



## COLORADO

Department of Public  
Health & Environment

Dedicated to protecting and improving the health and environment of the people of Colorado

HEALTH ALERT NETWORK BROADCAST

MESSAGE ID: 10132016 1200

FROM: CO-CDPHE

SUBJECT: HAN Alert - Mumps Update and Guidance

RECIPIENTS: Local Public Health Agencies / IPs / EDs / ID Physicians

RECIPIENT INSTRUCTIONS: Local Health Public Health Agencies - please forward to healthcare providers

### HEALTH ALERT INCREASE IN MUMPS CASES October 13, 2016

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

#### KEY POINTS:

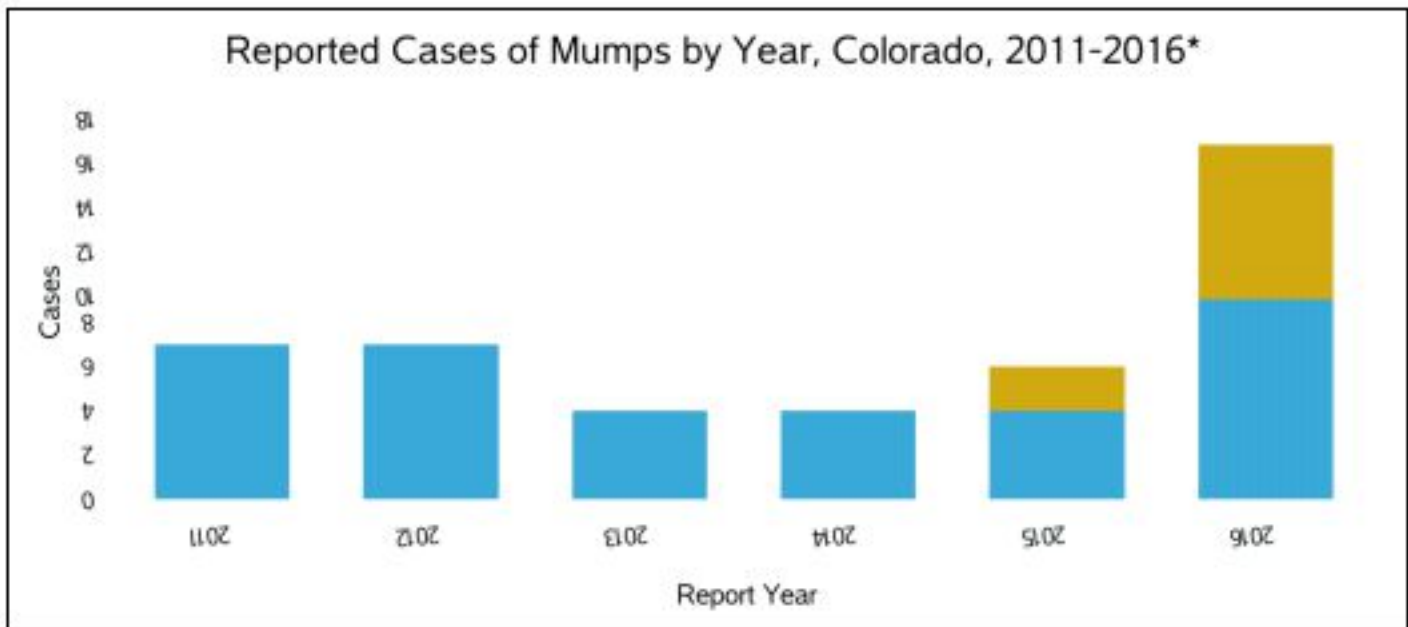
- The number of mumps cases reported in Colorado during 2016 is significantly higher compared to previous years.
- Physicians are urged to consider a diagnosis of mumps in patients who present with parotid or salivary gland swelling.
- If mumps is suspected, buccal swabs for PCR testing and/or serum specimen for mumps IgM testing should be collected as soon as possible.
- 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 mumps for two doses of MMR is 88%) and vaccine-induced immunity can wane.

#### BACKGROUND INFORMATION:

Colorado is experiencing an increase in mumps cases compared to previous years. As of October 7, 2016, 16 cases have been reported compared to a 5-year average of 5.6 cases per year. Of note, 6 of the 16 cases from 2016 are associated with a Denver County outbreak earlier in the year. According to CDC, there is a rise in mumps cases nationally as well, with the highest incidence of disease among those 18-25 years of age. In the past year, outbreaks have been reported in Arkansas, Oklahoma, Iowa, and Illinois. The current outbreak in Arkansas consists of over 450 cases.

The number of reported cases is likely an under-representation of the true burden of disease in Colorado as cases often go undetected or untested. Timely diagnosis and appropriate testing is necessary to help public health control the spread of disease and understand the current disease trend.





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, loss of appetite, 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 (testicular inflammation), 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 mumps for two doses of MMR is 88%) and vaccine-induced immunity can wane.**

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 2 days before through 5 days after onset of salivary gland swelling.

### RECOMMENDATIONS / GUIDANCE:

Physicians are urged to consider a diagnosis of mumps in patients who present with parotid or salivary gland swelling. Persons suspected of having mumps should be instructed to stay home until 5 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/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). 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.

## **CHILDCARE/SCHOOL EXCLUSION**

Children who are diagnosed with mumps should be excluded for 5 days after the day of swelling onset.

## **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.
- 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.

## **REPORTING:**

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

## **FOR MORE INFORMATION:**

For more information, contact Meghan Barnes or Amanda Reiff at 303-692-2700. CDPHE Mumps webpage: <https://www.colorado.gov/cdphe/mumps>