

OIE Reference Laboratory Reports Activities

Activities in 2020

This report has been submitted : 2021-01-20 13:10:47

Name of disease (or topic) for which you are a designated OIE Reference Laboratory:	Brucellosis (Brucella abortus, B. melitensis, B. suis)
Address of laboratory:	French Agency for Food, Environmental & Occupational Health & Safety (ANSES) Animal Health Laboratory - Bacterial Zoonoses Unit 14 rue Pierre et Marie Curie F-94701 Maisons-Alfort Cedex FRANCE
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Website:	https://eurl-brucellosis.anses.fr/
Name (including Title) of Head of Laboratory (Responsible Official):	Dr Pascal BOIREAU Director of the Animal Health Laboratory Dr Claire PONSART Head of the Bacterial Zoonoses Unit
Name (including Title and Position) of OIE Reference Expert:	Dr Claire PONSART DVM, PhD, Head of Bacterial Zoonoses Unit, ANSES
Which of the following defines your laboratory? Check all that apply:	Governmental Research

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
RBT	Yes	63	1
SAT	Yes	0	0
CFT	Yes	7	43
I-ELISA (bovine serum)	Yes	3	1
I-ELISA (bovine milk)	Yes	54	0
I-ELISA (ovine/caprine serum)	Yes	2	4
I-ELISA (pig serum)	Yes	2	4
C-ELISA	Yes	5	0
Milk Ring Test	Yes	44	0
Direct diagnostic tests		Nationally	Internationally
Isolation / culture	Yes	87	44
Brucella identification and biotyping (animal str.)	Yes	49	14
Brucella identificatino and biotyping (human str.)	Yes	0	0
Brucella molecular typing (HRM PCR, WGS)	No	8 HRM PCR, 44 WGS	0
Official control of diagnostic antigen batches	Yes	3 RBT ; 1 CFT ; 0 SAT	5 RBT ; 0 CFT; 1 SAT
Official control of serum ELISA kit batches	Yes	3	4
Official control of milk ELISA kit batches	Yes	1	3
Official control of control sera batches	Yes	2	0
Official control of vaccine batches	Yes	0	4

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?

Yes

NOTE: Currently, there are 22 laboratories that produce Standard Reference Reagents officially recognised by the OIE for 19 diseases/pathogens. Please click the following link to the list of OIE-approved International Standard Sera: <http://www.oie.int/en/our-scientific-expertise/veterinary-products/reference-reagents/>. If the reagent is not listed on this page, it is NOT considered OIE-approved. The next two questions allow you to indicate non-OIE-approved diagnostic reagents.

OIE-approved SRR producing laboratory – Select your lab from list:

Disease	Test	Available from			
Type of reagent available	Related diagnostic test	Produced/ Supply imported	Amount supplied nationally (ml, mg)	Amount supplied internationally (ml, mg)	Name of recipient OIE Member Countries
Reference strains	Brucella conventional identification and typing	Provided	<input checked="" type="radio"/> <10mL <input type="radio"/> 10-100mL <input type="radio"/> 100-500mL <input type="radio"/> >500mL	<input checked="" type="radio"/> <10mL <input type="radio"/> 10-100mL <input type="radio"/> 100-500mL <input type="radio"/> >500mL	ISRAEL ROMANIA

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
National standard panel of positive sera	Diagnostic reagent batch control	Provided	0	42 vials (1 ml)	9	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input checked="" type="checkbox"/> Middle East
National standard panel of negative sera	Diagnostic reagent batch control	Provided	0	20 vials (1 ml)	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
National RBT standard serum (BRU POS SE 01 eq. OIEISS)	RBT antigen batch control	Provided	1 vial (1 ml)	5 vials (1 ml)	5	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East
National CFT/SAT/MRT standard serum (BRU POS SE 02 eq. OIEISS)	RBT antigen batch control	Provided	5 vials (1 ml)	3 vials (1 ml)	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
National ELISA standard serum (BRU POS SE 03 eq. OIEELISpSS)	ELISA kits batch control	Provided	5 vials (1 ml)	4 vials (1 ml)	5	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East
European standard serum for pig brucellosis (EUPBSS)	ELISA kit batch control	Provided	0	2 vials (1 ml)	2	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East

European standard serum for dog brucellosis (EUDogSS)	antigen batch control	Provided	0	1 vial (1 ml)	1	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East
European standard serum for sheep & goat brucellosis	antigen batch control	Provided	0	3 vials (2 ml)	2	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East
Phages	Brucella conventional identification and typing	Provided	0	3 vials (1 mL)	1	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East
Anti-A, anti-M monospecific, anti-R and negative sera	Brucella conventional identification and typing	provided	0	6 vials (1 mL)	2	<input type="checkbox"/> Africa <input 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?

Yes

Name of OIE Member Country seeking assistance	Date (month)	No. samples received for provision of diagnostic support	No. samples received for provision of confirmatory diagnoses
BOSNIA AND HERZEGOVINA	June	0	32
UKRAINE	July	0	2
DENMARK	January	0	68
SWEDEN	July / September	0	2
SWITZERLAND	August / September / November	0	4

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
AZERBAIJAN	Advices on vaccination programs and brucellosis control	Remote advices
BOSNIA AND HERZEGOVINA	Gap analysis - Legislative framework in Brucellosis control strengthened and further aligned with the union acquis	EU Twinning project (visioconferences)
GUINEA	Reinforce the diagnosis competences for Brucellosis, Biosecurity and Quality management systems	OIE Twinning project between LCVD and ANSES

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
Brucellosis in dogs	24 months	Improved detection and diagnosis of brucellosis in dogs	National Reference laboratories	AUSTRIA BOSNIA AND HERZEGOVINA BULGARIA CROATIA FRANCE HUNGARY NORWAY PORTUGAL RUSSIA SLOVENIA SWEDEN SWITZERLAND UKRAINE
Coordination & conception of IDEMBRU (EU joint project)	30 months (2020-2022)	Identification of emerging <i>Brucella</i> species: new threats for human and animals	EU Members of the consortium of One Health EJP	BULGARIA FRANCE GERMANY ITALY PORTUGAL THE NETHERLANDS UNITED KINGDOM

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:
Contribution to the ECDC / EFSA report

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:
see list of publications

**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

Claire PONSART, Luca FREDDI, Acacia FERREIRA-VICENTE, Vitomir DJOKIC, Maryne JAY, Gina ZANELLA and Guillaume GIRAULT ; « Brucella, un genre bactérien en expansion : nouvelles espèces, nouveaux réservoirs / Brucella, a bacterial genus in expansion: new species, new reservoirs », Bull Acad Vét Fr 2020 ; Vol 173. DOI : <https://doi.org/10.3406/bavf.2020.70912>

b) International conferences: 2

Ponsart C, Al Dahouk S, Ashford R, Daskalov H, De Massis F, Freddi L, Garofolo G, Melzer F., Pelerito A, Umanets A, Whatmore A, Ferreira AC. "Identification of emerging Brucella species: new threats for human and animals (IDEMBRU)". Poster presentation at One Health EJP Annual Scientific Meeting 2020, Prague (CZ), 27-29 May.

Claire Ponsart, Luca Freddi, Guillaume Girault, Acacia Ferreira Vicente, Vitomir Djokic, « Brucella, a bacterial genus in expansion: new species, new reservoirs », Second International Symposium on Brucellosis, 19-20 October 2020 (Invited speaker)

c) National conferences: 1

Freddi Luca and Jař Maryne, Mick Virginie, Durand Benoit, Girault Guillaume, Perrot Ludivine, Taunay Benoit, Vuilmet Thomas, Azam Didier, Ponsart Claire and Zanella Gina, « Brucella microti-like prevalence in French farms producing frogs », Journées scientifiques et doctorales ANSES, 03 et 04 septembre 2020

d) Other:

(Provide website address or link to appropriate information) 2

ENSV-FVI webinar in the Framework of « Crisis management course » : « New knowledge acquired from the French Alpine ibex (Capra ibex), a singular wild reservoir of Brucella infection» (2020, October 13)

A. Ferreira Vicente, C. Ponsart. Canine Brucellosis : update on diagnosis aspects, EURL experience. Webinar organised by the NRL for Brucellosis, Italy. Webinar (2020, 2020, November 5)

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?

Yes

a) Technical visits: 0

b) Seminars: 4

c) Hands-on training courses: 1

d) Internships (>1 month): 0

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
b	PCR Expert meeting (April, videoconference)	10
b	PCR Expert meeting (September, videoconference)	10
b	EURL Workshop for brucellosis at ANSES (December, videoconference)	70
b	IDEMBRU project annual meeting at ANSES (December videoconference)	20
c	One week training session on Brucellosis : Serology and Molecular biology (twinning France - Guinea) (February)	2

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	1-2246.pdf

16. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
RBT / CFT /SAT / ELISA	COFRAC (member of EA and ILAC)
Isolation, identification and biotyping of <i>Brucella</i>	COFRAC (member of EA and ILAC)
Control of RBT, CFT, SAT antigens & ELISA kits	COFRAC (member of EA and ILAC)
Control of <i>Brucella</i> vaccines (in vitro batch control)	COFRAC (member of EA and ILAC)

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.
Brucellosis bovine serum	Organiser (Coordinator G. Girault)	113	FLI (DE), IZSAM (IT), South Korea

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
EURL Workprogramme 2019-2020	Diagnostic tools and genotyping	FLI (DE) IZSAM (IT) APHA (UK)
IDEMBRU: Identification of emerging Brucella species: new threats for human and animals	Emerging Brucella species	FLI (DE) IZSAM (IT) APHA (UK)

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
Brucellosis serology in serum (organizer)	113	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East
Brucellosis serology in milk - participant (Organiser = Siensano)	5	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East
Brucellosis bacteriology - participant (Organiser = Siensano)	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?

Yes

Kind of consultancy	Location	Subject (facultative)
OIE Twinning project	GUINEA CONAKRY	Reinforce the diagnosis competences for Brucellosis, Biosecurity and Quality management systems

25. Additional comments regarding your report:

