TESTING ANIMALS FOR SARS-COV-2

April 21, 2020 - A joint statement from the American Veterinary Medical Association (AVMA), American Association of Veterinary Laboratory Diagnosticians (AAVLD), National Association of State Public Health Veterinarians (NASPHV) and National Assembly of State Animal Health Officials (NASAHO)

Routine testing of animals for COVID-19 is NOT recommended by the American Veterinary Medical Association (AVMA), American Association of Veterinary Laboratory Diagnosticians (AAVLD), National Association of State Public Health Veterinarians (NASPHV), or the National Assembly of State Animal Health Officials. Nor is it recommended by key federal agencies, including the CDC and USDA.

Current expert understanding is that SARS-CoV-2 is primarily transmitted person-to-person. There is currently no evidence that animals can transmit this virus to people. In rare instances, people have spread the virus to certain animals, including cats, dogs, and a Malayan tiger.

The clinical picture of SARS-CoV-2 infection in animals is not well described, because there have been so very few cases in animals. Based on what is known from experimentally induced SARS-CoV-2 infections in animals, those few SARS-CoV-2 infections that animals have incidentally acquired from people, and what is known about other coronaviruses (including SARS-CoV-1), animals may present with a combination of fever, lethargy, and clinical signs of respiratory (e.g., coughing, difficulty breathing or shortness of breath, nasal discharge) and/or gastrointestinal (e.g., vomiting, diarrhea) illness. These clinical signs are not unique to SARS-CoV-2 and, as such, veterinarians are strongly encouraged to rule out more common causes for these clinical signs in animals before considering testing for SARS-CoV-2. The CDC, USDA, and other federal partners have created guidance, including a table of epidemiological risk factors and clinical features for SARS-CoV-2 in animals to help guide decisions regarding animal testing.

Discussion among key regulatory authorities and animal health experts (USDA, CDC, FDA, NASPHV, NASAHO, AVMA) indicates that testing may be justified for certain animals in the following situations:

- Animal has clinical signs consistent with SARS-CoV-2, more common causes of the patient’s clinical signs have been ruled out, and the animal has a history of
  - Close contact with a person with suspected or confirmed COVID-19, or
  - Exposure to a known high-risk environment where a human outbreak occurred, such as a residence, facility (e.g., nursing home, prison), or cruise ship
  - Atypical patterns of disease suggesting a novel pathogen in a mass care situation (e.g., animal shelter, boarding facility, animal feeding operation, zoo) where exposure history is not known (appropriate diagnostics should be undertaken first to rule out more common causes of illness)
  - Threatened, endangered, or otherwise imperiled/rare animals in rehabilitation or zoological settings that have clinical signs or are asymptomatic and have possible exposure to SARS-CoV-2 through an infected person or animal
  - Atypical pattern of disease suggesting infection with SARS-CoV-2 in recently imported animals (appropriate diagnostics should be undertaken first to rule out more common causes of illness)
  - Testing is part of an approved research project gathering scientific information to better understand if and how animals might be affected by SARS-CoV-2 and help clarify the role, if any, of animals in human COVID-19. Approved animal care and use and biosafety protocols are required.

The decision to test an animal should be made collaboratively between the attending veterinarian and local, state, and/or federal public health and animal health officials after careful consideration of this guidance as provided.

If it is determined that testing an animal for SARS-CoV-2 is appropriate, it will be necessary to coordinate that testing with these individuals. Please refer to USDA’s frequently asked questions for sample collection, transport, storage, and reporting.
of results. If samples are sent to state animal health, university, or private laboratories for initial testing, all samples should be collected by a licensed and, preferably, USDA-accredited veterinarian and in duplicate because positive samples must be confirmed through additional testing by the USDA National Veterinary Services Laboratories (NVSL). The USDA is responsible for reporting any animal that tests positive for SARS-CoV-2 in the United States to the World Organisation for Animal Health (OIE).

Again, routine testing of animals for SARS-CoV-2 is NOT recommended. Purpose for testing (which is a key consideration when establishing objectives for the sensitivity and specificity of a diagnostic test) has not been established for SARS-CoV-2 testing in animals. In addition, limited resources are available to maintain core animal health functions and capacities for ongoing animal health emergencies while officials are also assisting colleagues working to respond to the COVID-19 pandemic in people. As such, testing of animals in large numbers may compete for, and diminish, resources available for responding to human needs and may cause harm to the welfare of animals, especially pets (potential relinquishment, abandonment, or euthanasia). As previously mentioned, COVID-19 is an OIE notifiable disease and presumptive positive results require confirmation by the USDA NVSL. Confirmatory testing through the USDA NVSL is not currently available for non-mammalian animals, including reptiles, amphibians, birds, or fish.

Answers to frequently asked questions about animal testing are available from USDA (state public and animal health officials and pet owners), CDC, and AVMA (veterinarians and pet owners). Different states may also have different requirements for testing and collaborating with and reporting to public health and animal health officials.