World Organisation for Animal Health 12 rue de Prony 75017 Paris FRANCE File: 2020-14-24-00567 Ref. FRAFE, TGR Date: 24-08-2020

Update 3, on the COVID-19 situation in Denmark

Dear Dr. Monique Eloit,

Following my letter on July 23 2020, I hereby update you on the situation regarding detection of SARS-CoV-2 in mink farms in Denmark. One new outbreaks has been detected in a mink farm in Denmark since update 2, which was sent to the OIE on July 23 2020.

Infected mink farms

SARS-CoV-2 has until now, been confirmed in four mink farms in Denmark. All farms are located in the Northern part of Jutland, in the municipalities of Hjørring and Frederikshavn.

In the three first farms, the suspicions of infection with SARS-CoV-2 were raised due to contact with SARS-CoV-2 infected people at the farm; see previous updates for the farm description and epidemiological investigation for these farms. The fourth farm was detected by the new surveillance program following the Danish strategy for SARS-CoV-2 in mink farms (see under "New strategy"). Details of the infected farms are available in table 1.

Table 1. COVID-19 infected mink farms in Denmark, 21 July 2020.

Farm no.	Municipality	No. of ani- mals	Clinical signs	Date of confirmed COVID-19	Date of culling
1	Hjørring	11.000	No	15/06/2020	18/06/2020
2	Frederikshavn	4.200	Yes	19/6/2020	30/06/2020
3	Hjørring	5.500	Yes	30/6/2020	03/07/2020
4	Hjørring	15.500	Yes	14/8/2020	No culling (New strategy)

New control and surveillance strategy

DVFA has dealt with this situation in a one-health perspective and initiated a close

cooperation with the health authorities at both central and local level. Relevant information is exchanged between the authorities in an effort to effectively investigate the chain of infections. In addition, jointly prepared guidelines and recommendations about protective equipment and other preventive measures have been distributed to the mink farmers, veterinarians and others in contact with mink farms.

Furthermore, the Danish Veterinary and Food Administration (DVFA) has made SARS-CoV-2 in animals notifiable. SARS-CoV-2 in mink and ferrets in commercial herds is now notifiable upon suspicion, while SARS-CoV-2 in other animals is notifiable upon confirmation of disease.

Due to a precautionary principle, the Danish government decided to cull all mink in the first three infected farms. All mink in farm 1, 2 and 3 have been culled and the carcasses have been disposed of by rendering. Cleaning and disinfection is in progress in all farms.

The DVFA has stopped culling infected mink farms with SARS-CoV-2. The rationale behind it is that with the new control and surveillance strategy in place since July 20, 2020, the risk for the introduction of SARS-CoV-2 into the human population is estimated to be very low. Currently, all farms suspected of being infected are placed under official restrictions, which includes movement restrictions.

For farm 4 the culling of animals was not performed, because on July 20 it was decide to the change control strategy and no longer cull the infected farms.

The epidemiological investigation of farm 4 is in progress. Early reports, suggest that there was an increase in mortality from August 6, 2020 and a decrease in feed intake the last week.

Changes in the control strategy

As mentioned above no culling is performed, instead all farms suspected of being infected and farms confirmed infected with SARS-CoV-2 are placed under official restrictions. These restrictions include:

- 1. The farm will be subject to further investigations.
- 2. Animal movement restrictions, no animals allowed to enter or leave the farm.
- 3. The person in charge of the farm must make sure that everyone who in contact with the farm, including the rendering plant, fur centre, feed centre, consultant, veterinarian, etc., is notified that the farm is infected with COVID-19.
- 4. Dead or killed fur animals, as well as the fur and bodies of animals that have been furred in the herd, must be handled in accordance with instructions from the Danish Veterinary and Food Administration.
- 5. Machines and equipment, including cages, nesting boxes, halls, transport boxes, exhibition traps, eating and drinking vessels and other objects must be treated in accordance with instructions from the Danish Veterinary and Food Administration.

- 6. Feed and manure must be handled according to instructions from the Danish Veterinary and Food Administration.
- 7. The person in charge of the farm must ensure that means of transport and drivers who supply feed to the farm remain outside the fence. After delivery to a farm under restriction, no delivery may be made to other herds later the same day.
- 8. The person in charge of the farm must ensure that everyone who enters the crew wears appropriate protective equipment in the form of clean and washable footwear, boiler suit or disposable coverall, respirator FFP3 mask that closes tightly to the face, and tight-fitting goggles.
- 9. The person in charge of the farm must take measures so that family animals (animals kept in the home) do not have access to the herd area.
- 10. The person in charge of the farm must provide shower facilities with soap at the exit from the herd, which must be used by owners, employees and all other persons who regularly or occasionally come into contact with the herd, and ensure that these persons perform the showering as their last task at the end of the working day.
- 11. The person responsible for the farm must together with the Danish Veterinary and Food Administration, inspect fences and devices that must prevent fur animals from escaping, in order to ensure that fences and devices are in good and functional condition.
 - Escaped fur animals on the property must be captured immediately
 - The person in charge of the farm must establish a written own check program that contains procedures for and information on the following:
 - Daily statement of the number of mink per. row and per. house.
 - Supervision of the mink's feed consumption per. cage, and if an abnormally low feed consumption is found in a cage, review the cage to determine if one or more mink have escaped from the cage.
 - If it is found that mink have escaped from the cage, the area inside the fence is inspected with special focus on traps and corners where the mink can hide.
 - If it is found that mink has escaped, and if a subsequent inspection does not find escaped mink within the fence, this must be noted in the own check program per. row per house.

New surveillance strategy

On July 20, 2020, a new surveillance strategy was implemented, which made it mandatory for mink farms to participate in an official surveillance program.

All Danish mink farms are obliged to participate in the national surveillance for SARS-CoV-2 in mink. Each farm shall submit samples in a period of three weeks.

This sampling is repeated every three weeks until the furring season is completed – i.e. November 2020 at which time the need for further surveillance will be evaluated.

The samples consist of swab samples from the pharynx of five dead mink, preferably adult mink. The samples are sent to the Staten Serum Institute, where they are analyzed for SARS-CoV-2.

Furthermore, dead mink found in the wild or mink from farm, sent for necropsy and pathology, to the University of Copenhagen, because of other diseases or reasons, will be sampled and tested for SARS-CoV-2.

Results from the first round show that 925 farms provided samples. All the samples have been tested and all were negative.

The second round of testing is in progress and so far we have found 5 positive farm out of 331 farms sampled and tested. So far, confirmatory tests have been performed at one farm. The verification samples taken by the DVFA confirmed the positive status of the infected mink farm for SARS-CoV-2 on Friday 14. August 2020. Confirmatory samples from the four latter farms will be taken on Monday 24 August 2020.

I will keep you informed about any further developments concerning this issue.

Yours sincerely,

Dr. Hanne Larsen

Chief Veterinary Officer, DVFA

This information is transmitted in the context of Article 1.1.6 in the OIE Terrestrial Animal Health Code in order to provide the relevant information arising from field observations to enable the OIE to have more clarity on which animal species are susceptible to infection and may potentially be involved in the epidemiology of the human disease through.