

Swine Committee Report

2014 NIAA Annual Conference

Tuesday, April 1, 2014



The Swine Committee met on Tuesday, April 1, 2014 from 10:00 a.m. to 12:30 p.m. during the 2014 NIAA Annual Conference in Omaha, Nebraska, with about 52 people present. Dr. Butch Baker and Dr. Harry Snelson served as Co-Chairs. Dr. Snelson provided updates on the awards banquet for the evening activities and covered other housekeeping items such as the lunch-time business meeting for today.

The committee session focused on swine health issues and challenges including updates on PED activities, activities within USDA and updates on FDA Guidance documents for antimicrobial use. The following speakers presented relevant information pertaining to swine health challenges such as PEDV. Other topics included USDA activities and risk assessments as well as FDA antimicrobial issues.

Lisa Becton, DVM MS DACVPM – Director, National Pork Board, presented “Update on PEDV Research” The presentation focused on a review of National Pork Board past, present and future research activities for PED. A review was given of the research that has been done for PED since June 2013. Then a review was provided on the current and future activities for PED and other diseases like SdCV. The National Pork Board has committed nearly \$1.7 million dollars to research PED since June of 2013.

Butch Baker, DVM MS – Interim Director of the Iowa Pork Industry Center, ISU Extension and Outreach, Iowa State University, presented “PED Lab Update”

Dr. Baker gave an overview of the diagnostic reach of the Iowa State University Veterinary Diagnostic laboratory and the financial impact of the presence of the virus. Dr. Baker provided an overview of where the virus has been identified in the U.S. and how the breakout of the cases for PED looks within different types of farms. Dr. Baker provided a review of the various coronaviruses that are present in swine populations. For PED diagnostics, a wide range of sample types can be utilized for detection including: feces, oral fluids, and serum. Dr. Baker gave a review of the new virus, Swine Deltacoronavirus that has been identified and provided a review of what is currently known about that virus. One concern is to make sure that the portal through which these viruses have entered into the United States, is identified and shut down.

Paul Sundberg, DVM, PhD – Vice President, National Pork Board, presented “PED Producer Update”

Dr. Sundberg provided a producer perspective dealing with the PED virus. He started with a review of the Working Groups and Task Force members that have been developed since May of 2013. There was also a Packer Working Group to assess the impact of transportation on the spread of PEDV. Dr. Sundberg reviewed the subsequent actions and packing meetings (market hog and sow) that were held to address packer-specific issues for PED. The concept of the Rapid Response Team was reviewed, as this effort was a cooperative effort with USDA and NPB to have a group of investigators that can go look at epidemiologically distinct outbreaks of PED/SdCV that are different from other outbreaks. The goal is to try to learn from these outbreaks of what is new or different and how to we apply that to management of PED for the future. Dr. Sundberg also reviewed some additional surveillance of PED cases from University of Minnesota, Dr. Bob Morrison/Dane Goede. Dr. Sundberg reviewed the resolution from the

2014 Pork Forum to focus on emerging diseases and how to react, respond, and contain those diseases. The last part is to strengthen the defense against unwanted pathogens for all of US agriculture.

Lisa Ferguson, DVM – National Director, Policy Permitting and Regulatory Services, APHIS, VS, National Import Export Services, presented “Pathways Analysis Project”

Dr. Ferguson reviewed the USDA activities that focused on a broad assessment of what potential pathogens could enter into the United States. The assessment was not necessarily pathogen specific, but the goal was to look at the pathways on how pathogens could enter the US and then estimate the likelihood of the pathogens causing disease. Dr. Ferguson showed the template and questions that were utilized for the entry assessment. The viruses that were evaluated included: Classical Swine Fever, Pseudorabies, and Foot and Mouth Disease. Different ways that these pathogens could be spread were assess: airborne, inanimate articles, and live animals that may serve as vectors or fomites. Feed was assessed as a subset for pathway assessment. The different products and pathways were reviewed as potential sources for contamination. Also utilized literature for support of the risk assessment for pathways. Most of the pathways examined had a negligible risk of entry for the viruses reviewed.

Troy Bigelow, DVM – USDA, APHIS, VS, NCAHP, presented “VS’s Current Swine Activities and Updates”

Dr. Bigelow provided an update on the diseases of interest for surveillance including Pseudorabies virus and Swine Brucellosis. There was a review of Tools for assessment of intervention – TAI0 and looking at how it can impact producers and provide efficiencies for surveillance processes. There is also a movement to assess slaughter surveillance samples and how to readjust sampling for risk vs. rote sampling. A review of CSF was also given. There are 5 different streams being tested. There will be a focus on data quality for accurate surveillance activities; better usage of forms to track origin of samples and make sure samples are attributed correctly; and looking at different CSF testing platforms. Dr. Bigelow gave an update on SIV surveillance. The accessions have increased from F?Y 2012 to FY2013. FY 2014 is looking to surpass the 21,000 samples from 2014. An update was given on the status of PED activities for 2013-2014 and the NAHLN collaboration for disease tracking and surveillance. Dr. Bigelow reviewed activities for Comprehensive Integrated Surveillance to potentially include active surveillance pilot for FAD’s.

James McKean, DVM, PhD – Ext Veterinarian, Iowa State University, presented “FDA Antimicrobial Update”

Dr. McKean provided a review about the antimicrobial issues from FDA. There will be more prescription controls for feed and water medications as well as additional restrictions on extra-label medications. Many samples are now on the radar for additional “non-steroidal” activity on testing. There are two different routes for the use of a drug: label usage and extra-label use. Anything outside of those two usage is illegal. Guidance 209 is just that, a guidance for the industry. It will involve phasing out production use of medications in feed and calls for more veterinary oversight for prescriptions. Most of the medications on the list are also on the list for humans. Dr. McKean also reviewed some of the more detailed descriptions of the intent of the Guidance documents including prescriptions requirements for VFD’s.

Old Business:

There was a review of all current resolutions.

SW1 – Funding for Infectious disease Research and Field Studies: Motion made to reaffirm and 2nd. Passed by voice vote.

SW2 – Swine health protection act enforcement: Motion made to reaffirm and 2nd. Passed by voice vote.

SW3 – PRRS Research Needs

Motion made to reaffirm and 2nd. Passed by a voice vote.

SW5: Marine Act of 1920

Motion made to reaffirm and 2nd. Passed with a voice vote.

SW7: Free Ranging Species Research

Motion made to reaffirm and 2nd. Passed with a voice vote.

SW8: HACCP – Swine Disease Analysis Program ...

Motion made to reaffirm and 2nd. Did not pass by voice vote. So it will not be reaffirmed.

New Business:

- A new resolution was put forth on **PED**.

Title: Porcine epidemic diarrhea virus (PED) Research Need

BACKGROUND: Porcine epidemic diarrhea virus (PED) emerged in the United States (U.S.) swine herd in 2013 and is prevalent in all major swine production regions in the U.S. The virus is easily transmitted and there are currently no effective vaccines.

PEDv has had a significant economic impact on U.S. swine producers. In addition, a number of previously exotic corona viruses have also been identified in the U.S. swine herd. As newly emergent, non-reportable, non-regulatory diseases, there is a need for significant funding to support basic and applied research as well as the development of control strategies, epidemiology and prevalence studies. The U.S. pork industry has designated over \$1.4 million to support PEDv research and epidemiology.

RESOLUTION: The National Institute of Animal Agriculture requests that the U.S. Department of Agriculture provide program funding to be used in collaboration with the swine industry for applied and basic research, field studies, control and elimination protocols, and national prevalence studies for PEDV and other emerging corona viruses.

Motion made to adopt the new resolution on PED and 2nd. Passed by a voice vote.

- A new resolution was put forth on **Emerging Diseases**.

Title: Research Needed to Address Emerging Diseases of Swine

BACKGROUND: At least four previously exotic viruses emerged in the United States (U.S.) swine herd in 2013 and 2014. This raises concern within the pork industry regarding the frequency with which this is happening and the apparent inability to prevent their introduction, monitor their movement or mitigate their impact.

Emerging diseases potentially pose a significant economic impact on U.S. swine producers and may adversely affect access to international markets for U.S. pork products and live animals. As newly emergent, non-reportable, non-regulatory diseases, there is a need for significant funding to support response planning, basic and applied research as well as the development of control strategies, epidemiology and prevalence studies.

RESOLUTION: The National Institute of Animal Agriculture requests that the U.S. Department of Agriculture provide program funding to be used in collaboration with the swine industry for

response planning, basic and applied research, field studies, control and elimination protocols, and national prevalence studies for emerging swine production diseases.

Motion made to adopt the new resolution on Emerging Swine Production Diseases and 2nd. Passed by a voice vote.

General Discussion:

Consensus Points:

- 1. PEDv has had and continues to have a significant economic impact on the U.S. swine industry. Additional research is needed to address knowledge gaps associated with topics such as immunity, epidemiology, vaccinology, transmission, etc.**
- 2. Swine Delta Corona virus has been detected in the U.S. swine herd subsequent to the introduction of PEDv. Its significance is as yet unknown. Pathogenicity studies are needed to determine its disease potential.**
- 3. FDA's recent guidance documents restricting the use of antimicrobials for growth promotion and expanding the VFD will impact producer costs and access to antimicrobials for the prevention, control and treatment of swine diseases.**

Committee session adjourned at 1:10PM.