OIE Reference Laboratory Reports Activities

Activities in 2019

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Name of disease (or topic) for which you are a designated OIE Reference Laboratory:	Q fever
Address of laboratory:	Anses (Agence nationale de sécurité sanitaire de l'alimentation, de l'environnement et du travail), Laboratoire de Sophia Antipolis, Unité de fièvre Q animale, 105, route des Chappes, BP 111, 06902 Sophia Antipolis, FRANCE
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Website:	https://www.anses.fr/en/content/sophia-antipolis-laboratory
Name (including Title) of Head of Laboratory (Responsible Official):	Richard Thiéry
Name (including Title and Position) of OIE Reference Expert:	Elodie Rousset
Which of the following defines your laboratory? Check all that apply:	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	
Indirect diagnostic tests		Nationally	Internationally
ELISA sérum ruminants	Oui (en noir)	2128	0
ELISA sérum multi-espece	Non (exploratoire)	1520	0
Direct diagnostic tests		Nationally	Internationally
PCR Temps Reel Quantitative		595	0
Génotypage MLVA		21	0
Isolement (souris, culture)		0	0
WGS		0	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
Sérum étalon (0.5 mL unité)	Fixation du Complément	Produit	0	0	0	☐Africa ☐Americas ☐Asia and Pacific ☐Europe ☐Middle East
Sérum calibrant (0.4 mL unité)	ELISA (sérologie)	Produit	77	5	2	☐Africa ☐Americas ☐Asia and Pacific ☒Europe ☐Middle East
Standard ADN génomique (0.05 mL unité)	PCR, Génotypage	Produit	8	2	1	☐Africa ☐Americas ☐Asia and Pacific ☒Europe ☐Middle East
Bactéries purifiées inactivées dosées (1mL unité)	PCR	Produit	15	0	0	☐Africa ☐Americas ☐Asia and Pacific ☐Europe ☐Middle East
Souche de référence Nine Mile (phase 2)	culture	Produit	0	0	0	☐Africa ☐Americas ☐Asia and Pacific ☐Europe ☐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
IRAQ	question du passage en phase I lors de la culture de Coxiella. Explications sur les 2 formes (cf chapitre OIE sur la fièvre Q). La littérature ancienne indique 3 passages in vitro, voire 5 passages. On peut vérifier par exemple avec des sérums spécifiques de l'une ou l'autre des phases	Echange par mail
SERBIA	Question sur le vaccin de phase 1 Coxevac dans le cadre de la mise en place d'un protocole national. L'unique vaccin à disposition est enregistré pour les bovins et les ovins (: https://www.ema.europa.eu/en/medicines/veterinary/EPAR/coxevac). Explications sur le procédé en France pour son utilisation chez les ovins: "a use, case by case, in application of the article L. 5143-4 (application of the "veterinary cascade") can be chosen by the veterinarians to answer acute situations. In this case, the responsibility for the act is totally endorsed by the prescribing veterinarian". Le vétérinaire peut ainsi le prescrire. Orientation vers l'expert OIE en Pologne (Piwet, Krzysztof Niemczuk) pour connaitre le procédé dans un autre pays.	Echanges par mails
INDIA	Demande de conseils de gestion (desinfection, etc) sur un élevage caprin montrant régulièrement des positifs (colorations MZN, modified Ziehl-Neelsen) suite à des cas d'avortements dus à la fièvre Q (doi: 10.1007/s11250-018-1756-7.) En résumé : -options sur https://www.efsa.europa.eu/fr/efsajournal/pub/1595 , désinfectant sporicides, placentas en container pour l'équarisseur et non laissés dans le fumier -ajouter une enquête de séroprévalence plus large -conseils sur les méthodes de laboratoires et infos sur les matérieux de référence disponibles	Echanges par mails
UNITED KINGDOM	Demande de conseils de gestion de la fièvre Q face à des cas humains groupés, en particulier sur les essais de vaccination des animaux dans ces situations d'épidémie. Demande de conseils pour les sujets d'une revue qui afin de contribuer à la santé publique. Retour sur les options de lutte possible présenté dans les rapport d'experts Efsa (https://www.efsa.europa.eu/fr/efsajournal/pub/1595 et https://www.efsa.europa.eu/fr/supporting/pub/en-48) et Discontools files (https://discontools.eu/database/57-q-fever.html) et l'état de l'art des données épidémiologiques au niveau européen. Avis partagé pour une telle revue à l'échelle mondiale, avec des conclusions sur les meilleurs approches d'investigations, la faisabilité des mesures, les améliorations à envisager.	Echanges par mail
GUYANA	Appui aux mises en place des méthodes (ELISA et PCRq): conseils et explications ((situation des méthodes fièvre Q en terme de validation, témoins de reproductibilité / carte de contole, conservation, ...), fourniture de matériaux et d'un plan d'adoption pour chaque méthode. Contexte de futures collaborations scientifques à des investigations épidémiologiques, besoin de trouver les sources et réservoirs sur ce territoire fortement touché par la fièvre Q	Echanges par mails, tels et surtout skype

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:
Pas de surveillance dans son pays, Pas de centralisation pour les autres pays. Maladie non réglementée le plus souvent

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:
Pas de telles données

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: 5

Carrié, P., S. Barry, E. Rousset, R. de Crémoux, C. Sala, D. Calavas, J. B. Perrin, A. Bronner, P. Gasqui, E. Gilot-Fromond, C. Beck, K. Gache, and E. Jourdain. 2019. "Swab cloths as a tool for revealing environmental contamination by Q fever on ruminant farms." Transboundary and Emerging Diseases 66 (3):1202-1209. doi: 10.1111/tbed.13137.

Carrié, P., S. Barry, E. Rousset, R. de Cremoux, C. Sala, D. Calavas, J. B. Perrin, A. Bronner, P. Gasqui, E. Gilot-Fromont, K. Gache, C. Becker, and E. Jourdain. 2018. "Facteurs associés à la détection de Coxiella burnetii dans les prélèvements de poussière en élevages de ruminants domestiques." Bulletin de l'Académie Vétérinaire de France 171(3) : 216-222, https://doi.org/10.4267/2042/70286.

Davoust, B., J. L. Marié, D. Tahir, M. Dahmani, P. Dufour, R. Thiéry, and E. Rousset. 2019. "Seroprevalence of Coxiella burnetii infection in dogs from Southeastern France." International Journal of Infectious Diseases 79:122. doi: https://doi.org/10.1016/j.ijid.2018.11.300.

de Souza Ribeiro Mioni, M., B. L. D. Ribeiro, M. G. Peres, W. S. R. Teixeira, V. C. Pelicia, R. G. Motta, M. B. Labruna, M. G. Ribeiro, K. Sidi-Boumedine, and J. Megid. 2019. "Real-time quantitative PCR-based detection of Coxiella burnetii in unpasteurized cow's milk sold for human consumption." Zoonoses Public Health 66 (6):695-700. doi: 10.1111/zph.12609.

Selim, A., A. Abdelrahman, R. Thiéry, and K. Sidi-Boumedine. 2019. "Molecular typing of Coxiella burnetii from Sheep in Egypt." Comparative Immunology, Microbiology and Infectious Diseases 67:101-353. doi: https://doi.org/10.1016/j.cimid.2019.101353.

b) International conferences: 1

Desjardins, I., A. Joulié, L. Legrand, S. Lecollinet, L. Vial, E. Jourdain, E. Rousset, A. Leblond. 2019. "Coxiella burnetii infection in horses: seroprevalence, environmental exposure and clinical expression". European Veterinay Conference, Voorjaarsdagen, The Hague; Netherland, April 11-12.

c) National conferences: 0

d) Other:
(Provide website address or link to appropriate information) 3
Publications dans des revues professionnelles :
Bernadou, A., Y. Lambert, K. Gache et Collectif. Cas groupés de fièvre Q, dans le pays niortais, avril-mai 2017. Etudes et enquêtes - Maladies infectieuse - Santé Publique France Novembre 2019.

Rapports de projet, d'expertise, et documents d'appui scientifique et technique :
Rousset, E., P. Dufour. 2019. Rapport final d'essais interlaboratoires d'aptitude: Sérologie fièvre Q sur sérum par ELISA, session 2019, (74 participants). 19/07/2019.

Rousset, E., P. Dufour. 2019. "Rapport d'analyse quantitative des données issues de l'EILA sérologie fièvre Q sur sérum, session 2019. " (74 participants). 22/07/2019.

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: 2
b) Seminars: 0
c) Hands-on training courses: 0
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
a	Italie	2
a	Egypte	>10

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	ATTESTATION ACCREDITATION COFRAC 2019.pdf

16. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
ELISA sur sérum : IDEXX Q Feber Ab Test (IDEXX)	COFRAC
ELISA sur sérum : ID Screen® Q fever indirect (ID.vet)	COFRAC
ELISA sur sérum : PrioCHECK™ Ruminant Q Fever Ab Plate Kit (ThermoFischerscientific)	COFRAC
PCRq sur mucus vaginal (méthode interne)	COFRAC

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?

No

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?

No

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?

No

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
Méthodes ELISA sur sérums ruminants (kits spécifiés)	77	☐Africa ☐Americas ☐Asia and Pacific ☒Europe ☒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: