HEALTH ADVISORY (4): Mumps

Twenty three students and staff at a high school in Dallas County have been diagnosed with mumps within the past 3 weeks, with an additional 9 cases under investigation. All of the students diagnosed with mumps infections have had documentation of two prior doses of mumps-containing vaccine. Dallas County Health and Human Services is recommending that all students and staff at the school receive an additional third booster dose of MMR (measles, mumps, and rubella) vaccine.

North Texas has been continuing to experience an increase in mumps cases over the past few months, including unrelated outbreaks in other counties in the region and an ongoing outbreak in Johnson County. Healthcare providers should continue to be aware that additional mumps cases will occur locally.

Mumps is transmitted through respiratory droplets or saliva, and can be spread within 3 to 6 feet when an infected person coughs or sneezes. Symptoms typically start 12 to 25 days after exposure, and include fever followed by unilateral or bilateral parotitis lasting for more than 2 days. Up to 20% of mumps infections are asymptomatic. Persons are considered infectious from 2 days before symptom onset to 5 days after parotid swelling begins. Severe complications of mumps are rare but can include orchitis, oophoritis, deafness, and meningoencephalitis. All cases in this current outbreak have presented with parotitis or orchitis. Mumps can occur even in vaccinated persons, since the effectiveness of the mumps vaccine is approximately 88% after two doses. During outbreaks, a third booster dose of MMR in the highest risk populations may further protect individuals in the event of future exposure to mumps, and limit the size and duration of mumps outbreaks.

Please be aware of the following actions requested of healthcare providers:

- Consider a diagnosis of mumps in anyone presenting with compatible symptoms, regardless of vaccination history. (www.cdc.gov/mumps/hcp.html)


- Verify that all healthcare personnel in your facility have documented presumptive mumps immunity or receive 2 doses of MMR vaccine. (www.cdc.gov/mmwr/preview/mmwrhtml/rr6204a1.htm#Tab3)

- Obtain appropriate clinical specimens for testing. A buccal swab for mumps PCR should preferably be collected within 9 days of symptom onset. The parotid gland areas should be massaged for 30 seconds prior to obtaining the specimen. Acute mumps infection can also be confirmed by presence of serum mumps IgM. However, mumps IgM response may be absent or attenuated in vaccinated persons, making serologic confirmation difficult. Both mumps PCR and IgM tests can be sent to your usual commercial reference laboratories (e.g. Arup, Quest/Focus). (www.cdc.gov/mumps/lab/lab-test-infect.html)

- Advise isolation of patients with suspected mumps and instruct them not to return to work, school, or childcare until 5 days after the onset of swelling.

- Report suspected mumps cases before obtaining confirmatory lab results, preferably while the patient is in the clinical setting, to facilitate follow-up of testing results. Providers should contact DCHHS at (214) 819-2004, or after-hours at the DCHHS on-call number for healthcare providers: (877) 605-2660.

Additional information for patients about mumps and mumps outbreaks is available from the CDC website (www.cdc.gov/mumps/outbreaks/outbreak-patient-qa.html).