

Urgent opinion 04-2020 of the Scientific Committee established at the FASFC on the zoonotic risk of SARS-CoV2 virus (Covid-19) in pets: infection from man to animals and from animals to man.

Terms of reference

In the context of the pandemic spread of SARS-CoV-2 coronavirus (*Severe Acute Respiratory Syndrome CoronaVirus2*, etiological agent of Covid-19) and in view of detections at the end of March 2020 of two dogs and one cat found positive for SARS-CoV-2 virus using the RT-PCR diagnostic method and which were in close contact with infected human patients, the following question is addressed to the Scientific Committee: what is the zoonotic risk of pets for transmitting infection from animals to man and from man to animals?

On 26/02/2020 a dog was diagnosed positive for the SARS-CoV-2 virus with RT-PCR in Hong Kong. On 18/03/2020 a second dog, still in Hong Kong, was diagnosed positive. Also, on 18/03/2020, the FASFC was informed by the Faculty of Veterinary Medicine of the University of Liège that **viral RNA** of the SARS-CoV-2 virus was detected repeatedly in the feces and vomit of a cat with digestive and respiratory symptoms. The cat was owned by a person infected with SARS-CoV-2 virus. The presence of SARS-CoV-2 virus was confirmed by high throughput sequencing.

At the request of the Scientific Committee Corona virus, which is responsible for the risk assessment and risk management of SARS-CoV-2 virus (Covid-19) together with the Risk Assessment Group and the Risk Management Group for the Belgian Federal State, and which was informed in advance by the FASFC, the risk manager of the FASFC asked the SciCom for urgent advice on the risk of contamination of pets (dogs and cats) by man and, vice versa, of man by pets.

Method

A provisional urgent opinion has been issued on 23 March 2020. It has been updated based on additional knowledge produced in the scientific literature up to 14 April 2020. This risk assessment was carried out as a matter of urgency based on expert opinion. A systematic uncertainty analysis could not be carried out within the set time frame. The risk assessment is qualitative and based on the Risk Assessment Methodology for Animal Diseases of the Scientific Committee (SciCom, 2017).

Conclusion

The Scientific Committee took into account the reported suspicious cases for the detection of SARS-CoV-2 viruses in domestic animals (2 dogs in Hong Kong and 2 cats, 1 in Belgium and 1 in Hong Kong) as well as in a wild felid (Malaysian tiger from the New York Zoo). The Committee took also into account the results of various experimental infections carried out on domestic animals with the SARS-CoV-2 virus as well as a serological study on cats from the city of Wuhan. It was noted that some data however are coming from scientific articles which have not yet been peer-reviewed and therefore likely to evolve.

Considering all information, the Scientific Committee estimates that the transmission of SARS-CoV-2 from humans to animals is possible (in particular for cats, ferrets and golden hamsters but not for dogs) and that the health consequences of an infection are minor for cats and ferrets and marginal for dogs. The risk for animal health, associated with the infection of animals from humans is therefore estimated to be **low**. The Committee proposes risk mitigation options and recommends that veterinary authorities maintain increased vigilance and encourage epidemiological investigations on any new suspected case.

In regard to the risk of infection of humans from animals, the Scientific Committee is not able to estimate the risk given the current lack of sufficient evidence despite the high infection pressure. However, the Scientific Committee considers this risk as **very low as compared to the risk of human infection through the human-to-human transmission route** (under the current infection pressure in humans).

In cases where pet owners have tested positive for SARS-CoV-2 or are suspected to be positive, it is recommended to limit contact between the pet and its owner, as well as with other animals or people during walks. In particular, pet owners and other people who take care of the animal are advised to observe personal hygiene rules after any contact with the animal.

The full text is available on this website in dutch and in french.