

WOAH Reference Laboratory Reports Activities 2022

Activities in 2022

This report has been submitted : 5 mai 2023 10:15

Laboratory Information

Name of disease (or topic) for which you are a designated WOA Reference Laboratory:	Equine Influenza
Address of laboratory:	108 Gluck Equine Research Center Lexington, Kentucky 40546-0099 UNITED STATES OF AMERICA
Tel.:	+1-859 257 47 57
E-mail address:	tmcham1@uky.edu
Website:	gluck.ca.uky.edu
Name (including Title) of Head of Laboratory (Responsible Official):	Daniel Howe PhD, Chair, Department of Veterinary Science, University of Kentucky
Name (including Title and Position) of WOA 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

Diagnostic Test	Indicated in WOA Manual (Yes/No)	Total number of test performed last year	
Indirect diagnostic tests		Nationally	Internationally
Hemagglutination inhibition	yes	3,906	0
Direct diagnostic tests		Nationally	Internationally
virus isolation in embryonated eggs	yes	5,670	0

TOR2: REFERENCE MATERIAL

2. Did your laboratory produce or supply imported standard reference reagents officially recognised by WOA?H?

No

3. Did your laboratory supply standard reference reagents (nonWOAH-approved) and/or other diagnostic reagents to WOA?H Members?

Yes

TYPE OF REAGENT AVAILABLE	RELATED DIAGNOSTIC TEST	PRODUCED/ PROVIDE	AMOUNT SUPPLIED NATIONALLY (ML, MG)	AMOUNT SUPPLIED INTERNATIONALLY (ML, MG)	NO. OF RECIPIENT WOA?H MEMBER COUNTRIES	COUNTRY OF RECIPIENTS
equine influenza virus isolates	comparative HI and sequencing	241	16 ml (1 ml each isolate)	225 ml (1 ml each isolate)	3	America Europe

4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to WOA?H Members?

No

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 WOA?H Standards for the designated pathogen or disease?

No

8. Did your laboratory develop new vaccines for the designated pathogen or disease?

Yes

9. Did your laboratory validate vaccines according to WOA?H Standards for the designated pathogen or disease?

Yes

NAME OF THE NEW VACCINE DEVELOPED	DESCRIPTION AND REFERENCES (PUBLICATION, WEBSITE, ETC.)
experimental vaccine based on genetically engineered tobacco expressing equine flu HA	Testing of safety & efficacy is in progress

TOR4: DIAGNOSTIC TESTING FACILITIES

10. Did your laboratory carry out diagnostic testing for other WOA?H Members?

No

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

Yes

NAME OF THE WOA?H MEMBER COUNTRY RECEIVING A TECHNICAL CONSULTANCY	PURPOSE	HOW THE ADVICE WAS PROVIDED
JAPAN	provision of sequence information, collaboration on neutralization assay studies	email
COLOMBIA	provision of cDNA corresponding to equine virus isolates	physical shipment, email

UNITED KINGDOM

provision of virus isolates,
sequences, comparative HI dataphysical shipment, zoom
meetings, emails**TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES**

12. Did your laboratory participate in international scientific studies in collaboration with WOAHA Members other than the own?

Yes

Title of the study	Duration	PURPOSE OF THE STUDY	PARTNERS (INSTITUTIONS)	WOAH MEMBER COUNTRIES INVOLVED OTHER THAN YOUR COUNTRY
Expert Surveillance Panel for equine influenza	ongoing	monitoring of incidence of equine influenza and characterization of viruses	Irish Equine Centre, JRA, others	ARGENTINA CHINA (PEOPLE'S REP. OF) FRANCE GERMANY INDIA INDONESIA IRELAND JAPAN MALAYSIA NIGERIA SWEDEN UNITED KINGDOM
New generation equine influenza bivalent VLP vaccine	ongoing	development of new EIV vaccine	CSIR South Africa, Grayson Jockey Club Research Foundation	SOUTH AFRICA

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:

clinical disease information and 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:

2022--collected over 200 PCR-positive diagnoses from contacts in 27 states, made over 130 virus isolations to date

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

USDA-ARS/STAR-IDAZ animal influenza research gaps analysis workshop

c) National conferences:

0

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

0

TOR7: SCIENTIFIC AND TECHNICAL TRAINING

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

Yes

a) Technical visit :

b) Seminars :

c) Hands-on training courses:

d) Internships (>1 month) 1

Type of technical training provided (a, b, c or d)	Country of origin of the expert(s) provided with training	No. participants from the corresponding country
laboratory & veterinary techniques	Pakistan	1

TOR8: QUALITY ASSURANCE

18. Does your laboratory have a Quality Management System?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)	
AAVLD	pdf	AAVLD Cert.pdf

19. Is your quality management system accredited?

No

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

Yes

See letter to Dr. Matthew Stone (cc Sara Linnane and others) sent by email on 12 January 2017. Our Veterinary Diagnostic Laboratory, which does our primary diagnostic work, is accredited to ISO17025 standard by the American Association of Veterinary Laboratory Diagnosticians

TOR9: SCIENTIFIC MEETINGS

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

No

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

Yes

Title of event	Date (mm/yy)	Location	Role (speaker, presenting poster, short communications)	Title of the work presented
Annual meeting of the Equine Influenza Expert Surveillance Panel	2023-07-07	Zoom	speaker	update on equine influenza activity in the USA with sequence and antigenicity comparisons; consultation on equine influenza research gaps

TOR10: NETWORK WITH WOA?H REFERENCE LABORATORIES

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

Yes

24. Are you a member of a network of WOA?H Reference Laboratories designated for the same pathogen?

Yes

PURPOSE OF THE PROFICIENCY TESTS: 1	ROLE OF YOUR REFERENCE LABORATORY (ORGANISER/ PARTICIPANT)	NO. PARTICIPANTS	PARTICIPATING WOA?H REF. LABS/ ORGANISING WOA?H REF. LAB.
equine influenza expert surveillance panel	participant	12	USA, Ireland, Japan. Plus labs in other countries including France, Germany, Nigeria, Argentina, China, Sweden, others

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

No

26. Did your laboratory collaborate with other WOA?H Reference Laboratories for the same disease on scientific research projects for the diagnosis or control of the pathogen of interest?

Yes

TITLE OF THE PROJECT OR CONTRACT	SCOPE	NAME(S) OF RELEVANT WOA?H REFERENCE LABORATORIES
Comparative antigenicity by serum neutralization testing of recent equine influenza virus isolates	comparison of results between labs, sharing of data, publication of a journal article (accepted pending minor revision)	Equine Research Institute of Japan racing Association
Equine influenza surveillance and virus characterization	international surveillance of equine influenza viruses in circulation and their relation to vaccine strains	OIE reference labs for EIV in Ireland, Japan, USA

TOR11: OTHER INTERLABORATORY PROFICIENCY TESTING

27. Did your laboratory organise or participate in inter-laboratory proficiency tests with laboratories other than WOAHP Reference Laboratories for the same pathogen?

No

TOR12: EXPERT CONSULTANTS

28. Did your laboratory place expert consultants at the disposal of WOAHP?

Yes

KIND OF CONSULTANCY	Location	SUBJECT (FACULTATIVE)
ad hoc meeting of the equine influenza Expert Surveillance Panel	Zoom	review of equine influenza activity worldwide in 2021-22

29. Additional comments regarding your report:

Yes

In last year's report, under 'Did your laboratory organise scientific meetings,' I listed the 5th ISIRV International meeting on Neglected Influenza Viruses, to be held May 2022. It is now expected to be held in spring 2024, with myself as chief organiser.