



Coronavirus Disease 2019 (COVID-19)

Evaluation for SARS-CoV-2 Testing in Animals

Note: The scientific name of the new strain of coronavirus is SARS-CoV-2. In people, the disease caused by the virus is called Coronavirus Disease 2019, or COVID-19. Because we are addressing the virus itself in the context of animal health, we refer to it as SARS-CoV-2.

This guidance was collaboratively developed by CDC, USDA, and other federal agencies using a One Health approach. It may be adapted by state and local health departments to respond to rapidly changing local circumstances.



Key Points

- 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.

Who this guidance is for: This guidance was developed for use by state public health veterinarians and state animal health officials.

Purpose: This guidance is intended to guide decisions and help prioritize situations that may warrant SARS-CoV-2 testing in mammalian animal species given limited resources.

The decision to test an animal (including companion animals, livestock, and wild or zoo animals) should be made collaboratively using a One Health approach between local, state, and/or federal public health and animal health officials. Animal testing for SARS-CoV-2 is available if public health and animal health officials agree the animal's case merits testing. [Table 1](#) (below) is not intended to be prescriptive, but is rather intended to help guide priorities given limited resources. [Routine testing of animals for COVID-19 is not recommended](#). Confirmatory testing through USDA's National Veterinary Services Laboratories (NVSL) is not currently available for non-mammalian animals including reptiles, amphibians, birds, or fish.

Currently, there is no evidence that animals can transmit this virus to people. In some rare situations, people have spread this virus to certain types of animals. Veterinarians are strongly encouraged to rule out other, more common causes of illness in animals before SARS-CoV-2 testing. To discuss testing an animal for SARS-CoV-2 in certain circumstances, veterinarians should contact their [state public health veterinarian](#)  ¹ (or designated state official responsible for animal-related issues in public health) and/or their [state animal health official](#)  ².

Limited information is currently available to characterize SARS-CoV-2 infection in animals; please visit [CDC's COVID-19 and Animals page](#) for the most up-to-date information. Clinical criteria for considering testing for SARS-CoV-2 in animals is based on what is currently known about SARS-CoV-2 and COVID-19 and is subject to change as additional information becomes available.

Human patients with COVID-19 have [symptoms](#) that appear 2-14 days after exposure and include fever, cough, and shortness of breath. The clinical spectrum of SARS-CoV-2 infection in animals is currently unknown, but animals may present with a combination of respiratory symptoms or gastrointestinal illness based on presentation in a small number of animals and what is known about other coronaviruses including SARS-CoV-1³. Veterinarians should use their best judgment to determine if an animal has been exposed to people with suspected or confirmed COVID-19 and if the animal has clinical signs compatible with SARS-CoV-2 infection³. [Table 1](#) describes epidemiological risk factors and clinical features that can help guide decisions regarding animal testing.



If public health and animal health² officials determine that testing an animal for SARS-CoV-2 is appropriate, coordination between One Health partners will be needed. Please refer to [USDA's FAQs](#)  for sample collection, transport, storage, and result reporting. If samples are sent to state animal health, university, or private laboratories for initial testing, all samples should be collected in duplicate because any positive samples must be confirmed through additional testing by NVSL. 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 \(OIE\)](#) .

Table 1: Criteria to Guide Evaluation and Laboratory Testing for SARS-CoV-2 in Animals

Criteria	Epidemiological Risk		Clinical Features
A	Animal with history of close contact ⁴ with a person with suspected or confirmed COVID-19.	AND	Animal has clinical signs of a new, concerning illness ³ that is suspicious of an infectious disease.
B	Animal with exposure to a known high-risk environment (i.e., where a human outbreak occurred), such as a residence, facility, or vessel (e.g. nursing home, prison, cruise ship).		
C	Threatened, endangered or otherwise imperiled/rare animal ⁵ in a rehabilitation or zoological facility with possible exposure to SARS-CoV-2 through an infected person or animal.	AND	Animal is asymptomatic; OR Animal has clinical signs of a new, concerning illness ³ that is suspicious of an infectious disease.
D	Animals in a mass care or group setting (e.g., animal shelter, boarding facility, animal feeding operation, zoo) including companion animals, livestock, and other species, where their exposure history to people with COVID-19 is unknown.	AND	A cluster of animals show clinical signs of a new, concerning illness ³ that is suspicious of an infectious disease.



Footnotes

NOTE: Veterinarians are strongly encouraged to rule out other, more common causes of illness in animals before SARS-CoV-2 testing.

¹ Some jurisdictions do not have state public health veterinarians, or geographic, resource, or time limitations may prevent a state public health veterinarian from managing a situation involving an animal.

² State animal health officials should contact state wildlife officials for decisions concerning non-captive wildlife.

³ Although the clinical spectrum of illness for this virus remains largely undefined in animals, clinical signs more likely to be compatible with SARS-CoV-2 infection in mammalian animals may include a combination of the following:

- Fever
- Coughing
- Difficulty breathing or shortness of breath
- Lethargy
- Sneezing
- Nasal discharge
- Ocular discharge
- Vomiting
- Diarrhea

⁴ Close contact is defined as:

- Being within approximately 6 feet (2 meters) of a person with suspected or confirmed COVID-19 for a prolonged period of time; close contact can occur while an animal is living with, being petted, snuggled, giving kisses or licks, and/or sharing food or bedding with a person.
- Having direct contact with infectious secretions from a person with suspected or confirmed COVID-19 (e.g., being coughed on, consuming food or objects contaminated with a human patient's mucous or saliva).

⁵ The International Union for the Conservation of Nature (IUCN) governs an assessment of the status of species ranging from "critically endangered" to "least concern": <https://www.iucnredlist.org/> 

Page last reviewed: May 15, 2020

Content source: [National Center for Immunization and Respiratory Diseases \(NCIRD\), Division of Viral Diseases](#)