



MEMORANDUM

DATE: September 16, 2016

TO: Physicians and Residents at HHS and SJH
Clinical Managers and Education Clinicians at HHS and SJH
Laboratory Managers at Joseph Brant Hospital, Niagara Health System, Grand River Hospital, Cambridge Memorial Hospital, and St. Mary's Hospital

FROM: Dr. Marek Smieja, Microbiology Discipline Director and Head of Virology, HRLMP
Candy Rutherford, Technical Specialist, Microbiology, HRLMP

RE: **Detection of Enterovirus D68 in Respiratory Specimens**

The HRLMP Virology Laboratory is conducting weekly surveillance for Enterovirus D68, by testing respiratory specimens which first test positive for Rhinovirus/Enterovirus. Of 128 tested RV/EV positive specimens from August 1, 2016 to September 11, 2016, **12 (9.4%) were positive for EV-D68**. By contrast, we did not detect any positive EV-D68 in the fall of 2015.

We had a large outbreak in our region in September 2014, which primarily caused respiratory disease in children. As with Rhinovirus, EV-D68 caused mild to severe respiratory symptoms, including pneumonia and asthma exacerbation. Clinical findings were published (D. Mertz, CMAJ 2015). An association of EV-D68 with acute flaccid paralysis was observed in the US and Canada, but remains unproven.

Every September brings a large increase in Rhinovirus/Enterovirus detection, with a peak expected in the third week of September. Our routine multiplex PCR for respiratory viruses will reliably detect EV-D68 as a Rhinovirus/Enterovirus. Specific identification as EV-D68 is not generally needed, and currently will only be done weekly for surveillance purposes. However, in specific circumstances (severe respiratory disease in whom Rhinovirus/Enterovirus testing is known positive; suspected hospital outbreak; or suspected acute flaccid paralysis), we can do a specific EV-D68 PCR on the specimen within 24-48 hours. Please speak with me, the virology laboratory, or the microbiologist-on-call if specific EV-D68 testing is needed. I can be reached at 905-521-6021 or through paging.

Thank-you for the privilege of serving you and our patients.

Marek Smieja, MD PhD FRCPC
Microbiologist and Infectious Diseases Physician
Professor, Pathology & Molecular Medicine