Division of Epidemiology–Disease Surveillance and Investigation

December 11, 2018

Health Notice for District of Columbia Health Care Providers
Guidance on Mumps Testing and Control Measures

SUMMARY
Mumps is a contagious respiratory illness that spreads easily among people in close contact such as those in college dormitories and close-knit communities. The number of cases and outbreaks of mumps has significantly increased in the United States since late 2015.[1] Mumps incidence peaks predominantly in late winter and spring. In the District of Columbia (DC), there was a total of 56 cases in 2017, which was 3 times greater than in 2016. Therefore, DC Health is urging healthcare providers to maintain an increased index of suspicion for mumps in patients with clinically-compatible symptoms. This health notice provides information and guidance regarding mumps testing recommendations and control measures to help prevent an outbreak.

Background
Mumps is an acute viral disease caused by a paramyxovirus. Primary symptoms include fever and swelling of unilateral or bilateral parotid (parotitis) or other salivary glands. Parotitis can be noted as ear protrusion or obscuring of the angle of the jaw. Swelling usually peaks in 1 to 3 days and can last 2 or more days before subsiding. In approximately one-third of cases, mumps may present with nonspecific or primarily respiratory symptoms. It can also be subclinical. Mumps spreads from person to person via respiratory secretions or saliva or through fomites. A person with mumps is generally **contagious two days before onset of symptoms to 5 days after**. The incubation period is 14-18 days from the time of exposure, but can be as long as 25 days.

Measles-mumps-rubella (MMR) vaccination is the best way to prevent mumps infection, however cases can still occur among highly vaccinated communities. **DC Health is encouraging providers to test suspected cases of mumps and to recommend isolation of cases during their infectious period while results are pending to prevent the spread of the illness.**

Recommendations for Healthcare Providers
When a patient presents with signs and symptoms clinically compatible with mumps, the following is recommended:

- Immediately triage the patient and provide a mask while the patient is in the waiting area
- Follow droplet precautions when evaluating patients suspected to have mumps
- When sent home, patients suspected to have mumps should be given a mask to wear and recommended to **isolate at home during their infectious period, up to and including day 5 after parotitis onset**
- Recommend vaccination for close contacts who have not been vaccinated
- Educate patients and contacts on the following steps to prevent the spread of the infection:
    - Avoid sharing drinks or cups, kissing at parties or group events, or sharing food or eating utensils
    - Wash hands frequently, especially after being in large groups or with anyone who may be sick

Vaccination

- Two- dose vaccination with the MMR vaccine is the best way to prevent mumps infections, however, the vaccine is not 100 percent effective.
- Updated guidelines from the Advisory Committee on Immunization Practices (ACIP) indicate that a 3rd dose *can* be recommended in outbreak settings for identified high-risk groups.
    - Healthcare providers should consult with DC Health to determine if an outbreak is occurring and whether an additional vaccine dose is indicated.

Diagnostic Testing

It is recommended to collect the following specimens as soon as mumps is suspected:

- **PCR testing**: Oral or buccal swab samples. Massage the parotid gland for 30 seconds and store in 2 ml of viral transport medium. Refrigerate samples at 4°C for shipment within 24 hours and ship on cold packs (store at -70°C if delayed).
- **Serology testing**: Serum in a red-top or serum separator tube for IgG and IgM testing

It is critical to perform PCR testing to confirm the diagnosis of mumps since serologic test results can be misleading, especially in previously vaccinated persons.

Detailed specimen collection instructions can be found on the CDC website (https://www.cdc.gov/mumps/lab/specimen-collect.html). **Mumps testing (PCR and serology) should be performed through commercial laboratories or at your facility laboratory. If testing is not supported by your institution primary laboratory, please email doh.epi@dc.gov for other testing options.** For additional questions regarding specimen collection, please email vaccine.epi@dc.gov.

NOTE: Although mumps is a well-known cause of parotitis, healthcare providers should consider testing for other infectious agents that may cause parotitis (e.g. influenza A, parainfluenza, Epstein-Barr virus etc.).

Reporting

- All suspected cases of mumps infection should be reported to DC Health immediately. This allows for timely investigation of cases and identification of clusters or outbreaks. It also allows for more accurate assessment of the burden of disease in the District.
- Cases should be reported online by submitting a Notifiable Disease and Condition Case Report Form, which can be accessed on the infectious disease website at: https://dchealth.dc.gov/service/infectious-diseases.

Reports should be submitted at the time of the **initial** clinical suspicion of mumps. **Do not** wait for laboratory confirmation. If diagnosis of mumps is considered and diagnostic testing are ordered, the case should be reported at that time.

Resources/Additional information

1. CDC: Mumps cases and Outbreaks (https://www.cdc.gov/mumps/outbreaks.html).

Please contact the DC Health Division of Epidemiology–Disease Surveillance and Investigation at:
Phone: 202-442-8141 (8:15am-4:45pm) | 844-493-2652 (after-hours calls)
Fax: 202-442-8060 | Email: doh.epi@dc.gov