

WOAH Reference Laboratory Reports Activities 2024

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LABORATORY INFORMATION

*Name of disease (or topic) for which you are a designated WOAH Reference Laboratory:	Vesicular stomatitis
*Address of laboratory:	"National Veterinary Services Laboratories USDA, APHIS, Veterinary Services 1920 Dayton Ave Ames, IA 50010 UNITED STATES OF AMERICA Office: 515.337.7301"
*Tel:	+15153377551
*E-mail address:	NVSL.DVL.Heads@usda.gov
Website:	www.aphis.usda.gov/nvsl
*Name (including Title) of Head of Laboratory (Responsible Official):	Dr. Suelee Robbe-Austerman, Director, National Veterinary Services Laboratories
*Name (including Title and Position) of WOAH Reference Expert:	Dr. Rachel Tell, Veterinary Medical Officer, National Veterinary Services Laboratories
*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 WOAH Manual (Yes/No)	Total number of test performed last year	
Indirect diagnostic tests		Nationally	Internationally
Competitive enzyme-linked immunosorbent assay (cELISA; VS Indiana and VS New Jersey viruses)	Yes	1422	426
Complement fixation (VS Indiana and VS New Jersey	Yes	356	

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viruses)			14
Virus Neutralization (VS Indiana and VS New Jersey viruses)	Yes	1180	64
Direct diagnostic tests		Nationally	Internationally
Virus isolation	Yes	146	0
Real-time RT-PCR	Yes	153	0
Sequencing	No	9	0

TOR2: REFERENCE MATERIAL

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

No

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

Yes

Type of reagent available	Related diagnostic test	Produced/ provide	Amount supplied nationally (ml, mg)	Amount supplied internationally (ml, mg)	No. of recipient WOAHA Member Countries	Country of recipients
Antigen	CF	provided	5	0	1	UNITED STATES OF AMERICA,
Reference Virus	VN	provided	7.8	1.2	2	COLOMBIA, UNITED STATES OF AMERICA,
CF Test Panel	CF	provided	90	0	1	UNITED STATES OF AMERICA,
PCR Test Panel	PCR	both	30	0	1	UNITED STATES OF AMERICA,
Antiserum	several	provided	44	0	1	UNITED STATES OF AMERICA,

4. Did your laboratory produce vaccines?

Not applicable

5. Did your laboratory supply vaccines to WOAHA Members?

Not applicable

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 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

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

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:

"USDA Vesicular Stomatitis: NVSL works with another unit within USDA for distribution of analyzed data.

<https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/cattle-disease-information/vesicular-stomatitis-info>"

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:

"USDA Vesicular Stomatitis: NVSL works with another unit within USDA for distribution of analyzed data.

<https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/cattle-disease-information/vesicular-stomatitis-info>"

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:

1

Ellen Haynes, Christopher A. Cleveland, Vienna R. Brown, Angela M. Pelzel-McCluskey, Rachel M. Tell, David E. Stallknecht; Surveillance of Feral Swine (*Sus scrofa*) in the Western USA for Antibodies to Vesicular Stomatitis Virus, 2013–21. *J Wildl Dis* 1 October 2024; 60 (4): 1011–1015. doi: <https://doi.org/10.7589/JWD-D-24-00049>

b) International conferences:

0

c) National conferences:

1

October 2024: United States Animal Health Association and American Association of Veterinary Laboratory Diagnosticians Annual Meeting

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

<https://www.aphis.usda.gov/livestock-poultry-disease/cattle/vesicular-stomatitis>

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?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)	
ISO 17025	USDA NVSL ISO 17025 certificate.pdf	USDA NVSL ISO 17025 certificate.pdf

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
Virus Neutralization	American Association for Laboratory Accreditation (A2LA)
Complement Fixation	American Association for Laboratory Accreditation (A2LA)

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Competitive Enzyme-Linked Immunosorbent Assay (cELISA)	American Association for Laboratory Accreditation (A2LA)
Virus Isolation	American Association for Laboratory Accreditation (A2LA)

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

Yes

Biosafety, Security and Incident Response Plan and Biological Risk Assessments: NVSL-MAN-0018 and NVSL-WI-1207

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?

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 during the past 2 years?

No

No

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?

No

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 during the past 2 years?

Yes

Purpose for inter-laboratory test comparisons ¹	Role of your reference laboratory (organizer/participant)	No. participating laboratories	Name of the test	WOA Member Countries
Administered by NVSL and required to conduct official testing in the U.S.; shipped internationally by request	Administered by NVSL and required to conduct official testing in the U.S.	9	Complement Fixation Assay and Real-time RT PCR Assay	UNITED STATES OF AMERICA,



TOR12: EXPERT CONSULTANTS

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

No

29. Additional comments regarding your report:

Yes

During 2024, some testing and many activities were impacted by the ongoing H5 2.3.4.4b HPAI outbreak affecting wild birds and poultry with sporadic spillovers into mammals as well as the spillover event in dairy which required onboarding new tests for new sample types.

The vesicular stomatitis New Jersey virus (VSNJV) serotype outbreak began on May 17, 2023, and the last VSV quarantine in California was released on January 2, 2024. Refer to https://www.aphis.usda.gov/animal_health/downloads/animal_diseases/vsv/sitrep-01-03-24.pdf