RE: Neurologic findings associated with enterovirus D68 (EV-D68)

Dear Colleagues –

In our earlier bulletin of September 16 we commented on neurologic (paralytic) features associated with two of our initial laboratory-confirmed cases of enterovirus D68 (EV-D68) in British Columbia. Neurologic symptoms were not at that time considered a prominent feature of EV-D68, for which severe respiratory illness was instead emphasized in initial reports from the United States (US) and elsewhere.

Since then, however, the US Centers for Disease Control and Prevention (CDC) has issued a Health Advisory to clinicians in the US after a cluster of 9 children in Colorado were reported to have had paralytic symptoms (polio-like illness) associated in at least half with EV-D68 infection. Similar cases are also being investigated elsewhere. For the US CDC Health Advisory, please see: http://emergency.cdc.gov/han/han00370.asp. It is not yet clear whether EV-D68 is causally or coincidentally associated with paralysis in these children.

In response yesterday evening, the BC Centre for Disease Control in collaboration with Fraser Health and Interior Health Authorities issued a notice through ProMED mail – an emerging disease and outbreak reporting system - with additional details related to the two confirmed cases in BC also with paralytic features. That posting from BC is available here: www.promedmail.org/direct.php?id=2819618

Action and advice related to EV-D68 diagnosis and reporting among patients with severe respiratory illness remains unchanged from our earlier September 16 bulletin. However, per the US CDC advisory above, this should also be considered in patients ≤ 21 years of age presenting with acute onset of focal limb weakness occurring on or after August 1, 2014, and an MRI showing spinal cord lesion largely restricted to grey matter. Suspect EV-D68 investigations should be conducted in consultation with your local Medical Microbiologist and Medical Health Officer, with referral to the BC Public Health Microbiology and Reference Laboratory as indicated for EV-D68 typing.

Prior postings related to emerging respiratory viruses, including EV-D68, can be accessed here: www.bccdc.ca/dis-cond/DiseaseStatsReports/EmergingRespiratoryVirusUpdates.htm

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