Enteroviruses and Enterovirus D68

What are enteroviruses?
Enteroviruses are very common viruses; there are more than 100 different types. Approximately 10-15 million enterovirus infections occur in the United States each year. Most enterovirus infections in the United States occur seasonally during the summer and fall. Enteroviruses can cause respiratory illness, febrile rash, and neurologic illnesses, such as meningitis (swelling of the tissue covering the brain and spinal cord) or encephalitis (swelling of the brain).

How are enteroviruses spread?
Enteroviruses can be spread by close contact with an infected person who may cough or sneeze on you, by contaminating hands with stool, and by touching objects or surfaces that have the virus on them and then touching your eyes, nose or mouth.

What is Enterovirus D68?
Enterovirus D68 (EV-D68) is one of many enteroviruses. EV-D68 is not a new virus. It was first identified in California during 1962. EV-D68 infections likely occur less commonly than infections caused by other enteroviruses. Compared with other enteroviruses, EV-D68 infection has rarely been identified in the United States.

What are EV-D68 symptoms?
EV-D68 can cause mild to severe respiratory illness. Most people who are infected are infants, children and teens. Most start with common cold symptoms of runny nose and cough. Some, but not all, may also have fever. Infected people generally recover without complications by treating symptoms. However, some of those infected, particularly those with weakened immune systems or underlying medical conditions such as asthma, may experience severe illness and require hospitalization with supportive therapy. In more severe cases, difficulty breathing, problems with catching breath or wheezing may occur.

Who is at risk for EV-D68?
Infants, children and teenagers are most likely to be infected with EV and become sick. This is most likely because they do not have protection (immunity) or because of no previous exposure to this virus. Children with asthma seem to have a higher risk for severe respiratory illness. Infants and people with weakened immune systems have a greater chance of complications. Adults may be infected with EV, and are more likely to have mild or no symptoms.

What do I do if my child has these symptoms?
• If symptoms are mild, such as with the common cold, parents should do what they normally do.
  o Increase fluids and ensure rest.
  o Keep the child home from school.
  o Give medicines to reduce fever and pain, as needed.
• If symptoms worsen or do not get better within a week, or if new wheezing begins, contact your child’s health care provider.
• If at any time your child is having difficulty breathing, has blue lips, or is gasping for air, take him or her to the closest emergency room.

How is EV-D68 infection treated?
There is no specific treatment for EV-D68 infection. Many infections will be mild and self-limited, requiring only treatment of the symptoms, such as increasing fluid intake, resting, and taking fever-reducing medicine. Some people with severe respiratory illness caused by EV-D68 may need hospitalization to receive supportive therapy, such as with oxygen and nebulization (treatment by inhaling medication through vapor). There are no antiviral medications or vaccines currently available for EV-D68 treatment or prevention.
How do I prevent enterovirus infections?
There are no vaccines for preventing EV-D68 infections. You can help protect yourself from respiratory illnesses by following these steps:

- Wash hands often with soap and water for 20 seconds.
- If you do not have access to a sink, alcohol hand sanitizers are a good alternative as long as hands are not visibly soiled.
- Alcohol-based hand sanitizers are less effective against certain viruses such as norovirus and enteroviruses. In households with confirmed cases of these illnesses, use soap and water as the preferred way to wash hands.
- Avoid touching eyes, nose and mouth with unwashed hands.
- Avoid kissing, hugging, and sharing cups or eating utensils.
- Disinfect frequently touched surfaces (using an EPA-registered disinfectant), such as toys and doorknobs, especially if someone is sick. (EV-D68 does not live long outside the body. Once a surface is dry, it likely does not contain live virus.)
- Cover coughs and sneezes.
- As always, stay home if you are sick.
- People with asthma are at higher risk for respiratory illnesses and should maintain control of their asthma. Asthma can also be controlled by avoiding the triggers, such as tobacco smoke, that can cause an attack.