COVID-19 and animals: information for BC veterinarians

Updated: April 1, 2020

1. Can domestic animals be infected with the virus (SARS-CoV-2) that causes COVID-19 in humans?

Yes. However, there have only been a very small number of infections in animals noted globally. In Hong Kong there have been two dog cases and one cat case that have tested positive for the virus. One of the canine cases seroconverted demonstrating that dogs can be infected and mount an immune response. These animals did not show any signs of illness so it remains unclear if the virus is not pathogenic to dogs or cats in general or whether these particular animals did not develop clinical signs. The animals were put under a 14-day quarantine and monitored closely for signs of illness by Hong Kong’s Agriculture, Fisheries, and Conservation Department. One cat in Belgium has also tested positive for the virus after the owner tested positive for SARS-CoV-2. The cat showed respiratory and digestive symptoms, however at this time it is unclear if the symptoms were related to SARS-CoV-2. Ferrets have been shown to be susceptible to the disease under laboratory conditions. A second experimental study reported ferrets and cats were highly susceptible to infection, dogs were less susceptible, and pigs, chickens and ducks were not susceptible to infection. Caution is required in extrapolating experimental study results to natural exposure because the nature of exposure (intranasal inoculation), the very small number of experimental animals in each species, and the extent of peer-review (the second study has not yet undergone peer-review).

2. Can domestic animals develop clinical illness with COVID-19?

There is currently no evidence that domestic animals, including dogs and cats, develop clinical illness with this new coronavirus in a household or farm setting. Two pet dogs and one cat in Hong Kong tested positive for the virus but did not show any signs of illness. These animals were from households with a person infected with COVID-19. One cat in Belgium showed respiratory and digestive symptoms, however it is unclear whether this was related to infection with SARS-CoV-2 or a different cause. Clinical disease occurred in infected ferrets (but not cats or dogs) in an experimental exposure study.

3. What should animal owners do if they are infected with COVID-19?

Individuals infected with COVID-19 should limit contact with their pets and all other animals during their illness. The best option is to have another member of their household care for their animals. If an infected person must care for a pet, then they should wash their hands before and after interacting with their pet, its food and supplies. If no one is available to care for the animal (e.g. owner is hospitalized and doesn’t have a family member to care for their pet), then temporary housing at an animal shelter is recommended. Animals that need to be adopted or sent to a foster
home and come from a household with a COVID-19 case should be held for 14 days at a shelter before being placed into a home. Guidelines for sheltering animals during the COVID-19 pandemic can be found here: https://www.avma.org/resources-tools/animal-health-and-welfare/covid-19/interim-recommendations-intake-companion-animals-households-humans-COVID-19-are-present

4. What is the evidence on the source of the virus (SARS-CoV-2) that causes COVID-19 in humans?

The current COVID-19 outbreak is associated with transmission from person to person and not from animals. Experts agree that the virus likely originated from animals, however, the definitive source has not been identified. Based on genomic evidence, it is likely that bats were the original source of the virus but the virus was then likely passed through an intermediary animal source (currently unknown) in China before being transmitted to humans.

5. Can domestic animals infect people with the COVID-19 virus?

It is unlikely. There is no evidence that domestic animals can spread the virus that causes COVID-19 to people. The virus that causes COVID-19 most likely originated from an animal source in China, however, it is now spreading from person-to-person when there is direct contact (through droplets from coughing and sneezing) and not from contact with animals.

6. Is there a test available for animals for SARS-CoV-2 in BC?

No. There is currently no clinical test for animals available for SARS-CoV-2 in BC. The overall risk of transmission of the virus from human cases to animals remains extremely low in BC. A national policy on animal testing is being developed. This situation will be monitored closely and any new information on the need and pathways for animal testing will be shared with the BC veterinary community.

7. What should I do if a client calls me about their pet that has a respiratory illness and was around a person with COVID-19?

Currently, there is no evidence that domestic animals develop clinical illness after exposure to the virus that causes COVID-19 or transmit the virus to people. However, if you have a client with a pet with signs of a respiratory illness that has been in contact with a person with COVID-19, you should:

1. Confirm their pet was in contact with a person that has a confirmed COVID-19 case within the last 14 days;
2. Assess (over the phone) the severity of the illness. An animal with mild to moderate signs can remain in the care of their owner or guardian;
3. Identify severe cases and treat them as any other highly contagious disease;
4. To ensure you are dealing with current information on testing of animals or transmission risks you can contact either Erin Fraser, public health veterinarian, BCCDC at (Erin.Fraser@bccdc.ca, 778-677-7790) or Brian Radke – public health veterinarian, BC Ministry of Agriculture (Brian.Radke@gov.bc.ca, 778-666-0544)

8. Is there a vaccination against COVID-19 that can be administered to domestic animals?

No. Currently, there are no vaccines against COVID-19 available for animals. There is absolutely no evidence that vaccinating dogs with commercially available vaccines for other coronaviruses will provide cross-protection against COVID-19.

9. What is the risk of COVID-19 from imported animals? (e.g. a dog imported by a rescue organization)?

There is no evidence that imported pets or other domestic animals can spread the virus. This situation is being monitored very closely and any new information on the risk from imported animals will be updated as it becomes available. However, until we know more, importers, rescue organizations and adoptive families should avoid importing animals from areas where COVID-19 is circulating. If animals are imported from affected areas, they should be closely monitored for signs of illness by the owner or guardian. If a dog recently imported from an affected area develops a respiratory illness, the owner or guardian should contact their veterinarian by phone and inform them of the situation. Veterinarians should follow the steps listed above in question 7. The most affected countries are listed by the Public Health Agency of Canada here: https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/health-professionals/covid-19-affected-areas-list.html

10. How can I protect myself and clinic staff from COVID-19?

The virus that causes COVID-19 is spread through direct contact with an infected person from larger liquid droplets when they cough or sneeze or when there is contact with the virus on someone’s hand or on contaminated fomites. The risk of transmission by an infected animal has been assessed by a panel of Canadian experts as low.

Follow the same advice that public health officials recommend to prevent COVID-19 transmission:

- wash your hands before and after touching an at-risk animal or their food/supplies, and after cleaning up after them;
- wear protective outerwear to prevent contamination of your clothes;
- avoid touching your face, eyes, nose or mouth with unwashed hands;
- regularly clean and disinfect frequently touched surfaces;
- follow physical distancing recommendations;
- avoid others who are unwell; and
• stay home when you are sick.

Stay informed of COVID-19 risk in your community. BC information is posted on the BCCDC’s website at: http://www.bccdc.ca/health-info/diseases-conditions/covid-19

Follow all orders of BC’s Provincial Health Officer and recommendations of the College of Veterinarians of BC and ensure your practice is doing everything possible to minimize transmission of the COVID-19 virus. This includes implementing physical distancing measures and employing your professional judgement in limiting your practice to essential services to protect the health of your clients and patients.

If you have COVID-19, or think you might have it, help prevent spreading by following the instructions from BCCDC: http://www.bccdc.ca/health-info/diseases-conditions/covid-19/about-covid-19/if-you-are-sick

11. Who can I contact in BC for more information on COVID-19 and animals?
Erin Fraser – Public health veterinarian, BC Centre for Disease Control
Erin.Fraser@bccdc.ca or 778-677-7790

Brian Radke – Public health veterinarian, BC Ministry of Agriculture
Brian.Radke@gov.bc.ca or 778-666-0544

Resources:

BC Centre for Disease Control: http://www.bccdc.ca/health-info/diseases-conditions/covid-19

College of Veterinarians of BC: http://cvbc.ca/CVBC1/Resources/Useful_Links/CVBC1/Resources_Contents/Useful_Links.aspx?hkey=6671b44b-3416-44ae-8464-2897960929a8

Canadian Veterinary Medical Association: https://www.canadianveterinarians.net/coronavirus-covid-19
