

## PDCoV Monitoring

- There were 0 breaks this week with 24 of 26 systems reporting.
- There were 2 additional retrospective herd breaks, ranging from June 2015 to January 2016.

### \*\*\*PRRSv Time to Stability at Farrowing Study Update\*\*\*

As a reminder, the objective for this study is to determine PRRSv time to stability (TTS) at farrowing, and we are still enrolling herds. Eligible herds include all SHMP participating sow herds with new PRRSv breaks. Please contact Hunter ([baldr023@umn.edu](mailto:baldr023@umn.edu)) if you are interested in participating.

There are currently 15 herds from 6 different systems enrolled in this study, with results currently available from 5 herds. 15 out of 54 samples collected at farrowing have tested positive by PRRSv PCR. Percent positive samples per farm by sampling period varies from 0% to 100%. Participating herds have used either MLV (n=8), LVI (n=1), or a combination of both (n=4) as their control method of choice.

### Seneca Virus A case report part 2 of 3: Case description

Steve Tousignant, DVM, PhD; Laura Bruner, DVM; Jake Schwartz, DVM  
Swine Vet Center, P.A. – St. Peter, MN

Kim Gerardy, BS; Abbey Canon, DVM, MPH; Derald Holtkamp, DVM, MS; Iowa State University – Ames, IA  
Questions: [stous@swinevetcenter.com](mailto:stous@swinevetcenter.com)

This week we are continuing our discussion of a recent Seneca Virus A outbreak on a sow farm. As part of the response effort, a complete outbreak investigation was conducted in collaboration between veterinarians with the Swine Vet Center, Iowa State University College of Vet Med and the manager of the site.

The outbreak investigation explored all known/suspected routes of transmission including: swine movements, vehicles and trucking, deliveries and items entering the farm, personnel, manure and mortality removal, and finally air and water movement. Additionally, differences between site 1 (clinically affected sow farm) and site 2 (non-affected farm within same company, about 2 miles away) were identified and described.

Key findings of this investigation included:

- There was an incident approximately 2 weeks prior to the onset of clinical signs where a cull sow trailer was used to haul replacement gilts with less than 24 hours down time after trip to cull station.
  - Driver reports wearing plastic boot covers at cull station, however, they quickly became torn and ripped while unloading and walking around site
  - This was a one-time event, as the replacement gilt trailer was out of service that week
  - Truck was washed in a commercial wash station in an area that has a significant amount of swine traffic
    - Cold water wash, and high rate of synergize used
  - No line of separation at loading chute of barn, personnel entered trailer during unloading
  - First clinical signs were reported in the gilts that were moved on this cull sow trailer
- Site 1 shares a compost pile with 5 other wean to finish (WTF) sites within the production company, and also shares a tractor for hauling mortality
  - There was an indication that one of these wean to finish sites was infected with SVA the week prior to outbreak at site 1
    - Did sow farm wean positive pigs prior to clinical signs, or was the wean to finish site infected first, and then contaminated sow farm? (more next week)
- The feed mill for the entire company is on the same property as Site 1, and all vehicles use a common entry and pass within 40 yards of the barn.
  - It is not clear if any of the other WTF sites have become contaminated since the outbreak (other than through the weaning of positive pigs)
- Site 2
  - Has dedicated compost and tractor
  - No non-sow farm related activity on this site
  - Did not have gilt or cull sow movements in the period prior to outbreak at site 1

Our investigation revealed several possible routes of entry into site 1. Most notably was a one-time event of using a cull sow trailer to haul gilts onto the farm. Additionally, the sow farm shares a compost pile with 5 wean to finish sites, one of which tested positive for SVA. Finally, the feed mill for the company is on the same property as the affected sow farm. The non-affected sow farm has a dedicated compost pile, did not move culls or gilts, and has no non-sow farm related traffic.

Next week we will share the results of the SVA shedding study that was funded by the Swine Health Information Center (SHIC).