

REPORT OF THE COMMITTEE ON LIVESTOCK IDENTIFICATION

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The Committee met in Rose A Ballroom of John Ascuaga's Nugget Hotel, Reno, Nevada, on October 23, 2007 from 8:00 a.m. to 4:00 p.m. There were one hundred twenty four committee members and guests in attendance. Bob Hillman, Chair, presided, assisted by Kevin Maher, Vice-Chair. Committee Chair Hillman welcomed committee members and guests to the meeting, discussed the committee meeting expectations and addressed United States Animal Health Association Committee policies and procedures.

Dr. John Clifford, Deputy Administrator for United States Department of Agriculture (USDA), Animal and Plant Health Inspection Services (APHIS), Veterinary Services (VS) and Neil Hammerschmidt, National Animal Identification System Director, presented a report on the National Animal Identification System's (NAIS) Business Plan to Advance Animal Disease Traceability. Their report is as follows:

Animal disease traceability is one of the most critical issues at hand for the USDA because it is a vital component of disease control efforts, and there exists a need for improved animal disease control infrastructure in the United States today. Federal-state cooperative disease programs have historically administered national animal identification and have achieved significant success in reducing animal disease in the United States. Paradoxically, this progress has resulted in drastically reduced levels of officially identified animals; since most States are free of bovine tuberculosis, brucellosis, pseudorabies, etc., they do not test or vaccinate for those diseases, so there is no mechanism to identify the animals or officially record these activities.

The NAIS is an integral part of the solution and provides: (1) standardization for information systems and (2) opportunity for producers to be part of U.S. animal health safeguarding efforts before an animal disease event or "outside of" participating in a disease program.

USDA's "Business Plan to Advance Animal Disease Traceability" outlines strategies to enhance and further develop the U.S. traceability infrastructure. These strategies provide a complex solution that will take significant time and resources. Although 100 percent participation in the infrastructure would be ideal, USDA plans to focus immediate efforts where we can accomplish the most and achieve a "critical mass" of participation. Critical mass is defined as the minimum percentage of officially identified animals within each species/sector required to achieve traceability. For the purposes of the business plan strategies, USDA estimates that 70 percent of the animals in a specific species/sector need to be

identified and traceable to their premises of origin. This estimate will serve as a benchmark for advancing animal disease traceability.

Working together with States/Tribes and industry partners, USDA has made significant progress with the three components of NAIS to date and will continue to build on those accomplishments to advance animal disease traceability. Over 420,000 premises have been registered nationwide, and premises registration continues to be our immediate priority. The animal identification component is also progressing well. USDA has approved the eighth animal identification device, bringing the total to seven visual tags and one injectable transponder. The third component of the NAIS, animal tracing, is now in the implementation phase. USDA is establishing formal cooperative agreements with the administrators of the animal tracking databases who participated in the interim phase and with any other organizations or states whose systems meet the technical specifications for integration with USDA's Animal Trace Processing System.

To ensure ongoing, timely, and efficient progress, USDA is identifying strategies and actions that will enable us to advance towards our 48-hour traceability goal. We have established a very elaborate outreach and communication effort and will continue to expand on opportunities that allow us to work with industry. Our business plan targets actions in areas where the advancement in traceability offers the greatest return on the invested resources.

Strategy 1: Prioritize Species/Sectors

The establishment of priorities among species and sectors within species industries will ensure resources are applied where improvement in traceability is needed the most. The business plan first categorizes species based on existing tracing capabilities and the need for improvement. Tier 1 species include the primary commercial food animal industries – cattle, poultry (chickens and turkeys), swine, sheep, and goats. The competition horse industry is included as Tier 1 due, in part, to frequent animal movement. All other livestock and poultry are Tier 2. Additionally, sectors within the Tier-1 species have been prioritized to direct additional emphasis; for example, the beef and dairy breeding herds are the highest priorities within the cattle sector.

Strategy 2: Harmonize Animal Identification Systems

The need for standardized animal identification in government and industry programs is more evident now than ever before. Some disease control programs that are winding down, brucellosis for example, required a high level of identification and traceability. In fact, there are numerous disease control programs that require and/or benefit from official animal identification. The standardization of animal identification and data collection in these existing systems presents a clear opportunity to enhance traceability. In the private sector, producers are seeking improved and flexible identification methods, and compatible processes and data standards that may be used for multiple purposes. Harmonizing animal identification systems will undoubtedly result in more cost-effective options benefiting producers while achieving increased animal disease traceability for the entire industry.

Strategy 3: Converge NAIS Data Standards in Disease Programs and Regulations

USDA will take steps to adopt and apply NAIS data standards in existing disease programs, including international/interstate commerce regulations. For example, establishing national data standards that identify premises importing and exporting livestock, locations participating in official disease control programs, and origin and destination premises listed on interstate certificates of veterinary inspection will greatly enhance animal disease tracing and emergency response capabilities.

Strategy 4: Integrate Automated Data Capture Technologies with Disease Programs

USDA will take steps to integrate electronic data capture and reporting technologies into existing disease programs. By using NAIS-compliant radio frequency identification (RFID) devices and integrating handheld computers/readers to replace paper-based forms, animal health officials will be able to electronically record and submit essential data to the USDA Animal Health and Surveillance Monitoring database and other appropriate animal health databases. The electronic collection of data will increase volume and quality, minimize data errors, and speed data entry into a searchable database.

Strategy 5: Partner with States, Tribes, and Territories

State animal health authorities play a critical role in advancing national animal disease traceability. Working in close partnership with state, tribal, and territorial officials, USDA will continue to support the advancement of each State's disease traceability infrastructure. Each state animal health official will administer and manage localized plans reflecting the animal health priorities in individual regions.

Strategy 6: Collaborate with Industry

Achieving traceability objectives requires a partnership between the production sector and animal health officials. Producer organizations, representing member interests, can accelerate the adoption of practices that advance traceability. USDA has entered into cooperative agreements with non-profit industry organizations to promote premises registration within various species groups. Collaboration with USDA accredited veterinarians will enable the delivery of accurate information to clients as well as enhance the adoption of NAIS data standards in everyday production management systems and disease program activities at the producer level. Additional partnership efforts with industry alliances, service providers, auction markets, feedlots, harvesting facilities, and other industry sectors are a priority for USDA.

Strategy 7: Advance Identification Technologies

Continued advancements in traceability require practical, affordable technology solutions that improve efficiency and accuracy of animal ID data collection. USDA will collaborate with stakeholders to establish performance standards for ID devices and evaluate emerging technologies with emphasis on systems that can operate at the “speed of commerce.”

Outcomes

The business plan will utilize “critical mass,” as explained earlier, to establish participation goals and objectives for individual species. The benefit/cost analysis now being conducted will provide more substantial information and input to these performance-based goals. Until that information is available, though, USDA will be recommending to the Species Working Groups a 70 percent critical mass participation level.

Opportunities to advance traceability will continue to evolve as the business plan strategies are successfully implemented. Additionally, industries will face new animal health demands as the animal agriculture industry changes. Therefore, the strategies will continue to be evaluated and adjusted to ensure that we continue to advance towards the optimum goal of a 48-hour traceback in as timely and efficient a manner as possible.

David Morris, USDA-APHIS-VS NAIS staff, provided a report on NAIS Cooperative Agreement and Animal Identification Projects.

He presented information regarding preliminary results associated with the NAIS Pilot Project involving packers and renderers. The goal of this project was to gather information from the beef, pork, and lamb processing facilities and rendering facilities regarding opportunities for participation in NAIS. Project leaders were Gary Smith and Dustin Pendell, Colorado State University and the Colorado Department of Agriculture.

Objectives included assessing specific animal identification technologies, the impact of speed of commerce on speed and accuracy; estimating costs of participation in acquiring identification information; and assessing the best way currently to collect, archive, and transfer identification information needed for traceability. Preliminary results indicate that harvest facilities and rendering facilities are concerned with costs to implement, necessity to use private database providers, speed of commerce, data security, functionality of devices, and multiple identification systems.

The FY2008 NAIS Implementation Cooperative Agreement was described. Significant for FY2008 is that work plans are to be aligned with the recently prepared NAIS Business Plan of 2007. Newer components will require training and outreach to accredited veterinarians regarding NAIS functionality by both state and federal animal health officials within the state. Increased flexibility was offered in preparing a work plan in accordance with identifying and reducing traceability risks within the State, Tribe, or Territory. All work plans submitted will need to address the first six of the seven strategies listed in the NAIS Business Plan of 2007.

John F Wiemers, USDA-APHIS-VS, NAIS reported on the cost benefit analysis of NAIS. Understanding benefits and costs of adopting the NAIS is essential for informed policy development, industry participation, and long range implementation. Through a cooperative agreement with USDA-APHIS, Kansas State University will lead a multi-institutional comprehensive analysis of the benefits and costs associated with adopting the components of NAIS: premises registration, animal identification, and animal movement recording. Emphasis will be placed on determining aspects of NAIS that are common and unique across species to obtain accurate estimates of benefits and costs of system adoption by livestock and meat firms. Benefits and costs will be estimated for different species, by different sub-sectors, and for different firm sizes with emphasis on those species identified in the NAIS business plan.

Estimates of how benefits and costs will be shared vertically in the livestock and meat supply chain will be completed as well as estimates of costs to local and federal government of operating the systems.

A collaborative team of agricultural economists and animal scientists from four major Land Grant Universities will work with livestock and meat industry associations, collect past and on-going research, review NAIS pilot project and cooperative agreement reports, collaborate with APHIS, and collect information from local, state, and federal government agencies to generate a comprehensive benefit cost analysis of NAIS. Recognized economic principles and models will be employed. The project duration is one year with the final report expected by late fall of 2008.

Glenn Fischer, Chairman of the Identification and Information Systems Committee, National Institute for Animal Agriculture (NIAA) presented a report on the ID Info Expo 2007.

He reported that the key goals for ID Info Expo 2007 were to:

- build on successful ID Info Expo Franchise
- expand Geographic Reach
- expand focus to include strong State and Commercial focal points along with Critical Federal program overview
- to be the meeting *"Where Traceability Needs Intersect"*

The meetings drew over 400 attendees, primarily from the United States and Canada. The British FMD Outbreak created enhanced sense of relevance, with excellent feature speakers from UK and University of California Davis, Disease Simulation Program. Feedback from the meetings showed strong positive feedback on expanded international and commercial application focus.

NAIS progress continued to be a key focal point of the meeting, with important updates from USDA, Undersecretary Knight, as well as USDA personnel that showed increased relevance for NAIS in disease traceability as the focal point for the program. USDA foreshadowed the release of the NAIS business plan, again stressing disease programs and the continued infrastructure development for the establishments of an effective traceability program.

NIAA continues to look to provide government and industry with an important forum to discuss this issue and find consensus. In 2008, the direction will be to expand producer contribution to the program, provide stronger case study/application focus, and continue to grow international participation. Based on Regulatory and Market conditions, consider revised format, which may include an enhanced workshop format as part of the 2008 NIAA Annual Meeting.

Rich Baca, Director, Center for Animal Disease Information and Analysis, USDA-APHIS-VS; Centers for Epidemiology and Animal Health reported on NAIS Disease Program System Integration.

Summary:

VS is using many of its information technology (IT) assets to improve traceability. This discussion covers information about how the NAIS, Animal Health Surveillance and Management (AHSM) and Mobile Information Management (MIM) solutions continue to evolve and are currently being used as part of the New Mexico Task Force supporting the tuberculosis control and eradication program to increase traceability capabilities and support accurate electronic record keeping for managing the herd testing. Standards and mobility are two key goals in building the needed IT tools. Standards provide common methods that provide consistency to business approaches. Mobile solutions offer the ability to place data management in the hands of the animal health officials in the field. Moving the first point of data management increases data integrity, offers real time usage of information and reduces redundant processes.

Patrick McFall, Program Manager USDA-APHIS-VS Process Streamlining (VSPS), provided a VSPS update. He reported that VSPS is part of a developing initiative by a program within USDA APHIS. This web-based system offers a single point of access to electronic forms, applications, and certification processes required for the interstate and international movement of animals and animal products. Designed for USDA accredited veterinarians and state and federal animal health officials, VSPS is part of an Agency-wide eGov initiative to move from paper to electronic forms. As a result, it meets the requirements of the Government Paperwork Elimination Act and also contributes to the 48-hour trace back goal of the NAIS.

With VSPS, accredited veterinarians can update their accreditation status, access state regulations and foreign country import requirements, create electronic certificates of veterinary inspection

for interstate movement, incorporate required diagnostic tests and vaccination records, and electronically submit documents to origin and destination State officials.

In order to access VSPS, which is a USDA mandated secure system, accredited veterinarians and state and federal animal health officials must first apply for USDA eAuthentication and then create a VSPS profile specific to their role. Roles are also available for veterinary assistants, lab technicians, importers, and others. For more information about accessing VSPS, see Getting Started below.

Once a user has been granted a role in VSPS, the user can access the two currently available modules:

The Veterinary Accreditation Program (eVAP) module; and The Interstate movement module and related test records.

Additional modules such as import and export will soon be available through VSPS.

eVAP Module:

In October 2005, the National Veterinary Accreditation Program Staff transferred records of approximately 65,000 accredited veterinarians from its legacy national database to the new VSPS electronic Veterinary Accreditation Program module. This new module allows new veterinarians to apply for accreditation online and legacy accredited veterinarians to validate or update their contact information. Accredited veterinarians are encouraged to begin using the VSPS eVAP module to confirm that their accreditation and contact data is current and correct.

VS Area Veterinarians in Charge (AVIC) can use the module to approve roles in VSPS, verify accreditation status, process applications for accreditation, approve and print accreditation certificates, and create mailing labels, accreditation certificates and reports. State animal health officials can find accredited veterinarians and verify their accreditation status. The public can also find a listing of accredited veterinarians in their area.

eInterstate Module:

Accredited veterinarians with an active VSPS role can use the eInterstate Module to create electronic Certificates of Veterinary Inspection (eCVI) and related test records. This module provides a standard method of data capture that automatically disseminates state of origin and destination data to the appropriate state animal health officials and various Veterinary Services databases. Accredited veterinarians can also access state import regulations and create test record templates.

The eInterstate module also has a laboratory component that provides online connectivity to participating Equine Infectious Anemia laboratories approved by VS-National Veterinary Services Laboratories (NVSL) leading to shorter turn around time for EIA test results. Using the e-Interstate laboratory component, veterinarians can submit EIA test records electronically. The laboratory component of the e-Interstate module currently provides official test charts for the VS Form 10-11, Equine Infectious Anemia (eEIA)

Laboratory Test (digital photos may be included by the veterinarian). The VS Form 4-33, Brucellosis Test Record and VS Form 6-22, Tuberculosis Test Record are in development and will be added in the near future.

Report Tools:

VSPS also offers report tools for accredited veterinarians, diagnostic laboratories, and State and Federal animal health officials. Accredited veterinarians can store, print, and run reports on their own eCVIs and test records. State animal health officials can export their own state data to their State databases as well as batch print eCVI and related test and vaccinations records originating from or entering into their own state. Specific VSPS mail boxes have been established at VS; AVIC area offices to receive accreditation and role requests as well as animal and animal product import/export permit requests.

For more information about VSPS, go to: <https://vsps.aphis.usda.gov/vsps> or http://www.aphis.usda.gov/publications/aphis_general/index.shtml.

Francois Elvinger, Virginia-Maryland Regional College of Veterinary Medicine, Chairman and presenter for the National Animal Health Surveillance System Steering Committee provided a report on the system and urged support for full implementation of the National Animal Health Surveillance System. The 2001 National Animal Health Safeguarding Review recognized the central importance of comprehensive, coordinated and integrated surveillance for protection of US livestock and poultry health. VS, in 2003, in response to the recommendations of the Safeguarding Review, appointed a national surveillance coordinator and created the National Surveillance Unit (NSU), which was tasked to

coordinate all activities towards planning, evaluation, integration and enhancement of national animal health surveillance. By the spring of 2004, a Steering Committee composed of representatives from livestock, poultry and aquaculture industries, diagnostic laboratories, universities, State and Federal agencies was formed and charged with guiding and supporting design, planning and implementation of efficient and accurate surveillance for relevant animal diseases. The Steering Committee's functions are to ensure consideration of all Safeguarding Review recommendations; guide strategic planning; interact with constituencies and obtain stakeholder input and support; request and review documents and plans (early and late); seek outside expertise and help (panels and working groups; teams); support quality control; and guide research. The Steering Committee set goals in the NAHSS Strategic Plan which included early detection and global risk surveillance for foreign animal diseases and emerging diseases; enhanced surveillance for current program diseases; monitoring and surveillance for diseases of major impact on production and marketing.

The NSU recognized early that planning and implementation of effective and efficient surveillance systems required a paradigm shift from the traditional fragmented surveillance activities for single diseases in disparate programs, into integrated systems, taking advantage of existing and new surveillance streams and analytical processes to generate the information needed to take action. The NSU, first prepared a Surveillance and Data Standards document as a foundation and guidance for all surveillance plans, and designed methods for existing and future surveillance program evaluations. The NSU also, within CEAH, took advantage of existing and new modeling, of threat, pathway and risk analyses, to set priorities. The NSU further produced the U.S. Animal Health and Productivity Surveillance Inventory, which is a database application that enables users to search for information about surveillance and monitoring programs, epidemiologic studies, and other activities related to animal health in the United States (can be accessed at <http://www.aphis.usda.gov/vs/nahss/inventory.htm>). Since its inception, VS, and in particular NSU work has led to significant accomplishments in the context of the NAHSS, including design and implementation of surveillance for bovine spongiform encephalopathy, avian influenza, classical swine fever, viral hemorrhagic septicemia, pseudorabies virus, and scrapie; evaluation of scrapie and brucellosis surveillance; surveillance communication and reporting in the context of the National Animal Health Reporting Systems (NAHRS), World Organization for Animal Health (OIE) reports; and the U.S. Animal Health Report.

Despite those accomplishments, NAHSS faces challenges in the creation of integrated and comprehensive surveillance. Integration of surveillance streams for different diseases, eventually across species, requires careful evaluation of the epidemiology of diseases under consideration, their host and agent properties and dynamics in the environment. The potential for diagnostic systems (observations and / or tests) to be applied to animals or specimens for more than one agent or disease needs to be considered, and information technology systems to capture, analyze and transfer data and information need to be standardized. Integration needs to be logistically feasible under current or future funding streams. One of the main benefits of integration is the added value that can be obtained from efficient use of various surveillance streams for greater coverage of diseases and animal populations. Integration of surveillance streams will facilitate comprehensive surveillance which is surveillance for any manifestation (clinical, agent detection) of multiple diseases of interest across the U.S. and which facilitate national policy decisions and trade agreements.

Premises and animal identification will greatly benefit surveillance planning and execution. To appropriately plan surveillance it is of importance to have information on premises and animal location, and to have estimates of animal density and movement (direction and distance). For high impact diseases, the rapid determination of the location and expansion of a threat, i.e. of the animal disease agent, in particular from a shedding animal, helps determine which premises and animals are at risk, which allows for a faster response. Potential magnitude of exposure (for example related to the number of infectious animals that shed the agent) and time of exposure estimated from movement records will inform surveillance procedures, i.e. the design of sampling schemes (examination and/or specimen collection), which allows appropriate allocation of resources for surveillance (personnel and materials for specimen collection, laboratory capacities). Effective disease detection schemes are essential for rapid and efficient response to introduction of disease into a population, as well as for determination of absence of disease.

The NAHSS Steering Committee has recognized the many challenges that VS faces in implementing integrated and comprehensive surveillance, in particular the restrictive funding mechanisms. Surveillance planning and funding for implementation have traditionally been tied to specific

'program' diseases, a mechanism of funding which prevents flexibility and which has resulted in a lack of harmonization of surveillance planning and implementation. Difficulties in resource allocation slow down the planning process and delay the implementation of integrated and comprehensive surveillance. This places animal agriculture at risk of undetected introduction and / or spread of animal diseases, including high impact foreign animal and emerging diseases. Given these restriction, the Steering Committee decided to raise the awareness of stakeholders, as done with this report, and to look for support in identifying and leveraging resources to achieve maximum efficacy and efficiency of surveillance for diseases that are currently present in the United States, as well as for those that threaten US animal populations or may arise in the future.

Valerie Ragan, AgWorksSolutions, provided a report on the GlobalVetLink 50 State Regulatory Applications. She reported that GlobalVetLink, L.C. (GVL) is a private company, headquartered in Ames, Iowa, at the Iowa State University Research Park. GVL is the innovator of a secure, national web-based platform that replaces an outdated paper-based regulatory process. GVL established the 'gold standard' of electronic regulatory certification for animals – and is accepted by all 50 states.

GVL's national multi-species web-based platform connects all state animal health and regulatory officials with its veterinarian subscribers and a growing national network of over 55 online animal diagnostic laboratories, which are also GVL subscribers. GVL's regulatory system facilitates use of all forms of animal ID entered by accredited veterinarians, including: premises ID, digital photos, visual tags, and EID - with automated uploading of IDs.

Key Applications and Services:

- Online Certificate of Veterinary Inspections System (OCVI) - for animal movement certification by accredited veterinarians on behalf of their clients.
- State Animal Health Official Reporting – an automated real-time nationwide system that reports animal imports into a state, fulfilling the regulations for movements into the state, along with intra-state movement and lab tests result reporting.
- Equine Infectious Anemia system (eEIA) - Online system for completion of Equine Infectious Anemia (EIA) testing - including digital photos. The system connects diagnostic laboratories to private veterinarians & state animal health officials. Now approved by USDA-APHIS-VS for international movement of horses!
- Diagnostic Laboratory System- connecting labs to veterinarians with real-time reporting system.
- "Find An Aquaculture Diagnostic Lab" - developed in collaboration with American Veterinary Medical Association (AVMA), USDA's Risk Management Agency, Federal Crop Insurance Corporation through Mississippi State University.
- Veterinary Feed Directive 'eVFD' – web based prescription and documentation system for feed grade antibiotic use- connected with the feedmills for prescription verification.
- Pet Lemon Law system - pet health certification prior to the sale of pets.
- Permitting – allows animal health officials to document state entry permits for animal movements.
- Pre-conditioning Calf Certification– certification system developed for bovine veterinarians and auction markets – in conjunction with the Iowa Veterinary Medical Association and Iowa State University.

GlobalVetLink provides a one-stop shop for veterinarians for multiple regulatory applications for a large variety of species - and has grown to 34 states with signed license agreements, with eight more in the legal review processes.

The company welcomes input from state animal health officials, laboratory personnel and veterinary practitioners as it continues to enhance its system and maintain its relevance to subscribers – especially subscribing veterinary practices.

Becky Brewer-Walker, Oklahoma Department of Agriculture, Food and Forestry, provided a report on a survey conducted to evaluate animal identification legislation at the state level. The report, entitled Animal Identification Legislation, Are We Heading in the Right Direction detailed the responses to a survey conducted by Brewer and her staff.

Thirty-five states responded to the inquiry; Alabama, Arizona, Arkansas, Colorado, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Kansas, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Nebraska, Nevada, New Hampshire, New Mexico, North Carolina, North Dakota, Ohio,

Oklahoma, Oregon, Pennsylvania, South Dakota, Tennessee, Texas, Utah, Virginia, Washington, West Virginia and Wisconsin.

Of the responding States, 20 currently have no legislation pending.

Bills presented that DID NOT pass and contained POSITIVE language:

- Pennsylvania: SB 865, introduced October 2005. Would require mandatory premises registration and establish a database to facilitate that process.

Bills presented that DID NOT pass containing NEUTRAL language:

- South Dakota: HB 1199, introduced January 2007. Any and all ID program developed/implemented shall be voluntary.
- Washington: HB 1151, introduced February 2007. Create a livestock ID advisory committee to make recommendations on whether and how to implement a voluntary animal ID system.
- Tennessee: SB 1996, introduced February 2007. Would establish a voluntary premise registration system and database.
- Texas: HB 637, introduced February 2007. Would require a voluntary animal ID program, to the extent required by federal law. Included an annual fee as determined by the Animal Health Commission. Participants may withdraw at any time having all personal information withdrawn from the program.
- Arkansas: HB 1761, introduced March 2007. Producers could voluntarily register their premises and ID animals. Would not require premise registration or use of eID.
- Texas: HB 3573, introduced March 2007. Texas Animal Health Commission may adopt rules to establish a standard method for ID and tracking exotic livestock and exotic fowl. Would be voluntary.
- Texas: HB 461, introduced May 2007. Prohibits mandatory participation in an animal ID system. Allows the development and implementation of a voluntary system consistent with NAIS. May include a registration fee.

Bills presented that DID NOT pass containing both POSITIVE and NEGATIVE language:

- Oklahoma: HB 1842, introduced January 2007. Required mandatory premise registration, individual animal ID or group/lot ID and tracing animal movement. Operations with annual sales of \$10,000 or less shall be exempt

Bills that DID NOT pass containing NEGATIVE language:

- Virginia: HB 1990, introduced January 2007. Ensured the state does not participate in or provide any assistance to the establishment of the NAIS or similar program.
- Washington: HB 1151, introduced January 2007. Prohibited establishment of participation in NAIS. Any Cooperative Agreement with the federal government shall be terminated. Citizens must be notified that upon request their personal information will be expunged from the National Premises Information Repository.
- Missouri: HB 747, introduced February 2007. Shall not participate in NAIS. Will not establish a premise registration database or trace any animal movements. Any cooperative agreement with the federal government shall be terminated. Citizens shall be notified that upon their request their personal information will be expunged.
- Tennessee: SB 1273, introduced February 2007. Shall not participate in NAIS. Will not establish a premise registration database or trace animal movement. Any Cooperative Agreement with the federal government shall be terminated. Citizens will be notified that upon their request their personal information will be expunged.

Bills with POSITIVE language that have become LAW:

- Wisconsin: ACT 229, effective April 13, '04. Created mandatory premise registration and established an electronic database related to livestock premises in the state.
- Indiana: TITLE 345, effective September 1, 2006. Created mandatory premise registration and the establishment of an electronic data base related to livestock premises in the state. Also requires persons holding livestock exhibitions to register their premises and keep records of persons and livestock that attend their event. Stakeholders must contact the state veterinarian within 30 of changes in contact information.
- Michigan: ACT 466, effective March 1, 2007. Created mandatory premise registration, mandatory animal tagging and the establishment of an electronic data base related to livestock premises and

animal movement in the state. All cattle, goats, sheep and privately owned cervidae shall bear official identification before leaving the premise.

- N. Dakota: ACT CHAPTER 36-01, effective July 1, 2007. State Board of Animal Health shall develop and maintain an animal tracking data base to assist with tracking animal movement for animal health purposes only. The information obtained is subject to open records laws. An appropriation of \$90,836 from the State Treasury shall be used to develop and maintain the database.

Bills with LIMITING language that have become LAW:

- New Hampshire: RSA 436:6-A, effective September 1, 2007. Any program such as NAIS shall be voluntary.
- Arizona: TITLE 3 SECTION 3-1214, effective September 19, 2007. Participation in NAIS shall remain voluntary. State shall not mandate of force participation in NAIS.

The results of the survey strongly suggest that due diligence is necessary to address the myriad of concerns and misconceptions regarding implementation of NAIS.

Paul J. McGraw, Assistant State Veterinarian, Wisconsin Department of Agriculture, Trade and Consumer Protection, reported on Use of Premises Identification in an Animal Disease Response.

He reported that premises registration became mandatory in Wisconsin on January 1, 2006 for all keepers of livestock. Currently there are over 55,000 registered premises. Prior to the mandatory premises registration, Wisconsin had no registration for swine, beef, horses or poultry except for NPIP enrolled flocks. Wisconsin was voluntarily registering premises for nearly three years prior to the mandatory program with less than 20,000 premises registering; most of these premises were licensed dairy farms. In April 2007, the state was notified of a positive pseudorabies herd for the first time since 1998.

This was the first time premises registration was utilized to respond to an animal disease emergency in Wisconsin. It is required by pseudorabies – eradication program standards to perform a five mile area survey and test. The premises registration information and the GIS mapping capabilities that are a result of premises registration expedited these surveys. Animal Health Officials were able to complete the area surveys and depopulations within the required timelines to maintain Stage V pseudorabies free status.

John Huntley, New York State Veterinarian, provided a report on Innovative Solutions in the New York State Cervid Program.

Background:

An animal identification system is an essential element of most animal health programs. It is the foundation upon which informed decisions can be made that support progress in population animal health. New York State animal health programs incorporate technology where appropriate to achieve efficiency in collection of necessary animal data, facilitate compliance, and ease producer requirements. The use of technology also limits the impact of the control elements on the animal population.

The New York State (NYS) Chronic Wasting Disease (CWD) Program:

The NYS CWD Control Program is an example of the use of information systems to support a herd certification program. The herd CWD certification program requires long term accountability for individual deer within a herd. The major tenets of the program involve the conduct of an annual inventory, the documentation of animal movements from the herd, and sampling natural deaths that occur. Those procedures require a viable animal identification system.

Special Considerations:

Deer are difficult to handle and the annual inventory has been a difficult event that hampered producer enthusiasm and participation. It required a roundup and individual handling of each deer. The inventory process often resulted in disruption to the operation and occasional injury to the captive deer.

In an effort to address these issues, the state in cooperation with the federal government explored technological solutions that would ease producer concerns, maintain program integrity, and encourage participation and compliance with program elements.

Solutions considered:

The preferred solution to many of the handling, management, personnel, and other resource issues was to utilize a passive inventory system. This was designed to minimize the stress of roundup on the animals and produce a cost effective solution. The producer can also use this technology to manage

other aspects of the herd including health monitoring, production data, and other business oriented support information. The producer also establishes a CWD herd status that can be used for intrastate and interstate movement of deer.

Primary requirements of such a system entailed the capture of individual animal identification data at distances beyond the capabilities of traditional radio frequency identification (RFID) technologies.

Two technologies were evaluated:

1. Ultra High Frequency (UHF) passive tags: These tags allowed for data capture at extended working distances of approximately 4 feet. Working distance can be extended by enhancement of the antennae element. The tags worked satisfactorily. Orientation of tag to antennae, body mass, and metal affected the effectiveness of the system.
2. Low Frequency ACTIVE RFID tags- This system allowed for data capture at an effective working distance of 10 feet or greater. The tags worked very well with 100% inventory outcome. The tags did not suffer issues with metal interference, body mass, or tag/reader orientation. Individual tag cost may be a future issue impacting producer adoption.

Data Collection:

Data was collected and downloaded in a similar manner for both systems. The primary requirement was the ability to use the data in the Department's animal health information system. Data was uploaded into the Viaherd database for analysis and decision support regarding herd status and movement.

Summary Statement:

A viable animal identification system, either at the group or individual level has been an important component of the ability to improve animal health within animal populations. Utilization of technologies that minimize the impact of regulatory requirements at the producer level, work within the business rules inherent in the production system, and allow for the producer to use the information in non regulatory applications will encourage utilization of new technologies. Such technologies will permit animal health systems to keep pace with the speed of commerce and should result in improvements for surveillance, monitoring and control systems supporting animal health.

Greg Onstott, Missouri Department of Agriculture, reported on Missouri's efforts to address animal identification and tracking issues at markets in the state. The following is his report, Streamlining Sale Barn Information Data.

The livestock markets in the State of Missouri currently collect thousands of blood samples on an annual basis. The current method requires the market veterinarian and or his/her assistant to manually enter and write out all data collected at chute side. The Missouri General Assembly approved a new decision item that will allow the Missouri Department of Agriculture, Animal Health Division to assist the market veterinarian in streamlining the test data from the livestock markets.

This streamlining project will convert the process of collecting disease surveillance information and data into an electronic format. The project will equip market veterinarians with new computers and software that will allow them to collect samples and send the information associated with that data electronically.

Once the software and hardware is installed the market veterinarian will collect the data and save it to the computer. The veterinarian will also utilize official USDA-RFID tags for the identification of replacement cows and bulls going "back to the farm". Cull cows and bulls will still receive a metal test tag as in the past. All of this identification information, along with premises number of the market, date, species and age will be sent to the Division of Animal Health for disease trace back capabilities if needed. This electronic capture of data will also allow the test results and all associated data to be loaded instantly into the Generic Database (GDB) electronically, instead of manually. This process will save time at for both the livestock market and animal health official.

Michael Coe, Global Animal Management, presented a Concept for a Pilot Project to Evaluate Replacement of Current "Official Brucellosis Vaccination Tags" with NAIS Compliant (840) RFID Brucellosis Vaccination Tags.

The ongoing cooperative brucellosis control/eradication program has made great strides in elimination of this disease. Currently (September 2007) 49 states, Puerto Rico, and the Virgin Islands are classified as free. However an ongoing potential threat concerns both state animal health officials as well as cattle producers in the western United States. Private practitioners, producers and state animal health

officials have all voiced support for development of a RFID Official Brucellosis Vaccination Tag that visually denotes the state where the animal was vaccinated. Such a tag, if made available for use on a voluntary basis now would offer the choice for the producer and his veterinarian to replace the metal clip tag in current use and over a period of time would allow for the identification of a large number of "momma cows" on producer operations. The use of an Official RFID Brucellosis Tag over the next four to five years would have a significant impact in acceptance of RFID to enhance this disease management program as well as identifying 60 to 70 percent of adult female cattle on producer operations where calfhood vaccination is practiced. The majority of livestock health officials, brand inspectors and livestock producers are familiar with the "state two digits codes" and routinely use this information to identify in which state cattle were vaccinated.

Encourage USDA-APHIS-VS to make available an "RFID Official Brucellosis Vaccination Tag" that is orange in color and carries the two digit state code, as an option, for use at the time of vaccination.

Further, USDA-APHIS-VS to subsidize these tags so that they are available through appropriate channels (state or federal offices depending on the state) to accredited veterinarians at a reasonable cost. (\$0.25-0.50/tag)

Following the forgoing reports and discussion, the Committee conducted its business session.

Old Business:

The committee mission statement was reviewed with Committee members.

Committee members determined that the current mission statement accurately reflects the mission of the Committee and therefore, the mission statement will be continued without modification.

Chairman Hillman reviewed with Committee members the three resolutions from the 2006 meeting of the Committee and noted that USDA had responded promptly to each resolution via the draft traceability business plan presented earlier during the meeting. Chairman Hillman reported that no further action appeared necessary relative to the resolutions.

New Business:

The Committee approved five resolutions that were forwarded to the Committee on Nominations and Resolutions.