Date: October 8, 2014
Topic: Enterovirus D68 (EV-D68) Update
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To: All Providers and Medical Facilities

Current Situation
Enterovirus D68 (EV-D68) is one of many non-polio enteroviruses. EV-D68 was first recognized in California in 1962 and small numbers of EV-D68 have been reported regularly to the Centers for Disease Control and Prevention (CDC) since 1987. However, this year the number of people with confirmed EV-D68 infections in the US is much greater than that reported in previous years. From mid-August to October 7, 2014, CDC and state public health laboratories have confirmed a total of 628 people in 44 states and the District of Columbia with respiratory illness caused by EV-D68. No cases of EV-D68 have been confirmed in Nevada.

Hospitals in Missouri and Illinois were the first to document this increase that was later identified to be caused predominantly by EV-D68 infection. EV-D68 appears to be the predominant type of enterovirus this year and is likely contributing to the increases in severe respiratory illnesses. Almost all of the CDC-confirmed cases this year of EV-D68 infection have been among children. Many of the children had asthma or a history of wheezing. Due to increasing knowledge about the nationwide EV-D68 outbreak, there has been a very large increase in the number of specimens tested from patients with severe respiratory illness. Awareness of these initial results is also contributing to increased recognition of new cases.

Symptoms
EV-D68 infections can cause mild to severe respiratory illness, or no symptoms at all. Mild symptoms may include fever, runny nose, sneezing, cough, and body and muscle aches. Severe symptoms may include wheezing and difficulty breathing. Anyone with respiratory illness should contact their doctor if they are having difficulty breathing or if their symptoms are becoming severe.

There are many types of enteroviruses and they are known to be one of the causes of acute neurologic disease in children. They most commonly cause aseptic meningitis, less commonly encephalitis, and rarely, acute myelitis and paralysis.

Transmission
Since EV-D68 causes respiratory illness, the virus can be found in an infected person’s respiratory secretions, such as saliva, nasal mucus, or sputum. The virus likely spreads from person to person when an infected person coughs, sneezes, or touches a surface that is then touched by others.

In the United States, people are more likely to get infected with enteroviruses in the summer and fall. We are currently in the middle of the enterovirus season and EV-D68 infections are likely to decline later in the fall.

People at Risk
In general, infants, children, and teenagers are most likely to get infected with enteroviruses and become sick. They do not yet have immunity (protection) from previous exposures to these viruses. We believe this is also true for EV-D68. Adults can become infected with enteroviruses, but they are more likely to have no symptoms or mild symptoms. Children with asthma may have a higher risk for severe respiratory illness caused by EV-D68 infection.

Prevention
There are no vaccines for preventing EV-D68 infections. You can help protect yourself from getting and spreading EV-D68 by:
- Washing hands often with soap and water for at least 20 seconds.
- Avoiding touching eyes, nose and mouth with unwashed hands.
- Avoiding kissing, hugging, and sharing cups or eating utensils with people who are sick.
- Disinfecting frequently touched surfaces, such as toys and doorknobs, especially if someone is sick.
Children with asthma are at risk for severe symptoms from EV-D68 and other respiratory illnesses should follow CDC’s guidance to maintain control of their illness during this time:

- Discuss and update your child’s asthma action plan with your primary care provider.
- Make sure they prescribed asthma medications as directed.
- Your child should get a flu vaccine when available.
- Be sure to keep your child’s reliever medication with your child.
- If your child’s asthma symptoms worsen and do not go away, call your child’s doctor right away.

**Treatment**

There is no specific treatment for EV-D68 infections. Many infections will be mild and self-limited, requiring only treatment of the symptoms. For mild respiratory illness, you can help relieve symptoms by taking over-the-counter medications for pain and fever. Aspirin should not be given to children. Some people with severe respiratory illness caused by EV-D68 may need to be hospitalized and receive intensive supportive therapy. No antiviral medications are currently available or have shown activity against EV-D68 at clinically relevant concentrations for treating of EV-D68 infections.

**Reporting Guidelines for Health Care Professionals**

Healthcare Professionals should:

- Consider EV-D68 as a possible cause of acute, unexplained severe respiratory illness, even if the patient does not have fever and particularly in children.
- Report unusual increases in the number of patients with severe respiratory illness or suspected clusters of severe respiratory illness to local and state health departments.
- Consider laboratory testing of respiratory specimens for enteroviruses when the cause of respiratory illness in severely ill patients is unclear.
- Consider testing to confirm the presence of EV-D68. State or local health departments can be approached to facilitate diagnostic and molecular typing for enteroviruses.
- Contact your state or local health department if you are considering sending specimens for diagnostic and molecular typing.
- Follow standard, contact, and droplet infection control measures.

Please see the contact information below for the state and local health jurisdictions in Nevada to report unusual numbers of cases of respiratory illness or unusual severity of respiratory illness and to obtain laboratory testing information.

**Las Vegas area:** Southern Nevada Health District, 702.759.1300
**Reno/Sparks area:** Washoe County Health District, 775.328.2447
**Carson City, Douglas, Lyon County area:** Carson City Health and Human Services, 775.887.2190
**Other counties:** Rural Community Health Services, 775.687.5162 (business hours) or 775.434.4358 (after hours)
**State of Nevada Epidemiology Duty Officer (24 hours):** 775.400.0333

For More Information:


**CDC Enterovirus D68 general website:** [http://www.cdc.gov/non-polio-enterovirus/about/EV-D68.html](http://www.cdc.gov/non-polio-enterovirus/about/EV-D68.html)

**CDC Enterovirus D68 for Health Care Professionals:** [http://www.cdc.gov/non-polio-enterovirus/hcp/EV-D68-hcp.html](http://www.cdc.gov/non-polio-enterovirus/hcp/EV-D68-hcp.html)

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