



Information on Enteroviruses

September 10, 2014

Enteroviruses are very common viruses with more than 100 strains. Examples of common enteroviruses are the summer cold, hand, foot and mouth disease, viral conjunctivitis and viral meningitis or encephalitis. According to the Centers for Disease Control and Prevention (CDC), it is estimated that 10 to 15 million enterovirus infections are diagnosed each year. Most people affected with enteroviruses have no or very mild symptoms, but some infections can become serious. Enterovirus infections are seasonal and occur mainly in the summer and fall.

Enterovirus D68 (EV-D68) is one strain of enteroviruses that have recently been identified as currently circulating in Illinois, Missouri and a few other states. EV-D68 infection is associated exclusively with respiratory illness ranging from relatively mild to severe illness requiring hospitalization. This specific strain of enteroviral infection appears to affect mostly children. EV-D68 is rarely seen compared to other enteroviral strains at less than 100 identified cases since its discovery in 1962. The full spectrum of EV-D68 illness is not well-defined.

The key epidemiological and clinical information on enteroviruses that should assist with taking appropriate preventive steps is as follows:

Transmission: Respiratory secretions such as saliva, nasal mucous, sputum (phlegm) by direct contact such as kissing, sharing beverages or shaking hands with an infected person and then touching your eyes, nose or mouth with the contaminated hands. The viruses can also be spread from surfaces or objects like door handles or other frequently touched items. Enteroviruses can be transmitted from feces through fecal-oral route and fluid from blisters.

Incubation period: 3-6 days from exposure

Symptoms: Respiratory symptoms are runny nose, fever or no fever, skin rash, mouth blisters, body and muscle aches. Enterovirus D68 presents with cold symptoms, wheezing, worsening of asthma and pneumonia.

Lab Testing: Commercial lab tests can determine if a specimen is positive for rhinovirus/enterovirus. These tests are not specific enough, however, to determine if a specimen is a rhinovirus or an enterovirus and the strain type. Since most laboratories do not have the ability to differentiate which virus is positive and if enteroviral, the strain type, the specimens are sent to the CDC for viral identification and strain typing.

Treatment: Treatment is symptomatic care. At this time there are no vaccines or antiviral medications that can treat this.



Prevention:

- Wash hands thoroughly with soap and running water for 20 seconds after using the toilet, changing diapers, and before preparing or eating food. Hand washing is the best way to prevent the spread of infectious diseases found in the respiratory and intestinal tract. Promote and help children to wash hands as well. Continue good hand washing even after symptoms have stopped.
- Clean and disinfect contaminated areas (toilets, diapering areas, faucets) daily or when soiled. Sanitize surfaces and toys as needed and at least daily.
- Practice good cough and sneeze habits by coughing and sneezing into your elbow or sleeve. If you do use a tissue throw it away and wash your hands. Encourage children not to touch their eyes, nose, or mouth.
- Do not share drinks, eating utensils, or anything that would come in contact with the respiratory droplets and saliva. Do not eat items out of a shared container (e.g. potato chips or popcorn) to avoid fecal-oral ingestion.
- Do not go to work or school while ill and infectious. Many causes of illness, including enteroviruses are most infectious just before or early in the course of illness. Many viral illnesses spread easily because many cases have no or only mild cold symptoms.

Centers for Disease Control and Prevention; Non-polio enterovirus website. Retrieved 9/10/2014:

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

Illinois Department of Public Health; Enterovirus D68 (EV-D68) Respiratory Illness, Memorandum, IDPH Communicable Disease Control Section, September 5, 2014.

http://www.idph.state.il.us/health/infect/enterovirus_D68.htm

Lake County Health Department/Community Health Clinic; Fact Sheet on Enteroviruses for childcare, Information retrieved from the IDPH Health Beat Fact Sheet,

<http://www.idph.state.il.us/public/hb/hbentero.htm> . Retrieved from Illinois Department of Public Health on September 10, 2014.