



# San Mateo County Health System

October 6, 2014

## Enterovirus D-68 (EV D-68) School Information

### 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.
- 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 are the current numbers?

- An increased number of EV D-68 infections has recently been documented throughout the United States
- Almost all infections have been in children. **Many of the children had asthma or a history of wheezing.**
- As of 10/3/14 there have been 538 persons in 43 states with lab-confirmed EV D-68 infection.
- In California, CDPH has tested specimens from 140 children with respiratory illness. Of these, EV-D68 has been isolated in 13.
- It is likely that EV-D68 is circulating widely in California and additional cases are expected.
- **There are no confirmed cases in San Mateo County as of 10/6/14.**

### What are the symptoms?

- Mild symptoms include fever, runny nose, cough, congestion, sneezing, body and muscle aches (looks like flu).
- Severe symptoms include wheezing, difficulty breathing, and respiratory distress.

### How does it spread?

- EV-D68 is spread through close contact with infected people.

- The virus is found in an infected person's respiratory secretions including saliva, nasal mucus or sputum and also stool, and typically spreads from person to person when an infected person coughs, sneezes, or touches an object or surface that is then touched by others.
- Enterovirus is found in the respiratory tract for 1-3 weeks and can be shed in stool for weeks to months.

### **Who is at risk?**

- Infants, children and teenagers are most likely to get infected with EV and become sick.
- 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.

### **How is it 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.

### **What is the best way to prevent the spread?**

- No vaccine exists to protect persons from this infection, so basic droplet, hand and respiratory precautions are recommended.
  - Wash hands often with soap and water for at least 20 seconds. Alcohol based sanitizer is not typically effective in killing enteroviruses.
  - Avoid touching eyes, nose and mouth with unwashed hands.
  - Avoid close contact such as kissing, hugging, sharing cups or utensils with people who are sick.
  - Cover coughs and sneezes with tissue or shirt sleeve, not hands,
  - Clean and disinfect frequently touched surfaces and objects, including door handles, stair rails, telephones, desk and table tops, and toys.
  - Stay home when sick and keep children home when sick.

### **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 say 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>.

**Should parents of children with asthma be concerned about EV-D68?**

- It is important that asthma be 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 she/he be excluded from school/child care?**

- Children without a fever should be excluded until symptom free. Children with a fever (oral temperature of >100 degrees F) must stay home until they are fever free for 24 hours without fever-reducing medication and symptom free.

**What is the risk of a child getting EV- D68 if she/he goes to school or child care?**

- As with other respiratory infections, including the flu and the common cold, there is some increased 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 not send a sick child to school. Any child with a fever of 100 degrees F or more should stay home until she/he has been fever free for 24 hours.

**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 testing of sick children (especially hospitalized ones) 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.

**What should schools and child care facilities do 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.
- Children should be reminded about frequent hand washing, and respiratory hygiene and reminder signs should be posted throughout the school and facility grounds.

**What is 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 degrees 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, however, not possible to tell the type of illness based on symptoms alone.

**Is there a relationship between limb weakness of unknown causes (also called Acute Flaccid Paralysis) in children and 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.
- Parents reporting that their child is experiencing neurological illness with limb weakness, should immediately contact their healthcare provider.

For more information, <http://www.cdc.gov/non-polio-enterovirus/about/EV-D68.html>

**Communicable Disease Control Program**  
225 37<sup>th</sup> Avenue, San Mateo, CA 94403  
**Phone** (650) 573-2346 • **Fax** (650) 573-2919 • **CA Relay** 711 • **Website**  
[www.smchealth.org](http://www.smchealth.org)  
**Health System Chief** • Jean S. Fraser