

14TH CALL OIE AD HOC GROUP ON COVID-19 AT THE ANIMAL-HUMAN INTERFACE

13th April 2021

Participants: Billy Karesh (Chair OIE Wildlife Working Group), Thomas Mettenleiter (OIE CC, Germany), Andrea Ellis, Brad Pickering and Primal Silva (CFIA, Canada), Casey Barton Behravesh (OIE CC, USA), Jane Rooney (USDA-APHIS, USA), Jean-Claude Manuguerra (OIE CC, France), Hiroshi Kida (OIE CC, Japan), Ottorino Cosivi (PANAFTOSA/PAHO-WHO), Arjan Stegeman (University of Utrecht, Netherlands), Sten Mortensen (SSI, Denmark), Ann Cullinane (OIE CC, Ireland, and OIE BSC), Francesco Bonafante (OIE RL, Italy), Sophie Von Dobschuetz, Ihab El Masry, Sean Shadomy and Etienne Bonbon (FAO), Stephane de la Rocque (WHO), OIE Preparedness & Resilience and Standards Departments.

Agenda

1. Update on animal-human-environment interface related research and animal/wildlife surveillance work
2. Pros and cons of vaccinating animals (companion and farmed animals)
3. Guidance to national veterinary services on monitoring SARS-CoV-2 in minks and other susceptible and potentially susceptible farmed fur species (FAO)
4. AOB

Meeting notes

1. Update on animal-human-environment interface related research and animal/wildlife surveillance work

USA: 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. This suggests mink to human spread might have occurred. The animals on the farm have since tested negative for SARS-CoV-2 twice, and the infected people have since recovered. More information available on the CDC website: [LINK](#).

Denmark: a new research paper on SARS-CoV-2 infection in mink is pending publication. The subject of the paper is a farm that was thought to be cleared of SARS-CoV-2 infection but saw a reemergence of the virus after 2 months of no animals testing positive. The reemerged virus had accumulated mutations that indicate it lingered undetected in the mink population. The antibodies against SARS-CoV-2 remained very high throughout the study period in the mink population.

The Group expressed concern regarding the host range expansion of some SARS-CoV-2 variants (B.1.351 and P.1) that were shown to be able to infect mice at a [recent pre-print from Institut Pasteur \(Montgutelli et al, 2021\)](#). Although the host range expansion provides the opportunity of using other animals as laboratory models, it also raises the possibility of wild rodent secondary reservoirs and provides new experimental models to study disease pathophysiology and countermeasures.

2. Pros and cons of vaccinating animals (companion and farmed animals)

The group discussed the pros and cons of vaccinating companion and farmed animals against SARS-CoV-2. While vaccination of companion animals would only make sense in exceptional circumstances, for example when fragile or immunosuppressed humans would be in contact of animals of species that are susceptible to being infected with SARS-CoV-2, the picture is more complex for farmed animals. In the case of mink, the virus is usually introduced by infected humans. Therefore, it is important to ensure that strong

biosecurity measures are implemented and enforced at farm-level before considering vaccination of mink populations. These include vaccinating humans working in mink farms as a priority group. Although human vaccines do not induce sterile immunity, they reduce the duration of viral shedding and the viral load. Therefore, vaccination of workers may reduce risk of introduction to farmed animals, but it would not eliminate the risk.

Vaccination of mink would act as a complement to the biosecurity plan and could prevent SARS-CoV-2 from establishing itself into a farm if vaccination is done in a timely manner (before the first cases in mink are detected). Further research into vaccine efficacy and effectiveness in mink is needed, e.g., by vaccinating large mink populations.

3. Guidance to national veterinary services on monitoring SARS-CoV-2 in minks and other susceptible and potentially susceptible farmed fur species

FAO presented a draft guidance document for Veterinary Services on monitoring SARS-CoV-2 in minks and other susceptible and potentially susceptible farmed fur species. By implementing this guidance, it is expected that Veterinary Services would be better equipped to detect SARS-CoV-2 in farms, to determine the level of environmental contamination, to assess factors associated with SARS-CoV-2 circulation in farmed mink and other farmed fur species, and to conduct advanced molecular studies to monitor SARS-CoV-2 mutations in farmed fur animals, especially minks. The draft guidance document, which will be published jointly with OIE, was left with the Group for review after the meeting with deadline for comments 23 April 2021.

The Group raised a question on the need for additional guidance on the trade of live mink, whether it be within or between countries. It was asked that the ad hoc Group on Safe Trade of Animals and Animal Products issued guidance on this topic.

4. AOB

The representative from WHO informed the Group that a meeting to review the priorities identified in the R&D Blueprint for COVID-19 will take place before the next WHO General Assembly.

A joint [interim guidance document](#) was drafted by WHO with input from UNEP and OIE was published by WHO on Monday 12th April. This document, which had been awaiting publication for several months, provides guidance on reducing public health risks associated with the sale of live wild animals of mammalian species in traditional food markets through 6 main recommendations.

The next call of this *ad hoc* Group shall be scheduled on a need-basis.