

COVID-19 - An update for WSAVA Members

April 6th, 2020

We started this week with the news release by the Wildlife Conservation Society's Bronx Zoo in New York, USA reporting a resident four-year old female Malayan tiger that has tested positive for SARS-CoV-2 after being presented with cough and decreased appetite. The positive SARS-CoV-2 test for the tiger was confirmed by the United States Department of Agriculture (USDA's) National Veterinary Services Laboratory. The likely source of infection was a person caring for them who was asymptotically infected with the virus. Although three other tigers and three African lions also had a dry cough, only one tiger was tested because of the risk associated with collecting samples under anesthesia. Though they have experienced some decrease in appetite, the tigers and lions are otherwise doing well under veterinary care and are bright, alert, and interactive with their keepers. The four affected tigers live with one Amur tiger that has not exhibited any clinical signs. Three other tigers from the same zoo, as well as snow leopards, cheetahs, clouded leopard, Amur leopard, puma or serval are not presenting any signs of illness.

Assuming the other three lions and tigers with signs were ill due to SARS-CoV-2, this may support the findings of a domestic cat experimental study we commented on in our e-shot of April 3. In this study, some cats inoculated with a high dose of SARS-CoV-2 developed clinical signs of disease and some were able to pass the virus to other animals housed in close proximity.

Further studies will be required to determine whether exotic cats are more susceptible to the SARS-CoV-2 virus than domestic cats.

[Read the USDA's statement here](#)

Another preprint study published since our last e-shot investigated the presence of antibodies to SARS-CoV-2 in cats from Wuhan. Results from samples from 102 cats collected during the COVID-19 outbreak (January to March 2020) were compared to those from 39 cats collected prior to the outbreak in 2019. Antibodies against SARS-CoV-2, were detected in 15 (14.7%) of the cat samples obtained after the outbreak in an experimental indirect enzyme linked immunosorbent assay (ELISA). Eleven of the 15 samples had antibodies detected by virus neutralization. SARS-CoV-2 RNA was not amplified by specific qRT-PCR from any of the cats assayed. The results of this study suggest that cats can be naturally exposed to SARS-CoV-2 and mount a serological response. Similar to previous reports of the cats quarantined in Hong Kong, shedding of virus in naturally exposed cats is either of short duration or of low levels.

We have been asked this week if and when countries will start suggesting testing clinically ill cats or any cat that was housed with a person known to have COVID-19 associated illness. The WSAVA does not currently have information from each country and recommendations or requirements are changing rapidly. We suggest contacting public health authorities for your region or country for this information. Comments from the USDA are included in the document cited above. The OIE and CDC websites are also excellent sources of updated internationally relevant information.



OIE Information on COVID-19



CDC Information on COVID-19

Others have questioned whether WSAVA will recommend ivermectin for the treatment or prevention of SARS-CoV-2 infection of companion animals based on another pre-print, in vitro manuscript that was just made available. At this time, there is not enough information to make recommendations of how to use this information in clinical practice. To date, illness in dogs or cats potentially related to SARS-CoV-2 from natural infection has been non-existent or apparently self-limited.

[Read the following article for more information: "The FDA-approved Drug Ivermectin inhibits the replication of SARS-CoV-2 in vitro"](#)

The WSAVA One Health and Scientific Advisory Committees emphasize that pet owners sick with COVID-19 should avoid direct contact with animals in their household, including petting, snuggling, being kissed or licked, and sharing food. If they need to care for their pet or be around animals while they are sick, they should wash their hands before and after they interact with them and wear a facemask.

Again, we'd like to end by reminding you that, if you haven't checked it for a few days, please re-visit the WSAVA's COVID-19 resource hub as we are adding further content regularly.

Please keep yourselves and your families safe in these difficult times.

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[Visit the WSAVA COVID-19 resource hub here](#)

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