WOAH Reference Laboratory Reports Activities 2022

Activities in 2022

This report has been submitted : 25 avril 2023 16:51

**Laboratory Information**

<table>
<thead>
<tr>
<th>Name of disease (or topic) for which you are a designated WOAH Reference Laboratory:</th>
<th>Swine influenza</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address of laboratory:</td>
<td>National Veterinary Services Laboratories USDA, APHIS, Veterinary Services 1920 Dayton Ave Ames, IA 50010 UNITED STATES OF AMERICA</td>
</tr>
<tr>
<td>Tel.:</td>
<td>15153377301</td>
</tr>
<tr>
<td>E-mail address:</td>
<td><a href="mailto:mia.kim.torchetti@usda.gov">mia.kim.torchetti@usda.gov</a></td>
</tr>
<tr>
<td>Website:</td>
<td><a href="http://www.aphis.usda.gov/nvsl">www.aphis.usda.gov/nvsl</a></td>
</tr>
<tr>
<td>Name (including Title) of Head of Laboratory (Responsible Official):</td>
<td>Dr. Suelee Robbe-Austerman, Director, NVSL</td>
</tr>
<tr>
<td>Name (including Title and Position) of WOAH Reference Expert:</td>
<td>Mia Kim Torchetti, Director, Diagnostic Virology Laboratory, NVSL</td>
</tr>
<tr>
<td>Which of the following defines your laboratory? Check all that apply:</td>
<td>Governmental</td>
</tr>
</tbody>
</table>

**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

<table>
<thead>
<tr>
<th>Diagnostic Test</th>
<th>Indicated in WOAH Manual (Yes/No)</th>
<th>Total number of test performed last year</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Indirect diagnostic tests</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct diagnostic tests</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real-time RT-PCR (IAV, subtyping)</td>
<td>YES</td>
<td>400</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 (nonWOAH-approved) and/or other diagnostic reagents to WOAH Members?
   Yes

<table>
<thead>
<tr>
<th>TYPE OF REAGENT AVAILABLE</th>
<th>RELATED DIAGNOSTIC TEST</th>
<th>PRODUCED/ PROVIDE</th>
<th>AMOUNT SUPPLIED NATIONALLY (ML, MG)</th>
<th>AMOUNT SUPPLIED INTERNATIONALLY (ML, MG)</th>
<th>NO. OF RECIPIENT WOAH MEMBER COUNTRIES</th>
<th>COUNTRY OF RECIPIENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference antigen/antisera</td>
<td>HI H1, H3</td>
<td>BOTH</td>
<td>16</td>
<td>32</td>
<td>1</td>
<td>America</td>
</tr>
</tbody>
</table>

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?
    No

**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
**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:**

USDA Swine Surveillance: NVSL works with another unit within USDA for distribution of analyzed data.


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:**

USDA Swine Surveillance: NVSL works with another unit within USDA for distribution of analyzed data.


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:

2


b) International conferences:

4

*World Organisation for Animal Health and Food and Animal Organization (OFFLU) Swine influenza virus technical activity teleconference*

c) National conferences:

1

*October 2022: United States Animal Health Association and American Association of Veterinary Laboratory Diagnosticians Annual Meeting*

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

3

*Hosted visiting scientist from the Animal Plant Health Agency*
**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>
<tbody>
<tr>
<td>American Association for Laboratory Accreditation (A2LA)</td>
<td>pdf</td>
</tr>
</tbody>
</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>Real-time RT-PCR</td>
<td>ISO 17025 Biological Testing</td>
</tr>
<tr>
<td>Virus isolation</td>
<td>ISO 17025 Biological Testing</td>
</tr>
<tr>
<td>Hemagglutination-inhibition</td>
<td>ISO 17025 Biological Testing</td>
</tr>
<tr>
<td>Neuraminidase-inhibition</td>
<td>ISO 17025 Biological Testing</td>
</tr>
</tbody>
</table>

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

Yes

Biosafety, Security and Incident Response Plan and Biological Risk Assessments: NVSL-MAN-0018 and NVSL-WI-1207

**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. Are you a member of a network of WOAH Reference Laboratories designated for the same pathogen?

Yes
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>Region(s) of participating WOAH Member Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>APHIS approval to test</td>
<td>Organizer</td>
<td>50</td>
<td>America</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:
*Some testing and activities have been impacted by the ongoing H5 2.3.4.4 HPAI outbreak affecting wild birds and poultry with sporadic spillovers into mammals; and the ongoing vigilance for SARS-CoV-2 in animals. The national swine surveillance program is anonymous and based upon PCR and sequencing; serology is not typically conducted at NVSL.*