



Health Alert Network Message 20-06: Mumps Outbreak Awareness for Schools of Higher Learning and Healthcare Professionals

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SCHOOLS OF HIGHER LEARNING AND HEALTHCARE PROVIDER ADVISORY FOR MUMPS OUTBREAK AWARENESS

The Louisiana Department of Health (LDH) is investigating a mumps outbreak at Louisiana State University in Baton Rouge. We have continued to identify cases over the past few days. There is concern this outbreak could spread to students in other schools of higher education and to communities. **OPH is requesting all students at all schools of higher learning, student health centers and healthcare providers be alert for mumps.**

For Schools of Higher Learning

Since mumps has been identified in Louisiana, we are asking all students at schools of higher learning to take the following general precautions:

1. Check the vaccination records for you and your family. Two shots of mumps vaccine (MMR/MMRV) are recommended for persons four years and older.
2. Watch for symptoms of mumps. Mumps infection causes fever, loss of appetite, tiredness, and headache, along with swelling of one/both of the salivary glands. A person can be infectious with mumps from three days before the onset of symptoms until five days after the swelling begins.

If you have the symptoms of mumps, please contact your healthcare provider or the student health center immediately and **DO NOT** attend school or work.

For Healthcare Providers

The mumps virus is found in saliva and is spread through coughing, sneezing, kissing and sharing drinks, utensils, food or water bottles. The most recognizable symptom of mumps is parotitis (acute onset of unilateral or bilateral tender, self-limited swelling of the parotid or other salivary glands). Other symptoms include fever, headache, earache, muscle or joint pain, painful swelling of the testicles (orchitis) in men and swelling of the ovaries (oophoritis) in women causing abdominal pain.

Mumps vaccination is 88% effective, so mumps should be suspected in individuals meeting the clinical case definition even with a history of two MMR vaccinations. The mumps vaccine has decreased the number of cases in the U. S. by 99%.

Healthcare providers should consider mumps in patients presenting with the above symptoms, but should also test for influenza, as influenza is currently widespread in Louisiana. If healthcare providers suspect mumps, a buccal swab should be collected for RT-PCR testing.

If a patient is clinically diagnosed with mumps, regardless of laboratory testing, the case must be reported immediately to OPH by calling 800-256-2748.

The risk of mumps is greatly reduced through vaccination. Students who are not up-to-date with mumps vaccinations should be excluded from a school during a mumps outbreak at the school.

Mumps Testing:

OPH recommends providers collect a buccal swab for RT-PCR testing if a provider suspects mumps. According to the Centers for Disease Control and Prevention (CDC), **PCR is the preferred test for mumps.**

- A buccal swab should be collected as soon as disease is suspected, ideally within 3 days after parotitis onset.
- A buccal swab should be obtained by massaging the parotid gland area for 30 seconds before swabbing with a synthetic swab.
- Place the swab in at least 2mL of standard viral transport medium.
- Sensitivity of RT-PCR is enhanced if the swab is processed within 24 hours.
- Samples should be maintained at 4° C and shipped on cold packs to be received within 24 hours of collection. If shipping is delayed, samples may be preserved by freezing (-70° C) and then shipped on dry ice. If it has been between 3-8 days from onset of swelling, a buccal swab for PCR and serum specimen for serology should be submitted.

If it has been more than 8 days after the onset of symptoms, a serum specimen should be obtained to test for mumps IgM antibodies. In an unvaccinated individual, IgM is detectable after five days of symptom onset and reaches maximum levels about a week after the onset of symptoms. The levels may remain elevated for weeks to months. IgM response may not be detected in individuals who have been vaccinated. Tests for IgM are not reliable and tend to produce both false positives and false negatives, which is why a buccal swab for RT-PCR should be collected.

OPH Laboratory Services offers mumps PCR testing for patients determined to meet high-risk criteria. Please call OPH Infectious Disease Epidemiology at 800-256-2748 to consult with an epidemiologist regarding sample collection prior to submission to the LDH laboratory.

Patient Management

Any patient suspected of having mumps should be immediately isolated. Patients infected with mumps are infectious from 3 days before symptoms to 5 days after swelling

onset, and should be excluded from activities (i.e., work, school, childcare) during this time period. Mumps is spread by droplets of saliva or mucus from the mouth, nose, or throat of an infected person, usually when the person coughs, sneezes, or talks.

People with mumps can spread the infection for up to three days before symptoms start to five days after swelling, so those infected can spread the disease before they feel sick. Symptoms typically appear 16 to 18 days after infection, but this period can range from 12 to 25 days.

Mumps Immunization

Children are routinely vaccinated for mumps at 12 through 15 months of age, and again at 4 through 6 years of age. Vaccination with MMR is required for school attendance in Louisiana. Two doses of MMR vaccine are required for entry into a Louisiana school of higher learning. The Centers for Disease Control and Prevention (CDC) states that anyone born in 1957 or later who does not have evidence of immunity against mumps should have two doses of MMR vaccine, separated by at least 28 days. People born before 1957 do not need to be vaccinated, unless they work in a healthcare facility. Generally, adults born prior to 1957 are considered immune to mumps because they most likely had the disease. Individuals who cannot verify two doses of the MMR vaccine should contact their healthcare provider to be revaccinated.

Two dose mumps vaccine effectiveness is 88%. Since the introduction of the two dose MMR series in 1989, the number of measles has decreased by 99%.

There is no current recommendation that the general population get a third dose of the MMR vaccine for protection against mumps. **A third dose of MMR is recommended only for close contacts to a mumps case or high-risk groups identified in an outbreak setting.**

The MMR vaccine does not offer protection if the exposure has already occurred.

However, in some circumstances if there is sustained transmission in an intense exposure setting, including a college campus and if high attack rates are present, a third dose of MMR vaccine will be recommended to specific groups which have cases of mumps. **A fourth dose of MMR is not recommended.**

Please contact the Louisiana Office of Public Health at 504-568-2600 if you have questions or concerns regarding this issue. Healthcare providers are to call 800-256-2748 to submit a specimen for mumps testing.

The Mumps Outbreak Toolkit from the American College Health Association has posters and social media images at https://www.acha.org/ACHA/Resources/Mumps_Toolkit.aspx?WebsiteKey=03f1a0d5-4c58-4ff4-9b6b-764854022ac1

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