RESEARCH ABSTRACT

SWINE HEALTH

Title: An Industry Education Program for Understanding the Risk Factors Associated with PRRSv Breaks in Negative or Naïve Breeding Herds – **NPB #06-187**

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Abstract

A variety of methods have been applied for the elimination of PRRS virus from swine production sites. The initial success of these methods has been variable, and the reasons for failure are not well understood. For those sites that are successful with their initial PRRS virus elimination efforts, success in maintaining a PRRS-negative or naïve status for extended periods of time following elimination projects has been inconsistent and unpredictable. In 2006 a five-year PRRS-CAP funded study entitled "Quantifying risk and evaluating the relationship between risk score and PRRS-negative herd survival" (PRRS Site Survival Study) was initiated to test whether survival of PRRS virus negative or naive swine breeding herd sites (where "survival" is defined as remaining negative or naïve) is influenced by:

1) Risk factors as well as a composite of risk factors in the form of risk index scores measured using version 2 of the AASV PRRS Risk Assessment for the Breeding Herd
2) Season of establishing the site as negative or naive
3) Method of establishing the site negative or naïve
4) Region of the U.S. in which site is located

An integral part of the PRRS Site Survival Study is the PRRS Risk Assessment for the Breeding Herd and therefore, the first objective of this project was to promote use of PRRS Risk Assessment for the Breeding Herd and population of the database with risk assessments to enhance the value of benchmarking the risks measured by the tool. Additional objectives included creating benchmarking reports for sites that are undergoing a PRRS virus elimination project as well as those collaborating in the PRRS Site Survival Study, and presenting uses of the PRRS Risk Assessment to those seeking to more rigorously manage the risks associated with PRRS. Each of these objectives have been met: 1) the PRRS Risk Assessment database now includes over 800 sites with 256 sites from the PRRS Site Survival Study, 2) all 42 of the PRRS Site Survival Study collaborating veterinarians received a comprehensive benchmarking summary in the Fall of 2007, 2) the new web-based PRRS Risk Assessment (called PADRAP) was launched in November 2007 and since then 83 veterinarians have been trained, and 3) application of PRRS Risk Assessment program has been presented at three conferences in 2007.

For more information contact:
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Since its release, the authors are aware of several ways in which swine veterinarians have used the PRRS Risk Assessment to help producers:

1. To evaluate current and develop new biosecurity protocols
2. To demonstrate improvement in biosecurity over time to help justify expenditure of resources on measures to improve biosecurity
3. As an aid in the decision to initiate a project to eliminate PRRSv from a breeding herd site
4. As a tool to identify modifiable risk factors in an effort to increase the likelihood that an elimination project will be successful long-term
5. As an aid in the decision to use a breeding herd site to produce genetic animals and
6. As part of the due diligence process for purchases or contracting agreements

Producers interested in using the PRRS Risk Assessment for the Breeding Herd are encouraged to contact their veterinarian. For more information on the web version of the PRRS Risk Assessment for the Breeding Herd please email aasv@aasv.org or call the AASV office at 515-465-5255.