

FACT SHEET

Canine Influenza Virus (CIV) H3N2 in Ontario – Interim Information for Health Care Providers

The following information is intended for health care providers seeing patients with acute respiratory illnesses who have been exposed to dogs diagnosed with CIV H3N2 by a veterinarian.

The understanding of the H3N2 canine influenza virus in Ontario is evolving. As more is learned about the epidemiology, the information for health care providers, including testing guidelines will be updated. For questions, please contact your [local public health unit](#).

Background

As of January 1, 2018, detections of novel influenza in animals, including canine influenza, are reportable by veterinarians and laboratories to local public health units. Canine Influenza virus (CIV) A(H3N2) has been circulating in dogs in areas of Asia since at least 2005. It was first detected in dogs in the United States (US) in 2015, and is now widespread in dogs across the US.

Ontario

In late 2017, CIV A(H3N2) was detected in dogs in Ontario for the first time, following the importation of two dogs from South Korea. Virus spread was confined to canine contacts of the imported dogs. Recently, there has been reported spread of CIV H3N2 among dogs in southern Ontario after another importation of dogs, this time from China in early 2018.

Risks to humans

To date, there has been **no documented transmission of CIVs from dogs to humans**.

[The Centers for Disease Control and Prevention](#) have assessed that CIV A(H3N2) poses a “low threat to humans.” However, close monitoring of all CIVs is important to detect changes in the virus that could facilitate transmission to humans.

Advice for patients who are close contacts of dogs with CIV H3N2

A Fact Sheet on *Canine Influenza Virus (CIV) H3N2 in Ontario – Interim Information for Dog Owners/Handlers* is being distributed through local public health units and veterinarians to owners and handlers of dogs infected with CIV H3N2. That Fact Sheet contains infection prevention and control advice to reduce the risk of transmission of influenza viruses between humans and dogs. Owners, handlers, and other people who are in close contact with dogs with CIV H3N2 should be reassured that the risk of transmission is low. Acute respiratory illness, including influenza-like illness (ILI), in patients exposed to dogs with CIV H3N2 is most likely to be from seasonal influenza or other more common human respiratory viruses.

The Fact Sheet for *Interim Information for Dog Owners/Handlers* advises individuals to alert their health care provider of their exposure to a dog infected with CIV H3N2 if they become sick themselves with ILI and are seeking health care. Patients who seek health care with an ILI after an exposure to a dog infected with CIV H3N2 should be clinically assessed and treated as per usual practice for ILI, **with the exception of additional guidance on laboratory testing described below in this document.**

Laboratory testing for CIV in humans exposed to dogs with CIV H3N2

For clinical detection and ongoing surveillance of CIVs in humans, Public Health Ontario Laboratory will accept specimens for influenza testing from patients (including ambulatory patients) with influenza-like illness (ILI) who are close contacts of a dog infected with CIV.

For a patient specimen to be accepted by Public Health Ontario, the patient must meet **ALL** of the following four eligibility criteria.

1. Patient displays symptoms consistent with ILI:
 - Temperature greater than 38°C AND cough AND one or more of the following: sore throat, arthralgia, myalgia or prostration. Note: In children under 5 years of age, gastrointestinal symptoms may also be present. In patients less than 5 years of age or 65 years of age and over, fever may not be prominent.
2. Patient had close contact to the infected dog¹.
3. Patient developed symptoms of ILI within 10 days of last close contact with the infected dog.
4. The infected dog the patient has been exposed to has a laboratory-confirmed CIV or a clinical diagnosis of CIV from a veterinarian, based on epidemiological links to a dog with laboratory-confirmed CIV.

¹ Some dogs may have clinical signs of CIV and shed virus for prolonged periods of time, while others may be asymptomatic while shedding virus. Some evidence shows viral shedding is highest in the early part of the infection. As there is no documented transmission of CIV from dogs to humans, the period of when dogs may theoretically be infectious to humans is unknown.

How to Organize Laboratory Testing for CIV in humans

- If you are considering laboratory testing to detect CIV in humans, you must contact your [local public health unit](#).
- Detailed information on testing humans for CIV is available on our website: [PHOL Canine Influenza Virus Test Information Sheet](#).
- Health Care Providers must obtain approval for laboratory testing for CIV by contacting the Public Health Ontario Laboratory Customer Service Centre at 416-235-6556 or 1-877-604-4567. Contact the Public Health Ontario Laboratory After-hours Emergency Duty Officer at 416-605-3113 for after-hours consultation.

Resources

Centers for Disease Control and Prevention. Key Facts about Canine Influenza. Available from: <https://www.cdc.gov/flu/canineflu/keyfacts.htm>

Centers for Disease Control and Prevention. Summary of Influenza Risk Assessment Took Results. Available from: <https://www.cdc.gov/flu/pandemic-resources/monitoring/irat-virus-summaries.htm>

Worms and Germs Blog. Ontario Ministry of Agriculture, Food and Rural Affairs, Veterinary Advisory: Confirmed Cluster of Canine Influenza in Southern Ontario. March 2, 2018. Available from: <https://www.wormsandgermsblog.com/files/2018/03/CIV-Disease-Advisory-2018-03-02-FINAL.pdf>

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