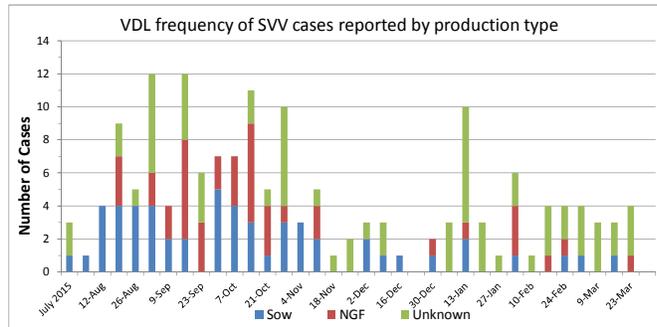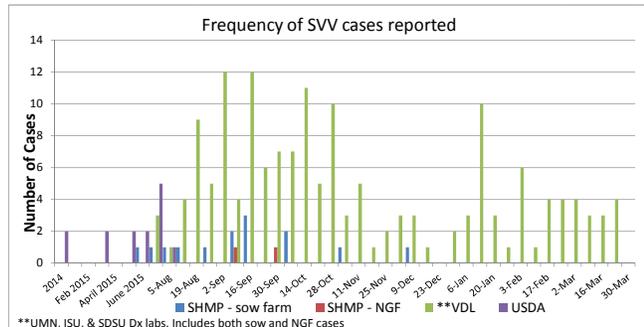# Seneca Valley Virus Update

We requested SHMP participants and UMN, ISU, and SDSU diagnostic labs to report frequency of Seneca Valley virus cases each week.

- 3 new SVV cases to report this week
- Note that the reported cases between data sources may overlap

Frequency of SVV cases reported

SHMP - sow farm · SHMP - NGF · **VDL · USDA
**UMN, ISU, & SDSU Dx labs. Includes both sow and NGF cases

VDL frequency of SVV cases reported by production type

Sow · NGF · Unknown

Monitoring and updating the value of productivity losses due to PRRSv

Gustavo Silva, Derald Holtkamp, Daniel Linhares
Iowa State University

Implications

- ISU and UMN are working on a National Pork Board (NPB) study to update 2x/year the estimates on the economic impact of PRRSv on the US Swine Industry
- The estimates will allow the NPB to monitor progress toward its goal of reducing the impact of PRRSV by 2020.
- Study will use aggregate data from the SHMP and will report the estimated value of lost productivity attributed to PRRSv for breeding herds and growing pig sites.

Background

Holtkamp et al estimated in 2012 that the value of lost productivity due to PRRSv in the US swine industry was $664 million/year1. Anecdotal reports from veterinarians indicates that in recent years changes have been made to prevent, control and eliminate PRRSV 2–4. Empirical evidence showing a reduction in the annual incidence of PRRS outbreaks (SHMP data) suggests that some of the changes may be working. In 2014, the National Pork Board (NPB) developed a strategic plan that identified the following goal to drive sustainable production: "By 2020, the National Pork Board will deploy tools and programs to decrease the annual economic impact of PRRS by 20 percent." Therefore, the objective of this study is to provide semi-annual updates of the estimated value of lost productivity in the US swine herd attributable to PRRS virus. The updated estimates will allow NPB to monitor progress toward the goal of reducing the impact of PRRSv.

Methods

The same enterprise budgeting model that was used to conduct the 2012 study will be used to estimate the value of the productivity losses attributed to PRRSv. Standard market hog prices, input prices and costs entered in the budgeting model will be updated using some of the sources of information used in the 2013 study. To adjust for fluctuations of hog and crop markets, an index will be created taking in consideration only the changes in productivity attributed to PRRSv (fixing market conditions).

Collaborative efforts with SHMP

The economic model has a PRRSv-classification system based on previous 52 weeks, which takes in consideration not only current PRRSv status but also previous history of PRRSv infection (i.e. protective value of prior immunity). To assure consistency over time, we will work in collaboration with the SHMP.

SHMP agreed to provide the aggregate information of pig site classifications, maintaining the anonymity of the herds / production systems. This partnership will leverage the value of the data collected with the SHMP to estimate the impact of PRRSv for the industry.

Participants: Gustavo Silva (ISU), Carl Betlach (UMN), Derald Holtkamp (ISU), Daniel Linhares (ISU), Robert Morrison (UMN).

References

1.Holtkamp, D. J. *et al. J. Swine Heal. Prod.* 21, 72–84 (2013); 2. Morrison, R. B. *Proceedings of the 2012 Banff Pork Seminar 22*, (2011); 3. Linhares, D. C. L., Johnson, C. & Morrison, R. B. *PLoS One* 10, e0144265 (2015); 4. Linhares, D. C. L. *et al. Prev. Vet. Med.* 116, 111–119 (2014).