

## COVID-19 - An update for WSAVA Members

### February 17th, 2021

There have been a number of notable discussions recently concerning the role SARS-CoV-2 plays in the health of companion animals so we aim to bring WSAVA members up to date in this latest E-shot:

#### **Updates on SARS-CoV-2 Clinical Disease in Companion Animals.**

Since our last E-shot, there have continued to be occasional reports of SARS-CoV-2 RNA amplified from small companion animals or antibodies detected in serum.

The best place to track the worldwide cases and read the specific reports is the World Organisation for Animal Health (OIE).

For those specifically seeking information for animals in their personal countries, many have tracking sites like the one maintained by the United States Department of Agriculture (USDA).

#### **Tracking and Reports by the OIE**

#### **Tracking website by the USDA**

Globally, less than 200 proven positive cases in small companion animals have been documented. Cats (n = 96) and dogs (n = 77) are most likely to be infected (Data as of February 3, 2021). The majority have had a history of exposure to a person with COVID-19. Of note, the first client-owned ferret was positive for SARS-CoV-2 by RT-PCR assay in Slovenia in late December 2020; this ferret lived in the home of a person with COVID-19 and exhibited gastrointestinal signs.

In the confirmed cases of SARS-CoV-2 infection of companion animals to date, clinical signs have been present in about 50% of those with detailed case histories. If disease occurs in an infected cat, dog, or ferret, self-limited respiratory (coughing, sneezing, ocular or nasal discharge) or gastrointestinal (diarrhea, vomiting) signs are predominant. To our knowledge, there have been no proven deaths of a small companion animal directly related to SARS-CoV-2 infection. It has been questioned whether additional cases may have been missed to date due to restrictions on animal testing in most countries. Of course, the answer to that question is unknown at this time and it is likely there will be variations in regions and countries. As an example, no small companion animal seen at the Veterinary Teaching Hospital at Colorado State University has been suspected to be clinically ill from SARS-CoV-2. In contrast, over 415,000 people are known to have been infected in the state of Colorado at the time of the writing of this E-shot.

#### **SARS-CoV-2 variants**

In the last several months, the emergence of new strains of SARS-CoV-2 that may be more easily transmittable have been recognized around the world. Variants from

the USA (B.1.1.7), South Africa (B.1.351), and Brazil (P.1) have been monitored the most to date.

#### **Information on variants by CDC**

The Center for Disease Control and Prevention (CDC) maintains a website that provides up to date information about what is known about these variants to date.

Whether the spectrum of illness associated with these variants is different is currently unknown. However, in limited studies to date, antibodies induced by SARS-CoV-2 vaccines in people appear to recognize the variants and so hopefully, current vaccines will confer protection. Whether effective treatments will differ with the new variants also will need to be studied.

Whether these variants are more likely to infect the small companion animals living with their owners or are more likely to cause severe disease is unknown but is being evaluated. As recommended from the start of the pandemic, if a family member has signs of COVID-19, they should attempt to quarantine from all family members, including pets and other animals.

**More information on keeping pets and people safe and healthy is available from CDC.**

#### **SARS-CoV-2 vaccines for animals**

It has been suggested by some that SARS-CoV-2 vaccines for animals may be required to stop the spread of the virus.

#### **Article by Science Focus on vaccinating pets against COVID-19**

In some susceptible species like farmed mink that are housed in large numbers, vaccination may be needed to mitigate transmission and disease. Research into mink vaccination is ongoing.

However, WSAVA would like to remind our members that based on the limited information available to date, the risk of animals spreading COVID-19 to people is considered to be low. Limited studies assessing cats or dogs for live SARS-CoV-2 suggest that shedding in cats is of short duration and in one small study in dogs, live virus was not detected at any time point (PMCID: PMC7585007).

A longitudinal study of dogs and cats living with at least one SARS-CoV-2 infected human in Texas was recently completed and released in pre-print. A total of 47.1% of 17 cats and 15.3% of 59 dogs from 25.6% of 39 households were positive for SARS-CoV-2 via RT-PCR and genome sequencing or neutralizing antibodies in serum. Virus was isolated from one cat. The majority (82.4%) of infected pets had no recognized signs of disease. Re-sampling of one infected cat 25 days after the first positive test was positive for viral RNA; this was 32 days after the COVID-19 diagnosis in the owner. Across 15 antibody-positive animals, titers increased (33.3%), decreased (33.3%) or were stable (33.3%) over time. As noted in the experimental study referenced before, presence of live virus was rare in these pets. Further field studies will be required to determine whether SARS-CoV-2 nucleic acids are present as long as 90 days after primary infection as in humans.

*Natural SARS-CoV-2 infections, including virus isolation, among serially tested cats and*

These findings combined with the facts that infected small companion animals to date have most likely been infected by a person and that clinical signs, when present, are, mild, and self-limited suggest that vaccines are not be needed in dogs, cats and ferrets at this time. While vaccine manufacturers are assessing vaccine candidates for use in animals, whether those vaccines will be needed for pet cats, dogs, and ferrets will require further research. Hopefully, as production, distribution, and administration of effective SARS-CoV-2 vaccines for people increases, the need for companion animal vaccines for this virus will be even less.

## **Dog and cat vaccination delays due to COVID-19**

In many countries, pet owners are still avoiding visits to veterinary clinics to have their pets vaccinated and veterinary practices in many countries are still restricting their services to essential or emergency care. For adult dogs and cats regularly vaccinated with core modified live vaccines this should not be a problem. While canine modified-live virus core vaccines (CDV, CAV and CPV2) and FPV vaccines should be given every 3 years, there is substantial evidence that protection is for much longer and probably for the lifetime of the pet. Feline core FHV-1 and FCV vaccines may also be given triennially to 'low-risk' cats or annually to 'high-risk' cats, however there is evidence that these vaccines also provide long-term protection to most cats. The more challenging situations in the face of COVID-19 are in implementing primary courses of core vaccination for puppies and kittens and maintaining vaccine immunity for non-core vaccine agents that are administered on an annual basis.

### **WSAVA Advice on Vaccinations during COVID-19**

WSAVA Vaccination Guidelines Group released an advisory about routine prophylactic vaccination during COVID-19 pandemic. It is available at this site for your review.

### **Update on PPE.**

Over the course of the COVID-19 pandemic, use of face masks has been shown to be beneficial to lessen transmission of the SARS-CoV-2 virus among people. Recently, the CDC has updated the site on effective mask use.

### **CDC advice on effective mask use**

Two of the most important things to do are to make sure the mask fits snugly and completely covers your nose and mouth and can be secured under your chin. Also, use a mask with two or more layers of washable, breathable fabric. Other things to consider when optimizing mask efficacy are discussed on the webpage.

### **SARS-CoV-2 references**

The CDC One Health Office has developed a One Health COVID-19 Scientific Publication tracker with summaries of over 500 articles. Please use the link below to sign up to receive this service.

### **Sign up to the CDC's Scientific Publication Tracker**

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We hope you find this e-shot useful and will be adding translations to the Resource Hub in the coming days.

Please let us know if you have questions or comments. Stay safe!

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

**World Small Animal Veterinary Association**

[www.wsava.org](http://www.wsava.org)

**Vision Statement:** All companion animals worldwide receive veterinary care that ensures their optimal health and welfare

**Mission Statement:** To advance the health and welfare of companion animals worldwide through an educated, committed and collaborative global community of veterinary peers



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