AASV Swine Health Committee Considers Seneca Valley Virus Response

The Swine Health Information Center (SHIC) asked the AASV Swine Health Committee to evaluate the status and possible responses to the recent Seneca Valley Virus (SVV) cases. The committee met by conference call on September 8, 2015 and was presented with up-to-date information regarding the most recent cases as well as the results of a PCR survey of oral fluid samples conducted at both the ISU-VDL and the U of MN VDL. Each lab retrospectively tested approximately 1000 oral fluid samples from swine not reported to be exhibiting clinical signs indicative of SVV (acute lameness accompanied by vesicular lesions on the snout, coronary band and/or hoof) submitted to the diagnostic lab during the week of 8/24/2015. The virus was detected by PCR from samples submitted from numerous states.

The committee concluded that early evidence suggests SVV is a widespread Emerging Swine Production Disease (ESPD) fitting the criteria of a TYPE 3 emerging disease outbreak. Those criteria include:

- Widespread areas of infection, and/or infections that are geographically and epidemiologically distinct, are detected involving a large portion of swine production centers in the United States.
- There is inadequate knowledge about the disease, how it spreads, effective prevention and/or control measures, and risk pathways for disease entry and spread.
- There is little to no likelihood of controlling the disease using quarantine, stop movement or depopulation, and no known or effective vaccine, treatment or control strategies.
- It is expected to take greater than one year to develop the needed tools and information to mitigate negative effects of the disease on swine health, welfare and producer profitability.

[NOTE: the TYPE 1, 2 and 3 designations are derived from a draft Emerging Disease Response Plan being developed through a joint effort involving AASV, NPB, NPPC, SHIC and USDA.]

The clinical signs and gross lesions of SVV are indistinguishable from vesicular foreign animal diseases (FAD) including foot and mouth disease, vesicular stomatitis, and swine vesicular disease making rapid response and differential diagnosis imperative. Complacency in continuing to monitor for FADs could be devastating to the livestock industry of the U.S. So, cases presenting similarly to FMD, VS or SVD must be treated as such until the FADs can be ruled out. The AASV SHC concurred that the observation of vesicles in pigs should be treated as a potential FAD necessitating the following activities:

Herd veterinarian roles and responsibilities:

- Intensive surveillance for gross lesions and clinical signs (see the pigs)
- Upon encountering a suspect case, the veterinarian should:
  - Stay at the site to await instructions from state or federal animal health officials
  - Stop all people, vehicular and animal movements
  - Call the state or federal animal disease control officials
- Once the disease has been determined to not be an FAD:
  - As with any clinically sick animal, SVV positive animals exhibiting clinically-active lesions cannot be shipped to slaughter.
  - Once lesions are no longer active, the state animal health official(s) should notify the slaughter plant and the USDA Food Safety and Inspection Service of the diagnostic findings before the animals are shipped to slaughter if healing erosions are still present. FSIS is currently working to determine what additional documentation may be necessary to verify FAD-negative status.

Producer roles and responsibilities

- Do not move animals which are ill or exhibiting clinical signs including clinically active lesions
- Segregate/isolate (if possible) affected animals on the site
- Disclose and report movements leading up to and immediately surrounding the onset of clinical signs
- Allow for sample collection and submission
- Communicate with state and local officials

Additional guidelines are available in the *Procedures to Report a Suspected Foreign Animal Disease* document on the AASV website.