TO: Primary Care Providers, Emergency Department, Laboratory, Public Health

RE: Mumps Outbreak Update

FROM: Thomas J. Safranek, M.D.

Nebraska State Epidemiologist

PHONE: 402-471-2937, FAX: 402-471-3601

E-MAIL: tom.safranek@nebraska.gov

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Mumps Cases There are now 21 cases of mumps related to the outbreak at Midland University in

Fremont, Nebraska. Most students have traveled home for the summer and some have become symptomatic after returning to their home locales. New cases have been reported in Cass, Douglas, Dodge, Hall, Madison, and Platte counties in the past week. The Nebraska Department of Health and Human Services (NDHHS) and Local Health Departments continue to investigate these cases and their

contacts. This outbreak is ongoing with potential for further spread.

Presentation Mumps is an acute viral illness caused by a paramyxovirus. The classic symptom

is parotitis (i.e., acute onset of unilateral or bilateral tender, self-limited swelling of the parotid or other salivary gland(s)), lasting at least two days, but may persist longer than ten days. Incubation period ranges from 12–25 days, but parotitis typically develops 16 to 18 days after exposure to mumps virus. Nonspecific prodromal symptoms may precede parotitis by several days, including low-grade fever which may last three to four days, myalgia, anorexia, malaise, and headache. However, mumps infection may present only with nonspecific or primarily

respiratory symptoms or may be a subclinical infection. Although rare, aseptic

meningitis and encephalitis can occur with a case-fatality rate of 1%.

Diagnosis If you suspect a patient may have mumps, please contact NDHHS at (402) 471-

2937, or your local health department to discuss the case and determine the necessity of testing. Classic symptoms and an epidemiologic link to other cases may suffice for making a clinical diagnosis. Due to the number of laboratory confirmed tests already received, PCR testing is no longer being offered at public health expense through the Nebraska Public Health Laboratory. Any lab testing going forward will be at the clinician's discretion and should be routed through commercial laboratories. If laboratory confirmation is desired, a PCR test of buccal swab/saliva is recommended over serology due to challenges in interpreting

serologic data in persons previously vaccinated.

Treatment There is no specific treatment for mumps except for supportive care of pain and

fever as needed. At this point, the most important precaution is aggressive isolation of symptomatic persons for 5 days after symptom onset. Vaccination status should also be confirmed in accordance with the ACIP-recommended schedule which includes a two-dose regimen of MMR at around age 1 and 6 years.

Transmission

The virus can be transmitted by contact with respiratory droplets and nasopharyngeal secretions. Individuals are considered most contagious during the

3 days before and 5 days after onset of symptoms.

Background

MMR vaccination does not provide life-long immunity: patients involved in this outbreak were appropriately vaccinated. However, mumps-containing vaccines are the best line of defense and everyone should be brought up to date with age appropriate vaccinations. A second dose of the MMR vaccine can also be considered for children aged 1–4 years old who are at increased risk of exposure (with at least 4 weeks separating first and second doses). Although vaccination is not effective in preventing mumps in persons already infected, it can prevent infection in persons who are not yet exposed or infected.

Special Populations

Infections occur among persons of all ages. Individuals who previously had mumps are considered immune to the virus. However, those who have been vaccinated for mumps—though much less likely to contract the virus—can still be infected. Immunocompromised individuals and pregnant woman are at increased risk of complications.

Additional information on Mumps is available at: http://www.cdc.gov/mumps/

Nebraska Local Health Departments: http://dhhs.ne.gov/publichealth/Pages/puh_oph_lhd.aspx#Websites

To report cases or if you have any additional questions or concerns, please contact:

Nebraska Department of Health and Human Services

301 Centennial Mall PO Box 95026 Lincoln, NE 68509 Phone: (402) 471-2937

Fax: (402) 471-3601

Three Rivers Public Health Department

Terra Uhing, Director 2400 North Lincoln Street Fremont, NE 68025-2461 Phone: (402) 727-5396

Fax: (402) 727-5399