NORTH DAKOTA DEPARTMENT of HEALTH

Enterovirus (Nonpoliovirus) Infection

(Group A and B Coxsackieviruses, Echoviruses and Enteroviruses)

What is enterovirus?

Non-polio enteroviruses are very common viruses that are responsible for many illnesses in people. Most people who become infected with non-polio enteroviruses do not get sick or have very mild illness. People infected with enteroviruses that do experience symptoms can have respiratory, rash-like, neurologic, gastrointestinal and/or cardiac symptoms.

Who is at risk for enterovirus?

Infants, children and people with weakened immune systems are most at risk. Mothers may transmit the virus to their infants during pregnancy.

What are the symptoms of enterovirus?

Most commonly, symptoms of mild illness can resemble those of the common cold and include fever, runny nose, sneezing, cough, skin rash, mouth blisters, and body and muscle aches. Gastrointestinal symptoms may include vomiting, diarrhea, abdominal pain and hepatitis. Other symptoms may be rash, eye infection, and cardiac and neurologic symptoms, including aseptic meningitis, encephalitis and paralysis.

How soon do symptoms appear?

Symptoms usually appear three to six days after exposure. Acute eye infections may occur within 24 to 72 hours after exposure.

How is enterovirus spread?

Non-polio enteroviruses can be found in an infected person's nose and mouth secretions, feces, blister fluid, and eyes. Exposure to the virus can occur by having close contact with an infected person, touching objects or surfaces that have the virus on them, changing diapers of an infected person, or drinking water that has the virus in it. Pregnant women who are infected with non-polio enteroviruses shortly before delivery can pass the virus on to their babies during birth.

When and for how long is a person able to spread the disease?

The virus can be shed in the stool of infected people for several weeks after onset of infection. Shedding through respiratory droplets is usually limited to about one week. The virus can be passed to others even if the infected person shows no signs of illness.

How is a person diagnosed?

Depending on what type of enterovirus you have, a laboratory test of throat or stool samples, and possibly blood and urine if taken during early onset of the disease, can determine if the virus is present.

What is the treatment?

No specific treatment is available. For some types of enterovirus, immune globulin intravenous treatment has been used in life-threatening infections of infants and may be beneficial for chronic enteroviral meningoencephalitis in people with weakened immune systems.

Does past infection make a person immune?

No.

Should children or others be excluded from child care, school, work or other activities if they have enterovirus?

Yes, the child should be excluded if the child has a fever or is unable to participate and the staff determines that they cannot care for the child without compromising their ability to care for the health and safety of the other children in the group.

What can be done to prevent the spread of enterovirus?

- Wash hands with soap and water, especially after diaper changing. Use of hand sanitizer may be less effective against certain enterovirus strains.
- Avoid close contact with people who are sick.
- Clean and disinfect frequently touched surfaces.

Additional Information:

Additional information is available by calling the North Dakota Department of Health at 800.472.2180.

This disease is a reportable condition. As mandated by North Dakota law, any incidence of this disease shall be reported to the North Dakota Department of Health.

Resources:

1. *Red Book: 2015 Report of the Committee on Infectious Diseases.* 30th ed. [Children in Out-Of-Home Care]. Kimberlin, DW; Brady, MT; Jackson, MA; Long, SS. American Academy of Pediatrics. 2015: 132-151.
2. *Red Book: 2015 Report of the Committee on Infectious Diseases.* 30th ed. [Enterovirus]. Kimberlin, DW; Brady, MT; Jackson, MA; Long, SS. American Academy of Pediatrics. 2015: 333-336.
3. Heymann, D. L. (2015). *Control of Communicable Diseases Manual, 20th Edition*. Enteroviruses. American Public Health Association. 2015: 120, 123, 205, 401-403, 407.