



Hot Tips

A Service of Ventura County Public Health Department

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Please copy and distribute to ALL physicians at your location.

Health Alert: Acute Neurologic Illness with Focal Limb Weakness of Unknown Etiology in Children

The Centers for Disease Control and Prevention (CDC) is working closely with the Colorado Department of Public Health and Environment (CDPHE) and Children's Hospital Colorado to investigate a cluster of nine pediatric patients hospitalized with acute neurologic illness of undetermined etiology. The illness is characterized by focal limb weakness and abnormalities of the spinal cord gray matter on MRI. These illnesses have occurred since August 1, 2014 coincident with an increase of respiratory illnesses among children in Colorado.

Clinical Presentation and Epidemiology

The CDPHE, Children's Hospital Colorado, and CDC are investigating nine cases of acute neurologic illness among pediatric patients. The cases were identified during August 9–September 17, 2014 among children aged 1–18 years (median age 10 years). Most of the children were from the Denver metropolitan area. All were hospitalized. Common features included acute focal limb weakness and specific findings on magnetic resonance imaging (MRI) of the spinal cord consisting of non-enhancing lesions largely restricted to the gray matter. In most cases, these lesions spanned more than one level of the spinal cord. Some also had acute cranial nerve dysfunction with correlating non-enhancing brainstem lesions on MRI. None of the children experienced altered mental status or seizures. None had any cortical, subcortical, basal ganglia, or thalamic lesions on MRI. Most children reported a febrile respiratory illness in the two weeks preceding development of neurologic symptoms. In most cases, cerebrospinal fluid (CSF) analyses demonstrated mild-moderate pleocytosis consistent with an inflammatory or infectious process. CSF testing to date has been negative for enteroviruses, including poliovirus and West Nile virus. Nasopharyngeal specimens were positive for rhinovirus/enterovirus in six out of eight patients that were tested. Of the six positive specimens, four were typed as EV-D68, and the other two are pending typing results. Testing of other specimens is still in process. Eight out of nine children have been confirmed to be up to date on polio vaccinations. Epidemiologic and laboratory investigations of these cases are ongoing.

The United States is currently experiencing a nationwide outbreak of EV-D68 associated with severe respiratory disease. The possible linkage of this cluster of neurologic disease to this large EV-D68 outbreak is part of the current investigation. CDC is seeking information about other similar neurologic illnesses in all states, especially cases clustered in time and place. CDC has particular interest in characterizing the epidemiology and etiology of such cases. **To date, Ventura County has had one confirmed case of EV-D68; the patient was hospitalized but is now recovering at home.**

Communicable Disease Office

2240 E. Gonzales Road, Suite 140 Oxnard, California 93036 (805) 981-5201 FAX (805) 981-5200

Report to Ventura County Public Health

Patients ≤21 years of age with:

1) Acute onset of focal limb weakness occurring on or after August 1, 2014;

AND

2) An MRI showing a spinal cord lesion largely restricted to gray matter.

Providers should be vigilant for and report to Ventura County Public Health (805-981-5201) any patients meeting the above case definition.

Specimen Collection and Testing

Providers treating patients meeting the above case definition should consult with Ventura County Public Health for laboratory testing of stool, respiratory, and cerebrospinal fluid specimens for enteroviruses, West Nile virus, and other known infectious etiologies.

If you have any questions, contact the Public Health Laboratory at 981-5131.

For more information

Please visit the CDC enterovirus website (<http://www.cdc.gov/non-polio-enterovirus/>) for general information about enterovirus infections, including EVD-68, and for up-to-date guidance about infection control measures. For information about poliovirus, please visit the CDC poliovirus website (<http://www.cdc.gov/vaccines/vpd-vac/polio/in-short-both.htm>). For information about West Nile Virus, please visit the CDC West Nile Virus website (<http://www.cdc.gov/westnile/>).

Also, please note, the Communicable Disease Office address has changed from Suite 220 to Suite 140. Please see below. Thank you.