

ADVANCING ANIMAL DISEASE TRACEABILITY (ADT) ROAD MAP FOR NORTH CAROLINA

A Three-Year Plan

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EXECUTIVE SUMMARY

North Carolina is a major agricultural state with beef cattle, pork, and the poultry industries being the leading animal commodities. An important element in the international and national marketing of these products is the capability to trace an animal back to its origin with the goal to safeguard animal health and public health using the latest technology allowing for quick response to a livestock disease event or incident of concern. The North Carolina Department of Agriculture and Consumer Services, Veterinary Division (NCDA & CS) coordinates efforts to implement the 2013 Animal Disease Traceability (ADT) Program as outlined in 9 CFR in the state of North Carolina. The challenge is to develop a system that meets stakeholders' needs and objectives in such a way as to be accepted by all.

Resources needed to establish, implement and maintain an animal disease traceability system include personnel, educational, and financial resources. Personnel resources are necessary for regulation of the program administratively and to have regulatory staff implement changes in the markets; developing educational resources to engage stakeholders; and financial resources to fund personnel and educational resources as well as provide supplies, equipment, technical support, and other items necessary for implementation and maintenance of a workable and efficient animal disease traceability system.

Achieving a workable animal disease traceability system requires stakeholder input, cooperation with other states and federal partners, and state legislative action. The reality of the wide variety of inputs will dictate a plan based on short and long term goals.

North Carolina has taken efforts to advance ADT focused on promoting premises identification, developing a database that has traceability capacity, and education and outreach initiatives with stakeholders. These efforts serve as a base for developing further disease traceability efforts plans. The current plan is built around implementing programs based on achieving the performance standards, guidelines and other goals and objective of the new framework for animal disease traceability and updating current North Carolina general statutes and administrative code. Because this plan is focused on developing, implementing and maintaining an animal information system within the State, all activities and actions summarized above will support the animal health information systems within the State.

The North Carolina animal disease traceability information is compatible and interoperable with other States/Sovereign Tribal Nations/Territories and USDA and allows sharing animal disease traceability data. The individual identification used is official and originates from legitimate cattle premises or licensed livestock markets, with both having premises identification as the location identifier. The individual identification devices are unique ear tags identified under the Animal Identification Numbering tags (e.g., 840 and RFID tags) or the National Uniform Ear [Tagging-Tagging](#) System (NUES) defined in 9 CFR 86.

The objectives of the North Carolina Animal Traceability Program are:

1. Maintain current animal disease traceability infrastructure within North Carolina;
2. Conduct outreach activities; and
3. To advance the animal disease tracing capability of the North Carolina Animal Disease Traceability Program.

An important element in the marketing of beef cattle and swine is the capability to trace an animal back to its origin with the goal to safeguard animal health and public health allowing for quick response to a livestock disease event or incident of concern.

NCDA & CS promotes the traceability rule by encouraging livestock markets, veterinarians, swine and cattle owners located in the state of North Carolina to participate in identification programs by:

- Registering for premises identification numbers;
- Requiring identification on swine for intrastate movement; and
- Assigning Animal Health Technician staff to support education and enforcement of ADT at markets, rodeos, exhibitions, etc.

The objective of animal disease traceability program is to have epidemiological information prior to any disease inquiry or response need, and by so doing support effective animal disease surveillance plan that documents disease free status.

CURRENT TRACEABILITY SITUATION

Who We Are

The leading agency of the North Carolina ADT Program is the North Carolina Department of Agriculture and Consumer Services, Veterinary Division.

External constituents include animal industry stakeholder groups (which includes but is not limited to):

- Small and large scale producers;
- Livestock market operators;
- Licensed livestock dealers;
- Private accredited veterinary practitioners;
- County extension at both the university and local levels;
- Managers of livestock and agricultural fairs and exhibitions and shows;
- SAHO from states that conduct animal movement with North Carolina;
- The Southern Animal Health Association (SAHA);
- USAHA; and
- USDA APHIS VS.

State and federal field personnel visit 15 accredited livestock markets regularly on sale days for purposes of inspection and monitoring activities, including verification that all livestock are identified according to the new traceability rule, that identification tags are properly placed, and that required record keeping and transmission of ID data is being done in timely fashion and in accordance with instructions. Field personnel, consisting of eleven (11) animal health technicians and four (4) Veterinary Medical Officers, who

work closely with the livestock markets and market veterinarians on all matters pertaining to the Federal traceability rule. Also, state and federal field personnel will visit with accredited veterinarians and livestock producers to address animal disease traceability (ADT) rules. The Livestock Unit director serves as the ADT Coordinator and provides oversight to the program.

Traceability data is used internally to traceback suspects in program disease efforts, federal ADT cooperative agreement exercises (including assisting other states conducting exercises), assist other Divisions within the NCDA & CS, assist industry in health and management decisions regarding their specific industry sector and interactions with other industry sectors, and to assist USDA APHIS FSIS and VS within North Carolina. Externally, traceability data is used to assist other states with interstate movement of animals, assist other states in tracebacks of program diseases that are found in our state, and to provide resources to national industry groups and USDA to be used in formulating policy, developing programs, and planning emergency response plans.

The animal disease traceability program goals include:

- Reducing risk of spread of disease by having the ability to quickly complete tracebacks to determine spread and origin of disease; and
- Honest and transparent interactions and communication with all our partners and stakeholders.

The ADT Advisory Committee consists of:

- Eastern Band of Cherokee Indians;
- North Carolina Alpaca Breeders and Owners;
- North Carolina Aquaculture Association;
- North Carolina Association of Agricultural Fairs;
- North Carolina Cattlemen's Association;
- North Carolina Cooperative Extension Service (NCSU & NCA&T);
- North Carolina Dairy Producers Association;
- North Carolina Deer and Elk Farmer Association;
- North Carolina Department of Agriculture and Consumer Services, Veterinary Division;
- North Carolina Farm Bureau;
- North Carolina Horse Council;
- North Carolina Livestock Market Association;
- North Carolina Meat Goat Association;
- North Carolina Meat Processors Association;
- North Carolina Pork Council;
- North Carolina Poultry Federation;
- North Carolina Sheep Producers Association;
- North Carolina Veterinary Medical Association (NCVMA); and
- USDA APHIS VS Area Office (AD and AIC).

The Advisory Committee meets annually and at other times as appropriate and necessary.

Where are we now?

Current traceability is defined in terms of successful tracebacks on program reportable diseases, the ability to locate specific back tag and individual animal information, the ability to locate the farm (or state) from where an individual animal originated, the level of individual animal identification on ICVIs, and the number/percentage of ICVIs that are approved vs. disapproved by the State Veterinarian's office. From this description it is obvious that the traceability system is not a stand alone initiative but overlays a wide range of animal health-related issues and programs. Achieving these measures are the standards for traceability that are being used and are appropriate.

Traceability coordination is currently being achieved through routine communication between office and field staff, field staff and producers, office and field staff with industry and federal partners, and all the iterations of all these various components and other constituents and/or units.

The technology infrastructure for the cooperator's traceability system includes the Standard Premises Registration System (SPRS) / Standard Premises Identification System (SPIS) repository for national Premises Identification Numbering System (PINS) and the cooperator's Animal Health Programs (AHP) data base. The state AHP data base contains information on approximately 35,000 premises in the state that is critical to our traceability system and will continue to be so. The SPIS contains traceability information on approximately 13,500 premises. All premises that are in the SPIS are also in the AHP data base. In the event of an animal disease emergency and at the discretion of the North Carolina State Veterinarian, the AHP data would be made available to appropriate individuals; this access is governed by North Carolina General Statutes and altering that protocol is not possible without legislative action.

Requests to the cooperator for information are routinely available Monday through Friday from 8 A.M. to 5 P.M. The North Carolina Department of Agriculture and Consumer Services, Veterinary Division is an "emergency response" unit and in the case of a declared emergency are expected to be available for 24/7 coverage including providing information from the AHP database necessary for managing the emergency, including traceability data if needed.

Strengths and Weaknesses

The strengths of North Carolina Animal Disease Traceability program are:

- a. An Animal Health Program (AHP) database was developed four years ago as a tool that included traceability components for animal identification (swine) and for premises identification;
- b. Personnel, both administrative and field staff, bring tremendous resources in terms of knowledge of programs, relationships with industry, and experience in response to disease outbreaks and eradication;

- c. One full-time administrative position assigned to oversee import/export of ~~animals-animas~~ in North Carolina to ensure movement requirements are being met and ICVIs are properly completed by accredited veterinarians (full-time position working with a temporary employee who serves as back-up for the program);
- d. Mandatory individual identification for certain species (goats and sheep are required to participate in the Scrapie program, and swine are required to have ID for movement);
- e. NC FarmID program to create and trace both state and national premises IDs;

Weaknesses in North Carolina’s animal traceability program include:

- a. There are limitations within the AHP regarding tracing animal identification numbers that other databases (e.g., Core One or USAHerds) have identified and corrected. Also, IT staff limitations limit how much programming can be accomplished per year;
- b. The lack of educational material to distribute to external stakeholders and the general public about the program and its purpose;
- c. Financial resources are not available to hire personnel for field enforcement for livestock movement;
- d. Reliance on utilization of a paper filing system of ADT documents and the lack of a searchable ICVI electronic database,
- e. Employee turnover (specifically temporary position) impairing our ability to have two people effectively manage and coordinate an animal traceability program with the number of animals moving through North Carolina; and
- f. A lack of a strong electronic animal identification system within its markets to easily capture Radio Frequency Identification (RFID), technological enhancements (e.g., RFID scanners, electronic animal identification, tablet PCs at livestock markets and software purchases or enhancements to existing systems).

Opportunities and Threats

This plan offers the opportunity to increase the number of animals identified, present a more accurate picture of interstate movement into and out of the state, develop a more complete and extensive database on owner information, animal locations and inventory, trace animal identification numbers, and an enhance the ability to respond more effectively and efficiently to animal health events.

Without this plan, the converse of these opportunities would exist and likely occur and the information necessary for response would still be required. Obtaining this information in the face of an emergency response situation would be inefficient and ineffective, prolonging the event and threatening continuity of business for the livestock and poultry sectors. Previous efforts and exercises have demonstrated these complications in preparedness, response and recovery activities.

Inventory of existing infrastructure and suitability assessment

The North Carolina Department of Agriculture and Consumer Services, Veterinary Division has two (2) full-time administrative staff that have been trained and dedicated to traceability efforts; there are an additional four (4) office personnel that would function as back up and support. Four (4) field Veterinary Medical Officers (VMOs) and eleven (11) Animal Health Technicians (AHTs) in the livestock section are also fully trained and capable to perform traceability activities. Fourteen poultry AHTs are also available for backup and support. The Directors of both the Poultry and Livestock Health Programs oversee and direct these activities.

Office space available for two computer stations, and multiple filing cabinets and dedicated to ongoing traceability efforts. Additional office space requirements may be available for use, but is limited due to physical layout of building. Existing office equipment for administrative use is greatly overtaxed, outmoded and limits effectiveness and efficiency. New technology will be reviewed as possible replacement for existing technology as needed. Office and field staff have direct access to the AHP database. Administrative staff has access and makes frequent use of USDA databases (e.g., SCS Core One) and animal health information resources. SCS Core One is being explored to possibly replace some of AHP current functions.

Records and data relative to traceability are available in electronic and paper record systems. Computer databases include state and federal programs (e.g., AHP and SCS Core One). Paper records include and are not limited to ICVIs that are maintained for two (2) to five (5) year periods as outlined in 9 CFR 86. The databases contain extensive data of animal agriculture-related information in North Carolina.

VISION AND MISSION CONTEXT FOR ADVANCING TRACEABILITY

Vision and Mission Statements

The mission of the North Carolina Department of Agriculture and Consumer Services Veterinary Division is to serve, protect and promote animal agriculture in North Carolina. The division works to ensure a healthy, growing animal industry. The division partners with private veterinarians and livestock industries to provide programs aimed at preventing, controlling and eradicating certain infectious or communicable diseases of livestock.

The North Carolina Animal Disease Traceability Program strives to have an effective disease surveillance program by continuing to improve every aspect of animal identification. The overall objective of this program in advancing animal disease traceability is to have searchable epidemiological information prior to responding to any disease inquiry or response need, and by so doing support an effective animal disease surveillance plan that documents disease free status. This same data is essential for supporting interstate animal activity and for planning continuity of operations

TRACEABILITY REQUIREMENTS

Strategic goal(s)

To develop and implement a State-wide infrastructure for advancing animal disease traceability compatible with State, Sovereign Tribal Nation, Territory and USDA standards.

Programmatic goals (objectives)

The overall objective of the North Carolina ADT program is to have searchable epidemiological information prior to responding to any disease inquiry or response need. This information supports an effective animal disease surveillance plan that documents disease free status which is essential for supporting interstate animal activity and for planning continuity of operations.

Objective 1: Maintain Current Animal Disease Traceability Infrastructure within North Carolina.

Animal identification of cattle is performed by livestock market personnel, state animal health technicians, and the market veterinarians. The NCDA & CS provides field support for livestock markets to facilitate the program. The livestock market veterinarian and market personnel apply official 840 RFID tags or official NUES metal tags, and USDA approved back-tags, to farm cattle over 18 months of age. The livestock market or field staff will submit the official identification numbers (usually from an official NUES tag number) linked to the corresponding back-tags to the NCDA & CS office where the data is transferred to the AHD. Office staff will explore the transfer of data into SCS Core One. Additional use of scanners for electronic identification would increase accuracy and efficiency of information transfer. NCDA & CS will engage with external stakeholders to develop a complete program.

Office staff will continue to receive, track and monitor ICVI information, and convert paper ICVIs into digital format for storage. Staff will continue to use the current USDA exercises to objectively assess traceability performance standards that provide a baseline measure for the program and help identify areas for improvement.

In a separate component of the traceability program, accredited livestock veterinarians and producers have been encouraged to participate in the animal identification program. Participating producers and veterinarians are utilizing NUES ear tags to identify cattle, swine, goats and sheep (via Scrapie tags). This program requires that participating herds have a premises identification number. Identification data is entered directly into the North Carolina AHD or SCS Core One by NCDA & CS staff. Staff will continue to do this while also investigating other methods of online data entry from veterinarians or livestock markets. North Carolina producers and veterinarians are able to obtain official NUES tags and taggers through NCDA & CS. NCDA & CS will continue to monitor the successes and challenges of this tag distribution system and will review and implement changes necessary to improve efficiency.

Objective 2: Conduct outreach activities.

NCDA & CS will continue to identify, develop and implement outreach messaging for producers, accredited veterinarians, livestock markets, harvest facilities and other industry shareholders to obtain input, buy-in and support for traceability programs.

In addition to the weekly visits to sales at livestock markets, office and field staff participate in various opportunities for program outreach on the traceability rule in their contacts with food animal veterinary practitioners, extension offices, livestock associations, etc. Outreach activities consist of personal contact, verbal communications, creation of fliers for print and distribution. At the statewide and regional levels, staff personally conducts outreach activities through participation in statewide and regional industry, and veterinary organization events, county and state level fairs.

Objective 3: Advance the animal disease tracing capability of the North Carolina Animal Disease Traceability Program.

Our goal is to increase the amount of traceability data collected at the field and office level by developing methods to voluntarily increase the usage of electronic identification tags by livestock market and producers and electronic submission of official identification numbers matched with backtags. Some of these goals may be accomplished by developing agreements for use of state-owned equipment at markets for use in capturing and transferring data to the state. Options will be explored for allowing veterinarians and livestock markets online access to databases to allow direct entry of animal identification information.

Plans will be developed to promote an increase of electronic certificates of veterinary inspection (eCVI) usage by veterinarians within the state through use of Veterinary Services Process Streamlining (VSPS) or other third party software programs like GlobalVetLink, New Planet Technologies, or through the development of a state produced Microsoft Access distributed ICVI.

Office staff will continue to explore ways to increase the conversion of paper ICVIs into digital images and then look for more efficient methods of digital storage with eventual XML encoding and incorporation of these images into a searchable database. This may be outside of the current AHP database or SCS Core One.

The program will continue to assess current regulatory authority given by the legislative body, and request adoption of appropriated regulations as required to support the traceability program.

All of the above must have the engagement and support of all external stakeholder groups for success of the program. NCDA & CS will continue to reach out and work all these organizations to develop a successful program.

Animal disease traceability performance measures

The first performance standard measures the time it takes to determine the State / Sovereign Tribal Nation where an imported animal was officially identified. This is performed by the State / Sovereign Tribal Nation where the reference animal is located.

The second performance standard measures the time it takes to determine the physical location in the State where the animal was officially identified. This is performed by the State / Sovereign Tribal Nation where the animal was officially identified.

The third performance standard measures the time it takes to determine the physical location in the State where the animal was officially identified. This is performed by the State / Sovereign Tribal Nation where the reference animal was officially identified.

The fourth performance standard measures the time it takes to determine the physical location an exported animal was shipped ~~form~~ from when it moved interstate. This is performed by the State / Sovereign Tribal Nation that exported the reference animal.

If USDA amends the performance measures during this time frame, North Carolina will modify to remain compliant.

Data requirements

The vast majority of traceability information is provided on ICVIs and the vast majority of ICVIs are paper forms. In addition, the cooperator has worked continually since before the inception of the various national animal identification and traceability systems to establish state and then federal premises identification systems. National PINs have been entered in the SPR S/ SPIS and managed through use of the AIN management system; there are around 13,500 such identified premises in North Carolina. State premises identification began earlier and has around 35,000 premises identified. Both state and national ID numbers are contained and cross- referenced in the AHP data base.

Official animal identification will be in accordance with 9 CFR and include AIN tags (840 and RFID), NUES tags, microchips, Scrapie tags, etc., with the type of official tag often being species specific. At this time there are no arrangements with other states for other means of official animal identification beyond 9 CFR standards. Official AIN and NUES (metal ear tags) will be distributed by the state directly to producers and livestock market operators as well as to accredited veterinarians. A federal and/or state premises number will be required in order to assign tags and distribute them to an owner. The owner information and the tags

numbers assigned to that individual will be kept in the AHP database or SCS Core One and can be queried for reports and retrieved for traceability requirements.

At this time North Carolina does not have any commuter herd agreements. Pending final disposition of animals, ICVIs and Owner Shipper Statements (OSS) are the only forms that are approved for interstate movement of animals. Group / lot official numbers are already maintained on official ICVIs and this is anticipated to continue.

Traceability data will be shared with other States/Sovereign Nations/Territories/USDA upon request and approval by the North Carolina State Veterinarian. Confidentiality statute (G.S. 106-24.1) prevents releasing this information except by approval by the State Veterinarian in the event of an emergency response. Both electronic and hard copies could be made available under this approval process.

Information technology plan

North Carolina's information technology plan is based on continued utilization of the AHP database or SCS Core One for routine management of animal health within the state, program disease efforts, and response to emergency animal health event; animal traceability is a component of all of these activities. The AHP data base is housed on a Sequel server platform at the NCDA & CS and is part of the Multi-Hazard Threat Database (MHTD) which serves the entire Department in emergency response situations. The NCDA & CS has adequate backup and security in place for this system.

Resource requirements

Currently, the cooperator has programmers within the NCDA & CS. Our federal partners within the state assist and support our activities and provide access to additional subject matter experts as needed.

Automated data capture resources for ICVIs, reading and recording tags at markets and sale barns are needed. Existing office equipment, supplies and furniture are overused, outdated and in need of replacement, as mentioned previously. Additionally, a commercial grade scanner to scan paper ICVIs and convert to eCVIs that can be transmitted to other states, and software to export the scan with XML coding store into a database will help with faster retrieval of information if needed during a disease outbreak.

Executive support

The animal traceability program has full support of the North Carolina State Veterinarian's office, Assistant Commissioner, and Commissioner. The ADT program is recognized for its importance in international and national trade.

Coordination and oversight procedures

The list of groups and organizations that make up the Animal Disease Traceability Advisory Committee was noted earlier. Meetings with this advisory committee are scheduled annually or on an as-needed basis.

Emergency preparedness and response is an on-going function of the Emergency Programs Division of the NCDA & CS. The Veterinary Division is an integral part of regular planning and training exercises with regards to this ESF-11 function. Other States/Sovereign Nation/Territories/USDA are included in these trainings and exercises to insure compatibility and uniformity between these agencies and units.

Disputes are handled through a "ground up" approach, moving through the chain of command until resolution is achieved. Feedback from producers, livestock market operators and other livestock and poultry industry groups will be sought out and encouraged, and this input will be a top priority throughout the administration of this program. Any change in administrative personnel will be handled according to state personnel policy; updating and education to bring awareness and familiarity to the program will be immediately addressed.

Policy

Existing legislative mandates on confidentiality of information limit allowing access to personal information collected for premises identification purposed related to traceability. The cooperator will seek legislative authority necessary to implement individual animal identification that will be necessary to align the State with current goals and objectives.

Staffing

All full-time staff are compensated by through state-appropriated programs; those salaries are considered in-kind contribution by the cooperator toward achieving the goals and objectives of the traceability cooperative agreements. As such, these full-time personnel meet state- mandated justifications and qualifications with clearly defined job descriptions approved by the Office of State Personnel. The Traceability (NCFarmID) Section of the Veterinary Division, NCDA & CS (the cooperator) is staffed by two full-time (state appropriated) employees and one, part-time federally funded employee who devotes approximated one-fourth of their time to the traceability work plan goals. Other Livestock Section staff in the Veterinary Division also make themselves available when necessary and requested by the Director of Livestock Health Programs. In an emergency event, the Poultry Section would support the Traceability and Livestock Sections. Thus, the Traceability Section works in a coordinated fashion with others in the Veterinary Division.

Budget requirements

Funding for animal disease traceability efforts is provided by both federal funding through cooperative agreements and state appropriated funds. Additional projects may receive funding through other division budgets. If budget shortfalls and cuts occur, the cooperator will make necessary adjustments in plans so that resources are allocated according to priorities.

Funding for various projects will be fluid over the years with priorities based on external stakeholder buy-in, legislative updates in current North Carolina law, and technological updates for field staff and livestock units, etc.

At this time, there are two systems of electronic identification (EID) available:

1. Low frequency (LF) identification tags, and
2. Ultrahigh frequency (UHF) identification tags.

The low frequency tags are the most common and popular form of EID tags available for use in multiple species today. The system has both portable and permanent equipment that can be used in various environments for tracing animals. The drawback with the LF system is the short range distance the tags transmit to readers and limits its usefulness to producers for other functions outside of identifying animals. USDA has recently approved the use of UHF animal identification tags that has been successfully tested in various scenarios in a number of states through cooperative agreement funding. These test projects will be completed shortly. These tags and the portable and panel readers are available for purchase and UHF animal identification numbers are recognized as official tags for use now. As this is new technology, there are fewer states and producers using it at this time. What is more promising about this technology is the greater distance the tags transmit to portable or permanent readers and the likelihood that they will offer producers greater usefulness outside of only being used for animal identification. We appear to be heading into a transition period where technology may switch from one format to the other. This is analogous to vinyl LPs and cassettes transitioning over to CDs. For states with little to know EID tracing capability, this offers a challenge as both systems would need to be purchased initially until one system proved to be the industry accepted system.

One of the major expenses for the requested ADT planning budget over the proposed period of this road map will be to develop a usable EID tracing system within the State of North Carolina. This will need to be a well thought out process as mentioned earlier that technology appears to be changing and will require the state to look at initially purchasing multiple systems until a transition period from one technology to another has been completed. Purchases with budgeted funding from the cooperative agreement may include (and is not limited to) LF and UHF handheld or panel EID readers that can be used by field staff within the division or can be loaned to markets through memorandums of understanding between the state and market; software and hardware for the information scanned by handhelds or panels to be linked into databases for more accurate recording and tracking; electronic animal identification number ear tags

that can be distributed to markets, various livestock groups (including extension), etc. that will promote the use of EID in animals for traceability within the state; etc.

Additional budgeting considerations will need to be given to include transitioning from a paper filing retrieval system to an electronic, searchable database for certificates of veterinary inspection.

Outreach

One of the main objectives of the North Carolina Animal Traceability Program is to conduct outreach activities to producers, accredited veterinarians, livestock markets, harvest facilities and other industry shareholders.

In addition to the weekly visits to sales at livestock markets, field staff participate in various opportunities for program outreach through their contacts with food animal veterinary practitioners, feed stores in conjunction with programs offered by the Food and Drug Protection Division, livestock and poultry associations, and extension office. General outreach activities consist of personal contact, verbal communications, teleconferencing utilizing FoodShield, and distributing printed educational materials. At the statewide and regional levels, staff personally conducts outreach activities through participation in statewide and regional industry and veterinary organizations.

ADT outreach projects to specific groups may include:

Accredited veterinarians

Accredited veterinarians are the backbone of animal identification efforts by being the main connection to livestock and poultry producers and program disease eradication efforts such as TB and Brucellosis. The cooperators will engage accredited veterinarians at every opportunity, such as local and state meetings, offer “brown bag” lunch teleconferences to veterinarians and their office staff, industry settings where they are present, and mass mailings of educational/outreach materials regarding the new traceability framework.

Additionally, the NCDA & CS works with the district USDA VS office in annual core accreditation training for new, graduate veterinarians as well as those who have recently moved to the state. This day-long training is another opportunity to educate and raise awareness of animal disease traceability and issues directly related, such as following standard procedures and requirements for ICVIs, the availability and use of eCVIs, and the role of accredited veterinarians in distributing official animal identification to producers.

With the focus of developing a stronger, voluntary electronic animal identification program over the next period of this road map, veterinarians

will be encouraged to utilize permanent type ear-tags like the 840 RFID tags, to identify cattle for their clients. The accredited veterinarian receives an incentive for promoting and performing animal identification in his/her practice area. Participating cattlemen are required to have a premises ID, along with a physical farm address, in order to participate in the program. Identification data is entered directly into the North Carolina AHD or SCS Core One.

North Carolina supports the use of eCVIs. During this period of the road map, NCDA & CS will investigate developing an eCVI that can be distributed and used by private practitioners similar to the Nebraska program, and will also encourage the use of third party federal and commercial eCVIs like USDA's VSPS, Global Vetlinks, New Planet Technology, etc. and encourage greater use of these systems for easier and more accurate transfer of information into electronic databases. All electronic formats explored must be consistent with USDA requirements for data transfer.

Livestock markets

Livestock market operators will be engaged and asked for input and recommendations for animal identification, record-keeping and retrieval, and other traceability-related issues that directly and indirectly affect their markets and their producers.

Field staff make weekly visits to sales at livestock markets and participate in various opportunities for program outreach in their contacts with the livestock markets. Outreach activities consist of personal contact, verbal communications, and distributing printed educational materials. Additionally, during the year direct personal contacts are made with the owners/operators at association meetings to outline and recruit livestock markets into a voluntary program of moving to using more electronic animal identification.

Industry as a whole

Livestock and poultry industry groups are heavily represented on the Traceability Advisory Committee. Not only do they provide feedback on materials presented to them but they serve as a conduit to take educational/outreach materials and information back to their respective industries.

Monitoring and reporting interstate movement activity

Animal movements, numbers of shipments, and number of ICVIs for both imports and exports are currently being monitored by the Livestock Unit Coordinator and ADT staff. Increased scrutiny for accuracy, legibility, official animal identification, correct address of consignor and consignee and other items that are

currently required under 9 CFR 86 will occur. Traceability data is available by species, state of origin, date of shipment, and other measures. Quarterly accomplishment reports capture and report required traceability data.

The new traceability framework is focused on interstate movement and the accompanying ICVI or similar documentation for that movement.

- The following data will be reported for quarterly reports from the 2012 calendar year in spreadsheets provided by USDA, and beginning in 2016 into EMRS 2.0:
 - Number of ICVIs and other interstate movement documents created within the State/Sovereign Tribal Nation/Territory on a year-to-date basis for move-out animals;
 - Number of ICVIs and other interstate movement documents received for move-in animals;
 - Number of animals by species and class for move-in events associated with ICVIs and other interstate movement documents, indicating the number of animals officially identified and the number not officially identified;
 - Number of animals by species and class for move-out events associated with ICVIs and other interstate movement documents, indicating the number of animals officially identified and the number not officially identified; and
 - Volume of distribution for each official numbering system/device issued by the State/Sovereign Tribal Nation/Territory and/or AD office, including backtags by market or processing (slaughter) facility.

TRACEABILITY IMPLEMENTATION

Ranking of priorities for advancement FY 2016

1. Capture and track data from ICVIs;
2. Incorporate farmed cervid program into SCS Core One database;
3. Explore options to enhance the Animal Health Program or utilize other electronic databases for ICVIs, premises identification, and animal identification tracking databases;
4. Improve field and office staff education on ADT;
5. Improve field staff and livestock market animal scanning capabilities;
6. Coordinate with NCDA & CS marketing department in developing outreach material and ADT support programs scheduled by both divisions;
7. Conduct outreach activities to livestock markets, veterinarians, producers, and other stakeholders;
8. Begin scanning paper ICVIs, coding XML appropriately into the images based on USDA guidelines, and research databases that would incorporate these images into a searchable database;

9. Implement and modify standard operating procedures for monitoring ICVIs and consistent enforcement policy; and
10. Market and personnel enhancements with additional hardware as needed.

FY 2017

1. Continue focus to capture and track data electronically from ICVIs;
2. Emphasize to accredited veterinarians the use of electronic ICVIs with a goal of having 20% of ICVIs be electronically generated by FY2020;
3. Coordinate with NCDA & CS marketing department in developing outreach material and ADT support programs scheduled by both divisions;
4. Improve field and office staff education on ADT;
5. Conduct outreach activities to livestock markets, veterinarians, producers, and other stakeholders;
6. Explore new opportunities for enhancing animal traceability; and
7. Continue to improve livestock market and personnel enhancements with additional hardware as needed.

FY 2018

1. Continue focus to capture and track data electronically from ICVIs;
2. Emphasize to accredited veterinarians the use of electronic ICVIs with a goal of having 20% of ICVIs be electronically generated by FY2020;
3. Coordinate with NCDA & CS marketing department in developing outreach material and ADT support programs scheduled by both divisions;
4. Improve field and office staff education on ADT;
5. Conduct outreach activities to livestock markets, veterinarians, producers, and other stakeholders;
6. Explore new opportunities for enhancing animal traceability; and
7. Continue to improve livestock market and personnel enhancements with additional hardware as needed.

Implementation of objectives

Each of the objectives and projects will be evaluated on an annual basis to prioritize and modify accordingly to meet the state plan. Additional funding requests will be made accordingly based on interest of markets to increase electronic animal identification.