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Subcommittee on Livestock, Dairy, and Poultry
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Chairman Scott, Ranking Member Neugebauer, and Members of the Subcommittee, thank you for the opportunity to testify before the Committee this morning. My name is Dr. John Clifford and I am the Deputy Administrator for Veterinary Services with the Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS). In this position, I also serve as USDA's Chief Veterinary Officer.

I appreciate the Committee's interest in our progress in implementing the National Animal Identification System (NAIS). We have expended significant resources, both financial and in staff time. While we have made progress, much remains to be done and we look forward to working with the Committee to reaching our goal of a modern, streamlined information system that helps producers and animal health officials respond quickly and effectively to animal disease events in the United States. NAIS is a long-term investment in emergency preparedness and response, competitiveness of our livestock sector in international markets, and consumer confidence in our food supply.

I would like to begin by giving you a brief overview of NAIS, including what we have been doing, the challenges we have faced, where we are now, and our plans to continue enhancing the program. Finally, I will conclude by reporting on how we have spent the dollars provided to us.

Before I start, I would like to mention that the Secretary is carefully weighing all of the options to determine how USDA and its partners can make NAIS more effective and successful. We understand that the success of NAIS depends on strong collaborations between this Committee, producers, industry and USDA. We are committed to redoubling our efforts in working with all of these key players in a transparent way and that is responsive to the concerns of all stakeholders.

NAIS History

The Animal Health Protection Act (AHPA) of 2002 authorizes USDA to take measures to detect, control, or eradicate livestock pests or diseases in the United States. When we do detect an outbreak, we must quickly determine its source so we can stop disease spread. We must identify all infected animals and all animals exposed to them. By tracing back from the infected animal detected, we can find any other infected or exposed animals and establish quarantines to ensure that they do not move. Once we set quarantine boundaries to arrest disease spread, we concentrate on treating or removing infected or exposed animals to eliminate the disease. The faster we can trace the path of the initially detected diseased animal, the faster we can establish

the quarantine—and with more precision so that we do not needlessly prevent healthy, unexposed animals from moving in commerce--and commence treatment or removal.

Somewhat like the “Golden Hour” concept of emergency medicine for humans, for animal health we have found that being able to trace back from infected animals within 48 hours is vital in quickly containing and eliminating an incipient disease outbreak. To achieve such an ambitious goal, we must have a standardized animal identification system. For much of the second half of the 20th century, USDA conducted long term eradication programs for diseases like brucellosis and tuberculosis. We used animal identification systems for those programs. While certainly not the modern, standardized system we envision with NAIS, those systems did provide us with a solid base for trace back. The success of those programs led to a dramatic decline in the number of premises and animals registered in any identification program.

Recognizing the lack of standardization and the increasing void in animal identification that would hamper our response capabilities to a disease outbreak, USDA, States, and industry have been working cooperatively to develop a unified NAIS for several years. This work assumed greater urgency when we witnessed the heavy losses associated with the foot and mouth disease (FMD) outbreak in the United Kingdom in 2001. In 2003, a group of approximately 100 industry and government representatives--the National Identification Development Team--drafted the U.S. Animal Identification Plan. While the Team was still seeking support for the plan, the detection of a case of bovine spongiform encephalopathy (BSE) in the United States on December 23, 2003, brought even greater urgency. Within days, then-Secretary Veneman used her emergency authority to transfer \$18.8 million to APHIS to accelerate NAIS implementation.

I should note that while we started NAIS with a focus on animal health, we also know that 75 percent of emerging animal diseases are zoonotic; that is, they can affect humans as well. Accordingly, a fully functional NAIS may also have tangential, but substantial, human health and food safety benefits.

Initially we envisioned a voluntary program that would eventually become mandatory. Also, we envisioned a system using standard technology. However in response to various concerns raised by some producers, small farmers, and some religious groups, then Secretary Johanns decided in August 2006 that NAIS would be entirely voluntary at the federal level. (States retained the option to make their participation mandatory, and several have done so.) Accordingly, we invested a great deal of effort—and money—in encouraging producers to voluntarily participate. I will provide more detail about those efforts later in my statement. Also, rather than establish a mandatory technology, we sought to make NAIS technology neutral, in hopes of stimulating competition that might lead to better pricing and more flexibility for voluntary participants.

NAIS Overview

I would like to give you a brief explanation of the three components that make up NAIS—premises registration, animal identification, and animal tracing. The first phase of NAIS involves producers registering their premises containing livestock and poultry with their local State or tribal authorities. Premises information is critical to protecting U.S. agriculture because it gives us the ability to plot locations within a radius of an infected premise and determine the

potential magnitude of a contagious disease as well as the resources needed to contain it. Additionally, it provides the foundation to achieve both animal identification and tracing.

Just having a contact list of producers in a given area will help us respond quickly when an animal health emergency or significant disease event arises. These lists proved beneficial when a blizzard hit Colorado in January 2007. The State Department of Agriculture used the NAIS contact list to call ranchers, evaluate the well being of their livestock, and airdrop hay if needed.

Animal identification, the second component of NAIS, provides participating producers and owners with a uniform numbering system for their animals; both as individuals or as a group or lot of animals. The actual identification protocol is sensitive to the unique qualities of different species groups, and the way they are raised and processed. For example, while individual animal identification is important for cattle, lot identification is more practical for poultry. The uniform numbering system links producers' livestock or poultry to the animals' birthplace or premises of origin. This is a valuable tool for producers and owners whose animals go into commercial production or are moved frequently. Each identification number provides a unique number for animals and the location or premises.

The final NAIS component, animal tracing, is available through several Animal Tracking Databases (ATDs) maintained by States and private industry. Having States and industry maintain these ATDs is part of our plan to assure confidentiality for participants. The Federal Government does not maintain this data; States and private entities do.

Key animal tracing information includes the animal identification number, the premises identification number, and the date the animal was moved in or out of a premises. We use a "bookends" analogy for individual-animal traceability. There is a "left bookend" – the birth record; "books on the shelf" – animal movement records; and a "right bookend" – the animal termination record. I want to emphasize that animal health officials will use the data only when an animal disease event warrants such use. This is another part of our commitment to protecting confidentiality.

Benefits of NAIS

Animal health officials in the United States and around the world have long recognized that an efficient and effective system for the identification of premises affected or potentially affected by livestock diseases is an essential component of any animal health program. While an animal identification system will not prevent the onset of a foreign animal disease such as FMD, a fully implemented NAIS will provide for rapid animal tracking and disease containment. These are critical in mitigating the risks posed by potential disease outbreaks.

Currently, it can take months for animal health officials to complete an investigation of an animal disease event because records are often, at best, kept on paper. Too often the lack of any official identification results in many more farms and ranches being part of a traceback as we are unable to determine the specific origin of the subject animal. Additionally, without movement data, we cannot determine potentially exposed animals. This exacerbates the traceback challenge.

For example, of the 199 positive cases of bovine tuberculosis identified in the United States between late 2003 and early 2008, over 84 percent of the animals did not have official USDA individual identification. As a result, USDA and State investigative teams spent substantially more time and money in conducting tracebacks, including an expanded scope of an investigation to identify suspect and exposed animals. The average time spent conducting a traceback involving 27 recent bovine tuberculosis investigations was 199 days. This is simply not acceptable.

With the rapid disease response capability that a successful NAIS will provide, we can limit the number of animal owners impacted by an outbreak and reduce the economic strain on owners and affected communities. In the case of an animal disease outbreak, NAIS would enable the United States to demonstrate that certain areas are free of disease, potentially limiting market closures. NAIS also helps to preserve the marketability of animals for domestic markets. Also, NAIS opens communication channels between animal health officials and animal owners, allowing the rapid sharing of information in the event of animal health concerns.

Cost is another issue we must carefully consider. We understand that NAIS implementation is not cheap; initial data from a cost-benefit analysis Kansas State University is conducting for USDA show that annual government and industry costs associated with achieving full preharvest traceability for cattle, swine, sheep, and poultry exceed \$200 million annually. But we must compare this with the estimated billions of dollars in losses we would suffer from an FMD outbreak. The 2001 United Kingdom FMD outbreak cost \$7.9 billion in losses and eradication costs. A 1997 FMD outbreak in swine in Taiwan cost \$6.9 billion and wiped out its previously strong export market. To more definitively demonstrate the benefits of 48-hour traceability, we entered into a cooperative agreement with Kansas State University, to conduct a cost-benefit analysis of the NAIS program. The analysis is studying the benefits and costs of all components of NAIS across all industry/species sectors. The analysis is also seeking to determine the overall distribution of the system's benefits and costs among producers of various-sized herds, marketing firms, processors, consumers, and State and Federal government agencies. The report is currently being finalized and we hope to be able to share it with the Committee soon.

In the global marketplace USDA recognizes that traceability—whether it be “farm to fork” traceability for food safety purposes, or traceability for animal disease purposes alone—is important to all producers and segments of the preharvest production chain for marketing purposes. Many of our international trading partners and competitors such as Brazil, the European Union, Australia, and Japan have adopted national identification systems. Establishing an internationally recognized system of traceability will enhance the competitiveness of U.S. exports of animals and animal products. In fact, our lack of a standardized, national animal identification system was one factor that prevented the United States from receiving “negligible risk” status (the best status possible under the rating system) for BSE from the World Organization for Animal Health (OIE). Receiving negligible risk status would not only enhance our ability to compete internationally, it would greatly support U.S. domestic price structures so that all producers—regardless of their interest in international marketing—would benefit when the United States expands its export markets.

Challenges

We have faced many challenges as we have worked to develop a robust NAIS. Most producers, industry groups, and State officials tend to see NAIS' value, but the debate continues over how to implement it. This has led to a disappointing participation rate of about 35 percent. Some State legislators have sought to restrict participation in the program. Further, we at USDA have made adjustments in the direction of NAIS, resulting in some confusion regarding producer participation.

Perhaps the producers' biggest concern has been protection of their information. I assure you that USDA takes NAIS privacy issues very seriously. We intentionally limited the type and quantity of information collected and maintained by the Federal Government. USDA maintains only the premises registration information needed to enable effective trace back or notification in animal disease situations, as well as distribution/termination records of official identification devices, and will not have direct access to the animal tracking databases which contain animal movement records. Existing Federal law protects individuals' private information and confidential business information from disclosure—a fact that USDA has continually emphasized. We will use all of our existing authorities to protect private personal information or confidential business information provided by NAIS participants. We look forward to working with the Committee should you believe that we need additional statutory assurances of confidentiality.

To address all of these challenges, USDA is working to reach a better understanding with producers about NAIS. We have put tremendous emphasis on outreach, communication, and promotional efforts to encourage participation. We want to make sure that producers recognize and embrace the importance of participation and understand the myriad benefits that NAIS brings to the entire U.S. livestock sector.

NAIS Today

Infrastructure

The premises registration and animal identification infrastructures are fully operational. The animal tracing component, while operational, is in its final stage of development. We are building these systems using standardized data elements established through NAIS. The standards now in place will ensure long-term compatibility of systems, an invaluable, long-term benefit that has resulted from NAIS.

To date, we have registered over 500,000 premises, or approximately 35 percent of the estimated number of our Nation's livestock and poultry premises. Thirteen States have registration rates greater than 50 percent; however, seven of those States have some form of a mandatory program or a process for issuing the standardized premises identifier to the locations on record in their State.

The animal identification component, with nearly 30 identification devices available that incorporate the official Animal Identification Number, commonly referred to as the 840 AIN, is well established. We can use it to meet multiple needs for animal ID. Both visual-only and

radio frequency tags are available. Over 5 million AIN devices have been manufactured of which 2.6 million have reached farms and ranches throughout the United States.

Producers have access to several Animal Tracking Databases (ATDs) for reporting the movement of animals that they ship to or from their premises. About 20 organizations are working with USDA to provide ATDs; these systems vary in their level of operation and integration with USDA systems. The ATDs link to the Animal Trace Processing System (ATPS), which is in its final stage of development. The ATPS provides the conduit for communicating and receiving information from the ATDs when animal health officials conduct disease tracebacks. These information systems are vital to making it easier for producers, States, industry, and USDA to determine the scope of a disease situation, locate infected animals, and curtail any further spread of disease.

NAIS Business Plan

In August 2008, USDA published *A Business Plan to Advance Animal Disease Traceability*. We are using that plan to guide our efforts to increase NAIS' functionality. The plan articulates these key priorities for USDA in fulfilling the long term vision for NAIS and demonstrating greater accountability for the program:

- Prioritize implementation by species/sectors, taking into account where the greatest disease concerns and traceability opportunities exist
- Harmonize animal ID programs
- Standardize data elements of disease programs to ensure compatibility
- Integrate automated data capture technology with disease programs
- Partner with States, Tribes, and territories
- Collaborate with industry
- Advance ID technologies

Secretary Vilsack has made it clear that NAIS should be implemented in a way that is sensitive to the unique qualities of different species and the way they are raised and processed. We have prioritized each species based on the need for improved traceability and developed supporting strategies that will work effectively for each species.

The Business Plan specifically provides benchmarks to guide the NAIS' progress towards the long-term goal of 48-hour traceback of affected or exposed animals in the event of an animal disease outbreak. Our immediate goal is to ensure that a minimum critical mass of producers is on board, which we estimate would be 70 percent of the animals in a specific species/sector that could be identified and traceable to their premises of origin. I must emphasize that while 70 percent would provide some measure of traceability, we really need to achieve higher participation rates, perhaps as high as 90 percent, to ensure the benefits of the system.

We must have data element standards to have compatible systems to communicate effectively among industry, state, and federal systems. For this reason, one of our key strategies is use of a standardized location identifier—the premises identification number—when recording locations that participate in activities related to a disease program and when responding to an animal

disease event or outbreak. In an effort to proceed with establishing the standardized PIN, our Agency published a proposed rule on January 13, 2009, “Official Animal Identification Numbering Systems,” (Docket No. APHIS-2007-0096) in the *Federal Register* and is inviting comments on the proposal through March 16, 2009. The proposed rule would establish the 7-character PIN as the standard location identifier.

USDA has also moved forward on another key strategy: integrating electronic data capture and reporting technologies into existing disease programs. By using NAIS-compliant identification devices that support automated data capture technology and by integrating handheld computers/readers to replace paper-based forms, animal health officials can electronically record and submit essential data to USDA’s Animal Health and Surveillance Monitoring database and other animal health databases. The electronic collection of data increases the volume and quality of information and speeds data entry into searchable databases.

While NAIS’ purpose is to provide critical animal health data, it can support industry-based marketing efforts. USDA’s Agricultural Marketing Service (AMS) has capitalized on the NAIS 840 animal identification eartag as a producer-friendly, practical solution to meet the requirements of country-of-origin labeling. AMS is strongly encouraging the use of NAIS participation to identify animals involved in USDA Process Verified Programs and Quality Systems Assessment Programs. This will allow producers to use one animal numbering system and ID method for multiple uses, simplifying their recordkeeping and reducing the costs associated with multiple ID tags. Producers who obtain a premises identification number for their operation and identify their animals using NAIS-compliant methods will be able to provide adequate information on the origin of their livestock to packers. Packers can rely upon this information for their origin claims on products.

Levels of Participation

The poultry industry, through the support of the National Poultry Improvement Plan (NPIP), continues to have a high level of traceability—estimated at more than 95 percent today. Premises are already well defined and industry organizations and leaders from the National Turkey Federation, National Chicken Council, United Egg Producers, and APHIS are merging existing records with NAIS.

The level of traceability in the pork industry has progressed well. Collaborative effort of the National Pork Board (NPB) and State and Federal animal health officials has led to an 80 percent increase in premise registration. The commercial swine industry utilizes group/lot identification extensively, thus premises information alone provides a high level of traceability.

We can trace most sheep back to the flock of origin due in large part to industry participation in the National Scrapie Eradication Program. An estimated 95 percent of sheep flocks are listed in the scrapie database.

The cattle industry remains our highest priority due to the lack of official identification. While interest and participation in NAIS have increased as a result of 840 AIN tags being readily available, the rate at which official identification is increasing in the cattle industry continues to

concern us. The Business Plan includes goals to have 50 percent of the calves born after January 1, 2008, officially identified to their birth premises by October 2009 and 60 percent by October 2010. We initially anticipated that Country of Origin Labeling (COOL) would significantly increase the use of 840 AIN tags. However, a significant part of the industry appears to support using the paper affidavits to meet its compliance requirement. Therefore, we may have over-estimated the anticipated increase in use of 840 AIN tags resulting from COOL. Given our current strategies, it appears that achieving the traceability business plan goal for the cattle industry will be difficult.

Funding

As NAIS continues to progress, Secretary Vilsack and his team will be overseeing its continued development. The Secretary is starting with a full review of past spending within the NAIS program. We know accountability is essential to assure the American public that the Federal government is making the best and most efficient choices when it comes to their tax dollars. Accordingly, I would like to give you a brief overview of past funding activities.

We have obligated \$118.9 million since 2004 to develop and implement NAIS. We invested nearly \$18 million, or about 15 percent of total obligations, on development of high caliber information technology (IT) systems, which are critical in making NAIS a success. We used eighty percent of those IT funds to support premises registration; 14 percent for animal identification; and 6 percent for the tracing component, including building capability to ensure USDA can interact with State and private Animal Tracking Databases.

We worked closely with States, Tribes, and Territories and provided them with \$55.5 million, or 47 percent of total obligations, to administer and deliver the program through cooperative agreements. These funds provided on-the-ground resources to conduct education and outreach efforts, administer premises registration activities, and support selected pilot projects/field trials to explore innovative methods of advancing NAIS. We worked through the States and others to allay the concerns expressed by producers and others about what they deemed too much intervention by the Federal Government. Also, working through States we reduced the amount of information collected and maintained by USDA, thus advancing the goal of confidentiality.

USDA also entered into several cooperative agreements with non-profit industry organizations. These agreements support efforts to promote NAIS and increase participation in premises registration, and these efforts cost approximately \$3.5 million.

The education and outreach efforts, through cooperative agreements with States, Tribes, Territories, and industry organizations, were part of the policy of persuading producers to participate in a voluntary system. We also used approximately \$10.4 million, or about 9 percent, of the total obligations for national-level communications aimed at increasing producer awareness and understanding of, and participation in, NAIS.

The balance of the funding over the past five years supported the USDA staff leading the NAIS effort. This includes the many veterinarians, information specialists, statisticians and others involved in designing the program. It also includes the APHIS veterinarians and other animal

health professionals located throughout the United States. They worked closely with their State and industry counterparts to promote an understanding of and participation in NAIS.

We understand the importance of accountability in the NAIS program, and assure you that we continue to look for ways to improve program oversight. We have allocated funding in accordance with the strategic direction of the program. As we look to the future and take a hard look at program strategy, we will adjust the funding allocations as appropriate.

Conclusion

Thank you for the opportunity to testify before you today on this important issue. USDA recognizes that we must be able to quickly and effectively trace animals linked to a disease event in order to enable a quick response to eradicate or control the disease. Enhancing these capabilities through the NAIS strengthens our ability to protect the health of U.S. livestock and poultry, as well as the economic well-being of those industries.

Implementation of the NAIS has been one of my highest priorities as Chief Veterinary Officer. It is time to reassess our strategy to ensure that we achieve significant increases in participation rates to reach the critical mass we need for an effective program. As I stated in my introduction, the Secretary is carefully weighing all of the options to determine how USDA and its partners can make NAIS more effective and successful. We look forward to continued collaboration with the States, industry, producers, and the Committee to develop NAIS policy in a manner that invites and is responsive to the input of all stakeholders.

I'd be happy to answer any questions.