

## Coronavirus Disease 2019 (COVID-19)

## COVID-19 and Animals

Updated June 22, 2020

#### What you need to know

- We do not know the exact source of the current outbreak of coronavirus disease 2019 (COVID-19), but we know that it originally came from an animal, likely a bat.
- At this time, there is no evidence that animals play a significant role in spreading the virus that causes COVID-19.
- Based on the limited information available to date, the risk of animals spreading COVID-19 to people is considered to be low.
- More studies are needed to understand if and how different animals could be affected by COVID-19.
- We are still learning about this virus, but it appears that it can spread from people to animals in some situations.

For more information, see COVID-19 and Animals Frequently Asked Questions. For information on pets, see If You Have Pets.

Coronaviruses are a large family of viruses. Some coronaviruses cause cold-like illnesses in people, while others cause illness in certain types of animals, such as cattle, camels, and bats. Some coronaviruses, such as canine and feline coronaviruses, infect only animals and do not infect humans.

# Risk of animals spreading the virus that causes COVID-19 to people

Some coronaviruses that infect animals can be spread to humans and then spread between people, but this is rare. This is what happened with the virus that caused the current outbreak of COVID-19, with the virus likely originating in bats. The first reported infections were linked to a live animal market, but the virus is now spreading from person to person.

The virus that causes COVID-19 spreads mainly from person to person through respiratory droplets from coughing, sneezing, and talking. Recent studies show that people who are infected but do not have symptoms likely also play a role in the spread of COVID-19. At this time, there is no evidence that animals play a significant role in spreading the virus that causes COVID-19. Based on the limited information available to date, the risk of animals spreading COVID-19 to people is considered to be low. More studies are needed to understand if and how different animals could be affected by COVID-19.

## Risk of people spreading the virus that causes COVID-19 to animals

We are still learning about this virus, but it appears that it can spread from people to animals in some situations, especially after close contact with a person sick with COVID-19.

For information on how to protect pets from possible infection with SARS-CoV-2, see If You Have Pets.

# Animals that can be infected with the virus that causes COVID-19



The first US case of an animal testing positive for COVID-19 was a tiger at a NY zoo.

We know that cats, dogs, and a

few other types of animals can be infected with SARS-CoV-2, the virus that causes COVID-19, but we don't yet know all of the animals that can get infected. There have been reports of animals being infected with the virus worldwide.

- A small number of pet cats and dogs have been reported to be infected with the virus in several countries, including the United States. Most of these pets became sick after contact with people with COVID-19.
- Several lions and tigers at a New York zoo tested positive for SARS-CoV-2 after showing signs of respiratory illness. Public health officials believe these large cats became sick after being exposed to a zoo employee who was infected with SARS-CoV-2. All of these large cats have fully recovered.
- SARS-CoV-2 was recently discovered in mink (which are closely related to ferrets) on multiple farms in the
  Netherlands. The mink showed respiratory and gastrointestinal signs; the farms also experienced an increase in
  mink deaths. Because some workers on these farms had symptoms of COVID-19, it is likely that infected farm
  workers were the source of the mink infections. Some farm cats on several mink farms also developed antibodies to
  this virus, suggesting they had been exposed to the virus at some point. Officials in the Netherlands are investigating
  the connections between the health of people and animals as well as the environment on these mink farms.

CDC, USDA, and state public health and animal health officials are working in some states to conduct active surveillance of SARS-CoV-2 in pets, including cats, dogs, and other small mammals, that had contact with a person with COVID-19. These animals are being tested for SARS-CoV-2 infection and also tested to see whether the pet develops antibodies to this virus. This work is being done to help us better understand how common SARS-CoV-2 infection might be in pets as well as the possible role of pets in the spread of this virus.

The U.S. Department of Agriculture (USDA) maintains a list \(\textstyle{\textstyle{\textstyle{1}}}\) of all animals with confirmed infections with SARS-CoV-2 in the United States.

## Research on animals and COVID-19

Research on SARS-Cov-2 in animals is limited, but studies are underway to learn more about how this virus can affect different animals.

- Recent research shows that ferrets, cats, and golden Syrian hamsters can be experimentally infected with the virus and can spread the infection to other animals of the same species in laboratory settings.
- A number of studies have investigated non-human primates as models for human infection. Rhesus macaques, cynomolgus macaques, African green monkeys, and common marmosets can become infected SARS-CoV-2 and become sick in a laboratory setting.
- Mice, pigs, chickens, and ducks do not seem to become infected or spread the infection based on results from these studies.
- Data from one study suggest some dogs can get infected but might not spread the virus to other dogs as easily compared to cats and ferrets, which can easily spread the virus to other animals of the same species

These findings were based on a small number of animals, and do not show whether animals can spread infection to people. More studies are needed to understand if and how different animals could be affected by COVID-19.

### Guidance and recommendations

- Interim Guidance for Public Health Professionals Managing People with COVID-19 in Home Care and Isolation Who Have Pets or Other Animals
- Interim recommendations for intake of companion animals from households where humans with COVID-19 are present 
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- Interim Infection Prevention and Control Guidance for Veterinary Clinics
- Evaluation for SARS-CoV-2 Testing in Animals
- Interim Guidance for SARS-CoV-2 Testing in North American Wildlife
- Toolkit: One Health Approach to Address Companion Animals with SARS-CoV-2

More Information
COVID-19 and Animals FAQs
COVID-19 and Pets
Information on Bringing an Animal into the United States
World Organisation for Animal Health: Q&As on COVID-19 ☑
USDA: Confirmed cases of SARS-CoV-2 in Animals in the United States ☑
USDA: Coronavirus Disease 2019 🖸
FDA: Coronavirus Disease 2019 🖸

#### Media Announcements

- Confirmation of COVID-19 in Pet Dog in New York ☑
- Confirmation of COVID-19 in Two Pet Cats in New York
- USDA Statement on the Confirmation of COVID-19 Infection in a Tiger in New York 🖸

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