OIE Reference Laboratory Reports Activities

Activities in 2018

This report has been submitted: 2019-01-22 08:55:27

<table>
<thead>
<tr>
<th>Name of disease (or topic) for which you are a designated OIE Reference Laboratory:</th>
<th>Newcastle disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address of laboratory:</td>
<td>177, Hyeoksin 8-ro Gimcheon-si, Gyeongsangbuk-do, 39660 KOREA (REP. OF)</td>
</tr>
<tr>
<td>Tel.:</td>
<td>+82-54 912 0821</td>
</tr>
<tr>
<td>Fax:</td>
<td>+82-54 912 0833</td>
</tr>
<tr>
<td>E-mail address:</td>
<td><a href="mailto:kchoi0608@korea.kr">kchoi0608@korea.kr</a></td>
</tr>
<tr>
<td>Website:</td>
<td></td>
</tr>
<tr>
<td>Name (including Title) of Head of Laboratory (Responsible Official):</td>
<td>Bong Kyun Park (Commissioner, APQA)</td>
</tr>
<tr>
<td>Name (including Title and Position) of OIE Reference Expert:</td>
<td>Kang-Seuk Choi</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></td>
<td>Nationally</td>
</tr>
<tr>
<td>Indirect diagnostic tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HI</td>
<td>Yes</td>
<td>949</td>
</tr>
<tr>
<td>Direct diagnostic tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Egg inoculation</td>
<td>Yes</td>
<td>2713</td>
</tr>
<tr>
<td>(real-time) RT-PCR</td>
<td>Yes</td>
<td>13</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?

   No

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

   Yes
### OIE Reference Laboratory Reports Activities, 2018

<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 OIE Member Countries</th>
<th>Region of recipients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control positive antigen</td>
<td>HI serologic test</td>
<td>provide</td>
<td>180</td>
<td>-</td>
<td>1</td>
<td>Africa Americas Asia and Pacific Europe Middle East</td>
</tr>
<tr>
<td>Control positive sera</td>
<td>HI serologic test</td>
<td>provide</td>
<td>180</td>
<td>-</td>
<td>1</td>
<td>Africa Americas Asia and Pacific Europe Middle East</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>INDONESIA</td>
<td>April</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>BANGLADESH</td>
<td>February</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>MALAYSIA</td>
<td>October</td>
<td>14</td>
<td>0</td>
</tr>
<tr>
<td>VIETNAM</td>
<td>March</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>VIETNAM</td>
<td>September</td>
<td>50</td>
<td>0</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>VIETNAM</td>
<td>Serologic monitoring of ND in poultry</td>
<td>remote</td>
</tr>
<tr>
<td>MALAYSIA</td>
<td>Molecular characterization of NDV isolates</td>
<td>remote</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?

Yes

<table>
<thead>
<tr>
<th>Title of the study</th>
<th>Duration</th>
<th>Purpose of the study</th>
<th>Partners (Institutions)</th>
<th>OIE Member Countries involved other than your country</th>
</tr>
</thead>
<tbody>
<tr>
<td>The molecular epidemiology of Newcastle disease and infectious bronchitis in Malaysia</td>
<td>2017-2019</td>
<td>To extend the understanding of epidemiology of the poultry diseases in Southeast Asia</td>
<td>Universiti Putra Malaysia</td>
<td>MALAYSIA</td>
</tr>
</tbody>
</table>
**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: 2
      - Genetic diversity of avian paramyxovirus type 6 isolated from wild ducks in the republic of Korea, 2018 J Wildl Dis 54(3):558-563

   b) International conferences: 0

   c) National conferences: 1

   d) Other:
      (Provide website address or link to appropriate information) 0

**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: 0
   b) Seminars: 12
   c) Hands-on training courses: 12
   d) Internships (>1 month): 0
<table>
<thead>
<tr>
<th>Type of technical training provided (a, b, c or d)</th>
<th>Country of origin of the expert(s) provided with training</th>
<th>No. participants from the corresponding country</th>
</tr>
</thead>
<tbody>
<tr>
<td>b</td>
<td>Vietnam</td>
<td>3</td>
</tr>
<tr>
<td>b</td>
<td>Indonesia</td>
<td>3</td>
</tr>
<tr>
<td>b</td>
<td>Mongolia</td>
<td>3</td>
</tr>
<tr>
<td>b</td>
<td>Kazakhstan</td>
<td>3</td>
</tr>
<tr>
<td>c</td>
<td>Vietnam</td>
<td>3</td>
</tr>
<tr>
<td>c</td>
<td>Indonesia</td>
<td>3</td>
</tr>
<tr>
<td>c</td>
<td>Mongolia</td>
<td>3</td>
</tr>
<tr>
<td>c</td>
<td>Kazakhstan</td>
<td>3</td>
</tr>
</tbody>
</table>

**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>ISO/IEC 17025</td>
<td>2016 KOLAS 인정서(영문).pdf</td>
</tr>
</tbody>
</table>

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

Yes

<table>
<thead>
<tr>
<th>Test for which your laboratory is accredited</th>
<th>Accreditation body</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification of the agent (molecular techniques)</td>
<td>KOLAS-Korean Laboratory Accrediation Scheme</td>
</tr>
<tr>
<td>Serologic test (HA and HI)</td>
<td>KOLAS-Korean Laboratory Accrediation Scheme</td>
</tr>
</tbody>
</table>

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?

Yes

<table>
<thead>
<tr>
<th>Purpose of the proficiency tests: ¹</th>
<th>Role of your Reference Laboratory (organiser/participant)</th>
<th>No. participants</th>
<th>Participating OIE Ref. Labs/organising OIE Ref. Lab.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU Conventional Proficiency Ring Trial (AI/ND PCR and classical HI typing)</td>
<td>Participant</td>
<td>49</td>
<td>Various/APHA(UK)</td>
</tr>
</tbody>
</table>

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?

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&lt;sup&gt;1&lt;/sup&gt;</th>
<th>No. participating laboratories</th>
<th>Region(s) of participating OIE Member Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Proficiency test for diagnosis of ND(organiser)</td>
<td>51</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>Responding to specific technical queries from OIE</td>
<td>Remote (e-mail)</td>
<td>Renewal of OIE registration of NDV ELISA</td>
</tr>
</tbody>
</table>

25. Additional comments regarding your report: