

## Increasing Enterovirus D68 Activity in BC

Thursday, October 20, 2022

**This message sent to: BC MHOs, Medical Microbiologists, Epidemiologists, Infection Control Practitioners, Infectious Disease Specialists, ER Docs, PHNLs, Provincial CD Nurses, BCCDC and others**

Surveillance screening of respiratory samples at the BCCDC Public Health Laboratory shows that the number of positive tests for enterovirus (EV) and rhinovirus (RV) has been increasing since mid-September this year. EV activity is known to typically increase each year during the late summer to early fall. Of note, however, is that among a subset of these EV/RV positive specimens that have been molecularly characterized for serotype, **a substantial proportion have been positive for enterovirus D68 (EV-D68) this season.**

EV-D68 is an enterovirus serotype. EV-D68 typically causes mild respiratory illness, but has been associated with severe respiratory infections in the past as well as acute flaccid myelitis (AFM), a rare but serious neurologic complication causing limb weakness primarily among children.

EV-D68 is associated with biennial peaks. In 2014, EV-D68 was associated with a large outbreak of severe respiratory illness in the USA and Canada, with subsequent peaks observed in the fall of 2016 and 2018. Some EV-D68 activity was seen in 2020 but it was limited, and is presumed to have been much lower because of COVID-19 public health measures that were in place.

Further characterization of EV/RV positive specimens to assess for EV-D68 is typically undertaken only upon clinician request. However, in years where increased EV-D68 activity is observed, targeted surveillance for EV-D68 is performed to inform risk assessments. Under this enhanced surveillance screening, laboratories across the province are requested to forward EV/RV positive specimens to the BCCDC Public Health Laboratory to assess for EV-D68. Based upon this surveillance, a higher proportion of EV/RV positive specimens have been characterized as EV-D68 so far this season compared to previous years.

In light of the higher EV-D68 positivity being observed in BC, clinicians are recommended to:

- Consider EV-D68 as part of the differential diagnosis in children presenting with acute, severe respiratory illness (with or without fever) by testing for a range of viral pathogens including EV/RV
- Consider AFM in patients with acute flaccid limb weakness, especially occurring after respiratory illness or fever, particularly between the late summer to early fall (August to November 2022) months. **If a respiratory sample is being submitted, request EV-D68 typing so that the result is reported to the ordering clinician.**

For persons 18 years and under from August to December, routine EV-D68 characterization is currently being performed for surveillance purposes when EV/RV is detected on a respiratory panel. **Note that this surveillance typing result is not routinely reported out to clinicians, so ordering clinicians should continue to request EV-D68 typing if there is a clinical suspicion.** Instructions on requesting testing for clinical purposes using a respiratory panel able to detect multiple respiratory viruses can be found within the [eLab Handbook](#) (Search for 'enterovirus').

For more information on EV-D68, please see: [Enterovirus-D68](#) on the BCCDC website.