New Brunswick Office of the Chief Medical Officer of Health Notice to Health Care Providers

November 27, 2018

RE: Acute Flaccid Myelitis (AFM)

As of October 19, 2018, the US CDC has reported 62 confirmed cases of AFM occurring mainly among children less than 18 years of age. To date, no pathogen has been consistently detected in the patients' Cerebrospinal fluid; however, patients' symptoms are similar to complications of infection from viruses such as enteroviruses, poliovirus, and adenovirus and West Nile virus. As required by the Public Health Act and Regulations, RHAs and clinicians must report any notifiable diseases and events, including unusual illnesses such as AFM to Public Health.

EPIDEMIOLOGY

AFM is a rare condition and is a subtype of acute flaccid paralysis (AFP). It affects a person's nervous system, specifically the spinal cord, causing flaccid weakness in one or more limbs.

In Canada, Ontario is experiencing a higher number than expected of acute flaccid paralysis (AFP) cases, which were reported mostly among children with a viral prodrome one to two weeks prior to the onset of acute limb weakness. These reports were received following the release of information regarding AFM in the United States and the communication to pediatricians in Ontario regarding case management and AFP reporting. Heightened awareness may have an impact on reporting frequency in Ontario.

REPORTING

Report to your regional Public Health any unusual illnesses (which would include acute flaccid paralysis) as per one of the following criteria: presence of symptoms that do not fit any recognizable clinical picture; known etiology but not expected to occur in New Brunswick; known etiology that does not behave as expected; or clusters presenting with unknown etiology.

Regional Public Health will contact you to complete the New Brunswick Acute Flaccid Paralysis form for children less than 18 years of age (which is based on the Canadian Pediatric Society Program form) and submit it to the Office of the Chief Medical Officer of Health through the confidential fax machine (506) 453-8702 Attention CD Epidemiologist.

TESTING

 Nasopharyngeal aspirate (preferred) or oropharyngeal swab serum, stool sample on viral media.

- Cerebrospinal fluid (Lumbar puncture)
- Lower respiratory tract specimens can be done on critically ill patients.
- Submit the sample to your local laboratory for Enterovirus testing; it will be processed at the Georges-L-Dumont University Hospital Centre Microbiology Laboratory.
- The Georges-L-Dumont University Hospital Centre Microbiology Laboratory can perform the initial tests; however strain typing for Enterovirus will be forwarded to the National Microbiology Laboratory in Winnipeg.

NOTE: Strain typing results may take days to weeks.

INVESTIGATION AND MANAGEMENT

- Determine if there is a history of upper respiratory, febrile illness or travel preceding onset of weakness
- Evaluate for other etiologies of acute limb weakness (neurology and infectious disease consultation may be warranted) Physical therapy once stable to optimize functional outcomes.

PREVENTION

- Emphasize basic, effective prevention messages with patients and colleagues (frequent hand hygiene, respiratory etiquette, staying home when sick,).
- Health facilities should have infection prevention and control protocols and emergency response plans to be able to contain and manage the surge in demand for care that can occur during outbreaks of viral illness.

RESOURCES

Canadian Pediatric Surveillance Form and information: https://www.cpsp.cps.ca/surveillance/study-etude/acute-flaccid-paralysis

Sincerely,

Dr. Jennifer Russell, Chief Medical Officer of Health