

Non-Polio Enteroviruses

Symptoms

Most people who get infected with non-polio enteroviruses do not get sick, or they only have mild illness, like the common cold. Infants, children, and teenagers are more likely than adults to get infected and become sick because they do not yet have immunity (protection) from previous exposures to the viruses. Adults can get infected too, but they are less likely to have symptoms, or their symptoms may be milder.

Symptoms of mild illness may include:

- fever
- runny nose, sneezing, cough
- skin rash
- mouth blisters
- body and muscle aches

Some non-polio enterovirus infections can cause:

- viral conjunctivitis
- hand, foot, and mouth disease
- viral meningitis (infection of the covering of the spinal cord and/or brain)
- viral encephalitis (infection of the brain)
- myocarditis (infection of the heart)
- pericarditis (infection of the sac around the heart)
- acute flaccid paralysis (a sudden onset of weakness in one or more arms or legs)
- inflammatory muscle disease (slow, progressive muscle weakness)

Infants and people with weakened immune systems have a greater chance of having these complications.

People who develop myocarditis may have heart failure and require long-term care. Some people who develop encephalitis or paralysis may not fully recover.

Newborns infected with a non-polio enterovirus may develop sepsis (the body's overwhelming response to infection which can lead to tissue damage, organ failure, and death). But this is very rare.

Non-polio enterovirus infections may play a role in the development of

type 1 diabetes in children.

Transmission

Non-polio enteroviruses can be found in an infected person's

- feces (stool)
- eye, nose, and mouth secretions (such as saliva, nasal mucus, or sputum)
- blister fluid

You can get exposed to the virus by

- having close contact, such as touching or shaking hands, with an infected person
- touching objects or surfaces that have the virus on them, then touching your eyes, nose, or mouth before washing your hands
- changing diapers of an infected person, then touching your eyes, nose, or mouth before washing your hands
- drinking water that has the virus in it

Once infected, you can shed (pass from your body into the environment) the virus for several weeks, even if you don't have symptoms.

Pregnant women who get infected with a non-polio enterovirus shortly before delivery can pass the virus to their babies. Mothers who are breastfeeding should talk with their doctor if they are sick or think they may have an infection.

Prevention

Many people who get infected with non-polio enteroviruses do not have symptoms but can still spread the virus to other people. This makes it difficult to prevent them from spreading. The best way to help protect yourself and others from non-polio enterovirus infections is to

- wash your hands often with soap and water for 20 seconds, especially after using the toilet or changing diapers
- avoid close contact, such as touching and shaking hands, with people who are sick
- clean and disinfecting frequently touched surfaces

There is no vaccine to protect you from non-polio enterovirus infection.

Treatment

There is no specific treatment for non-polio enterovirus infection. People with mild illness caused by non-polio enterovirus infection typically only need to treat their symptoms. This includes drinking enough water to stay hydrated and taking over-the-counter cold medications as needed. Most people recover completely. However, some illnesses caused by non-polio enteroviruses can be severe enough to require hospitalization.

Adopted from CDC, USA