WOAH Reference Laboratory Reports Activities 2023
Activities in 2023
This report has been submitted: 14 mai 2024 14:30

Laboratory Information

| Name of disease (or topic) for which you are a designated WOAH Reference Laboratory: | Bluetongue |
| Address of laboratory: | The Pirbright Institute, Ash Road, Pirbright, Woking, Surrey, UK, |
| Tel: | +441483231344 |
| E-mail address: | carrie.batten@pirbright.ac.uk |
| Website: | https://www.pirbright.ac.uk/our-science/vector-borne-viral-diseases/non-vesicular-disease-reference-laboratory |

Name (including Title) of Head of Laboratory (Responsible Official): Prof Bryan Charleston, Institute Director

Name (including Title and Position) of WOAH Reference Expert: Dr Carrie Batten, Head of the non vesicular reference laboratories

Which of the following defines your laboratory?
Check all that apply:
Research Institute

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></td>
<td>Nationally</td>
<td>Internationally</td>
</tr>
<tr>
<td>Indirect diagnostic tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELISA</td>
<td>Yes</td>
<td>3461</td>
</tr>
<tr>
<td>Direct diagnostic tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real-time RT-PCR</td>
<td>Yes</td>
<td>22131</td>
</tr>
<tr>
<td>Virus isolation</td>
<td></td>
<td>2</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>BTV-9 nucleic acid</td>
<td>PCR</td>
<td>PROVIDE</td>
<td>0</td>
<td>100ul</td>
<td>1</td>
<td>IRELAND,</td>
</tr>
<tr>
<td>BTV 1-24 and 26 nucleic acid</td>
<td>PCR</td>
<td>PROVIDE</td>
<td>0</td>
<td>25 X 100ul</td>
<td>1</td>
<td>PHILIPPINES,</td>
</tr>
</tbody>
</table>
4. Did your laboratory produce vaccines?
Not applicable

5. Did your laboratory supply vaccines to WOAH Members?
Not applicable

**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?
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</th>
<th>COUNTRY RECEIVING A TECHNICAL CONSULTANCY</th>
<th>PURPOSE</th>
<th>HOW THE ADVICE WAS PROVIDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHILIPPINES</td>
<td></td>
<td>Test controls</td>
<td>Email</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?
No

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:**


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:**


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:
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

<table>
<thead>
<tr>
<th>Quality management system adopted</th>
<th>Certificate scan (PDF, JPG, PNG format)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO/IEC 17025</td>
<td>Certificate</td>
</tr>
<tr>
<td></td>
<td>4025UKAS Cert.pdf</td>
</tr>
</tbody>
</table>

19. Is your quality management system accredited?

Yes

<table>
<thead>
<tr>
<th>Test for which your laboratory is accredited</th>
<th>Accreditation body</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELISA</td>
<td>UKAS</td>
</tr>
<tr>
<td>Virus Isolation</td>
<td>UKAS</td>
</tr>
<tr>
<td>Real-time RT-PCR (Hoffmann et al)</td>
<td>UKAS</td>
</tr>
<tr>
<td>Real-time RT-PCR (Mann et al)</td>
<td>UKAS</td>
</tr>
</tbody>
</table>

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

Yes

All our management systems are built around UK legislation, some is based on WHO and WOAH, but not directly translatable as it's updated into UK law before it's applied. All facilities have their operational risk assessment and specific activity risk assessments where required. We have a process in place for reporting incidents relating to biorisk, including an investigation process and lessons learned. There is also an inspection and audit programme which monitors compliance with Biorisk related legislation including SAPQ, COSHH (where it relates to human pathogens), and GM (contained use). We are inspected by the HSE as part of a proactive intervention plan, where parts of our biorisk management system are scrutinised and sampled to check compliance and we are also visited and inspected by the National Counter Terrorism Security Office (NaCTSO) to ensure any ‘dual-use’ materials are being held securely.

TOR9: SCIENTIFIC MEETINGS

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

No

22. Did your laboratory participate in scientific meetings related to the pathogen in question on behalf of WOAH?
No

**TOR10: NETWORK WITH WOAH REFERENCE LABORATORIES**

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

No

24. Do you network (collaborate or share information) with other 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?

Yes

<table>
<thead>
<tr>
<th>PURPOSE OF THE PROFICIENCY TESTS</th>
<th>ROLE OF YOUR REFERENCE LABORATORY (ORGANISER/ PARTICIPANT)</th>
<th>NO. PARTICIPANTS</th>
<th>PARTICIPATING WOAH REF. LABS/ ORGANISING WOAH REF. LAB.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harmonisation of diagnostic tests for BTV</td>
<td>Participant</td>
<td>51</td>
<td>Participant - South Africa Participant - Italy Organiser - Spain</td>
</tr>
</tbody>
</table>

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?

No

**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

<table>
<thead>
<tr>
<th>Purpose for inter-laboratory test comparisons</th>
<th>Role of your reference laboratory (organizer/participant)</th>
<th>No. participating laboratories</th>
<th>Name of the Test</th>
<th>WOAH Member Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harmonisation of diagnostic tests for BTV</td>
<td>Participant</td>
<td>51</td>
<td>Real-time RT-PCR ELISA</td>
<td>AUSTRIA, BELGIUM, BULGARIA, CANADA, CROATIA, CYPRUS, CZECH REPUBLIC, DENMARK, ESTONIA, FINLAND, FRANCE, GERMANY, GREECE, HUNGARY, IRELAND, ITALY, KOSOVO, LATVIA, LITHUANIA, LUXEMBOURG, MALTA, MONTENEGRO, MOROCCO, NORWAY, POLAND, PORTUGAL, ROMANIA, SAUDI ARABIA, SERBIA, SLOVAKIA, SLOVENIA, SOUTH AFRICA, SPAIN, SWEDEN, SWITZERLAND, THAILAND, THE NETHERLANDS, TUNISIA, TURKEY, UNITED ARAB EMIRATES, UNITED KINGDOM,</td>
</tr>
</tbody>
</table>

**TOR12: EXPERT CONSULTANTS**

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

No

29. Additional comments regarding your report:

Yes

*We also provided EHDV nucleic acid for PCR controls to two WOAH members to enable differential diagnosis.*

*Dr Batten has been reviewing GB risk assessments for trade.*

*The Pirbright has active orbivirus and entomological research groups, who regularly publish in high impact journals, this information is directly relevant to aspects of BTV control.*

*We continue to make our large collection of orbiviruses and related reagents available on request.*