



Health Advisory
10/10/2014
Enterovirus D68 and Acute
Flaccid Paralysis

Please distribute to all providers in your practice

SITUATION:

Since mid-August, patients with severe respiratory illness due to EV-D68 have been hospitalized in most states, including California.

As of October 10, Berkeley has reported one confirmed case of Enterovirus D68, and Alameda County has reported five cases. We expect to see additional cases as this virus is circulating widely in California.

In addition, the Centers for Disease Control & Prevention (CDC) are investigating a cluster of pediatric patients hospitalized with acute flaccid paralysis and spinal cord lesions in Colorado. Some of the Colorado cases had respiratory specimens test positive for EV-D68. CDC has expanded this investigation to call for cases nationally. One objective of this investigation is to assess the etiology of these cases, including the possible role of enteroviruses.

California Department of Public Health (CDPH) has been conducting enhanced viral testing and surveillance for patients with acute flaccid paralysis since 2012 and continues to seek information and specimens for testing, particularly in patients who have evidence of enteroviruses

BACKGROUND:

- Enteroviruses (EV) can cause respiratory and gastrointestinal illness, febrile rash, meningitis, or other neurologic illnesses. While most infections cause mild or no symptoms, some can be severe for children with a history of asthma.
- Almost all EV-D68 lab-confirmed cases **have been in children, two-thirds having a history of asthma or wheezing and less than one-third were febrile.** Chest radiographs showed perihilar infiltrates in several patients.
- More than 100 types of EV cause ~10-15 million infections annually in the US, usually in the summer and fall.
- There is no vaccine or specific treatment for EV-D68

ACTIONS REQUESTED OF CLINICIANS:

1. **Consider EV-D68** as a possible cause of acute, **unexplained severe respiratory illness**, especially with wheezing, in hospitalized patients under 18 years of age. Fever may be absent.
2. **Test for multiple viral pathogens, including influenza, RSV, enterovirus (EV), and rhinovirus (RhV)** as available, in persons in whom EV-D68 is under consideration. Specimens that test positive for EV or RhV should be considered for sub-typing to identify EV-D68.
3. **Report** cases of **Acute Flaccid Paralysis** and consider testing for EV-D68 in cases with unknown etiology and a MRI showing involvement of the spinal cord.
4. **Contact** Berkeley Public Health Department at 510-981-5300 **BEFORE submitting** specimens. **Collect and submit specimens** according to guidelines below. Respiratory specimens that will be accepted are oropharyngeal, throat swabs, or nasopharyngeal swabs, endotracheal aspirates, or other respiratory tract specimens.
5. Implement **standard, contact, & droplet precautions** for patients with known or suspected EV-D68. Droplet precautions are added for EV-D68 because of the predominant respiratory symptoms. **Hand hygiene with soap and water** is preferred as alcohol-based hand sanitizers have limited effectiveness against enteroviruses. EV-D68 is a **non-enveloped virus**. Thus, bleach or another hospital-grade disinfectant with an EPA label claim for non-enveloped viruses should be used for environmental disinfection of surfaces.
6. **Report** clusters of severe respiratory illness resulting in hospitalization by phone to Berkeley Public Health, at 510 981-5300.

Please distribute to all providers in your practice



Health, Housing & Community Services Department
Public Health Division
(510) 981-5300

Janet Berreman, MD, MPH
Health Officer

Health Advisory
10/10/2014
Enterovirus D68 and Acute
Flaccid Paralysis

Please distribute to all providers in your practice

Please call Berkeley Public health at (510) 981-5300 for prior approval before submitting to the Public Health Lab for testing:

- Respiratory specimens need to be, collected on a synthetic (e.g., Dacron) swab and placed in 0.7-3 ml of Viral Transport Media (VTM). Do not use Amies or other bacterial media.
- Specimens may be sent to the Alameda County Public Health Laboratory (ACPHL) and will be forwarded to the CDPH Viral and Rickettsial Disease Laboratory (VRDL) for detection or confirmation of EV, and if EV positive, typing to identify if EV-D68.
- Please include with all specimens a completed, Enterovirus D68 Surveillance Submittal Form, see link below.

Store and ship specimens at 2° - 8°C to the:

Alameda County Public Health Laboratory
499 5th Street, Oakland, CA 94607.

ACPHL will forward all suspect and preliminary positive rhinovirus/enterovirus specimens to the CDPH Viral and Rickettsial Disease Laboratory (VRDL) for further characterization.

Additional technical assistance with specimen processing and shipping is available from the ACPHL at (510) 268-2700.

CDPH Neurologic Surveillance & Testing program

Please submit cases of Acute Flaccid Paralysis and spinal cord lesions and specimens that meet CDPH criteria to the: Neurologic Surveillance and Testing Project.

For questions, please contact: Anna Clayton. Phone: (510) 307-8608.

Email: Anna.Clayton@cdph.ca.gov <http://www.cdph.ca.gov/programs/vrdl/Pages/NeurologicSurveillanceTesting.aspx>

Resources

CDPH: <http://www.cdph.ca.gov/Pages/NR14-080.aspx>

CDC: <http://www.cdc.gov/non-polio-enterovirus/about/ev-d68.html>

LAB SUMMITAL FORM:

<http://www.cdph.ca.gov/programs/vrdl/Documents/Enhanced%20Enterovirus%20EV-D68%20Surveillance%20140929.pdf>

Please distribute to all providers in your practice