

Guideline For Prevention of Transmission of Human COVID-19 to Pets

























Guideline For Prevention of Transmission of Human COVID-19 to Pets

Editors

Professor Dr Siti Suri Arshad Professor Dr Latiffah Hassan Dr Farina Mustaffa Kamal

Guideline For Prevention of Transmission of Human COVID-19 to Pets

Published by:



NATIONAL COORDINATING OFFICE (NCO)
MALAYSIA ONE HEALTH UNIVERSITY NETWORK
(MyOHUN)
Faculty of Veterinary Medicine
Universiti Putra Malaysia
43400 Serdang, Selangor, Malaysia
Phone: +603-9769 3476 / 3477 / 3478

E-Mail: nco@myohun.com

Website: https://www.myohun.com

All rights reserved. No part of this book may be reproduced in any form without permission in writing from the publisher except by a reviewer who wishes to quote brief passages in a review written for inclusion in a magazine or newspaper.

This guideline is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of the Malaysia One Health University Network under the One Health Workforce - Next Generation Project and do not necessarily reflect the views of USAID or the United States Government. USAID reserves a royalty-free nonexclusive and irrevocable right to reproduce, publish, or otherwise use and to authorize others to use the work for Government purposes.



Contributors

Universiti Putra Malaysia

Dr Farina Mustaffa Kamal Department of Veterinary Pathology & Microbiology Faculty of Veterinary Medicine

Associate Professor Dr Gayathri Thevi Selvarajah Department of Veterinary Clinical Studies Faculty of Veterinary Medicine

Dr Intan Nur Fatiha Shafie Department of Veterinary Clinical Studies Faculty of Veterinary Medicine

Dr Khor Kuan Hua Department of Veterinary Clinical Studies Faculty of Veterinary Medicine

Dr Nur Indah Ahmad Department of Veterinary Pathology & Microbiology Faculty of Veterinary Medicine

Ms Nur Karmila Zainundin Department of Veterinary Pathology & Microbiology Faculty of Veterinary Medicine

Professor Dr Syafinaz Amin Nordin Department of Medical Microbiology Faculty of Medicine and Health Sciences

Dr Syamira Syazuana Zaini Department of Veterinary Clinical Studies Faculty of Veterinary Medicine

Universiti Kebangsaan Malaysia

Associate Professor Dr Azimatun Noor Aizuddin Department of Community Health Faculty of Medicine

Ministry of Health, Malaysia

Dr Rohani Jahis Disease Control Division Ministry of Health Headquarters

Department of Veterinary Services Malaysia

Dr Rohaiza Yahaya Veterinary Biosecurity and Disease Control Division Department of Veterinary Services Headquarter Malaysia

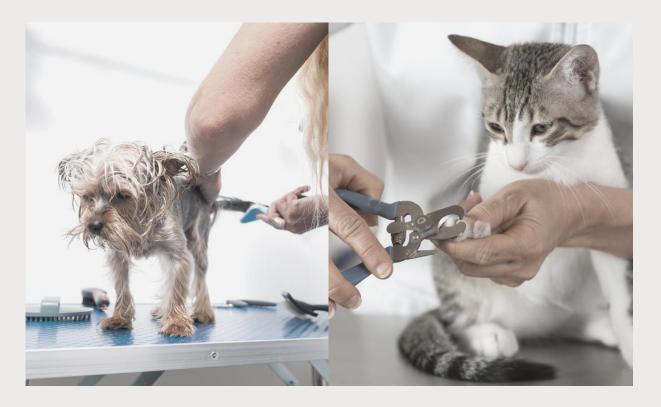
Table of Contents



Introduction	1
Background	2
I. Information of Transmission of COVID-19 from Humans to Pets	4
II. Hygiene practices of COVID-19- positive owners when handling their pets	5
III. Management of Pets with Suspected COVID-19 by owners and veterinarians	7
For the Veterinarians	a



Introduction



A novel coronavirus officially named as severe acute respiratory syndrome-coronavirus 2 (SARS-CoV-2) emerged in late 2019 and to date, it has caused an unprecedented coronavirus pandemic of the 21st century. Many countries have now moved into an endemic phase. The virus can spread from an infected person's mouth or nose in small liquid particles when they cough, sneeze, speak, sing, or breathe. These particles range from larger respiratory droplets to smaller aerosols. It is important to practice respiratory etiquette, for example, by coughing into a flexed elbow and to stay home and self-isolate until you recover if you feel unwell. Most vaccinated people infected with the virus will experience mild to moderate respiratory and/or gastrointestinal illnesses and recover without requiring further treatment. However, some will become seriously ill and require medical attention. Older people and those with underlying medical conditions, such as cardiovascular disease, diabetes, chronic respiratory disease, or cancer are more likely to develop serious illness.

Background

Reports of COVID-19 in animals, and in pets globally

There have been reports that humans who are infected with COVID-19 may transmit the causative agent (SARS-CoV-2) to their pets. Information on transmission of the virus in different animal species is still limited. Positive findings by PCR testing in dogs, cats, farmed mink, and wild animals in zoos have raised concerns about the possible role animals could play amplification and spread of the virus. Reptiles and birds have not been affected by this virus. The risk of animals spreading the virus to people is VERY LOW, but people with coronavirus disease (COVID-19) can spread the virus to animals during close contact.

Cats and dogs are the companion animals in which the virus has been detected and they can become clinically ill following experimental infection. Experimentally infected animals can seroconvert but do not show clinical signs. The infectious virus can be recovered from the upper and lower respiratory tracts for up to 10 days, and viral RNA can be detected in nasal washes for up to nine days. Cats appear to develop robust immunity as they produce virus-neutralizing antibodies and are re-infection resistant to subsequent challenge.



Cases of COVID-19 in pets in Malaysia

surveillance conducted studv between March to September 2021 in Malaysia revealed that 15.2% (42/278) of sampled cats owned by COVID-19positive individuals were found to be positive of SARS-CoV-2 either by PCR or antibody testing. Direct interaction of owners with their cats during the period of COVID-19 infection either by feeding, hugging, kissing, sleeping in the same bed together, or cleaning their litters; these are among the common factors that may cause transmission of the virus from humans to their cats. In addition, from this study, there was no evidence that catto-human nor cat-to-cat transmission had occurred. In addition, there have been no reports on animals dying due to COVID-19 in Malaysia.

Therefore. it can be concluded that pets can get infected with COVID-19 but with low chance and it can be minimizing mitigated by contact with pets during COVID-19 infection. Therefore. this quideline serves provide the public, especially pet owners, with relevant information in the aim to reduce the risk of animals contracting SARS-CoV-2.

Objective:

To provide guidance to pet owners and veterinarians in the prevention of COVID-19 transmission to pets and handling of pets suspected of COVID-19.

Scopes of COVID-19 Guideline

I. Information of transmission of COVID-19 from humans to pets;

II. Hygiene practices of COVID-19positive owners when handling their pets; and

III. Management of pets suspected of COVID-19 by pet owners and veterinarians.



I. Information of Transmission of COVID-19 from Humans to Pets

To date, there are limited evidence of transmission of the virus from pet to humans and pets to pets transmission, nevertheless this occurrence is very rare(1-3). The virus may be transmitted via close and prolonged contact related to handling the pets by the owners. On the other hand, even SARS-CoV-2 has though been detected in non-domestic animals. they pose little risk to humans when appropriate personal protective equipment is used.

The study in Malaysia also investigated the characteristics of the pets with SARS-CoV-2. Indoor and semi-roamer pets seem to have a higher risk of acquiring SARS-CoV-2 in comparison to outdoor pets. On this note, neutered pets will usually prefer to be indoor. Do take precautions in cleaning your pet's litter and food bowl. Lastly, it is best to keep your pet's health in check to protect against any diseases.

Pets infected with SARS-CoV-2 may appear healthy or become unwell, sometimes with respiratory-related symptoms and *depression. Findings from a study in Malaysia indicated the following activities increases the likelihood of pets to acquire the virus:

- Kissing;
- · Hugging;
- Playing;
- Patting;
- Owners and pets sleeping together; and
- Contact with pets' environment such as when cleaning pet litter/tray.

^{*}Depression here is indicated as less active.

II. Hygiene practices of COVID-19positive owners when handling their pets

Definition of hygiene

Hygiene is defined by World Health Organization (WHO) as a condition or practice that helps to maintain health and prevent the spread of diseases(4). Among those practices are proper handwashing, body washing, and using personal protective equipment accordingly.

Definition of close contact

Centers for Disease Control and Prevention (CDC) defined close contact as a person who is less than two meters away from someone confirmed with or suspected COVID19 with time spent more than 15 minutes starting two days before the infected person developed symptoms, or the date they were tested if they do not until thev symptoms, isolation(5). The assumption makes that same definition of close contact for humans and pets.



Spreading of virus between humans and pets

According to American Veterinary Medical Association (AVMA), under natural conditions, pets may become infected with SARS-CoV-2 after closed and prolonged contact with a COVID-19-positive person. A person with COVID-19 might transmit the virus that causes this disease to a pet in the same way we might transmit to another person(6).

The close contact between humans and pets is important in virus transmission from humans to pets and vice versa. These can be:

- Direct contact via saliva, blood, urine, mucous, feces, or other body fluids include petting or touching animals, and bites or scratches.
- Indirect contact in areas where pets live and roam, or objects or surfaces that have been contaminated include bedding, toys, litter box, food, and water bowl.

II. Hygiene practices of COVID-19positive owners when handling their pets

Common activities in handling pets under close contact

Activities that are commonly performed by pet owners when managing their pets include handling of excrement, bedding, toys, food and water bowl/tray. Feeding, snuggling, kissing, petting, playing, feeding table scraps, and sleeping together in the same bed are among the examples of how humans can come to close contact with their pets.



Hygiene measures

Hygiene practices are essential in preventing transmission of any infectious diseases such as COVID-19. When humans are positive for they should COVID-19, apply protective suitable personal equipment (PPE) such as wearing a face mask, glove, using scoop or cleaning equipment and practicing hand washing when handling animals during activities that stated above within 14 days of confirmed disease infection. Cleaning and of premises disinfection surfaces that pets are kept with water and detergent or disinfectant sodium hypochlorite such as (bleach) or alcohol-based solution. However, do not put masks and wipe or bathe the pet with chemical disinfectants, alcohol, hydrogen peroxide, or other products, such as hand sanitizer, counter-cleaning wipes, or other industrial or surface cleaners.

III. Management of pets with suspected COVID-19 by owners and veterinarians

Case definition

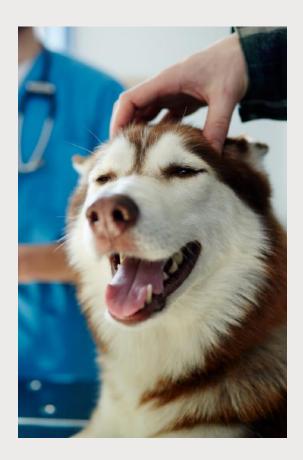
In humans, respiratory-like illness refers to a spectrum of clinical signs associated with upper respiratory tract infections. The definition of "respiratory-like illness" has not been specified in companion animals, hence the definition from human literature will be adopted for this guideline. Companion animals in this guideline refers to dogs and cats.

Dogs and cats may be susceptible to SARS-CoV-2 through natural infection following spillover ancestral strains or variants SARS-CoV-2 from infected humans. Animals exposed to SARS-CoV-2 be asymptomatic symptomatic. Infected animals may present with respiratory and gastrointestinal signs, including sneezing, coughing, vomiting, diarrhea, nasal discharge, ocular discharge, and respiratory distress. There is limited information on clinical signs in animals with different variants of SARS-CoV-2: however, it is believed that the clinical signs may vary.

Definition of asymptomatic and symptomatic pets

An asymptomatic animal is a healthy pet that comes into close contact with individual(s) who tested positive (self-test or medically supervised) for COVID-19.

A symptomatic animal is a sick pet with respiratory and gastrointestinal symptoms that come into close contact with individual(s) who tested positive (self-test or medically supervised) for COVID-19. Please refer to the case definition above for clinical signs of affected animals.



What advice needs to be given to pet owners infected with COVID-19 or those in selfisolation?

For the pet owners

Infected owners or owners that are highly suspected of COVID-19 or at risk of infection should plan for their pets' health care.

For asymptomatic pets:

- Boarding is recommended if the owner is hospitalized due to COVID-19, suffers from severe clinical signs and/or when a reliable pet-sitter is unavailable. The infected owner should strictly stay in quarantine and seek help from other personnel to send the pet to the boarding facility.
- The pet can be guarantined in the same house as the owner on selfisolation or home quarantine. It is recommended that the owner seek help from other personnel to take care of the pet. If a pet sitter is not available, the owner should minimize contact and wear a mask during handling. Apply good hygiene practice. handwashing and sanitization before and after pet handling, food, and water (Refer to the section on hygiene practice). Avoid direct contact activities. includina hugging, kissing and sleeping with your pet.

For symptomatic pets:

- The pet can be quarantined in the same house as the owner on selfisolation or home quarantine. It is recommended that the owner seek help from cat-sitter, relatives or friend to take care of the pet. If a pet sitter is not available, the owner should minimize contact and wear a mask during handling.
- Apply good hygiene practice, handwashing and sanitization before and after pet handling, food, and water (Refer to the section on hygiene practice). Disinfect bowls, toys, and other animal care items with an environmentally-safe disinfectant and rinse thoroughly with clean water afterwards. Disinfect contaminated surfaces with disinfectants (e.g.: Clorox, alcohol sanitizer) within one minute.
- Cats/dogs suspected of COVID-19 should be kept indoors and isolated from other pets for 14 days. Owner should consider not allowing cats to roam outside. Provide clean bedding, bowls or containers, treats, and toys separate from those used by other people or animals in the household.
- If the pet's clinical signs worsen, seek/contact your veterinarian for advice via phone or email. If urgent medical attention is required, get help from other personnel to send the pet to the nearest veterinary clinic.
- If the pet requires hospitalization, avoid visitation and seek updates through phone or email. Only one healthy adult is allowed to visit if the pet is in critical condition.

*Do not be tempted to wipe pets with antiseptic wipes because they will groom chemicals off their coat that may be toxic and may make them sick.

For the veterinarians

Perform a risk assessment of your clients/owners before proceed to veterinary consultation.

(Refer to https://Covid19.moh.gov.my/garis-panduan/garis-panduan-kkm)

Category	Description		
High risk	Individuals tested positive for COVID-19 that is hospitalized or under mandatory quarantine (home isolation). Individual with respiratory symptoms but not tested for COVID-19 but has a history of contact with household members(s) positive COVID-19 patients.		
Medium risk	Individual with respiratory symptoms but not tested for COVID-19 and no history of contact with positive COVID-19 patients.		
Low risk	Owner/household of recovered COVID-19 patient having completed the required days of quarantine. Owners with no symptoms of COVID-19 but have COVID-19 positive persons identified in the workplace.		
No identifiable risk	Healthy owner with no history of contact with COVID-19 positive persons.		

For the veterinarians

Veterinary consultations through appointment are recommended to limit crowds at veterinary practices.

Face-to-face consult

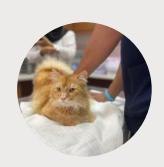
Identify specific entrance and/or exit doors where clients can safely enter and leave your premises (i.e., provide clear instructions or directions).

- a. Apply standard preventive measures in veterinary practices, including frequent sanitization and handwashing, appropriate ventilation, social and physical distancing (at least one meter apart).
- b. Maintain physical distancing during handling and restraining.
- c. The area must be labelled accordingly. Limit chairs to ensure safe physical distance.
- d. Clear all unnecessary items in the waiting area.
- e. Only one healthy adult is allowed to accompany the pet.
- f. Provide an appointment proof through letter or email.
- g. Face masks are compulsory for clients and practice staff inside and outside the premises .
- h. Perform only necessary procedures for the case.
- i. Hand sanitizers should be provided, and clients should be reminded to disinfect their hands each time they touch any area/surfaces (e.g., prompt/ cue at the entrance of the practice/consultation room).
- j. Maintain hygiene at all times, disinfect work surfaces between patients. Please refer to page 6 for recommended hygiene practices
 - Dispensed medication and pets must be handed over to the client by staff.
 - Online payment is preferred over a cash transaction.
 - If the pet requires hospitalization, visitation of pets is discouraged. Only one healthy adult is allowed to visit if the pet is in critical condition.
 - Routine testing of animals for SARS-CoV-2 is NOT recommended. Veterinarians are strongly encouraged to rule out other, more common causes of illness in animals before considering testing for SARS-CoV-2.











For the veterinarians

Risk Assessment for considering COVID-19 testing in pets (asymptomatic or has clinical signs suspicious of SARS-CoV-2 infection*)



Animal with a history of exposure to a person or animal suspected or confirmed to be infected with SARS-CoV-2.

*NOTE: Veterinarians are encouraged to consider other, more common, causes of illness in animals and use their clinical judgement when deciding whether or not to test animals for SARS-CoV-2. All decisions to test an animal should be made in coordination with relevant public health and animal health officials (DVS).

Veterinarians should consult the nearest State Department of Veterinary Services for any suspected cases. Any positive cases need to be reported to State Department of Veterinary Services and/or Crisis Management Center at DVS Putrajaya at:

Hotline tel no: 03-8870 2041;

Email: adic@dvs.gov.my;

Fax no: 03-8888 6472

References

- 1. Dróżdż, M., Krzyżek, P., Dudek, B., Makuch, S., Janczura, A., & Paluch, E. (2021). Current State of Knowledge about Role of Pets in Zoonotic Transmission of SARS-CoV-2. Viruses, 13(6), 1149.
- 2. Gonzales, J. L., de Jong, M. C. M., Gerhards, N. M., & van der Poel, W. H. M. (2021). The SARS-CoV-2 Reproduction Number Ro in Cats. Viruses, 13(12), 2480.
- 3. Sila T, Sunghan J, Laochareonsuk W, et al. Suspected Cat-to-Human Transmission of SARS-CoV-2, Thailand, July-September 2021 Emerg Infect Dis. 2022;28(7)
- 4. World Health Organization (WHO). "Hygiene: Overview". https://www.cdc.gov/hygiene/fast-facts.html
- 5. Centre for Disease Control and Prevention (CDC). How to Determine a Close Contact for Covid19. https://www.cdc.gov/coronavirus/2019-ncov/your-health/if-you-were-exposed.html
- 6. American Veterinary Medical Association (AVMA). SARS-CoV-2 in animals. https://www.avma.org/resourcestools/one-health/covid-1g/sars-cov-2-animals-including-pets
- 7. Centre for Disease Control and Prevention (CDC). What You Should Know about Covid19 and Pets. https://www.cdc.gov/healthypets/covid-19/pets.html
- 8. Virginia Department of Health. Testing and Management of an Animal Positive for SARS-CoV-2 in VA. https://www.vdh.virginia.gov/coronavirus/get-the-latest-guidance/health-professionals/veterinarians/testing-and-management-of-an-animal-positive-for-sars-cov-2-in-va/
- 9. Food and Agriculture Organization (FAO). Recommendations for the epidemiological investigation of SARSCoV-2 in exposed animals SARS-CoV-2 detection in farmed and companion animals. FAO Animal Health Risk Analysis Management, No. 2. Rome. https://doi.org/10.4060/cb7140en.
- 10. British Small Animal Veterinary Association. Dog and cat triage guidance for use during Covid19 pandemic in the United Kingdom. https://www.bsava.com/Portals/0/education/documents/triage-guidance.pdf?ver=2020-03-27-171545-433×tamp=1585329349520
- 11. World Animal Health Organization. Infection with SARS-CoV2 in animals. https://www.woah.org/app/uploads/2021/11/en-factsheet-sars-cov-2-20211025.pdf
- 12. World Small Animal Veterinary Association. WSAVA Advice for Pet Owners during the COVID-19 Pandemic. https://wsava.org/wp-content/uploads/2020/05/Pet-Owners_WSAVA-Animal-Welfare-Advice-during-COVID-19.pdf























