



SARS CoV-2 and Animals

Animals in Mass Care & Group Settings Advice Summary

Objectives

This document aims to facilitate preparedness in managing the risks associated with animals in mass care or group settings, where their exposure history to people with COVID-19 is unknown. This includes, but is not limited to animal shelters, pounds, boarding facilities, animal feeding operations, zoos, research facilities, wildlife sanctuaries and rehabilitation facilities.

Background

COVID-19 is a newly emerged disease of humans. A very small number of cases involving spill-over to animals, from people infected with COVID-19, have been reported. Information about the causal virus, severe acute respiratory syndrome coronavirus 2 (SARS CoV-2), and its relationship to domestic animals is sparse.

The World Organisation for Animal Health (OIE) advises that currently there is no evidence to suggest that animals infected with SARS CoV-2 from humans play a role in the transmission of the virus. All current knowledge points to the transmission and spread of SARS CoV-2 being between infected people.

Further information can be found on the World Organisation for Animal Health (OIE) [website](#).

Current knowledge as of 7 May 2020

There was experimental evidence during the SARS outbreak that both cats and ferrets could be infected with the SARS coronavirus, that ferrets could become ill from that infection and

both species could efficiently transmit virus to other cats and ferrets that were living with them¹.

In the current situation, a small number of dogs, felids (domestic cats as well as tigers and lions in captivity) and minks have tested positive to SARS CoV-2 all following close contact with infected humans. A serosurvey of cats in Wuhan (all associated with human cases of COVID-19) revealed 15% to be seropositive to SARS CoV-2.

Studies are underway to better understand the susceptibility of different animal species to SARS CoV-2 and to assess infection dynamics in susceptible animal species.

Preliminary findings from laboratory studies suggest that, of the animal species investigated so far, cats are the most susceptible species for SARS CoV-2, and cats can suffer clinical disease. In the laboratory setting cats were able to transmit infection to other cats.

Ferrets also appear to be susceptible to infection but less so to clinical disease. In the laboratory setting ferrets were also able to transmit infection to other ferrets.

Dogs appear to be susceptible to infection but appear to be less affected than ferrets or cats. Egyptian fruit bats were also infected in the laboratory setting but did not show signs of disease or the ability to transmit infection efficiently to other bats.

Poultry and pigs do not appear to be susceptible to SARS CoV-2 infection.

There remains no evidence that animals infect humans.

¹ Martina, B., Haagmans, B., Kuiken, T. et al. SARS virus infection of cats and ferrets. *Nature* **425**, 915 (2003). <https://doi.org/10.1038/425915a>

Principles

1. **Develop plans to ensure workforce continuity in the event of a COVID-19 outbreak**

Facilities should have a staff contingency plan in the event of a suspected or confirmed case of COVID-19 where staff may be excluded from work for a prolonged period until cleared to return to work. Animal care should not be jeopardised during periods of reduced workforce.

2. **Advise people entering the facility who are sick to stay home**

If anyone is unwell they should be asked to stay at home and not attend the facility. If any person entering the facility appears to be symptomatic (i.e. fever, cough, or shortness of breath) at work, they should immediately be separated from all other humans or animals and sent home.

3. **Obtain exposure history of all animals for potential exposure to people with COVID-19**

The history of all new animal intakes should be obtained by staff members to ascertain whether the animal might have had any exposure to a person with suspected or confirmed COVID-19.

4. **Train staff to identify disease in animals**

The clinical spectrum of illness for SARS CoV-2 virus remains largely undefined in animals. Animals may present with respiratory or gastrointestinal clinical signs based on the presentation of other coronaviruses more commonly found in animals as well as other emerging coronaviruses, including SARS CoV-1 infection. Clinical signs expected to be compatible with possible SARS CoV-2 infection in mammalian animals may include:

- i. Fever
- ii. Coughing
- iii. Difficulty breathing or shortness of breath
- iv. Lethargy
- v. Sneezing
- vi. Nasal/Ocular discharge
- vii. Vomiting
- viii. Diarrhoea

Private veterinary practitioners should be contacted if there are any concerns.

5. **Testing animals for SARS CoV-2 infection**

Current diagnostic testing and surveillance in Australian animals for SARS CoV-2 virus is not recommended. Animals presenting with illness or injury should receive veterinary care. Where appropriate, testing for infectious diseases that commonly cause animal illness should be conducted. If staff observe a new, concerning illness that cannot be otherwise explained, **and** the animal has had close contact with a person with

confirmed or suspected COVID-19 infection, the supervising veterinarian should contact their state Department of Agriculture to discuss whether or not there is a need to test that animal for SARS CoV-2.

6. Personal protective equipment (PPE)

Routine infection prevention practices should be implemented to minimise transmission of zoonotic pathogens and should be applied regardless of ongoing infectious disease outbreaks, however, are especially important during an outbreak of an emerging infectious disease, such as COVID-19.

The use of protective clothing, such as gowns or coveralls that can be laundered, and dedicated footwear is an alternative that may be preferable to preserve disposable PPE. The use of gloves is recommended. Training must be given to all employees in the proper use of such equipment.

Recommended PPE Based on Companion Animal History:

Animal History	Facemask	Eye Protection (face shield, goggles)	Gloves	Protective Outwear (gowns or coveralls)	N95 Respirator or Suitable Alternative
Healthy companion animal without exposure to a person with COVID-19 compatible symptoms	N	N	N	N	N
Companion animal with an illness that is not suspicious of SARS CoV-2 infection AND without exposure to a person with COVID-19 compatible symptoms	N	N	N	N	N
Companion animal that is not suspicious of SARS CoV-2 infection BUT has exposure to a person with COVID-19 compatible symptoms	Y	N	Y	N	N

Animal History	Facemask	Eye Protection (face shield, goggles)	Gloves	Protective Outwear (gowns or coveralls)	N95 Respirator or Suitable Alternative
Companion animal with an illness that is suspicious of SARS CoV-2 infection	Y	Y	Y	Y	N
Any procedure where a person with suspected or confirmed COVID-19 will be present	N	Y	Y	Y	Y

Amended from CDC 'Interim Infection Prevention and Control Guidance for Veterinary Clinics Treating Companion Animals During the COVID-19 Response' (2020).

7. General hygiene measures

Routine hygiene prevention practices should be implemented to minimise transmission of infectious pathogens. Key preventative measures include frequent washing of hands before and after each task, minimising the touching of one's face with unwashed hands and sneezing or coughing into your elbow or tissue. Eating and drinking in animal areas should also be prevented.

8. Social distancing

Reducing close physical contact with humans and animals at the workplace. Animals with known exposure to suspect or confirmed COVID-19 cases should be housed in an area separate from the rest of the population for 14 days following last close contact with the case.

9. Cleaning & disinfection

Routine cleaning and disinfection is important in animal areas. Cleaning of visibly dirty surfaces followed by disinfection is a best practice measure for prevention of COVID-19 and other infectious diseases. Coronaviruses are readily inactivated by disinfectants. Normal cleaning and disinfection protocols for both animal housing and common areas used are sufficient. Increased sanitation of surfaces frequently touched by people (e.g. light switches and door knobs) is recommended to reduce exposure between humans.

Additional resources about COVID-19 and animals

- [NSW Department of Primary Industries](#)
- [Animal Health Australia](#)
- [The Department of Agriculture, Water & Energy](#)
- [NSW Health](#)
- [Department of Health](#)
- [Wildlife Health Australia](#)
- [World Organisation for Animal Health](#)
- [World Health Organisation](#)
- [Centres for Disease Control & Prevention](#)
- [Wildlife Health Australia National Wildlife Biosecurity Guidelines](#)
- [SafeWork Australia](#)

Your Reference number V20/10121#10

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