

OIE Reference Laboratory Reports Activities

Activities in 2021

This report has been submitted : 2022-01-20 15:54:07

Name of disease (or topic) for which you are a designated OIE Reference Laboratory:	Leptospirosis
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E-mail address:	m.goris@amsterdamumc.nl
Website:	https://leptospira.amsterdamumc.org/leptospira-library/
Name (including Title) of Head of Laboratory (Responsible Official):	Marga G.A. Goris PhD, Head OIE and National Collaborating Centre for Reference and Research on Leptospirosis, Academic Medical Centre, Department of Medical Microbiology and Infection Prevention
Name (including Title and Position) of OIE Reference Expert:	Marga Goris, see above
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
Microscopic Agglutination Test	yes	538	500
IgM ELISA	no	608	
Ig Total ELISA	no	608	
Direct diagnostic tests		Nationally	Internationally
Culture	yes	454	
PCR	yes	887	

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
Rabbit Reference Sera	MAT ELISA IFAT	produced	0	220 ml	10	<input type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East
Monoclonal antibodies	MAT ELISA IFAT	produced	0	56 ml	6	<input type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East
Leptospira strains	MAT	provide	0	126	12	<input type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East
EMJH culture media (litres)	MAT Culture	produced	1 liter	11 liter	2	<input type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" 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?

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?

No

If the answer is no, please provide a brief explanation of the situation:
Due to Covid-19 situation some research is temporarily stopped

12. Did your laboratory disseminate epizootiological data that had been processed and analysed?

No

If the answer is no, please provide a brief explanation of the situation:
Due to Covid-19 situation some research is temporarily stopped

**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

1. Are Pathogenic *Leptospira* a Possible Cause of Aseptic Meningitis in Suspected Children in Sudan?

Abdelrahim NA, Fadl-Elmula IM, Hartskeerl RA, Ahmed A, Goris M.

Res Rep Trop Med. 2021 Dec 30;12:267-274

2. Draft Genome Sequence of a *Leptospira kirschneri* Serovar Mozdok Type 2 Strain Isolated from a Horse in Portugal.

Inácio J, Muñoz-Mérida A, Ahmed AA, Rocha T, Mesquita JR, Thompson G, Goris MGA, Hartskeerl RA, Ferreira AS. Microbiol Resour Announc. 2021 Jul 15;10(28)

3. Reply to Detection of *Leptospira interrogans* DNA in Urine of a Captive Ocelot (*Leopardus pardalis*).

Murillo A, Cuenca R, Serrano E, Goris, MGA, Ahmed A, Cervantes S, Caparrós C, Vieitez V, Ladina A, Pastor J.

Int J Environ Res Public Health. 2021 Jan 19;18(2):796.

4. Complete Genome Sequencing of *Leptospira interrogans* Isolates from Malaysia Reveals Massive Genome Rearrangement but High Conservation of Virulence-Associated Genes.

Ramli, S.R.; Bunk, B.; Spröer, C.; Geffers, R.; Jarek, M.; Bhujju, S.; Goris, M.; Mustakim, S.; Pessler, F. Pathogens 2021, 10, 1198

b) International conferences: 1

online meeting of the European Leptospirosis Society (ELS), 06-05-2021

Key note speaker "Leptospirosis in humans: diagnosis of acute febrile illnesses during the COVID-19 pandemic"

c) National conferences: 1

Havensymposium 2021-Back to normal?

26-11-2021

invited speaker: "Update: Leptospire vaccines"

d) Other:

(Provide website address or link to appropriate information) 2

1. Chapter on Leptospirosis published in the DISCONTTOOLS database. You can view it here:

<https://www.discontools.eu/database/63-leptospirosis.html>

2. <https://leptospira.amsterdamumc.org/leptospira-library/>

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)
NEN-EN-ISO 15189:2012	M178 Certificate English 20210208.pdf

16. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
Microscopic Agglutination Test	Raad voor Accreditatie (RvA)
ELISA	Raad voor Accreditatie (RvA)
PCR	Raad voor Accreditatie (RvA)
Culture	Raad voor Accreditatie (RvA)
Typing	Raad voor Accreditatie (RvA)

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.
MAT proficiency testing	organizer	110	all OIE Reference Laboratories

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
Serotyping of leptospires with monoclonal antibodies	Serological typing of leptospiral isolates	National Veterinary Services Laboratories USDA, APHIS, Veterinary Services, AMES, IOWA, United States of America

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
MAT, ELISA and PCR interlaboratory comparison study	4	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" 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?

No

25. Additional comments regarding your report:

Due to Covid-19 restrictions visits to our laboratory and vv were again not possible in 2021. We had a lot of online communication however.