WOAH Reference Laboratory Reports Activities 2023
Activities in 2023
This report has been submitted: 17 juillet 2024 21:17

Laboratory Information

| Name of disease (or topic) for which you are a designated WOAH Reference Laboratory: | Salmonellosis |
| Address of laboratory: | 110 Stone Road West, Guelph, ON |
| Tel: | +1-519 826.26.48 |
| E-mail address: | gita.arya@inspection.gc.ca |
| Website: | |

| Name (including Title of Head of Laboratory (Responsible Official)): | Sara Christianson, Chief, Reference and Diagnostic Services, Division of Enteric Diseases, National Microbiology Laboratory Branch, Public Health Agency of Canada |
| Name (including Title and Position) of WOAH Reference Expert: | Dr. Gitanjali Arya, WOAH Reference Expert, Head of Science Laboratory Services, Ottawa Animal Health Laboratory, Canadian Food Inspection Agency |

Which of the following defines your laboratory? Check all that apply:
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)

<table>
<thead>
<tr>
<th>Diagnostic Test</th>
<th>Indicated in WOAH Manual (Yes/No)</th>
<th>Total number of test performed last year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indirect diagnostic tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Nationally</td>
<td>Internationally</td>
</tr>
<tr>
<td>Direct diagnostic tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salmonella Serotyping (total)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td></td>
<td>4212</td>
</tr>
<tr>
<td></td>
<td>Nationally</td>
<td>Internationally</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Salmonella serotyping using Whole Genome Sequencing based method SISTR (Salmonella In Silico Typing Resource)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3050</td>
</tr>
<tr>
<td></td>
<td>Nationally</td>
<td>Internationally</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Salmonella serotyping using serological phenotypic method</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1162</td>
</tr>
<tr>
<td></td>
<td>Nationally</td>
<td>Internationally</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

TOR2: REFERENCE MATERIAL

2. Did your laboratory produce or supply imported standard reference reagents officially recognised by WOAH?
No

3. Did your laboratory supply standard reference reagents (non-WOAH-approved) and/or other diagnostic reagents to WOAH Members?
No

4. Did your laboratory produce vaccines?
Not applicable

5. Did your laboratory supply vaccines to WOAH 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 WOAH 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 WOAH Standards for the designated pathogen or disease?
No

**TOR4: DIAGNOSTIC TESTING FACILITIES**

10. Did your laboratory carry out diagnostic testing for other WOAH Members?
No

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

<table>
<thead>
<tr>
<th>NAME OF THE WOAH MEMBER COUNTRY RECEIVING A TECHNICAL CONSULTANCY</th>
<th>PURPOSE</th>
<th>HOW THE ADVICE WAS PROVIDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNITED KINGDOM</td>
<td>To reply to a technical question Animal Plant and Health Agency, UK regarding the best practice/s for techniques when testing Salmonella from poultry primary production samples such as fluff, dead in shell, dead on arrival and cull chicks.</td>
<td>EMAIL correspondence after consultation with the local provincial Salmonella isolation laboratory expert and the other WOAH Salmonella Reference Laboratory Experts was done</td>
</tr>
</tbody>
</table>

**TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES**

12. Did your laboratory participate in international scientific studies in collaboration with WOAH Members other than the own?
No

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

We require our clients to submit following metadata with the Salmonella isolates: Date Collected, Country, province, source, source type and unique sample identification of the sample.

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 Data is disseminated in form of reports, publications, conferences and lectures.

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:

14


Reports/Fact Sheets:
Stakeholder/International and veterinary associations meetings:

**TOR7: SCIENTIFIC AND TECHNICAL TRAINING**

17. Did your laboratory provide scientific and technical training to laboratory personnel from other WOAH Members?

No

**TOR8: QUALITY ASSURANCE**

18. Does your laboratory have a Quality Management System?

Yes

<table>
<thead>
<tr>
<th>Quality management system adopted</th>
<th>Certificate scan (PDF, JPG, PNG format)</th>
</tr>
</thead>
</table>

19. Is your quality management system accredited?

Yes

<table>
<thead>
<tr>
<th>Test for which your laboratory is accredited</th>
<th>Accreditation body</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serotyping of Salmonella</td>
<td>Standards Council of Canada</td>
</tr>
<tr>
<td>Salmonella in silico Typing Resource (SISTR) using Whole Genome Sequencing</td>
<td>Standards Council of Canada</td>
</tr>
</tbody>
</table>

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 WOAH?

No

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

No

**TOR10: NETWORK WITH WOAH REFERENCE LABORATORIES**

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

Yes

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

No

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

No

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

<table>
<thead>
<tr>
<th>Purpose for inter-laboratory test comparisons</th>
<th>Role of your reference laboratory (organizer/participant)</th>
<th>No. participating laboratories</th>
<th>Name of the Test</th>
<th>WOAH Member Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inter-Laboratory QA program regarding Salmonella Serotyping with the Laboratoire d'épidémiologie et surveillance animale du Québec, MAPAQ, StHyacinthe, Quebec</td>
<td>Participant and organizer</td>
<td>2</td>
<td>Salmonella serotyping using serological phenotypic method</td>
<td>CANADA,</td>
</tr>
<tr>
<td>Inter-laboratory QA program regarding Salmonella whole genome sequencing with PulseNet Canada</td>
<td>Participant</td>
<td>10</td>
<td>Salmonella serotyping using Whole Genome Sequencing based method SISTR (Salmonella In Silico Typing Resource)</td>
<td>CANADA,</td>
</tr>
</tbody>
</table>

**TOR12: EXPERT CONSULTANTS**

28. Did your laboratory place expert consultants at the disposal of WOAH?
No

29. Additional comments regarding your report:
Yes
TOR3: NEW PROCEDURES
'Did your laboratory develop new diagnostic methods for the designated pathogen or disease?'
Yes. Long read sequencing and metagenomics techniques for Salmonella are currently in development. "Did your laboratory develop new vaccines for the designated pathogen or disease?"
Yes. We are collaborating with in-country partners to develop Salmonella vaccines for poultry