

What's Your Diagnosis?

HISTORY

Two sow farms receive a shipment of gilts from the same supplier. Approximately 7 – 10 days later, the farmers notice vesicles appearing on the snouts of 3 – 5% of the sows and gilts in both herds (click here to see photos of the lesions). No fevers or inappetance were observed and there were no foot or oral lesions present. A shipment of feeder pigs left that morning for a finisher located in another state. You're the veterinarian. What are your rule-outs and next steps?

In this case, the farmers notified their veterinarians who contacted the state veterinarian. A foreign animal disease diagnostician was dispatched to the farms to collect duplicate samples. One set of samples (blood, vesicular fluid and epithelial tissue) were submitted to the regional National Animal Health laboratory Network lab for a foreign animal disease diagnostic workup. The state veterinarian notified the state animal health official of the receiving state regarding the shipment of feeder pigs and requested that the farmers not move any additional animals off the farm pending receipt of the preliminary diagnostic results.

DIAGNOSTIC RESULTS

Samples submitted to the NAHLN lab were tested for Foot and Mouth Disease. The lab returned negative PCR results in approximately 6 hours. While this provided some comfort to those involved, the duplicate samples were submitted Priority Two for confirmation and diagnosis at the Foreign Animal Disease Diagnostic Laboratory (FADDL) on Plum Island.

FADDL was able to isolate a virus and conducted a complete swine vesicular disease diagnostic panel. The results were negative for all foreign animal diseases. PCR tests were POSITIVE, however, for the presence of domestic disease agent SENECA VALLEY VIRUS nucleic acid.

This case was determined to be Seneca Valley Virus. Although poorly understood, SVV has been associated with idiopathic vesicular disease in swine closely resembling FMD. Cases of idiopathic vesicular disease have resulted in production and market disruptions. Although not observed in this particular case, affected animals can be febrile and anorexic. The lesions are often observed on the coronary band resulting in noticeable lameness.

CONCLUSION

When considering a possible foreign animal disease, you should contact your federal or state animal health official immediately. It is important that you obtain a complete and thorough history to include questions regarding disease onset, recent foreign travel by employees or visitors, feed sources (i.e. garbage feeders), other species of animals also exhibiting similar or abnormal clinical signs, efficacy of prior treatments, recent animal movements (introductions and ship-ments), consumption of foreign foods by employees, etc. Answers to these and similar questions may increase your suspicion of a FAD even in the absence of "abnormal" clinical signs or lesions.