

# OIE Reference Laboratory Reports Activities

## *Activities in 2019*

**This report has been submitted : 2020-01-23 18:05:17**

|  |  |
|--|--|
| <b>Name of disease (or topic) for which you are a designated OIE Reference Laboratory:</b> | Bluetongue   |
| <b>Address of laboratory:</b>  | USDA, APHIS, VS, DB National Veterinary Services Laboratories 1920 Dayton Avenue, P.O. Box 844 Ames, Iowa 50010 UNITED STATES OF AMERICA |
| <b>Tel.:</b>   | +1-515 337 7551  |
| <b>Fax:</b>  | +1-515 337 6508  |
| <b>E-mail address:</b>   | NVSL.DVL.Heads@usda.gov  |
| <b>Website:</b>  | <a href="http://www.aphis.usda.gov/nvsl">www.aphis.usda.gov/nvsl</a>   |
| <b>Name (including Title) of Head of Laboratory (Responsible Official):</b>                | Dr. Karl Hochstein, Acting Director, National Veterinary Services Laboratories, DB, VS, APHIS, USDA                                      |
| <b>Name (including Title and Position) of OIE Reference Expert:</b>                        | TBD, Diagnostic Virology Laboratory, National Veterinary Services Laboratories, DB, VS, APHIS, USDA                                      |
| <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)

Yes

| Diagnostic Test   | Indicated in OIE Manual (Yes/No) | Total number of test performed last year |                 |
|---|----------------------------------|--|-----------------|
|   |                                  | Nationally                               | Internationally |
| Indirect diagnostic tests   |                                  | Nationally                               | Internationally |
| Agar Gel Immunodiffusion (AGID)   | yes                              | 119                                      | 0               |
| Competitive Enzyme-Linked Immunosorbent Assay (C-ELISA)/Enzyme-Linked Immunosorbent Assay (ELISA) | yes                              | 396                                      | 125             |
| Virus Neutralization  | yes                              | 245                                      | 0               |
| Direct diagnostic tests   |                                  | Nationally                               | Internationally |
| Virus Isolation   | yes                              | 358                                      | 0               |
| Real-time reverse transcriptase-polymerase chain reaction (rRT-PCR)                               | yes                              | 363                                      | 6               |
| Polymerase Chain Reaction (PCR)   | yes                              | 0  | 0               |
| Sheep Inoculation   | yes                              | 373                                      | 0               |

**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?

Yes

NOTE: Currently, there are 22 laboratories that produce Standard Reference Reagents officially recognised by the OIE for 19 diseases/pathogens. Please click the following link to the list of OIE-approved International Standard Sera: <http://www.oie.int/en/our-scientific-expertise/veterinary-products/reference-reagents/>. If the reagent is not listed on this page, it is NOT considered OIE-approved. The next two questions allow you to indicate non-OIE-approved diagnostic

reagents.

OIE-approved SRR producing laboratory - Select your lab from list:

| Disease    | Test   | Available from   |
|------------|--|--|
| Bluetongue | Enzyme-linked immunosorbent assay;<br>Agar gel immunodiffusion | Dr Eileen N. Ostlund<br>National Veterinary Services<br>Laboratories, Animal & Plant Health Inspection Service,<br>USDA,<br>P.O. Box 844, 1920 Dayton Avenue,<br>Ames, Iowa 50010, United States of America<br>Tel: (1-515) 337.75.51<br>Fax: (1-515) 337.73.48<br>eileen.n.ostlund@aphis.usda.gov |

| Type of reagent available | Related diagnostic test | Produced/ Supply imported | Amount supplied nationally (ml, mg)   | Amount supplied internationally (ml, mg)  | Name of recipient OIE Member Countries |
|---------------------------|-------------------------|---------------------------|---|---|--|
| BT antisera               | ELISA/AGID              | both                      | <input type="radio"/> <10mL<br><input type="radio"/> 10-100mL<br><input checked="" type="radio"/> 100-500mL<br><input type="radio"/> >500mL | <input type="radio"/> <10mL<br><input checked="" type="radio"/> 10-100mL<br><input type="radio"/> 100-500mL<br><input type="radio"/> >500mL | JAPAN                                  |

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  |
|---|-------------------------|-------------------|-------------------------------------|--|---------------------------------------|---|
| Bluetongue (BT) viruses 2, 10, 11, 13, 17 | VN                      | both              | 1.8 ml                              | 0 ml                                     | 0                                     | <input 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            |
| BT antibodies- 2, 10, 11, 13, 17          | VN                      | both              | 4.6 ml                              | 0 ml                                     | 0                                     | <input 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            |
| BT weak positive                          | ELISA/AGID              | both              | 66 ml                               | 0 ml                                     | 0                                     | <input 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            |
| BT strong positive                        | ELISA/AGID              | both              | 28 ml                               | 10 ml                                    | 1                                     | <input type="checkbox"/> Africa<br><input type="checkbox"/> Americas<br><input checked="" type="checkbox"/> Asia and Pacific<br><input type="checkbox"/> Europe<br><input type="checkbox"/> Middle East |
| BT conjugate                              | FA                      | both              | 9 ml                                | 0 ml                                     | 0                                     | <input 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            |
| BT Proficiency Panel                      | ELISA/AGID              | both              | 54 Panels                           | 1 panel                                  | 1                                     | <input type="checkbox"/> Africa<br><input type="checkbox"/> Americas<br><input checked="" 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?

Yes

| Name of OIE Member Country seeking assistance | Date (month)                   | No. samples received for provision of diagnostic support | No. samples received for provision of confirmatory diagnoses |
|---|--------------------------------|--|--|
| ARGENTINA                                     | November                       | 1  | 0  |
| CANADA  | February, May, August, October | 18   | 0  |
| GERMANY                                       | July                           | 5  | 0  |
| UNITED KINGDOM                                | October                        | 1  | 0  |

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

No

***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:                         |
| USDA has a separate group that is responsible for this type of analysis and distribution of data. |

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:                         |
| USDA has a separate group that is responsible for this type of analysis and distribution of data. |

**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: 3

b) International conferences: 4

c) National conferences: 1

1. October 21-25, 2019: United States Animal Health Association Annual Meeting, Providence, RI

d) Other:

(Provide website address or link to appropriate information) 2

1. United States Animal Health Association: Committee on Parasitic and Vector Borne Diseases  
[https://www.usaha.org/upload/Committee/2019Reports/Parasitic\\_and\\_Vector\\_Borne\\_Disea.pdf](https://www.usaha.org/upload/Committee/2019Reports/Parasitic_and_Vector_Borne_Disea.pdf)

**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?

No

**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)   |
|-----------------------------------|---|
| ISO 17025 Biological Testing      | 2019 A2LA Accreditation Certification.pdf |

16. Is your quality management system accredited?

Yes

| Test for which your laboratory is accredited | Accreditation body                                       |
|--|--|
| Virus Neutralization                         | American Association for Laboratory Accreditation (A2LA) |
| RT-PCR                                       | A2LA   |
| PCR  | A2LA   |
| AGID   | A2LA   |
| ELISA  | A2LA   |
| Virus Isolation                              | A2LA   |

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?

No

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?

Yes

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



| Purpose for inter-laboratory test comparisons <sup>1</sup> | No. participating laboratories | Region(s) of participating OIE Member Countries   |
|--|--------------------------------|---|
| Annual proficiency test for export purposes                | 54                             | <input type="checkbox"/> Africa<br><input checked="" type="checkbox"/> Americas<br><input type="checkbox"/> Asia and Pacific<br><input type="checkbox"/> Europe<br><input type="checkbox"/> Middle East |
| Proficiency test for Quality Assurance                     | 1                              | <input type="checkbox"/> Africa<br><input type="checkbox"/> Americas<br><input checked="" type="checkbox"/> Asia and Pacific<br><input type="checkbox"/> Europe<br><input type="checkbox"/> Middle East |

***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?

No

25. Additional comments regarding your report:

- Due to recent changes in staff, we are in the application process for the next subject matter expert