

6 March, 2020

Report of transmission from human to pet dog in Hong Kong

On the evening of the 4th of March, Hong Kong's Agriculture, Fisheries and Conservation Department issued a statement that a Pomeranian, belonging to SARS-CoV-2 positive patient, has repeatedly tested positive for the virus. It is believed that this is a case of **human-to-animal** (reverse zoonotic) transmission.

The Hong Kong authorities detected low levels of the SARS-COV-2, which causes COVID-19, from nasal and oral cavity samples on the 27th of February. They repeated the test on the 28th of February and 2nd of March on the dog's nasal and oral cavity samples. Both subsequent sampling events returned a weak positive for the virus.

The Hong Kong authorities believe this finding may indicate the dog has a low-level of infection, and that it is likely to be case of human-to-animal transmission of the virus. The dog has not shown any clinical signs of disease and is currently being held in quarantine.

At this stage there is no evidence that dogs can play a role in the spread of this human disease, or that they become sick. During the 2003 SARS outbreak, a small number of cats and dogs tested positive for the virus, but did not demonstrate a role in transmitting the virus to other animals or people. (1,2,3)

Whilst pet owners should always use good hygiene practices, including hand hygiene before and after handling animals as well as their food, we do not believe there is reason for pet owners to be otherwise concerned.

While this is an evolving situation, at this stage, pet owners who may become infected with SARS-COV-2 should take precautionary steps to limit their close contact with their pets and practice appropriate hand hygiene practices before and after handling their pets. At no stage should pet owners take measures that may compromise the welfare of their pets.

The primary source of SARS-COV-2 transmission remains human-to-human contact, and the best way to reduce your risk is to practice effective hand hygiene. (4).

Resources to use in your clinic are available from the Hand Hygiene Australia website https://www.hha.org.au/local-implementation/promotional-materials

Alcohol-based hand rub (minimum 60%) is the gold standard for hand hygiene

- Use BEFORE and AFTER touching a patient
- Use BEFORE and AFTER a procedure or body fluid exposure risk (IV catheter, dental check)
- Use AFTER touching a patient's surroundings (cage, cage chart, IV pole)
- Perform hand washing when hands are visibly soiled.

Key messages to veterinarians:

- Human-to-animal transmission of SARS-COV-2 in Hong Kong
- Low level infection.

Unit 40, 6 Herbert Street, St Leonards NSW 2065 Phone: 1300 137 309 / +61 2 9431 5000

Fax: +61 2 9437 9068

www.ava.com.au ABN 63 008 522 852



- No evidence that pets play a role in the epidemiology of COVID-19
- Hand hygiene should be championed by all clinical staff your vet degree is not a barrier to catching a disease!

Key messages to general public

- First reported case of human-to-animal transmission in one dog
- Dog is in quarantine and is not showing any clinical signs of disease
- There is currently no evidence that pets play a role in human infection the major risk remains human to human contact
- Hand hygiene is critical before and after handling your pets, as well as with their food.

References

- 1. https://www.nature.com/articles/423576b (this paper implies that cats were found to be positive for SAR-COV-1 during the 2003 outbreak, and that they were clinically unwell, but the linked to paper within this was more about the outbreak at the apartment complex).
- 2. https://www.nature.com/articles/425915a (Experimental inoculation of cats with SARS-COV-1 and pitch for them to be considered as a possible animal model)
- 3. https://apps.who.int/iris/bitstream/handle/10665/70863/WHO CDS CSR GAR 2003.11 e ng.pdf (this is sadly not captured in the literature, but go to page 27-28 and there is a mention of a dog testing positive from the same apartment complex from reference 1 Amoy Gardens).
- 4. https://www.who.int/gpsc/tools/GPSC-HandRub-Wash.pdf

With thanks to the AVPH (public health) committee for their expert assistance in drafting this communique.

Melanie Latter Head of Policy and Advocacy

Unit 40, 6 Herbert Street, St Leonards NSW 2065 Phone: 1300 137 309 / +61 2 9431 5000

Fax: +61 2 9437 9068