



Enterovirus D68

EV-D68 Infections Reported

Hospitals in Missouri and Illinois

(<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm63e0908a1.htm>) are seeing more children than usual with severe respiratory illness caused by enterovirus D68 for this time of the year.

Several other states are investigating clusters of children with severe respiratory illness, possibly due to enterovirus D68.

CDC is watching this situation closely and helping the states with testing of specimens.

Q: What is enterovirus D68?

A: Enterovirus D68 (EV-D68) is one of many non-polio enteroviruses. This virus was first identified in California in 1962, but it has not been commonly reported in the United States.

Q: What are the symptoms of EV-D68 infection?

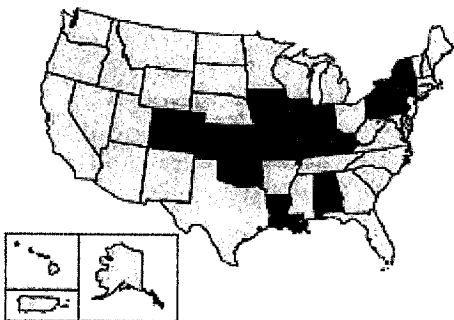
A: EV-D68 can cause mild to severe respiratory illness.

- Mild symptoms may include fever, runny nose, sneezing, cough, and body and muscle aches.
- Most of the children who got very ill with EV-D68 infection in Missouri and Illinois had difficulty breathing, and some had wheezing. Many of these children had asthma or a history of wheezing.

Q: How does the virus spread?

A: 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. EV-D68 likely spreads from person to person when an infected person coughs, sneezes, or touches contaminated surfaces.

States with Lab-confirmed EV-D68 Infections



From mid-August to September 16, 2014, a total of 130 people in 12 states (Alabama, Colorado, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Missouri, New York, Oklahoma, and Pennsylvania) have been confirmed to have respiratory illness caused by EV-

D68. Learn more about [states with confirmed cases \(/non-polio-enterovirus/about/EV-D68-states.html\)](/non-polio-enterovirus/about/EV-D68-states.html).

Q: How many people have been confirmed to have EV-68 infection?

A: From mid-August to September 16, 2014, a total of 130 people in 12 states were confirmed to have respiratory illness caused by EV-D68. (See [States with Lab-confirmed Enterovirus D68 \(/non-polio-enterovirus/about/EV-D68-states.html\)](/non-polio-enterovirus/about/EV-D68-states.html).) The cases of EV-D68 infection were confirmed by the CDC or state public health laboratories that notified CDC.

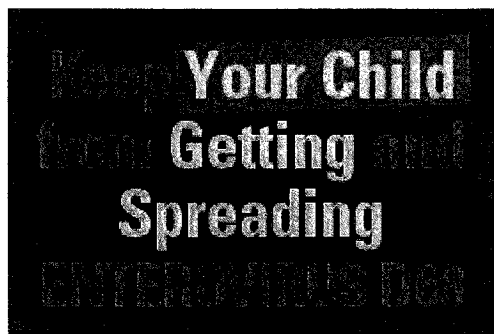
Q: How common are EV-D68 infections in the United States?

A: EV-D68 infections are thought to occur less commonly than infections with other enteroviruses. However, CDC does not know how many infections and deaths from EV-D68 occur each year in the United States. Healthcare professionals are not required to report this information to health departments. Also, CDC does not have a surveillance system that specifically collects information on EV-D68 infections. Any data that CDC receives about EV-D68 infections or outbreaks are voluntarily provided by labs to CDC's National Enterovirus Surveillance System (NESS). This system collects limited data, focusing on circulating types of enteroviruses and parechoviruses.

Q: What time of the year are people most likely to get infected?

A: In general, the spread of enteroviruses is often quite unpredictable, and different types of enteroviruses can be common in different years with no particular pattern. In the United States, people are more likely to get infected with enteroviruses in the summer and fall.

We're currently in middle of the enterovirus season, and EV-D68 infections are likely to decline later in the fall.



(</non-polio-enterovirus/about/EV68-infographic.html>)

Q: Who is at risk?

A: In general, infants, children, and teenagers are most likely to get infected with enteroviruses and become ill. That's because they do not yet have immunity (protection) from previous exposures to these viruses. We believe this is also true for EV-D68.

Among the EV-D68 cases in Missouri and Illinois, children with asthma seemed to have a higher risk for severe respiratory illness.

Q: How is it diagnosed?

A: EV-D68 can only be diagnosed by doing specific lab tests on specimens from a person's nose and throat.

Many hospitals and some doctor's offices can test ill patients to see if they have enterovirus infection. However, most cannot do specific testing to determine the type of enterovirus, like EV-D68. Some state health departments and CDC can do this sort of testing.

CDC recommends that clinicians only consider EV-D68 testing for patients with severe respiratory illness and when the cause is unclear.

Respiratory illnesses can be caused by many different viruses and have similar symptoms. Not all respiratory illnesses occurring now are due to EV-D68. Anyone with respiratory illness should contact their doctor if they are having difficulty breathing, or if their symptoms are getting worse.

Q: What are the treatments?

A: There is no specific treatment for people with respiratory illness caused by EV-D68.

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 may need to be hospitalized .

There are no antiviral medications currently available for people who become infected with EV-D68.

Q: How can I protect myself?

A: You can help protect yourself from respiratory illnesses by following these steps:

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

Also, see an graphic that shows [these prevention steps \(/non-polio-enterovirus/about/EV68-infographic.html\)](/non-polio-enterovirus/about/EV68-infographic.html).

Since people with asthma are higher risk for respiratory illnesses, they should regularly take medicines and maintain control of their illness during this time. They should also take advantage of influenza vaccine since people with asthma have a difficult time with respiratory illnesses.

Q: Is there a vaccine?

A: No. There are no vaccines for preventing EV-D68 infections.

Q: What should clinicians do?

A: Clinicians should

- consider EV-D68 as a possible cause of acute, unexplained severe respiratory illness, even if the patient does not have fever.
- report suspected clusters of severe respiratory illness to local and state health departments. EV-D68 is not nationally notifiable, but state and local health departments may have additional guidance on reporting.

- 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 health departments can be approached for diagnostic and molecular typing for enteroviruses.

Before sending specimens for diagnostic and molecular typing:

- contact your state or local health department.
- submit specimens (nasopharyngeal and oropharyngeal swabs are preferred or any other type of respiratory specimens) using [CDC instructions \(/non-polio-enterovirus/lab-testing/specimen-collection.html\)](#) and complete [specimen submission form 50.34 \(http://www.cdc.gov/laboratory/specimen-submission/form.html\)](#).
- complete a patient summary form for each patient for whom specimens are being submitted. Please send a printed copy of the form at the same time as specimen submission.
 - Enterovirus D68 (EV-D68) Patient Summary Form
 - [1 page, 508-compliant PDF \(/non-polio-enterovirus/downloads/EV68_PatientSummaryForm.doc\)](#)
 - [1 page PDF \(/non-polio-enterovirus/downloads/EV68-PatientSummaryForm.pdf\)](#)
- follow infection control measures; see [health alert \(http://emergency.cdc.gov/han/han00369.asp\)](#) for more information.

Q: What is CDC doing about EV-D68?

A: CDC is helping states with diagnostic and molecular typing for EV-D68.

CDC is also working with state and local health departments and clinical and state laboratories to

- enhance their capacity to identify and investigate outbreaks, and
- perform diagnostic and molecular typing tests to improve detection of enteroviruses and enhance surveillance.

Related Pages

- [Non-Polio Enterovirus for Health Care Professionals \(/non-polio-enterovirus/hcp.html\)](#)
- [Severe Respiratory Illness Associated with Enterovirus D68 — Missouri and Illinois, 2014. \(http://www.cdc.gov/mmwr/preview/mmwrhtml/mm63e0908a1.htm\) MMWR, September 8, 2014](#)
- [Clusters of Acute Respiratory Illness Associated with Human Enterovirus 68 - -- Asia, Europe, and United States, 2008--2010. \(http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6038a1.htm\) MMWR, September 30, 2011](#)

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