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Public Health Advisory

Enterovirus D68 (EV-D68) Detected in Southern California Children with Respiratory Illness

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Situation Update

This health alert describes the first cases of enterovirus D68 (EV-D68) respiratory infection confirmed among hospitalized children in Southern California. EV-D68 was identified in specimens from four of 10 tested patients. The patients with EV-D68 were not epidemiologically linked; three are San Diego residents and one is a Ventura County resident. No EV-D68 positive patients had documented recent travel outside of California.

In addition to the cases in California, a total of 153 people from 18 states have been confirmed to have EV-D68 respiratory illness since mid-August. No deaths have been reported. Updated information from the CDC may be found at: <http://www.cdc.gov/non-polio-enterovirus/about/EV-D68-states.html>.

This advisory provides guidance and references on laboratory testing, reporting, and infection control for EV-D68. No outbreaks of EV-D68 have been reported in Riverside County at this time. However, several suspect cases are under investigation by Disease Control.

Enterovirus Background

Enteroviruses (EV) are associated with various clinical symptoms, including mild respiratory illness, febrile rash illness, and neurologic illness. EV-D68, however, primarily causes respiratory illness, although the full spectrum of the disease remains unclear. There are no available vaccines or specific treatments for EV-D68, and clinical care is supportive.

Laboratory Testing for EV-D68

Local clinicians are encouraged to consider EV-D68 as a possible cause of acute, unexplained severe respiratory illness, especially with wheezing, in patients under the age of 18 years. Respiratory specimens (e.g., nasopharyngeal swabs, oropharyngeal or throat swabs, endotracheal aspirates, or other respiratory tract specimens) should be collected and tested for multiple viral pathogens, including influenza, rhinovirus (RhV) and/or EV.

While EV-D68 is primarily associated with respiratory illnesses, if a patient with a non-respiratory syndrome (such as a neurologic syndrome) tests positive for enterovirus/rhinovirus, further testing of that specimen should occur.

Specimens from patients under 18 years of age who are hospitalized for intensive care that test positive for RhV or EV, by PCR, should be sent to the County of Riverside Public Health Laboratory (PHL). These will be forwarded to CDPH VRDL for confirmation and further typing to identify EV-D68. Specimens should be accompanied by an EV-D68 Surveillance Submittal Form available at: <http://www.rivcoph.org/Portals/0/Enhanced%20Enterovirus%20%20EV-D68%20Surveillance%20140909%20REVISED.pdf>.

Technical questions about laboratory testing may be addressed to the County of Riverside Public Health Laboratory at (951) 358-5070. Questions about whether testing is appropriate may be addressed to Disease Control at (951) 358-5107.

Reporting of Suspected EV-D68 Cases and Severe Respiratory Illness Clusters

Clinicians are encouraged to report suspect cases of EV-D68 to Disease Control, especially when EV-D68 testing is being considered or has been requested. Any clusters or outbreaks of severe respiratory illness, regardless of the setting where they occur or the age group involved, should also be reported. Specimens may be collected and forwarded to the County of Riverside Public Health Laboratory for influenza testing. If influenza testing is negative, the specimens will be forwarded to CDPH VRDL for non-influenza respiratory virus testing, including RhV and EV.

Infection Control and Other Recommendations for Healthcare Providers

- Standard and contact precautions are typically recommended for patients with enterovirus infections. However, since EV-D68 is predominantly a respiratory virus, droplet precautions may also be considered.
- Alcohol-based hand sanitizers have limited effectiveness against enteroviruses and are not recommended for hand hygiene by healthcare personnel providing care to EV-D68 patients.
- Healthcare personnel who are ill or suspect they might have a viral respiratory illness should follow their organization policies concerning work attendance.

In addition, healthcare providers are recommended to ensure that patients with asthma have an asthma action plan. Use of this plan should be reinforced, including adherence to prescribed long-term control medication. Those who are experiencing an exacerbation should be encouraged to seek care early.

More information on EV-D68 for healthcare providers is available on the CDC EV-D68 website: <http://www.cdc.gov/non-polio-enterovirus/about/EV-D68.html> / <http://www.cdc.gov/non-polio-enterovirus/>. Questions may be directed to Disease Control at (951) 358-5107.