What are enteroviruses?
Enteroviruses (EV) are common viruses; there are more than 100 types. It is estimated that 10-15 million EV infections occur in the US each year. Most people infected with EV have no symptoms or only mild symptoms, but some infections can be serious. The spread of EV is unpredictable and different types of EV can be common in different years with no pattern. People are more likely to get infected with EV infections in the summer and fall.

What is Enterovirus-D68 (EV-D68)?
Enterovirus-D68 (EV-D68) is a type of EV first detected in 1962 in California. EV-D68 is thought to occur less often than other types of EV.

What is the current situation in the U.S. and EV-D68?
In August, severely ill children with EV were reported in Missouri and Illinois. The EV strain (type) was identified as D68 by the Centers for Disease Control and Prevention (CDC). Among the EV-D68 cases in Missouri and Illinois, children with asthma seemed to have a higher risk for severe respiratory illness. The CDC is currently working with state health departments to determine the exact risk factors for EV-D68. From mid-August to September 17, 2014, a total of 17 states (AL, CT, CO, IL, IN, IA, KS, KY, LA, MO, MT, NJ, NY, NE, OK, PA, VA) have confirmed respiratory illness caused by EV-D68. No deaths due to EV-D68 infection have been confirmed. The New Jersey Department of Health (NJDOH) confirmed that EV-D68 was present in a state on September 17, 2014.

For up-to-date listing of states with confirmed EV-D68 cases, go to the CDC’s website: http://www.cdc.gov/non-polio-enterovirus/about/EV-D68.html?"s_cid=cdc_homepage_whatsnew_001

What are symptoms of EV-D68 infection?
Symptoms may range from mild to severe. Mild symptoms may include runny nose, sneezing, cough, body and muscle aches and sometimes fever. Severe symptoms include difficulty breathing, wheezing and worsening of asthma. Hospitalization in an intensive care unit may be required.

How is EV-D68 infection spread?
EV-D68 is spread through close contact with infected people. The virus likely spreads from person to person when an infected person coughs or sneezes. You can also become infected by touching objects or surface that have the virus on them and then touching your mouth, nose or eyes. Enteroviruses are also present in poop (stool) and can be passed on to others when a person touches poop and does not wash their hands.
Who is at risk for EV-D68?
Infants, children and teenagers are most likely to get 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 can get infected with EV and are more likely to have no symptoms or mild symptoms.

How is EV-D68 diagnosed?
EV-D68 can only be diagnosed by doing specific lab tests on specimens most often taken from a person’s nose and throat. Many hospitals and some doctor’s offices can test ill patients to see if they have an EV infection. However, most cannot do specific testing to determine the type of EV, like EV-D68. In New Jersey, samples are sent to the CDC to determine the type of EV.

How is EV-D68 treated?
There is no specific medication for EV-D68 infections. Antibiotics do not treat viruses, and will have no effect on EV-D68. For most people, no treatment is needed, though medication may help control some symptoms. Aspirin should not be given to children. Those with severe respiratory illness may need to be hospitalized and receive intensive care. Testing for EV-D68 does not change the treatment an ill child will receive.

How can I protect myself from becoming infected with EV-D68?
There is no vaccine to prevent EV-D68 infections. However, you can protect yourself from EV-D68 and other EV infections if you:

- Wash hands often with soap and water for 20 seconds, especially after changing diapers
  - Enterovirus is found in poop (stool). Good hand hygiene is important for anyone who comes into contact with poop.
  - Hand sanitizer is not effective against EV
- Avoid touching eyes, nose and mouth with unwashed hands
- Use good respiratory hygiene; coughing and sneezing into a tissue or elbow and properly disposing of tissues. For more information about respiratory hygiene see the CDC website at http://www.cdc.gov/flu/protect/covercough.htm
- Avoid kissing, hugging and sharing cups or eating utensils with people who are sick
- Clean and disinfect frequently touched surfaces, such as toys and doorknobs, especially if someone is sick.
- Stay home when feeling sick and consult your health care provider
  - Since people with asthma are at higher risk for respiratory illnesses, they should take their medicine as directed by their health care provider
- Stay up to date with immunizations, especially influenza. This can protect against of other common infections and lessen the risk of having a more severe illness if you are infected with EV-D68 at the same time as influenza.
How concerned should parents be about the ED-V68?
Enteroviruses (EV) are common viruses with more than 100 different types that are around mostly in the summer and fall. EV infections can cause mild or severe symptoms, and are more common in infants, children and teenagers. Parents who have children with asthma should make certain that their child’s condition is well managed. All parents should encourage good hand washing and respiratory hygiene to prevent illness. If a child becomes ill or has difficulty breathing, parents should consult with their health care provider.

What is respiratory hygiene?
Respiratory hygiene includes coughing and sneezing into a tissue or arm/elbow and then properly disposing of the tissue. Hand sanitizer is not effective against EV. For more information about respiratory hygiene see the CDC website at http://www.cdc.gov/flu/protect/covercough.htm

What should parents of children with asthma know about EV-D68?
It is important that asthma is well-treated and controlled. Children with asthma should follow their asthma treatment plan. Healthcare providers should be consulted in the development of asthma treatment plans.

If a child is diagnosed with EV or EV-D68, should they be excluded from school/daycare?
Children without a fever should be excluded until symptom free. Children with a fever (oral temperature of >100°F) must stay home until they are fever free for 24 hours without fever-reducing medication and symptom free. For school exclusion guidance, go to: http://www.nj.gov/health/cd/outbreaks.shtml

Is there a risk of my child getting ED-V68 if my child goes to school?
As with other respiratory infections, including the flu and the common cold, there is some increase in risk of catching the EV-D68 in places with large numbers of people, such as schools and daycare settings. Children can protect themselves by washing their hands often, not touching their eyes and noses and coughing or sneezing into a tissue or their arm/elbow and properly disposing of the tissue. Parents should never send a sick child to school. Any child with a fever of 100°F or more should stay home until they are fever free for 24 hours.

What are schools doing about ED-V68?
Schools are encouraged to be vigilant for any unexpected increase in illness among their students and report any suspected outbreak of any illness, including ED-V68, to their local health department.

The NJDOH document “General Guidelines for the Control of Outbreaks in Schools and Daycare Settings” provides general guidelines about responding to illness which may occur in schools and daycare settings, such as exclusion criteria, prevention and outbreak response. The document is available at: http://www.nj.gov/health/cd/outbreaks.shtml
**Why does EV-D68 seem to affect children more than adults?**
Infants, children and teenagers are most likely to get infected with EV and become sick. This is most likely because they do not have protection (immunity) due to 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 can get infected with EV and are more likely to have no symptoms or mild symptoms.

**Is EV-D68 fatal?**
No confirmed deaths associated with EV-D68 have been reported.

**What should healthcare providers know about EV-D68?**
Clinicians should consider EV-D68 as a possible cause of severe respiratory illness, particularly in children. Healthcare providers should report unusual increases in the numbers of patients with severe respiratory illness to their local health department.

**What is the New Jersey Department of Health (NJDOH) doing to respond to EV-D68?**
NJDOH continues to monitor the situation and is in communication with hospitals, local health departments, healthcare providers, schools and daycare providers about testing and clinical guidance. In conjunction with the CDC and other partners, the NJDOH confirmed the first case in the New Jersey resident on September 17, 2014. Once the presence of EV-D68 is confirmed in a region, there is no need for routine testing for this infection. Testing for EV-D68 does not change the treatment an ill child will receive.