

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 WOA 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 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	
		Nationally	Internationally
Indirect diagnostic tests			
HI (type A influenza, equine H3		1432	0
qPCR		120	0
Direct diagnostic tests			
virus isolation in embryonated eggs		4050	0

TOR2: REFERENCE MATERIAL

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

No

3. Did your laboratory supply standard reference reagents (nonWOA-approved) and/or other diagnostic reagents to WOA 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 MEMBER COUNTRIES	COUNTRY OF RECIPIENTS
equine influenza virus strains	comparative HI and sequencing	49	1 ml	1 ml	2	FRANCE, UNITED STATES OF AMERICA,

4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to WOA 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 WOAHS Standards for the designated pathogen or disease?

No

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

Yes

NAME OF THE NEW VACCINE DEVELOPED	DESCRIPTION AND REFERENCES (PUBLICATION, WEBSITE, ETC.)
New generation equine influenza bivalent VLP vaccine	manuscript in process, collaboration with Dr. Maretha O'Kennedy in South Africa

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

No

TOR4: DIAGNOSTIC TESTING FACILITIES

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

No

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

Yes

NAME OF THE WOAHS MEMBER COUNTRY RECEIVING A TECHNICAL CONSULTANCY	PURPOSE	HOW THE ADVICE WAS PROVIDED
JAPAN	provision of sequence information	email
UNITED KINGDOM	provision of virus isolates, sequences, comparative HI data	physical shipment, zoom meetings, emails

TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

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

Yes

Title of the study	Duration	PURPOSE OF THE STUDY	PARTNERS (INSTITUTIONS)	WOAHS 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 IRELAND JAPAN NIGERIA SWEDEN UNITED KINGDOM
New generation equine influenza bivalent VLP vaccine	manuscript in preparation	development of new EIV vaccine	CSIR South Africa, Grayson Jockey Club Research Foundation	SOUTH AFRICA

13. In exercising your activities, have you identified any regulatory research needs* relevant for WOAHS?

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:

2023--collected about 150 PCR-positive swabs from contacts in 25 states, made over 100 virus isolations

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 WOAHA Members?

Yes

a) Technical visit : 0

b) Seminars : 0

c) Hands-on training courses: 2

d) Internships (>1 month) 0

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
C	PAKISTAN	1
C	NIGERIA	1

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 WOAHA?

Yes

NATIONAL/ INTERNATIONAL	TITLE OF EVENT	CO-ORGANISER	DATE (MM/YY)	LOCATION	NO. PARTICIPANTS
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International	5th ISIRV International meeting on Neglected Influenza Viruses	Dr. S. Mark Tompkins, University of Georgia	2023-01-01	held in 2024 in Lexington, Kentucky, USA	88
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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	2023-07-06	Zoom	speaker	update on equine influenza activity in the USA with sequence and antigenicity comparisons

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. Do you network (collaborate or share information) with other WOA?H Reference Laboratories designated for the same pathogen?

Yes

NETWORK/DISEASE	ROLE OF YOUR LABORATORY (PARTICIPANT, ORGANISER, ETC)	NO. PARTICIPANTS	PARTICIPATING WOA?H REF. LABS
equine influenza Expert Surveillance Panel	participant	10	yes, in Ireland, Japan

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	Equine Research Institute, JRA
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 WOA?H Reference Laboratories for the same pathogen?

No

TOR12: EXPERT CONSULTANTS

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

No

29. Additional comments regarding your report:

No