

WOAH Reference Laboratory Reports Activities 2025

This report has been submitted: 16 décembre 2025 14:47

LABORATORY INFORMATION

| | |
|---|---------------------------------------|
| *Name of disease (or topic) for which you are a designated WOA Reference Laboratory: | Epizootic haemorrhagic disease |
| *Address of laboratory: | |
| *Tel: | +33149771350 |
| *E-mail address: | stephan.zientara@anses.fr |
| Website: | |
| *Name (including Title) of Head of Laboratory (Responsible Official): | Stéphan Zientara |
| *Name (including Title and Position) of WOA Reference Expert: | Stéphan Zientara and Corinne Sailleau |
| *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

| Diagnostic Test | Indicated in WOA Manual (Yes/No) | Total number of test performed last year | |
|--|----------------------------------|--|-----------------|
| | | Nationally | Internationally |
| Indirect diagnostic tests | | | |
| Competition ELISA | Yes | 45 | 0 |
| Seroneutralisation | Yes | 40 | 0 |
| Direct diagnostic tests | | | |
| All genotypes rRT-PCR (Viarouge et al, 2015) | Yes | 86 | 0 |
| Typing rRT-PCR (Viarouge et al, 2015) | Yes | 10 | 0 |
| Viral isolation on KC cells | Yes | 3 | 0 |

TOR2: REFERENCE MATERIAL

2. Did your laboratory produce or supply imported standard reference reagents officially recognised by WOA?

No

3. Did your laboratory supply standard reference reagents (nonWOAH-approved) and/or other diagnostic reagents to WOA Members?

Yes

| Type of reagent available | Related diagnostic test | Produced/ provide | Amount supplied nationally (ml, mg) | Amount supplied internationally (ml, mg) | No. of recipient WOA Member Countries | Country of recipients |
|---------------------------|----------------------------|-------------------|-------------------------------------|--|---------------------------------------|-----------------------|
| Sera (field samples) | ELISA / seroneutralisation | provided | 0 | 8 X 1 ml | 1 | GERMANY, |
| | | | | | | |

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| | | | | | | |
|--|----------------------------|-----------------------|-------------------------|-------------|---|--------------|
| Reference Sera | Seroneutralisation | Produced and provided | 0 | 5 X 1ml | 1 | GERMANY, |
| Virus | Viral isolation + rtRT-PCR | Produced and provided | 0 | 1 X 1 ml | 1 | GERMANY, |
| Infected blood (panel for blind testing) | rtRT-PCR | Produced and provided | 0 | 13 X 700 µL | 1 | SWITZERLAND, |
| Reference blood | rtRT-PCR | Produced and provided | 24 X 250 µl | 0 | 0 | FRANCE, |
| Infected blood (panel for blind testing) | rtRT-PCR | Produced and provided | 13 X 700 µL For 50 labs | 0 | 0 | FRANCE, |
| RNA Panel | rtRT-PCR | Produced and provided | 68 X 20 µl | 0 | 0 | FRANCE, |

4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to WOAHA Members?

TOR3: NEW PROCEDURES

6. Did your laboratory develop new diagnostic methods for the designated pathogen or disease?

7. Did your laboratory validate diagnostic methods according to WOAHA Standards for the designated pathogen or disease?

No

8. Did your laboratory develop new vaccines for the designated pathogen or disease?

9. Did your laboratory validate vaccines according to WOAHA Standards for the designated pathogen or disease?

TOR4: DIAGNOSTIC TESTING FACILITIES

10. Did your laboratory carry out diagnostic testing for other WOAHA Members?

No

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

Yes

| Name of the WOAHA Member Country receiving a technical consultancy | Purpose | How the advice was provided |
|--|----------------------|-----------------------------|
| SWITZERLAND | Using commercial kit | By email |

TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

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

No

13. In exercising your activities, have you identified any regulatory research needs* relevant for WOAHA?

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, Caribbean 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?

No

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:

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VITOUR D, ZIENTARA S. 2025. Généralités et perspectives sur la maladie hémorragique épizootique. *Le Nouveau Praticien Vétérinaire élevages & santé* 2024;16(57-58), 28-34, doi.org/10.1051/npvelsa/2025014

ZIENTARA S. 2025. Maladies vectorielles, une expansion géographique difficile à enrayer. *Le Nouveau Praticien Vétérinaire élevages & santé (NPV élevages & santé)*, n° 59, Volume 16, 5.

b) International conferences:

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Zientara, 2025 « Situation épidémiologique de la FCO et de la MHE en France et en Europe », REMESA, Marrakech, 9 janvier 2025.

Zientara.2025 « Maladie hémorragique épizootique : le virus, sa pathogénie, son mode de transmission, l'épidémiologie générale, la comparaison avec la FCO », Luxembourg, 11 février 2025.

Zientara.2025 « Bluetongue, an overview: Emergence of orbiviruses in France/Europe over the last 27 years, Symposium Bluetongue and other exotic viruses », Lelystad, 11 mars 2025.

Zientara.2025 « Emergence and re-emergence of arboviruses in Europe », Governing Board of the European Partnership on Animal Health and Welfare, Ministry of Higher Education and Research, Paris, 28 mars 2025.

Zientara.2025 « Actual situation and threat for Europe by Bluetongue, Epizootic hemorrhagic disease, and Foot-and-Mouth disease », Congrès vétérinaire, 12 avril 2025, Lodz, Pologne.

Zientara.2025 "Bluetongue and EHD", symposium « Vaccination at the Core of a Sustainable European Strategy for Vector-borne Diseases », Nantes, 14 mai 2025.

Zientara.2025 « Global warming and emergence of vector borne diseases in Europe", webinaire, EFSA Stakeholder Discussion Group on Emerging Agenda of the 33rd meeting », 5 juin 2025

c) National conferences:

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Zientara.2025 « Situation épidémiologique de la FCO, de la MHE et de la FA en France et en Europe », Académie Vétérinaire de France, Paris (Académie d'Agriculture de France), 23 janvier 2025.

Zientara.2025 « Les maladies vectorielles », séminaire SBEA-INRAE, Nantes, 5 février 2025

Zientara.2025 « Epidémiologie vétérinaire : les émergences vectorielles », conseil scientifique et technique du LNCR, 12 février 2025.

Zientara.2025 « Les arboviroses : des infections d'avenir chez l'Homme et l'animal », Centre François Baclesse, Caen, 7 mars 2025.

Zientara.2025 « MHE en France : Bilan de situation », webinaire CEVA, 28 avril 2025.

Zientara.2025 « Les maladies vectorielles émergentes, des menaces à l'aube du dérèglement climatique ? », GDS d'Evreux, 4 juin 2025.

Zientara.2025 « Rétrospective et perspectives face aux orbivirus », webinaire, webinaire, Bio-X-diagnostics, 26 juin 2025.

Zientara.2025 « FCO et MHE, deux orbivirus émergents », Rougé (Chateaubriant), 10 octobre 2025.

Zientara.2025 "Situation épidémiologique de la FCO, de la MHE en France et en Europe", journée RNSPV/ADILVA, Sables d'Olonne, 5-6 novembre 2025.

Zientara.2025 « Les arboviroses émergentes, des maladies d'avenir ? », Santé animale Paris Saclay (SAPS), INRAE, Jouy-en-Josas, 4 décembre 2025.

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

TOR7: SCIENTIFIC AND TECHNICAL TRAINING

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

No

TOR8: QUALITY ASSURANCE

18. Does your laboratory have a Quality Management System?

Yes

| | | |
|-----------------------------------|---|--|
| Quality management system adopted | Certificate scan (PDF, JPG, PNG format) | |
|-----------------------------------|---|--|

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| | | |
|-----------|--------------------------------|---------------------------------|
| ISO 17025 | portée détaillée (EHD page 16) | Portée détaillée V15_251211.pdf |
|-----------|--------------------------------|---------------------------------|

19. Is your quality management system accredited?

Yes

| Test for which your laboratory is accredited | Accreditation body |
|--|--------------------|
| Detection of viral genome by rtRT-PCR | COFRAC |

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

No

our lab has a biosecurity officer for FMDV

TOR9: SCIENTIFIC MEETINGS

21. Did your laboratory organise scientific meetings related to the pathogen in question on behalf of WOAHP?

No

22. Did your laboratory participate in scientific meetings related to the pathogen in question on behalf of WOAHP?

No

TOR10: NETWORK WITH WOAHP REFERENCE LABORATORIES

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

Not applicable (only WOAHP Reference Laboratory designated for the disease)

24. Are you a member of a network of WOAHP Reference Laboratories designated for the same pathogen?

Not applicable (only WOAHP Reference Laboratory designated for the disease)

25. Did you organise or participate in inter-laboratory proficiency tests with WOAHP Reference Laboratories designated for the same pathogen during the past 2 years?

Not applicable (Only WOAHP Reference Laboratory designated for the disease)

no inter-laboratory proficiency tests as we are the only with WOAHP Reference Laboratory

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

Not applicable (only WOAHP 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 WOAHP Reference Laboratories for the same pathogen during the past 2 years?

Yes

| Purpose for inter-laboratory test comparisons ¹ | Role of your reference laboratory (organizer/participant) | No. participating laboratories | Name of the test | WOAHP Member Countries |
|--|---|--------------------------------|------------------|---|
| Epizootic haemorrhagic disease virus (EHDV) Inter-Laboratory Comparison test PCR + ELISA | Participant | 7 | PCR and ELISA | BELGIUM, CANADA, FRANCE, ITALY, SPAIN, THE NETHERLANDS, UNITED KINGDOM, |
| Epizootic haemorrhagic disease virus (EHDV) Inter-Laboratory Comparison test. (PCR) | Organiser (and 49 French labs) | 50 | PCR | FRANCE, |

TOR12: EXPERT CONSULTANTS

28. Did your laboratory place expert consultants at the disposal of WOAHP?

No

29. Additional comments regarding your report:

Yes

There is no mandatory monitoring of EHDV worldwide, hence few requests.