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 31 May **2022**, around **530 million** confirmed human cases have been reported worldwide, with more than **6.3 million** human deaths¹. 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 humans². 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.

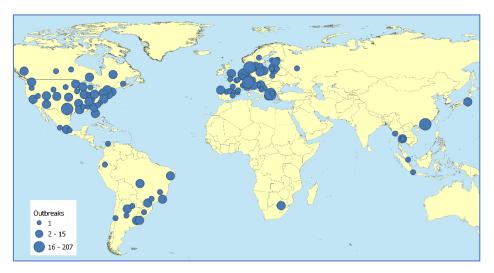


Figure 1. Worldwide distribution of SARS-CoV-2 outbreaks in twenty-three animal species reported to the OIE (as of 31 may 2022).

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 twenty-three 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, mule deer, giant anteater, West Indian manatee, black-tailed marmoset).

Species Region	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	Mule deer	Giant anteater	West Indian	Black-tailed marmoset
Africa						х		Х															
Americas	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		Х			Х	Х	Х	Х
Asia	Х	Х				Х	Х												Х				
Europe	Х	Х	Х		Х	Х	Х									Х		Х					

Table 1. Number of outbreaks (n=676) reported worldwide, by species and region (as of 31 May 2022).

² https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2020.25.23.2001005#html_fulltext



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

Update during last month (01/05/2022 - 31/05/2022)

During the last month **1 outbreaks** have been reported or updated by **1 country (Switzerland)** in **2 animal species** (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 (01/05/2022 - 31/05/2022).

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, **676 outbreaks** in animals have been reported globally, affecting **23 species** in **36 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 guidelines³.

Relevant changes in disease situation during the period:

SARS-CoV-2 was reported through 2 Follow-up report by Switzerland in cats and dogs

Relevant epidemiological comments from countries:

• Switzerland (cats and dogs): "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 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
- 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)
- Alaskan wildlife being tested for SARS-CoV-2 | Outdoors | newsminer.com

³ https://www.oie.int/fileadmin/Home/MM/A Sampling Testing and Reporting of SARS-CoV-2 in animals 3 July 2020.pdf



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