

PDCoV Monitoring

Starting this week, health status data regarding Porcine Delta Coronavirus (PDCoV) have also been requested from participants. We will continue collecting case updates, both retrospective and moving forward, and will share the aggregated results in the near future. Thank you to all participants for your continued willingness to share data!

Seneca Virus A Case Report, Part 1 of 3: Case Description

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

Beginning in August of 2015, there were increased reports of vesicular lesions being identified on the snouts and feet of pigs on farms across the United States. Foreign Animal Disease investigations were immediately initiated on these farms. After being confirmed negative for foreign animal diseases, Seneca Valley Virus (or Seneca Virus A (SVA)) was detected in the vesicular fluid collected from those pigs. While not a new disease in the US, the sudden onset of cases this fall is a reason for concern. And while this disease does not appear to cause major production losses, it is significant given the similarity to lesions seen with Foot and Mouth disease.

Below is a case report of an outbreak on a 1,200 head, continuously filtered, PRRS vaccine stable, PED/Mycoplasma negative farrow to wean farm in south central Minnesota (Farm 1). Approximately 2 miles north and west of this site is a second 1,200 head, non-filtered farm (Farm 2). Gilts are produced internally at Farm 2, moved to an offsite developer, which then feeds gilts back into each sow farm. To date, Farm 2 and the gilt developer have never displayed clinical signs, or had any diagnostic evidence of infection.

On Saturday August 29th, 2015 we were contacted by the manager at Farm 1 who reported a sudden increase in lameness in gilts. On the following day, vesicular lesions were seen on the snouts of a few sows in gestation. On Monday August 31st, The Minnesota Board of Animal Health conducted a Foreign Animal Disease Diagnostics investigation which returned negative for all Foreign Animal Diseases including Vesicular Stomatitis, Vesicular Exanthema, and Foot and Mouth disease. Samples tested positive only for SVA. By Tuesday, September 1st, clinical signs were evident in nearly 80% of sows in gestation and farrowing barns. Lesions included dramatic vesicles on the snout and coronary bands, as well as ulcerations on the feet. Usually multiple lesions types were found on each sow.

Sows seemed lethargic, and were reluctant to stand. Fever was not a significant event on this farm and while feed intake was somewhat reduced during the outbreak, it was not as dramatic as expected given the severity of the snout lesions on most sows. In farrowing, pre-weaning mortality (PWM) increased approximately 10% in the groups farrowing during the week of the outbreak. This was attributed to increased rate of laid-on piglets and some neonatal diarrhea, which are thought to be manifestations of the sows having sore feet, not feeling well, and poor milk production.

Within 7 days, lesions on snouts and feet were beginning to heal and sow activity was dramatically improving. By 14 days post-outbreak, most lesions were completely healed and by 21 days post-outbreak, few discernable lesions were found. Additionally, farrowing performance returned to normal by the next farrowing group. Clinical signs were never observed in any piglets in farrowing or post-weaning where they were comingled with piglets from Farm 2.

In the coming weeks we will share information from this case including an epidemiologic investigation (part 2) and the results of a shedding study (part 3) that was funded by the Swine Health Information Center and the University of Minnesota Veterinary Diagnostic Laboratory.