# **WOAH Reference Laboratory Reports Activities 2023**

## **Activities in 2023**

This report has been submitted: 6 juin 2024 02:53

## **Laboratory Information**

Name of disease (or topic) for which you are a designated WOAH Reference Laboratory:	Bovine viral diarrhoea virus	
Address of laboratory:	Virology Laboratory, Elizabeth Macarthur Agriculture Institute, Woodbridge Rd Menangle NSW Australia	
Tel.:	+61-2 46.40.63.31,	
E-mail address:	peter.kirkland@dpie.nsw.gov.au	
Website:	www.dpi.nsw.gov.au	
Name (including Title) of Head of Laboratory (Responsible Official):	Dr P.D. Kirkland	
Name (including Title and Position) of WOAH Reference Expert:	Dr P.D. Kirkland, Senior Principal Research Scientist, Manager Virology Laboratory	
Which of the following defines your laboratory? Check all that apply:	<b>?</b> 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
BVDV VNT		12050	1131
BVDV Ab ELISA		383	0
BVDV AGID		7286	0
Direct diagnostic tests		Nationally	Internationally
BVDV Virus Isolation		124	0
BVDV qRT-PCR		1035	0
BVDV Ag ELISA		14007	200

## **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?

Yes

TYPE OF REAGENT AVAILABLE	RELATED DIAGNOSTIC TEST		AMOUNT SUPPLIED NATIONALLY (ML, MG)	AMOUNT SUPPLIED INTERNATIONALLY (ML, MG)	NO. OF RECIPIENT WOAH MEMBER COUNTRIES	COUNTRY OF RECIPIENTS
Monoclonal antibodies are	virus isolation	Produced and provided	300mL	50mL	2	AUSTRALIA, CANADA,

4. Did your laboratory produce vaccines?

Nο

5. Did your laboratory supply vaccines to WOAH Members?

Not applicable

### **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?

Nο

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?

Yes

NAME OF WOAH MEMBER COUNTRY SEEKING ASSISTANCE		WHICH DIAGNOSTIC TEST USED	NO. SAMPLES RECEIVED FOR PROVISION OF DIAGNOSTIC SUPPORT	NO. SAMPLES RECEIVED FOR PROVISION OF CONFIRMATORY DIAGNOSES
NEW ZEALAND	2023-03-01	BVDV Virus isolation	2	0
NEW ZEALAND	2023-05-14	BVDV VNT	1131	0

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

Νo

### 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?

No

### TOR6: EPIZOOLOGICAL DATA

14. Did your Laboratory collect epidemiological data relevant to international disease control?

Nο

15. Did your laboratory disseminate epidemiological data that had been processed and analysed?

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:

0

c) National conferences:

0

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

0

## 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?

Vac

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)	
ISO17925	NATA Vet Certificate 30.11.2021.pdf	NATA Vet Certificate 30.11.2021.pdf

19. Is your quality management system accredited?

Vac

Test for which your laboratory is accredited	Accreditation body	
BVDV VNT	NATA	
BVDV Ab ELISA	NATA	
BVDV AGID	NATA	
BVDV Ag ELISA	NATA	
BVDV qRT-PCR	NATA	
BVDV virus isolation	NATA	

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

Yes

The laboratory has a high level of physical containment with facilities at both BSL 2 and BSL2. All work in the laboratory is conducted in Class 2 biological safety cabinets and all biological material leaving the laboratory is autoclaved to ensure biocontainment. All staff are trained in the safe handling of infectious material and work practices to ensure containment of potentially infectious material. As BVDV is a common contaminant of cell cultures and medium supplements, there are rigorous protocols to ensure that all material remains free of adventitious contamination and that test specimens are not inadvertently contaminated. As BVDV type 2 is exotic to Australia there are strict protocols associated with handling materials from other countries. Advice is also frequently given to exporters, artificial breeding centres and manufacturers about risks associated with BVDV infections and contamination of biological materials.

### **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?

Yes

NETWORK/DISEASE	ROLE OF YOUR LABORATORY (PARTICIPANT, ORGANISER, ETC)	NO. PARTICIPANTS	PARTICIPATING WOAH REF. LABS
Network	Organiser	4	Canada

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

### **TOR12: EXPERT CONSULTANTS**

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

Yes

KIND OF CONSULTANCY	Location	SUBJECT (FACULTATIVE)
Response to technical queries	Australia	Editing of BVDV chapter of Manual
Response to technical queries	Australia	Editing of Border Disease Virus chapter of Manual (no official reference laboratory)

#### 29. Additional comments regarding your report:

Voc

The laboratory provides significant technical expertise to manufacturers of biological materials (especially foetal bovine serum) and BVDV vaccines although the nature of this work (including evaluation of vaccines using novel technologies) does not involve methods described by the Manual or other OIE standards. Past problems and difficulties with the diagnosis of BVDV infections are now largely resolved by the widespread availability of excellent ELISA assays for the detection of BVDV antigens and antibodies and use of real time PCR.