



Enterovirus D68

FACT SHEET 13-020-0914

What is Enterovirus and Enterovirus D68?

Enteroviruses are one of many common virus types which can result in respiratory infections. The Centers for Disease Control and Prevention (CDC) estimates that approximately 10-15 million respiratory infections occurring in the United States each year are due to Enteroviruses. Enterovirus infections are common in the United States from August to October and are characterized by more than 100 variants of the virus. However, Enterovirus D68 (EV-D68), one of the more than 100 variants, is less commonly seen than many other sub-types. Only 79 EV-D68 cases were reported to the National Enterovirus Surveillance System (NESS) during the previous four years.

Recently, clusters of severe respiratory disease due to EV-D68 have been reported in children from several states. Hundreds of cases of respiratory illnesses were reported in a pediatric hospital in Kansas City, Missouri, and outbreaks have been described in as many as 10 other states. These respiratory illnesses have resulted in a substantial number of hospitalizations, more than seen with the more common types of enterovirus or rhinovirus. Previous outbreaks have been reported in the United States, Asia, and Europe.

What are the symptoms of EV-D68 infection?

Most individuals infected with EV-D68 may be asymptomatic or experience mild respiratory symptoms, such as cough and runny nose, sometimes with fever or muscle aches. However, some, especially those with underlying conditions such as asthma, may develop more severe respiratory symptoms (wheezing or difficulty breathing) and require hospitalization.

How is EV-D68 transmitted?

Although the modes of EV-D68 transmission are not well-studied, transmission is likely from person-to-person via respiratory droplets from coughing and sneezing or from contact with contaminated surfaces.

Are there treatments for EV-D68 infections?

There is no vaccine, antiviral medication, or specific treatment for EV-D68 infections. Treatment mainly involves reducing or eliminating symptoms. If the infection is severe, hospitalization may be required for intensive supportive therapy.

How can EV-D68 be prevented?

Currently, there are no vaccines available to prevent EV-D68 infections. In order to protect yourself from respiratory illnesses, you should:

- Wash your hands often with soap and water for at least 20 seconds. If soap and water are not available, use an alcohol-based sanitizer containing 60% alcohol or more.
- Cover your nose and mouth with the inside of your elbow when sneezing. If using tissues, throw them in the trash and do not reuse.
- Clean and disinfect commonly used surfaces, such as doorknobs, light switches, handrails, and toys.
- Avoid close contact, such as kissing, hugging, or sharing eating utensils and cups, with sick individuals.
- Avoid touching your eyes, nose, or mouth with unwashed hands.
- Ensure those with asthma take prescribed medication as ordered, receive the influenza vaccine, and avoid triggers such as tobacco smoke.

What if my child is sick?

If your child displays symptoms related to a respiratory illness, it is best to keep them at home and seek medical care from a health care provider, especially if they are wheezing or having difficulty breathing. Avoid giving your child aspirin.

Guidance for Child Care Centers

Child care center employees, especially those in affected areas, should monitor for ill children and ensure that febrile children are excluded in accordance with childcare policies. Employees should strictly adhere to sanitation and hygiene practices, particularly ensuring that appropriate hand washing procedures are followed after diaper changing.

Guidance for Health Care Professionals

Health care professionals should consider EV-D68 as a possible cause if patients present with acute, unexplained severe respiratory illnesses, especially in young children. Ensure public health personnel are aware of potential disease clusters.

Maternity wards with newborns and medical units with immunocompromised persons should consider excluding pediatric visitors if there is an outbreak in the local community.

Currently, there is not an approved assay for identification of EV-D68. Until one becomes available, providers should consult their local medical treatment laboratory regarding submission and identification of respiratory viruses, including enterovirus, from patient specimens. Most Army medical center (MEDCEN) laboratories have the ability to test for enterovirus via culture or PCR. MEDDACs can refer specimens to regional MEDCENs or to State public health laboratories.

EV-D68 is not reportable in the U.S., and isolated cases do not need to be reported in the Disease Reporting System internet (DRSi). Instead, use the outbreak module of DRSi to report suspected EV-D68 disease clusters.

Where can I get more information on EV-D68?

- Centers for Disease Control and Prevention (CDC) website: <http://www.cdc.gov/non-polio-enterovirus/about/EV-D68.html>
- USAPHC Disease Epidemiology email: usarmy.apg.medcom-phc.mbx.disease-epidemiologyprogram13@mail.mil