

# OIE Reference Laboratory Reports Activities

## *Activities in 2019*

**This report has been submitted : 2020-01-16 02:34:12**

|  |   |
|--|---|
| <b>Name of disease (or topic) for which you are a designated OIE Reference Laboratory:</b> | Anthrax   |
| <b>Address of laboratory:</b>  | P.O. Box 640 Township Road 9-1 Lethbridge Alberta T1J 3Z4<br>CANADA                         |
| <b>Tel.:</b>   | +1-403 382 55 05  |
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| <b>Website:</b>  |   |
| <b>Name (including Title) of Head of Laboratory (Responsible Official):</b>                | Dr. Kingsley Amoako, Director, Canadian Food Inspection Agency (CFIA) Lethbridge Laboratory |
| <b>Name (including Title and Position) of OIE Reference Expert:</b>                        | Kingsley Amoako, Director, CFIA Lethbridge Laboratory                                       |
| <b>Which of the following defines your laboratory? Check all that apply:</b>               | Governmental  |

***ToR 1: To use, promote and disseminate diagnostic methods validated according to OIE Standards***

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

***ToR 2: To develop reference material in accordance with OIE requirements, and implement and promote the application of OIE Standards. To store and distribute to national laboratories biological reference products and any other reagents used in the diagnosis and control of the designated pathogens or disease.***

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

No

3. Did your laboratory supply standard reference reagents (non OIE-approved) and/or other diagnostic reagents to OIE Member Countries?

Yes

| Type of reagent available        | Related diagnostic test                         | Produced/ provide | Amount supplied nationally (ml, mg) | Amount supplied internationally (ml, mg) | No. of recipient OIE Member Countries | Region of recipients  |
|----------------------------------|---|-------------------|-------------------------------------|--|---------------------------------------|---|
| Rapid detection kits for anthrax | Molecular diagnosis of B. anthracis             | Provided          | 0                                   | 100 kits                                 | 1                                     | <input checked="" type="checkbox"/> Africa<br><input type="checkbox"/> Americas<br><input type="checkbox"/> Asia and Pacific<br><input type="checkbox"/> Europe<br><input type="checkbox"/> Middle East |
| Primers and Probes               | PCR and real time PCR detection of B. anthracis | Provided          |                                     | 1000 reactions                           | 1                                     | <input checked="" type="checkbox"/> Africa<br><input type="checkbox"/> Americas<br><input type="checkbox"/> Asia and Pacific<br><input type="checkbox"/> Europe<br><input type="checkbox"/> Middle East |
| Culture media for anthrax        | Culture detection of anthrax                    | Provided          |                                     | 1Kg                                      | 1                                     | <input checked="" type="checkbox"/> Africa<br><input type="checkbox"/> Americas<br><input type="checkbox"/> Asia and Pacific<br><input type="checkbox"/> Europe<br><input type="checkbox"/> Middle East |
| PCR and real time PCR Master mix | Molecular Detection of B. anthracis             | Provided          |                                     | 5Kits                                    | 1                                     | <input checked="" type="checkbox"/> Africa<br><input type="checkbox"/> Americas<br><input type="checkbox"/> Asia and Pacific<br><input type="checkbox"/> Europe<br><input type="checkbox"/> Middle East |
| Staining kits                    | Detection of B. anthracis                       | Provided          |                                     | 1 kits                                   | 1                                     | <input checked="" type="checkbox"/> Africa<br><input type="checkbox"/> Americas<br><input type="checkbox"/> Asia and Pacific<br><input type="checkbox"/> Europe<br><input type="checkbox"/> Middle East |
| DNA Extractionkits               | Molecular detection of B. anthracis             | Provided          |                                     | 5kits                                    | 1                                     | <input checked="" type="checkbox"/> Africa<br><input type="checkbox"/> Americas<br><input type="checkbox"/> Asia and Pacific<br><input type="checkbox"/> Europe<br><input type="checkbox"/> Middle East |

4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to OIE Member Countries?

No

***ToR 3: To develop, standardise and validate, according to OIE Standards, new procedures for diagnosis and control of the designated pathogens or diseases***

6. Did your laboratory develop new diagnostic methods validated according to OIE Standards for the designated pathogen or disease?

No

7. Did your laboratory develop new vaccines according to OIE Standards for the designated pathogen or disease?

No

***ToR 4: To provide diagnostic testing facilities, and, where appropriate, scientific and technical advice on disease control measures to OIE Member Countries***

8. Did your laboratory carry out diagnostic testing for other OIE Member Countries?

No

9. Did your laboratory provide expert advice in technical consultancies on the request of an OIE Member Country?

Yes

| Name of the OIE Member Country receiving a technical consultancy | Purpose  | How the advice was provided  |
|--|--|--|
| GEORGIA  | Request from the Veterinary Services of Georgia for advice on Laboratory investigation of anthrax in Georgia | Dr. Amoako as the OIE expert was contacted by officials from the FAO and OIE via email and the advice was provided via email.  |
| GHANA  | Training of three staff from the Ghana veterinary services on work with anthrax.                             | Global Affairs Canada provided funds for three staff to travel from Ghana to the OIE reference lab in Canada for two weeks training on biosecurity, biosafety best practices for work with anthrax in a BSL 3 Lab. The training was provided as onsite visit and hands on involving methods used for the detection of anthrax. |
| GHANA  | Training in capacity building for anthrax work at the Ghana veterinary services Laboratory in Pong Tamale.   | Global Affairs Canada provided funds for travel to train staff at the Ghana veterinary services in Pong Tamale on capacity building for anthrax work in Modular labs provided by Global Affairs Canada. The training was on site and included hands on.  |
| GERMANY  | Advice on PCR diagnosis of anthrax   | Dr. Amoako was contacted by INDICAL BIOSCIENCE on Germany via email for advice on PCR diagnosis of anthrax. The advice was provided via email.   |

***ToR 5: To carry out and/or coordinate scientific and technical studies in collaboration with other laboratories, centres or organisations***

10. Did your laboratory participate in international scientific studies in collaboration with OIE Member Countries other than the own?

No

***ToR 6: To collect, process, analyse, publish and disseminate epizootiological data relevant to the designated pathogens or diseases***

11. Did your Laboratory collect epizootiological data relevant to international disease control?

No

If the answer is no, please provide a brief explanation of the situation:

The lab tracked Anthrax outbreaks reported in ProMed.

12. Did your laboratory disseminate epizootiological data that had been processed and analysed?

No

|   |
|---|
| If the answer is no, please provide a brief explanation of the situation: |
| No  |

**13. What method of dissemination of information is most often used by your laboratory?  
(Indicate in the appropriate box the number by category)**

a) Articles published in peer-reviewed journals: 0

None

b) International conferences: 0

c) National conferences: 0

d) Other:

(Provide website address or link to appropriate information) 1

<http://www.promedmail.org>

***ToR 7: To provide scientific and technical training for personnel from OIE Member Countries***

***To recommend the prescribed and alternative tests or vaccines as OIE Standards***

14. Did your laboratory provide scientific and technical training to laboratory personnel from other OIE Member Countries?

Yes

a) Technical visits: 2

b) Seminars: 2

c) Hands-on training courses: 2

d) Internships (&gt;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 |
|---|---|---|
| Training in Biosafety, biosafety, QA and BSL 3 best practices   | Ghana   | 3   |
| Presentation on Biosafety and biosecurity and QA best practices | Ghana   | 3   |
| Hands-on training on anthrax detection                          | Ghana   | 3   |

**ToR 8: To maintain a system of quality assurance, biosafety and biosecurity relevant for the pathogen and the disease concerned**

15. Does your laboratory have a Quality Management System?

Yes

| Quality management system adopted | Certificate scan (PDF, JPG, PNG format)                               |
|-----------------------------------|---|
| IOS/IEC 17025                     | ASB_LTR_15366_Notice-Continued-Accreditation-Letter_v1_2018-06-13.pdf |

16. 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 | IOS/IEC 17025      |

17. 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)*

**ToR 9: To organise and participate in scientific meetings on behalf of the OIE**

18. Did your laboratory organise scientific meetings on behalf of the OIE?

No

19. Did your laboratory participate in scientific meetings on behalf of the OIE?

No

**ToR 10: To establish and maintain a network with other OIE Reference Laboratories designated for the same pathogen or disease and organise regular inter-laboratory proficiency testing to ensure comparability of results**

20. Did your laboratory exchange information with other OIE Reference Laboratories designated for the same pathogen or disease?

Yes

21. Was your laboratory involved in maintaining a network with OIE Reference Laboratories designated for the same pathogen or disease by organising or participating in proficiency tests?

No

22. Did your laboratory collaborate with other OIE Reference Laboratories for the same disease on scientific research projects for the diagnosis or control of the pathogen of interest?

No

**ToR 11: To organise inter-laboratory proficiency testing with laboratories other than OIE Reference Laboratories for the same pathogens and diseases to ensure equivalence of results**

23. Did your laboratory organise or participate in inter-laboratory proficiency tests with laboratories other than OIE Reference Laboratories for the same disease?

No

Note: See Interlaboratory test comparisons in: Laboratory Proficiency Testing at: <http://www.oie.int/en/our-scientific-expertise/reference-laboratories/proficiency-testing> see point 1.3

**ToR 12: To place expert consultants at the disposal of the OIE**

24. Did your laboratory place expert consultants at the disposal of the OIE?

Yes

| Kind of consultancy                      | Location | Subject (facultative)   |
|--|----------|---|
| OIE Twinning project proposal discussion | Mali     | OIE initiated discussion on twinning the Reference Lab in Lethbridge with a lab in Mali.  |
| OIE Twinning project proposal discussion | Guinea   | OIE initiated a discussion and conference call for potential twinning between the Reference lab in Lethbridge and a lab in Guinea |

25. Additional comments regarding your report:

The proposal for OIE twinning with Mali did not go forward because of security concerns in Mali. The Twinning with Guinea also did not go forward as a result of language barrier. The staff in Guinea could not communicate in English and the Lethbridge Lab here is all English. Currently, due to the ongoing capacity building for work with



anthrax at the Ghana veterinary services which is funded by Global Affairs Canada, the Reference Lab here will like to propose a OIE twinning project with the Pong Tamale veterinary services Lab in Ghana.

A request for advice from Macedonia on Information on Bacillus anthracis diagnostic procedures was received by the two OIE Reference Labs for anthrax via email. The two OIE experts for anthrax provided the needed advice via email.