WOAH Reference Laboratory Reports Activities 2022

Activities in 2022

This report has been submitted : 8 mars 2023 11:06

Laboratory Information

Name of disease (or topic) for which you are a designated WOAH Reference Laboratory:	Equine Influenza
Address of laboratory:	Irish Equine Centre, Johnstown, Naas, Co Kildare, Ireland
Tel.:	045866266
E-mail address:	acullinane@irishequinecentre.ie
Website:	
Name (including Title) of Head of Laboratory (Responsible Official):	Deborah Grey MBA CEO
Name (including Title and Position) of WOAH Reference Expert:	Professor Ann Cullinane MVB PhD Head of Virology
Which of the following defines your laboratory? Check all that apply:	Registered Charity

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 WOAH Manual (Yes/No)	Total number of test performed last year	
Indirect diagnostic tests		Nationally	Internationally
Single Radial Haemolysis	Yes	1	1238
Haemagglutination Inhibition	Yes	95	30
Direct diagnostic tests		Nationally	Internationally

Real-Time RT-PCR	Yes	1477	5
Virus Isolation	Yes	6	239

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

TYPE OF REAGENT AVAILABLE	RELATED DIAGNOSTIC TEST	PRODUCED/ PROVIDE	AMOUNT SUPPLIED NATIONALLY (ML, MG)	AMOUNT SUPPLIED INTERNATIONALLY (ML, MG)	NO. OF RECIPIENT WOAH MEMBER COUNTRIES	COUNTRY OF RECIPIENTS
Virus A/eq/Newmarket/77 (H7N7)	HI	Produced	0	15ml	1	Europe
Virus A/eq/Meath/07 (H3N8) FC2	HI	Produced	0	15ml	1	Europe
Virus A/eq/South Africa	HI	Produced	0	15ml	1	Europe
Negative Control antiserum	HI	Produced	0	2.5ml	1	Asia and Pacific

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?

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

NAME OF WOAH MEMBER COUNTRY SEEKING ASSISTANCE	DATE	WHICH DIAGNOSTIC TEST USED	NO. SAMPLES RECEIVED FOR PROVISION OF DIAGNOSTIC SUPPORT	NO. SAMPLES RECEIVED FOR PROVISION OF CONFIRMATORY DIAGNOSES
UNITED KINGDOM	2022-02-03	RT-PCR	1	
UNITED KINGDOM	2022-02-08	RT-PCR	1	
UNITED KINGDOM	2022-01-04	HI	30	
UNITED KINGDOM	2022-02-09	Rt-PCR	3	
FRANCE	2022-03-24	SRH	6	
FRANCE	2022-04-14	SRH	3	
FRANCE	2022-05-05	SRH	2	
FRANCE	2022-09-21	SRH	6	

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

Yes

NAME OF THE WOAH MEMBER COUNTRY RECEIVING A TECHNICAL CONSULTANCY	PURPOSE	HOW THE ADVICE WAS PROVIDED
TURKEY	Molecular diagnostics	e-mail
SWITZERLAND	FEI response re interruption to vaccination supply	Videoconference
GERMANY	Validity of SRH analysis Comparative efficacy of vaccines	Videoconference
CZECH REPUBLIC	SRD methodology	e-mail

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

Title of the study	Duration	PURPOSE OF THE STUDY	PARTNERS (INSTITUTIONS)	WOAH MEMBER COUNTRIES INVOLVED OTHER THAN YOUR COUNTRY
Investigation of vaccination regimes in foals with maternal antibodies	2021-2023	Investigation of equine influenza antibody kinetics in four protocols of primary vaccination of foals	Hanover University and Cornell University	UNITED STATES OF AMERICA
Characterisation of recent clade 1 viruses	2021-2024	Antigenic characterisation of recent viruses to determine if current vaccine strains are fit for purpose.	Japanese Racing Authority	JAPAN

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:
Epidemiological investigation of outbreaks and virus characterisation by sequencing

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:
As above nationally and internationally

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:

1
Ohta M, Kambayashi Y, Mita H, Kuroda T, Bannai H, Tsujimura K, Yamanaka T, Garvey M, Cullinane A, Yamayoshi S, Kawaoka Y, Nemoto M. Protective efficacy of a reverse genetics-derived inactivated vaccine against equine influenza virus in horses. Vaccine. 2022 Oct 19;40(44):6362-6366. doi: 10.1016/j.vaccine.2022.09.047. Epub 2022 Sep 27. PMID: 36175213.

b) International conferences:

3
British Equine Veterinary Association Congress September 2022 - Presentation entitled Equine Influenza Vaccination -New Regimes and Challenges
FEEVA Disease Surveillance Network Croatia - October 2022 Presentation 1 entitled • Equine Influenza and Equine Herpesvirus Mandatory Vaccination – Protectiveness V Legitimacy•
Presentation 2 entitled Update on Activities of WOAH Expert Surveillance Panel for Equine Influenza
Presentation to equine clinicians at Veterinary Faculty in Zagreb entitled Evidence Based Vaccination Against Equine Influenza
Annual Congress of Equine Veterinarians Czech Republic, December 2022 Equine Influenza – Evidence Based Vaccination of Horses

c) National conferences:

1
Irish Equine Veterinary Association Conference November 2022 Presentation - Current Equine Virology Issues

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

1
ESP Recommendations on WOAH website https://www.woah.org/en/home/

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

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)	
ISO 17025	pdf	the-irish-equine-foundation-ltd-151t.pdf

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
HI	INAB
SRH	INAB
RT-PCR	INAB

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

Yes

Initial laboratory processing of all unknown diagnostic specimens is carried out in calibrated/certified Biosafety Level (BCL)-2, which are decontaminated regularly and after use. Virus culture/inoculation is carried out in dedicated BCL-2 hoods. A precautions checklist worksheet is completed before this work is commenced. Disposable coats must be worn. All liquid waste is decontaminated and exposed to UV irradiation for a minimum of 20 minutes. Biological waste is collected and sealed in a double-autoclave bag. All staff are trained with regard to segregation, handling, storage and transport of clinical waste. Any materials containing live virus are soaked overnight in Virudine or Virkon S. All biological waste liquids are decontaminated prior to drain disposal. All biological waste solids are discarded as regulated medical waste and autoclaved or disinfected as appropriate. All sharps (e.g. pipette tips, pipettes, needles, syringes, broken glassware or any object that can puncture the skin) are disposed of in biohazard sharps containers provided for this purpose. Laboratory clinical soft waste and clinical solid waste is collected weekly by a licensed waste management company. Clinical soft waste and clinical solid waste is treated by a steam disinfection process, at log 6 decimal reduction. Infectious samples shipped by road and air are classified (e.g. biological substance category B UN3373), marked, packed, labelled and documented according to ADR and IATA regulations. All accidents, bio hazardous exposures and work related illnesses are reported to the Health and Safety Manager (biosafety and biosecurity officer)/laboratory head.

TOR9: SCIENTIFIC MEETINGS

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

Yes

NATIONAL/ INTERNATIONAL	TITLE OF EVENT	CO-ORGANISER	DATE (MM/YY)	LOCATION	NO. PARTICIPANTS
	WOAH Expert Surveillance Panel	Gounalan Pavade	2022-07-07	By Videoconference	19

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
FEEVA Equine Surveillance Meeting	2022-10-11	Zagreb	Speaker	Update on Activities of WOAH Expert Surveillance Panel for Equine Influenza

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. Are you a member of a network of 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?

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

TITLE OF THE PROJECT OR CONTRACT	SCOPE	NAME(S) OF RELEVANT WOAH REFERENCE LABORATORIES
Expert Surveillance Panel	Global Surveillance, Assessment of Vaccine Efficacy and Virus Characterisation	Gluck Equine Research Centre and Equine Research Institute, Japan Racing Association

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?

Yes

Purpose for inter-laboratory test comparisons1	Role of your reference laboratory (organizer/participant)	No. participating laboratories	Region(s) of participating WOAH Member Countries
Assessing competency for HI	Organiser	2	Asia and Pacific Europe
Assessing competency and quality assurance for HI, SRH and real time RT-PCR	Co-organiser	2	Europe

TOR12: EXPERT CONSULTANTS

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

Yes

KIND OF CONSULTANCY	Location	SUBJECT (FACULTATIVE)
Vice President of Biological Standards Commission	Videoconference and OIE Headquarters	International Standards for Diagnostic Tests and Vaccines
Chair of FAO-WOAH Advisory group on viral evolution of SARS-CoV-2 in animals	Videoconference	Joint meeting with AHG on COVID-19 at the human-animal interface.
WOAH representative on WHO Advisory Group on viral evolution of SARS-CoV-2	Videoconferences	Monitoring key mutations and their implications for public health
WOAH representative at WHO meeting	Geneva	Surveillance and risk assessment of SARS-CoV-2 variants
Chair of WOAH Expert Surveillance Panel for Equine Influenza	Videoconference	Surveillance of equine influenza virus and recommendations for vaccine composition
Participant at WOAH Brainstorming Meeting	Videoconference	Terms of Reference for future WOAH group Emerging Disease Threats
Participant at WOAH meeting	Videoconference	Impact of evolving technology on laboratory sustainability

29. Additional comments regarding your report:

No