

ZAHP Update: April 2020

RGDV-2, COVID-19 Updates, and more

Rabbit Hemorrhagic Disease Virus (RHDV-2)

Rabbit Hemorrhagic Disease Virus (RHDV-2) is a highly contagious virus which causes fatal disease in wild and domestic rabbit species. A reportable foreign animal disease, RHDV-2 was first identified in North America in Feb 2018, and is currently being detected in New Mexico, Arizona and Texas.

It is highly recommended that you check with your state's wildlife agency and State Animal Health Official's webpages for information specific to your region. Facilities that notice an increase in mortality of rabbits on grounds, or conduct necropsies of wildlife found on grounds should know to whom mortalities should be reported, and what should be done with biomaterials.

For more information, see the link to the National Wildlife Health Services announcement accessible here.

COVID-19 Resources and Updates

Considerations for Non-Domestic Species in Human Care During COVID-19 (updated)

These considerations continue to be updated as this event continues. The following resources have been added since the last update:

- Taxonomic specific statements and resources:
 - Animal Care Considerations to Prevent the Spread of Severe Acute
 Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Prepared by Wild Pig,
 Peccary and Hippo TAG veterinary advisors
 - Ape Emerging Disease Management Hub This site is being designed in real time as a resource for those working at the interface of humans and non human primates.
- Emerging research on species susceptibility to SARS-CoV-2

Click here to read more

Evaluation for SARS-CoV Testing in Animals

The CDC, USDA, and other federal agencies have developed guidance to help guide decisions and prioritize situations that may warrant SARS-CoV-2 testing in mammalian animal species including companion animals, livestock, wild and zoo animals.

The key points of this guidance are as follows:

- Routine testing of animals for SARS-CoV-2 is not recommended.
- The decision to test an animal (including companion animals, livestock, and wild or zoo animals) should be agreed upon using a One Health approach between appropriate local, state, and/or federal public health and animal health officials.
- This document provides recommendations to guide priorities for animal SARS-CoV-

- 2 testing given limited resources.
- Veterinarians are strongly encouraged to rule out other, more common causes of illness in animals before considering SARS-CoV-2 testing.

View the full guidance on the CDC website here.

Zoo and Aquarium Workers added to CISA Guidance on Essential Personnel

The Cybersecurity and Infrastructure Security Agency (CISA) recently ammended their <u>Guidance on the Essential Critical Infrastructure Workforce</u> to clarify the descriptions of some essential services and functions in the list. This update include the addition of the following clarification under *Other Community-or-Government-Based Operations and Essential Functions:* "Workers performing services to animals in human care, including zoos and aquariums".

This guidance is advisory in nature. Please refer to your local jurisdiction for specific guidance for your area.

Emerging research on species susceptibility to SARS-CoV-2

This article, currently available ahead-of-print contains findings of a multi-national study, looking at the composition of the ACE2 receptor in many vertebrates. As previously described in other studies, the ACE2 receptor in humans is much like a 'lock', and parts of the coronavirus acts as a 'key' to enter the cells and cause infection.

This study is useful, as it attempts to assign risk classifications to various vertebrates based upon their ACE2 similarity to the human receptors. This study describes how the researchers categorized risk, and contains an excellent table listing the various species they examined.

Broad Host Range of SARS-CoV-2 Predicted by Comparative and Structural Analysis of ACE2 in Vertebrates - Joana Damas, Graham M. Hughes, Kathleen C. Keough, Corrie A. Painter, Nicole S. Persky, Marco Corbo, Michael Hiller, Klaus-Peter Koepfli, Andreas R. Pfenning, Huabin Zhao, Diane P. Genereux, Ross Swofford, Katherine S. Pollard, Oliver A. Ryder, Martin T. Nweeia, Kerstin Lindblad-Toh, Emma C. Teeling, Elinor K. Karlsson and Harris A. Lewin.

bioRxiv. posted 18 April 2020, 10.1101/2020.04.16.045302

Remember: there are multiple factors that cause disease in an individual (or species) besides ACE2 homogeneity. There may be other receptor types, yet to be identified, that also allow for infection and subsequent disease. Continued research is needed to understand how SARS CoV-2 may impact non-domestic species in human care.

Additional Resources

- Path Forward: Navigating the Return to Work This webinar series from the US
 Chamber of Commerce Foundation airs twice weekly and addresses issues that
 businesses need to consider when developing a re-opening strategy.
 - Recordings of past sessions are available <u>here</u>.
 - Register for upcoming sessions here.
- <u>Psychological First Aid: Addressing Mental Health Distress During Disasters</u> -A recording of this webinar presented by the CDC's Emergency Partners Information Connection (EPIC) is available at the link above, along with slides and additional resources.

Planning for Future Disasters

During this difficult time it is more critical than ever facilities continue planning for other

disasters that may occur.

While most zoos and aquariums are currently closed to the public, personnel shortages may have made it necessary for staff members to take on new duties. Given the increased stress of this pandemic and shifting responsibilities, staff may be less familiar with the safety and response protocols for the areas they are currently working in. Further, due to the widespread impacts of COVID-19, organizations and vendors that would typicall assist during a response may have limited capacity to do so.

Click here to read more

Giving Back During COVID-19: Zoos, Aquariums, and Sanctuaries Support Their Communities

During the course of the COVID-19 pandemic, many zoos, aquariums, and sanctuaries have sought ways to support their local communities.

As the need for **personal protective equipment (PPE), cleaning supplies, and medical equipment** became apparent, multiple facilities contributed portions of their backstock to local medical centers, including N95 masks, gowns, gloves, disinfectants, and ventilators.

- Akron Zoo, OH donated 1400 N95 masks to their local emergency management agency and is exploring modifications to their large animal ventilator with appropriate experts for possible use by the human medical community. (4/2/2020)
- Binder Park Zoo, MI donated a variety of medical supplies to their local hospital (4/6/2020)
- Performing Animal Welfare Society (PAWS), CA donated PPE to their local medical center. (4/9/2020)
- Sierra Safari Zoo, NV donated 1400 N95 masks to their local regional medical center. (3/31/2020)

Click here to read more

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