Animals and COVID-19

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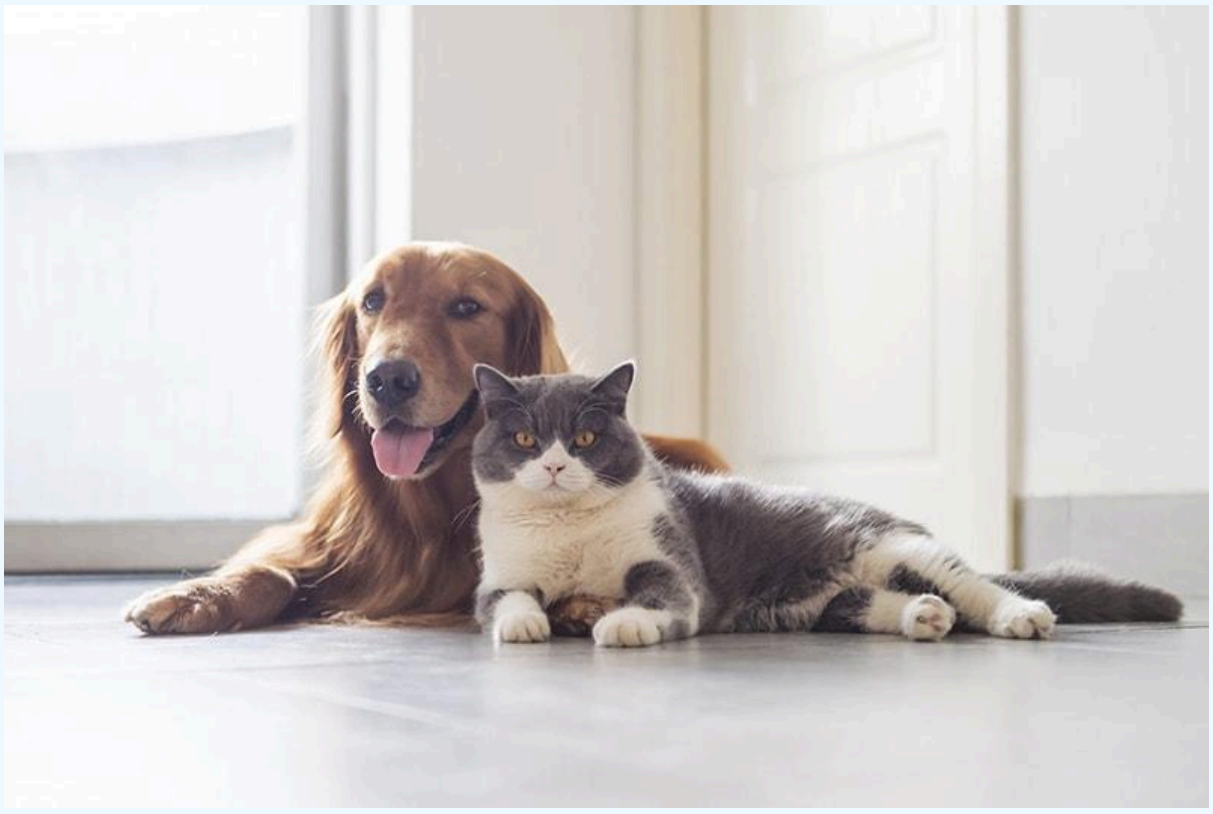
What You Need to Know

- The risk of animals spreading SARS-CoV-2, the virus that causes COVID-19, to people is low.
- The virus can spread from people to animals during close contact.
- More studies and surveillance are needed to understand how SARS-CoV-2 is spread between people and animals.
- People with suspected or confirmed COVID-19 should avoid contact with animals, including pets, livestock, and wildlife.

For Pet Owners, Veterinarians, & Public Health Officials



- Pet Owners and Others Handling Animals
- One Health Toolkit for Health Officials Managing Companion Animals with SARS-CoV-2

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 people. Some coronaviruses that infect animals can be spread to people and then spread between people, but this is rare. This is what happened with SARS-CoV-2, which likely originated in bats.

Risk of people spreading SARS-CoV-2 to animals

People can spread SARS-CoV-2 to animals, especially during close contact.

Animals infected with SARS-CoV-2 have been documented around the world. Most of these animals became infected after contact with people with COVID-19, including owners, caretakers, or others who were in close contact. We don't yet know all of the animals that can get infected. Animals reported infected worldwide include

- Companion animals, including pet cats, dogs, hamsters, and ferrets.
- Animals in zoos and sanctuaries, including several types of big cats (e.g., lions, tigers, snow leopards), otters, non-human primates, a binturong, a coatimundi, a fishing cat, hyenas, hippopotamuses, and manatees.
- Mink on mink farms.
- Wildlife, including white-tailed deer, mule deer, a black-tailed marmoset, a giant anteater, and wild mink near mink farms.

For information on how to protect pets and animals, visit

- What You Should Know about COVID-19 and Pets
- Companion Animals with COVID-19: Toolkit for Health Officials
- Reducing Risk of Spreading COVID-19 between People and Wildlife

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Risk of animals spreading SARS-CoV-2 to people

The risk of animals spreading COVID-19 to people is considered low.

There is no evidence that animals play a significant role in spreading SARS-CoV-2, the virus that causes COVID-19, to people. There have been a few reports of infected mammalian animals spreading the virus to people during close contact, but this is rare. These cases include farmed mink in Europe and the United States, white-tailed deer in Canada, pet hamsters in Hong Kong, and a cat in Thailand. In most of these cases, the animals were known to be first infected by a person who had COVID-19.

It's important to remember that people are much more likely to get COVID-19 from other people than from animals. There is no need to euthanize or otherwise harm animals infected with SARS-CoV-2.

There is a possibility that the virus could infect animals, mutate, and a new strain could spread back to people and then among people (called spillback). More studies and surveillance are needed to track variants and mutations and to understand how SARS-CoV-2 spreads between people and animals.

Mink and SARS-CoV-2

SARS-CoV-2 has been reported in farmed mink in multiple countries. Currently, there is no evidence that mink are playing a significant role in the spread of COVID-19 to people.

In the United States, respiratory disease and increases in mink deaths have been seen on most affected mink farms. However, some infected mink might also appear healthy. Infected workers likely introduced SARS-CoV-2 to mink on the farms, and the virus then began to spread among the mink. Once the virus is introduced on a farm, spread can occur between mink, as well as from mink to other animals on the farm

(dogs, cats). One wild mink and a small number of escaped farm mink trapped near affected farms in Utah and Oregon were found to be infected with SARS-CoV-2.

Although there is no evidence that mink are playing a significant role in the spread of SARS-CoV-2 to people, there is a possibility of mink spreading SARS-CoV-2 to people and other animals on mink farms. Mink-to-human spread of SARS-CoV-2 has been reported in the Netherlands, Denmark, and Poland, and data suggest it might have occurred in the United States.

- Investigations found that mink from a Michigan farm and a small number of people were infected with SARS-CoV-2 that contained unique mink-related mutations (changes in the virus's genetic material). This suggests mink-to-human spread might have occurred.
- Finding these mutations in mink on the Michigan farm is not unexpected because they have been seen before in mink from farms in the Netherlands and Denmark, and also in people linked to mink farms worldwide.
- To confirm the spread of SARS-CoV-2 from mink to people, public health officials would need more information on the epidemiology and genetics of the virus in mink, mink farm workers, and the communities around mink farms.
- These results highlight the importance of routinely studying the genetic material of SARS-CoV-2 in susceptible animal populations like mink, as well as in people.

Guidance is available to protect worker and animal health, developed collaboratively by the U.S. Department of Agriculture (USDA), CDC, and state animal and public health partners using a One Health approach:

Prevent Introduction of SARS-CoV-2 on Mink Farms: Interim SARS-CoV-2 Guidance and Recommendations for Farmed Mink and Other Mustelids

Response and Containment Guidelines: Interim Guidance for Animal Health and Public Health Officials Managing Farmed Mink and other Farmed Mustelids with SARS-CoV-2

USDA maintains a list external icon of all animals and mink farms in the United States with SARS-CoV-2 infections confirmed by their National Veterinary Services Laboratories.

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Research on animals and COVID-19

More studies and surveillance are needed to understand if and how different animals could be affected by COVID-19.

Many studies have been done to learn more about how this virus can affect different animals, including if they are susceptible to infection and if they can spread infection to other animals. Studies on animals do not show whether animals can spread infection to people.

Based on these studies, we know that invertebrates, birds, reptiles, and amphibians are not susceptible to infection with SARS-CoV-2.

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What CDC is doing

Since the beginning of the pandemic, CDC has been leading efforts to improve our understanding of how SARS-CoV-2 affects animals and how the virus might spread between people and animals. CDC has also worked to improve coordination of federal, state, and other One Health partners.

- CDC leads the One Health Federal Interagency COVID-19 Coordination (OH-FICC) Group, which brings together public health, animal health, and environmental health representatives from more than 20 federal agencies to collaborate and exchange information on the One Health aspects of COVID-19. For example, the group researches and develops guidance on the connection between people and pets, wildlife, zoo animals, and livestock; animal diagnostics and testing; and environmental health issues relevant to COVID-19.
- CDC leads the regular State-Federal One Health Update Call to bring local, state, tribal, and territorial partners together with OH-FICC members.
- CDC, USDA, state public health and animal health officials, and academic partners are working in some states to conduct active surveillance (proactive testing) of SARS-CoV-2 in pets, including cats, dogs, and other small mammals, that had contact with a person with COVID-19.
- CDC deployed One Health teams to multiple states to support state and local departments of health and agriculture, federal partners, and others in conducting on-farm investigations into SARS-CoV-2 in people, mink, and other animals (domestic and wildlife). The teams collected samples from animals on the farms and from people working on the farms and in surrounding communities.