Division of Epidemiology–Disease Surveillance and Investigation

April 26, 2019

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

SUMMARY
The Centers for Disease Control and Prevention (CDC) and State Health Departments are investigating measles outbreaks in multiple states. From January 1 to February 28, 2019, 206 people from 10 states (CA, CO, CT, GA, IL, NJ, NY, OR, TX, and WA) have been reported as having measles. Five outbreaks (defined as 3 or more linked cases) have been reported, in Rockland County, New York; Monroe County, New York; New York City; Washington; Texas; and Illinois. Of these outbreaks, two are ongoing from 2018. These outbreaks have been linked to travelers from other countries such as Israel and Ukraine, where large measles outbreaks are occurring. This health notice is to inform healthcare facilities about the measles outbreaks, and to provide guidance regarding measles testing recommendations and control measures to help prevent an outbreak in Washington, DC. DC Health is urging healthcare providers to maintain an increased index of suspicion for measles in patients with clinically-compatible symptoms, and to ensure that all patients are up to date on MMR vaccine, including before international travel.

Background
Measles is a highly contagious, acute viral disease. It is transmitted through direct contact with infectious droplets and by airborne spread. It begins with a prodrome of fever, cough, coryza (runny nose), and conjunctivitis (pink eye). These symptoms last two to four days prior to rash onset. The rash is typically maculopapular and spreads from the head to the trunk, then lower extremities. Infected individuals are contagious from four days before to four days after the rash appears. After an infected person leaves a location, the virus remains viable for up to two hours on surfaces and in the air. The incubation period for measles from exposure to fever onset is usually about 10 days (range, 7 to 12 days) and from exposure to rash onset is usually 14 days (range, 7 to 21 days). Measles can cause severe health complications, including pneumonia, encephalitis, and death. There is no treatment for measles; the measles-mumps-rubella (MMR) vaccination is the best way to prevent measles infection.

Recommendations for Healthcare Providers
- Discuss the importance of MMR vaccine with parents, Listen and respond to parents’ questions and prepare for questions parents may ask.
  - More information can be found on the CDC’s Provider Resources for Vaccine Conversation with Parents.
- Ensure all patients are up to date on MMR vaccine (review vaccination section for more details)
- Consider measles in any patient presenting with a febrile rash illness and clinically compatible measles symptoms (cough, coryza, and/or conjunctivitis).
  - Ask patients about recent international or domestic travel to an area with an ongoing outbreak, history of measles exposures in their communities, or whether they had contact with someone with a febrile rash illness.
- Promptly isolate patients with suspected measles and immediately report cases to DC Health.
  - Immediately provide a mask or place patients in an airborne isolation room when available.
For outpatient facilities, any waiting or public areas and shared air spaces (including those with shared air ducts) should be cleared for two hours after the patient has left the area.

- Obtain specimens for testing, including viral specimens for confirmation and genotyping.

**Vaccination**

- Two-dose vaccination with the MMR vaccine is the best way to prevent measles infections:
  - Children need two doses of MMR: one dose at 12-15 months and another dose at 4-6 years.
  - Teenagers and adults who do not have evidence of immunity* against measles need two doses separated by at least 28 days.
  - Before any international travel, infants 6-11 months need one dose of MMR vaccine, children 12 months and older need two doses separated by at least 28 days.

*One of the following is considered evidence of measles immunity: 1) birth before 1957, 2) documented administration of two doses of live measles virus vaccine (MMR, MMRV, or measles vaccines), 3) laboratory (serologic) proof of immunity or laboratory confirmation of disease.

**Diagnostic Testing**

The following specimens* should be collected as soon as measles is suspected:

- **PCR testing**: Nasopharyngeal or throat specimen using synthetic or flocked polyester swabs should be collect. Swabs should be placed in 2 ml of standard viral transport medium (VTM). Refrigerate samples at 4°C for shipment within 24 hours and ship on cold packs (freeze at -70°C if delay in shipping).

- **Serology testing**: Serum in a red-top or serum separator tube for IgG and IgM testing.

*It is critical to collect both specimens for testing to confirm the diagnosis of measles.

Detailed specimen collection instructions can be found on the CDC website (https://www.cdc.gov/measles/lab-tools/index.html). Measles testing (PCR and serology) can be performed through the state public health laboratory if testing is not supported by your institution’s primary laboratory. Please make sure to notify DC Health via email doh.epi@dc.gov or by contacting us via phone at 202-442-5893 (8:15 am - 4:45 pm) or 844-493-2652 (after-hours calls) to coordinate testing or for additional questions regarding specimen collection.

**Reporting**

- All suspected cases of measles infection should be reported to DC Health immediately (not after lab confirmation) by phone or using the online Notifiable Disease and Condition Case Report Form, which can be accessed on the infectious disease website.
- DC Health will provide guidance on isolation, infection control, and will approve and facilitate testing through the DC Public Health Laboratory.
- Please contact DC Health for further guidance on contact tracing and control measures.

**Resources/Additional information**


Please contact the DC Health Division of Epidemiology–Disease Surveillance and Investigation at:
  Phone: 202-442-5893 (8:15 am - 4:45 pm) | 844-493-2652 (after-hours calls)
  Fax: 202-442-8060 | Email: doh.epi@dc.gov