

Guidance for Enterovirus D68 Respiratory Infections

Attention: Physicians, Emergency Departments, Nurse Practitioners, Infection Control Practitioners, Occupational Health Professionals, Walk-In Clinics/Urgent Care Clinics, Midwives, Family Health Teams, NSM LHIN, Central LHIN, County of Simcoe Paramedic Services, Medavie EMS Ontario – Muskoka, Rama Mnjikaning EMS

Date: September 18, 2014

Current epidemiology:

- In Ontario, there have been 4 lab-confirmed non-ICU cases reported from the Children's Hospital in Ottawa.
- In the rest of Canada, Alberta has reported 18 confirmed cases and British Columbia has reported 3 confirmed cases.
- In the US, there have been 130 lab confirmed cases across 12 states with some clusters of severe illness in children.

In Ontario, Enterovirus D68 (EV-D68) is not a reportable disease; as such, there is no data on the typical number of seasonal EV-D68 cases. However, it is important to note that enteroviruses are very common viruses, and it is not uncommon to see a spike of enterovirus infections in the fall.

Clinical presentation:

EV-D68 is a specific enterovirus that causes respiratory illness ranging from mild to severe. Symptoms can include a cold-like illness with coughing and wheezing to severe infections requiring admission to a hospital or possibly to an intensive care unit because of breathing difficulties.

Children and teenagers appear to be at increased risk of infection from EV-D68 because they may lack protection from previous exposures to the virus. However, the virus can infect the adult population as well. **Children with asthma seem to have a higher risk for severe respiratory illness. There is no specific treatment or vaccine for EV-D68.**

Guidance tools and documents:

Public Health Ontario (PHO) has developed guidance tools and documents that include information on laboratory testing and infection prevention and control measures. The PHO website will be continuously updated and is available at <http://www.publichealthontario.ca/EV-D68>.

Laboratory testing:

Laboratory testing should be considered for patients with severe respiratory illness, especially children, among whom symptomatic enterovirus infections, including EV-D68, are more common. Testing can also be considered if clusters of severe respiratory illness are identified. Testing patients with mild illness is of limited clinical utility.

EV-D68 testing will take place at the PHO Laboratories and/or the National Microbiology Laboratory in Winnipeg. EV-D68 is detected by a two-step process. First, a respiratory specimen is tested for the presence of enterovirus by real-time PCR (all hospitalized patients) and/or standard virus culture. Enterovirus-positive primary specimens or culture isolates will then undergo molecular serotyping.

Infection Prevention and Control Measures:

- Enteroviruses typically spread by fecal-oral route; however, EV-D68 appears to spread via droplets and direct contact like other respiratory viruses.
- Patients with EV-D68 present to hospital with symptoms of acute respiratory infection, indistinguishable from other respiratory viral infections spread by droplet and contact. Patients with symptoms of acute respiratory infection, including those with suspected EV-D68, should be placed on droplet and contact precautions as per [Routine Practices and Additional Precautions](#) and Infection Prevention and Control should be notified. (http://www.publichealthontario.ca/en/eRepository/RPAP_All_HealthCare_Settings_Eng2012.pdf)
- Environmental disinfection of surfaces in healthcare settings should be performed using a hospital-grade disinfectant.

Further Information:

The ministry is available to provide support during urgent situations that may arise. Health partners can contact the ministry on a 24/7 basis through the Health Care Provider Hotline at 1-866-212-2272.

For additional information or to report a cluster of unusual respiratory illness, please contact the Simcoe Muskoka District Health Unit, Communicable Disease Team at (705)721-7520 or 1-877-721-7520 extension 8809.