Morrison Swine Health Monitoring Project
Incidence Year 2018/2019 Annual Summary

Cesar A Corzo

I would like to begin this summary by acknowledging the three parties that make this project successful, MSHMP participants, the Swine Health Information Center and the MSHMP team. MSHMP participants deserve recognition not only for their commitment with the project but also for the willingness to share sensitive data with us at the University of Minnesota. On the other hand, financial support by SHIC has been tremendously valuable for us to continue providing participants and the industry with near real-time incidence data while we continue to assemble a system for national preparedness. Last but not least, the MSHMP team, Mariana Kikuti, Emily Geary, Paulo Fioravante, Juan Sanhueza and Carles Vilalta, the team has done a great job at analyzing data, automating processes and continuing to challenge our system looking for opportunities.

Objective 1 – Disease incidence

PRRS – A significant decrease compared to previous years. This drop from 34% in 2017/2018 to 21% in 2018/2019 is the largest difference we have seen between two consecutive years.

PED – Followed the same trend as a significant reduction was observed with approximately 50% fewer cases compared to the previous year.

The low incidence reported for PRRS and PED demonstrates that these diseases can be prevented and the factors that influenced this incidence reduction should be investigated. Additionally, the fact that both diseases had a lower incidence during the same year is particularly interesting coincidence and warrants further investigation.

Objective 2 – Prospective monitoring of PRRSv

More than 23,000 PRRSv sequences from 21 participants in 19 states were entered into a database containing date and location in most of the cases. We are currently analyzing the data looking for clusters in time and space and hope to report findings soon.

Objective 3 – Develop the capacity to capture and analyze movement data

In the last year, a major breakthrough occurred as we are currently monitoring in real time a total of 10 vehicles, a mix of trucks and trailers, hauling pigs. Data is being generated consistently and reliably. We are currently exploring the best ways to retrieve, configure and analyst the data to continue to make it relevant for production systems.

Objective 4 – To expand participation to allow all to be involved

Expansion continues as we are in the process of adding growing-finishing sites to our database. We have purposely decided to begin slowly as we need to understand the characteristics of this population when it relates to health status, sow herd flow, dynamic locations and monitoring protocols.

In general, 2018/2019 has been an exciting year with new developments and challenges. We look forward to continue to work with all of the participants, receive your comments/questions/feedback and continue to tailor this tool for the industry.

Sincerely,

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