WOAH Reference Laboratory Reports Activities 2023
Activities in 2023
This report has been submitted: 12 juin 2024 09:04

Laboratory Information

Name of disease (or topic) for which you are a designated WOAH Reference Laboratory: Avian influenza

Address of laboratory: ICAR-National Institute of High Security Animal Diseases, Anand Nagar, Hathaikheda Road, Bhopal - 462022 (M.P.), India

Tel.: +91-755 275 92 04

E-mail address: ctosh@hsadl.nic.in

Website: https://nihsad.nic.in/

Name (including Title) of Head of Laboratory (Responsible Official): Dr. Aniket Sanyal, Director

Name (including Title and Position) of WOAH Reference Expert: Dr. Chakradhar Tosh, Principal Scientist

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

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>Indirect diagnostic tests</td>
<td>Nationally</td>
<td>Internationally</td>
</tr>
<tr>
<td>HI</td>
<td>2704</td>
<td>0</td>
</tr>
<tr>
<td>AGID</td>
<td>5408</td>
<td>0</td>
</tr>
<tr>
<td>Direct diagnostic tests</td>
<td>Nationally</td>
<td>Internationally</td>
</tr>
<tr>
<td>RT-PCR</td>
<td>5510</td>
<td>0</td>
</tr>
<tr>
<td>Real time RT-PCR</td>
<td>39858</td>
<td>0</td>
</tr>
<tr>
<td>Virus isolation</td>
<td>5517</td>
<td>0</td>
</tr>
<tr>
<td>Nucleotide sequencing and molecular pathotyping</td>
<td>19</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?

No

4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to WOAH Members?

No
TOR3: NEW PROCEDURES

6. Did your laboratory develop new diagnostic methods for the designated pathogen or disease?
   Yes

7. Did your laboratory validate diagnostic methods according to WOAH Standards for the designated pathogen or disease?
   Yes

<table>
<thead>
<tr>
<th>NAME OF THE NEW TEST OR DIAGNOSTIC METHOD DEVELOPED</th>
<th>DESCRIPTION AND REFERENCES (PUBLICATION, WEBSITE, ETC.)</th>
</tr>
</thead>
</table>

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

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:
   
   Information on avian influenza viruses isolated including their origin, subtype and nucleotide sequences of HPAI and LPAI viruses in India

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 avian influenza genetic clade status were shared with Department of Animal Husbandry and Dairying, Government of India

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:


b) International conferences:


c) National conferences:


Tosh C. (2023) HPAI Indian Scenario: current status and control strategies, Presented as Guest speaker in Association of Avian Health Professionals (AAHP) Poultry Health Webinar -5, Coordinated by ICAR-Directorate of Poultry Research, Hyderabad, India, 30th October 2023 (Zoom meeting).

Tosh, C. (2023) Avian influenza surveillance in India, Presented in Review Meeting of Department of Animal Husbandry and Dairying, MoFAH&D, Govt of India, New Delhi, 7th to 8th November 2023.

Tosh C. (2023) Avian influenza surveillance in India, Presented in Review Meeting of Department of Animal Husbandry and Dairying, MoFAH&D, Govt of India, New Delhi, 7th to 8th November 2023.


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?

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>Real time RT-PCR</td>
<td>National Accreditation Board for Testing and Calibration Laboratories</td>
</tr>
</tbody>
</table>

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

Yes

The laboratory is a certified BSL3 biocontainment laboratory and has a robust biorisk management system to handle the pathogens

**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?

Yes
**Title of event** | **Date (mm/yy)** | **Location** | **Role (speaker, presenting poster, short communications)** | **Title of the work presented**
--- | --- | --- | --- | ---
WOAH Regional Workshop for Avian Disease Prevention and Control in Asia and the Pacific | 2023-08-29 | Qingdao, People's Republic of China | Speaker | Best practice for sampling and sample Transportation
Regional consultation on: Environmental Surveillance for Zoonotic Influenza in Asia 11/23 Bangkok, Thailand Consultation Participation | 2023-11-14 | Bangkok, Thailand | Consultation | Participation

**TOR10: NETWORK WITH WOAH REFERENCE LABORATORIES**

23. Did your laboratory exchange information with other WOAH Reference Laboratories designated for the same pathogen or disease?
No

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?
Yes

<table>
<thead>
<tr>
<th>PURPOSE OF THE PROFICIENCY TESTS</th>
<th>ROLE OF YOUR REFERENCE LABORATORY (ORGANISER/ PARTICIPANT)</th>
<th>NO. PARTICIPANTS</th>
<th>PARTICIPATING WOAH REF. LABS/ ORGANISING WOAH REF. LAB.</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFFLU PT program – Influenza A virus PCR</td>
<td>Participant</td>
<td>10</td>
<td>Organized by CSIRO ACDP</td>
</tr>
<tr>
<td>Asia-Pacific Terrestrial PT program - Avian Diseases PCR</td>
<td>Participant</td>
<td>33</td>
<td>Organized by CSIRO ACDP</td>
</tr>
</tbody>
</table>

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?
No

**TOR12: EXPERT CONSULTANTS**

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

29. Additional comments regarding your report:

*We will be happy to provide diagnosis of avian influenza on samples referred from other WOAH member countries*