

## FACT SHEET

### Enterovirus

Enteroviruses are a group of highly contagious small viruses from the *Picornavirus* family. This group includes the polioviruses, coxsackieviruses, echoviruses, and other enteroviruses. Recently they have been grouped into four enteroviruses species (Enterovirus [EV] A, D, C, and E). There are over 100 non-polio types of enteroviruses that can cause disease in humans. <http://www.cdc.gov/non-polio-enterovirus/about/index.html>

#### Cause:

Enteroviruses are common and worldwide. They can be found in respiratory secretions, such as saliva, sputum or nasal secretions, and in the feces of infected persons. Persons may become infected by direct contact with secretions from an infected person, or by contact with contaminated objects such as drinking and eating utensils. Humans are the only known reservoir with the exception of some primates. Transmission is common if an infected person coughs or sneezes directly in the face of another person. These viruses can be transmitted by contact with feces, such as when persons changing diapers of infants and toddlers do not wash their hands thoroughly, mother to infant prenatally, after delivery and possibly through breast feeding. Persons with no symptoms of illness who are infected with an enterovirus can infect other persons who may or may not become ill after they become infected.

#### Symptoms:

Most people who are infected with a non-polio enterovirus have no symptoms. Infected persons who become ill usually develop either mild upper respiratory symptoms (a "summer cold"), a flu-like illness with fever and muscle aches, or an illness with rash. Less commonly, some persons have "aseptic" or viral meningitis. Rarely, a person may develop an illness that affects the heart (myocarditis) or the brain (encephalitis) or causes paralysis. Enterovirus infections are suspected to play a role in the development of juvenile-onset diabetes mellitus (sugar diabetes). Newborns infected with an enterovirus may rarely develop severe illness and die from infection.

#### Spread:

Enteroviruses can be found in the respiratory secretions (e.g., saliva, sputum, or nasal mucus) and stool of an infected person. Other persons may become infected by direct contact with secretions or stool from an infected person or by contact with contaminated surfaces or objects, such as a drinking glass or telephone. Parents, teachers, and child care center workers may also become infected by contamination of the hands with stool from an infected infant or toddler during diaper changes.

**Incubation:**

The average incubation period is 3-6 days. Enteroviruses are able to survive exposure to the tough environment of the gastrointestinal tract. They can also survive chlorine, freezing, and can live on surfaces for several days, long enough to allow for transmission by fomites such as door handles, pillowcases, and dust. The virus can be killed with standard disinfectant and heat.

**Diagnosis and Treatment:**

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**Prevention:**

There currently is no approved treatment for enterovirus infections although Immune Globulin Intravenous (IVIG) may help with more serious infections. No vaccine is currently available for the non-polio enteroviruses.

Hand washing is the most effective way to reduce the spread of infection. Please see the US Centers for Disease Control and Prevention site for effective preventative measures.

<http://www.cdc.gov/ounceofprevention/>