

COVID-19, caused by infection with SARS-CoV-2, is a human disease which most likely emerged from an animal source and through widespread human-to-human transmission became a pandemic. As of 28 February 2022, around **450 million** confirmed human cases have been reported worldwide, with more than **6 million** human deaths<sup>1</sup>. The nature of this new zoonotic virus, together with its widespread distribution and the susceptibility of some animal species to infection, manifests in animal infections arising from close contact between people and animals. Conversely, there is also evidence that, for some animal species, close contact with infected animals can represent a potential source of infection in humans<sup>2</sup>. This report is a monthly update of the global situation of the report of SARS-CoV-2 in animals, with a special focus on the new reports submitted to the OIE in the last month.

### Global situation since the beginning of the pandemic

The worldwide geographical distribution of SARS-CoV-2 outbreaks in animals reported to the OIE is shown in Figure 1. The first case of SARS-CoV-2 in animals was officially reported to the OIE by Hong-Kong (SARC) on 29 February 2021 in a dog.

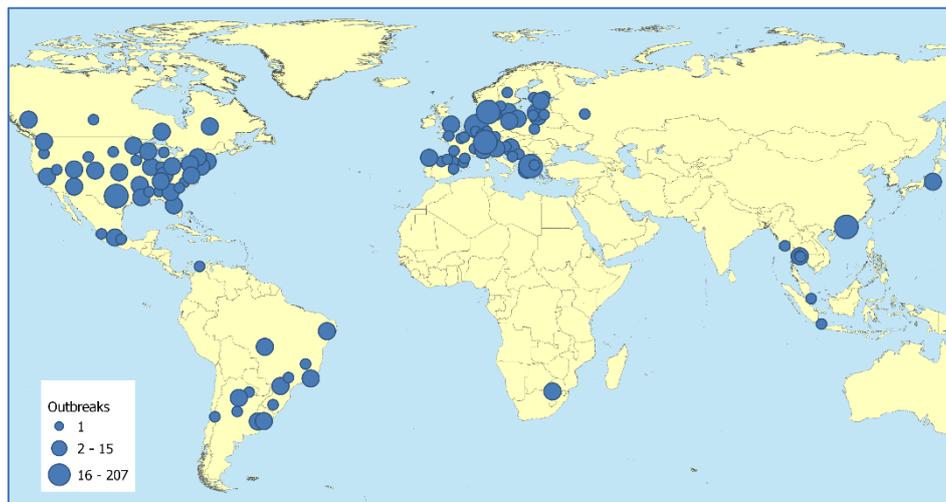


Figure 1. Worldwide distribution of SARS-CoV-2 outbreaks in fifteen animal species reported to the OIE (as of 28 February 2022). Note that dot size on the map is proportional to the number of outbreaks reported.

Table 1 shows the global distribution of animal infections with SARS-CoV-2. Thirty-five countries in the Americas, Africa, Asia, and Europe have reported the occurrence of the disease, in nineteen different animal species (cats, dogs, mink, otter, pet ferrets, lions, tigers, pumas, snow leopards, gorillas, white-tailed deer, fishing cat, Binturong, South American coati, spotted hyena, Eurasian lynx, Canada lynx, hippopotamus, hamster).

Table 1. Number of outbreaks (n=663) reported worldwide, by species and region (as of 28 February 2022).

Species																				
	Cat	Dog	Mink	Otter	Pet ferret	Lion	Tiger	Puma	Snow leopard	Gorilla	White-tailed deer	Fishing cat	Binturong	Coatimundi	Spotted hyena	Eurasian lynx	Canada lynx	Hippo	Hamster	
Region																				
Africa						Yes		Yes												
Americas	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes			
Asia	Yes	Yes				Yes	Yes													Yes
Europe	Yes	Yes	Yes		Yes	Yes	Yes									Yes		Yes		

<sup>1</sup> <https://coronavirus.jhu.edu/map.html>

<sup>2</sup> [https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2020.25.23.2001005#html\\_fulltext](https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2020.25.23.2001005#html_fulltext)

### Update during last month (01/02/2022 - 28/02/2022)

During the last month **25 outbreaks** have been reported or updated by **6 countries (Canada, Finland, Hong Kong, Italy, Lithuania, and Switzerland)** in **3 animal species** (American mink, cat, dog). The recent distribution of outbreaks is reported in Figure 2.



Figure 2. Worldwide recent distribution of SARS-CoV-2 outbreaks reported to the OIE (01/02/2022 - 28/02/2022).

## EPIDEMIOLOGICAL COMMENTS

### Summary of the global situation and recommendations

While the main driver of community and international spread in the current pandemic is human to human transmission, animal cases of infection with SARS-CoV-2, though still only occasional occurrences, continue to rise. Currently, **663 outbreaks** in animals have been reported globally, affecting **19 species** in **35 countries**. Some countries have experienced a high prevalence of outbreaks in mink farms, and variant strains have now been identified in mustelids. As infection with SARS-CoV-2 is an emerging disease, the OIE strongly encourages Members to report through WAHIS the occurrence of any cases in animals that comply with the case definition provided in the OIE guidelines<sup>3</sup>.

### Relevant changes in disease situation during the period:

- SARS-CoV-2 was reported through **1** Follow-up report by **Canada** in **American minks**
- SARS-CoV-2 was reported through **1** Follow-up report by **Finland** in **a dog**
- SARS-CoV-2 was reported through **1** Immediate notification by **Hong Kong** in **cats**
- SARS-CoV-2 was reported through **1** Follow-up report by **Italy** in **cats**
- SARS-CoV-2 was reported through **1** Follow-up report by **Lithuania** in **American minks**
- SARS-CoV-2 was reported through **1** Follow-up reports by **Switzerland** in **cats** and **dogs**

### Relevant epidemiological comments from countries:

- **Hong Kong (cat affected):** “Cats from the same household as a close contact of a confirmed human case of COVID-19 were placed under quarantine on 4 February 2022. Following veterinary examination, samples were taken after the cats' admission to the quarantine facility. The cats have not exhibited any specific clinical signs. Risk management measures are in place for this case, including cleansing and disinfection of the premises, proper personal hygiene and protection. Mammalian pets from household with confirmed human cases or close contacts of such cases will be collected for testing of SARS-CoV-2 as appropriate”.
- **Switzerland (cats and dogs affected):** “These cases were detected in the framework of a research project on pet animals of owners who were infected with SARS-CoV-2. The project is under the responsibility of the Clinical Laboratory of the Vetsuisse Faculty (VSF) of the University of Zurich (UZH). The Swiss government does not recommend currently to test cats

<sup>3</sup> [https://www.oie.int/fileadmin/Home/MM/A\\_Sampling\\_Testing\\_and\\_Reporting\\_of\\_SARS-CoV-2\\_in\\_animals\\_3\\_July\\_2020.pdf](https://www.oie.int/fileadmin/Home/MM/A_Sampling_Testing_and_Reporting_of_SARS-CoV-2_in_animals_3_July_2020.pdf)

*or dogs for SARS-CoV-2 but supports research to increase knowledge in the field. For the time being, COVID-19 continues to be treated as a human disease with the main route of transmission between human beings”.*

*Other relevant information during the period* (OIE documents, relevant news, upcoming webinar or conferences)

- OIE Ad hoc Group on COVID-19 at the Animal-Human Interface - [https://old.oie.int/fileadmin/Home/MM/14th\\_call\\_AHG\\_COVID-19.pdf](https://old.oie.int/fileadmin/Home/MM/14th_call_AHG_COVID-19.pdf)
- [Statement from the Advisory Group on SARS-CoV-2 Evolution in Animals concerning the origins of Omicron variant - OIE - World Organisation for Animal Health](#)
- [8th-call-advisory-group-sars-cov2-evolution-in-animals.pdf \(oie.int\)](#)
- [Susceptibility of wild canids to severe acute respiratory syndrome coronavirus 2 \(SARS-CoV-2\) | bioRxiv](#)
- [Pet rabbits naturally infected with SARS-CoV-2 in France - FluTrackers News and Information](#)
- [SARS-CoV-2-Related Coronaviruses From Bats in Laotian Caves Can Infect Human Cells | Genomeweb](#)