WOAH Reference Laboratory Reports Activities 2023

Activities in 2023

This report has been submitted : 29 avril 2024 12:04

Laboratory Information

Name of disease (or topic) for which you are a designated WOAH Reference Laboratory: Epizootic haemorrhagic disease

Address of laboratory: 14 rue Pierre et Marie Curie

Tel: +33687619859

E-mail address: Stephan.Zientara@anses.fr

Website: www.anses.fr

Name (including Title) of Head of Laboratory (Responsible Official): Dr Stéphan Zientara, Director of the Animal Health laboratory

Name (including Title and Position) of WOAH Reference Expert: Stéphan Zientara

Which of the following defines your laboratory? Check all that apply: Research agency

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>Indirect diagnostic tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELISA</td>
<td>Yes</td>
<td>Nationally: 165, Internationally: 0</td>
</tr>
<tr>
<td>Seroneutralisation</td>
<td>Yes</td>
<td>Nationally: 30, Internationally: 0</td>
</tr>
<tr>
<td>Direct diagnostic tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All genotypes rRT-PCR (Viarouge et al, 2015)</td>
<td>Yes</td>
<td>Nationally: 731, Internationally: 210</td>
</tr>
<tr>
<td>Typing rRT-PCR (Viarouge et al, 2015)</td>
<td>Yes</td>
<td>Nationally: 10, Internationally: 104</td>
</tr>
<tr>
<td>Viral isolation on KC cells</td>
<td>Yes</td>
<td>Nationally: 0, Internationally: 10</td>
</tr>
</tbody>
</table>

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?

   Yes

<table>
<thead>
<tr>
<th>TYPE OF REAGENT AVAILABLE</th>
<th>RELATED DIAGNOSTIC TEST</th>
<th>PRODUCED/ PROVIDE</th>
<th>AMOUNT SUPPLIED NATIONALLY (ML, MG)</th>
<th>AMOUNT SUPPLIED INTERNATIONALLY (ML, MG)</th>
<th>NO. OF RECIPIENT WOAH MEMBER COUNTRIES</th>
<th>COUNTRY OF RECIPIENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference Sera</td>
<td>ELISA / seroneutralisation</td>
<td>Produced and provided</td>
<td>0</td>
<td>7 X 1 ml</td>
<td>1</td>
<td>AUSTRIA,</td>
</tr>
</tbody>
</table>
Stephan Zientara - Epizootic haemorrhagic disease - FRANCE

WOAH Reference Laboratory Reports Activities 2023

Reference Sera  
<table>
<thead>
<tr>
<th>seroneutralisation</th>
<th>Produced and provided</th>
<th>0</th>
<th>7 X 1 ml</th>
<th>1</th>
<th>ITALY,</th>
</tr>
</thead>
</table>

Reference Sera  
<table>
<thead>
<tr>
<th>ELISA / seroneutralisation</th>
<th>Produced and provided</th>
<th>0</th>
<th>2 X 1 ml</th>
<th>1</th>
<th>PORTUGAL,</th>
</tr>
</thead>
</table>

**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>SWITZERLAND</td>
<td>2023-10-27</td>
<td>rtRT-PCR</td>
<td>10</td>
<td>0</td>
</tr>
</tbody>
</table>

11. Did your laboratory provide expert advice in technical consultancies on the request of an WOAH Member?  
Yes

<table>
<thead>
<tr>
<th>NAME OF THE WOAH MEMBER COUNTRY RECEIVING A TECHNICAL CONSULTANCY</th>
<th>PURPOSE</th>
<th>HOW THE ADVICE WAS PROVIDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUSTRIA</td>
<td>Diagnosis</td>
<td>By email</td>
</tr>
<tr>
<td>SPAIN</td>
<td>Virus isolation</td>
<td>By email</td>
</tr>
<tr>
<td>CROATIA</td>
<td>Diagnosis rtRT-PCR</td>
<td>By email</td>
</tr>
<tr>
<td>MOROCCO</td>
<td>Diagnosis rtRT-PCR</td>
<td>By email</td>
</tr>
<tr>
<td>PORTUGAL</td>
<td>Serological diagnosis</td>
<td>By email</td>
</tr>
<tr>
<td>SWEDEN</td>
<td>Diagnosis rtRT-PCR</td>
<td>By email</td>
</tr>
</tbody>
</table>

**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>Orbivirus Circulating in Cuba in 2022</td>
<td>3 months</td>
<td>Detection, Characterization and Sequencing of Orbivirus</td>
<td>National Center for Animal and Plant Health (CENSA)</td>
<td>CUBA</td>
</tr>
</tbody>
</table>
13. In exercising your activities, have you identified any regulatory research needs* relevant for WOAH?

No

**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:**

Surveillance and identification of EHDV strains that circulate in the French overseas territories (French Guiana and Reunion Island) enrich the epidemiological data on the distribution of the virus in the Indian Ocean and South America.

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:**

Genetic data

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:**

7


**b) International conferences:**

5


c) National conferences:

5


Zientara, Stéphan. 2023a. « Maladie hémorragique épidémique. » Conseil scientifique et technique du LNCR.


Zientara. 2023e. « Emergence de l'EHD/MHE (Maladie hémorragique épizootique) en Italie, en Espagne, au Portugal et en France. » Communication orale présenté à Rencontres Nationales en Santé Publique Vétérinaire, journée scientifique de l’ADILVA, Chorges, France, octobre 10.

Zientara. 2023h. « Changement climatique et maladies virales vectorielles en santé animale. » Communication orale invitée, webinaire présenté à colloque sur l’impact sanitaire du changement climatique sur les productions animales, Mérieux NutriSciences, novembre 23.

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

0

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 : 0

b) Seminars : 0

c) Hands-on training courses: 0

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>CUBA</td>
<td>1</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>
</tr>
</thead>
<tbody>
<tr>
<td>ISO 17025</td>
<td>Attestation 1-2246 révision 25.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>Detection of viral genome by rRT-PCR</td>
<td>COFRAC</td>
</tr>
</tbody>
</table>

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

Yes

Strains and sera are stored and manipulated in BSL3 lab which is controlled under biosecurity measures

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
**TOR10: NETWORK WITH WOAH REFERENCE LABORATORIES**

23. Did your laboratory exchange information with other WOAH Reference Laboratories designated for the same pathogen or disease?
Not applicable (only WOAH Reference Laboratory designated for the disease)

24. Do you network (collaborate or share information) with other WOAH Reference Laboratories designated for the same pathogen?
Not applicable (Only WOAH Reference Laboratory designated for the disease)

25. Did you organise or participate in inter-laboratory proficiency tests with WOAH Reference Laboratories designated for the same pathogen?
Not applicable (Only WOAH Reference Laboratory designated for the disease)

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?
Not applicable (Only WOAH Reference Laboratory designated for the disease)

**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 comparisons</th>
<th>Role of your reference laboratory (organizer/participant)</th>
<th>No. participating laboratories</th>
<th>Name of the Test</th>
<th>WOAH Member Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assess the ability of participating laboratories to properly detect EHDV antibodies in serum (ELISA), and to identify nucleic acid of EHD virus in ruminant blood (rRT-PCR)</td>
<td>organizer</td>
<td>1</td>
<td>PCR</td>
<td>CANADA,</td>
</tr>
<tr>
<td>Assess the ability of participating laboratories to properly detect EHDV antibodies in serum (ELISA), and to identify nucleic acid of EHD virus in ruminant blood (rRT-PCR)</td>
<td>organizer</td>
<td>1</td>
<td>PCR</td>
<td>UNITED KINGDOM,</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:
No