Vitenskapskomiteen for mat og miljø
Norwegian Scientific Committee for Food and Environment

# CWD – statement 2018

**Statement from the Norwegian Scientific Committee for Food and Environment**

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Preparation of the statement:

This statement has been prepared by Georg Kapperud (VKM Panel on Biological Hazards; Norwegian Institute of Public Health) and Michael A. Tranulis (Norwegian University of Life Sciences, NMBU), and Siamak Yazdankhah (VKM staff). All members of the VKM Panel on Biological Hazards have been sent the statement for their comments.
Members of the panel are: Yngvild Wasteson (Chair), Karl Eckner, Georg Kapperud, Jørgen Lassen, Judith Narvhus, Truls Nesbakken, Lucy Robertson, Jan Thomas Rosnes, Olaug Taran Skjerdal, Eystein Skjerve, and Line Vold.

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## Background and terms of reference

The Norwegian Food Safety Authority (NFSA) has asked the Norwegian Scientific Committee for Food and Environment (VKM) for a statement about the recently published (EFSA, 2018) opinion from the European Food Safety Authority (EFSA) regarding chronic wasting disease (CWD).

The NFSA has requested VKM to assess whether EFSA's recent report (EFSA, 2018) provides any basis for changing the conclusions reached in VKM's previous opinions on CWD (VKM 2016, VKM 2017a, VKM 2017b), and whether these conclusions from VKM are still applicable.

VKM appointed a working group consisting of one member of the Panel on Biological Hazards and one external expert to prepare a statement document answering the question. Both experts participated in the preparation of VKM's CWD reports in 2016 and 2017. The working group also consisted of a project leader from the VKM staff. The Panel on Biological Hazards was requested to read and comment on the statement.

## Statement

Since the discovery of CWD in Norway in 2016, VKM has, on the request of NFSA, developed and published three reports addressing specific questions from NFSA and considering several major aspects of this unexpected challenge (VKM, 2016; VKM, 2017a; VKM, 2017b).

The zoonotic risk of CWD was evaluated by VKM in the phase I report (VKM, 2016) and readdressed in the phase III report (VKM, 2017b), which specifically considered the data emerging from ongoing studies led by Dr. Stefanie Czub (University of Calgary / Canadian Food Inspection Agency), in which some Cynomolgus macaques (*Macaca fascicularis*) fed meat containing CWD prions developed prion disease (Cruz, S. 2017; VKM, 2017b).

Although there are no reports of human disease caused by CWD, and nor are there any epidemiological data suggesting an increased occurrence of human prion disease in regions endemic for CWD, transmission of CWD to humans cannot be excluded. Experiments have shown that the species barrier for transmission of CWD prions and other prions from livestock, such as sheep scrapie, to humans, appears to be strong. Nevertheless, it is probably not absolute.

Importantly, different strains (varieties) of CWD prions exist and early data from the Norwegian cases indicate that the Norwegian CWD prions might differ from those observed in North America. Transmission experiments are ongoing with Norwegian CWD isolates and full characterization of these will take years to complete. However, preliminary observations (Sylvie L. Benestad, Norwegian Veterinary Institute, personal communication) do not suggest that there is an increased human risk associated with the Norwegian CWD isolates.

Currently, we are not aware of data that indicate that there is a need for further reassessment of the zoonotic risk of CWD, thus maintaining the evaluation "very low risk".

In response to requests from the European Commission, EFSA has issued two comprehensive scientific opinions (Phase I and II) concerning the emergence of CWD in Europe (EFSA, 2017; EFSA, 2018). The phase I report from EFSA, published in January 2017 (EFSA, 2017), addressed surveillance, animal health risks, and public health risks, whereas the phase II report, released in December 2017 (EFSA, 2018) focused on the important topic of diagnostic methods for CWD and the validity of the methods currently available.

**Conclusion**

Overall, evaluations of the animal and public health risks associated with CWD, as discussed in the reports from EFSA, correspond well with the assessments from VKM. We are not aware of new information to suggest that the assessments concerning CWD published by VKM should be revised.

The information and statements presented by EFSA (2018) are in accordance with VKM's conclusions regarding the zoonotic potential of CWD, and do not contain new data that make it necessary to change our current and published opinion.

Hence, our conclusions are still applicable, and there is presently no need for any revision.

## References

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