OIE Reference Laboratory Reports Activities

Activities in 2016

This report has been submitted: 2017-01-22 23:32:49

<table>
<thead>
<tr>
<th>Name of disease (or topic) for which you are a designated OIE Reference Laboratory:</th>
<th>Infectious bovine rhinotracheitis/infectious pustular vulvovaginitis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address of laboratory:</td>
<td>Südufer 10 D-17493 Greifswald Insel Riems GERMANY</td>
</tr>
<tr>
<td>Tel.:</td>
<td>+49 38351 7 1200</td>
</tr>
<tr>
<td>Fax:</td>
<td>+49 38351 7 1226</td>
</tr>
<tr>
<td>E-mail address:</td>
<td><a href="mailto:martin.beer@fli.de">martin.beer@fli.de</a></td>
</tr>
<tr>
<td>Website:</td>
<td><a href="http://www.fli.de">www.fli.de</a></td>
</tr>
<tr>
<td>Name (including Title) of Head of Laboratory (Responsible Official):</td>
<td>Prof. Dr. Martin Beer deputy head: Dr. Patricia König (<a href="mailto:patricia.koenig@fli.de">patricia.koenig@fli.de</a>)</td>
</tr>
<tr>
<td>Name (including Title and Position) of OIE Reference Expert:</td>
<td>Prof. Dr. Martin Beer</td>
</tr>
<tr>
<td>Which of the following defines your laboratory? Check all that apply:</td>
<td>Governmental</td>
</tr>
</tbody>
</table>
**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

<table>
<thead>
<tr>
<th>Diagnostic Test</th>
<th>Indicated in OIE 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>BHV-1 gE ELISA</td>
<td>yes</td>
<td>2626</td>
</tr>
<tr>
<td>BHV-1 gB ELISA</td>
<td>yes</td>
<td>586</td>
</tr>
<tr>
<td>BHV-1 whole virus ELISA</td>
<td>yes</td>
<td>356</td>
</tr>
<tr>
<td>serum neutralisation assay</td>
<td>yes</td>
<td>96</td>
</tr>
<tr>
<td>BHV-1 bulk milk ELISA</td>
<td>no</td>
<td>13</td>
</tr>
<tr>
<td>BHV-2 whole virus ELISA</td>
<td>no</td>
<td>152</td>
</tr>
<tr>
<td>Bo/BuHV-1 differentiating ELISA</td>
<td>no</td>
<td>120</td>
</tr>
<tr>
<td>virus isolation in cell culture</td>
<td>yes</td>
<td>1322</td>
</tr>
<tr>
<td>IFA</td>
<td>yes</td>
<td>33</td>
</tr>
<tr>
<td>PCR</td>
<td>yes</td>
<td>900</td>
</tr>
<tr>
<td>RFLP</td>
<td>yes</td>
<td>30</td>
</tr>
</tbody>
</table>

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

Yes

<table>
<thead>
<tr>
<th>Type of reagent available</th>
<th>Related diagnostic test</th>
<th>Produced/provided</th>
<th>Amount supplied nationally (ml, mg)</th>
<th>Amount supplied internationally (ml, mg)</th>
<th>No. of recipient OIE Member Countries</th>
<th>Region of recipients</th>
</tr>
</thead>
<tbody>
<tr>
<td>serum</td>
<td>ELISA, SNT</td>
<td>5/70</td>
<td>193</td>
<td>250</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>milk</td>
<td>ELISA</td>
<td>1/30</td>
<td>81</td>
<td>78</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>virus</td>
<td>vi, IFA, PCR</td>
<td>0/20</td>
<td>0</td>
<td>9</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>DNA</td>
<td>PCR</td>
<td>0/15</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Name of OIE Member Country seeking assistance</th>
<th>Date (month)</th>
<th>No. samples received for provision of diagnostic support</th>
<th>No. samples received for provision of confirmatory diagnoses</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNITED STATES OF AMERICA</td>
<td>January</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>FRANCE</td>
<td>March</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>UNITED KINGDOM</td>
<td>May</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>UNITED KINGDOM</td>
<td>May</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>POLAND</td>
<td>May</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>SWITZERLAND</td>
<td>September</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>SWITZERLAND</td>
<td>September</td>
<td>0</td>
<td>14</td>
</tr>
</tbody>
</table>

9. Did your laboratory provide expert advice in technical consultancies on the request of an OIE Member Country?
Yes
<table>
<thead>
<tr>
<th>Name of the OIE Member Country receiving a technical consultancy</th>
<th>Purpose</th>
<th>How the advice was provided</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISRAEL</td>
<td>comparison of diagnostic test systems</td>
<td>email</td>
</tr>
<tr>
<td>BELGIUM</td>
<td>BoHV-2 diagnostics</td>
<td>email</td>
</tr>
<tr>
<td>IRELAND</td>
<td>recommendation of diagnostic test systems</td>
<td>email</td>
</tr>
<tr>
<td>ITALY</td>
<td>Evaluation of a new marker test</td>
<td>Meeting and email</td>
</tr>
<tr>
<td>AUSTRIA</td>
<td>BoHV2 meeting with representatives from Austria, Italy, Switzerland, and Germany</td>
<td>meeting and audioconference</td>
</tr>
<tr>
<td>BELGIUM</td>
<td>Exchange of experiences concerning marker tests</td>
<td>email</td>
</tr>
<tr>
<td>ITALY</td>
<td>recommendation of test systems</td>
<td>email</td>
</tr>
<tr>
<td>THE NETHERLANDS</td>
<td>BoHV-1 eradication programme- experiences and future perspectives</td>
<td>meeting</td>
</tr>
</tbody>
</table>

**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

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

Yes

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: 4
b) International conferences:  3
27th Annual Meeting of the Society for Virology 22–25 March 2017 • Marburg
Screening for potential interaction partners of Bovine Herpesvirus-1 glycoprotein E and implications for
diagnostics (S. Koethe)

6th European Congress of Virology, October 19-22, 2016, Hamburg, Germany
Deletion of glycoprotein C (potentially) changes the protein composition of Bovine Herpesvirus-1 and has
implications for diagnostics(S. Koethe)

10th Annual Meeting EPIZONE in Madrid - Epizone:
Influence of glycoprotein C on Bovine Herpesvirus-1 virion composition and implications for diagnostics (S.
Koethe)

c) National conferences:  1
“BoHV-1 eradication in Germany - on the home straight” (M. Beer)

d) Other:
(Provide website address or link to appropriate information)   2
www.fli.de
Tiergesundheitsjahresbericht 2015 / Hrsg: Friedrich-Loeffler-Institut, Federal Research Institute for Animal Health

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?

No

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 certified according to an International Standard?

Yes

<table>
<thead>
<tr>
<th>Quality management system adopted</th>
<th>Certificate scan (PDF, JPG, PNG format)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO17025</td>
<td>D-PL-14002-02-00_DAkks_Symbol_ILAC_RGB_2.1_2015.jpg</td>
</tr>
</tbody>
</table>

16. Is your laboratory accredited by an international accreditation body?

Yes
Test for which your laboratory is accredited | Accreditation body
--- | ---
flexible accreditation: ELISA, SNT | DAkkS / ILAC MRA
virus isolation, IFA, nucleic acid extraction, PCR | DAkkS / ILAC MRA
RFLP | DAkkS / ILAC MRA

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?
No

**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?
No

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?
No
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?

Yes

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

<table>
<thead>
<tr>
<th>Purpose for inter-laboratory test comparisons</th>
<th>No. participating laboratories</th>
<th>Region(s) of participating OIE Member Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisation: comparison of performance of different test systems</td>
<td>3</td>
<td>□Africa □Americas □Asia and Pacific □Europe □Middle East</td>
</tr>
<tr>
<td>Participation: comparison of performance of gB and gE ELISAs; organised by Coda Cerva, Belgium</td>
<td>approximately 20</td>
<td>□Africa □Americas □Asia and Pacific □Europe □Middle East</td>
</tr>
</tbody>
</table>

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?

Yes

<table>
<thead>
<tr>
<th>Kind of consultancy</th>
<th>Location</th>
<th>Subject (facultative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review of the OIE Manual of Diagnostic Tests and Vaccines for Terrestrial Animals</td>
<td>not applicable</td>
<td>cooperation with OIE RL Weybridge (UK)</td>
</tr>
</tbody>
</table>

25. Additional comments regarding your report:

Test laboratory for batch release and licensing in Germany: 55 BoHV-1 ELISA batches released in 2016