as well, with the highest incidence of disease among those 18-25 years of age. Timely diagnosis and appropriate testing is necessary to help public health control the spread of disease and understand the current disease trend.

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**Recommendations / guidance**

Physicians are urged to consider a diagnosis of mumps in patients who present with acute onset of parotid or salivary gland swelling. People suspected of having mumps should be instructed to stay home until five days after onset of salivary gland swelling.

**Testing**

Physicians who suspect mumps should collect a buccal swab specimen for PCR testing and a serum specimen (red top tube or separator tube) for mumps IgM and IgG. False positive and false negatives for mumps serology are not uncommon, especially in vaccinated individuals. Testing for mumps is available at some commercial labs. Consult with CDPHE Communicable Disease Branch staff at 303-692-2700 if you have questions about testing or problems obtaining specimens for testing. Buccal swab specimens from highly suspect cases may be referred to the CDPHE laboratory for PCR testing. More information on mumps testing is available here: https://www.colorado.gov/pacific/cdphe/mumps-information-health-care-and-public-health-professionals.

**Prevention and vaccination**

There is no post-exposure prophylaxis for mumps. Receiving mumps vaccine after exposure will not prevent infection from that exposure but is recommended for susceptible persons, as it may prevent infection from future exposures.

- For prevention of mumps, two doses of MMR vaccine are recommended routinely for children with the first dose at 12-15 months of age and the second dose at 4-6 years of age (school entry). Schools should verify that enrolled children are appropriately immunized.

- Two doses of MMR vaccine are also recommended for adults at high risk, including international travelers, college and other post-high school students, and healthcare personnel born during or after 1957. All other adults born during or after 1957 without other evidence of mumps immunity should be vaccinated with one dose of MMR vaccine.
For healthcare personnel, presumptive evidence of mumps immunity includes two doses of live MMR vaccine, serologic evidence of immunity to mumps (i.e., positive mumps IgG titer), or documentation of physician-diagnosed mumps. Healthcare personnel without evidence of immunity may be excluded from work in the event of a mumps exposure. All health care personnel should have presumptive evidence of mumps immunity documented and on file at their work location.

**Childcare and school exclusion**

Children who are diagnosed with mumps should be excluded through five days after the day of swelling onset.

School nurses for K-12 grades should review MMR vaccination status of students. Students with less than 2 documented doses of MMR (Colorado school requirement) and no exemption should be reminded to get an MMR vaccine so they are up-to-date.

**Infection control**

In hospital settings, patients with suspected mumps should be placed in respiratory isolation. In clinic settings, patients with suspected mumps should be quickly placed in a private room with the door closed and asked to wear a surgical mask, if tolerated.

Only health care personnel with presumptive evidence of mumps immunity should have contact with the patient.

**Reporting**

Report suspected mumps cases to your local health agency or CDPHE at 303-692-2700. Do not wait until laboratory results are available before reporting suspect cases.

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**For more information**

Contact Meghan Barnes, Amanda Reiff, or Emily Spence Davizon at 303-692-2700.

CDPHE Mumps web page: [https://www.colorado.gov/cdphe/mumps](https://www.colorado.gov/cdphe/mumps)