



Enterovirus D68 (EV-D68)

MU Patient Education Series

Definition:

Enterovirus D68 (EV_D68) is one of many non-polio enteroviruses. The pattern of emergence for enteroviruses can be unpredictable and different kinds of enteroviruses can be found in different years. They are most likely to infect in throughout the summer and fall. The first case of EV-D68 was identified in 1962 and is rarely reported in the United States, although small clusters have occurred. EV-D68 generally causes mild to severe respiratory illness, but the full extent of the disease remains unclear. There is no vaccine or specific treatments, so care of the patient is supportive.

The virus is found in an infected person's respiratory secretions, such as saliva, nasal mucus, or sputum. It is spread person to person when an infected person coughs, sneezes, or touches contaminated surfaces and therefore it is highly contagious.

Anyone can become infected with enterovirus. Infants, children and teenagers are most at risk for becoming infected, because they do not yet have the immunity to protect them from previous exposures to these viruses. Also children with asthma appear to have a higher risk for severe respiratory illness. From mid-August to September 19, 2014, a total of 160 people in 22 states have been confirmed to have respiratory illness caused by EV-D68.

SIGNS/SYMPTOMS:

In its early stages, infection with EV-D68 often looks like the cold or the flu. These symptoms can remain mild, but can progress to a more severe respiratory illness that can require hospitalization. Most cases to date have been mild. Those children with asthma or undocumented asthma are most at risk for severe respiratory illness.



MILD SYMPTOMS:

- Fever
- Runny nose
- Sneezing
- Cough
- Body and muscle aches

SEVERE SYMPTOMS:

- Difficulty breathing
- Wheezing
- Pneumonia

DIAGNOSIS:

- Laboratory testing can be performed on specimens taken from the person's nose or throat
- Hospital and some doctor's offices can test the ill patient to see if they have enterovirus infection. This testing is NOT specific for EV-D68
- CDC recommends considering EV-D68 testing for only patients with severe respiratory illness when the cause is unclear. Confirmation of the EV-D68 virus requires typing by molecular sequencing. At this time, only the CDC and a very few state or local health can do this testing

TREATMENT:

At this time, there is no antiviral medication or specific treatment for EV-D68. If symptoms are mild they can be relieved by using over-the-counter medications for pain and fever. Children should not be given aspirin. Those people with severe respiratory illness may need to be hospitalized. May require mechanical ventilation in very severe cases, but in general the treatment is supportive care.

PREVENTION:

Since this disease is currently most prevalent amongst children, it is important to make sure that toddlers and school aged children are educated on prevention methods. Schools and daycares should be diligent about hand washing and disinfecting surfaces.

- Wash hands often with soap and water for 20 seconds, especially after changing diapers



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- Avoid touching eyes, nose and mouth with unwashed hands
- Avoid kissing, hugging, and sharing cups or eating utensils with people who are sick
- Disinfect frequently touched surfaces, such as toys and doorknobs, especially if someone is sick
- Avoid contact with sick people and stay home when you are sick
- People with asthma should regularly take their medicines and maintain control of their illness. They should also get a flu shot

People with asthma and children suffering from reactive airway disease should take the following precautions recommended by the CDC.

- Discuss and update your asthma action plan with your primary care provider
- Take your prescribed asthma medications as directed, especially long term control medication(s)
- Be sure to keep your reliever medication with you
- If you develop new or worsening asthma symptoms, follow the steps of your asthma action plan. If your symptoms do not go away, call your doctor right away
- Parents should make sure the child's caregiver and/or teacher is aware of his/her condition, and that they know how to help if the child experiences any symptoms related to asthma

References: CDC Summary and Recommendations. <http://www.cdc.gov/non-polio-enterovirus/about/EV-D68.html>

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