2019-nCoV outbreak: Information for Health Professionals

CTS staff have compiled information from the Public Health Agency of Canada, World Health Organization, Canadian Medical Association, and other health organizations to provide the following summary.

What is the novel coronavirus?

The World Health Organization (WHO) describe coronaviruses as a large family of viruses that can cause illness ranging from the common cold to more severe diseases like Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). The 2019 novel coronavirus, or “2019-nCoV”, is a new strain that has not been identified in humans before.

Outbreak summary

On January 25, 2020, the Government of Ontario reported the first case of 2019 nCoV in Canada. The case occurred in a person who had been in the city of Wuhan in the 14 days prior to becoming ill. Appropriate infection prevention and control measures were followed. On January 27, the Government of Ontario reported that the individual’s wife tested positive for the 2019-nCoV. She has been in self-isolation at home since her husband was identified as a case. Close contacts of these cases will be notified, monitored for signs of illness, and given instructions for what to do if they become ill by local public health authorities.

On January 28, 2020, the Government of British Columbia reported the third case of 2019 nCoV in Canada. The case occurred in a person who had been in the city of Wuhan in the 14 days prior to becoming ill. Appropriate infection prevention and control measures were followed.

How Canada is monitoring the 2019 Novel Coronavirus infection

The Public Health Agency of Canada is working with the provinces and territories, and international partners, including the World Health Organization, to actively monitor the situation.

Canada’s Chief Public Health Officer is in close contact with provincial and territorial Chief Medical Officers of Health to ensure that any cases of 2019-nCoV occurring in Canada continue to be rapidly identified and managed to protect the health of Canadians.

Risk to Canadians

The Public Health Agency of Canada has assessed the public health risk associated with 2019-nCoV that originated in Wuhan, China, as low for Canada and for Canadian travellers.

Public health risk is continually reassessed as new information becomes available.

How is the virus transmitted?

The WHO reports that human-to-human transmission is occurring with a preliminary R0 estimate of 1.4-2.5. Current estimates of the incubation period of the virus range from 2–10 days, but more information about the mode of transmission is needed to confirm this. Experts are also still unclear whether transmission can occur from asymptomatic individuals or during the incubation period. The WHO offers standard recommendations to prevent the spread of coronavirus, including regular hand washing, covering the mouth and nose when coughing
and sneezing, and thoroughly cooking meat and eggs. Where possible, WHO advises avoiding close contact with persons showing symptoms of respiratory illness, including coughing and sneezing.

**Symptoms and Treatment**

There is currently no vaccine against or specific treatment for 2019-nCoV infection. Treatment is supportive and should be tailored to the patient's condition.

The WHO has published guidance on the clinical management of severe acute respiratory infection when novel coronavirus infection is suspected:

Clinical management of severe acute respiratory infection when novel coronavirus (nCoV) is suspected.

**Advice for healthcare professionals**

Common signs of coronavirus infection include respiratory symptoms, fever, cough, shortness of breath and breathing difficulties. As with SARS and MERS, when dealing with suspected 2019-nCoV cases, health professionals should follow CDC airborne precautions and wear respiratory masks (N95 or higher) during intubation and when entering a negative pressure room.

The **Public Health Agency of Canada** provides information for healthcare professionals on the following topics:
- What health professionals need to know
- Spectrum of illness
- Transmission
- Detection and Reporting
- Infection prevention and control
- Treatment
- Related Information

**PHAC Infection Prevention and Control guidelines:**

- Infection Prevention and Control Guidance for Middle East Respiratory Syndrome Coronavirus (MERS-CoV) in Acute Care Settings
- Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Healthcare Settings

**WHO - When and How to Wear a Mask**  

**CDC Interim Infection Prevention and Control Recommendations for Patients with Confirmed 2019 Novel Coronavirus (2019-nCoV) or Patients Under Investigation for 2019-nCoV in Healthcare Settings:**  
WHO Infection Prevention Infographic: https://www.who.int/images/default-source/health-topics/coronavirus/1overall.png?sfvrsn=4f38434f_4


Association of Medical Microbiology and Infectious Disease Canada (AMMI Canada): Information on the prevention, diagnosis and treatment of various infectious diseases: https://www.ammi.ca/


Further information:
- Public Health Agency of Canada
- Canadian Medical Association – Update on coronavirus
- Canadian Society for Respiratory Therapists: What RTS should know
- World Health Organization technical guidance on Coronavirus
- US Centers for Disease Control and Prevention 2019 Novel Coronavirus Summary
- John Hopkins University – Interactive global tracking map 2019nCov

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