WOAH Reference Laboratory Reports Activities 2023
Activities in 2023
This report has been submitted: 12 juillet 2024 10:38

Laboratory Information

Name of disease (or topic) for which you are a designated WOAH Reference Laboratory: Newcastle Disease

Address of laboratory: Südufer 10

Tel: 03835171545

E-mail address: christian.grund@fli.de

Website: FLI.de

Name (including Title) of Head of Laboratory (Responsible Official): Prof. Christa Kühn

Name (including Title and Position) of WOAH Reference Expert: PD Dr. Christian Grund; senior researcher

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

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 tests performed last year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indirect diagnostic tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hemagglutination inhibition test</td>
<td>Yes</td>
<td>64 (Nationally) 0 (Internationally)</td>
</tr>
<tr>
<td>Direct diagnostic tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RT-qPCR</td>
<td></td>
<td>955 (Nationally) 0 (Internationally)</td>
</tr>
<tr>
<td>Nucleotide sequencing</td>
<td></td>
<td>190 (Nationally) 0 (Internationally)</td>
</tr>
<tr>
<td>virus isolation</td>
<td></td>
<td>120 (Nationally) 0 (Internationally)</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 (nonWOAH-approved) and/or other diagnostic reagents to WOAH Members?

   No

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?
No
11. Did your laboratory provide expert advice in technical consultancies on the request of an WOAH Member?
No

**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?
Yes

- **Research need : 1**

  Please type the Research need: defining the role of pigeon type paramyxovirus for the epidemiology of NDV
  Relevance for WOAH Disease Control,
  Relevance for the Codes or Manual Code,
  Field
  Animal Category Terrestrial,
  Disease: Newcastle disease
  Kind of disease (Zoonosis, Transboundary diseases) Transboundary diseases,
  If any, please specify relevance for Codes or Manual, chapter and title (e.g. Terrestrial Manual Chapter 2.3.5 - Minimum requirements for aseptic production in vaccine manufacture)
  Answer: definition of NDV

  Notes:
  Answer: specific genotypes of NDV, so called pigeon paramyxovirus-1 are endemic in the pigeon population world wide. Incursion of such strains even in pigeon flocks lead to irritation as they are sometimes considered as ND-outbreak. For the purpose of legislation. it would be easier, if such strains would be excluded from the definition of ND.

**TOR6: EPIZOOLOGICAL DATA**

14. Did your Laboratory collect epidemiological data relevant to international disease control?
No
15. Did your laboratory disseminate epidemiological data that had been processed and analysed?
No
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:
b) International conferences:

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Olayinka Asala, Ibrahim Moharam, Jacob Schön, Meseko Clement, Paul Abdu, Mohammed Hafez and Christian Grund; Protection of layers against NDV challenge with “exotic” genotype 2.XIV. WPSA conference, Verona Sept. 4-8.

Ibrahim Moharam, Olayinka Asala, Jacob Schön and Christian Grund. Pathogenicity of genotype VII.1.1 in Broiler chickens: implication of subclinical course of infection for endemicity. WPSA conference, Verona Sept. 4-8.

c) National conferences:

0

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

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>
<th>Accreditation body</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO 17025</td>
<td>see attached file</td>
<td>DAKKS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Akkreditierungsurkunde_FLI-Riems-Jena_2019.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>heamagglutination inhibition test</td>
<td>DAKKS</td>
</tr>
<tr>
<td>amplification assays</td>
<td>DAKKS</td>
</tr>
<tr>
<td>bio assays</td>
<td>DAKKS</td>
</tr>
</tbody>
</table>

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

Yes

The biorisk management systems of the FLI encloses several components. the fundamental part are approved instructions for maintaining and operating laboratories designed for working with pathogens categoryzed as L1-L4. All procedures are approved by FLI experts in a bio risk commitee. The system is supervised by an internal biorisk officer and extenaly by the state veterinary service.

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?
Yes

24. Do you network (collaborate or share information) with other WOAH Reference Laboratories designated for the same pathogen?
Yes

<table>
<thead>
<tr>
<th>NETWORK/DISEASE</th>
<th>ROLE OF YOUR LABORATORY (PARTICIPANT, ORGANISER, ETC)</th>
<th>NO. PARTICIPANTS</th>
<th>PARTICIPATING WOAH REF. LABS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newcastle disease</td>
<td>discussing new techniques for rapid pathotyping of NDV, evaluation of tests</td>
<td>8</td>
<td>IZS Padua, Italy; Animal and Plant Health Agency (APHA)</td>
</tr>
</tbody>
</table>

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>Validation of detection of NDV by molecular means</td>
<td>participant</td>
<td>32</td>
<td>IZS Padua, Italy</td>
</tr>
<tr>
<td>Validation of molecular pathotyping of NDV</td>
<td>participant</td>
<td>32</td>
<td>IZS Padua, Italy</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?
Yes

<table>
<thead>
<tr>
<th>TITLE OF THE PROJECT OR CONTRACT</th>
<th>SCOPE</th>
<th>NAME(S) OF RELEVANT WOAH REFERENCE LABORATORIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>NDV Rt-qPCR</td>
<td>new techniques for rapid pathotyping of NDV</td>
<td>IZS Padua, Italy</td>
</tr>
</tbody>
</table>

**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?
No

**TOR12: EXPERT CONSULTANTS**

28. Did your laboratory place expert consultants at the disposal of WOAH?
No

29. Additional comments regarding your report:
No