

REPORT OF THE USAHA COMMITTEE ON LIVESTOCK IDENTIFICATION

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The Committee met on Tuesday, October 18, 2016, at the Sheraton Greensboro Hotel, Greensboro, North Carolina from 8:00 a.m. – 12:00 p.m. There were 86 attendees, 53 members, and 33 nonmembers. The meeting was chaired by Dr. William Brown and vice chair Kevin Maher.

Animal Disease Traceability Update

Neil Hammerschmidt, USDA-APHIS-VS

Traceability Performance Measures – 2nd Comparison to National Baseline Values

The Animal Disease Traceability (ADT) program was established to improve the ability of Federal, and State and Tribal animal health officials to trace livestock in the event of an animal disease outbreak. Ongoing implementation of this performance-based program is measured through a specific set of four (4) traceability performance measures (TPMs). These TPMs are based on activities that are typically associated with the administration of trace (trace-back or trace-forward) investigations. These four activities are utilized because they can be uniformly measured regardless of the complexity of the trace and measure a State's ability to properly administer, record and retrieve documents pertaining to official livestock identification and interstate movement.

Two values are measured for each TPM. The "Percent (%) Successful" value represents the percentage of time the information was successfully retrieved for each activity, while the "Time" value reflects the average lapsed time it took the State to complete each activity. When recording the lapsed time, the start time is when the State is notified of the official identification number and the end time is when the State finds the information to answer the question posed by the TPM.

The following table provides the comparison of the second year results to the national baseline values established in 2014 and the first year comparison. The lapsed time decreased for all four TPMs in both the first and second year comparisons. The total number of trace records assigned, or initiated, and the number of traces completed are used to reflect the frequency with which information was successfully retrieved to answer the question posed by each TPM. Improvement for successfully completed TPMs has been achieved from the national baselines values for all four TPMs. However, there is minimal

change from the first comparison to the second for TPMs 2, 3 and 4 while there was significant increase in the frequency of successfully completed exercises for TPM 1.

1st and 2nd Comparisons to National Baseline Values

#	Performance Measure Description	National Baselines		1 st Year Comparison		2 nd Year Comparison	
		% Successful		% Successful		% Successful	
		Time	Time	Time	Time	Time	Time
1	In what State was an imported animal officially identified?	NA	NA	88%	39 hr.	97%	20 hr.
2	Where in the State was the animal officially identified?	69%	88 hr.	88%	35 hr.	87%	29 hr.
3	From what State was an animal shipped?	58%	138 hr.	85%	42 hr.	86%	32 hr.
4	From what location was an exported animal shipped?	76%	264 hr.	88%	46 hr.	91%	41 hr.

The emphasis placed on record keeping systems, particularly electronic systems, to retrieve data associated with the TPMs has resulted in a favorable trend demonstrating improved traceability completion time and, for the most part, a greater number of TPMs successfully completed. It is important to acknowledge that the data used for the national baseline values reflects time to retrieve information prior to the implementation of the ADT program. For the first year comparison, event records from 2012, 2013, and 2014 were primarily selected and for the second year comparison, event records were selected from 2013, 2014 and 2015. While the first two comparisons are based on records that are much more current, which alone would likely make those records more readily available, the overall trends shown by the TPM values indicate progress has been achieved.

Monitoring and Enforcement

APHIS concentrated on outreach and education the first year after publication of Part 86 with phased in enforcement beginning in 2014 for repeat offenders. The Monitoring and Compliance reference document provides guidelines for standardizing the process of enforcement actions that APHIS may take when violations occur including, consultations, letters of information and initiation of Investigative and Enforcement Services investigations. ADT staff monitor the number of actions taken per year related to violations of Part 86, which as of April 2016 also include State enforcement actions taken in regard to Part 86 and any related to their own traceability regulations. There was a shift in enforcement actions from 2015 to 2016 away from consultations and letters of information to an increasing number of Investigative and Enforcement Services' (IES) investigations.

Collection of ID at Slaughter

APHIS is committed to improving the rates of collection of identification and correlation to the carcass at slaughter plants. In addition to its value to ADT, proper administration of identification at the slaughter plants significantly impacts disease programs and surveillance efforts. APHIS will support, advise, or otherwise assist FSIS as requested to achieve these goals.

APHIS will be implementing several measures to improve collection and correlation of identification at slaughter plants including:

1. Training VS personnel on the use of the finalized ADT slaughter inspection forms to standardize field inspection of plants related to collection/correlation of identification (ID) to carcass through disposition;
2. Determining the procedures for ID collection/correlation to carcass through disposition utilized by top 40 plants to see which systems are most widely utilized and most successful;
3. AIC's and VS field personnel will continue to work directly with individual plants to address questions and obstacles to collection/correlation of ID;
4. Review of tuberculosis (TB) granuloma slaughter submissions to determine trends in ID collection or lack thereof from individual plants and reach out to successful plants through field personnel to determine best practices that may be applied to others and to assist VS field

personnel with targeted outreach to plants regarding cases where DNA microsatellite test results indicated that tissue/hair associated with the identification devices did not match the lesioned tissue submitted;

5. In addition to the current practice of tissue matching for all *M. bovis* histo compatible lesions submitted from slaughter, Cattle Health Center (CHC) will work with NVSL to perform random tissue matching on non histo compatible lesions to more closely monitor proper correlation of ID to the carcass.

Ultra High Frequency (UHF) Demonstration Projects

In FY 2014, APHIS provided funds to support UHF demonstration projects through the administration of eight cooperative agreements with the States of California/Hawaii (joint agreement), Colorado, Florida, Michigan, Montana, Oklahoma, Tennessee and Wisconsin. The objective of these projects was to evaluate UHF technology to document its potential merit for the collection of official livestock identification and animal health information to support disease traceability and animal disease control programs. Funding was awarded to projects that included cattle as the primary focus, targeting areas in the cattle industry that are most common or frequently practiced so that the outcomes would have the potential to impact a significant portion of the industry.

Overall the UHF tags and technology worked very well and as expected. The projects indicated that the UHF technology has certain advantages over low frequency radio-frequency identification (RFID) tags, in particular the read rate and read distance increase the potential of reading the animals' official identification numbers at the speed of commerce. Impediments to successful integration included utilizing the improper equipment for the production setting or environment, unfamiliarity with the equipment to ensure continued function at the speed of commerce, and lack of incorporation of appropriate software to achieve maximum benefit and efficiency of UHF technology. It is apparent that successful utilization of UHF tags will be driven by the industry for management and marketing purposes. The utilization of UHF technology is likely to advance and grow as more fine-tuning of the equipment and tags is achieved. Continued use of the technology by 14 of the 32 (44%) participants, two of which already used low frequency RFID, is a good indicator that investment in UHF technology is feasible in some environments.

Swine Industry ID Update

Patrick Webb, National Pork Board

The codification of a mandatory identification for swine moving interstate occurred October 14, 1988. The section of code, 9 CFR 71.19 served the industry well however, as the industry evolved, producer leaders started to realize that a mandatory pre-harvest traceability system was going to be important to the future. In 2003, the pork industry was supportive of efforts by National Institute for Animal Agriculture (NIAA) and USAHA to task USDA with leading the development of a mandatory livestock identification system. As a result, USDA APHIS developed the U.S. Animal Identification Plan which became the National Animal Identification System (NAIS). In 2004, the pork industry developed the swine identification (ID) program standards to be compliant with what was proposed in the NAIS and in 2005, began to implement the standards and continued implementation as the NAIS was sunset and replaced with the Animal Disease Traceability program and final rule in 2015. The Swine ID program standards are based on how pigs are currently identified and moved today. The program standards are consistent with the federal and state codes of regulations and they use the nationally standardized premises identification number (PIN) as the foundation for standardized animal identification and record keeping for swine. To support implementation, the industry worked with USDA to develop Official PIN Tags to identify market breeding stock and the ability to verify PIN's and render barcodes for use in production and movement records, bills of lading, and for use with diagnostic laboratory submissions. The standards have been integrated into Pork Quality Assurance Plus® Program's educational materials.

The CFR's definition of a Swine Production System plays a central role in deciding what types of identification can be used. Swine moving within a swine production system are eligible to use group / lot identification. Swine that are comingled outside of a production system are required to be identified with unique official identification. In both cases, detailed movement records are required to be captured and held for three years.

Since the ADT rule became effective in March 11, 2013 there have been some unintended consequences that have caused some confusion regarding the identification of breeding stock moving interstate for breeding purposes. In commercial production breeding gilts are raised and moved as group/lots for breeding purposes. The only time that they are comingled outside of a production system is

when they enter harvest channels. Historically all States have accepted an ear tag bearing a PIN and a producer's own unique livestock production numbering system as official identification for breeding swine moving interstate for breeding purposes. The regulatory authority for this method of identification is defined in 9 CFR 71.1 within the term Premises Identification Number. After the ADT rule this method of identification did not meet the definition of an Official Ear Tag as defined in the CFR so there was some question as to its continued use. The industry worked with USDA to address this issue and USDA provided clarification to the States that this type of tag is approved by the Administrator as an official method to uniquely identify breeding stock in interstate commerce for breeding purposes.

Sheep and Goat Industry Update

Cindy Wolf, University of Minnesota, College of Veterinary Medicine

Since 2001, significant portions of the sheep and goat industries have adopted identification (ID) as mandated by the National Scrapie Eradication Program. This program provides producers with ID options including eartags, registration tattoos, and program-compliant electronic implants placed in approved sites. Compliance has been positively affected by the availability of these options. Publication of the revised scrapie rule is expected soon. It is anticipated that the new rule will help close the existing gaps in traceability. The industry perspective is that the existing choices of program-provided eartags will assist with better compliance as new classes of sheep and goats will be required to be identified in transit and in commerce.

Traceability Challenges with Current Implementation/Use of Electronic ID in Horses

Angela Pelzel-McCluskey, USDA-APHIS-Veterinary Services (VS)

A short series of case studies was presented to demonstrate the varied outcomes of recent attempts to trace equine microchips. Overall conclusions of these experiences were:

- Given that there are multiple parties responsible for keeping records in the life of an equine microchip, a failure to keep or properly transfer records at any single step yields a permanent dead end to the trace.
- The best outcomes for tracing equine microchips to date have been achieved when the end information is maintained by breed registries or equine industry groups.
- Having to trace stepwise starting at the manufacturer is time consuming, although the manufacturers have done a great job maintaining their data and providing the information when needed. These delays could have significant impacts when the reason for the tracing is related to a disease outbreak.
- There is a clear need for an online microchip look-up tool for equine chips that will at least provide the name/phone number of the final entity that retains the data on that chip (similar to what is used for small animal lost/found).

Overview of the Challenges/Hurdles with Equine ID; Current and Future View Relative to Equine ID

Billy Smith, American Paint Horse Association

Mr. Smith presented the Paint Associations comparison of registry numbers to Quarter Horse and Appaloosa. He discussed trends in the registered horse population and rebrand issues of the industry and association. Concerns were discussed about the lack of database and system compatibility and integration as well as consistency with EID types and reading technology options. Market demographics of horse ownership, including their primary concerns/needs were highlighted.

A panel discussion then occurred following the above species group presentations by the preceding presenters:

A Livestock Market Panel Discussion occurred to address several topics, with the following participants:

Jennifer Houston (TN)
Darrell Ford (AR)
Jim Santomaso (CO)
Brandy Ferguson (VA)
Lawson Roberts (VA)

This was a panel of livestock market operators from various states that explored the challenges and opportunities for livestock markets within the realms of the animal traceability rule. Several topics were explored including:

- Successes and challenges you have had with animal identification.
- What changes, if any, did you have in implementing the 2013 federal ADT rule requiring tagging for dairy cattle and beef cattle more than 18 months of age moving between states?
- Have you incorporated electronic tags? If so, how did it go? If not, why not?
- If ADT was to be expanded to require tagging feeder cattle, how would this affect your business?
- Looking ahead, what do you vision for animal traceability in the U.S. and your market in the next 10-20 years?
- Other questions from the audience.

The second panel addressed several topics and issues relative to animal traceability and consisted of State Animal Health Officials, State Animal Disease Traceability Coordinators, and industry representatives. ADT State Compliance Panel Participants:

SAHOs

Paul McGraw (WI)

Charlie Hatcher (TN)

ADT Coordinators

Alicia Gorczyca-Southerland (OK)

Kendra Frasier (KS)

Alex Turner (CO)

Industry leaders

Billy Smith (Exec. Dir. American Paint Horse Association)

Gary Ross presented by Thach Winslow (WY)

Topics Discussed:

- State compliance discussion and procedures (SAHO and/or state ID coordinators)
- State ADT cooperative agreements examples of acceptance of various forms of ID
- Distribution of RFID Tags – what works and does not work in tag distribution
- Expressed concerns of slow adoption of EID and reader use by producers, veterinarians
- What do you vision for animal traceability in the U.S. and your state in the next 5, 10, and 20 years?

Committee Business:

New business resulted in a motion from Dr. Cindy Wolf, titled: '*Continued USDA Provision of Plastic Scrapie Program Eartags to Sheep and Goat Producers*'.

The motion received a second and was approved by the Committee as a resolution.

No further action occurred during the business meeting. The meeting adjourned at 12:25 p.m.