WOAH Reference Laboratory Reports Activities 2022

Activities in 2022

This report has been submitted: 1 mars 2023 17:34

**Laboratory Information**

| Name of disease (or topic) for which you are a designated WOAH Reference Laboratory: | Infection with salmonid alphavirus |
| Address of laboratory: | Norwegian Veterinary Institute, P.O. Box 64, 1431 Aas, Norway |
| Tel.: | +4723216000 |
| E-mail address: | hilde.sindre@vetinst.no |
| Website: | https://www.vetinst.no/en |
| Name (including Title) of Head of Laboratory (Responsible Official): | Torill Moseng, Director General of the Norwegian Veterinary Institute |
| Name (including Title and Position) of WOAH Reference Expert: | Dr. Hilde Sindre |
| Which of the following defines your laboratory? Check all that apply: | Governmental 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></td>
<td></td>
<td>Nationally</td>
</tr>
<tr>
<td>Indirect diagnostic tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Histopathology</td>
<td>Yes</td>
<td>425</td>
</tr>
<tr>
<td>Direct diagnostic tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immunohistochemistry</td>
<td>Yes</td>
<td>13</td>
</tr>
</tbody>
</table>

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**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>Infectious field isolates SAV2/SAV3</td>
<td>several</td>
<td>Norway</td>
<td>10 ml</td>
<td>20 ml</td>
<td>2</td>
<td>Europe</td>
</tr>
<tr>
<td>Salmon sera from SAV-infected fish</td>
<td>ELISA, VNT</td>
<td>Norway</td>
<td>0,1 ml</td>
<td>1</td>
<td>Europe</td>
<td></td>
</tr>
</tbody>
</table>

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>Effects of a DNA and multivalent oil-adjuvanted vaccines against pancreas disease</td>
<td>2021-2022</td>
<td>Evaluate the effect of a DNA vaccine on viremia and neutralizing activity</td>
<td>Experimental Pathology Laboratories Inc., Elanco</td>
<td>UNITED STATES OF AMERICA</td>
</tr>
<tr>
<td>in Atlantic salmon (Salmo salar) challenged with salmonid alphavirus subtype 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robust Atlantic salmon through fine-tuned genome editing (TUNESAL)</td>
<td>2020-2023</td>
<td>Produce SAV-clones for experimental trials</td>
<td>IMR, Norway (project leader) INRA - French National Institute for Agricultural Research</td>
<td>FRANCE</td>
</tr>
<tr>
<td>EPA immune - Can dietary EPA affect viral response in Atlantic salmon?</td>
<td>2021-2025</td>
<td>Produce SAV-clones for experimental trials. Evaluate immune responses</td>
<td>IMR (project leader) Norway, University of Manchester</td>
<td>UNITED KINGDOM</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:**

Data collected related to all Norwegian detections of SAV and also all PD cases

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:**

An overview of the occurrence of SAV is presented in the annual Fish Health report. All reported cases of SAV are also presented continuously at our webpage (Pankreassykdom (PD) - utbrudd og statistikk (vetinst.no)) including an interactive map over outbreaks.

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:
Effects of a DNA and multivalent oil-adjuvanted vaccines against pancreas disease in Atlantic salmon (Salmo salar) challenged with salmonid alphavirus subtype 3.


b) International conferences:

1

2022 PD Trination meeting, Edinburgh, UK

c) National conferences:

1

Frisk Fisk, Bergen 2022

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

The Fish Health report provide an annual status and risk evaluation of the fish health situation in Norway.

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>NS-EN ISO/IEC 17025</td>
<td>Akkrediteringsdokument 13.01.23.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>Influenza A virus (matrix) - detection with real-time Rt-PCR (ME07_127)</td>
<td>Norwegian Accreditation, member of EA</td>
</tr>
<tr>
<td>Flexible accreditation including all methods based on the same principle, this includes real-time RT-PCR for SAV</td>
<td>Norwegian Accreditation, member of EA</td>
</tr>
</tbody>
</table>

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

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WOAH Reference Laboratory Reports Activities 2022
Yes

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

24. Are you a member of a network of 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>Region(s) of participating WOAH Member Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>The EU-RL Annual Inter-laboratory Proficiency Test 2022 focused on identification of the pathogens causing the nonexotic and exotic fish diseases listed in Council Directive 2016/88EC, including ISA. In 2015, SAV was included for the first time.</td>
<td>Participant</td>
<td>44</td>
<td>Africa, America, Asia and Pacific, Europe, MiddleEast</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
Less contact from other labs for advice and assistance, possibly connected to the covid-19 situation