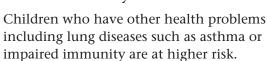
AMERICAN THORACIC SOCIETY

Patient Information Series

What is Enterovirus D68?

A respiratory virus that has had a recent surge in activity among children is called Enterovirus D68. Enterovirus is not a new virus. It is part of a family of related virus strains called enteroviruses. Other enteroviruses can also cause infection in humans and often are seen from July to October. It causes a mild to severe respiratory illness. Most children recover fully but some have had to stay in the hospital while a few have become very ill.



It is not clear why the sudden outbreak of this virus has occurred. But its continued spread likely does relate in part to the return of school as children spend more time together. This trend is similar to the increase in cases of influenza that are seen when students go back to the classroom after winter break.



From mid-August to September 12, 2014, a total of 97 people in Colorado, Illinois, Iowa, Kansas, Kentucky and Missouri have been confirmed to have respiratory illness caused by EV-D68. Many more are believed to be infected.

*Source: Centers for Disease Control website, accessed 9/12/14,



Strains of Viruses

The D68 refers to the specific strain of enterovirus. Viruses can change slightly to form new strains, which can make it easier at times for a virus to cause infection because people have not developed immunity to the new form. Another example of a virus that has different strains is influenza (that causes the 'flu'). Change in strains is one reason that people need to get a new flu vaccine every year. There is no vaccine currently for enteroviruses.

How Viruses Spread and How to Avoid Getting Sick

Like many other viruses, it is spread from person-to-person when an infected person coughs or sneezes or touches another person or a surface with virus on his or her hands. Proper hand washing is the most important thing we can do to prevent the spread of the virus. Teach your child and wash your hands often or use an alcohol-based hand sanitizer. The virus can live on surfaces for hours. Contact with a sick person or touching a contaminated surface and then touching your face can give you the infection. Avoid touching your eyes, nose or mouth with unwashed hands. Common disinfectants and detergents will kill enteroviruses so clean surfaces and toys according to manufacturer instructions.

Enterovirus 68 may spread through the air as well like other viruses when an ill person coughs



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or sneezes. Keep a distance of 6 feet (about the distance of a standard bicycle) from someone who is coughing as that is about how far droplets can travel. If you are ill, cover your mouth when you cough and then wash your hands and dispose of used tissues. Avoid contact with ill persons if possible.

What are symptoms of Enterovirus D68 Infection?

Typical symptoms are similar to those seen with a common cold but can progress to more serious respiratory problems. Symptoms can include:

- Fever (not seen in all children)
- Runny or stuffy nose or sneezing
- Cough
- Wheezing (particularly if there is a history of asthma or past wheezing)
- Chest congestion
- Difficulty breathing

How do I know if my child has Enterovirus D68?

Testing to prove an acute infection is due to Enterovirus D68 is not readily available. Some hospitals can test nasal secretions to detect the type of virus but may not be able to tell if it is the D68 strain. Usually, specific testing is done only in people with severe infection. Since there is no specific treatment, a health care provider makes a decision based on the symptoms and supportive care is given without proving what virus is causing symptoms.

What can be done to treat enterovirus D68 infection?

There is no specific treatment for enterovirus. Children who get sick are given supportive care such as medicine to treat fever, fluids, and rest. The illness can be mild and resolves on its own within a week and most people recover fully. Children with asthma and other lung diseases often need to increase their medicines and treatments to control symptoms. Those who are sicker may need to be hospitalized, require

more frequent breathing treatments, and oxygen therapy if needed

If your child is working hard to breathe or has wheezing, has a high fever for more than a couple of days, or is having a difficulty keeping down fluids, you should call your child's health care provider. Your child may need to be evaluated by a clinician.

Authors: Marianna Sockrider MD, DrPH, Jeffrey Starke MD, Thomas Ferkol MD.

R What to Do...

To avoid getting sick, have your child:

- ✓ Wash hands often with soap and water, or an alcohol-based sanitizer if soap and water is not available
- ✔ Avoid touching her face with unwashed hands
- ✔ Avoid contact with others who are sick

If your child is sick,

- ✓ Teach her to cover her coughs and sneezes
- ✓ Dispose of used tissues
- ✓ Treat symptoms like you would the common cold
- ✓ Stay home until she is no longer sick

If symptoms are or become severe (working hard to breathe, wheezing, high fever for several days, difficulty keeping down fluids), your child may need to be evaluated by a health care provider

Doctor's Office Telephone:

Resource

U.S. Centers for Disease Control:

http://www.cdc.gov/non-polio-enterovirus/about/EV-D68.html?s_cid=cdc_homepage_whatsnew_001

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