Enterovirus-D68 (EV-D68) Frequently Asked Questions

October 15, 2014

New information highlighted

For more information

NJDOH: http://www.nj.gov/health/cd/ev-d60/index.shtml
CDC: http://www.cdc.gov/non-polio-enterovirus/outbreaks/EV-D68-outbreaks.html

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. More than 40 states have confirmed respiratory illness caused by EV-D68.

New Jersey has laboratory-confirmed cases throughout the state. For an updated list of the total number of confirmed EV-D68 cases and affected counties, please visit the NJDOH website at: http://www.nj.gov/health/cd/ev-d60/index.shtml

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

How many specimens have been tested by the CDC for EV-D68:

The CDC has received more specimens for EV lab testing than usual this year. More than 1,000 specimens have been tested by the CDC lab. Of those tested, about half have tested positive for EV-D68. About one third have tested positive for other viruses, such as rhinovirus or enteroviruses other than EV-D68.

Does the CDC have plans to make EV-D68 testing quicker in the future?
The CDC has developed a faster lab test for detecting EV-D68. CDC will begin using this new test on October 14, 2014 which will allow them to process specimens more quickly. As a result of this faster test, the number of confirmed EV-D68 cases will likely increase in the coming days. These increases do not mean the situation is getting worse. Faster testing will help to better show the trends of this outbreak and monitor changes occurring in real time.

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. *Enteroviruses can be found in respiratory secretions, such as saliva (spit), nasal mucus (snot) and sputum (thick mucus in the lungs) and stool (poop).* The virus likely spreads from person to person when an infected person coughs or sneezes and you can also become infected by touching objects or surfaces that have the virus on them and then touching your mouth, nose or eyes and when a person touches poop and does not wash their hands. **Hand sanitizer is not effective in killing Enteroviruses**.

NOTE: While the information included in this document is meant for the general public, health professionals working in healthcare settings, may refer to the NJDOH enterovirus website regarding infection control precautions (technical info tab) at http://www.nj.gov/health/cd/ev-d60/techinfo.shtml or at the CDC http://www.cdc.gov/non-polio-enterovirus/hcp/EV-D68-hcp.html

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 (samples) 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.** The CDC is receiving samples from all over the country and it is impossible to predict how quickly testing can be completed.

How are samples/specimens tested?
Since knowing the answer to exactly what virus is causing an illness is not necessary for treatment, testing to determine if EV-D68 is the cause of an illness is usually not done. If your doctor and the

NJDOH feel that it is important for this testing to be done, the NJDOH can arrange for a specimen to be sent to the CDC. The NJDOH has criteria in place for testing specimens, since the virus has already been confirmed in our state. However, it takes days to weeks to get the results of these tests.

Can individual doctors and hospitals confirm cases of EV-D68?

EV-D68 can only be diagnosed by doing specific lab tests on specimens (samples) and that few laboratories are able to perform. While many hospitals and some doctor's offices can test ill patients to see if they have an EV infection, very few can do specific testing to determine the type of EV, like EV-D68**.** There are over 100 EV infections and specific typing of specimens is needed to confirm whether the virus is D68. In order to make the final diagnosis of EV-D68, the CDC in Atlanta would have to confirm the test on the sample.

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, doorknobs and computer keyboards, 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 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 long can EV live on surfaces?

EV can survive on surfaces long enough to allow the virus to spread to others. Frequent cleaning of commonly touched surfaces such as tables, chairs, countertops, doorknobs, toys and computer keyboards can help limit the spread of EV to others.

What is the best way to clean surfaces?

The best way to clean surfaces is to use a bleach-based household cleaner as directed on the product label. If no such cleaning product is available, you can use a solution made with 5 tablespoons to 1.5 cups of household bleach per 1 gallon of water. If you are unable to use bleach, look for cleaning products that list "Alkyl dimethyl benzyl ammonium chloride" as an active ingredient on the label and says that the product kills norovirus and rhinovirus. This includes products such as Lysol All-purpose cleaner, Pine-Sol All-purpose cleaner and Clorox disinfecting spray/wipes. Follow instructions on the label. Enteroviruses are resistant to alcohol disinfection. The Environmental Protection Agency (EPA) website has a list of commercial cleaning products for noroviruses; these also kill enteroviruses. http://www.epa.gov/oppad001/chemregindex.htm

How concerned should parents be about the EV-D68?

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 is hand hygiene?

Hand hygiene refers to washing hands often with soap and water for 20 seconds, especially after changing diapers, touching pets and commonly touched surfaces. Avoid touching eyes, nose and mouth with unwashed hands. **Hand sanitizer is not effective against Enteroviruses**.

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 EV-D68 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 EV-D68?

Schools are encouraged to be vigilant for any unexpected increase in illness among their students and report any suspected outbreak of any illness, including EV-D68, 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.

How do I know my child's school was cleaned?

Each school has a regular cleaning schedule that they follow. These cleaning schedules are designed to keep children safe. Check with your school for more information about the cleaning schedule.

How are patients who were swabbed for EV notified whether it is EV-D68?

Patients who were tested for EV should talk with their healthcare provider. 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. The CDC sends results to the NJDOH, who then contacts the healthcare provider. Results can take a while to confirm the type of EV. However, testing for EV-D68 does not change the treatment that an ill person will receive.

Should we be testing all children to see if they have EV or EV-D68?

No. Enteroviruses (EV) are common viruses and EV infections are more common in the summer and fall. While some testing of sick kids can help the local and state health departments determine how widespread this illness is, testing of all children will not help. Since there is no treatment for EV-D68, testing all kids will also not help the children. Testing for EV-D68 does not change the treatment that an ill child will receive.

How can I protect myself against getting a respiratory virus?
There are many viruses that are in the environment and people come into contact with them every day. Enteroviruses, influenza, rhinovirus and coxsackie viruses are common in the fall and winter months and are spread person-to-person. The best way to protect yourself is to practice good hand hygiene (washing hands) and respiratory hygiene (cover coughs and sneezes with the inside of your arm or a tissue and then throw away the tissue) and to clean commonly touched surfaces often, such as door knobs, tables and toys. Getting a flu shot every year is also a good way to prevent getting the flu.

Is there special concern for pregnant women and EV-D68?
Most pregnant women will likely be exposed to many viruses, particularly in the fall. Some of these viruses may be EV-D68. Most pregnant women who do come into contact with EV-D68 will not get sick, or will only have a mild illness. There is no clear evidence that EV-D68 can cause severe complications such as miscarriage or birth defects. If the mother is sick when she delivers, it is possible for EV to be passed from mother to baby at birth. Often, babies born to ill mothers do not get sick. Mothers and everyone else should practice good respiratory and hand hygiene and clean commonly touched surfaces and items, such as toys, doorknobs and computer keyboards.

I just heard about limb weakness of unknown causes in children. How is this related to EV-D68?
Neurologic illness with limb weakness can result from a variety of causes. Viral causes of neurologic illness may include viruses that cause respiratory illness and West Nile virus. Neurologic illness caused by these viruses is uncommon in the United States. If your child is experiencing neurological illness with limb weakness, contact your healthcare provider.

How can I tell the difference between an EV infection and the flu?
Many respiratory illnesses, including the common cold, EV infection, and the flu may have similar symptoms. When compared to EV infection, the flu tends to hit quicker and harder, with a rapid onset of symptoms including fever (often more than 101^{o} F), chills, muscle aches, and headache. Usually, EV infection starts gradually, with symptoms of sore throat, cough, runny nose developing over a couple of days, and fevers are not as high as with flu. **It is not possible to tell which illness you have based on symptoms alone.** If you, or a loved one, has a severe illness - especially any illness with difficulty breathing - seek medical attention right away.

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.

How many deaths does NJ see every year from respiratory illness?
In NJ, only pediatric deaths from influenza are reportable. NJ does not track pediatric deaths from respiratory illness. However, while not common, pediatric deaths from respiratory illnesses do occur.