

WOAH Reference Laboratory Reports Activities 2023

Activities in 2023

This report has been submitted : 11 juin 2024 09:13

Laboratory Information

Name of disease (or topic) for which you are a designated WOAHO Reference Laboratory:	Enzootic abortion of ewes
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Website:	
Name (including Title) of Head of Laboratory (Responsible Official):	Dr Zientara Stéphan
Name (including Title and Position) of WOAHO Reference Expert:	Dr Laroucau Karine
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 WOAHO Manual (Yes/No)	Total number of test performed last year	
		Nationally	Internationally
Indirect diagnostic tests			
ELISA		6	0
Direct diagnostic tests			
real-time PCR Chlamydiaceae family		109	0
real-time PCR Chlamydia abortus		87	0
real-time PCR Chlamydia pecorum		11	0
PCR-HRM typing (vaccine vs field strain)		62	0

TOR2: REFERENCE MATERIAL

2. Did your laboratory produce or supply imported standard reference reagents officially recognised by WOAHO?

No

3. Did your laboratory supply standard reference reagents (nonWOAHO-approved) and/or other diagnostic reagents to WOAHO Members?

Yes

TYPE OF REAGENT AVAILABLE	RELATED DIAGNOSTIC TEST	PRODUCED/ PROVIDE	AMOUNT SUPPLIED NATIONALLY (ML, MG)	AMOUNT SUPPLIED INTERNATIONALLY (ML, MG)	NO. OF RECIPIENT WOAHO MEMBER COUNTRIES	COUNTRY OF RECIPIENTS
DNA of Chlamydia reference strains	PCR	Produced	4 x 50 µL	-	1	FRANCE,
Positive C. abortus serum	ELISA	Produced	12 x 500 µL	-	5	FRANCE,

4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to WOAHA Members?

No

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 WOAHA Standards for the designated pathogen or disease?

No

8. Did your laboratory develop new vaccines for the designated pathogen or disease?

No

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

No

TOR4: DIAGNOSTIC TESTING FACILITIES

10. Did your laboratory carry out diagnostic testing for other WOAHA Members?

No

11. Did your laboratory provide expert advice in technical consultancies on the request of an WOAHA Member?

Yes

NAME OF THE WOAHA MEMBER COUNTRY RECEIVING A TECHNICAL CONSULTANCY	PURPOSE	HOW THE ADVICE WAS PROVIDED
TURKEY	Use of WOAHA methods for diagnosis of Enzootic abortion of ewes, serology	Remote assistance by email
CROATIA	Maintenance of the real-time PCR accreditation	Remote assistance by email and analyses
ITALY	Use of WOAHA methods for diagnosis of Enzootic abortion of ewes, serology	Remote assistance by email
BRAZIL	Use of WOAHA methods for diagnosis of Enzootic abortion of ewes, serology	Remote assistance by email

TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

12. Did your laboratory participate in international scientific studies in collaboration with WOAHA Members other than the own?

No

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

No

TOR6: EPIZOOLOGICAL DATA

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

No

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

No

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:

3

- Sachse K, Hölzer M, Vorimore F, Barf LM, Sachse C, Laroucau K, Marz M, Lamkiewicz K. Genomic analysis of 61 *Chlamydia psittaci* strains reveals extensive divergence associated with host preference. *BMC Genomics*. 2023 May 29;24(1):288. doi: 10.1186/s12864-023-09370-w. PMID: 37248517
- Aaziz R, Vinuesa RL, Vorimore F, Schnee C, Jiménez-Uzcátegui G, Zanella G, Laroucau K. Avian *Chlamydia abortus* Strains Detected in Galápagos Waved Albatross

(*Phoebastria irrorata*). *J Wildl Dis.* 2023 Jan 1;59(1):143-148. doi: 10.7589/JWD-D-21-00163. PMID: 36763342

• Herrmann B, Aaziz R, Kaden R, Riedel HM, Spörmly-Nees E, Sandelin LL, Laroucau K. SNP-based high-resolution typing of *Chlamydia psittaci* from humans and wild birds in Sweden: circulation of the Mat116 genotype reveals the transmission mode to humans. *Microbes Infect.* 2024 Mar-Apr;26(3):105251. doi: 10.1016/j.micinf.2023.105251. Epub 2023 Nov 11. PMID: 37952689

b) International conferences:

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• Laroucau K. Feather Frenzy: The Latest on Psittacosis and Avian Chlamydiosis. *European congress of clinical microbiology and infectious diseases (ECCMID).* Copenhagen, Denmark. 15-18/04/2023. Invited speaker.

• Björn H, Rachid A, Kaden R, Riedel HM, Spörmly-Nees E, Labbé Sandelin L, Laroucau K. "Transmission mode of *Chlamydia psittaci* from birds to humans in Sweden: High-resolution typing shows an association between the Mat116 genotype and exposure to wild birds" *European meeting on animal chlamydiosis and zoonotic potential (EMAC6),* 28-29/11/2023, Edingburgh, Ecosse

c) National conferences:

0

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

0

Review of the *Chlamydia abortus* fact sheet for the American Association of Zoo Veterinarians Infectious Disease Manual

TOR7: SCIENTIFIC AND TECHNICAL TRAINING

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

No

TOR8: QUALITY ASSURANCE

18. Does your laboratory have a Quality Management System?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)	
ISO17025	Accreditation by COFRAC	Accréditation2024.pdf

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
real-time PCR Chlamydiaceae	COFRAC

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

Yes

- Risk assesment for Chlamydia agents with regular updates - Appropriate risk control measures (biosafety and biosecurity) are installed - A biological safety officer is appointed - Regular inspection of the laboratories by national authorities

TOR9: SCIENTIFIC MEETINGS

21. Did your laboratory organise scientific meetings related to the pathogen in question on behalf of WOAAH?

No

22. Did your laboratory participate in scientific meetings related to the pathogen in question on behalf of WOAAH?

No

TOR10: NETWORK WITH WOAAH REFERENCE LABORATORIES

23. Did your laboratory exchange information with other WOAAH Reference Laboratories designated for the same pathogen or disease?

Yes

24. Do you network (collaborate or share information) with other WOA Reference Laboratories designated for the same pathogen?

No

25. Did you organise or participate in inter-laboratory proficiency tests with WOA Reference Laboratories designated for the same pathogen?

Yes

PURPOSE OF THE PROFICIENCY TESTS: 1	ROLE OF YOUR REFERENCE LABORATORY (ORGANISER/ PARTICIPANT)	NO. PARTICIPANTS	PARTICIPATING WOA REF. LABS/ ORGANISING WOA REF. LAB.
Assessment of technical competence of laboratories in detection of Chlamydia abortus specific antibodies, testing of positive sera	participant	-	WOAH ref lab from Germany (FLI) as participant WOAH ref lab from Switzerland (Institute of Veterinary Pathology - Zurich) as participant
Assessment of technical competence of laboratories in detection of Chlamydia spp. genomic DNA in different matrices by real-time PCR	organizer	16	WOAH ref lab from Germany (FLI) as participant

26. Did your laboratory collaborate with other WOA 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 WOA REFERENCE LABORATORIES
Comparison of performance of different C. abortus specific PCR tests	Test comparison	Institute of Veterinary Pathology - Zurich FLI - Germany

TOR11: OTHER INTERLABORATORY PROFICIENCY TESTING

27. Did your laboratory organise or participate in inter-laboratory proficiency tests with laboratories other than WOA Reference Laboratories for the same pathogen?

Yes

Purpose for inter-laboratory test comparisons ¹	Role of your reference laboratory (organizer/participant)	No. participating laboratories	Name of the Test	WOAH Member Countries
Assessment of technical competence of laboratories in detection of Chlamydia spp. genomic DNA in different matrices by real-time PCR	organizer	16	PCR	FRANCE, GERMANY, SWITZERLAND,

TOR12: EXPERT CONSULTANTS

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

No

29. Additional comments regarding your report:

No