WOAH Reference Laboratory Reports Activities 2023
Activities in 2023
This report has been submitted: 29 mai 2024 03:35

Laboratory Information

<table>
<thead>
<tr>
<th>Name of disease (or topic) for which you are a designated WOAH Reference Laboratory:</th>
<th>Avian influenza</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address of laboratory:</td>
<td>North 20, West 10 Kita-Ku Sapporo 001-0020 JAPAN</td>
</tr>
<tr>
<td>Tel:</td>
<td>+81-11 706 5207</td>
</tr>
<tr>
<td>E-mail address:</td>
<td><a href="mailto:sakoda@vetmed.hokudai.ac.jp">sakoda@vetmed.hokudai.ac.jp</a></td>
</tr>
<tr>
<td>Website:</td>
<td></td>
</tr>
<tr>
<td>Name (including Title) of Head of Laboratory (Responsible Official):</td>
<td>Yoshihiro Sakoda (Professor)</td>
</tr>
<tr>
<td>Name (including Title and Position) of WOAH Reference Expert:</td>
<td>Yoshihiro Sakoda (Professor)</td>
</tr>
<tr>
<td>Which of the following defines your laboratory? Check all that apply:</td>
<td>Academic institution</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>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Nationally</td>
</tr>
<tr>
<td>Indirect diagnostic tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HI test for H5 virus infection</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Direct diagnostic tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virus isolation</td>
<td>300</td>
<td>800</td>
</tr>
<tr>
<td>RT-qPCR</td>
<td>100</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>Chicken immunized serum against AI virus</td>
<td>HI test</td>
<td>Produced</td>
<td>0</td>
<td>1 ml × 7 tubes</td>
<td>1</td>
<td>CONGO (DEM. REP. OF THE),</td>
</tr>
</tbody>
</table>

4. Did your laboratory produce vaccines?
   Not applicable

5. Did your laboratory supply vaccines to WOAH Members?
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?
Yes

<table>
<thead>
<tr>
<th>NAME OF WOAH MEMBER COUNTRY SEEKING ASSISTANCE</th>
<th>DATE</th>
<th>WHICH DIAGNOSTIC TEST USED</th>
<th>NO. SAMPLES RECEIVED FOR PROVISION OF DIAGNOSTIC SUPPORT</th>
<th>NO. SAMPLES RECEIVED FOR PROVISION OF CONFIRMATORY DIAGNOSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIETNAM</td>
<td>2023-07-06</td>
<td>Virus isolation</td>
<td>0</td>
<td>800</td>
</tr>
</tbody>
</table>

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>VIETNAM</td>
<td>Improvement of diagnosis of avian influenza</td>
<td>Direct advice in field</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?
Yes

<table>
<thead>
<tr>
<th>Title of the study</th>
<th>Duration</th>
<th>PURPOSE OF THE STUDY</th>
<th>PARTNERS (INSTITUTIONS)</th>
<th>WOAH MEMBER COUNTRIES INVOLVED OTHER THAN YOUR COUNTRY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surveillance of avian influenza</td>
<td>22 years</td>
<td>Monitoring of avian influenza</td>
<td>State Central Veterinary Laboratory</td>
<td>MONGOLIA</td>
</tr>
<tr>
<td>Surveillance of avian influenza</td>
<td>14 years</td>
<td>Monitoring of avian influenza</td>
<td>Department of Animal Health</td>
<td>VIETNAM</td>
</tr>
<tr>
<td>Surveillance of avian influenza</td>
<td>6 years</td>
<td>Monitoring of avian influenza</td>
<td>Central Veterinary Laboratory</td>
<td>CONGO (DEM. REP. OF THE)</td>
</tr>
</tbody>
</table>

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:

During the surveillance in national or international cooperative project, we isolated high pathogenicity avian influenza viruses and investigated their gene constellations, and conducted the phylogenetical tree analysis.

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:
Gene sequence data of the isolated avian influenza viruses were registered onto the GISAID website.

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:

4


b) International conferences:

8
Sakoda Y, Characterization of H5 high pathogenicity avian influenza viruses detected in Japan during the winter season of 2022–2023 and perspectives for the forthcoming season. The 3rd Joint Meeting of Veterinary Science in East Asia. 1 May, 2023 (Pintong, Taiwan).

Sakoda Y, Integrated Surveillance and Available Tools and mechanisms. Zoonotic Influenza Webinar Regional Quandridpartite Sub-Group – Zoonotic Influenza. 8 May, 2023 (online hosted by FAO, Thailand)

Sakoda Y, Surveillance of HPAI and avian diseases in poultry and non-poultry, including wild birds and mammals. WOAH Regional Workshop for Avian Disease Prevention and Control in Asia and the Pacific. 29 Aug., 2023 (Qingdao, China)

Sakoda Y, Laboratory networking Networking and Information sharing-Avian influenza. Regional Workshop for Avian Disease Prevention and Control in Asia and the Pacific. 29 Aug., 2023 (Qingdao, China)

Isoda N, Control for Avian and Zoonotic Influenza through One Health Approach. International Symposium on AI in Animal and Plan Quarantine Agency, Ministry of Agriculture, Forest and Rural Affairs KOREA. 13 Sep., 2023 (Gimcheon, Korea)

Hino T, Current situation of high pathogenic avian influenza virus infection in wild birds and mammals in Japan. International Symposium on AI in Animal and Plan Quarantine Agency, Ministry of Agriculture, Forest and Rural Affairs KOREA. 13 Sep., 2023 (Gimcheon, Korea)

Hew YL, Continuous introduction of H5 high pathogenicity avian influenza viruses in Hokkaido, Japan. The 11th Sapporo Summer Symposium for One Health, 14-15, Sep., 2023 (Sapporo, Japan)

Sakoda Y, Importance of networking and information sharing for the control of avian influenza in Asia. The program of V International scientific conference "The Impact of Climate Change on Biological Diversity and the Spread of Viral Infections of Animals in Eurasia". 5 Dec., 2023 (online hosted by Federal Research Center for Fundamental and Translational Medicine, Russia)

c) National conferences:

2
Isoda N, Virus surveillance and their characterization for development of pandemic influenza vaccine. Research progress of The Institute for Vaccine Research and Development, Hokkaido University. 28., Sep., 2023 (Sapporo, Japan)

Hew YL, Characterization of H5 high pathogenicity avian influenza viruses isolated in winter 2022–2023 in Hokkaido, Japan. 70th annual meeting for the Japanese Society for Virology. 26-29 Sep., 2023 (Sendai, Japan)

d) Other (Provide website address or link to appropriate information):
TOR7: SCIENTIFIC AND TECHNICAL TRAINING

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

Yes

a) Technical visit : 0
b) Seminars : 9
c) Hands-on training courses: 14
d) Internships (>1 month) 0

<table>
<thead>
<tr>
<th>Type of technical training provided (a, b, c or d)</th>
<th>Country of origin of the expert(s) provided with training</th>
<th>No. participants from the corresponding country</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>THAILAND</td>
<td>9</td>
</tr>
<tr>
<td>C</td>
<td>GHANA</td>
<td>2</td>
</tr>
<tr>
<td>C</td>
<td>SRI LANKA</td>
<td>1</td>
</tr>
<tr>
<td>C</td>
<td>INDONESIA</td>
<td>1</td>
</tr>
<tr>
<td>C</td>
<td>JAMAICA</td>
<td>1</td>
</tr>
<tr>
<td>C</td>
<td>THAILAND</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>NEPAL</td>
<td>1</td>
</tr>
<tr>
<td>C</td>
<td>ZAMBIA</td>
<td>1</td>
</tr>
<tr>
<td>C</td>
<td>CHINA (PEOPLE’S REP. OF)</td>
<td>1</td>
</tr>
<tr>
<td>C</td>
<td>VIETNAM</td>
<td>1</td>
</tr>
<tr>
<td>C</td>
<td>MONGOLIA</td>
<td>2</td>
</tr>
</tbody>
</table>

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>Hemagglutination test and hemagglutination inhibition test</td>
<td>ISO/IEC 17025:2017</td>
</tr>
</tbody>
</table>

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

Yes

- Allocate the responsibility to each of the workers with training system and the SOP. - Zoning of biohazard area with locked system not to allow unrelated persons entering in. - Management of laboratory equipment including PPE with open-end system. - Held team-meeting once a week to conduct the risk communication.

TOR9: SCIENTIFIC MEETINGS

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

Yes

<table>
<thead>
<tr>
<th>NATIONAL/INTERNATIONAL</th>
<th>TITLE OF EVENT</th>
<th>CO-ORGANISER</th>
<th>DATE (MM/YY)</th>
<th>LOCATION</th>
<th>NO. PARTICIPANTS</th>
</tr>
</thead>
</table>

WOAH Reference Laboratory Reports Activities 2023
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?
Yes

<table>
<thead>
<tr>
<th>NETWORK/DISEASE</th>
<th>ROLE OF YOUR LABORATORY (PARTICIPANT, ORGANISER, ETC)</th>
<th>NO. PARTICIPANTS</th>
<th>PARTICIPATING WOAH REF. LABS</th>
</tr>
</thead>
</table>

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?
Yes

<table>
<thead>
<tr>
<th>TITLE OF THE PROJECT OR CONTRACT</th>
<th>SCOPE</th>
<th>NAME(S) OF RELEVANT WOAH REFERENCE LABORATORIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early detection of transboundary avian influenza viruses isolated from wild migratory birds</td>
<td>Early warning of transboundary avian influenza viruses in the Far East</td>
<td>Animal and Plant Quarantine Agency Ministry of Agriculture, Forest and Rural Affairs (Korea)</td>
</tr>
<tr>
<td>Early detection of transboundary avian influenza viruses isolated from wild migratory birds</td>
<td>Early warning of transboundary avian influenza viruses in the Far East</td>
<td>Federal State-Financed Institution, Russia</td>
</tr>
<tr>
<td>Genetic and antigenic characterization of recent H9 low pathogenicity avian influenza viruses</td>
<td>To characterize isolated viruses to develop the new diagnostic method for H9 low pathogenicity avian influenza</td>
<td>Istituto Zooprofilattico Sperimentale delle Venezie Research and Innovation Dept., Italy</td>
</tr>
</tbody>
</table>

**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?
No

**TOR12: EXPERT CONSULTANTS**

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