

ADVANCING ANIMAL DISEASE TRACEABILITY ROAD MAP FOR THE STATE OF DELAWARE

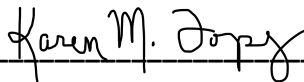
A Five-Year Plan

Submitted by:

KAREN LOPEZ, DVM

**DEPUTY STATE ANIMAL HEALTH OFFICIAL
DELAWARE DEPARTMENT OF AGRICULTURE
2320 S. DUPONT HWY
302-698-4500**

[SIGNATURE] _____



Submitted to:

**MARK REMICK, DVM
FIOPS AVIC MD/DE/DC
VETERINARY SERVICES
ANIMAL AND PLANT HEALTH INSPECTION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE**

**400 NORTH 8TH STREET
SUITE 726
RICHMOND, VA 23219-4824
(804) 343-2567**

**February 29, 2012
March 2, 2016
Updated May 10, 2019**

Table of Contents

I.	EXECUTIVE SUMMARY	3
II.	CURRENT TRACEABILITY SITUATION	4
	2.1 Who are we?	4
	2.2 Where are we now?.....	4
	2.3 Strengths and Weaknesses	4
	2.4 Opportunities and Threats.....	4
	2.5 Inventory of existing infrastructure and suitability assessment.....	5
III.	VISION AND MISSION CONTEXT FOR ADVANCING TRACEABILITY	5
	3.1 Vision statement	5
	3.2 Mission statement	5
IV.	TRACEABILITY REQUIREMENTS	5
	4.1 Strategic goal(s).....	5
	4.2 Programmatic goal(s) (Objectives).....	6
	4.3 Animal disease traceability performance measures	6
	4.4 Data requirements	7
	4.5 Information technology plan.....	8
	4.6 Resource requirements.....	8
	4.7 Organizational needs.....	8
	4.7.1 Executive support.....	8
	4.7.2 Coordination and oversight procedures.....	9
	4.7.3 Policy.....	9
	4.7.4 Staffing.....	9
	4.7.5 Budget requirements	9
	4.7.6 Outreach	10
	4.7.6.1 Accredited veterinarians.....	10
	4.7.6.2 Livestock markets	10
	4.7.6.3 Industry as a whole.....	10
	4.8 Monitoring and reporting interstate movement activity	11
V.	TRACEABILITY IMPLEMENTATION	12
	5.1 Ranking of priorities for advancement	12
	5.2 Implementation of objectives.....	13

I. EXECUTIVE SUMMARY

Why does Delaware need a traceability plan? An effective animal disease traceability program is necessary for the protection of American agriculture, and must be coordinated and consistent across states in order for the rapid response, containment and control of animal disease outbreaks. The capability to efficiently and effectively deal with livestock diseases of concern when they occur is not only important to the health of livestock populations in Delaware, but is also important in supporting rural economies, maintaining interstate and international movement of livestock and increasing consumer confidence in food production systems. The Delaware Department of Agriculture, with the help of USDA/APHIS/VS, has developed this roadmap as a business plan for marketing and implementation of a better approach to animal disease traceability than currently exists in Delaware.

Resources needed: It is crucial to spend time continuing to develop a plan for the promotion of traceability in Delaware. Time will be spent on database maintenance and on outreach and education to producers, veterinarians, markets, and extension agents. Ear-tags will be distributed both through veterinarians and directly to producers.

- *What is the fundamental problem(s) this plan addresses?* The Delaware plan will fill the gap that currently exists in the identification and tracking of animals that move into and out of Delaware.
- *What are the key elements in summary form?* Key elements are promotion of the traceability program, outreach and education, data entry and tracking of ear-tag distribution, usage of electronic CVIs (Certificates of Veterinary Inspection) and constant evaluation of the plan: “what’s working and what’s not?”.
- *What are the primary benefits?* The primary benefits are that Delaware producers and veterinarians will all feel a sense of ownership in the plan, due to our promotion of the traceability program and outreach. By keeping these stakeholders first with regards to information sharing and valuing their opinions, we will build a strong program that will have the support of stakeholders.
- *How does this plan build upon previous efforts to advance animal disease traceability?* This plan proposes to encourage veterinarians directly to utilize electronic CVIs and perform outreach to constituents in a public forum (Delaware Ag Week) and through the Delaware State Fair, which have not previously been performed.
- *How does this plan fit within USDA’s new framework for animal disease traceability?* This plan, when implemented, will enable Delaware to meet the priority objectives outlined by Under Secretary Ibach.
- *How does this plan support animal health information systems within the State/Tribe/Territory?* This plan proposes to encourage veterinarians directly to utilize electronic CVIs and to expand data entry in AINMS and Core One (SCS) so that the information is readily accessible to state and USDA personnel.
- *How does this plan support animal health information needs with other States/Tribes/Territories and USDA nationally?* This plan will allow us to assist our state partners and USDA in rapid response to an animal disease event.
- *What alternatives were explored?* There are not many economically feasible options outside of an Excel database and utilization of free applications such as Core One (SCS) and AINMS

because of the very small size of our cattle industry (17,000 head of cattle - 2018 inventory estimate).

- *What are the projected costs for FY2019, FY2020, FY2021 and 2022?* We currently receive \$4,646 annually through the ADT Cooperative Agreement, though we would like to request additional funding for approved uses in the future.

II. CURRENT TRACEABILITY SITUATION

2.1 *Who are we?*

In Delaware, the constituents that will be primarily affected by this plan are the dairymen and beef producers, and private field veterinarians providing services to these groups. Other stakeholders include legislators, agency administration, farm bureau, and universities/extension agents.

2.2 *Where are we now?*

We use a paper system for filing CVIs by species and month after they are reviewed, and because of the small number received, it is very simple to find an individual CVI within a few minutes during a trace performance exercise. CVIs are also scanned and saved as PDF documents. We currently support our single USDA-approved livestock auction in application of RFID tags for cattle and tagging of other animals upon entry. The auction is required keep track of who purchases and sells animals each week. Traceability as it is now being defined (moving forward) may still be a new concept to some of our animal producers. We plan to perform marketing and outreach that will present the traceability concept as relevant to all producers, regardless of the size of their operation.

Requests for information are available M-F, 37.5 hours per week, if authorized personnel are present. Federal funding has been and will continue to help Delaware as we continue to provide economical traceability options for producers and veterinarians.

2.3 *Strengths and Weaknesses*

Our agency has a history of strong relationships with animal producers in the state. Our staff is well-liked and respected because of our professionalism. Because we have so few cattle, it should be manageable to perform outreach and education to a majority of producers in the state over the 5 year period. We only have 2 animal health technicians (inspectors) for the entire state, so it may be necessary to utilize other staff members' time to reach our objectives. We do not employ a traceability coordinator: the duties have been shared between the Deputy State Veterinarian and one of the animal health inspectors.

2.4 *Opportunities and Threats*

This plan will improve our ability to respond to all types of catastrophic events, including foreign animal disease incursions, flooding, hurricanes, blizzards, suspected agro-terrorism, or contamination of feed supplies. The traceability plan

will allow us to better use our limited resources than would currently be possible with our “low technology” approach. This plan will allow us to provide our state partners with quick response to any inquiry they have about suspected disease in a group of animals that may have originated in our state.

2.5 *Inventory of existing infrastructure and suitability assessment*

- Human resources: We currently employ two animal health inspectors, one deputy state veterinarian, and an administrative assistant who will be primarily responsible for carrying out the traceability plan.
- Space availability: This will not be a problem for our agency.
- Connectivity resources, both in office and in the field: The only type of technology used will be laptops in the field (if needed) and Nomad Trimbles.
- Access to USDA animal disease traceability and animal health information resources: Level 2 e-authentication is still needed for the administrative assistant and the soon-to-be hired second animal health inspector; other staff already have the necessary access.
- Organization of all existing paper record systems used to access animal disease traceability or animal health information: this mainly involves CVI filing. Our agency files CVIs by species and month, for example “January 2018 cattle”. We also scan CVIs by quarter and year for easy retrieval over the retention period. We will continue to use Excel spreadsheets, Core One (SCS), and AINMs to document ear tag distributions, tuberculosis and brucellosis test charts and vaccination (Brucella), and will begin to hand-enter CVIs for cattle and swine.

III. VISION AND MISSION CONTEXT FOR ADVANCING TRACEABILITY

3.1 *Vision Statement*

The vision of our group is to continue to develop robust programs that will serve to enhance our response to animal disease events and unexpected catastrophic events, thereby minimizing damage to livestock and poultry industries.

3.2 *Mission Statement*

The mission of our group is to protect the domestic animals of Delaware from the introduction and spread of contagious diseases, including those which may affect humans. A critical component of protecting our domestic animals is to be able to quickly identify the source of potentially infected animals which have either originated in Delaware or have come into our state through interstate commerce.

IV. TRACEABILITY REQUIREMENTS

4.1 *Strategic goal(s)*

Our goal is to develop State-wide infrastructure for advancing animal disease traceability compatible with State, Tribe, Territory, and USDA standards.

4.2 *Programmatic goals (objectives)*

The objectives in support of achieving our strategic goal are outlined in the Timeline seen below:

YEAR 1: RAISE AWARENESS & PROMOTE TRACEABILITY STATEWIDE, INCREASE UTILIZATION OF AHER

By the end of Year 1:

- Have performed one-on-one outreach and outreach via one other method (e.g., social media, Delaware Veterinary Medical Association) regarding RFID availability and usage, and use of eCVI platforms to all production animal veterinarians in the State
- Have increased engagement with cattle and swine producers on the availability and benefits of RFID tags
- Have begun entering cattle and swine CVIs into Core One (SCS)

YEAR 2: EXTEND OUTREACH EFFORTS AND UTILIZATION OF AHER

By the end of Year 2:

- Have trained staff in data entry (issuing premises ID numbers (PINs) in EMRS2, ear-tag distribution into AINMS)
- Have hosted/provided one formal outreach event for Delaware cattle and swine producers (e.g., Delaware AG Week) on RFID and the animal disease traceability process
- Have done a baseline assessment of the current application of RFID tags to cattle and swine entering the Delaware State Fair

YEAR 3: IMPROVE INTERNAL USAGE OF eCVI TECHNOLOGY AND RFID TECHNOLOGY, TRANSITION SHOW ANIMALS TO RFID APPLICATION

By the end of Year 3:

- Have begun routine usage of RFID wand readers and Nomad Trimble (or other appropriate technology) by animal health inspectors
- Have DDA Poultry and Animal Health Section transitioned from issuance of paper CVIs to eCVIs for animals moving interstate for shows and fairs
- Offer RFID tags or utilize previously applied RFID tags as acceptable ID for animals entering the Delaware State Fair

4.3 *Animal disease traceability performance measures*

The table below lists the performance measures Delaware will use to document progress and accountability of our ADT program. Delaware has demonstrated exceptional performance to date with TPMs and National Priority Traces. Because we currently have a new ADT Coordinator, we will work with our AVIC to do some

practice trace exercises to assure that we are still able to demonstrate rapidity and accuracy in completing the activities listed below:

Table 1 Traceability Performance Standards			
Number	Activity	Performed by	Measure
1	Determines the State in which the animal was officially identified and notify that state of the reference animal's official ID number	State that received the reference animal	85% Excellent ratings
2	Confirm that it has documentation that an official ID number was issued within its jurisdiction and that it has contact information for the person who received that number	State where the reference animal was officially identified	
3	Determine the state from which the animal was moved interstate into its jurisdiction and notify that state of the reference animal's official ID number	State that received a reference animal	
4	Determine the address or location from which the reference animal was shipped	State that receives notification that a reference animal moved interstate from its jurisdiction (may be the same State in #2)	

4.4 *Data requirements*

While it will likely not be possible to completely replace paper records with electronic documents and data, the appropriate use of modern information processing technologies in key areas will significantly improve our ability to trace animals in the event of a disease. Both Type II accredited veterinarians and DDA Poultry and Animal Health Staff must adopt utilization of eCVI technology to improve management of animal movement and identification records.

We plan to continue to utilize RFID bangle tags for distribution to markets, producers, and veterinarians. Distribution of tags will be administered through our office by tracking which series of tags are handed out to which producers and veterinarians and on what date. Producer and veterinarian agreements are distributed along with the tags as triplicate carbon copy forms to ensure that producers understand the importance of applying those tags assigned to them to their OWN animals, exclusively, and to retrieve data from veterinarians on distribution of tags.

Our group will need to expand utilization of Core One and AINMS databases to record distributions of ear tags and to hand-enter CVI data. Because of the small number of CVIs that we receive for livestock species such as cattle and swine, the

goal of manually entering CVI data into Core One for data access by State and Federal personnel is attainable.

Quarterly reports to USDA will contain records of number of tags distributed and number of CVIs entered to our database. Aside from routine quarterly statistics, Delaware traceability data will be shared with other states and with USDA on an as-needed basis.

We intend to extend data collection efforts in the field through the use of wand readers and Nomad Trimbles during routine animal inspections. We also plan to promote RFID traceability to the livestock board of the Delaware State Fair so that RFID utilization can be integrated and ultimately replace plastic tags for animals entering the fair.

4.5 *Information technology plan*

Delaware projects to have minimal new IT needs for FY2019, FY2020, and FY2021.

4.6 *Resource requirements*

- Is specific expertise needed that is not currently available? Because we have not had a traceability coordinator in the past, it may be necessary to set up teleconferences or visits to neighboring states to learn more about how they successfully implement their programs. We have already had very early (broad overview) discussions with Pennsylvania, Maryland, and Virginia folks. We will also need instruction in setup, utilization, and software installation for the RFID wand readers, livestock data logger, and Nomad Trimbles.
- Will consultants be needed? We do not expect to need consultants.
- Is a continuity of operation plan (COOP) in place and how frequently is it tested? Our Agency has a COOP in place, and it is tested about once/year.
- Will automated data capture resources be needed? Not at this time.
- Will additional or new space be required? No.

4.7 *Organizational needs*

- Does a need for organizational change exist? No. Agency superiors (Secretary of Agriculture, Deputy Secretaries) are on board with this process, and embrace it.
- Can additional resources be leveraged within the current administrative structure? Yes, we will use other groups within the agency to assist if needed.

4.7.1 *Executive support*

As mentioned in 4.7, Delaware's Secretary of Agriculture is on board with the traceability plan and values the benefit which this system will impart to the well-being of the livestock industry in Delaware.

- Is additional support from executive management needed? It will be necessary to ask the Secretary or his Deputy to speak openly about their approval of the program whenever possible.

- How are officials briefed on progress and baseline measures of performance? Updates will be sent to the Governor in the agency’s “weekly report”, with the Secretary’s approval, of course. Other updates will be made to the Secretary as milestones are reached.

4.7.2 *Coordination and oversight procedures*

The State Veterinarian and her staff are responsible for advancing animal disease traceability. We will develop an outreach and promotional plan to present to animal producers and veterinarians in a manner that is non-confrontational and transparent.

- Our agency has one liaison with the State Emergency Management Agency. We have already made them aware of the gap we are attempting to fill by creation of the Traceability plan.
- How is compatibility with other States, Tribes, Territories, and USDA monitored? We meet with regional state veterinarians regularly at meetings and speak frequently to them on-on-one. The objective is to have some consistency in enforcement within our region, so that producers know what to expect when moving animals to auction, for example. The states which Delaware has reached out to are Ohio, W. Virginia, Virginia, Maryland, New Jersey and Pennsylvania.

4.7.3 *Policy*

In Delaware we do not currently have existing mandates which could limit our traceability plan. Our current regulations state that animals must be individually identified for entry to the State.

4.7.4 *Staffing*

Because our State is very small, and because we have only 17,000 head of cattle, we predict that we will not need any additional FTEs.

4.7.5 *Budget requirements*

- How are you funded for animal disease traceability? State funded and federally funded (ADT Cooperative Agreement. To date, Delaware has utilized salary dollars for research and development of the roadmap and for attendance at general meetings to learn and make decisions being presented in this document. Federal funds have been used to purchase official ID tags, wand readers, Nomad Trimble, and the livestock data logger.
- What are the funding requirements projected by year for FY2019, FY2020, and FY2021 for implementing this plan? The 2019 budget is presented within the Cooperative Agreement 2019 work-plan.

4.7.6 *Outreach*

All constituents who might be impacted by the traceability program will be addressed in the outreach campaign. This will include veterinarians, producers, livestock markets, legislators, agency administration, farm bureau, and universities/extension agents.

4.7.6.1 *Accredited veterinarians*

- Our marketing and outreach plan will include as a priority providing education to accredited veterinarians with regards to availability of RFID tags and uptake of eCVI technologies.
- What continuing education is being planned for improving data quality relative to animal health information systems being used? We will continue to provide veterinarians with a blank form that can be used to fill out in the field (by hand or electronically) for tracking of tag distribution. The form will be in a format that can be easily entered into the access database by administrative staff in my office. We will also do one-on-one outreach to veterinarians and use other means of outreach such as social media and the Delaware Veterinary Medical Association.
- What is the plan for enhancing the use of eICVIs, if any? See above regarding continuing education.
- What role, if any, does the accredited veterinarian have in providing low-cost, official identification tags/devices to producers? There are only 2 or 3 veterinarians in Delaware who practice with cattle in our state. During the outreach portion of the plan, we will encourage vets to provide and or apply tags to all producers they visit.

4.7.6.2 *Livestock markets*

- Our marketing and outreach plan will include as a priority providing education to the single livestock market in Delaware.
- We already have a system of accessing paper trails (buyers, sellers) from our livestock market. This market is attended by an animal health inspector each week, and inspectors support the market in application of RFID tags for cattle and tagging of other animals upon entry. Tag distribution, date, buyer, and seller information is recorded.

4.7.6.3 *Industry as a whole*

Our promotional and outreach plan will include as a priority providing education to the livestock and poultry stakeholders in Delaware. There are 23 dairies in Delaware that sell Grade A milk, and my staff has a good working relationship with the dairy industry. Our beef industry is very small, with just one feedlot in

the state. The sheep and goat producers have monthly meetings, which will provide a great opportunity for outreach without scheduling extra sessions.

- What other resources are available for industry outreach? University and extension colleagues can be brought in for additional support.
- As mentioned earlier, Delaware has no more than 17,000 head of cattle. There are approximately 3,000 sheep and goat (combined) and 6,000 swine. The majority of our industry is broiler chickens, which will move under the lot system and will not require individual identification when moved to processing.
- Outreach to producers will include continued distribution and marketing of RFID tags, presentation to commodity groups in a public forum such as Delaware Ag Week, and hopefully implementation of RFID for Delaware State Fair cattle and swine entries.

4.8. *Monitoring and reporting interstate movement activity*

- How will the number of animals and the number of shipments be monitored that move interstate? By tallying CVI data for quarterly ADT Cooperative Agreement reporting, we will be able to print a report showing # of shipments and # of animals by species that move interstate.
- The following data (reporting elements) will be reported in the quarterly reports beginning with calendar year 2012:
 - Number of ICVIs and other interstate movement documents created within the State/Tribe/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
 - Volume of distribution for each official numbering system/device issued by the State/Tribe/Territory and/or AVIC office, including backtags by market or processing (slaughter) facility
 - Number of Category II accredited veterinarians using eCVI applications and the applications used

V. TRACEABILITY IMPLEMENTATION

5.1 *Ranking of priorities for advancement*

In summary, the priorities in Delaware's traceability program are shown here in bullet form, and included in more detail within the ADT Cooperative Agreement work-plan for 2019:

- Perform outreach to producers and veterinarians to increase utilization of RFID tags and eCVI applications
- Enhance usage of AHER by expanding entries of ear tag distributions and CVI data
- Elevate DDA's usage of electronic technology and data capture to better manage animal identification and movement data

5.1.2 *Historical priorities for advancement*

In summary, the 6 goals of the 2012 work plan were as follows (approved budget \$15,000):

- Assemble ADT advisory group
- Develop consensus statements
- Identify target groups for outreach
- Develop marketing plan
- Build a database (Excel)
- Begin planning for cattle identification methods

In summary, the 4 goals of the 2013 work plan were as follows (approved budget \$18,000):

- Perform outreach and education
- Monitor identification and interstate movement activity
- Administer test exercises to establish traceability performance standards
- Maintain electronic record of ear-tag distribution and enter data from brucellosis and TB testing records, and from brucellosis vaccination records

In summary, the 4 goals of the 2014 and 2015 work plan were as follows (submitted budget \$12,000):

- Perform outreach and education
- Monitor identification and interstate movement activity
- Administer test exercises to establish traceability performance standards
- Maintain electronic record of ear-tag distribution (switching to RFIDs) and enter data from brucellosis and TB testing records, and from brucellosis vaccination records

In summary, the 7 goals of the 2016 work plan were as follows (submitted budget \$6,000):

- Administer trace exercises to establish traceability performance measures
- Distribution of official identification devices
- Information sharing
- Perform outreach and education
- Maintain electronic record of ear-tag distribution (switching to RFIDs) and enter data from brucellosis and TB testing records, and from brucellosis vaccination records
- Compliance and Enforcement of traceability regulations
- Identification and interstate movement activity

5.2 *Implementation of objectives (2019)*

It is expected that implementation of the 2019 goals listed above (section 5.1) can commence with the FY2019 work plan.

END DOCUMENT