

WOAH Reference Laboratory Reports Activities 2022

Activities in 2022

This report has been submitted : 20 mars 2023 11:59

Laboratory Information

Name of disease (or topic) for which you are a designated WOAHO Reference Laboratory:	Bovine viral diarrhoea
Address of laboratory:	P.O. Box 640 Township Road 9-1 Lethbridge, Alberta T1J 3Z4 CANADA
Tel.:	+1-403 382 55 00
E-mail address:	oliver.lung@inspection.gc.ca
Website:	
Name (including Title) of Head of Laboratory (Responsible Official):	Dr. Kingsley Amoako, Director, Canadian Food Inspection Agency National Centres for Animal Disease, Lethbridge Laboratory
Name (including Title and Position) of WOAHO Reference Expert:	Dr. Oliver Lung, Research Scientist/Head, Genomics Unit, Canadian Food Inspection Agency, National Centre for Foreign Animal Disease
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 WOAHO Manual (Yes/No)	Total number of test performed last year	
Indirect diagnostic tests		Nationally	Internationally
BVD-SN	Yes	3,801	
Direct diagnostic tests		Nationally	Internationally
BVD-Isolation	Yes	466	
BVD-IP	Yes	2,984	

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
BVDV mAb pool	BVD-IP	produced and provided	2 ml		1	America
whole blood from SPF cattle	various	produced	13007 ml			
serum from SPF cattle	BT-C ELISA, BLV-1 ELISA, PTB ELISA and others	produced and provided	2188 ml	10 ml	1	Asia and Pacific

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.)
high-throughput sequencing methods for BVDV and other viruses	High-throughput sequencing for species authentication and contamination detection of 63 cell lines (Scientific Reports 11(1) DOI: 10.1038/s41598-021-00779-5) and manuscripts in preparation

7. Did your laboratory validate diagnostic methods according to WOA?H 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 WOA?H Standards for the designated pathogen or disease?

No

TOR4: DIAGNOSTIC TESTING FACILITIES

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

No

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

Yes

NAME OF THE WOA MEMBER COUNTRY RECEIVING A TECHNICAL CONSULTANCY	PURPOSE	HOW THE ADVICE WAS PROVIDED
UNITED STATES OF AMERICA	query about BVDV antigen and antibody positive field reference material for development and optimization of ELISA for detection of BVDV	remote
BRAZIL	query about BVD-free MDBK cell lines	remote
SPAIN	query about Hobi-like BVD samples and whether it can be detected in ELISA assays	remote

TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

12. Did your laboratory participate in international scientific studies in collaboration with WOA 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
Present and Future Challenges in Genomics in Animal Health Workshop	2 days	Organization of a workshop focuses on the opportunities and challenges of using genomic technologies to improve the surveillance of viral pathogens in agricultural animals.	Pirbright Institute (UK), Canadian Food Inspection Agency (Canada), Sciensano (Belgium)	BELGIUM

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:

passive surveillance

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:

Reports are provided regularly to the Canadian Food Inspection Agency

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:

7
Seven peer-reviewed papers related to multiple viruses were published in this reporting period

b) International conferences:

4
Presentations were made in four international conferences in this reporting period on multiple viruses

c) National conferences:

4
Presentations were made in four national conferences in this reporting period on multiple viruses

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

passive surveillance conducted and reported regularly to the Canadian Food Inspection Agency

TOR7: SCIENTIFIC AND TECHNICAL TRAINING

17. Did your laboratory provide scientific and technical training to laboratory personnel from other WOAHA Members?

Yes

a) Technical visit : 1

b) Seminars :

c) Hands-on training courses:

d) Internships (>1 month)

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
Oxford Nanopore sequencing	Guatemala	2

TOR8: QUALITY ASSURANCE

18. Does your laboratory have a Quality Management System?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)	
17025	pdf	2021 ASB_CTF_15366-CFIA-

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
Virus Isolation	Standards Council of Canada
Immuno-Peroxidase	Standards Council of Canada
Serum Neutralization	Standards Council of Canada

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

Yes

Laboratory access is strictly controlled and all visitors are required to sign in and sign out. Computer access is also controlled.

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?

No

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?

Yes

PURPOSE OF THE PROFICIENCY TESTS: 1	ROLE OF YOUR REFERENCE LABORATORY (ORGANISER/ PARTICIPANT)	NO. PARTICIPANTS	PARTICIPATING WOA REF. LABS/ ORGANISING WOA REF. LAB.
	participant	multiple	

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?

No

TOR11: OTHER INTERLABORATORY PROFICIENCY TESTING

27. Did your laboratory organise or participate in inter-laboratory proficiency tests with laboratories other than WOA Reference Laboratories for the same pathogen?

No

TOR12: EXPERT CONSULTANTS

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

Yes

KIND OF CONSULTANCY	Location	SUBJECT (FACULTATIVE)
ad hoc meetings	remote	review of BVD chapter
consultation related to BVD diagnostics	remote	protocols for diagnostic tests
consultation and provision of reagents related to BVD	remote	production and provision of reagents related to BVD

29. Additional comments regarding your report: