WOAH Reference Laboratory Reports Activities 2023

Activities in 2023

This report has been submitted : 11 juin 2024 13:19

Laboratory Information

Name of disease (or topic) for which you are a designated WOAH Reference Laboratory:	Infectious Salmona Anemia (ISA)
Address of laboratory:	Postboks 64, 1431 Ås, Norway
Tel.:	+47-23 21 60 00
E-mail address:	ole.b.dale@vetinst.no
Website:	https://www.vetinst.no/
Name (including Title) of Head of Laboratory (Responsible Official):	General Director, DVM PhD Øyvind Fylling-Jensen
Name (including Title and Position) of WOAH Reference Expert:	DVM, PhD Ole Bendik Dale
Which of the following defines your laboratory? Check all that apply:	Governmental

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 WOAH Manual (Yes/No)	Total number of test performed last year	
Indirect diagnostic tests		Nationally	Internationally
Histopathology for ISA		177	0
Direct diagnostic tests		Nationally	Internationally
Immunohistochemistry for ISA		436	0
Cell culture with IFAT identification for ISAV		40	0
RT-PCR for ISAV		5896	0
Genotyping HPR segment 6 ISAV		305	0

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 (nonWOAH-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?

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?

No

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

Yes

Research need : 1

Please type the Research need: New diagnostic tests have recently been published or are in press: validation according to WOAH chapter is needed

Relevance for WOAH Standard Setting,

Relevance for the Codes or Manual

Field Diagnostics,

Animal Category Aquatic,

Disease:

Infection with infectious salmon anaemia virus

Kind of disease (Zoonosis, Transboundary diseases)

If any, please specify relevance for Codes or Manual, chapter and title

(e.g. Terrestrial Manual Chapter 2.3.5 - Minimum requirements for aseptic production in vaccine manufacture)

Answer: Aquatic manual Chp 2.3.4 - 4. Diagnostic methods

Notes:

Answer: The diagnostic methods in the present manual are "time-proven", but not validated formally. Recently, new methods with presumptive advantages have been published or are in the process of being published. This makes validation of methods necessary.

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:
Publishing ISAV sequence data from Norwegian outbreaks in open acess database (Genebank)

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:
Sommerset I, Wiik-Nielsen J, Moldal T, Oliveira VHS, Svendsen JC, Haukaas A og Brun E. Norwegian Fish Health Report 2023, Norwegian Veterinary Institute Report, series #8a/2024, published by the Norwegian Veterinary Institute in 2024

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:

2
Petersen PE, Dahl MM, Vest NMO, Jansen MD, Fosse JH, Falk K, Christiansen DH. Validation of a TaqMan one-step real-time RT-PCR assay targeting ISAV segment 7 spliced mRNA. J Virol Methods. 2023 Nov;321:114791. doi: 10.1016/j.jviromet.2023.114791. Epub 2023 Aug 8. PMID: 37562733.
Fosse JH, Andresen AMS, Ploss FB, Weli SC, Heffernan IA, Sapkota S, Lundgård K, Kuiper RV, Solhaug A, Falk K. The infectious salmon anemia virus esterase prunes erythrocyte surfaces in infected Atlantic salmon and exposes terminal sialic acids to lectin recognition. Front Immunol. 2023 Apr 25;14:1158077. doi: 10.3389/fimmu.2023.1158077. PMID: 37180109; PMCID: PMC10167051.

b) International conferences:

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 WOAH 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)	
ISO/IEC 17025 (2005)	See attached file	Akkrediteringsdokument 13.01.23.pdf

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
P27 Flexible accreditation for real-time RT-PCR methods including: Cellefrie væsker, infisert cellekultur og organmateriale fra fisk Infeksiøs lakseanemi virus Intern metode ME07_181 Realtime PCR	Norsk Akkreditering

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

Yes

The QA system approved by Norwegian accreditation includes a bioriskmanagement system protecting staff and environment through biosecurity measures up to BSL-3 level.

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?

Yes

24. Do you network (collaborate or share information) with other 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?

No

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

Purpose for inter-laboratory test comparisons1	Role of your reference laboratory (organizer/participant)	No. participating laboratories	Name of the Test	WOAH Member Countries
The EU-RL Annual Interlaboratory Proficiency Test	Participant	13	ISAV RT-PCR	

TOR12: EXPERT CONSULTANTS

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

No

29. Additional comments regarding your report:

Yes

The ISA disease situation in Norway is demanding and much of the available resources for this disease at the Norwegian Veterinary Institute is used for diagnostics and advice to the competent authoratives acc to EU regulations and national regulations. None the less R&D on diagnostics, whole genome sequencing and pathogenesis are ongoing and the number of publications will increase for the year of 2024. Our attempt to collaborate with WOAH expert on the same disease (ISA) in Chile on validation have been postponed and there is a need to rethink which methods to include in validation as there are several new methods: i.e. formal validation lagging behind innovation