HEALTH ALERT NETWORK BROADCAST
MESSAGE ID: 02232016 08:00
FROM: CO-CDPHE
SUBJECT: HAN Advisory - HAN Alert - Mumps Outbreak
RECIPIENTS: Local Public Health Agencies / IPs / EDs / ID Physicians
RECIPIENT INSTRUCTIONS: Local Health Public Health Agencies - please forward to healthcare providers

HEALTH ALERT
MUMPS OUTBREAK - February 23, 2016

****Health care providers: Please distribute widely in your office****

KEY POINTS:

• Denver Public Health is investigating an outbreak of 6 mumps cases among a group of Denver County residents and health care personnel.

• The source of the infection is thought to be a person who recently moved to Colorado from Iowa, with additional infections resulting from exposures in a health care setting.

• Iowa has been experiencing an ongoing outbreak of mumps since July 2015.

• Physicians are urged to consider a diagnosis of mumps in patients who present with parotid or salivary gland swelling, especially if they recently traveled to or had visitors from Iowa, or if they visited Denver Health Adult Urgent Care Clinic on the following dates: January 28, January 30, January 31, and February 2, 2016.

BACKGROUND INFORMATION:

Denver Public Health is investigating an outbreak of 6 mumps cases among a group of Denver County residents and health care personnel, all of whom are adults.

The source of the infection is thought to be a person who recently moved to Colorado from Iowa and reported symptoms of fever and bilateral swelling under his ears that extended under his mandibles during early January. While infectious, this person socialized with a group of three friends who all subsequently developed unilateral parotid swelling and tenderness in late January. These cases presented together at Denver Health Adult Urgent Care Clinic on February 2 where they were evaluated and tested for mumps. One of the cases was PCR positive and IgM negative for mumps, one was PCR positive and IgM positive, and the third case was not tested.
As of February 22, three health care personnel who treated the cases at the urgent care clinic developed symptoms consistent with mumps, despite reporting being vaccinated against the disease. Denver Health is contacting other health care personnel and patients who may have also have been exposed.

**RECOMMENDATIONS / GUIDANCE:**

Iowa has been experiencing an ongoing outbreak of mumps since July 2015, largely occurring among undergraduate college students. Physicians are urged to consider a diagnosis of mumps in patients who present with parotid or salivary gland swelling, especially if they recently traveled to or had visitors from Iowa, or if they visited Denver Health Adult Urgent Care Clinic on the following dates: January 28, January 30, January 31, and February 2, 2016.

Mumps is a viral infection that can cause painful swelling of one or more of the salivary glands, typically the parotid glands. Other symptoms may include low-grade fever, malaise, and headache, but **approximately one third of infected persons do not have clinically apparent illness so cases often go undetected.** Severe complications from mumps are rare, but can include inflammation of the brain and/or tissue covering the brain and spinal cord, inflammation of the ovaries and/or breast, sterility, orchitis, spontaneous abortion, or deafness. **Despite high vaccination rates and an effective vaccine, cases are likely to occur among vaccinated individuals because the vaccine is not 100% effective** (estimated effectiveness for two doses is 88%) and vaccine-induced immunity can wane.

**TESTING:**

Commercial testing for mumps is available. Physicians who suspect mumps should collect a buccal swab specimen for PCR 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. More information on mumps testing is available here: [http://www.cdc.gov/mumps/lab/qa-lab-test-infect.html](http://www.cdc.gov/mumps/lab/qa-lab-test-infect.html)

After consultation with CDPHE Communicable Disease Branch staff at 303-692-2700, buccal swab specimens from highly suspect cases may be referred to the CDPHE laboratory for PCR testing.

**INFECTION CONTROL:**

Mumps is transmitted by direct contact with respiratory droplets or saliva from an infected person. Mumps may be spread by freshly contaminated fomites. The average incubation period is 16-18 days, with a range of 12-25 days. The period of maximum communicability is from 1 to 2 days before onset of salivary gland swelling to 5 days after onset of salivary gland swelling. For disease investigation purposes, consider mumps cases infectious 2 days prior to salivary gland swelling through 6 days of swelling (5 days after swelling onset with the day of onset counted as day 0).

- In **HOSPITAL** settings, patients with suspected mumps should be placed in respiritory 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.
• All health care personnel should have presumptive evidence of mumps immunity documented and on file at their work location.

• 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.

PREVENTION/VACCINATION:
There is no prophylaxis for mumps infection. 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). For prevention of mumps, 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.

REPORTING:
Suspect mumps cases should be reported to your local health agency or CDPHE at 303-692-2700 (after-hours call 303-370-9395). Do not wait until laboratory results are available before reporting suspect cases.

FOR MORE INFORMATION:

For more information, contact Meghan Barnes, Emily Spence-Davison, or Breanna Kawasaki at 303-692-2700.

CDPHE Mumps webpage: https://www.colorado.gov/cdphe/mumps