

WOAH Reference Laboratory Reports Activities 2022

Activities in 2022

This report has been submitted : 6 février 2023 06:03

Laboratory Information

Name of disease (or topic) for which you are a designated WOA Reference Laboratory:	Swine streptococcosis
Address of laboratory:	No. 1 Weigang, Nanjing 210014
Tel.:	0086-18651836283
E-mail address:	lucp@njau.edu.cn; yaohch@njau.edu.cn; wuzongfu@njau.edu.cn
Website:	
Name (including Title) of Head of Laboratory (Responsible Official):	Prof. Chengping Lu
Name (including Title and Position) of WOA Reference Expert:	Prof. Chengping Lu
Which of the following defines your laboratory? Check all that apply:	Research agency Academic institution

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 WOA Manual (Yes/No)	Total number of test performed last year	
Indirect diagnostic tests		Nationally	Internationally
Direct diagnostic tests		Nationally	Internationally
PCR detection for Streptococcus suis	Yes	1651	0

TOR2: REFERENCE MATERIAL

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

No

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

No

4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to WOAHP 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 WOAHP 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 WOAHP Standards for the designated pathogen or disease?

No

TOR4: DIAGNOSTIC TESTING FACILITIES

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

No

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

No

TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

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

No

TOR6: EPIZOOLOGICAL DATA

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

Yes

IF THE ANSWER IS YES, PLEASE PROVIDE DETAILS OF THE DATA COLLECTED:

We collected epizootiological data of Streptococcus suis isolated from healthy or diseased pigs.

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

Yes

IF THE ANSWER IS YES, PLEASE PROVIDE DETAILS OF THE DATA COLLECTED:

Streptococcus pasteurianus, an underreported opportunistic pathogen, is considered an increasingly recognized cause of meningitis and bacteremia in many animals and humans worldwide. We first isolated an *S. pasteurianus* strain from a newly weaned piglet's brain with meningitis, and confirmed that it is a new pathogen of swine streptococcosis.

As one of the main pathogenic serotypes causing clinical disease in pigs, we found the pathogenic potential of *Streptococcus suis* serotype 8 cannot be ignored and provided valuable information for SS8 surveillance.

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

1. Zhaoying Liu, Qihua Xu, Pujun Liang, Zeren Peng, Huochun Yao, Han Zheng*, Zongfu Wu*. The characteristics of population structure and antimicrobial resistance of *Streptococcus suis* serotype 8, a non-negligible pathotype. *Transboundary and Emerging Diseases*, 2022, 69:e2495–e2505

2. Zijiang Liang, Huizhen Wu, Chen Bian, Hao Chen, Yanling Shen, Xueping Gao, Jiale Ma, Huochun Yao, Liping Wang, Zongfu Wu*. The antimicrobial systems of *Streptococcus suis* promote niche competition in pig tonsils. *Virulence*, 2022, 13 (1): 781–793

3. Shuoyue Wang, Miaohang Ma, Zijiang Liang, Xinchu Zhu, Huochun Yao, Liping Wang, Zongfu Wu*. Pathogenic investigations of *Streptococcus pasteurianus*, an underreported zoonotic pathogen, isolated from a diseased piglet with meningitis. *Transboundary and Emerging Diseases*, 2022, 69:2609–2620

b) International conferences:

0

c) National conferences:

0

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

0

TOR7: SCIENTIFIC AND TECHNICAL TRAINING

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

No

TOR8: QUALITY ASSURANCE

18. Does your laboratory have a Quality Management System?

No

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
PCR detection for <i>Streptococcus suis</i>	China National Accreditation Service for Conformity Assessment (ISO/IEC 17025: 2017)

20. 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)

TOR9: SCIENTIFIC MEETINGS

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

No

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

No

TOR10: NETWORK WITH WOA REFERENCE LABORATORIES

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

24. Are you a member of a network of WOA Reference Laboratories designated for the same pathogen?

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

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?

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?

No

TOR12: EXPERT CONSULTANTS

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

Yes

KIND OF CONSULTANCY	Location	SUBJECT (FACULTATIVE)
attendance at WOA Commission meetings, ad hoc Group meetings, review of		

WOAH Standards, responding to specific technical queries from WOAH, technical papers on diagnostic test procedures or vaccine production		
--	--	--

29. Additional comments regarding your report:

No