Thank you for participating in SowBridge 2010.
To start this presentation, advance one slide by pressing enter or the down or right arrow key.
For additional PRRSV information, you're welcome to contact Locke Karriker at Iowa State University.
Locke Karriker
2227 Lloyd Vet Med Center
Ames, IA  50011-1250
Ph. 515-294-2283
E-mail: karriker@iastate.edu

What I hope you take from this presentation
• Motivation to assess the biosecurity risks in your operation(s)
• Introduction to a tool that you may find helpful for assessing your biosecurity risks

The big picture
• The pork industry is an increasingly high risk industry – disease is a major source of that risk
  – Difficult to control diseases that are endemic to the U.S. like PRRSV
  – Diseases with human health implications like A/H1N1
  – Emerging diseases like PCV2
  – Foreign animal diseases like FMD
  – Waiting until an incident or problem occurs and then scrambling to contain it is NOT a strategy that will lead to the long-term survival and global competitiveness of our industry
• We need to be able to minimize the risk of introduction and transmission of the pathogens that cause these diseases

The smaller picture
• Essential component of successful PRRSV elimination / eradication at the herd, regional, national and continental level
  – Innovation of herd closure and rollover strategies has provided a major advantage on the battlefield
  – The inability to keep herds negative is stopping us from exploiting that advantage
  – The AASV Production Animal Disease Risk Assessment Program (PADRAP) is a standardized method of capturing and quantifying information about biosecurity practices that is essential for learning how to keep herds negative
• Also important for learning how to prevent positive herds from breaking over and over

Assessing Biosecurity Risks for PRRS virus
Dr. Derald Holtkamp, Iowa State University,
College of Veterinary Medicine
Email: holtkamp@iastate.edu
Phone: 515-294-9611
• Eradication is the only clear road I can see for dealing with PRRS
  - Keeping the virus out of herds and minimizing / eliminating lateral transmission between growing pig / breeding herd sites is the major remaining barrier

1. Biosecurity
2. Biosecurity
3. Biosecurity

What can you do to assess the biosecurity risks in your operation(s) to prevent them from breaking over and over or to keep them negative (if you are fortunate enough to already be there)?

What can you do to assess your biosecurity risks?

The American Association of Swine Veterinarian’s Production Animal Disease Risk Assessment Program (PADRAP)

Hierarchy of External Risk Factors in PADRAP
(Bio-exclusion)

Hierarchy of Internal Risk Factors in PADRAP
(Bio-management)
History of Development

- **Fall 2002:** Design and development of the PRRS Risk Assessment for the Breeding Herd was done at Boehringer Ingelheim Vetmedica Inc. (BIVI) – work began in fall of 2002
- **March 2005:** BIVI offered to gift the tool to the American Association of Swine Veterinarians (AASV)
- **March 2006:** AASV, with support from National Pork Board (NPB) and USDA accepted the gift
- **September 2006:** Iowa State University College of Veterinary Medicine, Food Supply Veterinary Medicine entered into an agreement with AASV to establish the Production Animal Disease Risk Assessment Program (PADRAP) to develop, manage and promote disease risk assessment tools and databases of completed risk assessments held by AASV
- **November 2007:** Launch of web version – “PADRAP-Online”

Present

- **Collaborative effort**
  - AASV
  - NPB providing financial support
  - USDA, APHIS providing financial support
  - ISU providing program coordination
  - Boehringer Ingelheim Vetmedica providing in-kind support
  - PRRS-CAP (CREES, NC-229)

How to Start Using the Risk Assessment Tool

- Producers should contact their veterinarian(s)
  - To insure the validity and quality of the data collected with the assessments only trained veterinarians are being given access to the tool
- Veterinarians may attend an AASV hosted training session
  - Contact Tom Burkgren at AASV to let him know your interest

PRRS Regional Control Project in Iowa County, Iowa

- **Selected area**
  - 36 Production sites
  - 18 finishers (900-4000)
  - 2 nursery (1200-2000)
  - 10 farrow-finish (10-350 sows)
  - 3 breed-wean (320-2400 sows)
  - 3 vacant pig sites

Can the Golden Rule be applied to PRRS virus?

- Because area spread is such a prominent characteristic of the PRRS virus – What you do affects your neighbor and what your neighbor does affects you!
Working Group Members

- Iowa Pork Producers Association
- Iowa State University
- ISU Diagnostic Lab
- Funding
  - Iowa Pork Producers Association
  - PIC
  - PRRS CAP
  - Boehringer Ingelheim Vetmedica Inc.

Objectives

- To demonstrate and develop steps needed to implement a regional PRRS control program
- Study the impact of PRRS virus movement within a prescribed area over time
- Study the impact of pig movement on the PRRS virus into and within the study area
- Reduce the prevalence of the PRRS virus within the selected area

Challenges

- Pig dense area with weaned and feeder pigs moving in/out of the area
  - Significant influx of non-Iowa, non-locally produced growing pigs
- Producer recruitment
  - Hold Harmless Agreement
  - Confidentiality
  - Attendance at meetings
- Funding

Other PRRS virus regional

- Projects are predominantly driven by producers and veterinarians in the project areas
- Others
  - Universities
    - Iowa State University
    - University of Minnesota
    - University of Pennsylvania
    - University of Nebraska
    - Michigan State University
  - Boehringer Ingelheim Vetmedica (BIVI)
- Funding sources
  - IPPA (other state associations?)
  - USDA PRRS CAP
  - BIVI
  - PIC
  - Other industry partners
  - NPB? – not yet

Early efforts

- Regional eradication projects – early projects
  - Stephens County Minnesota project
  - Sonora, Mexico
  - Quebec, Canada

Train is getting more crowded

- Regional eradication projects - newbies
10 Participating Areas

- Northwest Indiana
- Western Michigan
- Western Illinois
- Pennsylvania
- Ontario, Canada
- North Central Illinois
- Minnesota
- Cumins County, Nebraska
- Carson, Colorado
- Iowa County, Iowa

Methods

- Enroll producers by obtaining production information for each site
- Initial PRRS testing of each site
  - By serum (PCR and ELISA)
- Complete PADRAP for each site
- Routing testing of sites
  - By serum and oral fluids
- Sample sites with active PRRS infections to determine presence of virus and characterize

Herd Veterinarian

- Each site will designate their own vet
- Vets responsible for
  - Developing herd plan with producers
  - Conduct PADRAP analyses
  - Routine sampling of sites

Learn more about the regional projects