

WOAH Reference Laboratory Reports Activities 2025

This report has been submitted: 30 janvier 2026 14:28

LABORATORY INFORMATION

| | |
|-----------------------------------------------------------------------------------------------|-------------------------------------------------------|
| *Name of disease (or topic) for which you are a designated WOAHO Reference Laboratory: | Viral haemorrhagic septicaemia |
| *Address of laboratory: | Kemitorvet, Building 202, 2800 Kgs, Lyngby |
| *Tel: | +45 35 88 68 31 |
| *E-mail address: | abrij@dtu.dk |
| Website: | www.aqua.dtu.dk |
| *Name (including Title) of Head of Laboratory (Responsible Official): | Director Anna Rindorf |
| *Name (including Title and Position) of WOAHO Reference Expert: | Professor Britt Bang Jensen DVM, PhD, Head of Section |
| *Which of the following defines your laboratory? Check all that apply: | Academic institution |

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 WOAHO Manual (Yes/No) | Total number of test performed last year | |
|----------------------------------------------|------------------------------------|------------------------------------------|-----------------|
| | | Nationally | Internationally |
| Indirect diagnostic tests | | | |
| Direct diagnostic tests | | | |
| Cell cultivation BF-2 cells | Yes | 413 | 17 |
| Cell cultivation EPC cells | Yes | 413 | 17 |
| RT-qPCR | Yes | 161 | 80 |
| ELISA following CPE on cell culture analysis | Yes | 19 | 0 |

TOR2: REFERENCE MATERIAL

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

No

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

No

4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to WOAHO Members?

TOR3: NEW PROCEDURES

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

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

TOR4: DIAGNOSTIC TESTING FACILITIES

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

Yes

| Name of WOAHS Member Country seeking assistance | Date | Which diagnostic test used | No. samples received for provision of diagnostic support | No. samples received for provision of confirmatory diagnoses |
|-------------------------------------------------|------------|----------------------------|----------------------------------------------------------|--------------------------------------------------------------|
| FRANCE | 2025-10-09 | Cell culture and RT-qPCR | 0 | 4 |
| BELGIUM | 2025-12-16 | Cell culture and RT-qPCR | 0 | 13 |

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

Yes

| Name of the WOAHS Member Country receiving a technical consultancy | Purpose | How the advice was provided |
|--------------------------------------------------------------------|------------------------------------------------------------------------|-----------------------------|
| FRANCE | Diagnostic confirmation and further characterization of VHSV isolates. | Remote |

TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

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

Yes

| Title of the study | Duration | Purpose of the study | Partners (Institutions) | WOAHS Member Countries involved other than your country |
|------------------------------------------------|----------|------------------------------|----------------------------------------------|---------------------------------------------------------|
| In-vivo assessment of VHSV recombinant viruses | 1 month | Search for virulence markers | NIFS (National Institute of Fishery Science) | KOREA (REP. OF) |

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

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:

We have asked all European countries for the prevalence and incidence of VHSV in our annual survey for fish diseases in Europe

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:

Report on survey and diagnosis of fish diseases in Europe disseminated at the 29th Annual Workshop of the National reference laboratories for fish diseases.
Report available upon request.

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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*EFSA AHAW Panel (EFSA Panel on Animal Health and Welfare), Nielsen, S. S., Alvarez, J., Boklund, A., Dippel, S., Figuerola, J., Herskin, M. S., Michel, V., Miranda Chueca, M. A., Nannoni, E., Nonno, R., Riber, A. B., Ståhl, K., Stegeman, J. A., Thulke, H.-H., Tuytens, F., Winckler, C., Christiansen, D. H., Olesen, N. J., ... Dórea, F. (2025). Viral haemorrhagic septicaemia virus, infectious haematopoietic necrosis virus and HPR-deleted infectious salmon anaemia virus – Risk of introduction in free areas through fertilised eggs and gametes. *EFSA Journal*, 23(12), e9800. <https://doi.org/10.2903/j.efsa.2025.9800>*

b) International conferences:

1

EUURL Annual Workshop for National Reference Laboratories of Fish Diseases

c) National conferences:

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?

Yes

a) Technical visit : 0

b) Seminars : 56

c) Hands-on training courses: 12

d) Internships (>1 month) 0

| Type of technical training provided (a, b, c or d) | Country of origin of the expert(s) provided with training | No. participants from the corresponding country |
|----------------------------------------------------|-----------------------------------------------------------|-------------------------------------------------|
| C | LATVIA | 2 |
| C | ITALY | 1 |
| C | FINLAND | 1 |
| C | SWEDEN | 1 |
| C | LITHUANIA | 1 |
| C | SERBIA | 1 |
| C | SWITZERLAND | 1 |
| C | HUNGARY | 1 |
| C | GERMANY | 1 |
| C | CROATIA | 1 |
| C | DENMARK | 1 |
| B | AUSTRIA | 1 |
| B | BELGIUM | 1 |

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|---|------------------------|----|
| B | BOSNIA AND HERZEGOVINA | 1 |
| B | BULGARIA | 1 |
| B | CROATIA | 1 |
| B | CZECH REPUBLIC | 1 |
| B | DENMARK | 16 |
| B | ESTONIA | 1 |
| B | FAROE (ISLANDS) | 1 |
| B | FINLAND | 1 |
| B | FRANCE | 1 |
| B | GERMANY | 2 |
| B | HUNGARY | 1 |
| B | ICELAND | 2 |
| B | IRELAND | 1 |
| B | ITALY | 2 |
| B | LATVIA | 3 |
| B | LITHUANIA | 1 |
| B | THE NETHERLANDS | 2 |
| B | NORWAY | 2 |
| B | POLAND | 2 |
| B | PORTUGAL | 1 |
| B | ROMANIA | 1 |
| B | SERBIA | 1 |
| B | SLOVAKIA | 1 |
| B | SPAIN | 1 |
| B | SWEDEN | 1 |
| B | SWITZERLAND | 1 |
| B | TURKEY | 1 |

TOR8: QUALITY ASSURANCE

18. Does your laboratory have a Quality Management System?

Yes

| Quality management system adopted | Certificate scan (PDF, JPG, PNG format) | |
|-----------------------------------|-----------------------------------------|------------------------------------|
| DS/EN ISO/IEC 17025:2017 | Certifikat_05-0588_Akk EN sign.pdf | Certifikat_05-0588_Akk-EN-sign.pdf |
| DS/EN ISO/IEC 17043:2010 | Certifikat_05-0515_Akk EN sign.pdf | Certifikat_05-0515_Akk EN sign.pdf |

19. Is your quality management system accredited?

Yes

| Test for which your laboratory is accredited | Accreditation body |
|----------------------------------------------|--------------------|
| VHSV Cell cultivation | DANAK 17025:2017 |
| VHSV IFAT | DANAK 17025:2017 |
| VHSV ELISA | DANAK 17025:2017 |

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|-----------------------------------|------------------|
| VHSV RT-qPCR | DANAK 17025:2017 |
| Proficiency test for fish viruses | DANAK 17043:2010 |

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

No

No, our laboratory does not maintain a dedicated biorisk management system for VHS, as the virus does not pose a risk to human health. However, as an ISO 17025-accredited laboratory under DANAK, we adhere to strict quality management and biosafety procedures to minimize any risks associated with working with pathogens.

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?

Yes

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

Yes

| NETWORK/DISEASE | ROLE OF YOUR LABORATORY (PARTICIPANT, ORGANISER, ETC) | NO. PARTICIPANTS | PARTICIPATING WOAHP REF. LABS |
|----------------------|----------------------------------------------------------------------------------------------|------------------|----------------------------------------|
| WOAHP listed disease | Participant providing access to diagnostic laboratory to test reference controls and samples | 3 | WOAHP ref lab for VHSV at NIFS and DFO |

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?

No

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?

Yes

| Title of the project or contract | Scope | Name(s) of relevant WOAHP Reference Laboratories |
|-----------------------------------------------------------|-----------------------------|--------------------------------------------------|
| In-vivo virulence assessment of recombinant VHSV isolates | Search of virulence markers | NIFS |

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 |
|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------|------------------------|
| To primarily assess the identification of the fish viruses VHSV, IHNV, EHN, EVCV, and IPNV by cell culture methods | Organizer and participant | 46 | European Union Reference Laboratory Inter-Laboratory Proficiency Test for Fish Diseases PT 1 | |
| To assess the identification of the fish viruses ISAV, SAV, and KHV by PCR-methods | Organizer and participant | 44 | European Union Reference Laboratory Inter-Laboratory Proficiency Test for Fish Diseases PT 2 | |

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|-----------------------------------------------------------------------------------------------------------|---------------------------|----|---------------------------------------------------------------------------------------------------------|
| To assess the identification of the crustacean viruses WSSV, TSV, and YHV-1 by PCR-methods | Organizer and participant | 26 | European Union Reference Laboratory Inter-Laboratory Proficiency Test for Crustacean Diseases |
| To assess the identification of the crustacean viruses IHHNV, IMNV, AHPND, WSSV, and YHV-1 by PCR-methods | Participant | 1 | Asia-Pacific Aquatic PT Program: Crustacean Diseases by CISRO Australian Centre for Diseases |
| To assess the identification of the fish viruses KHV, RSIV, NNV, and SVCV by PCR-methods | Participant | 1 | Asia-Pacific Aquatic PT Program: Finfish Diseases by CISRO Australian Centre for Diseases |
| To assess the identification of fish pathogenic cold-water bacteria | Participant | 1 | 1. 2025 Ring test for fish pathogenic cold-water bacteria |
| To assess the identification of fish bacteria | Participant | 1 | 1st Inter-laboratory Proficiency Test (BATT ID) for the identification of fish bacterial - IZSve, Italy |

TOR12: EXPERT CONSULTANTS

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

Yes

| Kind of consultancy | Location | Subject (facultative) |
|------------------------|--------------------------|----------------------------------------------|
| Workshop participation | Paris, WOA?H headquarter | Priorities in aquatic animal health research |

29. Additional comments regarding your report:

No