

7TH CALL OIE AD HOC GROUP ON COVID-19 AT THE ANIMAL-HUMAN INTERFACE

26th May 2020

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Agenda

1. Update on SARS-CoV-2 'events' in animals
2. Update on animal-human interface related research and animal/wildlife work
3. Update on the work of the AHG on COVID-19 and Safe Trade in Animals and Animal Products
4. AOB

Meeting notes

1. Update on COVID-19 virus 'events' and surveillance in animals

Netherlands: an update on the ongoing outbreak of SARS-CoV-2 infections in mink farms (European mink, *Mustela lutreola*) in the south of the country was provided. At the moment, 4 farms were reported as affected and are under close attention of the Veterinary Authority. The clinical presentation of SARS-CoV-2 infection in minks varies from mild to severe (pneumonia and death). Investigations on the farms were performed, including environmental sampling (including airborne dust) and regular sampling of mink, cats, dogs, and humans living on the farm.

The affected farms had increased mink mortality – most of the dead minks tested positive for SARS-CoV-2. In the first 2 farms that were reported as affected in the beginning of this outbreak, mortality is already decreasing towards normal levels. Virus sequencing has revealed that three of the outbreaks in mink farms are associated with each other. The fourth outbreak appears to result from an independent introduction of virus to the farm. Given the data, on two farms SARS-CoV-2 transmission from mink to humans is likely. This is supported by analysis of the exposure history (human infections 2 weeks after detection in mink) and viral gene sequences. The hypothesis is further supported by detection of virus in airborne dust particles within buildings, suggesting that there is a risk of occupational exposure. The exact route of transmission to humans is not known, but it could result from airborne transmission of virus in the buildings or from handling used animal feed which had been contaminated by the mink. Workers had not been wearing personal protective equipment. All airborne dust samples collected outside of the buildings were negative by RT-PCR for SARS-CoV-2 suggesting that the risk of infection from exposure to airborne virus by people living close to the farms is negligible. Evidence also suggests that there was transmission between mink and from mink to cats and dogs on the farms. The animals on the farms will continue to be monitored and tested, and other mink farms will be screened. Strict biosecurity measures in all mink farms (affected or not) are in place. Notification of infection with SARS-CoV-2 has been made mandatory in the Netherlands.

In conclusion, human exposure and infection on the mink farms is possible. Risk assessment and risk management measures need to consider the risk of introduction of SARS-CoV-2 infection to mink farms; transmission from mink to other animals; transmission of infection to humans; and the establishment of a reservoir of SARS-CoV-2 on mink farms.

Russia: the OIE received an immediate notification from Russia on the 26th of May. It was reported that a 5-year-old cat had tested positive by PCR to SARS-CoV-2. It is expected that details on the clinical presentation and epidemiology of the case will be provided in a follow up report. The cat had been isolated.

2. Update on human-animal interface related research activities and animal/wildlife work

Experimental infection and immunization studies with racoon dogs, hamsters, ferrets, and guinea pigs are ongoing. Similar studies using cattle are expected to start soon.

The results of experimental transmission studies of SARS-CoV-2 in pigs, turkeys and chickens by different research institutes have reinforced the idea that these species are not affected by SARS-CoV-2 and cannot transmit it.

3. Update on the work of the AHG on COVID-19 and Safe Trade in Animals and Animal Products

Since the last call of this group, the AHG on COVID-19 and Safe Trade in Animals and Animal Products was convened to develop a document with Considerations on the application of sanitary measures for international trade related to COVID-19, which is now available on the Q&A page, and to revisit the parts in the Q&A that relate to trade and movement of animals and animal products. The recent evidence of mink to human transmission does not change the recommendations of the AHG, but the considerations will need to be updated to reflect evidence of animal to human transmission.

4. AOB

The Chair of the sub-group responsible for the *Considerations for sampling, testing, and reporting of SARS-CoV-2 in animals* did a summary of the drafting process and thanked the members of the group. This document is available on the Q&A page in all OIE languages. The considerations are high-level and non-prescriptive. They follow a risk-based approach to provide a rationale for when to test animals for SARS-CoV-2 and include considerations targeted to different groups of animals. Definitions of suspected case and confirmed case are also provided, noting that the latter should be notified to the OIE. Guidance for disease notification is included in these considerations.

The OIE had also been working with WHO on Food safety and COVID-19 – A One Health Issue: Reducing public health risks associated with the sale of live wild animals for food in traditional food markets. This document and the recommendations were due to be published soon.