

OIE Reference Laboratory Reports Activities

Activities in 2020

This report has been submitted : 2020-12-25 03:52:49

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|--|---|
| Name of disease (or topic) for which you are a designated OIE Reference Laboratory: | Newcastle disease |
| Address of laboratory: | No.369 Nanjing Road Qingdao 266032 CHINA (PEOPLES REP. OF) |
| Tel.: | +86-532 87.83.91.88 |
| Fax: | +86-532 87.83.99.22 |
| E-mail address: | zlwang111@163.com |
| Website: | |
| Name (including Title) of Head of Laboratory (Responsible Official): | Dr.Zhiliang Wang |
| Name (including Title and Position) of OIE Reference Expert: | Zhiliang Wang |
| Which of the following defines your laboratory? Check all that apply: | Governmental |

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 | |
|----------------------------|----------------------------------|--|-----------------|
| | | Nationally | Internationally |
| Indirect diagnostic tests | | Nationally | Internationally |
| HI | Yes | 1230 | 0 |
| Direct diagnostic tests | | Nationally | Internationally |
| Virus isolation (SPF eggs) | Yes | 11319 | 0 |
| RT-PCR | Yes | 6316 | 0 |
| Realtime RT-PCR | Yes | 2300 | 0 |

**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 |
|---------------------------|-------------------------|-------------------|-------------------------------------|--|---------------------------------------|---|
| Serum | HI | CAHEC | 30 | 0 | 0 | <input type="checkbox"/> Africa <input type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East |
| NDV | virus isolation | CAHEC | 0 | 2 | | <input type="checkbox"/> Africa <input type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> 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?

Yes

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

Yes

| Name of the new test or diagnostic method or vaccine developed | Description and References (Publication, website, etc.) |
|--|--|
| Realtime RT-PCR for NDVs of genotype VI | Detection of virulent NDVs of genotype VI |
| Realtime RT-PCR for NDVs of genotype VII | Detection of virulent NDVs of genotype VII |
| Genotype VI NDV vaccine | Genotype-matched vaccine for genotype VI NDV using reverse genetics |
| Genotype VII NDV vaccine | Genotype-matched vaccine for genotype VII NDV using reverse genetics |

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?

No

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 |
|--|--------------------------------|--|
| THAILAND | Request for reference antigens | The reference NDV strains will be provided |

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

| Title of the study | Duration | Purpose of the study | Partners (Institutions) | OIE Member Countries involved other than your country |
|---|-----------|----------------------------------|-------------------------------------|---|
| Evaluation of diagnostic methods on NDV | 2020-2021 | Evaluation of diagnostic methods | National Institute of Animal Health | THAILAND |

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: |
| The current situtaion of Newcastle disease in China. |

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: |
| The current situtaion of Newcastle disease in China. |

**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

1. Genomic characteristics of five strains of genotype VII Newcastle disease viuses isolated in China from 2014 to 2018. China Animal Health Inspection,2020,37(5):37-42.
2. Pathogenic surveillane and phylogenetic analysis on class I Newcastle disease virus during 2016 to 2019 in China. China Animal Health Inspection,2020,37(11):1-5.

b) International conferences: 1

GFTADs Regional Expert Meeting for diseases of poultry in Asia and the Pacific Region. December 1-2, 2020. Presentation on Newcatle Disease and Other Emerging Avian Disease.

c) National conferences: 3

The Epidemic Analysis of Major Avian Disease.Yinchuan,August 25-28,2020.
National Epidemiological Investigation Meeting.Qingdao,September 15-17,2020.
National Training on Emerging Avian Disease.Qingdao,September 23-26,2020.

d) Other:

(Provide website address or link to appropriate information) 1

The training material has been dispatched through webmail to 49 international trainees from 13 countries, which had been involved in our training programme before. The training materials were published on the OIE website <https://rr-asia.oie.int/en/reference-centres/>

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: 1
- 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 |
|--|---|---|
| b (e-mail) | 13 countries | 49 |

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) |
|-----------------------------------|---|
| ISO/IEC 17025 | 17025-EN.jpg |

16. Is your quality management system accredited?

Yes

| Test for which your laboratory is accredited | Accreditation body |
|--|--|
| Virus isolation | China National Accreditation Service for Conformity Assessment |
| RT-PCR | China National Accreditation Service for Conformity Assessment |
| Realtime RT-PCR | China National Accreditation Service for Conformity Assessment |

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 |
|---|--------------|----------|---|--|
| GFTADs Regional Expert Meeting for diseases of poultry in Asia and the Pacific Region | 12/20 | Webinar | Speaker | Newcastle Disease and Other Emerging Avian Disease |

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

| Purpose for inter-laboratory test comparisons ¹ | No. participating laboratories | Region(s) of participating OIE Member Countries |
|--|--------------------------------|---|
| Evaluating new test methods | 3 | <input type="checkbox"/> Africa <input type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East |

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

| Kind of consultancy | Location | Subject (facultative) |
|-------------------------------|----------|---|
| Regional Expert Group Meeting | Webinar | OIE Regional Expert Meeting for diseases of poultry |
| Provision of comments | China | Comments to Chapter 3.3.14 OIE Terrestrial Manual |

25. Additional comments regarding your report: