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**From:** [REDACTED]@minvws.nl  
**Sent:** Mon 11/2/2020 7:08:14 AM  
**Subject:** FW: PRO/AH/EDR> COVID-19 update (464): animal, Denmark, mink, control, One Health  
**Received:** Mon 11/2/2020 7:08:14 AM

Denemarken zet arbeidsmigranten in. Inmiddels 175 besmette bedrijven.

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**Datum:** zondag 01 nov. 2020 6:56 AM  
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**Onderwerp:** PRO/AH/EDR> COVID-19 update (464): animal, Denmark, mink, control, One Health

CORONAVIRUS DISEASE 2019 UPDATE (464): ANIMAL, DENMARK, MINK, CONTROL,  
 ONE HEALTH

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A ProMED-mail post

<<http://www.promedmail.org>>

ProMED-mail is a program of the  
 International Society for Infectious Diseases

<<http://www.isid.org>>

In this update:

- [1] Control activities, farmed mink
- [2] Communication between epidemiological center and periphery
- [3] Mink variants of SARS-CoV-2 and their epidemiological potentials
- [4] Future of mink farming in Denmark

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[1] Control activities, farmed mink

Date: Thu 29 Oct 2020

Source: Information.dk [in Danish, machine trans., abridged, edited]

<<https://www.information.dk/telegram/2020/10/100-er-farne-udlaendinge-saette-tempo-paa-minkaflyvning>>

In North Jutland, foreign labor has been hired to speed up the killing of mink herds with corona infection. This is stated by police inspector Ole Kristensen, who is head of the Local Emergency Response Staff.

Just over 100 foreigners are employed to help with the task. According to Kristensen, this is because there are too few people in Denmark who have an understanding of the handling of mink.

The Danish Veterinary and Food Administration announced on Twitter on Thursday [29 Oct 2020] that corona infection has been found on a total of 175 of 1138 mink farms in Denmark [see comment]. Of these, 36 herds have been killed.

Kristensen cannot say anything about how long the work of killing mink in North Jutland, where the majority of the corona-infected mink farms are located, will take. Nor can he state which countries the foreign laborers come from.

Kristensen expects them to work on the mink farms for at least a month. The authorities are facing a major task with the killing of the many mink. It has in the past led them to encourage mink breeders to help. The growers have therefore been allowed to be responsible for killing and the subsequent cleaning and disinfection.

"Our great hope is that you can get the breeders involved in this as much as possible. It will be the biggest help we can get," says Kristensen [see comment].

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<5.1.2e@promedmail.org>

[According to the continuously updated COVID-19-in-mink map, maintained on the website of the Danish Veterinary and Food Administration, and as stated above, the 175 (out of a countrywide total of 1138) infected holdings are located in 16 municipalities. The map and a table listing the affected municipalities are available at <[https://www.foedevarestyrelsen.dk/L\\_cksikon/Sider/Kort-over-screening-af-COVID-19-i-mink.aspx](https://www.foedevarestyrelsen.dk/L_cksikon/Sider/Kort-over-screening-af-COVID-19-i-mink.aspx)>.

The involvement of foreign labor on mink farms may require targeted efforts, assisted by their employers, to monitor the workers' health and detect COVID-19 infections among them. - Mod.AS]

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[2] Communication between epidemiological center and periphery

Date: Wed 28 Oct 2020

Source: Statens Serum Institut (State Serum Institute, SSI) press release [in Danish, machine trans., edited]

<<https://www.ssi.dk/sygdomme-beredskab-og-forskning/sygdomsovervaagning/c/covid19-overvaagning>>

SSI is continuously working on an epidemiological investigation that follows the coronavirus infection and helps to determine how infection chains arise and develop. When the 1st 3 mink herds were infected with COVID-19 this summer [2020], the Statens Serum Institut (SSI) began to establish a list of people in Denmark who are associated with mink production.

To help form an overview of who is associated with the Danish mink farms, SSI sent a letter to 1426 Danish mink owners on 14 Jul 2020. They were asked to provide information about their employees. Due to an error, however, the letter reached only very few mink owners [according to media sources, only 2 acknowledged they had received the letter].

"When we heard that there were mink owners who had not received the letter, we of course immediately started investigating the case with the help of the Danish Health and Medicines Authority and electronic mailbox [which every Danish citizen has] and thus discovered the error," says 5.1.2e 5.1.2e 5.1.2e. "We apologize a lot to the mink owners for adding figures to an article in, among other things, "Information," which described a very low response rate when it is due to the letters not arriving."

The lack of information has not had any effect on the spread and course of the COVID-19 epidemic on the mink farms.

Similarly, SSI has also continued to work on the epidemiological investigation and has obtained information about people associated with the mink farms in other ways.

The letters will further clarify the process and will be sent to the mink breeders as soon as possible.

The epidemiological report is one of several ways to detect and trace corona infection among animals and people associated with the Danish mink farms. In total, there are 4 ways:

1. Clinical suspicion of animals by mink owners or veterinarians
2. Samples of dead mink, which are sent to the Danish Veterinary

Consortium (DV-VET)

3. The Danish Agency for Patient Safety's contact tracing, which asks people if they have a connection to mink production

4. The Statens Serum Institut's epidemiological report of the COVID infection

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[Statens Serum Institut (SSI) is under the auspices of the Danish Ministry of Health and can be considered the national public health institute covering humans but not veterinary public health and food safety. ("Our main duty is to ensure preparedness against infectious diseases and biological threats as well as control of congenital disorders").

The handling of COVID-19 in minks and its zoonotic aspects are divided in Denmark (and in fact, in any affected country) between the Public Health and the Animal Health agencies, including diagnostic and research institutions: a typical One Health issue, requiring close coordination and cooperation on all levels.

The surveillance and epidemiological research activities addressing minks and their human contacts, as closely coordinated between public- and animal-health research and diagnosis institutions of both State and academy in the Netherlands, deserve to be regarded as exemplary. - Mod.AS]

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[3] Mink variants of SARS-CoV-2 and their epidemiological potentials

Date: Tue 27 Oct 2020

Source: Information.dk [in Danish, machine trans., abridged, edited]

<<https://www.information.dk/telegram/2020/10/myndigheder-rugede-paa-viden-coronamutationer-mink>>

Knowledge about the health risk of 2 virus mutations that had occurred in mink came to the attention of Minister of Food, Agriculture and Fisheries, Mogens Jensen, on 1 Oct [2020].

On 4 Sep [2020], the Statens Serum Institut (SSI) had made the Danish Veterinary and Food Administration aware that 2 special mink variants of the coronavirus were flourishing.

On 16 Sep 2020, SSI and the University of Copenhagen wrote a new risk assessment to the Danish Veterinary and Food Administration, in which they mentioned that the newest of the 2 mink variants had now been found among humans and mink on 6 mink farms. And 2 days later, on 18 Sep 2020, SSI and KU [the University of Copenhagen, or Københavns Universitet] wrote a so-called epidemiological report in which they [stated]: "The continued development of virus in mink with more and more mutations in the spike protein and spread by transmission to humans in Denmark poses a potential danger to public health and to the expected effects of a vaccine."

On Wednesday [28 Oct 2020] Jensen convened 2 consecutive consultations on COVID-19 among mink [see item 4].

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[The information, allegedly included in the mentioned (2) reports from SSI and the University of Copenhagen in September 2020, addressing the mutations in mink-derived strains of SARS-CoV-2 and in particular their zoonotic and immune-related potential are of particular interest

within and beyond Denmark. Their publication is recommended and will be helpful. - Mod.AS]

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[4] Future of mink farming in Denmark

Date: Wed 28 Oct 2020

Source: Information.dk (in Danish, machine trans., abridged, edited]

<<https://www.information.dk/telegram/2020/10/regeringen-forbyde-minkavl-lige-trods-smitte>>

A ban on mink breeding will not only affect the individual fur breeder, but also have "major negative socio-economic consequences." For this reason, the government has no current plans to ban mink breeding in Denmark. This is what Minister of Food, Agriculture and Fisheries Mogens Jensen says in a consultation on Wednesday [28 Oct 2020], where the theme is corona infection on the Danish mink farms.

"Denmark is one of the world's leading producers of mink fur; 12-13 million skins are produced annually in this country," says the minister.

In addition, he refers to the fact that the fur house "Kopenhagen Fur" in 2018 and 2019 had a total turnover of DKK 5.2 billion [roughly EUR 700 million]. "This is therefore a large production with a significant follow-up industry," says Jensen at the consultation.

The corona has spread like wildfire on the Danish mink farms. This has meant that several herds have been killed. The rising infection has raised the question of whether mink breeding should be banned in Denmark, as it has been in the Netherlands, where it was decided to speed up the decision to stop mink breeding due to outbreaks of coronavirus.

But in the Netherlands, according to Jensen, the situation is different than in Denmark. "In the Netherlands, it has been decided to phase out mink production before the corona event. So it had been a discussion whether one wanted that kind of production in the Netherlands at all. And they have a much smaller production than in Denmark," says the minister after the 2 consultations.

According to the minister, it will be the health authorities' recommendations that largely determine whether new animals are to be introduced on the farms after the next felling season.

However, the government does not yet have an assessment from the health authorities on how mink production should be handled in the long term, the minister says after the consultations. "The government's starting point is that we must continue to have mink production in Denmark. That possibility, and under which conditions, is pending the advice that is currently being discussed between different authorities and the industry."

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[Denmark submitted to the OIE on 17 Jun 2020 a letter informing the 1st detection of SARS-CoV-2 in its minks, followed by updates dated 3 Jul, 24 Aug, and 1 Oct 2020. To view them all, please refer to "events in animals" at

<<https://www.oie.int/scientific-expertise/specific-information-and-recommendations/questions-and-answers-on-2019-novel-coronavirus/events-in-animals/>>.

The accuracy of information on infections in humans by mink variants (see item 3 above) deserves to be visited.

Response to the questions raised in this posting, in particular those

related to mink-derived strains of SARS-CoV-2 and their potential zoonotic aspects, will be welcomed and might be considered for inclusion in the next OIE update.

Minks are known to be farmed in dozens of countries worldwide. So far, information on COVID-19 affecting farmed minks has become available from Netherlands, Denmark, Spain, the USA, and Sweden (the latter has not yet reported to the OIE). A suspected case in Italy is pending confirmation or otherwise.

The suspected case in Italy deserves to be clarified that in the report of "LAV" (cited in ProMED-mail archive no. <http://promedmail.org/post/20201028.7897986>), their call to "ban farms" was and is considered by ProMED-mail to be related exclusively to COVID-19-infected mink farms and conditional to scientific advice.  
- Mod.AS

HealthMap/ProMED-mail map:

Denmark: <<http://healthmap.org/promed/p/111>>]

[See Also:

COVID-19 update (461): animal, Sweden, mink, 1st case, RFI  
<http://promedmail.org/post/20201030.7903582>  
COVID-19 update (458): animal, Italy, mink, RFI  
<http://promedmail.org/post/20201028.7897986>  
COVID-19 update (445): animal, Netherlands, Denmark, mink, spread, epidemiology <http://promedmail.org/post/20201019.7873326>  
COVID-19 update (439): animal, Denmark, mink, spread, control <http://promedmail.org/post/20201014.7861560>  
COVID-19 update (437): animal, Netherlands, Denmark, mink, spread, control <http://promedmail.org/post/20201013.7858915>  
COVID-19 update (433): animal, Denmark (ND, MJ) farmed mink, spread, control <http://promedmail.org/post/20201010.7851707>  
COVID-19 update (430): animal, USA (UT) mink <http://promedmail.org/post/20201009.7847704>  
COVID-19 update (425): animal, Denmark (ND) farmed mink, spread, control <http://promedmail.org/post/20201004.7835635>  
COVID-19 update (414): animal, Netherlands (LI), Denmark (ND), farm mink, spread <http://promedmail.org/post/20200925.7813579>  
COVID-19 update (406): animal, Netherlands (LI), Denmark (ND), farm mink, spread <http://promedmail.org/post/20200918.7794239>  
COVID-19 update (401): Netherlands (NB), Denmark, farmed mink, spread <http://promedmail.org/post/20200914.7777661>  
COVID-19 update (394): Netherlands (NB) animal, farmed mink, spread <http://promedmail.org/post/20200908.7759382>  
COVID-19 update (387): Netherlands, mink, animal & public health, research <http://promedmail.org/post/20200902.7740793>  
COVID-19 update (382): Netherlands, animal, farmed mink, spread, control <http://promedmail.org/post/20200830.7730463>  
COVID-19 update (376): animal, ferret, mink, comment <http://promedmail.org/post/20200827.7721923>  
COVID-19 update (366): animal, USA (UT) mink <http://promedmail.org/post/20200818.7692815>  
COVID-19 update (363): animal, Denmark (ND) Netherlands (NB,LI) mink, spread <http://promedmail.org/post/20200817.7687830>  
COVID-19 update (340): animal, China, enviro monitoring, Netherlands (NB), mink <http://promedmail.org/post/20200801.7635820>  
COVID-19 update (334): animal, Netherlands, mink, spread, UK, cat, 1st rep. OIE <http://promedmail.org/post/20200727.7617582>  
COVID-19 update (324): Netherlands (NB) animal, farmed mink, spread <http://promedmail.org/post/20200719.7591013>  
COVID-19 update (317): Netherlands (NB) animal, farmed mink, spread <http://promedmail.org/post/20200716.7578453>  
COVID-19 update (307): Netherlands (NB), Denmark (ND) farmed mink, spread, control <http://promedmail.org/post/20200708.7553067>  
COVID-19 update (301): Denmark (ND) Netherlands (NB) farmed mink, spread, control <http://promedmail.org/post/20200703.7536980>  
COVID-19 update (284): Denmark (ND) animal, farmed mink, spread, dog

<http://promedmail.org/post/20200624.7506728>  
 COVID-19 update (281): Netherlands (NB, LI) farmed mink, spread, animal, global <http://promedmail.org/post/20200623.7502849>  
 COVID-19 update (266): Denmark (ND) animal, farmed mink, 1st rep <http://promedmail.org/post/20200617.7479510>  
 COVID-19 update (251): Netherlands (NB, LI) animal, farmed mink, spread, culling <http://promedmail.org/post/20200610.7453845>  
 COVID-19 update (248): Netherlands (NB, LI) animal, mink, spread, culling, cat <http://promedmail.org/post/20200609.7446478>  
 COVID-19 update (236): Netherlands (NB, LI) animal, farmed mink, spread, culling <http://promedmail.org/post/20200604.7427849>  
 COVID-19 update (230): Netherlands (NB, LI) animal, farmed mink, spread, control <http://promedmail.org/post/20200602.7420433>  
 COVID-19 update (215): Netherlands (NB) animal, mink-to-human, epidem., control <http://promedmail.org/post/20200527.7385049>  
 COVID-19 update (209): Netherlands (NB) farmed mink, animal-to-human, cat, epid <http://promedmail.org/post/20200525.7375359>  
 COVID-19 update (198): Netherlands (NB) farmed mink, animal-to-human infect susp <http://promedmail.org/post/20200520.7359976>  
 COVID-19 update (189): Netherlands (NB) animal, farmed mink, research, cat, dog <http://promedmail.org/post/20200517.7344274>  
 COVID-19 update (177): Netherlands (NB) animal, farmed mink, Spain (CT) cat susp <http://promedmail.org/post/20200512.7328587>  
 COVID-19 update (174): Netherlands (NB) animal, farmed mink, comment <http://promedmail.org/post/20200511.7323845>  
 COVID-19 update (169): Netherlands (NB) animal, farmed mink, spread, rabbit susp <http://promedmail.org/post/20200509.7316646>  
 COVID-19 update (154): Netherlands (NB) animal, farmed mink, research <http://promedmail.org/post/20200503.7294846>  
 COVID-19 update (146): Netherlands (NB) animal, farmed mink, epidemiology <http://promedmail.org/post/20200501.7286113>  
 COVID-19 update (135): Netherlands (NB) animal, farmed mink <http://promedmail.org/post/20200427.7272289>

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