

# Atlantic County Division of Public Health Enteroviruses and Enterovirus D68

### Background

### **Enteroviruses**

- Enteroviruses are very common viruses; there are more than 100 types.
- It is estimated that 10 to 15 million enterovirus infections occur in the United States each year.
- Enteroviruses can cause respiratory illness, febrile rash, and neurologic illnesses, such as aseptic meningitis (swelling of the tissue covering the brain and spinal cord) and encephalitis (swelling of the brain).
- Most infected people have no symptoms or only mild symptoms, but some infections can be serious.
- Infants, children, and teenagers are most likely to get infected with enteroviruses and become sick. Adults can get infected with enteroviruses, but they are more likely to have no symptoms or mild symptoms.
- In general, the spread of enteroviruses is often quite unpredictable, and different types of enteroviruses can be common in different years with no particular pattern. In the United States, people are more likely to get infected with enteroviruses in the summer and fall.

### **Enterovirus D68**

- Enterovirus D68 (EV-D68) infections are thought to occur less often than infections with other enteroviruses.
- EV-D68 was first identified in California in 1962. Compared with other enteroviruses, EV-D68 has been rarely reported in the United States. However, EV-D68, like other enteroviruses, is likely to be found in many places in the United States during this time of the year.

### **Symptoms**

- EV-D68 has been reported to cause mild to severe respiratory illness.
  - o Mild symptoms may include fever, runny nose, sneezing, cough, body and muscle aches.
  - Most of the children who got very ill with EV-D68 infection in Missouri and Illinois had difficulty breathing, and some had wheezing. Many of these children had asthma or history of wheezing.

### People are risk

- In general, infants, children, and teenagers are most likely to get infected with enteroviruses and become ill.
  That's because they do not yet have immunity, or protection, from previous exposures to these viruses. We believe this is also true for EV-D68.
- Among the EV-D68 cases in Missouri and Illinois, children with asthma seemed to have a higher risk for severe respiratory illness.

# **Transmission**

EV-D68 is not frequently identified, so it is less studied and the ways it spreads are not well-understood. Since
EV-D68 causes respiratory illness, the virus can be found in respiratory secretions, such as saliva, nasal mucus,
or sputum. The virus likely spreads from person to person when an infected person coughs, sneezes, or touches
contaminated surfaces.

# **Treatment**

- There is no specific treatment for people with respiratory illness caused by EV-D68 infections.
  - For mild respiratory illness, you can help relieve symptoms by taking over-the-counter medications for pain and fever.
     Aspirin should not be given to children.
  - Some people with severe respiratory illness caused by EV-D68 may need to be hospitalized and receive intensive supportive therapy.
- There are no antiviral medications are currently available for people who become infected with EV-D68.

# **Prevention**

- 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, especially after changing diapers
  - Avoid touching eyes, nose and mouth with unwashed hands
  - Avoid kissing, hugging, and sharing cups or eating utensils with people who are sick
  - o Disinfect frequently touched surfaces, such as toys and doorknobs, especially if someone is sick
- Since people with asthma are at higher risk for respiratory illnesses, they should regularly take medicines and follow guidance to maintain control of their illness during this time. They should also take advantage of influenza vaccine when available since people with asthma have a difficult time with respiratory illnesses.

### More information

- CDC enterovirus D68 website: <a href="http://www.cdc.gov/non-polio-enterovirus/about/EV-D68.html">http://www.cdc.gov/non-polio-enterovirus/about/EV-D68.html</a>
- Severe Respiratory Illness Associated with Enterovirus D68 Missouri and Illinois, 2014, MMWR: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm63e0908a1.htm?s cid=mm63e0908a1 x