

OIE Reference Laboratory Reports Activities

Activities in 2020

This report has been submitted : 2021-01-20 03:16:07

Name of disease (or topic) for which you are a designated OIE Reference Laboratory:	Rabies
Address of laboratory:	Liuying Xi Road 666 Jingyue Economic Development Zone Changchun 130122 CHINA (PEOPLES REP. OF)
Tel.:	+86-431 81.03.20.22
Fax:	+86-431 81.03.20.22
E-mail address:	changchun_tu@hotmail.com
Website:	
Name (including Title) of Head of Laboratory (Responsible Official):	Dr Changchun Tu, Professor
Name (including Title and Position) of OIE Reference Expert:	Dr Changchun Tu, Professor
Which of the following defines your laboratory? Check all that apply:	Academic

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
Fluorescent antibody virus neutralisation (FAVN)	Yes	2547	0
Direct diagnostic tests		Nationally	Internationally
Fluorescent antibody test (FAT)	Yes	70	0
Reverse transcription-nest PCR (RT-nPCR)	Yes	171	0
Real time TaqMan RT-PCR (FQ-PCR)	Yes	171	0
G gene and N gene Sequencing	Yes	64	0
Genome Sequencing	Yes	4	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
Inactivation cell cultures contain RABV	Real-time PCR	Produced and provide	20 ml	-	1	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East
Reference serum	FAVN	Produced and provide	1 ml	-	1	<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?

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?

Yes

Name of the OIE Member Country receiving a technical consultancy	Purpose	How the advice was provided
MYANMAR	Explain the result of ELISA	Via email
SIERRA LEONE	Establish rabies diagnosis laboratory	Via email
PHILIPPINES	Strengthen animal rabies surveillance	Via email

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
Phylogenetic analysis of RABVs from Philippines	Ongoing	Molecular characterization of currently circulating RABVs in Philippines	Bureau of Animal Industry, Animal Disease Diagnosis and Reference Laboratory	PHILIPPINES

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:
Every year we collect the epidemiologic information of animal rabies in China and report it to the Ministry of Agriculture and Rural Affairs of 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:

In 2020 we disseminated the information in EID journal: Animal Rabies Surveillance, China, 2004–2018. Emerg Infect Dis, 2020, 26(12):2825-2834.

**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

Y. Feng, Y. Wang, W. Xu, Z. Tu, T. Liu, M. Huo, Y. Liu, W. Gong, Z. Zeng, W. Wang, Y. Wei, C. Tu. Animal Rabies Surveillance, China, 2004–2018. Emerging Infectious Diseases, 2020, 26(12):2825-2834.

R M. Wallace, F. Cliquet, C. Fehlner-Gardiner, A R. Fooks, C T. Sabeta, A A. Setién, C. Tu, et al. Role of Oral Rabies Vaccines in the Elimination of Dog-Mediated Human Rabies Deaths. Emerging Infectious Diseases, 2020, 26(12):e1.

b) International conferences: 2

United Against Rabies: One Health in Action-Partnering for Success, 22nd September, Online Webinar

End Rabies: Collaborate, Vaccinate in the Asia Pacific Region, 28th September, Online Webinar

c) National conferences: 3

Rabies conference in China, 28-29th August, Xi'an, China.

Biosafety and Biosecurity meeting organised by Ministry of Agriculture and Rural Affairs of China, 17th September, Harbin, China

Revision meeting of Technical Specification for Rabies Control in China, 24th November, Beijing, China

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)
CNAS (equal to ISO/IEC 17025)	cnas.jpg

16. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
Fluorescent antibody virus neutralisation (FAVN)	CNAS (ISO 17025)
Fluorescent antibody test (FAT)	CNAS (ISO 17025)
Reverse transcription-nest PCR (RT-nPCR)	CNAS (ISO 17025)
Real time TaqMan RT-PCR (FQ-PCR)	CNAS (ISO 17025)

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

Purpose of the proficiency tests: ¹	Role of your Reference Laboratory (organiser/ participant)	No. participants	Participating OIE Ref. Labs/ organising OIE Ref. Lab.
Proficiency test for rabies serology	participant	unknown	OIE-RL ANSES Nancy, France (Organising Lab)

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?

Yes

Title of the project or contract	Scope	Name(s) of relevant OIE Reference Laboratories
OIE Rabies Laboratories Network	Expand access to high-quality diagnostic services to continuously enhance regional and national diagnostic capacities, and contribute to worldwide improvement of laboratory-based rabies surveillance and information exchange.	11 OIE Reference Laboratories for Rabies

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
Inter-laboratory test for rabies serology (FAVN test)	1	<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)
Provide consultations about the rabies chapters	Changsha, China	Revision meeting of Terrestrial Animal Health Code and Manual of Diagnostic Tests and Vaccines for Terrestrial Animals

25. Additional comments regarding your report: