

WOAH Reference Laboratory Reports Activities 2022

Activities in 2022

This report has been submitted : 26 avril 2023 10:19

Laboratory Information

Name of disease (or topic) for which you are a designated WOA Reference Laboratory:	Infectious bovine rhinotracheitis/infectious pustular vulvovaginitis
Address of laboratory:	Südufer 10 D-17493, Greifswald Insel Riems, GERMANY
Tel.:	+49 38351 7 1223
E-mail address:	martin.beer@fli.de
Website:	www.fli.de
Name (including Title) of Head of Laboratory (Responsible Official):	Dr. Patricia König, Deputy Head of Laboratory, patricia.koenig@fli.de
Name (including Title and Position) of WOA Reference Expert:	Prof. Dr. Martin Beer, 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	
Indirect diagnostic tests		Nationally	Internationally
BoHV-1 whole virus ELISA	yes	91	6
BoHV-1 gB blocking ELISA	yes	945	12

BoHV-1 gE blocking ELISA	yes	557	8
BoHV-1 bulk milk ELISA	yes	140	0
BoHV-2 whole virus	no	28	2
BoHV-1/BuHV-1 differentiating ELISA	no	67	0
serum neutralisation test	yes	183	2
Direct diagnostic tests		Nationally	Internationally
virus isolation in cell culture	yes	55	6
IFA	yes	17	0
PCR	yes	94	34

TOR2: REFERENCE MATERIAL

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

No

3. Did your laboratory supply standard reference reagents (nonWOAH-approved) and/or other diagnostic reagents to WOA?H 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?H MEMBER COUNTRIES	COUNTRY OF RECIPIENTS
milk samples	indirect milk/bulk milk ELISA	0/30	100 mL	21 mL	3	Europe
serum samples	antibody ELISA / SNT	0/50	24 mL	21 mL	5	Europe
meat juice samples	antibody ELISA	0/4	0	0	0	
DNA	PCR, RFLP	0/15	0	0	0	
virus stocks	SNT virus isolation	1/10	2	2	2	Europe

4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to WOA?H Members?

No

TOR3: NEW PROCEDURES

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

Yes

NAME OF THE NEW TEST OR DIAGNOSTIC METHOD DEVELOPED	DESCRIPTION AND REFERENCES (PUBLICATION, WEBSITE, ETC.)
Genetic DIVA	Differentiation of circulating BoHV-1 virus from US2 deleted vaccine strains. Publication in preparation (Basel A. Abukhadra, Sahar Abd El Rahman; Faculty of Veterinary Medicine, Mansoura

University)

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?

No

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

No

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
AUSTRIA	2022-03-22	PCR	5	0
IRELAND	2022-07-28	ELISA, SNT	0	2
UNITED ARAB EMIRATES	2022-09-08	PCR, VI	2	0

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
AUSTRIA	outbreak epidemiology	E-mail, phone
EGYPT	DIVA	E-mail, online meetings, exchange of samples
FRANCE	Survey in animal health	questionnaire
BELGIUM	cross neutralisation of ruminant herpesviruses	E-mail
SPAIN	BHV-2 SNT	exchange of protocols and reference material
IRELAND	BHV-1 pseudovaccines	E-mail
SPAIN	possible occurrence of CpHV-1 in cattle	E-mail
CANADA	BHV-1 gB ELISA	E-mail
GERMANY	aspects and suggestions of international control and regulation of BHV-1 pseudovaccines	E-mail
SPAIN	indirect gE ELISA	E-mail, exchange of test material
MALTA	optimised test strategies for IBR free insemination bulls	E-mail
CZECH REPUBLIC	pool options for diagnostic samples	E-mail

ITALY

singelton reactors in free herds

E-mail, exchange of samples

TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

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

Yes

Title of the study	Duration	PURPOSE OF THE STUDY	PARTNERS (INSTITUTIONS)	WOAH MEMBER COUNTRIES INVOLVED OTHER THAN YOUR COUNTRY
IBR in Egypt	> 6 months	Characterisation of BoHV-1 isolates in Egypt Application of different diagnostic PCR methods; characterisation of IBR strains: molecular subtyping and genetic DIVA	Faculty of Veterinary Medicine Mansoura University	EGYPT
Whole genome sequencing	2020-2023	BoHV-1 isolates: possibilities of molecular epidemiology	GD Deventer	THE NETHERLANDS

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:

FLI (Institute of Epidemiology) collects data and presents the annual reporting to the EU commission.

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:

- Institute of Epidemiology at FLI is hosting the disease notification systems www.tsis.fli.de and www.tsn.fli.de: Collection and geographical distribution of reported cases in Germany
- FLI (Institute of Epidemiology) and the Swiss Federal Food Safety and Veterinary Office (BLV) are distributing the "Radar Bulletin". The Radar Bulletin compiles and evaluates information on the global situation and on the spread of the most important animal diseases which are relevant for Germany and Switzerland.
- FLI (Institute of Epidemiology) collects data and presents the annual reporting of the number of examinations, diagnostic tests carried out and outbreak statistics to the EU

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:

0

b) International conferences:

1

10. RDT, Greifswald, Germany
"Updates from the National
Reference Laboratories"

c) National conferences:

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

www.fli.de

Tiergesundheitsjahresbericht 2021/Hrsg. Friedrich-Loeffler-Institut, Federal
Research Institute for Animal Health

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	tif	D-PL-14002-02-00_DAKKS_Symbol_ILAC_RGB_2.1_2015.tif
ISO 17025	jpg	Akkreditierungsurkunde_2019.jpg

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
ELISA (marker and conventional) on blood and milk samples, SNT	ILAC MRA

VI, IFA, NA extraction, PCR	ILAC MRA
RFLP	ILAC MRA

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

Yes

FLI has a well established biorisk control system (BRO, biorisk committee) with standardised laboratory biosafety and hygiene instructions; Regular official control visits and documentation control by independent state control authority,

TOR9: SCIENTIFIC MEETINGS

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

No

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

Yes

Title of event	Date (mm/yy)	Location	Role (speaker, presenting poster, short communications)	Title of the work presented
CEN/TC 469 WG1	2022-01-01	online meetings at regular intervals	German expert	standardisation of control of diagnostic reagents on European level in accordance with WOA standards and definitions

TOR10: NETWORK WITH WOA REFERENCE LABORATORIES

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

Yes

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

No

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

No

26. Did your laboratory collaborate with other WOA 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 WOA REFERENCE LABORATORIES
OIE reference sera for IBR	Generation of reference sera validated according to OIE standards	APHA, Weybridge, UK
Detection of BoHV-1 in bovine semen	Generation of thoroughly characterised test panels	APHA, Weybridge, UK

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	Region(s) of participating WOAHP Member Countries
BoHV-1 direct and indirect diagnostics	lyophilisation of the samples panel for launching the 2023 proficiency test		

TOR12: EXPERT CONSULTANTS

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

Yes

KIND OF CONSULTANCY	Location	SUBJECT (FACULTATIVE)
EU COMMENTS ON THE PROPOSED CHANGES TO THE WOAHP MANUAL OF DIAGNOSTIC TESTS AND VACCINES FOR TERRESTRIAL ANIMALS	remote	3.7.2. Rabbit haemorrhagic disease

29. Additional comments regarding your report:

Yes

The WOAHP laboratory is in charge with test licensing (1 test system) and batch control testing in Germany (laboratory testing of 31 ELISA batches in 2022).