



# Companion Animals and COVID-19: Current Evidence and Guidance

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# Outline

- » Companion Animals and COVID-19 – Current Evidence:
  - Cats
  - Ferrets
  - Hamsters
  - Dogs
- » Guidance: Keeping Pets and People Healthy
- » Key Messages

# COVID-19 Pandemic: Key Considerations

- » Predominant route of transmission of COVID-19 is human-to-human
  - Mainly spread through droplets produced when an infected person coughs or sneezes
- » Despite a widespread global pandemic, there have not been any reports of transmission from a companion animal to a person
- » Still many unknowns about how this virus will behave in various animal species

# Companion Animals and COVID-19

» What we do know...



# Cats and COVID-19

## » Case reports

- Four pet cats have tested positive for SARS-CoV-2, in Belgium (1), Hong Kong (1), and USA (2)

## » Research

- Experimental study (Shi et al., 2020)
  - Susceptible
  - Younger cats developed significant respiratory tract lesions
  - Some transmission to other cats
- Observational study (Zhang et al., 2020)
  - ~11% (11/102) cats sampled in Wuhan, China, January-March, 2020 had antibodies to SARS-CoV-2



# Ferrets and COVID-19

## » Research

- Experimental studies (Shi et al., 2020; Kim et al., 2020; Richard et al., 2020)
  - Susceptible
  - May develop mild clinical signs
  - Transmission to other ferrets by direct and indirect contact



# Hamsters and COVID-19

## » Research

- Experimental study (Chan et al., 2020)
  - Susceptible
  - Clinical signs include respiratory, lethargy, weight loss with significant respiratory tract lesions
  - Transmission to other hamsters by direct contact



# Dogs and COVID-19

## » Case reports

- Two dogs in Hong Kong tested positive for SARS-CoV-2 after exposure to COVID-19 positive owners

## » Research

- Experimental study (Shi et al., 2020)
  - Susceptible
    - No infectious virus isolated
  - No transmission to other dogs by direct contact





# Companion Animals and COVID-19: Summary\*

Species	Susceptible	Subclinical infection	Clinical signs	Seroconversion	Transmit to other animals	Evidence
Cat	yes	yes	yes	yes	yes	1,2,3
Ferret	yes	yes	yes	yes	yes	2
Hamster	yes	unknown	yes	yes	yes	2
Dog	yes, somewhat	yes	no?	yes	no	1,2

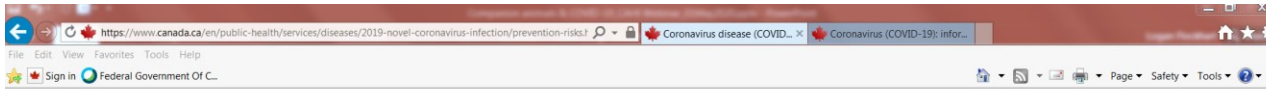
**\*Based on limited information available as of April 28, 2020. Animal species not listed do not yet have any evidence available.**

Evidence: 1 – Case report; 2 – Experimental finding; 3 – Observational study

Clinical signs: Cat – respiratory, gastrointestinal; Ferret – fever, respiratory, decreased appetite;

Hamster – respiratory, lethargy, weight loss

# Guidance: Keeping Pets and People Healthy



## Animals in Canada

The current spread of COVID-19 is a result of human-to-human transmission. There is no evidence to suggest that pets or other animals play a role in transmitting the disease to humans. Scientists are still trying to understand how the disease affects animals.

Pets can contribute to our overall happiness and well-being, especially in times of stress. If you have symptoms of COVID-19 and are not self-isolating because of COVID-19 illness, you can continue to spend time with your pet. This can contribute to keeping both you and your pet healthy.

As a precautionary measure, if you have COVID-19 symptoms or are self-isolating due to COVID-19, you should follow similar recommendations around animals, as you would around people in your household.

- avoid close contact with animals during your illness
  - practise good handwashing and avoid coughing and sneezing on your animals
  - do not visit farms or have contact with livestock
- if possible, have another member of your household care for your animals
  - if this is not possible, always wash your hands before and after touching animals, and practise good cough and sneezing etiquette
- limit your animal's contact with other people and animals outside the household until you are fully recovered

## COVID-19 and Animals

### FREQUENTLY ASKED QUESTIONS FOR VETERINARIANS

April 28, 2020

This document was developed by a working group consisting of Canadian public health and animal health experts, with representation from federal and provincial/territorial governments, the Canadian Veterinary Medical Association, and academia. It takes into consideration past and current research on coronaviruses and COVID-19, as well as expert opinion. The findings and conclusions represent the consensual, but not necessarily unanimous, opinions of the working group participants, and do not necessarily represent the views of the participants' respective organizations.

This information is preliminary and will be updated as further information becomes available.

# Guidance: Keeping Pets and People Healthy

## » If you have COVID-19 symptoms or are self-isolating:

- Avoid close contact with animals
- Practice good hygiene
  - wash your hands
  - avoid coughing and sneezing on your animals
- If possible, have another member of your household care for your animals
- Restrict your animal's contact with other people and animals
  - Cats indoors
  - Dogs on a leash/private fenced area



## Key Messages

- » There is evidence that cats, ferrets, hamsters, and dogs have at least some level of susceptibility to infection with SARS-CoV-2 and cats, ferrets, and hamsters may develop illness
- » There is limited evidence that cats, ferrets, and hamsters can spread the infection to other animals of the same species, under experimental conditions
- » Despite a widespread global pandemic, there have not been any reports to date of transmission from a companion animal to a person
- » Out of an abundance of caution, guidance has been developed to help keep both pets and people healthy

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# Thank You

For more information visit:

[Canada.ca/coronavirus](https://Canada.ca/coronavirus)

# References

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