

OIE Reference Laboratory Reports Activities

Activities in 2021

This report has been submitted : 2022-01-28 15:18:14

Name of disease (or topic) for which you are a designated OIE Reference Laboratory:	Avian chlamydiosis
Address of laboratory:	Naumburger Str. 96a 07743 Jena GERMANY
Tel.:	+49-3641 804 2435
Fax:	+49-3641 804 2228
E-mail address:	christiane.schnee@fli.de
Website:	www.fli.de
Name (including Title) of Head of Laboratory (Responsible Official):	Prof. Christian Menge
Name (including Title and Position) of OIE Reference Expert:	Dr. Christiane Schnee
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	
		Nationally	Internationally
Indirect diagnostic tests			
-	no	0	0
Direct diagnostic tests			
Real time PCR Chlamydiaceae	yes	67	0
Real time PCR Chlamydia psittaci	yes	6	0
Real time PCR Chlamydia avium/gallinacea	no	7	0
16S rRNA PCR and sequencing	yes	4	0
Cell culture	yes	4	12

**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
Chromosomal DNA of chlamydial strains	PCR, Real- Time PCR,sequencing	Produced	0	3x50 µl	1	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East
Cell culture aliquots of Chlamydia strains	Cell culture	Produced	1x0,5 ml	0	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

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?

Yes

7. Did your laboratory develop new vaccines according to OIE Standards for the designated pathogen or disease?

No

Name of the new test or diagnostic method or vaccine developed	Description and References (Publication, website, etc.)
Real-time Taqman PCR for <i>C. psittaci</i> detection	Angen Ø, Johannesen TB, Petersen RF, Uldum SA, Schnee C. Development of a species-specific real-time PCR test for <i>Chlamydia psittaci</i> and its employment in the investigation of zoonotic transmission from racing pigeons in Denmark. <i>Diagn Microbiol Infect Dis.</i> 2021. 100(2):115341. doi: 10.1016/j.diagmicrobio.2021.115341. Epub 2021 Feb 9.
PCR-HRM for quick genotyping of <i>C. psittaci</i> strains	Vorimore F, Aaziz R, de Barbeyrac B, Peuchant O, Szymańska-Czerwińska M, Herrmann B, Schnee C, Laroucau K. A New SNP-Based Genotyping Method for <i>C. psittaci</i> : Application to Field Samples for Quick Identification. <i>Microorganisms.</i> 2021. 9(3):625. doi: 10.3390/microorganisms9030625.

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
IRELAND	DNA preparation from swabs of infected birds and measures to prevent zoonotic transmission	Remote assistance by email
AUSTRIA	DNA extraction from tissues for <i>Chlamydia</i> detection	Remote assistance by email

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?

Yes

If the answer is yes, please provide details of the data collected:
The occurrence and typing of Chlamydia avium in feral pigeons

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 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: 3

Favaroni A, Trinks A, Weber M, Hegemann JH, Schnee C. Pmp Repertoires Influence the Different Infectious Potential of Avian and Mammalian Chlamydia psittaci Strains. *Front Microbiol.* 2021; 12:656209. doi: 10.3389/fmicb.2021.656209. eCollection 2021.

Angen Ø, Johannesen TB, Petersen RF, Uldum SA, Schnee C. Development of a species-specific real-time PCR test for Chlamydia psittaci and its employment in the investigation of zoonotic transmission from racing pigeons in Denmark. *Diagn Microbiol Infect Dis.* 2021. 100(2):115341. doi: 10.1016/j.diagmicrobio.2021.115341. Epub 2021 Feb 9.

Vorimore F, Aaziz R, de Barbeyrac B, Peuchant O, Szymańska-Czerwińska M, Herrmann B, Schnee C, Laroucau K. A New SNP-Based Genotyping Method for C. psittaci: Application to Field Samples for Quick Identification. *Microorganisms.* 2021. 9(3):625. doi: 10.3390/microorganisms9030625.

b) International conferences: 0
cancelled due to pandemic

c) National conferences: 2
Meeting of the German Veterinary Society: Bacteriology and Mycology, Online, June 14-16
Meeting of the German National Reference Laboratories for Chlamydiae, Q-fever, Paratuberculosis and Bovine Tuberculosis (host), Online, April 21-22

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)
ISO17025	Akkreditierungsurkunde_FLI-Riems-Jena_2019.pdf

16. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
PCR and real-time PCR Chlamydiaceae	DAkKS Deutsche Akkreditierungsstelle
Real-time PCR Chlamydia spp.	DAkKS Deutsche Akkreditierungsstelle
Isolation and culture Chlamydia spp.	DAkKS Deutsche Akkreditierungsstelle

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?

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?

Yes

Title of the project or contract	Scope	Name(s) of relevant OIE Reference Laboratories
SNP-Based Genotyping Method for C. psittaci: Application to Field Samples for Quick Identification	Development of a new genotyping tool for C. psittaci	Anses France

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
Assessment of technical competence of laboratories in detection of <i>Chlamydia psittaci</i> genomic DNA in different matrices by Real-Time PCR	46	<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:

The number of samples sent to the laboratory from Germany were about the same as in previous years, but there were no samples from abroad. In general, the demand for confirmatory tests seems to be lower as highly specific PCR detection is well established in routine labs, at least in Europe.

Further activities, such as international exchange and meetings or laboratory training were affected by the Corona pandemic.