

ONTARIO SPCA AND HUMANE SOCIETY

Ontario's animal charity since 1873.

Disease name:	Canine Influenza Virus (CIV)
Agent:	RNA virus
Susceptible domestic species	Dogs, H3N2 can infect cats but with low incidence; ferrets are also susceptible to H3N2
Zoonotic?	No, but could be an emerging zoonotic in future.
Prevalence	H3N8 – identified in early 2000's in US, relatively low rate of incidence H3N2 – more prevalent in N. America, introduced to US in 2015 through import of dogs, first identified in Canada in late 2017
Risk factors	Dogs of any breed, age or health status can be affected. Participating in group events or housed in communal facilities. Dogs in shelter and rescue groups are high risk group.
Clinical signs and significance	Frequent coughing, sneezing, nasal/ocular discharge, decreased appetite, fever. Some dogs develop serious disease and pneumonia. Dogs can have subclinical infections with no clinical signs but still shed the virus.
Diagnostic aids	PCR on nasal swabs is recommended. Highest viral shedding will occur early in the course of the infection. After 7 days illness - to confirm viral shedding has stopped, need PCR tests, every 2 – 3 days apart until have 2 consecutive negative tests.
Test comments	Serological testing can be performed but is of limited use clinically
Excreted in :	Respiratory secretion (mucus and saliva, coughing)
Mode of transmission:	Direct nose-to-nose contact poses the highest risk of transmission; aerosol transmission (up to 20 ft or more) and indirect transmission from contaminated fomites . Ideally infected dogs should be kept in an area with separate ventilation.
Disinfection	Can survive for 8 to 12 hrs on clothing and hands and up to 24 hr in the environment with the right temperature (low temps) and humidity (high moisture). Inactivated by most commonly used disinfectants such as accelerated hydrogen peroxides (Prevail™ or Peroxigard Plus®) or potassium peroxydisulfate (Virkon®, Trifectant®) Potentially contaminated items (eg. stethoscopes) must be cleaned and disinfected.
Incubation	H3N2 = < 7 days. Virus shedding can occur 24 hours before clinical signs appear. H3N8 = normally 2 – 5 days
Post-recovery shedding	H3N2 - Shedding or contagious period can be up to 3 – 4 weeks; quarantine all exposed dogs for 2 weeks; isolate all sick dogs for 4 weeks. (Unless you choose to confirm cessation of shedding – see Diagnostic Aids above) H3N8 - quarantine dogs for 7 days
Carrier state?	No
Specific treatment	Supportive care; antibiotics if secondary infection occurs
Control	All preventive measures apply; proper intake, immediate vaccination, separation from adoptable dogs. PPE – protective outerwear covering entire body (Hazmat suit) includes



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disposable gloves, boots or disposable Agri-boots (not shoe covers) and hair cover similar to bouffant cap or hood of the suit). proper disinfection. When canine influenza strikes, virtually 100% dogs are affected, and approximately 20% show no signs, therefore **all** exposed dogs must be considered an infection risk