WOAH Reference Laboratory Reports Activities 2023
Activities in 2023
This report has been submitted: 6 juin 2024 22:24

Laboratory Information

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

Address of laboratory: University of Kentucky, Gluck Equine Research Center, 1400 Nicholasville Road

Tel: +1-859 257 47 57

E-mail address: tmcham1@uky.edu

Website: https://gluck.ca.uky.edu/

Name (including Title) of Head of Laboratory (Responsible Official): Prof. Surendranath Suman, interim chair

Name (including Title and Position) of WOAH Reference Expert: Thomas M. Chambers, PhD, Professor

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

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></td>
<td></td>
</tr>
<tr>
<td>HI (type A influenza, equine H3)</td>
<td>Yes</td>
<td>Nationally: 1432, Internationally: 0</td>
</tr>
<tr>
<td>qPCR</td>
<td></td>
<td>Nationally: 120, Internationally: 0</td>
</tr>
<tr>
<td>Direct diagnostic tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>virus isolation in embryonated eggs</td>
<td></td>
<td>Nationally: 4050, Internationally: 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?

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>equine influenza virus strains</td>
<td>comparative HI and sequencing</td>
<td>49</td>
<td>1 ml</td>
<td>1 ml</td>
<td>2</td>
<td>FRANCE, UNITED STATES OF AMERICA,</td>
</tr>
</tbody>
</table>

4. Did your laboratory produce vaccines?

No

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?
Yes

<table>
<thead>
<tr>
<th>NAME OF THE NEW VACCINE DEVELOPED</th>
<th>DESCRIPTION AND REFERENCES (PUBLICATION, WEBSITE, ETC.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New generation equine influenza bivalent VLP vaccine</td>
<td>manuscript in process, collaboration with Dr. Maretha O’Kennedy in South Africa</td>
</tr>
</tbody>
</table>

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>JAPAN</td>
<td>provision of sequence information</td>
<td>email</td>
</tr>
<tr>
<td>UNITED KINGDOM</td>
<td>provision of virus isolates, sequences, comparative HI data</td>
<td>physical shipment, zoom meetings, emails</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>Expert Surveillance Panel for equine influenza</td>
<td>ongoing</td>
<td>monitoring of incidence of equine influenza and characterization of viruses</td>
<td>Irish Equine Centre, JRA, others</td>
<td>ARGENTINA CHINA (PEOPLE’S REP OF) FRANCE GERMANY IRELAND JAPAN NIGERIA SWEDEN UNITED KINGDOM</td>
</tr>
<tr>
<td>New generation equine influenza bivalent VLP vaccine</td>
<td>manuscript in preparation</td>
<td>development of new EIV vaccine</td>
<td>CSIR South Africa, Grayson Jockey Club Research Foundation</td>
<td>SOUTH AFRICA</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:

vaccination histories of infected horses

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:

WOAH Reference Laboratory Reports Activities 2023
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: 
0

b) International conferences: 
1
5th ISIRV International Symposium on Neglected Influenza Viruses

c) National conferences: 


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: 0

c) Hands-on training courses: 2

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>C</td>
<td>PAKISTAN</td>
<td>1</td>
</tr>
<tr>
<td>C</td>
<td>NIGERIA</td>
<td>1</td>
</tr>
</tbody>
</table>

TOR8: QUALITY ASSURANCE

18. Does your laboratory have a Quality Management System?
No

19. Is your quality management system accredited?
No

20. Does your laboratory maintain a “biorisk management system” for the pathogen and the disease concerned?
Yes
per the letter of 24 October 2023 from Dr Montserrat Arroyo, our reference laboratory status is temporarily suspended while we pursue ISO17025 accreditation.

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?
Yes

<table>
<thead>
<tr>
<th>Title of event</th>
<th>Date (mm/yy)</th>
<th>Location</th>
<th>Role (speaker, presenting poster, short communications)</th>
<th>Title of the work presented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual meeting of the Equine Influenza Expert Surveillance Panel</td>
<td>2023-07-06</td>
<td>Zoom</td>
<td>speaker</td>
<td>update on equine influenza activity in the USA with sequence and antigenicity comparisons</td>
</tr>
</tbody>
</table>

**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>
<tbody>
<tr>
<td>equine influenza Expert Surveillance Panel</td>
<td>participant</td>
<td>10</td>
<td>yes, in Ireland, Japan</td>
</tr>
</tbody>
</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>Comparative antigenicity by serum neutralization testing of recent equine influenza virus isolates</td>
<td>comparison of results between labs</td>
<td>Equine Research Institute, JRA</td>
</tr>
<tr>
<td>Equine influenza surveillance and virus characterization</td>
<td>international surveillance of equine influenza viruses in circulation and their relation to vaccine strains</td>
<td>OIE reference labs for EIV in Ireland, Japan, USA</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

29. Additional comments regarding your report:
No