



COVID-19 - An update for WSAVA Members

October 27th, 2020

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:

The use of SARS-CoV-2 assays

The use of antibody assays, antigen assays, nucleic acid amplification assays such as quantitative reverse transcriptase PCR assay (qRT-PCR), and virus isolation assays in the diagnosis and management of both human and animal cases with possible SARS-CoV-2 infection continues to generate discussion and, frequently, confusion.

We would like to share our thinking and highlight useful resources you can use to help answer questions your owners or staff may have for you. Key points to remember include:

Antibodies against SARS-CoV-2 prove that an animal or person was exposed to the virus and developed an immune response.

- Positive antibody test results do not prove the presence of live virus in an individual.
- By the time an individual has a positive antibody test result, it would be unlikely that they could be shedding live virus.
- Work continues to determine what are the best viral targets to use in antibody tests and how best to use the results in management strategies in both humans and animals.
- The Center for Disease Control provides interim guidance for the use of antibody tests in humans and is a great source of information.

CDC's antibody test guidelines

Positive results in SARS-CoV-2 antigen assays, qRT-PCR assays, and virus isolation assays confirm the presence of the virus, but only virus isolation assays confirm the presence of living virus. Thus, a person or pet that is positive for SARS-CoV-2 antigens or RNA amplified by qRT-PCR assay may not be contagious.

People have now been shown to be positive for viral RNA by qRT-PCR assays for up to 12 weeks, long after they stopped being infectious to others. This is why the Center for Disease Control no longer recommends a test-based strategy for return-to-work plans for previously positive people.

CDC: return to work

A recently published study evaluated qRT-PCR assay, a virus isolation assay, and several different antibody assay results in experimentally infected adult dogs and adult cats and helps us understand more about what happens when an animal is infected with SARS-CoV-2 by contact with an infected person.

Study on infected adult dogs and cats

- While dogs became transiently qRT-PCR assay positive and developed serum antibodies, clinical signs were not noted and live virus was not grown from any dog.
- Primary inoculated cats passed live virus to other cats in direct contact, but none of the cats developed clinical signs of disease.
- Viral RNA and live virus were detected transiently in the cats after primary inoculation or direct contact. However, the shedding was of short duration and was completed during the time periods generally recommended for quarantine in many countries (10-14 days after exposure or clinical signs)
- Neutralizing antibody titers developed and cats that had a second challenge with the virus on Day 28 did not repeat shedding of live virus.

The results of this study of experiment animals supports observations from client-owned animals that suggest that infection of animals from people occurs (reverse zoonoses), but is uncommon and does not result in serious disease in most exposed animals. If you would like to evaluate the SARS-CoV-2 infected companion animals reported to date, please visit the OIE site below.

Visit the OIE website: Q&A on SARS-CoV-2

Companion animal research on SARS-CoV-2 using results from field cases continues in many countries. For example, the Center for Companion Animal Studies at Colorado State University has permission to use a research qRT-PCR assay to evaluate samples from dogs with unexplained causes of the Canine Infectious Respiratory Disease Complex in the United States. To date, dogs positive for SARS-CoV-2 have not been detected.

It has been great to have access to manuscripts in pre-review via portals such as www.biorxiv.org. However, the WSAVA One Health Committee reminds our members that these manuscripts have not completed peer-review and may be modified greatly before publication or not be accepted for publication.

The use of animals in animal-assisted therapy

We have received questions as to when restrictions on the use of companion animals in important health care services, such as animal-assisted therapy will be ended. This is an extremely important global One Health issue. Hopefully, as further information concerning SARS-CoV-2 shedding rates in dogs becomes more widely available, some countries will allow the lifting of restrictions. Please contact your local health authorities for advice about this issue in the interim period.



Latest webinar added to WSAVA COVID-19 resource hub

One of the most notable new additions to the [WSAVA's COVID-19 resource hub](#) is a WSAVA One Health webinar entitled 'The impact of COVID-19 on your patients and staff: An update.' During the webinar, Peter Karczmar MD, Michael R. Lappin, DVM, and Richard Squires BVSc discussed a range of important updates concerning the risk of SARS-CoV-2 infections to your staff and the impact of COVID-19 on your patients and preventative health programs. Please enjoy the webinar if you missed the live recording and let us know at admin@wsava.org if you have comments to share. We thank MSD Animal Health for supporting the webinar.

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

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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