OIE Reference Laboratory Reports Activities

Activities in 2019

This report has been submitted : 2020-01-15 17:01:57

Name of disease (or topic) for which you are a designated OIE Reference Laboratory:	Equine influenza
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Name (including Title) of Head of Laboratory (Responsible Official):	Dr Richard Newton
Name (including Title and Position) of OIE Reference Expert:	Debra Elton Head of Virology
Which of the following defines your laboratory? Check all that apply:	Other: Charity

ToR 1: To use, promote and disseminate diagnostic methods validated according to OIE Standards

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 OIE Manual (Yes/No)	Total number of test performed last year	
Indirect diagnostic tests		Nationally	Internationally
Haemagglutination-Inhibition, H3 & H7	Yes	2,538	781
Direct diagnostic tests		Nationally	Internationally
qRT-PCR, M1 & NP genes	Yes	11,956	12
Virus isolation in eggs	Yes	72	6

ToR 2: To develop reference material in accordance with OIE requirements, and implement and promote the application of OIE Standards.
To store and distribute to national laboratories biological reference products and any other reagents used in the diagnosis and control of the designated pathogens or disease.

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

No

3. Did your laboratory supply standard reference reagents (non OIE-approved) and/or other diagnostic reagents to OIE Member Countries?

Yes

Type of reagent available	Related diagnostic test	Produced/ provide	Amount supplied nationally (ml, mg)	Amount supplied internationally (ml, mg)	No. of recipient OIE Member Countries	Region of recipients
A/equine/East Lothian/2/2018 equine influenza virus	qRT-PCR, HI assay	Produced	1 ml	0	0	☐Africa ☐Americas ☐Asia and Pacific ☐Europe ☐Middle East
A/equine/Essex/1/2019 equine influenza virus	qRT-PCR, HI assay	Produced	1 ml	0	0	☐Africa ☐Americas ☐Asia and Pacific ☐Europe ☐Middle East
A/equine/Derbyshire/1/2019 equine influenza virus	qRT-PCR, HI assay	Produced	1 ml	0	0	☐Africa ☐Americas ☐Asia and Pacific ☐Europe ☐Middle East
A/equine/Hampshire/3/2016 equine influenza virus	qRT-PCR, HI assay	Produced	1 ml	0	0	☐Africa ☐Americas ☐Asia and Pacific ☐Europe ☐Middle East
A/equine/Kent/1/2016 equine influenza virus	qRT-PCR, HI assay	Produced	1 ml	0	0	☐Africa ☐Americas ☐Asia and Pacific ☐Europe ☐Middle East

A/equine/Stirlingshire/1/2016 equine influenza virus	qRT-PCR, HI assay	Produced	1 ml	0	0	☐Africa ☐Americas ☐Asia and Pacific ☐Europe ☐Middle East
Purified viral RNA	qRT-PCR assay	Produced	0.05 ml	0	0	☐Africa ☐Americas ☐Asia and Pacific ☐Europe ☐Middle East

4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to OIE Member Countries?

No

ToR 3: To develop, standardise and validate, according to OIE Standards, new procedures for diagnosis and control of the designated pathogens or diseases

6. Did your laboratory develop new diagnostic methods validated according to OIE Standards for the designated pathogen or disease?

No

7. Did your laboratory develop new vaccines according to OIE Standards for the designated pathogen or disease?

No

ToR 4: To provide diagnostic testing facilities, and, where appropriate, scientific and technical advice on disease control measures to OIE Member Countries

8. Did your laboratory carry out diagnostic testing for other OIE Member Countries?

Yes

Name of OIE Member Country seeking assistance	Date (month)	No. samples received for provision of diagnostic support	No. samples received for provision of confirmatory diagnoses
CHINA (PEOPLE'S REP. OF)	January, February, March, May, June, August, September, October, December	773	0
IRELAND	June, July, December	3	0
SPAIN	February, March, December	12	0
MALI	May, June	29	0

9. Did your laboratory provide expert advice in technical consultancies on the request of an OIE Member Country?

Yes

Name of the OIE Member Country receiving a technical consultancy	Purpose	How the advice was provided
MALI	Diagnosis of respiratory outbreak in donkeys in West Africa	Telephone, email
SPAIN	qRT-PCR	Email

ToR 5: To carry out and/or coordinate scientific and technical studies in collaboration with other laboratories, centres or organisations

10. Did your laboratory participate in international scientific studies in collaboration with OIE Member Countries other than the own?

No

ToR 6: To collect, process, analyse, publish and disseminate epizootiological data relevant to the designated pathogens or diseases

11. Did your Laboratory collect epizootiological data relevant to international disease control?

Yes

If the answer is yes, please provide details of the data collected:
Location of outbreak, number of animals affected, clinical signs, vaccination status, movement of animals on or off the affected premises

12. Did your laboratory disseminate epizootiological data that had been processed and analysed?

Yes

If the answer is yes, please provide details of the data collected:
Location of outbreak, number of animals affected, clinical signs, vaccination status, movement of animals on or off the affected premises

13. What method of dissemination of information is most often used by your laboratory? (Indicate in the appropriate box the number by category)

a) Articles published in peer-reviewed journals: 0

b) International conferences: 0

c) National conferences: 0

d) Other:
(Provide website address or link to appropriate information) 587
Rapid notification of outbreaks:
www.equiflunet.org.uk: 86 reports. There is a newly developed outbreak reporting system at https://app.jshiny.com/jdata/equiflunet/equiflunet/
Twitter @equiflunet: 170 alerts
TellTale text alerts to mobile phones (in collaboration with Boehringer Animal Health): 94 alerts
International Collating Centre: 228 reports

Sequence data:
GISAID: sequence data made available for four virus strains from 2019

Surveillance data:
4 Defra quarterly disease surveillance reports, available at www.aht.org.uk/disease-surveillance/defra-aht-beva-reports

Raising awareness of equine influenza and how to manage outbreaks:
AHT CPD talk to equine practitioners
BEVA webinar (http://www.ebeva.org/b057e1ae916049e789e25f3339966044_1)
Association of British Riding Schools
Endurance GB

Non-peer reviewed articles:
British Showjumping Magazine Issue 3 2019 – “Tackling equine flu”

ToR 7: To provide scientific and technical training for personnel from OIE Member Countries
To recommend the prescribed and alternative tests or vaccines as OIE Standards

14. Did your laboratory provide scientific and technical training to laboratory personnel from other OIE Member Countries?

Yes

a) Technical visits: 2
b) Seminars: 0
c) Hands-on training courses: 0
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
a	South Korea	1
a	USA	1

ToR 8: To maintain a system of quality assurance, biosafety and biosecurity relevant for the pathogen and the disease concerned

15. Does your laboratory have a Quality Management System?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)
ISO17025	ISO 17025 Accreditation Certificate (4649) (2 - 18Sep12).pdf

16. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
qRT-PCR	ILAC

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

Yes

(See Manual of Diagnostic Tests and Vaccines for Terrestrial Animals, Chapter 1.1.4)

ToR 9: To organise and participate in scientific meetings on behalf of the OIE

18. Did your laboratory organise scientific meetings on behalf of the OIE?

No

19. Did your laboratory participate in scientific meetings on behalf of the OIE?

Yes

Title of event	Date (mm/yy)	Location	Role (speaker, presenting poster, short communications)	Title of the work presented
Meeting of the Expert Surveillance Panel for equine influenza	04/19	OIE Headquarters, Paris	participant	Equine influenza in the UK

ToR 10: To establish and maintain a network with other OIE Reference Laboratories designated for the same pathogen or disease and organise regular inter-laboratory proficiency testing to ensure comparability of results

20. Did your laboratory exchange information with other OIE Reference Laboratories designated for the same pathogen or disease?

Yes

21. Was your laboratory involved in maintaining a network with OIE Reference Laboratories designated for the same pathogen or disease by organising or participating in proficiency tests?

Yes

Purpose of the proficiency tests: [1]	Role of your Reference Laboratory (organiser/ participant)	No. participants	Participating OIE Ref. Labs/ organising OIE Ref. Lab.
Diagnostic qRT-PCR assay: maintenance of ISO17025 accreditation	participant	2	Animal Health Trust/Irish Equine Centre
HI and SRH assay: maintenence of ISO 17025 accreditation for IEC	participant	2	Animal Health Trust/Irish Equine Centre

[1] *validation of a diagnostic protocol: specify the test; quality control of vaccines: specify the vaccine type, etc.*

22. Did your laboratory collaborate with other OIE 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 OIE Reference Laboratories
Sequence analysis and antigenic characterisation of EIV isolates	Sequence analysis of virus isolates from the USA, antigenic characterisation by HI assay for the purpose of monitoring antigenic drift	Gluck Equine Research Centre, USA
Next generation sequence analysis of isolates from the UK 2019 outbreaks	Deep sequencing of clinical samples from the 2019 outbreaks	Centre for Virus Research, Glasgow, UK

ToR 11: To organise inter-laboratory proficiency testing with laboratories other than OIE Reference Laboratories for the same pathogens and diseases to ensure equivalence of results

23. Did your laboratory organise or participate in inter-laboratory proficiency tests with laboratories other than OIE Reference Laboratories for the same disease?

No

Note: See Interlaboratory test comparisons in: Laboratory Proficiency Testing at: http://www.oie.int/en/our-scientific-expertise/reference-laboratories/proficiency-testing see point 1.3

ToR 12: To place expert consultants at the disposal of the OIE

24. Did your laboratory place expert consultants at the disposal of the OIE?

No

25. Additional comments regarding your report: