REPORT OF THE COMMITTEE ON TRANSMISSIBLE DISEASES OF SWINE

Chair: Mark Engle, Franklin, KY
Vice Chair: Harry Snelson, Burgaw, NC

Paul L. Anderson, MN; John K. Atwell, NC; C. Carter Black, GA; Philip E. Bradshaw, IL; Becky L. Brewer-Walker, OK; Corrie C. Brown, GA; Thomas J. Burkgren, IA; Max E. Coats, Jr., TX; James E. Collins, MN; Gene A. Erickson, NC; James M. Foppoli, HI; Nancy A. Frank, MI; Michael J. Gilsdorf, MD; Larry M. Granger, MD; Thomas J. Hagerty, MN; Edwin C. Hahn, IL; Michael E. Herrin, OK; Howard T. Hill, IA; Sam D. Holland, SD; John A. Johnston, IN; Charles F. Kirkland, NC; John A. Korslund, MD; Elizabeth A. Lautner, IA; James W. Leafstedt, SD; Donald H. Lein, NY; Bret D. Marsh, IN; David T. Marshall, NC; Charles E. Massengill, MO; James D. Mckean, IA; David A. Nolan, KS; Sandra K. Norman, IN; Gary D. Osweiler, IA; Richard E. Pacer, MD; Kristine R. Petrini, MN; Kurt D. Rossow, MN; Mo D. Salman, CO; John J. Schiltz, IA; Jeff Schnell, IA; Rick L. Sibbel, IA; Dennis Slate, NH; James E. Stocker, NC; Paul L. Sundberg, IA; Paul O. Ugstad, CA; Lyle P. Vogel, IL; Max Waldo, NE; Margaret A. Wild, CO; Larry L. Williams, NE; Pam Zaabel, IA.

The Committee met on October 17, 2006 from 12:30 to 5:30 p.m. at the Minneapolis Hilton in Minneapolis, Minnesota. Approximately 12 committee members and 18 visitors were recorded on roll.

Committee members were welcomed. The Committee was updated on the mission and membership of the committee and the procedures for participation and voting. Dr. Mark Engle notified the Committee that the Pseudorabies (PRV) Control Board had voted to recess their Committee and transfer active consideration of PRV issues to the Transmissible Diseases of Swine Committee. PRV issues will be reviewed at this committee meeting henceforth. The Control Board retains its charge and will meet as needed.

Invited Speakers

Dr. Paul Sundberg, National Pork Board (NPB) filled in for Dr. Pam Zaabel and gave the update on porcine circovirus-associated diseases (PCVAD). A rise was seen in polymerase chain reaction (PCR) positives starting in mid-year 2005. He showed a map highlighting self-reported data on the distribution of PCVAD, indicating that the swine industry needs to enhance its surveillance capabilities. He reported on anecdotal evidence regarding the successful use of porcine circovirus type 2 (PCV2) vaccines in Canada and it appears to hold true in the United States as well, although perhaps becoming a bit more variable. There is progress in reducing mortality and improving performance. Still, researchers need to understand the epidemiology and immunology of the disease syndrome. Sundberg reported on the results of a PCVAD workshop designed to identify research needs. A total of $500,000 toward PCVAD research including a $200,000 cooperative agreement with the United States Department of Agriculture (USDA). Ten research proposals have been funded. Boehringer Ingelheim Vetmedica, Inc. offered $75,000 to fund three projects as well. NPB, in collaboration with the American Association of Swine Veterinarians (AASV), has developed a guide for managing PCVAD.

Dr. David Pyburn provided an update on USDA Swine Health Programs. Regarding the Swine Health Protection Act, 30 states allow garbage feeding including Puerto Rico. In FY06
9,889 inspections were done, resulting in 134 alleged violations. Searches made for non-licensed garbage feeders were 27,202 (found 95). A total of 2,078 licensed facilities were operating at end of FY06 (1,100 in Puerto Rico).

For classical swine fever (CSF) surveillance, the National Surveillance Unit (NSU) developed a plan in FY04. Funding was identified in FY05 and the plan was implemented in FY06. The goal is to integrate sample collection and analysis at the National Animal Health Laboratory Network (NAHLN) labs. Sampling concentrates on 18 high-risk states, including Puerto Rico. Animal and Plant Health Inspection Service (APHIS) is developing a Memorandum of Understanding (MOU) with the Food Safety Inspection Service (FSIS) to collect tonsils for submission, in addition to samples submitted from diagnostic laboratories. APHIS is also conducting an education plan in association with NPB, AASV and the Center for Food Security and Public Health (CFSPH). A total of 9,788 samples were submitted in FY06. The FY07 plan includes the following goals: move feral swine testing to all serology (1,500 to 2,000 samples), garbage feeders (5,000 samples), Florida and Texas, transitional swine (7,000 samples).

Pyburn then discussed brucellosis activities. Thirteen cases were documented in transitional herds. USDA is currently updating regulations to conform with the brucellosis eradication plan. They have funded cooperative agreements through PRV funding.

For PRV, 12 cases were found in transitional herds (six were dual infections with brucellosis.). Pyburn highlighted two goals: 1) detect infection and 2) demonstrate freedom in commercial swine. Funds from the Accelerated Pseudorabies Eradication Program (AEP) were used to depopulate these herds and disinfect the premises.

Regarding compartmentalization, Pyburn discussed the description and implications of compartmentalization and the difference vs. regionalization. Role of Veterinary Services (VS) is oversight of the compartment and rules that govern compartmentalization.

Dr. Nora Wineland provided an update on the National Animal Health Monitoring System (NAHMS) program. The objectives of the study are to: describe trends since last study, determine prevalence/risk factors, vaccine/antibiotic use, changes in mgmt practices. The study involves a questionnaire and biologic sample collection, including Porcine Reproductive and Respiratory Syndrome (PRRS), Swine Influenza Virus (SIV), trichinae and toxoplasmosis – 60 samples from up to 10 pens. The first visit is for Fall 2007, second visit January 2008, trends to be established by March 2008, while biologics collection TBA. Sampling is to include top 17 states and farms with >99 hogs. Wineland also offered copies of the 2005 USDA Animal Health Report.

Dr. Eric Bush provided the National Surveillance Unit (NSU) update. On the CSF surveillance plan, they have developed a CSF surveillance manual, prepared submission forms, allocated cooperative agreements and released the VS laboratory submission module. The CSF program was officially launched in FY06. The primary focus has been lab-based surveillance. NSU has formed a Change Control Board (CCB) to manage changes and enhancements to the program. Currently, there is a need to validate the data and develop reports for distribution.

For the PRV Comprehensive surveillance plan, NSU has completed a pathways analysis and determined PRV could enter via feral swine or possibly reactivation from an old sow. The focus will mostly concentrate on feral swine. There are three compartments: commercial, outdoor with feral access (transitional swine) and feral swine. Dr. Bush described a proposal to enhance
testing of interstate shipments from high risk counties, which includes:

1. Define high risk counties;
2. Implement permitting system;
3. Post-movement testing eligibility (some exemptions made for movements from non-high risk, within a production system, or from “monitored” herds);
4. Post-movement sampling rate; and
5. Receiving states would receive federal funding to support testing.

Discussion revolved around concerns that this would result in changes to interstate movement requirements.

Dr. Harry Snelson provided an update on the National Bio and Agro-Defense Facility (NBAF). The facility will replace the Plum Island Animal Disease Center (PIADC). PIADC is considered to be insufficient to meet animal agriculture needs. In 2003, the Department of Homeland Security (DHS) took over as “landlord” for PIADC. Homeland Security Presidential Directive (HSPD) 9 directs USDA and DHS to work together to develop a new facility. In FY06, $23 million for design and initiation for the NBAF. DHS will put together a conceptual design. Facility current stands at $451 million 520,000 sq ft facility. Will narrow the number of proposed sites down to a “short list” and begin environmental impact studies. There are concerns with the lack of outreach from DHS and USDA to stakeholders to get input on the scope of work to be done at the facility, facility design, and facility location. Will the needs of animal agriculture be met? Will USDA maintain an equal seat at the management table?

Dr. Keith Flanagan updated the Committee on CSF surveillance in developing countries. As he worked in Haiti, CSF was eradicated in the 1980s along with African Swine Fever (ASF). It was, however, reintroduced in 1996. The APHIS program started in 2003. Political and social unrest, natural disasters, lack of infrastructure all contribute to difficulties of addressing disease control/eradication. CSF has been controlled in most areas, thanks to expanded public training. Cysticercosis is an increasing problem in Haiti, particularly in feral pigs. The Caribbean should be considered as a risk to the U.S. swine herd due to relative proximity. CSF is endemic in Cuba as well.

Dr. Patrick Webb provided the Swine Health Advisory Committee update. The Swine Futures Project identifies Advisory Committees as an important component to disease management programs. NPB has received some USDA funding to promote these committees. NPB is in the process of developing a guidance document describing how to establish and maintain a Swine Health Advisory Committee.

Dr. Carter Black provided a report on the Subcommittee on Feral Swine. Dr. Black has been named the new chair. Dr. Pyburn presented a USDA update. Dr. Ned Hahn reported on fingerprinting PRV genetic sequences. Viral sequences have been completed for a number of feral populations. Strains appear to be moving north. Joe Corn updated PRV and brucellosis studies in high density domestic swine populations. In 2004, feral swine were present in 1,014 counties in 14 states. Ed Stevens presented on the U.S. wild boar market. Two Rivers has developed a validated herd to produce wild boars. Texas recognized delay in approval of depopulation, no indemnity, no transportation funding. Paul Anderson moved, and Tom Burkgren seconded, a motion to accept the subcommittee’s report. The motion passed.

The Committee addressed old business. The Committee discussed the 2005 recommendation that recommended that the United States Department of Agriculture, Animal Research Service immediately commit resources to research to be conducted on Post-weaning Multisystemic
Wasting Syndrome (PMWS) in the areas of diagnosis, control and biosecurity. No known response although funding from USDA was received targeted to PCVAD.

The Committee received an update on PRV Committee recommendations from 2005.

The Committee then proceeded to address new business. From the Subcommittee on Feral Swine, the following resolutions were discussed:

1. Subject matter: Control of Feral Swine. A motion to accept the resolution was moved and seconded. The motion was approved unanimously following no discussion.

2. Subject matter: Code of Federal Register changes. A motion to accept the resolution was moved and seconded. Following limited discussion, the motion was approved.

A Resolution to Encourage Stakeholder Involvement in the Development of the National Bio and Agro Defense Facility (NBAF), was proposed by Dr. Harry Snelson and a motion was made and seconded to accept the resolution. Following limited discussion, the motion was approved unanimously.

Three Resolutions were forwarded to the Committee on Nominations and Resolutions.