

SARS-CoV-2 at the Zoo: A National Picture of What we Have Learned About SARS-CoV-2 in Zoo Animals

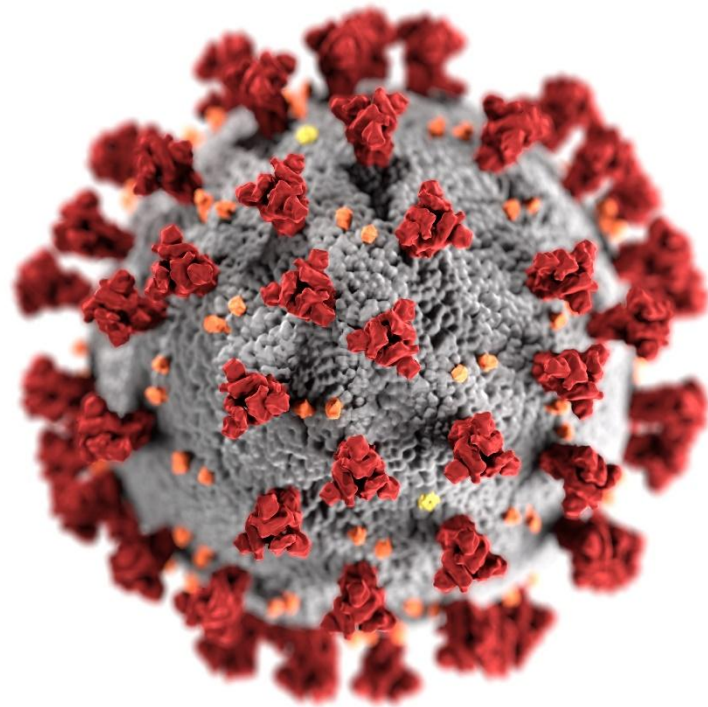
Ria Ghai, MSc PhD

Doctoral Epidemiologist

One Health Office

National Centers for Emerging and Zoonotic Infectious
Diseases

U.S. Centers for Disease Control and Prevention



cdc.gov/coronavirus



Zoos provide opportunities for education, they support conservation, protect endangered species, and aid in animal research

Zoo Species Known to be Susceptible to SARS-CoV-2





Louisville Zoo Female Snow Leopard Tests Positive for SARS-CoV-2

Great Cats Tested Presumptive Positive For COVID-19 at the Smithsonian's National Zoo

Sep. 17, 2021



Asian Small-Clawed Otters at Georgia Aquarium Test Positive for COVID-19



The otters showed respiratory symptoms but are improving

Two spotted hyenas at the Denver Zoo are the first known to have Covid-19.



Ngozi, 22, is one of two hyenas at the Denver Zoo among the first in the world to have tested positive for the coronavirus, according to officials. Denver Zoo



Winston, an elderly silverback gorilla, is one of eight gorillas that have recovered from Covid-19 at the San Diego Zoo Safari Park.

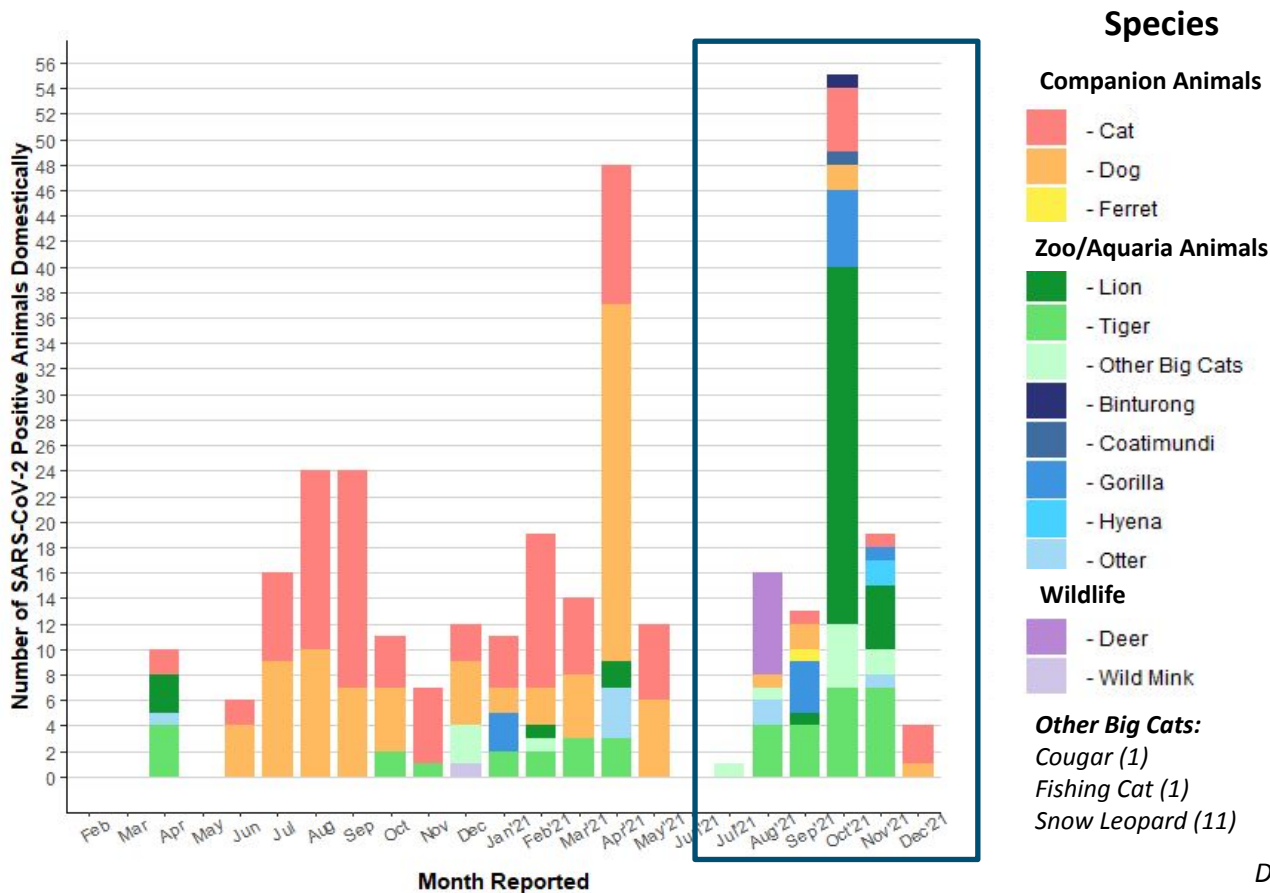


October 14, 2021

Denver Zoo's Tigers Test Positive for COVID-19

November 3 Update: Nikita and Yuri have received three consecutive negative tests, and are considered fully recovered from COVID-19. Keepers say both tigers are doing well and are no longer showing any symptoms, and have good appetites.

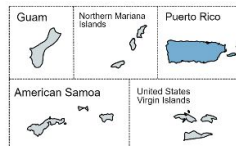
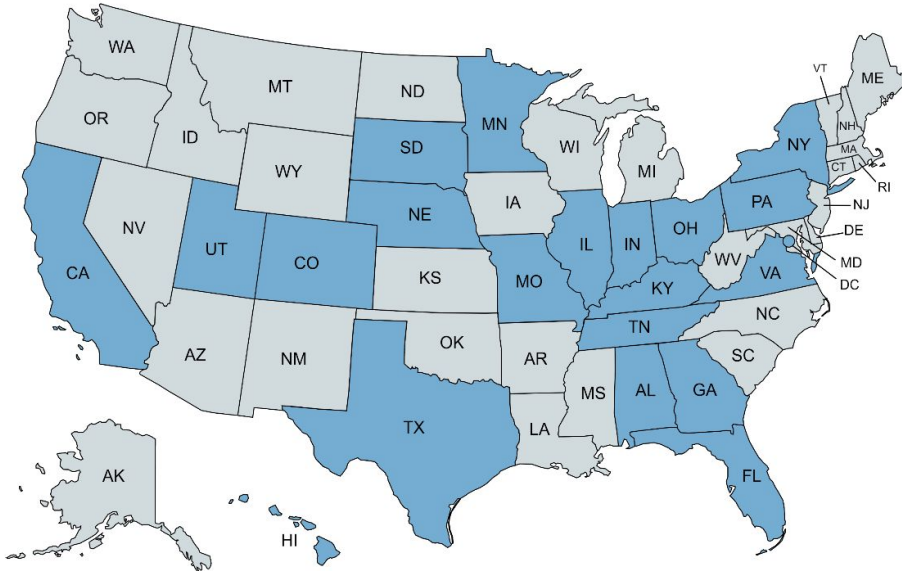
Animals Reported Positive for SARS-CoV-2 in the United States, 2020-2021



Data as of December 7, 2021

States with Zoos Reporting Animal SARS-CoV-2 Cases

120 animal cases reported
from 32 zoos in 22 states




Data as of November 30, 2021

Felidae:

 = 40


 = 41

 = 11

 = 1

 = 1

Homonidae

 = 14

Hyenidae:

 = 2

Mustelidae:

 = 8

Procyonidae:

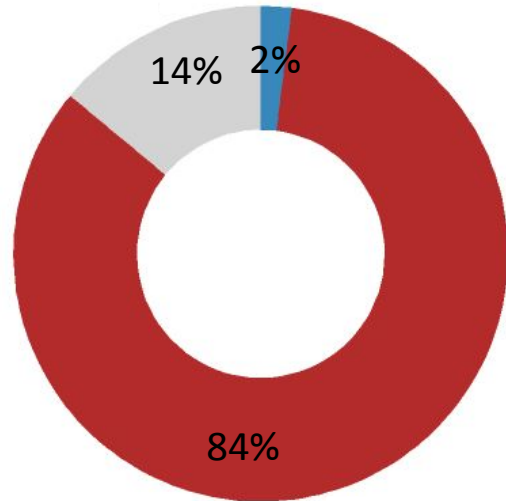
 = 1

Viverridae:

 = 1

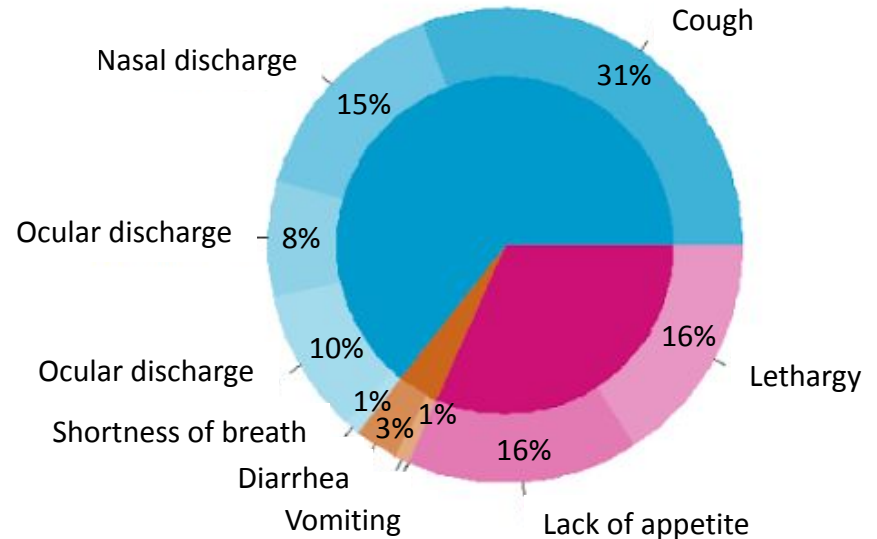
Clinical Signs: 84% of Zoo Animals with SARS-CoV-2

Percent Reporting Clinical Signs



- Asymptomatic
- Symptomatic
- Unknown

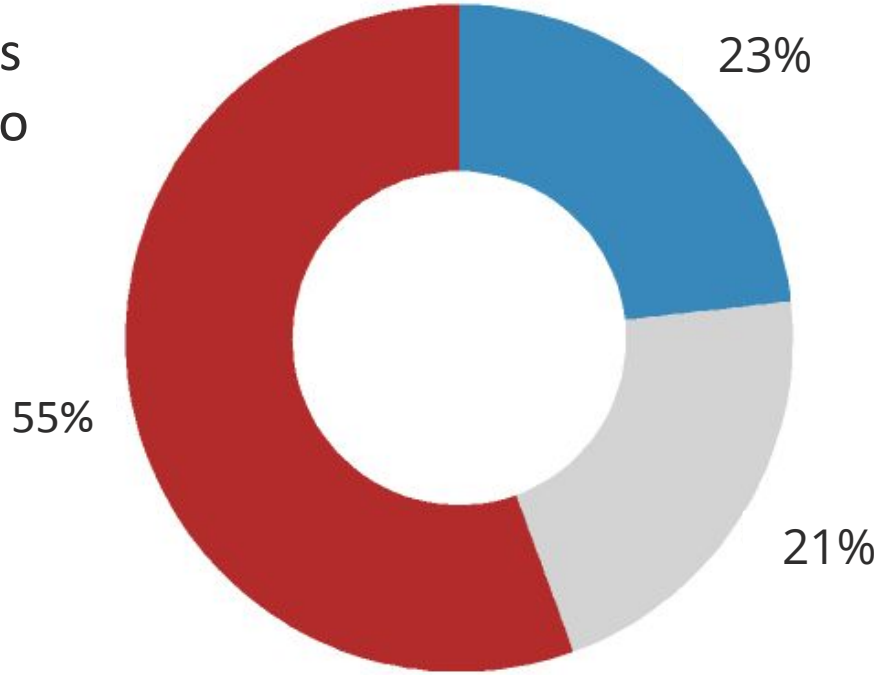
Breakdown of Clinical Signs



- Respiratory
- Gastrointestinal
- Non-specific

How are Zoo Animals Becoming Infected with SARS-CoV-2?

55% of Zoo Animal Cases had a known exposure to a person with COVID-19



- No known exposure
- Known exposure
- Unknown

Summary and Webinar Purpose

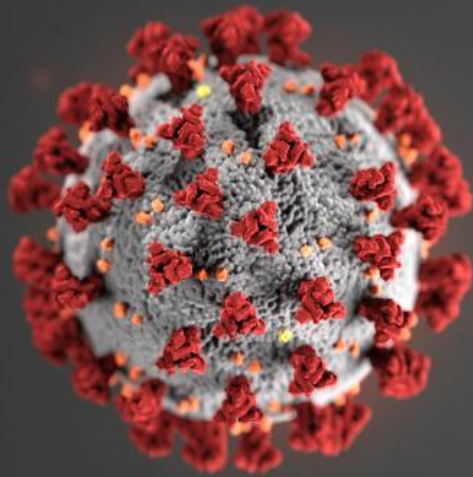
COVID-19 Mitigation Strategies at Zoos:

- Increased biosafety/biosecurity around susceptible species
- Masks (visitors, staff/volunteers)
- PPE (staff/volunteers)
- Vaccination (people, animals)
- Other

Ongoing Concerns:

- Transmission
 - Inter-species transmission
 - Animal-to-human transmission
- Vaccine breakthroughs (people and animals)
- Variants
 - Increased transmissibility
 - Increased diseases severity





THANK YOU

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

Mention of any company or product does not constitute
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The findings and conclusions in this report are those of the authors and do not necessarily represent the
official position of the Centers for Disease Control and Prevention.

