

WOAH Reference Laboratory Reports Activities 2023

Activities in 2023

This report has been submitted : 7 juin 2024 21:56

Laboratory Information

Name of disease (or topic) for which you are a designated WOAHO Reference Laboratory:	Foot and mouth disease
Address of laboratory:	Av. Governador Leonel de Moura Brizola, 7778, São Bento, Duque de Caxias, RJ,, Brazil, CEP 25045-002
Tel.:	+55 21 3661 9064
E-mail address:	pitucoedv@paho.org
Website:	www.paho.org/en/panaftosa
Name (including Title) of Head of Laboratory (Responsible Official):	Ottorino Cosivi, Veterinarian, Director Pan American Center for Foot and Mouth Disease - PANAFTOSA-PAHO/WHO
Name (including Title and Position) of WOAHO Reference Expert:	Edviges Maristela Pituco, Veterinarian (PhD), Head of Reference Laboratory of Pan American Center for Foot and Mouth Disease - PANAFTOSA-PAHO/WHO
Which of the following defines your laboratory? Check all that apply:	International Organisation/PANAFTOSA-PAHO/WHO

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	
		Nationally	Internationally
Indirect diagnostic tests			
ELISA CFL		0	267
Direct diagnostic tests			
Virus neutralization		0	288

TOR2: REFERENCE MATERIAL

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

Yes

TYPE OF REAGENT AVAILABLE	RELATED DIAGNOSTIC TESTING	PRODUCED/ IMPORTED	QUANTITY SUPPLIED NATIONWIDE (ML, MG)	QUANTITY SUPPLIED AT INTERNATIONAL LEVEL (ML, MG)	NAME OF BENEFICIARY WOAHO MEMBER COUNTRIES

3. Did your laboratory supply standard reference reagents (nonWOAH-approved) and/or other diagnostic reagents to WOAHO Members?

Yes

TYPE OF REAGENT AVAILABLE	RELATED DIAGNOSTIC TEST	PRODUCED/ PROVIDE	AMOUNT SUPPLIED NATIONALLY (ML, MG)	AMOUNT SUPPLIED INTERNATIONALLY (ML, MG)	NO. OF RECIPIENT WOAHO MEMBER COUNTRIES	COUNTRY OF RECIPIENTS
Kit NCPanaftosa ELISA FMD gIII	FMD NSP antibodies detection	produced	-	188 kits	8	ARGENTINA, BRAZIL, COLOMBIA, ECUADOR, KOREA (REP. OF), PARAGUAY, PERU,

						URUGUAY,
Kit NCPanaftosa EITB	FMD NSP antibodies detection	produced	-	114 kits	8	ARGENTINA, BRAZIL, COLOMBIA, ECUADOR, KOREA (REP. OF), PARAGUAY, PERU, URUGUAY,
LPBE ELISA (ELISA CFL)	FMD SP antibodies detection	produced	-	215 kits	6	BRAZIL, COLOMBIA, ECUADOR, PARAGUAY, PERU, URUGUAY,
Ag Typing ELISA	FMDV/VSV Antigen Typing	produced	-	21 kits	8	ARGENTINA, BRAZIL, COLOMBIA, ECUADOR, MOROCCO, PARAGUAY, PERU, URUGUAY,
Cell lines	Vaccine production	produced	-	20 vials	4	ARGENTINA, BRAZIL, PARAGUAY, URUGUAY,
Reference standard	Molecular biology	produced	-	25 vials	2	COLOMBIA, MOROCCO,
Antisera NSP and SP (reference material)	Antibody detection	produced	-	9 vials	1	COLOMBIA,
FMDV seeds	Vaccine production	produced	-	19 vials	1	UNITED KINGDOM,

4. Did your laboratory produce vaccines?

No

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

No

TOR4: DIAGNOSTIC TESTING FACILITIES

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

No

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

Yes

NAME OF THE WOAHA MEMBER COUNTRY RECEIVING A TECHNICAL CONSULTANCY	PURPOSE	HOW THE ADVICE WAS PROVIDED
GUYANA	Technical support	Technical visit at laboratory
VENEZUELA	Support on the vaccination program, surveillance and other technical subjects	Technical support on the field, and at distance
BRAZIL	Technical support	Technical support on the field, and at distance
PARAGUAY	Technical support	Technical support at distance
ARGENTINA	Technical support	Technical support at distance
BOLIVIA	Technical support	Technical support at distance
PERU	Technical support	Technical support at distance
COLOMBIA	Technical support	Technical support at distance
ECUADOR	Technical support	Technical support at distance
MOROCCO	Technical support	Technical support at distance

TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

12. Did your laboratory participate in international scientific studies in collaboration with WOAAH 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
Post-vaccination immune response monitoring.	5 years	Post-vaccination monitoring. Percentage expectation of protection against foot-and-mouth disease virus in systematically vaccinated cattle herds in Brazil	- Biological Institute of São Paulo - IBSP	BRAZIL
Production of reference serum panels for vaccine matching studies using bivalent and monovalent vaccines with serotypes O1 Campos and A24 Cruzeiro.	5 years	Produce larger volumes of post-vaccination sera to be supplied to laboratories for use as reference sera (routine vaccine control and vaccine matching)	- Biological Institute of São Paulo - IBSP - Ministry of Agriculture and Livestock	BRAZIL
Evaluation of foot-and-mouth disease virus inactivators in field samples.	3 years	Evaluate the efficacy of buffers in the inactivation of foot-and-mouth disease virus (FMDV).	Ministry of Agriculture and Livestock	BRAZIL
Validation of rapid (commercial) tests for the detection of foot-and-mouth disease.	3 years	In vesicular disease investigations, using rapid field tests to rule out (or confirm) foot-and-mouth disease is an important tool for the agility required at the current stage of eradicating the disease in the Americas.	Ministry of Agriculture and Livestock	BRAZIL

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

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:

Using the Interface for Official Veterinary Surveillance (IVVO), an online information system to support official veterinary surveillance (passive and active) of animal diseases at national and regional levels, Panaftosa collects epizootiological data from countries in the region and performs their epidemiological analysis to guide the next actions against FMD in the context of each country's Action Plan.

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:

PANAFTOSA disseminates its knowledge through a catalog of publications. The main objective of this catalog is the preservation and dissemination of the scientific-technical memory of the Organization, through the collection and organization of the works officially published by PANAFTOSA/SPV and its professionals since its creation in 1951.

PANAFTOSA/SPV-PAHO/WHO selects and makes available in the catalog: documents, publications, scientific articles, events, virtual transmissions, and monographs carried out in the institutional and scientific environment.

It is important to note that some records allow electronic access and are available in full text, the others are with their respective references.

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:

b) International conferences:

c) National conferences:

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

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1. *Foot-and-mouth disease: Comparative analysis between foot-and-mouth disease-free status "with" and "without" vaccination - May 11th, 2023 - Technical note from the Pan-American Center for Foot-and-Mouth-Dease and Veterinary Public Health (PANAFTOSA/SPV)*

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 : 0

b) Seminars : 0

c) Hands-on training courses: 173

d) Internships (>1 month) 0

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
C	BRAZIL	60
C	BRAZIL	50
C	ECUADOR	60
C	GUYANA	2
C	URUGUAY	1

TOR8: QUALITY ASSURANCE

18. Does your laboratory have a Quality Management System?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)	
ABNT NBR ISO/IEC 17025:2017	Certificado_CRL 1309 PANAFTOSA 28-06- 21.pdf	CERTIFICADO ACREITAÇÃO_CRL 1309 PANAFTOSA 28-06-21.pdf

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
I-ELISA 3ABC	CGCRE/INMETRO - Brazil
ELISA 3ABC (block)	CGCRE/INMETRO - Brazil
EITB	CGCRE/INMETRO - Brazil
ELISA CFL	CGCRE/INMETRO - Brazil

Typing ELISA	CGCRE/INMETRO - Brazil
Virus neutralization	CGCRE/INMETRO - Brazil
RT-PCR	CGCRE/INMETRO - Brazil
RT-qPCR	CGCRE/INMETRO - Brazil

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

Yes

The laboratory follows procedures to identify, map, control, monitor, and mitigate possible risks that may affect its activities. Risks are identified by area and classified in relation to priority and impact, and treated according to the classification in which they were placed.

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?

Yes

Title of event	Date (mm/yy)	Location	Role (speaker, presenting poster, short communications)	Title of the work presented
18th Annual Meeting OIE/FAO Reference Laboratories	2023-10-10	Winnipeg, Canada	Speaker	Panaftosa Laboratory Activities in 2023 - Pool 7: South America
Third Meeting of the Global Coordination Committee on Foot-and-Mouth Disease (GCC-FMD)	2023-01-25	Virtual meeting	Speaker	GCC-FMD proposed action plan
Third Meeting of the Global Coordination Committee on Foot-and-Mouth Disease (GCC-FMD)	2023-01-25	Virtual meeting	Moderator	-----

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?

Yes

NETWORK/DISEASE	ROLE OF YOUR LABORATORY (PARTICIPANT, ORGANISER, ETC)	NO. PARTICIPANTS	PARTICIPATING WOAHP REF. LABS
			WOAHP Reference Laboratory for FMD, Dirección de Laboratorio Animal, SENASA, Argentina WOAHP collaborating Centre for validation, quality assessment and quality control of diagnostic assays and vaccine testing for vesicular diseases in Europe, and FAO Reference Centre for Vesicular Diseases Sciensano, Belgium WOAHP Reference Laboratory for FMD Botswana Vaccine Institute (BVI), Botswana Centro Panamericano de Fiebre Aftosa (PANAFTOSA) and PAHO /WHO and WOAHP Reference Laboratory for FMD FAO and WOAHP FMD Reference Laboratory, National Centre for Foreign Animal Disease National Centres for Animal Disease, Canadian Food Inspection Agency, Canada WOAHP and China National FMD Reference Laboratory, Lanzhou Veterinary Research Institute (LVRI), CAAS, People's Republic

18th Annual Meeting OIE/FAO Reference Laboratories	Speaker	29	of China WOAHO FMD Reference Laboratory, French Agency for Food and Environmental and Occupational Health & Safety (ANSES), France WOAHO/FAO FMD Reference Laboratory, Istituto Zooprofilattico Sperimentale della Lombardia e dell'Emilia Romagna (IZSLER), Italy WOAHO Reference laboratory for FMD, Animal and Plant Quarantine Agency (APQA), Republic of Korea FAO Reference Centre for FMD for Central Asia and West Eurasia and WOAHO Reference Laboratory for FMD, Federal Governmental Institute, Centre for Animal Health (FGI ARRIAH), Vladimir, Russian Federation FAO Reference Laboratory for FMD in Africa and WOAHO FMD Reference Laboratory, Transboundary Animal Diseases Programme, ARC-Onderstepoort Veterinary Institute (ARC-OVI), South Africa FAO World Reference Laboratory (WRLFMD) and WOAHO FMD Reference Laboratory The Pirbright Institute Pirbright, United Kingdom WOAHO FMD Reference Laboratory, Foreign Animal Disease Diagnostic Lab, Plum Island Animal Disease Center (PIADC), United States of America
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25. Did you organise or participate in inter-laboratory proficiency tests with WOAHO Reference Laboratories designated for the same pathogen?

Yes

PURPOSE OF THE PROFICIENCY TESTS: 1	ROLE OF YOUR REFERENCE LABORATORY (ORGANISER/ PARTICIPANT)	NO. PARTICIPANTS	PARTICIPATING WOAHO REF. LABS/ ORGANISING WOAHO REF. LAB.
FMD antigen detection test	participant	undisclosed	Organized by The Pirbright Institute/UK
FMD molecular biology test	participant	undisclosed	Organized by The Pirbright Institute/UK
FMD NSP antibody detection test	participant	undisclosed	Organized by The Pirbright Institute/UK
FMD SP antibody detection test	participant	undisclosed	Organized by The Pirbright Institute/UK
FMD SP antibody detection test	organiser	14	APHIS (USA), SENASA (Argentina), NCFAD (Canada)
FMD molecular biology test	organiser	13	SENASA (Argentina), NCFAD (Canada)
FMD antigen detection test	organiser	16	APHIS (USA), SENASA (Argentina), NCFAD (Canada)
FMD NSP antibody detection test	organiser	25	APHIS (USA), SENASA (Argentina), NCFAD (Canada)

26. Did your laboratory collaborate with other WOAHO 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 WOAHO Reference Laboratories for the same pathogen?

No

TOR12: EXPERT CONSULTANTS

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

Yes

KIND OF CONSULTANCY	Location	SUBJECT (FACULTATIVE)
Advisor	Paris	Evaluation of requests for maintenance or change of sanitary status

29. Additional comments regarding your report:

No