DATE: 04/10/2019
TO: Health Alert Network
FROM: Rachel Levine, MD, Secretary of Health
SUBJECT: Mumps Testing Recommendations
DISTRIBUTION: Statewide
LOCATION: n/a
STREET ADDRESS: n/a
COUNTY: n/a
MUNICIPALITY: n/a
ZIP CODE: n/a

This transmission is a “Health Advisory”: provides important information for a specific incident or situation; may not require immediate action.

HOSPITALS: PLEASE SHARE WITH ALL MEDICAL, PEDIATRIC, NURSING AND LABORATORY STAFF IN YOUR HOSPITAL
EMS COUNCILS: PLEASE DISTRIBUTE AS APPROPRIATE
FQHCS: PLEASE DISTRIBUTE AS APPROPRIATE
LOCAL HEALTH JURISDICTIONS: PLEASE DISTRIBUTE AS APPROPRIATE
PROFESSIONAL ORGANIZATIONS: PLEASE DISTRIBUTE TO YOUR MEMBERSHIP
LONG-TERM CARE FACILITIES: PLEASE SHARE WITH ALL MEDICAL, INFECTION CONTROL, AND NURSING STAFF IN YOUR FACILITY

Summary

Providers evaluating suspected cases of mumps should:

• **If 3 days or less** have passed since onset of symptoms, **DO NOT** collect serum for mumps IgM. Collect a buccal swab for mumps PCR and a nasal swab for a respiratory virus panel.
• If there are symptoms of orchitis or oophoritis, collect urine for mumps PCR.
• **If it is more than 3 days** from onset of symptoms, **DO** collect serum for mumps IgM. This can be sent to a commercial laboratory.
• Contact the Pennsylvania Department of Health (DOH) at 1-877-PA-HEALTH (1-877-724-3258) or your local health department to report the suspected case.
• If the case is part of a previously identified outbreak, testing may not be needed. Consult with DOH at 1-877-PA-HEALTH (1-877-724-3258) or your local health department for further guidance.
**Background:** The ongoing mumps outbreak at Temple University in Philadelphia has led to an unusually high number of requests for mumps testing. In order to reduce the burden on our laboratory resources, and to optimize the utility of these tests, the DOH is requesting that clinicians refrain from testing where the test is unlikely to yield meaningful results:

- Mumps testing **should not be ordered** for patients without symptoms of mumps.
- Mumps IgM **is unlikely to be positive** if done too early in the course of the disease (i.e., ≤3 days from onset of illness).
- Urine testing **is unlikely to be helpful** in the absence of genitourinary involvement (orchitis or oophoritis).
- Cases that meet the probable case definition and that are linked to a known outbreak generally **do not need to be tested** for mumps. Consultation with the DOH or your local health department is recommended in these instances.

**The Centers for Disease Control and Prevention (CDC) have the following recommendations for ensuring effective and efficient mumps testing during outbreaks:**

At the onset of a suspected mumps outbreak, patients suspected to have mumps should be tested by RT-qPCR to confirm mumps and rule out other possible etiologies. However, once a mumps outbreak is confirmed, jurisdictions should consider alternate strategies to ensure more efficient use of testing resources.

One strategy is to consider limiting testing of patients who meet the probable mumps case definition when resources are constrained or testing volume is unusually high. The Council of State and Territorial Epidemiologists (CSTE) case definition for mumps defines a probable case as:

Acute parotitis or other salivary gland swelling lasting at least 2 days, or orchitis or oophoritis unexplained by another more likely diagnosis, in:

- A person with a positive test for serum anti-mumps immunoglobulin M (IgM) antibody, OR
- A person with epidemiologic linkage to another probable or confirmed case or linkage to a group/community defined by public health during an outbreak of mumps.

Consider limiting testing of probable cases when resources are constrained or testing volume is unusually high.

During an outbreak, jurisdictions’ communication with providers should define the specific groups or communities that are considered epidemiologically linked to the outbreak and which therefore may not require testing in a public health laboratory. Jurisdictions can use the Provider Testing Job-Aid as a tool to communicate this information to providers.

In certain situations, even epidemiologically linked cases warrant testing. These include:

- Patients with complications such as oophoritis, orchitis, aseptic meningitis, encephalitis, hearing loss, mastitis, or pancreatitis
- Patients who received ≥3 doses of measles, mumps, and rubella vaccine (MMR) more than 28 days before symptom onset
- Patients with recurrent parotitis (test samples from both occurrences when possible)
• Patients who traveled during their incubation period (12–25 days prior to onset), especially those with international travel

Resources:

• CDC Mumps Information for Healthcare Providers: [https://www.cdc.gov/mumps/hcp.html](https://www.cdc.gov/mumps/hcp.html)
• CDC Recommendation of the Advisory Committee on Immunization Practices for Use of a Third Dose of Mumps Virus–Containing Vaccine in Persons at Increased Risk for Mumps During an Outbreak: [https://www.cdc.gov/mmwr/volumes/67/wr/mm6701a7.htm](https://www.cdc.gov/mmwr/volumes/67/wr/mm6701a7.htm)
• CDC Mumps Testing Job Aid for Clinicians (see attached)
• Contact the Pennsylvania Department of Health (DOH) at 1-877-PA-HEALTH (1-877-724-3258) or your local health department to report the suspected case.

Categories of Health Alert messages:

**Health Alert:** conveys the highest level of importance; warrants immediate action or attention.

**Health Advisory:** provides important information for a specific incident or situation; may not require immediate action.

**Health Update:** provides updated information regarding an incident or situation; unlikely to require immediate action.

This information is current as of April 10, 2019, but may be modified in the future. We will continue to post updated information regarding the most common questions about this subject.