

# WOAH Reference Laboratory Reports Activities 2024

This report has been submitted: 31 janvier 2025 20:47

## LABORATORY INFORMATION

<b>*Name of disease (or topic) for which you are a designated WOA Reference Laboratory:</b>	Rift Valley fever
<b>*Address of laboratory:</b>	No. 100 Old Soutpan Road, Onderstepoort, 0110, Gauteng Province, South Africa
<b>*Tel:</b>	+27-12 529 9338
<b>*E-mail address:</b>	lubisia@arc.agric.za
<b>Website:</b>	<a href="https://www.arc.agric.za/">https://www.arc.agric.za/</a>
<b>*Name (including Title) of Head of Laboratory (Responsible Official):</b>	Dr. Baratang Alison Lubisi - Acting Senior Manager Research: Animal Health and Protection
<b>*Name (including Title and Position) of WOA Reference Expert:</b>	Dr. Baratang Alison Lubisi - Research Team Manager: Diagnostic Services
<b>*Which of the following defines your laboratory? Check all that apply:</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 WOA Manual (Yes/No)	Total number of test performed last year	
		Nationally	Internationally
Indirect diagnostic tests			
IgG ELISA	Yes	1046	0
IgM ELISA	Yes	1046	0
Direct diagnostic tests			
Real time PCR	Yes	105	0

## 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?

No

4. Did your laboratory produce vaccines?

Not applicable

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

No

## TOR4: DIAGNOSTIC TESTING FACILITIES

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

No

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

No

## 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
Reducing the risk of Rift valley fever through ecology, epidemiology and socio-economics	5 years	To understand and control Rift valley fever in South Africa	EcoHealth Alliance; National Aeronautics and Space Administration (NASA); University of Pretoria (UP); National Institute for Communicable diseases	UNITED STATES OF AMERICA

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			(NICD)	
Demonstration of Long-term protection against RVFV infection afforded by a single dose of Rift Valley fever Smithburn MLV vaccine in sheep	1 year - logistics of the study were planned and permissions sought in 2024	To determine the duration of protection from clinical disease following vaccination with a single dose of Smithburn modified live vaccine in sheep	United States Department of Agriculture (USDA), University of Pretoria (UP), National Institute for Communicable diseases (NICD), One Health Research Concepts, One Health Research;	SOUTH AFRICA UNITED STATES OF AMERICA

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

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:

Even though the laboratory did not perform any diagnostic testing for countries other than South Africa, diagnostic tests were performed for the national herd and reports issued. The results contained in the report add to the body of knowledge on the epidemiology of Rift valley fever in the Southern African region. Some of the samples tested originated from wildlife that was destined for international export. This contributed to international disease control.

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:

The laboratory published a popular article in a farmers' magazine.

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:

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*A short communication with Somalian collaborators was submitted. One research article is in draft format.*

b) International conferences:

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*Lubisi, B.A. 2024. Can wild immunology advance Rift valley fever vaccinology? CEPI Workshop on Rift valley fever Epidemiology and*

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Modelling, Nairobi, Kenya, 4-5 June 2024.

Other international conferences are targeted for 2025.

c) National conferences:

1

A presentation on biosecurity, with RVF given as one of the disease examples was made:

i) Lubisi, B., Hlokw, T., Gcebe, N., Mparamoto, M., Romito, M., Rotherham, L. & Matle, I. Extrapolating the 8 pillars of biosecurity to one-health approaches to address zoonotic diseases and other health risks. ARC/DALRRD Conference, 12 – 14 February 2024, ARC-VIMP, Pretoria (Oral presentation)

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

## TOR7: SCIENTIFIC AND TECHNICAL TRAINING

17. Did your laboratory provide scientific and technical training to laboratory personnel from other WOA 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	The laboratory subscribes to the ISO 17025 standard and is accredited by SANAS.	V0001-06-2022 signed.pdf

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
RVF IgG ELISA	South African National Accreditation System (SANAS)
RVF IgM ELISA	South African National Accreditation System (SANAS)
Real Time RT-PCR	South African National Accreditation System (SANAS)

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

Yes

The laboratory subscribes to the international standard, ISO 35001 and has a biorisk management system.

## TOR9: SCIENTIFIC MEETINGS

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

No

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

No

## TOR10: NETWORK WITH WOA?H REFERENCE LABORATORIES

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

No

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

No

25. Did you organise or participate in inter-laboratory proficiency tests with WOA?H Reference Laboratories designated for the same pathogen during the past 2 years?

Yes

Purpose of the proficiency test:	Role of your Reference Laboratory (organiser/ participant)	No. participating Laboratories	Participating WOA?H Ref. Labs/ organising WOA?H Ref Lab
Method harmonisation	Organiser	4	CIRAD
Method harmonisation	Participant	Above 4	CIRAD

26. Did your laboratory collaborate with other WOA?H 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?H Reference Laboratories for the same pathogen during the past 2 years?

Yes

Purpose for inter-laboratory test comparisons <sup>1</sup>	Role of your reference laboratory (organizer/participant)	No. participating laboratories	Name of the test	WOA?H Member Countries
Method harmonisation	Organiser	4	ELISA	FRANCE,
Method harmonisation	Participant	4	ELISA	FRANCE,

## TOR12: EXPERT CONSULTANTS

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

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29. Additional comments regarding your report:

*The following RVF related activities took place in 2024:*

*I). International meetings attended*

*The laboratory was represented at a workshop involving various international role players at Kwalata Game reserve, South Africa, where gaps in RVF research and diagnostics were discussed. The workshop was organised by the Civilian Research and Development Foundation (CRDF), an independent, non-profit global organization that promotes safety, security, and sustainability through science and innovation.*

*II). Publication of a popular article*

*Maluleke, R. & Tshabalala, T. (2024). Rift valley fever: A potential new way to detect specific antibodies. Read Meat, 15(4), 74-76*

*III). Appointments*

*Dr. Lubisi was appointed as Ad hoc member of the One Health Working Group of the World Veterinary Association (WVA) by the WVA Council on 12 July 2024 for the 2024-2026 term*