

# FMD/SVA Swine Vesicular Testing Guidance August 2023

Please note: This procedure may be revised as needed.

The National Animal Health Laboratory Network (NAHLN) is a partnership of state and federal diagnostic laboratories that provide investigational and surveillance testing for high consequence agricultural pathogens. There continues to be a high prevalence of Senecavirus A (SVA)-associated vesicular lesions in swine on farms and in slaughter channels. In 2019 an SVA/foot-and-mouth disease (FMD) testing pilot project in select SVA/FMD approved National Animal Health Laboratory Network (NAHLN) laboratories was launched and after success of that pilot program it was shifted to a long-term strategy in 2022. Since that time, feedback from stakeholders, particularly SAHOs, is that the burden of performing these FADIs at high incidence plants continues to be significant. The daily resource demand is becoming challenging to meet in the face of continued animal disease outbreaks.

In response to these concerns, vesicular testing at high incidence swine plants with previous history of SVA confirmed cases will continue to occur at select NAHLN laboratories (see Appendix) without initiation of a foreign animal disease investigation. Only 5% of samples tested by the NAHLN laboratory will be forwarded to the FADDL for quality assurance testing.

#### A. Samples Tested by Approved NAHLN Laboratories:

- The SVA/FMD multiplex PCR should be run on all samples submitted from designated slaughter plants as part of this monitoring program.
- All results should be messaged within 24h of test completion.

#### B. Samples Forwarded to FADDL

- All FMD Non-negative
- All SVA Not Detected/FMD Not Detected
- Random 5% of all SVA Non-negative/FMD Not Detected

### C. FMD Non-negative

- Any FMD Non-negative test result should be handled in accordance with:
  - i. NVSL-MAN-0028 NAHLN Laboratory Guide for Foreign Animal Disease (FAD) Investigations.
  - NVSL-SOP-0648 Preparation, Performance and Interpretation of the Foot and Mouth Disease Virus and Senecavirus A Multiplex rRT-PCR Assay on the Applied Biosystems 7500 FAST Real-time PCR System.

#### D. Inclusion of Additional NAHLN Laboratories

- If your laboratory is seeing a large number of swine vesicular FADIs (FMD) from one specific slaughter facility and/or your SAHO has inquired about this program, please contact the NAHLN Program Office (NAHLN@usda.gov) for consideration to have your laboratory added to this monitoring program.
  - i. To be added to the current group of laboratories completing this testing your laboratory would need to complete the following:
    - 1. Successfully pass a proficiency test for the SVA/FMD Multiplex assay.
    - 2. Successfully message the multiplex results through HL7 messaging.
  - 3. Update your current IDIQ to include a negotiated price for multiplex PCR.



## Appendix: FMD/SVA Surveillance Participating NAHLN Laboratories

Please note: This list may be revised as needed.

	State	Laboratory
1	California	California Animal Health & Food Safety Laboratory
2	Illinois	University of Illinois Veterinary Diagnostic Laboratory
3	Kansas	Kansas State Veterinary Diagnostic Laboratory
4	Michigan	Michigan State University Veterinary Diagnostic Laboratory
5	Minnesota	University of Minnesota Veterinary Diagnostic Laboratory
6	North Carolina	Rollins Diagnostic Laboratory
7	Ohio	Animal Disease Diagnostic Laboratory
8	Oregon	Oregon Veterinary Diagnostic Laboratory
9	Tennessee	Kord Animal Health Diagnostic Laboratory
10	Wisconsin	Wisconsin Veterinary Diagnostic Laboratory