WOAH Reference Laboratory Reports Activities 2022

Activities in 2022

This report has been submitted: 26 avril 2023 11:55

Laboratory Information

<table>
<thead>
<tr>
<th>Name of disease (or topic) for which you are a designated WOAH Reference Laboratory:</th>
<th>Bovine Spongiform Encephalopathy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address of laboratory:</td>
<td>Via Bologna 148 Turin Italy</td>
</tr>
<tr>
<td>Tel.:</td>
<td>+390112686296</td>
</tr>
<tr>
<td>E-mail address:</td>
<td><a href="mailto:cristina.casalone@izsto.it">cristina.casalone@izsto.it</a></td>
</tr>
<tr>
<td>Website:</td>
<td><a href="http://www.izsplv.it">www.izsplv.it</a></td>
</tr>
<tr>
<td>Name (including Title) of Head of Laboratory (Responsible Official):</td>
<td>Cristina Casalone</td>
</tr>
<tr>
<td>Name (including Title and Position) of WOAH Reference Expert:</td>
<td>Cristina Casalone</td>
</tr>
<tr>
<td>Which of the following defines your laboratory? Check all that apply:</td>
<td>Governmental</td>
</tr>
</tbody>
</table>

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)

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?
Yes

<table>
<thead>
<tr>
<th>NAME OF WOAH MEMBER COUNTRY SEEKING ASSISTANCE</th>
<th>DATE</th>
<th>WHICH DIAGNOSTIC TEST USED</th>
<th>NO. SAMPLES RECEIVED FOR PROVISION OF DIAGNOSTIC SUPPORT</th>
<th>NO. SAMPLES RECEIVED FOR PROVISION OF CONFIRMATORY DIAGNOSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRELAND</td>
<td>2022-06-03</td>
<td>WBBSE</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>SWEDEN</td>
<td>2022-07-27</td>
<td>WBBSE</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

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>Enhancing Research for Africa Network</td>
<td>36 months</td>
<td>The main task of the ERFAN network aims at enhancing research collaborations and to push forward the activities of veterinary Institutions</td>
<td>5 Italians IIZZSS</td>
<td>ALGERIA BOTSWANA LIBYA MOROCCO MOZAMBIQUE SOUTH AFRICA SUDAN TUNISIA ZAMBIA ZIMBABWE</td>
</tr>
</tbody>
</table>

**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:**

We participated to the writing of “The European Union Summary Report on surveillance for the presence of Transmissible Spongiform Encephalopathies (TSEs) in 2021

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:**

Through a collaboration with EFSA in the frame of the drafting of “The European Union Summary Report on surveillance for the presence of Transmissible Spongiform Encephalopathies (TSEs) in 2021

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:
1

“Are rapid tests and confirmatory western blot used for cattle and small ruminants TSEs reliable tools for the diagnosis of Chronic Wasting Disease in Europe?” M. Mazza, L. Tran; D. Loprevite, M. C. Cavarretta, L. Dell’Atti, J. Våge, K. Madslien, TT Vuong; E. Bozzetta, S.L. Benestad. Submitted to PLOS ONE.

b) International conferences:
4

- **International Conference**
  - Prion2020/2022, Göttingen 13-16 September 2022
  - II Workshop EVita, Torino 29-30 September 2022
  - 19th Annual meeting of the TSE EU RL Torino 17-18 October 2022
  - 10° Iberian congress on PRIONS - Vila Real Portogallo 19-20 May 2022 • EFSA - BSE/TSE Network meeting - Parma, 13-14 October 2022

c) National conferences:
3

- XXI Convegno degli Istituti Zooprofilattici Sperimentali sulle Encefalopatie Spongiformi Trasmissibili Torino 27 January 2022
- 75° Convegno SISVET - Lodi (MI) 15-18 June 2022
- XXI Congresso nazionale SIDILV 2022 - Ischia 7-9 September 2022

d) Other (Provide website address or link to appropriate information):

17
Scientific committees and working groups attended by staff:
- TSE WG on 14 June: connexion and updated documents gruppo TSE per CEA e EUR 15/6/21; • Working group TSE “Moduli eLearning per BTSF Academy” 2022;
- Working group coordinated by the Ministry of Health for the management of sheep breeds at risk of extinction with genetic selection;
- 17th meeting of the Scientific Network EFSA on BSE/TSE, Parma 13-14/10/2022;
- 2nd meeting of the Scientific Network for Zoonoses Monitoring Data - TSE-BSE Subgroup.

Training course organized:
- ERFAN Interactive training course “BSE and Scrapie confirmatory tests by Histopathology, Immunohistochemistry, and differential diagnosis” for the University of Veterinary Pretoria - 3 February 2022 online;
- The Italian TSE diagnostic network: updates, problems and future prospects 30/3/22;
- XXI Convegno degli Istituti Zooprofilattici Sperimentali sulle Encefalopatie Spongiformi Trasmissibili- Torino, 27 January 2022
- Management and control of transmissible spongiform encephalopathies (TSEs): epidemiological, diagnostic and regulatory updates 27-28/09/22. Speakers in international conference:
  - 19th Meeting EURL TSE (Torino 17th and 18th October 2022) “TSE EURL histopathology and immunoistochemistry interpretation EQA”.
  - ERFAN Interactive training course (3 febbraio 2022 online) “BSE and Scrapie confirmatory tests by Histopathology, Immunohistochemistry, and differential diagnosis” for the University of Veterinary Pretoria
  - 19th Meeting EURL TSE (17th and 18th October 2022) “EURL TSE Work programme 2021-2022: what done, what to do”
  - 19th Meeting EURL TSE (17th and 18th October 2022) “Rapid test EQA (RB & RS): results of the 2021 round and forthcoming 2022 round”
  - 19th Meeting EURL TSE (17th and 18th October 2022) “Rapid and confirmatory tests: issues and news”
  - 19th Meeting EURL TSE (17th and 18th October 2022) “Confirmatory immunoblotting (WB & WS): results of the 2021 round and forthcoming 2022 round”
  - 19th Meeting EURL TSE (17th and 18th October 2022) “Prion Biosafety: the TSE EURL approach”

“Epidemiology of BSE”, Course STRATEGIES TO IMPROVE SAFETY OF FOODS OF ANIMAL ORIGIN WITHIN CIRCULAR AGRICULTURAL SYSTEM, della Laurea Magistrale in Food animal metabolism and management in the circular economy (cod. 5814), Università di Bologna.

**TOR7: SCIENTIFIC AND TECHNICAL TRAINING**

17. Did your laboratory provide scientific and technical training to laboratory personnel from other WOAH Members?
Yes

- a) Technical visit :
- b) Seminars : 1
- c) Hands-on training courses: 1
- d) Internships (>1 month) 1

<table>
<thead>
<tr>
<th>Type of technical training provided (a, b, c or d)</th>
<th>Country of origin of the expert(s) provided with training</th>
<th>No. participants from the corresponding country</th>
</tr>
</thead>
<tbody>
<tr>
<td>d</td>
<td>Tunisia</td>
<td>1</td>
</tr>
<tr>
<td>c online</td>
<td>Croatia</td>
<td>2</td>
</tr>
<tr>
<td>b online</td>
<td>Pretoria</td>
<td>20</td>
</tr>
</tbody>
</table>

**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>
<th>2023 - 2026 ACCREDIA - CERTIFICATO DI ACCREDITAMENTO.pdf</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO 17025</td>
<td>pdf</td>
<td></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>HERDCHEK BSE/Scrapie Antigen Kit EIA IDEXX</td>
<td>ACCREDIA-ILAC MRA</td>
</tr>
<tr>
<td>BSE confirmatory immunoblot</td>
<td>ACCREDIA-ILAC MRA</td>
</tr>
<tr>
<td>Immunohistochemistry for pathological prion protein</td>
<td>ACCREDIA-ILAC MRA</td>
</tr>
<tr>
<td>Histology</td>
<td>ACCREDIA-ILAC MRA</td>
</tr>
<tr>
<td>ROBOSCREEN BETA PRION BSE EIA</td>
<td>ACCREDIA-ILAC MRA</td>
</tr>
</tbody>
</table>

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

Biosafety guidelines have been produced for personnel working within laboratories that handle prions

**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?
Yes

<table>
<thead>
<tr>
<th>Title of event</th>
<th>Date (mm/yy)</th>
<th>Location</th>
<th>Role (speaker, presenting poster, short communications)</th>
<th>Title of the work presented</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSE-WG MEETING North Africa</td>
<td>2022-01-17</td>
<td>online</td>
<td>working group coordinator</td>
<td>Past activities and Road map 2022</td>
</tr>
<tr>
<td>TSE-WG MEETING South Africa</td>
<td>2022-01-28</td>
<td>online</td>
<td>working group coordinator</td>
<td>Past activities and Road map 2022</td>
</tr>
<tr>
<td>EURL TSE Meeting</td>
<td>2022-10-17</td>
<td>Turin</td>
<td>Speakers</td>
<td>Feedback on the Proficiency Testing EQA round; update on the epidemiological data and regulations on the TSE active surveillance in Europe;</td>
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<tr>
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<td>2022-10-18</td>
<td>Turin</td>
<td>Speakers</td>
<td>Feedback on the Proficiency Testing EQA round; update on the epidemiological data and regulations on the TSE active surveillance in Europe;</td>
</tr>
</tbody>
</table>

**TOR10: NETWORK WITH WOAH REFERENCE LABORATORIES**

23. Did your laboratory exchange information with other WOAH Reference Laboratories designated for the same pathogen or disease?
No
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?
Yes

<table>
<thead>
<tr>
<th>PURPOSE OF THE PROFICIENCY TESTS: 1</th>
<th>ROLE OF YOUR REFERENCE LABORATORY (ORGANISER/PARTICIPANT)</th>
<th>NO. PARTICIPANTS</th>
<th>PARTICIPATING WOAH REF. LABS/ ORGANISING WOAH REF. LAB.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSE screening rapid test</td>
<td>Participant</td>
<td>27</td>
<td>NRLS</td>
</tr>
<tr>
<td>BSE Confirmatory Immunoblot</td>
<td>Participant</td>
<td>23</td>
<td>NRLS</td>
</tr>
<tr>
<td>TSE Histopathology and immunohistochemistry interpretation EQA</td>
<td>Participant</td>
<td>43</td>
<td>NRLS</td>
</tr>
<tr>
<td>PrP immunohistochemistry technical EQA</td>
<td>Participant</td>
<td>22</td>
<td>NRLS</td>
</tr>
</tbody>
</table>

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?
No

**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?
Yes

<table>
<thead>
<tr>
<th>Purpose for inter-laboratory test comparisons1</th>
<th>Role of your reference laboratory (organizer/participant)</th>
<th>No. participating laboratories</th>
<th>Region(s) of participating WOAH Member Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harmonising existing test methods (IDEXX HerdCheck BSE-scrapie Antigen Kit EIA for Italian network laboratory</td>
<td>ORGANIZER</td>
<td>11</td>
<td>Europe</td>
</tr>
</tbody>
</table>

**TOR12: EXPERT CONSULTANTS**

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

29. Additional comments regarding your report:
Our OIE Centre for BSE and scrapie collaborates with EURL TSE as part of the same institution and also all staff, including myself, works for both centres. From 2019 we have been providing diagnostic advice to European Nrls. From three years we have been working closely with countries in North Africa and South Africa