

## What is Enterovirus D68?

Enterovirus D68 is one of a group of viruses called enteroviruses. How often any particular virus causes illness in the community varies over time. In 2014, there was a large national outbreak of Enterovirus D68 in the United States. Since that time it has not been as active in causing disease. Enterovirus D68 has more recently been associated with some cases of acute flaccid myelitis (AFM) causing severe weakness. Other enteroviruses can also cause illnesses in humans and often are seen from July to October. They cause 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.



Children who have other health problems including lung diseases such as asthma or impaired immunity are at higher risk for severe disease.

It is not clear why the sudden outbreak of this virus occurred in 2014 or whether a similar outbreak will occur in the future. The spread of this virus as well as other viruses 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.

### 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, enterovirus 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 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 as 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

Enterovirus D68 also has been associated with a condition called acute flaccid myelitis [AFM]. This condition affects the spinal cord and causes severe weakness of one or more extremities, most commonly the legs. If your child is having or recently had a respiratory infection and develops weakness, you should immediately seek the attention of your child's healthcare provider.

### 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 infections. Children who get sick are given supportive care such as medicine to treat fever, fluids, and rest. The illness can be mild and resolve 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 difficulty keeping down fluids, you should call your child's healthcare provider. Your child may need to be evaluated by a healthcare provider.

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## R<sub>x</sub> Action Steps

To avoid getting sick, have your child:

- ✓ Wash hands with alcohol-based sanitizer, or soap and water if alcohol-based sanitizer is not available
- ✓ Avoid touching his 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 when you are 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 healthcare provider

**Healthcare Provider's Contact Number:**

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## Resources

**U.S. Centers for Disease Control:**

- <https://www.cdc.gov/non-polio-enterovirus/about/ev-d68.html>
- <https://www.cdc.gov/acute-flaccid-myelitis/>

**American Thoracic Society**

- [www.thoracic.org/patients](http://www.thoracic.org/patients)

**American Academy of Pediatrics**

- <https://www.healthychildren.org/English/health-issues/conditions/infections/Pages/Reports-of-a-Severe-Respiratory-Illness-on-the-Rise.aspx>

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