

COVID-19 Investigations of Big Cats at Zoos and Sanctuaries

Background

In the United States, several big cats, including tigers, lions, snow leopards, and cougars, have become infected with SARS-CoV-2 (the virus that causes COVID-19 in people) in zoos and sanctuaries after being exposed to people with COVID-19. Investigating these instances can help experts understand why and how these big cats are becoming infected. This will help experts to set up prevention and control measures to protect the health and safety of these cats and their caretakers.

Purpose of this fact sheet

This fact sheet is intended for owners and operators of sanctuaries and zoos with big cats. Its purpose is to provide information about SARS-CoV-2 outbreak investigations including who to contact, and how to participate if big cats are affected by SARS-CoV-2 at your facility.



Purpose of an investigation

Outbreak investigations of big cats with SARS-CoV-2 involves a remote or in-person consultation by health officials to determine how and why big cats became infected. An investigation helps caretakers, scientists, and health officials better understand how the virus spread between people and animals and the best ways to prevent exposure and spread. This knowledge is critical in protecting the health and welfare of the animals and animal care staff who may have close contact with the animals.

Reporting animals with SARS-CoV-2 to state health officials also helps your veterinarians and animal care staff take steps to prevent more animals becoming infected, which might be beneficial to animal care and welfare at your facility.

By participating in these investigations, you are helping to protect your big cats and contributing to knowledge that can help protect big cats in other facilities.

How investigation helps protect your facility and others

Outbreak investigations of big cats at zoos or sanctuaries help to:

- Take action to prevent further spread at the facility and prevent future cases from occurring.
- Understand how and why these infections happened.
- Guide the care for sick animals
- Determine if infected animals are able to spread the virus to animal care staff.
- Protect the health of animals at all zoos and sanctuaries housing big cats.

Understanding the actions you might be asked to take during an investigation:

- Follow guidance from state health officials on whether animal testing and investigation are warranted.
 - In general, testing is recommended when:
 - Animals have clinical signs suspicious of SARS-CoV-2
 - » These clinical signs include fever, coughing, trouble breathing or shortness of breath, lethargy, sneezing, nasal discharge, eye discharge, vomiting, and diarrhea.

AND

- Animals have been exposed to person(s) with COVID-19 (based on SARS-CoV-2 positive test).



cdc.gov/coronavirus

- Tell health officials in your state when you think or know big cats at your facility are infected with SARS-CoV-2. Health officials to notify include:

- [State Public Health Veterinarians](#)
- [State Animal Health Officials](#)

- Allow experienced health investigators to interview animal care staff and volunteers to understand as follows: a) if they have recently felt sick or tested positive for COVID-19; and b) their duties and activities at the facility. These interviews will help determine how the animals may have been exposed to SARS-CoV-2.

- The information collected will be used to help develop procedures to prevent future spread of the virus; it is not intended to find fault in practices or behaviors.

- Allow animal care staff and volunteers to be tested for COVID-19 to help determine how the animals might have been exposed to the virus. Information on staff or caretaker identities and test results will be kept confidential.
- Help investigators collect appropriate samples from animals at the facility. Testing these samples will show how many animals might have been infected with the virus.
 - Fecal samples are easy to collect and can tell us if the animal is currently infected.
 - Nasal and oral swabs and blood samples are helpful to collect if there are already plans to sedate animals for other procedures, or if animals are trained to tolerate sampling while they are awake. Like fecal samples, nasal and oral swabs samples can tell us if the animal is currently infected, while blood samples can be used to detect antibodies from a past infection.
 - Environmental swabs from the animals' habitats and other areas might also be collected to determine if there is potential contamination of the virus.
- Work with investigators to develop or implement quarantine or isolation plans, as well as any additional action plans needed (for example, procedures for treating and feeding sick animals, protocols to clean enclosures) to prevent further spread at the facility.
- You might be asked to help with an on-site investigation to help health officials better understand current facility operations and practices that can be changed to protect animals and their caretakers.



Understanding the actions health officials will take in an investigation:

- Keep information on staff or caretaker identities and test results confidential both during and after the investigation.
- Partner with you to reduce disruptions or impacts to daily facility operations.
- If requested, provide facility staff with infection prevention training and resources, as well as instruction on how to safely use personal protective equipment.
- More information about investigations can be found at [One Health Toolkit for Health Officials Managing Companion Animals with SARS-CoV-2](#).

For more information about this disease in animals see:

[COVID-19 and Animals](https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/animals.html) (https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/animals.html) and [Cases of SARS-CoV-2 in Animals in the United States](https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/sa_one_health/sars-cov-2-animals-us) (https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/sa_one_health/sars-cov-2-animals-us)