WOAH Reference Laboratory Reports Activities 2022

Activities in 2022
This report has been submitted: 8 mars 2023 14:11

Laboratory Information

| Name of disease (or topic) for which you are a designated WOAH Reference Laboratory: | Chronic Wasting Disease |
| Address of laboratory: | Postboks 64, 1431 Ås, Norway |
| Tel.: | +47 97536830 |
| E-mail address: | sylvie.benestad@vetinst.no |
| Website: | www.vetinst.no |
| Name (including Title) of Head of Laboratory (Responsible Official): | Dr Torill Moseng |
| Name (including Title and Position) of WOAH Reference Expert: | Dr Sylvie L. Benestad |
| Which of the following defines your laboratory? Check all that apply: | Governmental |

TOR1: Diagnostic Methods

1. Did your laboratory perform diagnostic tests for the specified disease/topic for purposes such as disease diagnosis, screening of animals for export, surveillance, etc.? (Not for quality control, proficiency testing or staff training)

Yes

<table>
<thead>
<tr>
<th>Diagnostic Test</th>
<th>Indicated in WOAH Manual (Yes/No)</th>
<th>Total number of test performed last year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nationally</td>
<td>Internationally</td>
</tr>
<tr>
<td>Indirect diagnostic tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PrP ELISA</td>
<td>Yes</td>
<td>17597</td>
</tr>
<tr>
<td>PrP WB</td>
<td>Yes</td>
<td>200</td>
</tr>
<tr>
<td>PrP IHC</td>
<td>Yes</td>
<td>150</td>
</tr>
</tbody>
</table>

WOAH Reference Laboratory Reports Activities 2022
**TOR2: REFERENCE MATERIAL**

2. Did your laboratory produce or supply imported standard reference reagents officially recognised by WOAH?  
No

3. Did your laboratory supply standard reference reagents (non-WOAH-approved) and/or other diagnostic reagents to WOAH Members?  
No

4. Did your laboratory produce vaccines?  
No

5. Did your laboratory supply vaccines to WOAH Members?  
No

**TOR3: NEW PROCEDURES**

6. Did your laboratory develop new diagnostic methods for the designated pathogen or disease?  
No

7. Did your laboratory validate diagnostic methods according to WOAH Standards for the designated pathogen or disease?  
No

8. Did your laboratory develop new vaccines for the designated pathogen or disease?  
No

9. Did your laboratory validate vaccines according to WOAH Standards for the designated pathogen or disease?  
No

**TOR4: DIAGNOSTIC TESTING FACILITIES**

10. Did your laboratory carry out diagnostic testing for other WOAH Members?  
No

11. Did your laboratory provide expert advice in technical consultancies on the request of an WOAH Member?  
No

**TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES**

12. Did your laboratory participate in international scientific studies in collaboration with WOAH Members other than the own?  
Yes

<table>
<thead>
<tr>
<th>Title of the study</th>
<th>Duration</th>
<th>PURPOSE OF THE STUDY</th>
<th>PARTNERS (INSTITUTIONS)</th>
<th>WOAH MEMBER COUNTRIES INVOLVED OTHER THAN YOUR COUNTRY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tackling CWD in Europe</td>
<td>Several years</td>
<td>Study host/pathogen interactions relevant to disease transmission in wildlife, livestock and people</td>
<td>Roslin Institute Edinburgh</td>
<td>UNITED KINGDOM</td>
</tr>
</tbody>
</table>
Tackling CWD in Europe

Several years Study host/pathogen interactions relevant to disease transmission in wildlife, livestock and people
INIA Madrid SPAIN

Tackling CWD in Europe

Several years Study host/pathogen interactions relevant to disease transmission in wildlife, livestock and people
FLI Riems GERMANY

Tackling CWD in Europe

Several years Study host/pathogen interactions relevant to disease transmission in wildlife, livestock and people
INRAe Toulouse and Jouy en Josas FRANCE

CWD strain characterization

Several years Comparison between CWD in Europe and North America
Canadian Food Inspection Agency, Ottawa CANADA

CWD strain characterization

Several years Bioassay in bank voles
ISS, Rome ITALY

CWD strain characterization

Several years Bioassay in transgenic mice
Colorado University, Fort Collins UNITED STATES OF AMERICA

CWD strain characterization

Several years Bioassay in transgenic mice
ANSES Lyon FRANCE

CWD strain characterization

Several years Bioassay in transgenic mice
Alberta University CANADA

CWD strain characterization

Several years Bioassay in transgenic mice
UCL London UNITED KINGDOM

TOR6: EPIZOOLOGICAL DATA

14. Did your Laboratory collect epidemiological data relevant to international disease control?
Yes

IF THE ANSWER IS YES, PLEASE PROVIDE DETAILS OF THE DATA COLLECTED:

The Norwegian Veterinary Institute analyzed 17597 cervids in 2022 through the National surveillance program on CWD

15. Did your laboratory disseminate epidemiological data that had been processed and analysed?
Yes

IF THE ANSWER IS YES, PLEASE PROVIDE DETAILS OF THE DATA COLLECTED:

The samples and results are daily published on the Institute web site http://apps.vetinst.no/skrantesykestatistikk/NO/#omrade

16. What method of dissemination of information is most often used by your laboratory? (Indicate in the appropriate box the number by category and list the details in the box)
a) Articles published in peer-reviewed journals:

4


b) International conferences:

10

-R, Nonno; S, Benestad. Chronic wasting disease in European cervids. Oral presentation 10th Iberian Prion Congress Vila Real, Portugal, 19-20 of May 2022

-SL, Benestad; TT, Vuong; L, Tran; T, Vikøren; J, Våge; K, Madslien; GC, Telling; L, Pirisinu; R, Nonno. Emerging CWD strains in Europe, overall view of current/emerging situation. Oral presentation (invited) Prion2022 Göttingen, Germany, 13-16 September 2022

-Mazza M, Tran L, Loprevite D, Cavarretta MC, Dell’Atti L, Våge J, Madslien K, Vikøren T, Vuong TT, Benestad SL. Are rapid tests and confirmatory western blot for cattle and small ruminants reliable tools for the diagnosis of Chronic Wasting Disease in Europe? Poster Prion2022 Göttingen, Germany, 13-16 September 2022

-C, Diaz-Dominguez; Anjo N, Gonzalves; JM, Charco; TT, Vuong; L, Fernandez-Wei; L, Tran; C, Sampredo-TorresQuevedo; E, Basco; H, Erana; SL, Benestad; J, Castilla. Evaluation of naturally occurring polymorphic variants of the PrP from cervids as RT-QuIC substrates for the detection of multiple CWD strains. Poster Prion2022 Göttingen, Germany, 13-16 September 2022

-CD, Velasquez; C, Kim; E, Funk; S, Gilch; SL, Benestad; J, Aiken; D, McKenzie. Propagation and adaptation of chronic wasting disease (CWD) prions. Poster Prion2022 Göttingen, Germany, 13-16 September 2022

-Pritzkow; D, Gorski; F, Ramirez; F, Wang; GC, Telling; J, Greenlee; SL, Benestad; C, Soto. Application of PMCA to understand CWD strains, species barrier and zoonotic potential. Poster Prion2022 Göttingen, Germany, 13-16 September 2022

-S, Benestad. Chronic Wasting Disease in Europe: EU provisions and monitoring programme. Oral presentation BTSF course European Commission- 3 sessions in 2022

c) National conferences:

d) Other (Provide website address or link to appropriate information):
strains in Europe. Oral presentation 17th Meeting of the EFSA BIOCONTAM BIOHAZ BSE-TSE Network, Parma, 13th October 2022
-CM Rolandsen, J Våge, P Hopp, SL Benestad, H Viljugrein, EJ Solberg, EB Nilsen, R Andersen, O Strand, T Vikøren, K Madslien, A Tarpai,
V Veiberg, M Heim, F Holmstrøm, A Mysterud Kartlegging og overvåking av skrantesjuke (Chronic wasting disease - CWD) NINA NINA
Rapport 2158 / Veterinærinstituttets rapportserie, rapport 22 2022.
file:///C:/Users/04benest/Downloads/Kartlegging%20og%20overv%C3%A5king%20av%20skrantesjuke%20CWD%202021%20%20(1).pdf

**TOR7: SCIENTIFIC AND TECHNICAL TRAINING**

17. Did your laboratory provide scientific and technical training to laboratory personnel from other WOAH Members?
No

**TOR8: QUALITY ASSURANCE**

18. Does your laboratory have a Quality Management System?
Yes

<table>
<thead>
<tr>
<th>Quality management system adopted</th>
<th>Certificate scan (PDF, JPG, PNG format)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Akkrediteringsdokument 08.02.22.pdf</td>
</tr>
</tbody>
</table>

19. Is your quality management system accredited?
Yes

<table>
<thead>
<tr>
<th>Test for which your laboratory is accredited</th>
<th>Accreditation body</th>
</tr>
</thead>
<tbody>
<tr>
<td>PrP TeSeE ELISA (Bio-Rad)</td>
<td>Norwegian accreditation (NA)</td>
</tr>
<tr>
<td>PrP HerdChek ELISA (IDEXX)</td>
<td>Norwegian accreditation (NA)</td>
</tr>
<tr>
<td>PrP TeSeE Western Blot (Bio-Rad)</td>
<td>Norwegian accreditation (NA)</td>
</tr>
</tbody>
</table>

20. Does your laboratory maintain a "biorisk management system" for the pathogen and the disease concerned?
Yes

Work with TSE takes place in BSL3 laboratories in accordance with guidelines for work with infection risk group 3 agents, we have carried out risk assessments and implemented procedures to ensure biosafety for employees and the environment.

**TOR9: SCIENTIFIC MEETINGS**

21. Did your laboratory organise scientific meetings related to the pathogen in question on behalf of WOAH?
No

22. Did your laboratory participate in scientific meetings related to the pathogen in question on behalf of WOAH?
No

**TOR10: NETWORK WITH WOAH REFERENCE LABORATORIES**

23. Did your laboratory exchange information with other WOAH Reference Laboratories designated for the same pathogen or disease?
Yes

24. Are you a member of a network of WOAH Reference Laboratories designated for the same pathogen?
No
25. Did you organise or participate in inter-laboratory proficiency tests with WOAH Reference Laboratories designated for the same pathogen?
No

26. Did your laboratory collaborate with other WOAH Reference Laboratories for the same disease on scientific research projects for the diagnosis or control of the pathogen of interest?
Yes

<table>
<thead>
<tr>
<th>TITLE OF THE PROJECT OR CONTRACT</th>
<th>SCOPE</th>
<th>NAME(S) OF RELEVANT WOAH REFERENCE LABORATORIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaborative framework concerning CWD reference laboratories</td>
<td>Advancing strategies to detect, control and characterize CWD</td>
<td>Canadian Food Inspection Agency, Ottawa, Canada</td>
</tr>
</tbody>
</table>

**TOR11: OTHER INTERLABORATORY PROFICIENCY TESTING**

27. Did your laboratory organise or participate in inter-laboratory proficiency tests with laboratories other than WOAH Reference Laboratories for the same pathogen?
No

**TOR12: EXPERT CONSULTANTS**

28. Did your laboratory place expert consultants at the disposal of WOAH?
No

29. Additional comments regarding your report:
No