

# WOAH Reference Laboratory Reports Activities 2023

## Activities in 2023

This report has been submitted : 11 juin 2024 01:36

### Laboratory Information

<b>Name of disease (or topic) for which you are a designated WOA Reference Laboratory:</b>	Anthrax
<b>Address of laboratory:</b>	CFIA Lethbridge Lab, Township Road 9-1, Lethbridge Alberta, T1J3Z4
<b>Tel.:</b>	14033825505
<b>E-mail address:</b>	kingsley.amoako@inspection.gc.ca
<b>Website:</b>	
<b>Name (including Title) of Head of Laboratory (Responsible Official):</b>	Dr. Kingsley Amoako, Laboratory Director
<b>Name (including Title and Position) of WOA Reference Expert:</b>	Dr. Kingsley Amoako, Lab Director
<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)

No

### 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 (nonWOA-approved) and/or other diagnostic reagents to WOA Members?

No

4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to WOA 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 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 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
	NIGERIA	Consulted for advice and support during anthrax outbreak in Nigeria.	Advice was provided through emails and conference calls
	ZAMBIA	Consulted by WOAHA and WHO for expert advice on the decontamination and disposal of anthrax infected carcasses during an anthrax outbreak in Zambia.	Provided through emails
	GHANA	Consulted for advice during anthrax outbreak in Northern Ghana	Advice provided through emails and phone calls.

## TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

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

No

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

No

## TOR6: EPIZOOLOGICAL DATA

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

No

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

No

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 WOAHA Members?

Yes

- a) Technical visit : 1  
 b) Seminars : 0  
 c) Hands-on training courses: 1  
 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
A	GHANA	5
C	GHANA	5

## TOR8: QUALITY ASSURANCE

18. Does your laboratory have a Quality Management System?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)	
ISO/IEC 17025	Scanned Certificate attached	2023.09.29 ASB_CTF_15366-CFIA-Certificate_v4.pdf

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
Laboratory Procedures for the isolation and identification of Bacillus anthracis	Standards Council of Canada

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

Yes

(See Manual of Diagnostic Tests and vaccines for Terrestrial Animals, Chapter 1.1.4)

## 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?

No

## 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
Sharing information with the WOAHP Reference lab for anthrax in Ames, Iowa, USA	Shared relevant information received from other WOAHP members regarding anthrax	1	WOAHP Reference Lab for anthrax in Ames, Iowa, USA
Collaboration on anthrax	Worked with the WOAHP Reference Lab expert for anthrax in the revision and update of Chapter 3.1.1 Anthrax in the WOAHP Manual of Diagnostic Tests and Vaccines for Terrestrial Animals	1	WOAHP Reference Lab for anthrax in Ames, Iowa, USA

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

No

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

No

## TOR12: EXPERT CONSULTANTS

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

Yes

KIND OF CONSULTANCY	Location	SUBJECT (FACULTATIVE)
Request from WOAHA to update Chapter 3.1.1 Anthrax to include a new easier to produce Bacillus anthracis capsule stain	Remotely	updated for the WOAHA Manual of Diagnostic Tests and Vaccines for Terrestrial Animals
Participated in expert panel led by the Chief Science Advisor for Canada	Remotely	Arctic Thaw Expert panel discussion
Participated in meetings with the Global Partnership Program on Signature Initiative under the Auspices of the Africa Centre for Disease Control	Remotely	Africa Centre for Disease Control

29. Additional comments regarding your report:

Yes

*In 2023, the WOAHA Reference lab for Anthrax in Lethbridge, Canada continued to provide technical advice for WOAHA member labs remotely as indicated in this Annual Report. The Reference lab continued to support the Veterinary Services Lab in Pong Tamale in Ghana in building capacity for diagnostic work with anthrax. The WOAHA Reference lab expert for anthrax at the Lethbridge Lab was able to travel to Ghana to provide hands-on training on anthrax in March 2023 to the Pong Tamale veterinary Lab in Ghana. This was successful and included a mock exercise on the detection of anthrax. This exercise delineated the procedure and workflow to be used in case of an anthrax outbreak. All the 5 participants in the training became familiar with the entire process from sample receiving to the release of test results. The training involved the use of supplies and test kits provided by the Reference lab here in Canada. It is worth noting that the training, equipment, PPEs and supplies provided to the Pong Tamale lab in Ghana in March 2023 for anthrax detection enabled the lab to successfully respond to the anthrax outbreak in Northern Ghana in July, 2023. It is anticipated that the training of the veterinary lab staff in Ghana for anthrax detection will continue to provide the lab with the capacity to detect anthrax. The Lethbridge WOAHA Reference laboratory for Anthrax remains active in providing scientific support to other labs around the world. The high level of scrutiny on issues related to anthrax as a bioterrorism agent makes moving samples from one lab to the Reference lab or vice versa a huge challenge and this imposes a significant limitation on international diagnostic activity. The CFIA is committed to maintaining and enhancing the WOAHA Reference Laboratory for Anthrax. Currently there is no diagnostic testing at the Reference lab as all anthrax testing is now done by the Provincial labs. There is ongoing discussion on diagnostic testing activities that would enhance the WOAHA Reference Laboratory status, and further ensure preparedness in the event of intentional contamination of the food supply. The lab continues to maintain close contact with the WOAHA Reference Lab in Ames, Iowa in the USA in the review and response to international requests. Furthermore, consultations are now ongoing with other Canadian Federal government stakeholders including the Public Health Agency Canada and Department of Defense to determine areas of potential collaboration to enhance the activities of the Reference lab. The Lethbridge WOAHA Reference Lab for Anthrax continues to work with the Ghana Veterinary services to help build capacity for anthrax diagnostic detection and readiness to respond to any potential biothreat event related to the use of anthrax. As part of this, the Lethbridge WOAHA Reference lab for Anthrax has provided expert technical training on biosafety/biosecurity, SOP development, QA and state of the art anthrax detection methods to technical staff at the Pong Tamale veterinary lab in Ghana. The WOAHA Reference lab for anthrax continues to lead the project on High-consequence pathogens detection which is funded by the Canadian Safety and Security Program (CSSP) under the leadership of Dr. Chad Laing. One of the pathogens of interest in the project is Bacillus anthracis. This project is exploring the use of Artificial Intelligence for front-line laboratories in preparing for high-consequence pathogens detection to reduce their risk. The Lethbridge WOAHA Reference lab for Anthrax will in future benefit from twinning with other labs in Africa to share expertise, provide technical support and help build capacity for anthrax testing and diagnostics based on the experience gained in working with the Ghana Veterinary Services. This will also raise the level of support for international diagnostic testing activities.*