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### REGIONAL PRRS CONTROL WITHIN A HIGH PIG DENSITY AREA: SOUTHEAST IOWA

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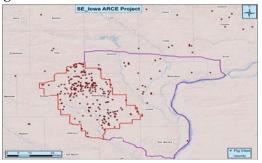
### Introduction

The annual loss associated with PRRS in the US swine industry has been recently estimated at USD-\$664 million. The elimination of PRRS virus (PRRSv) from breeding herds through load. homogenize and close protocols is effective and repeatable;<sup>2</sup> however, transmission between farms occurs all too often, making it very difficult to meet and maintain health and productivity expectations.<sup>3</sup> An alternative is to implement cooperative and coordinated disease control efforts in order to significantly reduce the risk of re-infection in those herds. The objectives of this project are: 1) Reduce the incidence and prevalence of PRRS in the region. 2) Minimize the severity and duration of PRRS episodes, and 3) Establish a structure for disease surveillance and communication in the region.

### **Materials and Methods**

As part of this voluntary project, producers sign participation agreements to allow information sharing. Every other week, veterinarians communicate any change in PRRSv infection status during the previous 2 weeks to the coordinator. A prevalence summary table, a list of herds that changed status and the maps are updated in a bi-weekly bulletin. Quarterly meetings are held to discuss needs and actions as well as to evaluate the progress of the initiative considering change in prevalence, number of new cases and genetic diversity. The primary control area of this project is mostly occupying Washington County, located in Southeast Iowa. A peripheral control area includes parts of the 6 surrounding counties and 3 more counties to the Northeast (Fig 1). Washington County is the sixth most hog dense county in the state of Iowa and twelfth in the US.4

Figure 1. Southeast Iowa PRRS control area



#### Results

By December 2011, 21 breeding herds, 42 nursery sites and 256 finishing sites have enrolled in the project. Most are family owned farms averaging 2700 pigs per site. About 40% of the herds have been reported as PRRSv stable or negative and the infection status of 5% of herds remains unknown.

### **Conclusions and Discussion**

The regional control plan for this project is based on the use of modified-live virus vaccination in breeding and grow-finish herds, air filtration in specific sow farms and comprehensive biosecurity programs to systematically mitigate the impact of PRRSv and reduce transmission between herds. The surveillance protocol allows for early detection of infection and facilitates communication to coordinate interventions, pig flow and transit.

#### References

- 1.Holtkamp D. www.pork.org/News/1265/ 2011.
- 2. Dee SA, et al. JSHAP. 3(2):64-69. 1995.
- 3. Holtkamp D, et al. Prev Vet Med 96(3-4):186-193. 2010.
- 4. USDA. Census of Agriculture. 2007.

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