



Swine Product Update:

Boehringer: Complimentary Tools Help Pork Producers More Effectively Control PRRS On The Farm

Source: Boehringer Ingelheim news release

Thanks to continuing research in the areas of porcine reproductive and respiratory syndrome (PRRS) management over the past several years, swine producers now have more "tools in their toolbox" when it comes to preventing and managing the disease. According to Scott Dee, DVM, Ph.D., with the Swine Disease Eradication Center at the University of Minnesota, developments in area-wide mapping, aerosol transmission and air filtration, herd risk assessment models, new surveillance methods and improved vaccination strategies over the past few years now give producers more ways to successfully prevent and manage the disease.

Dee, who spoke at the 2009 World Pork Expo, said many of these recent PRRS-control strategies are complementary and can easily be integrated into a management program that best fits the individual production, health status and goals of each system. "Today more than ever before, producers can take a holistic, systematic approach to managing PRRS with greater success. Our improved understanding of the dynamics of the virus, transmission, infection, diagnosis and monitoring, and vaccination protocols has helped us provide producers with highly effective tools to turn the tide on PRRS infections."

Several of the PRRS-control developments that Dee covered in his presentation included the use of geographical information systems to help producers map and analyze the status of PRRSv in pig sites within a region, which has become a fundamental tool in area PRRS control programs. "Extensive mapping and modeling of PRRS status and movement now allows us to more accurately predict and track PRRS spread in a region with greater accuracy based on pig movement, flows, transportation and delivery networks, biosecurity and other patterns," Dee explained.

An important issue related to area-wide control that Dee discussed was aerosol transmission and the use of appropriate air filtration systems to help mitigate transmission of the virus. "Our research as it relates to area/regional PRRS control and elimination shows that the virus can travel long distance in the air and presents a significant risk factor in the spread of the disease under certain weather conditions," Dee said. "In addition, appropriate air filtration is an essential component of an effective biosecurity program for swine-dense regions."

Another PRRS-management tool Dee discussed as a complementary component was on-farm risk assessment programs, which help managers identify various risk factors for disease in their systems. "Conducted by individual farms, risk assessments are a critical first-step to uncovering historical and current management and biosecurity issues that impact PRRS infection in a system," Dee explained. "Individual farm assessments can be analyzed within a specific area or region to compare PRRS status and risk and improve disease control within that region."

A developing PRRSv monitoring method that shows promise in area/regional control surveillance programs is the use of oral fluid diagnostic sampling. Similar to a process used in screening for diseases in humans for nearly a century, Dee said ongoing research by Iowa State and other organizations shows oral fluid sampling to be an easy and effective monitoring tool. "Using a simple cotton rope, the pigs' natural chewing behavior, and PCR lab diagnostics, this method may be effective in monitoring not only PRRS, but PCV2, SIV and other diseases."

Lastly, Dee presented information on how vaccination protocols can be used in the breeding herd and entire pig production pipeline to reduce transmission of PRRS virus and improve clinical response to infections and overall pig performance in the face of disease challenge.

"The most effective and successful PRRS control and prevention within an area requires a high degree of cooperation, coordination and collaboration within and among production systems in a region," Dee concluded. "Fortunately, producers have a number of effective tools available to better help them determine current status, assess PRRS risk, measure and monitor infection status and improve their disease-management decision making."