World Organisation for Animal Health

Paola De Benedictis - -

WOAH Reference Laboratory Reports Activities 2025

This report has been submitted: 5 février 2026 15:51

LABORATORY INFORMATION

***Name of disease (or topic) for which you are a designated WOAH Reference Laboratory:**	Rabies
***Address of laboratory:**	WOAH Reference Laboratory for Rabies Istituto Zooprofilattico Sperimentale delle Venezie (IZSVe) Viale dell'Università, 10 35020 Legnaro (Padova), Italy
***Tel:**	+390498084385
***E-mail address:**	pdebenedictis@izsvenezie.it
Website:	https://www.izsvenezie.it/
***Name (including Title) of Head of Laboratory (Responsible Official):**	Paola De Benedictis, DVM, PhD
***Name (including Title and Position) of WOAH Reference Expert:**	Paola De Benedictis, DVM, PhD, Head of Laboratory for emerging viral zoonoses
***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

Diagnostic Test	Indicated in WOAH Manual (Yes/No)	Total number of test performed last year	
Indirect diagnostic tests		Nationally	Internationally
Fluorescent Antibody Virus Neutralisation Test (FAVN)	Yes	4898	876
Direct diagnostic tests		Nationally	Internationally
Direct fluorescent antibody (DFA)	Yes	1434	0
RT-PCR	Yes	29	0
Real-time RT-PCR (rRT-PCR)	Yes	368	0

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?

Yes

Type of reagent available	Related diagnostic test	Produced/ provide	Amount supplied nationally (ml, mg)	Amount supplied internationally (ml, mg)	No. of recipient WOAH Member Countries	Country of recipients
anti-WCBV-2020 hyperimmune serum	RFFIT - Rapid Fluorescent Focus Inhibition Test	41 ml	0	0,2 ml (1 vial)	1	AUSTRIA,

anti-WCBV- 2002 hyperimmune serum	RFFIT - Rapid Fluorescent Focus Inhibition Test	78 ml	0	0,2 ml (1 vial)	1	AUSTRIA,
anti- LLEBV hyperimmune serum	RFFIT - Rapid Fluorescent Focus Inhibition Test	50 ml	0	0,2 ml (1 vial)	1	AUSTRIA,
anti-ARAV hyperimmune serum	RFFIT - Rapid Fluorescent Focus Inhibition Test	52 ml	0	0,2 ml (1 vial)	1	AUSTRIA,
anti-MOKV hyperimmune serum	RFFIT - Rapid Fluorescent Focus Inhibition Test	63 ml	0	0,2 ml (1 vial)	1	AUSTRIA,
anti-KHUV hyperimmune serum	RFFIT - Rapid Fluorescent Focus Inhibition Test	60 ml	0	0,2 ml (1 vial)	1	AUSTRIA,
anti-EBLV1 hyperimmune serum	RFFIT - Rapid Fluorescent Focus Inhibition Test	76 ml	0	0,2 ml (1 vial)	1	AUSTRIA,
anti-EBLV2 hyperimmune serum	RFFIT - Rapid Fluorescent Focus Inhibition Test	7 ml	0	0,2 ml (1 vial)	1	AUSTRIA,
anti-BBLV hyperimmune serum	RFFIT - Rapid Fluorescent Focus Inhibition Test	63 ml	0	0,2 ml (1 vial)	1	AUSTRIA,
anti-DUVV hyperimmune serum	RFFIT - Rapid Fluorescent Focus Inhibition Test	63 ml	0	0,2 ml (1 vial)	1	AUSTRIA,
anti-VSV hyperimmune serum	RFFIT - Rapid Fluorescent Focus Inhibition Test	41 ml	0	0,2 ml (1 vial)	1	AUSTRIA,
anti-WCBV-2020 hyperimmune serum	RFFIT - Rapid Fluorescent Focus Inhibition Test	41 ml	0	0,2 ml (1 vial)	1	UNITED KINGDOM,
anti- LLEBV hyperimmune serum	RFFIT - Rapid Fluorescent Focus Inhibition Test	50 ml	0	0,2 ml (1 vial)	1	UNITED KINGDOM,
positive control (PDP VIR 027 - Direct fluorescent antibody (DFA) test for rabies diagnosis (WOAH - Manual for Terrestrial Animals Cap 3.1.18 par B.1.3.1.i 2018))	DFA - Direct fluorescent antibody	133 slides	130 slides	0	1	ITALY,
negative control (PDP VIR 027 - Direct fluorescent antibody (DFA) test for rabies diagnosis (WOAH - Manual for Terrestrial Animals Cap 3.1.18 par B.1.3.1.i 2018))	DFA - Direct fluorescent antibody	51 slides	50 slides	0	1	ITALY,
monoclonal Antibodies commercial product (Fujirebio)	FAVN – fluorescent antibody virus neutralization	1 pack	5 ml	0	1	ITALY,
Evans Blue solution 1%	DFA - Direct fluorescent antibody	1 vials	10 ml	0	1	ITALY,

4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to WOAH Members?

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?

9. Did your laboratory validate vaccines according to WOAH Standards for the designated pathogen or disease?

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?

Yes

Title of the study	Duration	Purpose of the study	Partners (Institutions)	WOAH Member Countries involved other than your country
OneBAT - HE OneBAT (OneHealth Approach to Understand, Predict and Prevent viral emergencies from bats) GA number 101095712	2023-2026	Harmonising the tools and knowledge at a European level to investigate the role of the bat Miniopterus schreibersii as reservoir of emerging pathogens, including divergent lyssaviruses	13 https://onebat.eu/	BELGIUM CYPRUS FRANCE HUNGARY ITALY SPAIN UKRAINE UNITED KINGDOM UNITED STATES OF AMERICA
FAO – IZSVE Letter of Agreement PO 368312	2023-2025	Laboratory Services on rabies, including training, proficiency testing, support of regional networks, provision of expertise, confirmatory diagnosis rabies in support of beneficiary countries	FAO - The Food and Agriculture Organization of the United Nations	BENIN BURKINA FASO CAMEROON CONGO (DEM. REP. OF THE) COTE D'IVOIRE EGYPT ETHIOPIA GHANA GUINEA KAZAKHSTAN KENYA MALI MOZAMBIQUE NIGERIA SENEGAL SIERRA LEONE ZAMBIA
FAO – IZSVE Letter of Agreement PO 377056	2025-2026	Laboratory Services on rabies, including training, proficiency testing, support of regional networks, provision of expertise, confirmatory diagnosis rabies in support of beneficiary countries	FAO - The Food and Agriculture Organization of the United Nations	BURKINA FASO ETHIOPIA GHANA KAZAKHSTAN PHILIPPINES SIERRA LEONE TANZANIA THAILAND ZAMBIA
"RabTool - Tools to implement a harmonized canine rabies control program in the Northern African Region	2025-2028	Aimed at strengthening the capacities of Algeria, Morocco and Tunisia, beneficiary countries, to achieve the goal of global elimination of rabies by 2030	Italian Ministry of Health with the technical support of the Global Alliance for Rabies Control (GARC) and WOAH; 4 partners: Italy, Algeria, Morocco, Tunisia	ALGERIA MOROCCO TUNISIA
		Collaboration in studies/projects and common		

Scientific collaboration on avian influenza. Memorandum of Understanding (MOU)	(for the time needed)	scientific initiatives on avian influenza pathogenicity and eco-epidemiology; Exchange of scientists and students through short to long-term missions	Hokkaido University Research Center for Zoonosis Control, Sapporo, Japan	JAPAN
Cables Interreg VIA Italia-Austria 2021-2027 (CCI 2021TC16RFCB044)	2025-2027	To develop and implement a cross-border monitoring system for bats that use underground habitats, aiming to precisely analyze climatic, ecological, and health-related risk factors	UMIT TIROL – Private Universität für Gesundheitswissenschaften und –technologie GmbH; Università degli Studi di Padova; Ecotone; Österreichische Agentur für Gesundheit und Ernährungssicherheit GmbH (AGES)	AUSTRIA ITALY
Consultancy Meeting on Cross-Species Serological Assay Technology Transfer Joint FAO/IAEA Centre of Nuclear Techniques in Food and Agriculture	19-30/05/2025	The purpose of the event is to validate and transfer serological assay technology between IZSVe and Animal Production and Health Laboratory (APHL) for cross-species serological surveillance of zoonotic diseases	IAEA's Laboratories in Seibersdorf, Austria WOAH CC "ELISA and Molecular Techniques in Animal Disease Diagnosis"	AUSTRIA

13. In exercising your activities, have you identified any regulatory research needs* relevant for WOAH?

No

TOR6: EPIZOOLOGICAL DATA

14. Did your Laboratory collect epidemiological data relevant to international disease control?

Yes

If the answer is yes, please provide details of the data collected:

Collection of samples for the IZSVe veterinary biobank, which is part of the national network of veterinary biobanks 'Biowarehouse' coordinated by the Istituto Zooprofilattico Sperimentale della Lombardia ed Emilia Romagna (IZSLER) and recognized by the WOAH as an official collaboration center.

In the framework of the HE OneBAT project (One Health approach to understand, predict and prevent viral emergencies from bats - GA number 101095712) the IZSVe is coordinating an active surveillance of Miniopterus schreibersii across Europe. This surveillance aims to evaluate the spread of circulating divergent lyssaviruses in the host species. Currently, data are being collected into a project webportal, which can be accessible to stakeholders upon request

15. Did your laboratory disseminate epidemiological data that had been processed and analysed?

Yes

If the answer is yes, please provide details of the data collected:

The RL is the Italian contact point for the Rabies Bulletin Europe which is a platform administrated by the WHO Collaborating Center for Rabies at the Friedrich-Loeffler-Institut (FLI - Insel-Riems, Germany); data are provided by the network of the Istituti Zooprofilattici and transfered into the patform; these epidemiological data are then made accessible on the web at the following www.who-rabies-bulletin.org

The RL is also the national correspondent for rabies data collection in the SINZOO platform (National Zoonoses Information System) within the Veterinary Information Systems portal of the Ministry of Health. Data are then sent to the EFSA. www.vetinfo.it

The RL provides the European Union Reference Laboratory (EURL) for rabies EURL (ANSES, Malzéville, France) with data related to the analyses carried out within the national surveillance programmes for rabies control. This is achieved through "The Annual Questionnaire for the National Reference Laboratories for Rabies".

In the context the HE OneBAT project (GA number 101095712), data on the circulation of WCBV/LLEBV are available online through a web portal (available to stakeholders upon request) and preliminary data previously collected have been published open access(Leopardi, S. et al. "European distribution and intramuscular pathogenicity of divergent lyssaviruses West Caucasian bat virus and Lleida bat lyssavirus." iScience (2025). https://www.sciencedirect.com/science/article/pii/S2589004224029651)

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:

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1. Castellan M, Zamperin G, Foiani G, Zorzan M, Priore MF, Drzewnioková P, Melchiotti E, Vascellari M, Monne I, Crovella S, Leopardi S, De Benedictis P. 82025) Immunological findings of West Caucasian bat virus in an accidental host. J Virol. 2025 Feb 25;99(2):e0191424. doi: 10.1128/jvi.01914-24. Epub 2025 Jan 23. PMID: 39846740; PMCID: PMC11853057.

2. Drzewnioková P., Brian I., Mancin M., Fortin A., Gourlaouen M., Angot A., Niang M., Dah I., Berete K., Diakite A., Tall Lo F., Meseko C., Go-Maro E., D'Amico V., Valastro V., Soumare B., De Benedictis P., Monne I., Panzarin V.(2025) Validation and multi-site deployment of a lyophilized qRT-PCR reagent for the molecular diagnosis of avian influenza and rabies in Sub-Saharan African regions. bioRxiv 2025.01.16.633398; doi: https://doi.org/10.1101/2025.01.16.633398

3. Drzewnioková P, Brian I, Mancin M, Fortin A, Gourlaouen M, Angot A, Niang M, Dah I, Berete K, Diakite A, Lo FT, Meseko C, Go-Maro E, D'Amico V, Valastro V, Soumare B, De Benedictis P, Monne I, Panzarin V. (2025) Validation and multi-site deployment of a lyophilized qRT-PCR reagent for the molecular diagnosis of avian influenza and rabies in Sub-Saharan African regions. J Clin Microbiol 0:e00080-25. https://doi.org/10.1128/jcm.00080-25"

4. Leopardi S., Dacheux L., Serra-Cobo J., Ábrahám Á., Bajić B., Bourhy H., Bücs S.-L., Budinski I., Castellan M., Drzewniokova P., Dundarova H., Festa F., Kergoat L., Leuchtmann M., López-Roig M., Pontier D., Priore M. F., Robardet E., Scaravelli D., Zecchin B., Lanszki Z., Görföl T., Kemenesi G., De Benedictis P. (2025) European distribution and intramuscular pathogenicity of divergent lyssaviruses West Caucasian bat virus and Lleida bat lyssavirus, iScience, 2025, 111738, ISSN 2589-0042, https://doi.org/10.1016/j.isci.2024.111738. (https://www.sciencedirect.com/science/article/pii/S2589004224029651)

5. Pasqual D, Artusi I, Paccagnella M, Sibille G, Mirandola M, Appelberg S, Priore MF, Zorzan M, Maffei ME, De Benedictis P, Del Vecchio C, Mirazimi A, Cozza G, Gribaudo G, Salata C. The natural polyphenol proanthocyanidin A2 prevents the in vitro infection of Ebola virus and rabies virus by interfering with the early phases of the replication cycle. Antiviral Res. 2025 Dec;244:106312. doi: 10.1016/j.antiviral.2025.106312. Epub 2025 Nov 20. PMID: 41274418.

b) International conferences:

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1. Castellan, M., Priore, M. F., Zecchin, B., Zorzan, M., Drzewniokova, P., Festa, F., Leopardi, S., & De Benedictis, P. (2025). Investigating mAbs mechanisms for lyssavirus prophylaxis. In PREPARE-EU: Connecting European expertise for pandemic preparedness, abstract book (poster n° 9, pp. 15-16) 2-3 June, Leuven - Belgium.

2. De Benedictis, P. (2025) Investigating lyssavirus spillover from endangered M.Shreibrsii. 16th session of the Rabies Workshop in Maisons-Alfort organised by ANSES - L'Agence nationale de sécurité sanitaire de l'alimentation, de l'environnement et du travail 10-11/06/2025 Paris, France https://sitesv2.anses.fr/en/minisite/rabies/16th-session-rabies-workshop-maisons-alfort

3. De Benedictis, P. (2025). Presentation of the EU project: OneBAT PREPARE-EU: Connecting European expertise for pandemic preparedness. 2-3/06/2025, Leuven – Belgium

4. De Benedictis, P. (2025). Dog rabies control: where are we now? 30th meeting of the Joint Permanent Committee (JPC) of the Mediterranean Animal Health Network (REMESA). 1-3/07/ 2025, Nouakchott, Mauritania

5. De Benedictis, P. (2025) WOAH Rabies Reference Laboratory Network's (RABLAB) overview of LFD tests for field application. 2025 United Against Rabies Forum Stakeholder Meeting, 07-09/10/2025 Bangkok, Thailand (online) https://unitedagainstrabies.org/events-courses/united-against-rabies-stakeholder-meeting-2025/

6. De Benedictis, P. (2025) participated as chairman at the event "Strengthening Rabies Surveillance: Where Do Lateral Flow Devices Fit?". This webinar, organised by the by United Against Rabies – UAR, presented the WOAH Rabies Reference Laboratory Network (RABLAB) guidance: "Overview of LFD Tests for Field Application". 10/12/2025 online https://unitedagainstrabies.org/events-courses/strengthening-rabies-surveillance-where-do-lateral-flow-devices-fit/

7. Priore, M. F., Castellan, M., Drzewniokova, P., Zorzan, M., Festa, F., Zecchin, B., Zamperin, G., Salata, C., Leopardi, S., & De Benedictis, P. (2025). In vitro and in vivo characterization of divergent lyssaviruses: Toward improved understanding of their zoonotic potential. In PREPARE-EU: Connecting European expertise for pandemic preparedness, abstract book (poster n° 13, pp. 21-22). 2-3 June, Leuven – Belgium

c) National conferences:

0

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

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Guidelines published (1)

De Benedictis, P., Fehlner-Gardiner, C., Freuling, C., Müller, T., & Wallace, R. (2025). WOAH Rabies Reference Laboratory Network's (RABLAB) overview of LFD tests for field

application. World Organisation for Animal Health (WOAH). July 2025
https://www.woah.org/en/document/woah-rabies-reference-laboratory-networks-rablab-overview-of-lfd-tests-for-field-application/

Science communication on international media (1)
Médéa : un congrès sur la lutte et la prévention contre la rage (25/09/2025) https://news.radioalgerie.dz/fr/node/71385

National and international training courses, (12)
1. De Benedictis, P. (2025) "C2.3: Diagnostic chez les animaux". Le BOOC, Rabies MOOC. Pôle d'Enseignement Numérique, Institute Pasteur (pag. 22)
https://drive.google.com/file/d/1I-_E7LD-QO2-_UmQvRwy_wITxV85oVNS/view?pli=1
2. De Benedictis, P. (2025) The role of the National Reference Laboratory current perspectives and epidemic preparedness". University of Bologna – Faculty of Veterinary Medicine, Bologna 06/05/2025 (online)
3. De Benedictis, P. (2025) RC IZSVe 01/20 – The golden hamster (mesocricetus auratus) as an animal model for the use of monoclonal antibodies for the therapeutic treatment of zoonotic infectious diseases. Training course organised by IZSVe "IZSVE's research Activities funded by the Ministry of Health: Projects concluded in 2023" 25/06/2024 -24/06/2025 online
https://www.izsvenezie.it/corso-ecm-online-ricerca-corrente-izsve-2023/
4. De Benedictis, P. (2025) The role of the National and FAO Reference Centre for Rabies. "Rabies: old disease, new challenges". Training course organised by the Local Health Authority of Brindisi, 29/09/2025 (online)
5. De Benedictis, P. "Lecture on rabies diagnosis" - lecture given during Second edition of the MOOC ON RABIES, promoted by the Institut Pasteur of Cambodia and the Pasteur Network (online course available from 01/10/2024 to 31/09/2025)
https://www.fun-mooc.fr/en/courses/rabies/
6. De Benedictis, P. (2025) Control of dog related zoonotic diseases: two case studies on rabies and leishmaniosis. One Health, Global Health, Planetary Health: New Approaches in Emerging Economies approaches. Training course organised by the University of Padova. 14/11/2025
7. De Benedictis, P. (2025) The National project IZSVE 7/22 CONNETTI-CAT, evaluating the circulation of Lyssavirus in pet-owned cats. Training course organised by IZSVe Feline Meningoencephalomyelitis: diagnosis, treatment, and zoonotic surveillance. IZSVe Legnaro, Padova 28/11/2025
https://www.izsvenezie.it/corso-ecm-webinar-meningoencefalomieliti-gatto/
https://www.izsvenezie.it/corso-ecm-online-ricerca-corrente-izsve-2023/
8. De Benedictis, P. (2025) Updates on National and International Reporting. Rabies and Lyssavirus: Annual update for the National network of veterinary laboratories. IZSVe Legnaro, Padova 18/12/2025
https://www.izsvenezie.it/documenti/formazione/corsi-convegni/2025/2025-12-18-rabbia/programma.pdf
9. De Benedictis, P. (2025) Production and provision of Reference Material/AQUA-RV PT for 2026". Rabies and Lyssavirus: Annual update for the National network of veterinary laboratories. IZSVe Legnaro, Padova 18/12/2025
https://www.izsvenezie.it/documenti/formazione/corsi-convegni/2025/2025-12-18-rabbia/programma.pdf
10. De Benedictis, P. (2025) National rabies surveillance – assessments of the diagnostic workflow and regulatory Updates. Rabies and Lyssavirus: Annual update for the National network of veterinary laboratories. IZSVe Legnaro, Padova 18/12/2025
https://www.izsvenezie.it/documenti/formazione/corsi-convegni/2025/2025-12-18-rabbia/programma.pdf
11. Drzewniokova P. (2025) "Introduction to Lyssaviruses and Molecular Epidemiology."
FAO/IAEA International Atomic Energy Agency Training Course on Rabies and Lyssaviruses 22/09/2025 Austria online
12. Leopardi, S. (2025) RC IZSVe 06/19 – Deciphering Serology to Understand the Eco-Pathology of Lyssaviruses in European Bats. Training course organised by IZSVe "IZSVE's research Activities funded by the Ministry of Health: Projects concluded in 2023" 25/06/2024 -24/06/2025 online

Links from IZSVe's web site (4):
National Reference Centre / WOAH Reference Laboratory / FAO Reference Centre for Rabies https://www.izsvenezie.com/reference-laboratories/rabies/

IZSVE's contribution to HE OneBAT project (One Health approach to understand, predict and prevent viral emergencies from bats - GA number 101095712):
A One Health approach to the study and prevention of bat-borne viral emergencies
https://www.izsvenezie.com/onebat-project/

RabTool Project: Tools to implement a harmonised canine rabies control programme in the Northern African region 23/07/2025
https://www.izsvenezie.com/rabtool-project/

What are the Italian National Reference Centres? [Video] 12/03/2025
https://www.izsvenezie.com/what-are-italian-national-reference-centres-video/

TOR7: SCIENTIFIC AND TECHNICAL TRAINING

17. Did your laboratory provide scientific and technical training to laboratory personnel from other WOAH Members?

Yes

a) Technical visit : 0

b) Seminars : 0

c) Hands-on training courses: 2

d) Internships (>1 month) 4

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
C	ALGERIA	1
C	ITALY	1
D	BRAZIL	1
D	FRANCE	1
D	ITALY	1
D	PERU	1

TOR8: QUALITY ASSURANCE

18. Does your laboratory have a Quality Management System?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)	
UNI CEI EN ISO/IEC 17025:2018	Accreditation certificate 17025	17025.pdf
UNI CEI EN ISO/IEC 17043:2010	Accreditation certificate 17043	17043.pdf

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
PDP VIR 034 Lyssavirus identification and typing through one step RT-PCR and Sanger sequencing	ACCREDIA – Italian Accreditation System
PDP VIR 035 Rilevazione di RNA di Lyssavirus mediante Real Time RT-PCR (rRT-PCR)	ACCREDIA – Italian Accreditation System
PDP VIR 027 Direct fluorescent antibody (DFA) test for rabies diagnosis (WOAH Manual for Terrestrial Animals Cap 3.1.19 par B.1.3.1.i 2023)	ACCREDIA – Italian Accreditation System
PDP VIR 029 Rabies virus isolation in cell culture test (WOAH Manual for Terrestrial Animals Cap 3.1.19 par B.1.3.2.i 2023)	ACCREDIA – Italian Accreditation System
PDP IMM 045 Virus neutralisation test in cell culture: fluorescent antibody virus neutralisation test (FAVN) (WOAH Manual for Terrestrial Animals Cap. 3.1.19 par. B.2.1 2023)	ACCREDIA – Italian Accreditation System
Proficiency testing provider	ACCREDIA – Italian Accreditation System

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

Yes

The RL implements biorisk management measures to prevent disease among personnel and safeguard the community from potentially infectious pathogens. Special emphasis is placed on the safe transport of infectious substances in accordance with IATA guidelines and the UN classification system.Agents (pathogenic or infectious organisms, including Newcastle disease viruses) posing moderate hazards to personnel and the environment are handled under BSL-2 conditions. Since 2013, IZSVe has maintained a Biosafety Committee responsible for: - Assessing safety risks for personnel and the environment associated with BSL-3 activities involving microorganisms, animals, and Genetically Modified Microorganisms (GMOs); - Evaluating emergency procedures; Reviewing all management and operational procedures within BSL-3 laboratories and animal facilities, including potential biosecurity concerns. All Standard Operative Procedures (SOPs) and handling of pathogens are pathogen handling are conducted in accordance with the WHO Laboratory Biosafety Manual (4th Ed.). BSL-3 laboratory and animal facility operations follow the WHO Laboratory Biosafety Manual (4th Ed.). Biocontainment is ensured through regular maintenance, annual activity suspension for equipment and premises decontamination, and strict access control via self-closing, lockable doors positioned away from general corridors, as part of internal biosecurity protocols

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. Are you a member of a network of WOAH Reference Laboratories designated for the same pathogen?

Yes

NETWORK/DISEASE	ROLE OF YOUR LABORATORY (PARTICIPANT, ORGANISER, ETC)	NO. PARTICIPANTS	PARTICIPATING WOAH REF. LABS
WOAH RABLAB network	Co-chair	1	For n° of participants and WOAH ref. labs participants, refer to https://www.woah.org/en/disease/rabies/#ui-id-3
United Against Rabies Forum (supported by FAO, WOAH, and WHO)	Participant	1	For n° of participants and WOAH ref. labs participating, refer to https://www.unitedagainstrabies.org/
ANSES - French Agency for Food, Environmental and Occupational Health Safety European Network of National Reference Laboratories for rabies from the European Union Member States and to selected partners of the EURL	Full member	27	For n° of participants and WOAH ref. labs participating, refer to https://sitesv2.anses.fr/en/minisite/rabies/workshop-rabies-2025-registration-open

25. Did you organise or participate in inter-laboratory proficiency tests with WOAH Reference Laboratories designated for the same pathogen during the past 2 years?

Yes

Purpose of the proficiency test:	Role of your Reference Laboratory (organiser/ participant)	No. participating Laboratories	Participating WOAH Ref. Labs/ organising WOAH Ref Lab
Interlaboratory test for rabies diagnostic (2025) organised by the European Union Reference Laboratory for Rabies (ANSES, Nancy, France WOAH RL for rabies)	participant	(information available at ANSES)	(information available at ANSES)
Rabies serology proficiency testing (2025) organised by the European Union Reference Laboratory for Rabies (ANSES, Nancy, France WOAH RL for rabies)	participant	(information available at ANSES)	(information available at ANSES)
Rabies Serology Proficiency Test for the Virus Neutralization method (2025) Co-organized by the University of Missouri and CDC-Atlanta	participant	(information available from the organiser)	2025 CDC Rabies Serology Proficiency Test for rabies
Inter-laboratory test: evaluation of the performance characteristics of Pan-lyssavirus real-time RT-PCR (2024) organised by the European Union Reference Laboratory for Rabies (ANSES, Nancy, France WOAH RL for rabies)	participant	(information available at ANSES)	(information available at ANSES)
Inter-laboratory test for quality assurance of the results: virological (IF) and molecular (RT-PCR and RRT-PCR) 2024	organiser	(information available at ANSES)	(information available at ANSES)

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

Paola De Benedictis - -

Title of the project or contract	Scope	Name(s) of relevant WOAH Reference Laboratories
OneBAT - HE OneBAT (OneHealth Approach to Understand, Predict and Prevent viral emergencies from bats) GA number 101095712 https://onebat.eu/	One Health approach to understand, predict and prevent viral emergencies from bats	ANSES the French Agency for Food, Environmentaland Occupational Health & Safety (WOAH RL for rabies)
Network's (RABLAB) overview of LFD tests https://www.woah.org/en/document/woah-rabies-reference-laboratory-networks-rablab-overview-of-lfd-tests-for-field-application/ for field application	The publication of guideline involved the RABLAB group throughout the entire reference period The first author is a representative from the WOAH RL	- Canada: Canadian Food Inspection Agency (CFIA), Nepean, Ontario - China: Harbin Veterinary Research Institute, Harbin, Heilongjiang - France: ANSES - Agence Nationale de Sécurité Sanitaire de l'Alimentation, de l'Environnement et du Travail - Germany: Friedrich-Loeffler-Institut (FLI), Greifswald-Insel Riems - India: Karnataka Veterinary, Animal and Fisheries Sciences University (KVAFSU), Bangalore - Israel: Kimron Veterinary Institute, Beit Dagan - Japan: National Institute of Infectious Diseases (NIID), Tokyo - Mexico: Centro Nacional de Servicios de Diagnóstico en Salud Animal (CENASA), Tecámac, Estado de México - Romania: Institute for Diagnosis and Animal Health (IDAH), Bucharest - South Africa: Agricultural Research Council - Onderstepoort Veterinary Institute, Pretoria, Gauteng - South Korea: Animal and Plant Quarantine Agency (APQA), Gimcheon, Gyeongsangbuk-do - United Kingdom: Animal and Plant Health Agency (APHA), Weybridge, Surrey - United States: Centers for Disease Control and Prevention (CDC), Atlanta, Georgia
Horizon 2020 research programme EVA-AISBL (registered in March 2025). https://www.izsvenezie.it/associazione-internazionale-european-virus-archive/ https://www.european-virus-archive.com/partners	EVA-AISBL was established through the collaboration of public health agencies, academic institutions, veterinary institutes, and research centres working in the fields of human, veterinary, and environmental virology	ANSES the French Agency for Food, Environmentaland Occupational Health & Safety (WOAH RL for rabies); the Friedrich-Loeffler-Institute – Germany (WOAH RL for rabies); Animal and Plant Health Agency -APHA (WOAH RL for rabies)

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 during the past 2 years?

Yes

Purpose for inter-laboratory test comparisons1	Role of your reference laboratory (organizer/participant)	No. participating laboratories	Name of the test	WOAH Member Countries
AQUA RV-D 2-24 National inter-laboratory trial on Rabies diagnosis https://www.izsvenezie.com/activities-services/interlaboratory-proficiency-testing/	Organiser	6	Isolation and identification of rabies virus	ITALY,
Inter-laboratory trial for the diagnosis of animal	Organiser (the panel was		1. detection of viral antigens using the Direct Fluorescent Antibody (DFA) test and/or the Direct Rapid Immunohistochemical Test (DRIT) 2.	

rabies in the African continent 2024	sent)	1	detection of viral RNA by means of molecular techniques, according to the methods routinely used for diagnostic activities.	NAMIBIA,

TOR12: EXPERT CONSULTANTS

28. Did your laboratory place expert consultants at the disposal of WOAH?

Yes

Kind of consultancy	Location	Subject (facultative)
RabTool Project "Tools to implement a harmonised canine rabies control programme in the Northern African region"	Tunis, Tunisia	Organization and chair
RabTool Project "Tools to implement a harmonised canine rabies control programme in the Northern African region"	Algiers, Algeria	Organization and chair of the Stepwise Approach for Rabies Control and Elimination 22-24/09/2025
RabTool Project "Tools to implement a harmonised canine rabies control programme in the Northern African region"	Medea, Algeria	Celebration of the World rabies day 25/09/2025
First WOAH Reference Centre Network Meeting	Paris, France	Participation on behalf of the RABLAB 22/05/2025 https://www.woah.org/en/strengthening-collaboration-across-our-reference-centre-network/
30th meeting of the Joint Permanent Committee (JPC) of the Mediterranean Animal Health Network (REMESA)	Nouakchott, Mauritania (online)	Participation as invited speaker 01-03/07/2025
WOAH Rabies Reference Laboratory Network's (RABLAB) overview of LFD tests for field application	Remote assistance	Drafting the overview available at https://www.woah.org/en/document/woah-rabies-reference-laboratory-networks-rablab-overview-of-lfd-tests-for-field-application/ for field application
2025 United Against Rabies Forum Stakeholder Meeting	Bangkok, Thailand (online)	Invited speaker De Benedictis, P. (2025) "WOAH Rabies Reference Laboratory Network's (RABLAB) overview of LFD tests for field application" 07-09/10/2025 https://unitedagainstrabies.org/events-courses/united-against-rabies-stakeholder-meeting-2025/
United Against Rabies UAR Webinar event "Strengthening Rabies Surveillance: Where Do Lateral Flow Devices Fit?"	Paris, France online	Participation as chairman De Benedictis, P. (2025) "The WOAH Rabies Reference Laboratory Network (RABLAB) guidance: Overview of LFD Tests for Field Application" 10/12/2025 https://unitedagainstrabies.org/events-courses/strengthening-rabies-surveillance-where-do-lateral-flow-devices-fit/

29. Additional comments regarding your report:

Yes

The RL for rabies collaborates with:

- *the Italian National and WOAH RL for avian influenza for the surveillance of FLU in wild carnivores (in the frame of INF-ACT initiative and HORIZON KAPPA-FLU project)*
- *the WOAH CC "ELISA and Molecular Techniques in Animal Disease Diagnosis" (IAEA, Austria) for the development and validation of new serological methods for rabies/lyssavirus antibodies*