OIE Reference Laboratory Reports Activities

Activities in 2019

This report has been submitted : 2020-01-13 10:29:49

Name of disease (or topic) for which you are a designated OIE Reference Laboratory:	Highly and low pathogenic avian influenza
Address of laboratory:	Anand Nagar Bhopal 462 021 Madhya Pradesh INDIA
Tel.:	+91-755 275 92 04
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E-mail address:	ctosh@hsadl.nic.in
Website:	www.nihsad.nic.in
Name (including Title) of Head of Laboratory (Responsible Official):	Dr. V.P. Singh, Director
Name (including Title and Position) of OIE Reference Expert:	Chakradhar Tosh
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	
Indirect diagnostic tests		Nationally	Internationally
HI	Yes	844	0
AGID	Yes	4873	0
Direct diagnostic tests		Nationally	Internationally
RT-PCR	Yes	3598	0
Real time RT-PCR	Yes	7408	0
Virus Isolation	Yes	10,061	0
Nucleotide sequencing & molecular pathotyping	Yes	8	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?

No

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?

No

9. Did your laboratory provide expert advice in technical consultancies on the request of an OIE Member Country?

No

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

If the answer is yes, please provide details of the data collected:
Field survey/investigation in HPAI outbreak areas to collect epizootiological data and post operative surveillance

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 information was analysed and the report submitted to Department of Animal Husbandry and Dairying, Government of India

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: 1
Karunakaran AC, Murugkar HV, Kumar M, Nagarajan S, Tosh C, Pathak A, Mekhemadhom Rajendrakumar A, Agarwal RK (2019). Survivability of highly pathogenic avian influenza virus (H5N1) in naturally preened duck feathers at different temperatures. Transbound Emerg Dis. 66: 1306-1313.

b) International conferences: 3
1.Tosh, C., Nagarajan, S, Singh, V.P. (2019) Surveillance and Control of Avian influenza in South Asia, Presentation at OIE Regional Expert Group Meeting for Diseases of Poultry in Asia and the Pacific, held at Sapporo, Japan, 2-4 October, 2019.
2.Tosh, C., Nagarajan, S, Singh, V.P. (2019) Epidemiology and Genetic Diversity of Avian influenza viruses in South Asia, Presentation at OIE Regional Expert Group Meeting for Diseases of Poultry in Asia and the Pacific, held at Sapporo, Japan, 2-4 October, 2019.
3.Nagarajan, S. (2019) Avian /Novel Influenza Viruses Outbreaks, Presentation at One Health Table Top Exercise on Sensitizing State Level Veterinary and Human Health Professionals for Effective Response to avian influenza, Conducted by CDC, India Office; DAHD, Government of India and Sandia National Laboratories, USA, held at Bangalore, Karnataka, India, 21st to 23rd January, 2019.

c) National conferences: 2
Tosh, C. (2019) Highly Pathogenic Avian Influenza in India, and Application of Compartment for Safe Trade of Poultry and Poultry Products, Presentation at Disease Regionalization workshop, Jointly Organized by DAHD, Government of India and USDA at ICAR-Indian Veterinary Research Institute, Bareilly,Uttar Pradesh, India, 8-12 July, 2019.
Tosh, C. (2019) Vaccines and Vaccination to Control Avian Influenza, Presented at Disease Regionalization workshop, Jointly Organized by DAHD, Government of India and USDA at ICAR-Indian Veterinary Research Institute, Bareilly, Uttar Pradesh, India, 8-12 July, 2019.

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?

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?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)
ISO/IEC 17025: 2017 General Requirements for the Competence of Testing & Calibration Laboratories	Certificate TC-8541.pdf.pdf

16. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
Real time RT-PCR	National Accreditation Board for Testing and Calibration Laboratories

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
Regional Animal Health Laboratory Technical Advisory Group Meeting	17-18 June, 2019	Chiang Mai, Thailand	Speaker	Country update on avian influenza
OIE Regional Expert Group Meeting for the Diseases of Poultry in Asia and the Pacific Region	2-4 October, 2019	Sapporo, Japan	Speaker	i. Surveillance and Control of Avian influenza in South Asia. ii. Epidemiology and Genetic Diversity of Avian influenza viruses in South Asia

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?

No

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

Purpose of the proficiency tests: [1]	Role of your Reference Laboratory (organiser/ participant)	No. participants	Participating OIE Ref. Labs/ organising OIE Ref. Lab.
OFFLU 2019 proficiency testing for avian influenza [Influenza A PCR (Matrix gene), subtyping H5 and H7), Cleavage site analysis]	Participation	11	ICAR-NIHSAD,Bhopal, India/CSIRO-AAHL, Geelong, Australia

[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

Purpose for inter-laboratory test comparisons[1]	No. participating laboratories	Region(s) of participating OIE Member Countries
2019 Asia Pacific Regional Proficiency Testing for Avian Diseases (avian influenza virus and avian paramyxovirus-1)	25	☐Africa ☐Americas ☒Asia and Pacific ☐Europe ☐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?

No

25. Additional comments regarding your report:

Review of OIE Chapter 3.3.4: Avian influenza (Infection with high pathogenicity avian influenza virus)