

September 9, 2014

**ENTEROVIRUS-D68 (EV-D68)  
(Human Enterovirus-D68 (HEV-D68))**

Enterovirus-D68, first identified in California in 1962, has been rarely reported in the United States for the last 50+ years. However, this year more children than usual have been reported with severe respiratory illness caused by enterovirus-D68. It has been reported to cause mild to severe respiratory illness, presenting much like the common cold; however, it may also cause a rash and in severe cases it may include wheezing, difficulty breathing or in even rarer cases develop into meningitis or heart infection. There have been no reported fatalities to date due to EV-D68. There are more than 100 different types of enterovirus and are quite common with many people getting infected but not becoming ill. Those who do become ill are most likely infants, children and teens who have not encountered the virus previously and are thus not immune. Those in the population with a suppressed immune system are also at risk. When the signs and symptoms observed in a patient is severe respiratory illness and the causative organism is unclear, an enterovirus PCR assay can determine the presence or absence of enterovirus. The enterovirus PCR assay is not specific for enterovirus-D68, but if positive it does suggest the possibility of EV-D68 particularly if it is the predominate enterovirus of the season. The specimen for enterovirus PCR testing is EDTA whole blood (lavender top) or CSF with a turn-around-time (TAT) of 2-4 days. The Oklahoma State Health Department has sent a collection of specimens to CDC 3 weeks ago and have yet to receive the final report on the enterovirus typing. They have discouraged sending any further specimens to CDC for typing.

**SYMPTOMS:** EV-D68 has been reported to cause mild to severe respiratory illness. However, the full spectrum of EV-D68 illness is not well defined.

**TRANSMISSION:** EV-D68 has rarely been identified until this enterovirus season and thus less studied and the spread is not well understood. The virus can be found in respiratory secretions such as saliva, nasal mucus or sputum. Transmission likely occurs from person to person when an infected person coughs, sneezes or touches and contaminates surfaces.

**WASH YOUR HANDS AND KEEP THEM OUT OF YOUR MOUTH AND NOSE.**

**TREATMENT:** No specific treatment for EV-D68 infections other than supportive.  
No antiviral medications or vaccine are currently available.

**PREVENTION:** WASH HANDS OFTEN with soap and water for at least 20 seconds.

**LABORATORY TESTING:**

**Enterovirus PCR testing (not specific for EV-D68)**

Test code **5586525**

Mnemonic: **CSF ENTPCR**                      cpt code: **87498**

**Preferred Specimen** 0.7mL(0.3mL) CSF in sterile screwtop container.

**Alternate Specimen(s): Serum or EDTA Plasma Refrigerated or Frozen** or Throat or rectal swab in M4 or V-C-M medium or 1 gm stool(minimum 0.3 mL). Whole blood specimens should be Centrifuged and separated into **Serum or Plasma within 2 hours of collection** and **kept Refrigerated or Frozen. Avoid repeated freezing and thawing of specimens.**

**Culturing enterovirus** is also available (but with a lower sensitivity and also not specific for EV-D68),

Test code **6000450**

Mnemonic: **C VIRUS**                      cpt code: **87252**

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