**9/30/14**

***New Information From Your CPMG Medical Directors…***

***… always interesting to us – hopefully useful to you!***

We felt it was important to share where things stand regarding the POSSIBLE association of EV-D68 and paralytic symptoms.  This is getting a great deal of press currently, as you know.  To the extent that you may be questioned by patients, it is important to have the up to date information about this.

Do not hesitate to contact us if you have questions or concerns.

Best wishes,

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**CDC probing etiology of acute neurologic illness cluster**

The Centers for Disease Control and Prevention (CDC) is working with the Colorado Department of Public Health and Environment and Children’s Hospital Colorado to investigate a cluster of nine pediatric patients in the Denver area, who are hospitalized with acute neurologic illness of unknown etiology.

This acute neurologic illness is characterized by limb weakness and/or cranial nerve dysfunction.

The United States is currently experiencing a nationwide outbreak of enterovirus D-68 (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. To date, cerebrospinal fluid (CSF) testing for enteroviruses and other potential causes has not confirmed an etiology.

Six of the eight patients who had nasopharyngeal washes performed tested positive for rhinovirus/enterovirus; four were typed as EV-D68. Results are pending in two other children. Eight of the nine children are confirmed up to date on polio vaccinations.

To help in this investigation, the CDC is seeking information about other similar neurologic illnesses in all states, especially cases clustered in time and place. Clinicians should report patients who meet the following case definition to state and local health departments:

**Patients age 21 years or under with (1) acute onset of focal limb weakness occurring on or after Aug. 1, *and* (2) magnetic resonance imaging (MRI) showing a spinal cord lesion largely restricted to gray matter.**

Samuel R. Dominguez, M.D., Ph.D., FAAP, a microbial epidemiologist at Children’s Hospital Colorado, cautioned, “Although this is occurring in the midst of the EV-D68 outbreak, the cause of these cases is still unknown and under investigation.”

Providers treating patients meeting the above case definition should consult with their local and state health department for laboratory testing of stool, respiratory and cerebrospinal fluid specimens for enteroviruses, West Nile virus and other known infectious etiologies.

In addition, children presenting with these symptoms should be referred to a children’s hospital to be evaluated by a neurologist and an infectious diseases specialist to do a full workup. “We don’t know what’s causing this. Maybe it is related to the (EV-D68) outbreak, but maybe it’s not. So they should be evaluated for other etiologies potentially,” said Dr. Dominguez, who also is pediatric infectious diseases specialist at the University of Colorado Denver School of Medicine.

The nine cases were identified from Aug. 9 through Sept. 17 among children aged 1-18 years, with a median age of 10 years. All were hospitalized with common symptoms that included acute focal limb weakness and/or cranial nerve dysfunction and specific findings on 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.

Cerebrospinal fluid (CSF) analyses demonstrated mild to moderate pleocytosis (increased cell count in the CSF) consistent with an inflammatory or infectious process, in most cases. CSF testing to date has been negative for West Nile virus and enteroviruses, including poliovirus. Epidemiologic and laboratory investigations of these cases are ongoing.