

WOAH Reference Laboratory Reports Activities 2023

Activities in 2023

This report has been submitted : 23 avril 2024 15:09

Laboratory Information

Name of disease (or topic) for which you are a designated WOA Reference Laboratory:	Bovine viral diarrhoea
Address of laboratory:	Friedrich-Loeffler-Institut, Federal Research Institute for Animal Health, Südufer 10, 17493 Greifswald – Insel Riems, Germany
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Website:	https://www.fli.de/en/startpage/
Name (including Title) of Head of Laboratory (Responsible Official):	PD Dr. Kerstin Wernike (head of laboratory)
Name (including Title and Position) of WOA Reference Expert:	PD Dr. Kerstin Wernike (head of laboratory)
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 WOA Manual (Yes/No)	Total number of test performed last year	
		Nationally	Internationally
Indirect diagnostic tests			
Antibody ELISA		1622	30
Serum neutralisation (BVD)		62	22
Serum neutralisation (Border Disease)		19	0
Direct diagnostic tests			
Virus isolation		31	0
BVDV antigen ELISA		492	0
RT-PCR		1562	12

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
Antibody positive and						GERMANY, IRELAND,

negative sera	Antibody ELISA, SNT	Produced and provided	12ml	14ml	4	POLAND, SWITZERLAND,
Antibody positive and negative milk samples	Antibody ELISA	Provided	15ml	4ml	2	GERMANY, POLAND,
RNA	RT-PCR	Produced and provided	-	0.4ml	1	ETHIOPIA,
BVDV positive tissue	RT-PCR, Antigen-ELISA, virus isolation	Provided	2500mg	-	1	GERMANY,
BVDV positive and negative sera	RT-PCR, Antigen-ELISA, virus isolation	Provided	-	4ml	1	POLAND,
BVDV positive and negative milk samples	RT-PCR, Antigen-ELISA	Provided	-	2ml	1	POLAND,

4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to WOAHO 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 WOAHO 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 WOAHO Standards for the designated pathogen or disease?

No

TOR4: DIAGNOSTIC TESTING FACILITIES

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

No

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

Yes

NAME OF THE WOAHO MEMBER COUNTRY RECEIVING A TECHNICAL CONSULTANCY	PURPOSE	HOW THE ADVICE WAS PROVIDED
POLAND	sequencing, proficiency testing schemes	Email
ETHIOPIA	diagnostic testing/PCR	Email, material transfer
JORDAN	sequencing	Email
FRANCE	proficiency testing schemes	Email
CANADA	diagnostic testing/serology	Email, meeting via video conference, material transfer
CZECH REPUBLIC	diagnostic testing	Email
SWITZERLAND	proficiency testing schemes	Email
DENMARK	viral sequences	Email, meeting via video conference

TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

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

No

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

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:

Institute of Epidemiology at the Friedrich-Loeffler-Institut is hosting the TSN disease notification system; annual statistics about BVD/MD cases in Germany based on data obtained from the cattle trade database (HI-Tier); genotyping of BVDV strains

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:

Annual statistics about BVD/MD cases in Germany is provided

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:

1

Wernike, K., Pfaff, F., Beer, M. "Fading out" - genomic epidemiology of the last persistently infected BVDV cattle in Germany. doi: 10.3389/fvets.2023.1339248. eCollection 2023.

b) International conferences:

1

c) National conferences:

3

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

190

1 report, 189 BVDV sequences

report: <https://www.fli.de/en/publications/annual-animal-health-reports/>

sequences: 5'UTR sequences of 189 BVDV strains, NCBI GenBank (<https://www.ncbi.nlm.nih.gov/genbank/>) accession numbers OR710303 to OR710491

TOR7: SCIENTIFIC AND TECHNICAL TRAINING

17. Did your laboratory provide scientific and technical training to laboratory personnel from other WOAHA 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 17025	Akkreditierungsurkunde_2022.pdf	Akkreditierungsurkunde_2022.pdf

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
flexible accreditation: antibody ELISA and neutralisation test	Deutsche Akkreditierungsstelle GmbH (DAKKS)

flexible accreditation: virus isolation, antigen ELISA and RT-PCR

Deutsche Akkreditierungsstelle GmbH (DAKKS)

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

Yes

A management system that ensures safe and secure handling, storage, and transport of biological materials is in place. The specifications are laid down in operating instructions. The designated Biorisk Officer oversees the biorisk management of the institute and the observance of biosafety and -security regulations.

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. Do you network (collaborate or share information) with other WOAHP Reference Laboratories designated for the same pathogen?

No

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

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?

No

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?

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
BVDV antigen/virus/genome detection, antibody detection	Organizer	41	virus isolation, BVDV antigen ELISA, RT-PCR; antibody ELISA, serum neutralisation test	AUSTRIA, DENMARK, FINLAND, FRANCE, GERMANY, IRELAND, ITALY, LITHUANIA, SWITZERLAND, THE NETHERLANDS,

TOR12: EXPERT CONSULTANTS

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

Yes

KIND OF CONSULTANCY	Location	SUBJECT (FACULTATIVE)
review of the WOAHP Terrestrial Manual chapter on bovine viral diarrhoea	remote	updating of the chapter

29. Additional comments regarding your report:

Yes

The WOAHP reference laboratory is acting as test laboratory for test authorisation and batch release testing in Germany.