

# OIE Reference Laboratory Reports Activities

## *Activities in 2020*

**This report has been submitted : 2021-01-30 14:38:00**

<b>Name of disease (or topic) for which you are a designated OIE Reference Laboratory:</b>	Rabies
<b>Address of laboratory:</b>	Kimron Veterinary Institute Veterinary Services and Animal Health P.O. Box 12 Beit Dagan 50250 ISRAEL
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<b>Name (including Title) of Head of Laboratory (Responsible Official):</b>	Boris Yakobson
<b>Name (including Title and Position) of OIE Reference Expert:</b>	Boris Yakobson, Director, Kimron Veterinary Institute
<b>Which of the following defines your laboratory? Check all that apply:</b>	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
RFFIT animal	Yes	2495	204
RFFIT human	Yes	200	
Direct diagnostic tests		Nationally	Internationally
FAT	Yes	1262	
RT -PCR	Yes	47	
Real time PCR animal	Yes	55	
Real time PCR human	No	2	
Virus isolation	Yes	20	

**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?

Yes

Title of the study	Duration	Purpose of the study	Partners (Institutions)	OIE Member Countries involved other than your country
Quality in lateral flow devices	2 month	Validation of quality of diagnostic test	FLI	GERMANY
Efficacy study of ORV in jackals	6 month	Efficacy of vaccine	FLI, IDT	GERMANY

**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:
All rabies positive cases are sequenced, mapped and published

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:
Positive rabies cases mapped and web published on line: <a href="https://www.moag.gov.il/vet/Yechidot/Machon/maabada_kalevet/airueim%20kalevet/Pages/rabies_events_2020.aspx">https://www.moag.gov.il/vet/Yechidot/Machon/maabada_kalevet/airueim%20kalevet/Pages/rabies_events_2020.aspx</a>

**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: 4

a) Seasonal variation in bait uptake and seropositivity during a multi-year biannual oral rabies fox vaccination programme in Kosovo (2010-2015).

Taylor N, Goga I, Gjinovci V, Muhaxhiri J, Recica I, Hulaj B, Yakobson B, Wilsmore T. Prev Vet Med. 2020 Aug;181:105050. doi: 10.1016/j.prevetmed.2020.105050. Epub 2020 Jun 5. PMID: 32554289

b) Further Evidence of Inadequate Quality in Lateral Flow Devices Commercially Offered for the Diagnosis of Rabies.

Klein A, Fahrion A, Finke S, Eyngor M, Novak S, Yakobson B, Ngoepe E, Phahladira B, Sabeta C, De Benedictis P, Gourlaouen M, Orciari LA, Yager PA, Gigante CM, Knowles MK, Fehlner-Gardiner C, Servat A, Cliquet F, Marston D, McElhinney LM, Johnson T, Fooks AR, Müller T, Freuling CM. Trop Med Infect Dis. 2020 Jan 18;5(1):13. doi: 10.3390/tropicalmed5010013. PMID: 31963635

c) Role of Oral Rabies Vaccines in the Elimination of Dog-Mediated Human Rabies Deaths.

Wallace RM, Cliquet F, Fehlner-Gardiner C, Fooks AR, Sabeta CT, Setién AA, Tu C, Vuta V, Yakobson B, Yang DK, Brückner G, Freuling CM, Knopf L, Metlin A, Pozzetti P, Suseno PP, Shadomy SV, Torres G, Vigilato MAN, Abela-Ridder B, Müller T. Emerg Infect Dis. 2020 Dec;26(12):1-9. doi: 10.3201/eid2612.201266. PMID: 33219786

d) Human-dog relationships during the COVID-19 pandemic: booming dog adoption during social...  
 by Morgan Liat; Protopopova Alexandra; Birkler Rune Isak Dupont ; Itin-Shwartz Beata; Sutton Gila Abells; Gamliel Alexandra; Yakobson Boris; Raz Tal  
 Humanities & Social Sciences Communications, 12/2020, Volume 7, Issue 1  
 The recent COVID-19 pandemic led to uncertainty and severe health and economic concerns. Previous studies indicated that owning a companion animal, such as a...  
 Journal Article Citation Online  
<https://www.nature.com/articles/s41599-020-00649-x>

b) International conferences: 1

a) Stray and abandoned dog overpopulation management- Israel's unique system  
 by Liat Morgan; Boris Yakobson; Tal Raz  
 Journal of animal science, 12/2019, Volume 97  
 Dog overpopulation is a major problem worldwide, which impacts animal welfare and health, as well as public health. In Israel, a unique governmental database...  
 Journal Article Full Text Online

c) National conferences: 0

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 17025; 2017	KVI 17025_2017-15189_2012.pdf
ISO 15189; 2012	KVI 17025_2017-15189_2012.pdf

16. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
RFFIT	ISRAC
FAT	ISRAC
Real time RT-PCR	ISRAC
Viris isolation in cell culture	ISRAC

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: <sup>1</sup>	Role of your Reference Laboratory (organiser/ participant)	No. participants	Participating OIE Ref. Labs/ organising OIE Ref. Lab.
Animal rabies serology	Participant	50	ANSES
Human rabies serology	Participant	30	Kansas State University

<sup>1</sup> 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
Collaboration on rabies vaccine research	ORV	FLI

**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?

No

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

**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:

