CENTER FOR RESPONSIBLE SCIENCE

Support for SB 832 TO PHASE OUT MINK FARMING AND PREVENT COVID-19 VARIANT FROM EXTENDING THE DURATION OF THE PANDEMIC

Dear Chair Golden and Committee members:

As a long-time resident of Ashland, and in the capacity of Director of Research and Regulatory Policy for the Center for Responsible Science, I hereby submit the following comments in strong support for SB 832, the bill to end mink farming in Oregon.

While acknowledging the hardships faced by Oregon mink farmers due to reduced market for mink pelts in the United States and the effects of SARS-CoV-2 on their businesses and health, we support the adoption of SB 832 because of serious and overriding public health concerns. It is essential for public health that the fur production and trading sector not become a reservoir for future spillover of SARS-CoV-2 to humans and wildlife.

Mink and SARS CoV-2

American mink are highly susceptible to SARS-CoV-2. The virus spreads very efficiently within mink farms once introduced, by direct and indirect contact. High density of mink in cramped and crowded factory farms significantly increases the chances for transmission. Between-farm spread is likely to occur once SARS-CoV-2 is introduced, short distance between SARS-CoV-2 positive farms is a risk factor. As of January 2021, the SARS-CoV-2 virus has been reported in 400 mink farms in eight countries in the European Union. In most cases, the likely introduction of SARS-CoV-2 infection into farms was infected humans, especially mink farm workers. Human health can be at risk by mink-related variant viruses, which can establish circulation in the community.[1]

Devi Shridhar, an American Professor at the University of Edinburgh, who holds a Personal Chair in Global Public Health and Founding Director of the Global Health Governance Programme, called mink farms and other captive animal industries “natural bioweapon factories” that are a threat to human health because of the rapid spread of SARS-CoV-2 among animals and threat of variants that can be transmitted back to humans.

[1] European Food Safety Authority and European Centre for Disease Prevention and Control, Boklund A, Gortazar C, Pasquali P, Roberts H, Nielsen SS, Stahl K, Stegeman A, Baldinelli F, Broglia A, Van Der Stede Y, Adlhoch C, Alm E, Melidou A and Mirinaviciute G, 2021. Scienti!c Opinion on the monitoring of SARS-CoV-2 infection in mustelids. EFSA Journal 2021;19(3):6459, 68 pp. https://doi.org/10.2903/j.efsa.2021.6459 6459 https://efsa.onlinelibrary.wiley.com/doi/10.2903/j.efsa.2021.6459

According to the European Centre for Disease Prevention and Control (ECDC), between June 2020 and January 2021, Denmark reported over 1,000 human cases of infection with a mink-related variant of the virus[2] that spread from the North to the South, with estimates from Danish Authorities as high as 4,000 human cases caused by mink variants.[3]

Public Health Risks – Variants Pose a Threat to Vaccination Efforts, Unknown Effect of Vaccines on Transmission, and Unknown Duration of Immunity

Even with vaccination efforts in full force, the natural ability of the coronavirus to use mink to mutate and spread means the theoretical threshold for vanquishing COVID-19 could already be out of reach.

- Reaching a herd-immunity threshold seems unlikely because of factors such as vaccine hesitancy, the emergence of new variants and the delayed arrival of vaccinations for children.[4]
- As new variants arise and immunity from infections potentially subsides, we may find ourselves still facing the threat, and having to deal with future surges.[5]
- Higher rates of immunity can create selective pressure, which would favor variants that are able to infect people who have been immunized.[6] It is well documented that variants from mink in Denmark were found in at least 1,000 people.
- Vaccinating quickly and thoroughly can prevent a new variant from gaining a foothold, however, unevenness of vaccine roll-outs creates a challenge.[7]
- It is unclear whether vaccines prevent transmission.[8]
- People who have been infected with SARS-CoV-2 seem to develop some immunity to the virus, but it is unknown how long immunity lasts. Given what's known about other coronaviruses and the preliminary evidence for SARS-CoV-2, infection-associated immunity wanes over time.
- It is unknown how long protection lasts for those who are vaccinated.[9]

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[2] Id.
[3] Id.
[4] Five reasons why COVID herd immunity is probably impossible, *Nature,* March 18, 2021, https://www.nature.com/articles/d41586-021-00728-2?utm_source=Nature+Briefing&utm_campaign=0aee776394-briefing-dy-20210319&utm_medium=email&utm_term=0_c9dfd39373-0aee776394-45350126
[5] Id. (quoting epidemiologist Lauren Ancel Meyers, executive director of the University of Texas at Austin COVID-19 Modeling Consortium)
[6] [6] Id. (Quoting Matt Ferrari, epidemiologist at Pennsylvania State University's Center for Infectious Disease Dynamics in University Park)
[7] Id.
[8] Johns Hopkins University and Medicine, Coronavirus Resource Center, Vaccines FAQ, https://coronavirus.jhu.edu/vaccines/vaccines-faq
[9] Centers for Disease Control and Prevention, Frequently Asked Questions About COVID-19 vaccinations. https://www.cdc.gov/coronavirus/2019-ncov/vaccines/faq.html#:~:text=We%20don't%20know,new%20evidence%20becomes%20available.

- Vaccinating mink farm workers and families and the possibility of vaccinating mink does not provide assurance that protection will be provided against new variants and long-term protection, which leaves the scenario of more mink infection and variants and possible spillover into nature.
- Vaccinating the mink themselves poses potential complications for fighting COVID-19, because in the event of new outbreaks, it will be impossible for researchers to determine whether mink possess antibodies as a result of the vaccine or due to exposure to a new variant or strain by other infected people or animals.

The devastation wrought by COVID-19 underscores the need for measures to minimize the chances of another zoonotic pandemic. That means radically changing how humans interact with wildlife, including farmed wildlife kept in unnatural conditions increasing the likelihood of infection and spillover. The health of Oregonians must be the priority.

For the foregoing reasons, I urge you to vote YES on SB 832. Thank you for considering our position and for your service to the people of Oregon.

Tamara Drake
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Center for Responsible Science