

Advancing Animal Disease Traceability Road Map for Nebraska

A Three-Year Plan

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I. EXECUTIVE SUMMARY

Determining an animal or identification device's location, when interstate movements are properly documented, is now quick and efficient. Improving the number of successful traces is achieved by increasing the number of movements being sufficiently documented. The ability to enable quick and efficient determination of an animal's location continues to require significant personnel, financial, and technological resources.

To meet this challenge, we will focus on the following key elements:

- Establish and increase the number of specific animal location reference points for disease investigations.
- Increase the number of individual animals or livestock groups with official identification.
- Increase the percentage of properly documented movements and submit them on a timely basis.

The livestock industry in Nebraska is a major contributor to the economic strength and stability of the state. The spread of reportable disease in livestock will have a negative economic impact on the entire state. The impact to the directly affected livestock producer will not be limited to economic hardship but will include psychological and emotional ramifications as well. The longer a disease event remains uncontrolled, the greater the collective damage incurred. Therefore, it is imperative a system and plan be designed to limit the spread of disease.

Previous efforts to:

- Implement scanning and indexing of animal movement documents.
- Educate veterinarians on the need for improved Interstate Certificates of Veterinary Inspections (ICVI)
- Provide orange 840 RFID tags for official calf-hood vaccination
- Provide a method for livestock market veterinarians to prepare ICVIs on a laptop

have positioned the Nebraska Department of Agriculture favorably to move forward on process improvements.

All objectives and animal disease traceability efforts within this plan will be developed and pursued in alignment with the goals of USDA's Animal Disease Traceability system (ADTS) framework. Activities within this plan utilize functions within the Department. This may include data from other programs:

- OCV database

- Database of accredited veterinarians
- Database of livestock markets
- Epidemiology data
- Import system; and
- Any other data and systems which would enhance or simplify the efficient tracing of an animal or identification device or number. The improved speed and efficient of information retrieval has enhances our responsiveness to request for traceability information from other entities.

Other methods for meeting plan objectives will include:

- Utilizing existing databases of other eCVI services for animal movement information
- Informing and teaching producers, livestock market veterinarians, and accredited veterinarians on the requirements of identification and documentation for interstate movement of livestock; and
- Help producers and accredited veterinarians with the transition to the new proposed ADT rule.

The projected costs for the activities in this Road map will have a direct relationship to the amount of funding provided in each of the years through the cooperative agreement work plan budgets. The objective or benefit for each year will be an increase in the percentage of interstate movement of livestock with proper documents and official identification. This will be accomplished while maintaining or improving the speed and efficiency of retrieving the concerning animal movement histories. Efficiently forwarding the information to the entities requiring the information must also be accomplished. The number of properly completed Nebraska origin ICVIs, trace exercises, and actual events will serve as benchmarks for the success of the ADT program.

II. CURRENT TRACEABILITY SITUATION

2.1 Who are we?

The primary constituents involved in animal disease tracing activities are:

- Private veterinarians
- Livestock market veterinarians
- Nebraska Department of Agriculture, Animal and Plant Health Protection staff; and
- U.S. Department of Agriculture, Animal Plant Health inspection Service (USDA-APHIS-VS) staff.

While the initiatives detailed above have the potential to affect international animal health, this plan will focus on events ranging from local-involvement only incidents to statewide concerns. Nebraska does not anticipate the need for tribal-wide or territory-wide planning or activity. However, the activities and accomplishments listed under this plan are intended to support the animal disease traceability information requirements other entities may require from Nebraska to pursue their response objectives.

The use of traceability data for external purposes is restricted to those actively responding to a specific incident or in the case of animals with unknown origin. The most common example of the latter, is when a brand inspector is attempting to determine the origin of an animal. Use of traceability data internally is limited to an actual response.

Animal disease traceability data may be utilized in aggregate to provide statistical information as needed or requested by outside agencies. However, no personally identifying data may be released. Data may only be accessed and utilized by appropriate animal health personnel for animal disease situations with the exception of origin/ownership investigations.

The values guiding animal disease traceability activities within Nebraska will be consistent with the Department's Animal and Plant Health Protection mission "...of protecting the health of livestock in Nebraska and determining and employing the most efficient and practical means of prevention, suppression, control, and eradication of diseases transmissible among livestock..." These efforts will seek to minimize the negative fiscal and emotional and impacts disease events have on affected producers and their operations. These activities are also intended to reduce the number of producers and operations involved in a disease event.

2.2 Where are we now?

Animal disease traceability is currently defined as "determining where a disease entered an affected herd." The information compiled to date from previous efforts to establish a disease traceability system was poorly integrated into most disease response situations or trace outs. Therefore, animal disease traceability activities are no longer viewed as a standalone information gathering project.

The current measure of traceability capability is "How quickly and accurately can we determine where and when the animal of concern entered or left Nebraska?" While we have the capability of tracing interstate movements, tracking intrastate animal movements it currently out of the

scope of our regulatory authority. Nebraska has an excellent record of TPMs, proving that previous ADT funds have been utilized effectively.

To effectively coordinate the activities associated with disease traceability, a weekly Animal Health Staff Meeting is held. These meetings are attended by the state veterinarian, deputy state veterinarian, state epidemiologist, veterinary field staff, ADT program manager, and import program specialist. The objective of these meetings is to brief all staff members on current issues in animal health and answer associated questions.

ADTS data is made readily available to those needing it. All animal health officials within the Department have access to ADTS information from their workstations or laptops. ADTS information held or controlled by the Department will remain available to other appropriate entities upon request when deemed necessary by the State Veterinarian. Requests for information are currently available Monday through Friday during normal business hours. Designated Department staff has access to information 24 hours a day, 7 days a week.

Federal funding is critical to ADTS activities in Nebraska. The only state funds budgeted for ADTS are those funds required to achieve any state matching contribution required to utilize cooperative agreement funds. If there are no federal funds, there will be no state funds specifically allocated to ADTS activities.

2.3 Strengths and Weaknesses

The ADT functions of the Department have access to excellent technology support. The Department's Data Center personnel and animal health staff work closely and meet on a regular basis to continually improve efficiencies. The Data Center staff is very familiar with activities and information technology (IT) requirements of animal health functions.

The ADTS functions are currently addresses by the full-time Program Manager, one Program Specialist dealing with imports, and two full-time Office Specialists. This staff has been able to direct the development and implementation of the ADTS activities. Several other Office Specialists from other programs assist as their workload permits. This staffing level keeps the processing of ICVIs on a current status and improves the review return process for deficient ICVIs. It also enables more efficient and effective responses to requests for service and information from stakeholders.

The use of technology in the field necessitates remote training and support. The support aspect of technology will continue to increase time demands on current personnel. The increased support will be provided in the field by

Veterinary Filed officers (VFO) and USDA field personnel. The Data Center will continue to be called upon for continued support and improvement of processes.

The Department is now scanning and indexing each of the ICVIs for both exports and imports. The indexing of individual or official identification fields is a very labor-intensive data input task. The current staffing level is estimated to be deficient by one, full-time equivalent (FTE) of being able to meet this need while maintain the constituent service function.

2.4 Opportunities and Threats

The intent of the plan is to enable the Department to mitigate the consequences of potential threats. Even with a comprehensive plan in place, not all disease threats can be prevented.

The resources available now and anticipated in the future will be better utilized because of this plan. The implementation of this plan necessitated the integration of import order information and compliance activities, ICVI handling procedures and ADTS information management efforts into a coordinated activity. It now includes virtually all animal disease program activities and documents and quarantines of livestock. This requires the continued development of Standard Operating procedures (SOP) for handling, reviewing, scanning, indexing, commenting, correcting, returning, and retrieving ICVIs and the documents and the information they contain.

If this plan is not maintained, the timely retrieval of information from ICVIs will not continue to improve and violations of import requirements would be undetected for longer periods of time. The timeframes for action under the performance standards National Priority Traces may not be maintained if this plan is not exercised. The net result of not maintaining this plan is an increased risk of economic and emotional damage to Nebraska livestock producers resulting from an unmitigated disease outbreak. Finally, if this plan is not maintained, the entities charged with responding to a disease outbreak will not have sufficient resources available to address the disease as it is occurring, and to perform associated traces.

This plan supports current in ADTS efforts. In the past, ADTS activities were not integrated or coordinated into other animal health-related actions. This integration and coordination have now become a necessary aspect of most of the major activities to protect Nebraska's livestock production.

2.5 Inventory of existing infrastructure and suitability assessment

Human Resources

The addition of the Import Program Specialist and support from Office Specialists in other programs, means the 2023 staffing level is adequate to maintain current program efficiencies. The staffing level must be continually monitored for adjustments as animal health developments may affect needs.

Space Availability

The office space is adequate for both current and future ADTS activities.

Connectivity resources and access to the USDA animal disease traceability and animal health information resources are available both in the office and in the field.

A new eCVI App has been developed and deployed. The Departments VFOs and inspectors also have access to the App. The App requires continual monitoring and correction of issues that become apparent. This will continue as we strive to progress.

Organization of all all-existing paper records systems used to access animal disease traceability or animal health information.

The Department is currently scanning existing paper records (ICVIs) to an electronic format and indexing each document to allow for more efficient retrieval of information. All ICVIs received as email attachments are also being indexed into the database. The number of electronically generated ICVI is on a steady increase. This is a great benefit in allowing current staffing levels to maintain acceptable levels of service to stakeholders.

The current data management capabilities are anticipated to be sufficient through 2025. Scanning capacity is adequate. Their use will decrease as the use of computer-generated ICVIs and eCVI Apps increase.

While direct electronic input of identification at the capture point would be ideal, the most immediate benefit will be our office processes. As eCVI xml formats become standard for each state, additional ICVI data will not require manual indexing.

III. VISION AND MISSION CONTEXT FOR ADVANCING TRACEABILITY

3.1 & 3.2

Protect the health of Nebraska's invaluable animal industries by rapidly and accurately responding to the threat of disease, increase revenue potential with foreign markets and preserving the privacy of the producer.

IV. TRACEABILITY REQUIREMENTS

2.1 Strategic goal(s)

1. Enhance electronic sharing of data among Federal and State animal health officials, veterinarians, and industry; including sharing basic ADT data with the Federal Animal Health Events Repository (AHER);
2. Increase use of electronic ID tags for animals requiring individual identification to make the transmission of data more efficient.
3. Enhance the ability to track animals from birth to slaughter through a system that allows tracking data points to be connected; and
4. Elevate the discussion with States and industry to work toward a system where animal health certificates are electronically transmitted from private veterinarians to State animal health officials.

4.2 Programmatic goals (objectives)

1. Continue the capture, conversion and filing of interstate certificates of Veterinary Inspection (ICVI) Animal Movement Data in electronic format
2. Target, develop and implement outreach messaging by collaborating with the Departments Animal Health Emergency Management Program to encourage cattle producers to official identify breeding and potential breeding stock at transfer of ownership in addition to interstate movement
3. increase number of export ICVIs in electronic formats which will facilitate data pulled into OnBase without manual indexing or data stored on third party electronic ICVI services
4. Implement re-training for accredited veterinarians on livestock movement requirements
- 4.refine commuter herd agreement processes to avoid loss of traceability
5. Update Premises Identification information
6. Transition to CoreOne data management system

4.3 ADT Trace Performance Measures (TPMs)

The current performance measure now utilizes National Priority Traces (NPT). Most of our trace exercises are successfully completed in minutes. Maintaining data systems and staff well versed in their operation will be maintained.

4.4 Data requirements

The primary source of traceability data is and will be ICVIs. Historically, the ICVIs have been stored as hard copies. These were filed by state, species, year, and month for manual retrieval as needed.

Before the first Strategic Road Map, historical ICVIs were being scanned and then filed electronically in the same manner of filing, state, species, year and month for electronic retrieval when needed. This system allowed for

more efficient retrieval of information but was not sufficient to meet retrieval needs when performance standards would be implemented.

We utilize a database operated by the State of Nebraska. It is known as the OnBase system. This will provide the benefit of better support and reduce or eliminate concerns about storage space on hard drives and servers. This system provides many advantages. To maximize utilization of the systems capabilities, the data on the ICVIs is indexed. This is because many of the ICVIs will continue to be handwritten for years into the future. The software system is not able to correctly interpret each of the handwritten pieces of information on each ICVI. Because of the need to search for a given identification number that may be included on an ICVI in our database, each identification number on handwritten ICVIs will require manual data input. Given the number of ICVs written and received in Nebraska each year, and the number of individual animal identification numbers listed on those ICVIs, this data input effort requires the supports of two full-time equivalent Office Specialists. Group/lot identification listed on ICVIs will be indexed and utilized within the system in the same manner as unique individual identification devices.

The standards for location identification will continue to vary within Nebraska. This is because of the method in which official metal tags are distributed and used in the state. We permit the distribution of “Brite” tags to producers by accredited veterinarians. Producers wishing to utilize “Brite” tags will not be required to have a premises Identification number (PIN). The location identification for this group of producers is what we refer to as “phone book” information. This is obtained as a part of the distribution system of “Brite” tags as described below.

Participating accredited veterinarians may have “Brite” tags in stock. They may distribute the tags directly to producers. When a producer receives “Brite” tags from the veterinarian, the veterinarian is required to list that distribution on a log form supplied by the department. The information on the log includes the date, number of tags the series of tag numbers, and the name, address and phone number of the producer receiving the tags. At the end of each month, the veterinarian forwards a copy of the log form to the Department. The Department enters the information into OnBase. This will make the tag history information available and retrievable.

The ADTS-related data compiled or held in the Department will be made available upon request and in periodic reports to USDA as required.

4.5 Information technology plan

The IT plan has been generally addressed previously in the data requirements section, ADTS information input, storage and retrieval activities will be integrated into the Department’s overall information system. This will allow much of ADTS storage space and information

systems support needs to be met by existing Department resources. There may be some funding requirements for IT in later years, such as scanner replacement and updating of laptop and desktop computers. Data security, backups and data redundancy issues will also be addressed by being included in the Department's IT umbrella. Later in 2023 we also plan to implement CoreOne.

4.6 Resource requirements

Staff expertise, automated data capture and space resources appear to be adequate through 2025.

4.7 Organizational needs

The current organization structure is adequate and unlikely to change.

4.7.1 Executive support

- The administrative authorities have been and continue to be supportive of the development of a sound animal disease traceability system in Nebraska. An effective animal disease traceability system is viewed as a needed program to accomplish the NDA mission" ...of protecting the health of livestock in Nebraska and determining and employing the most efficient and practical means of prevention, suppression, control and eradication of diseases transmissible among livestock..."

4.7.2 Coordination and oversight procedures

Additional support from executive management will be helpful to integrate the import program and ADTS program activities into mutually supporting programs. The emphasis of the program in cooperative agreements of past years has been the establishment and building of a database for all locations where animals may be held, raised, or assembled. This naturally became an activity of its own, distinct from other Department activities. This has changed with the import program and ADTS program cooperating and supporting each programs' activities regarding imports of livestock.

The ADTS staff participates in bi-weekly meetings. One item on the agenda for each of these meetings, is to update everyone on the many changes in progress and the status of them. These meetings will serve well for executive evaluation of progress and needs in ADTS activities. The staff meetings have been and will continue to be held at a consistent time and place each week.

4.7.3 Policy

The evaluation of Nebraska ADT activities through the use of NPTs requires access to data contained in ICVIs. The evaluation of the effectiveness and, thus, future funding of ADTS activities by the Department will be based on the quality, completeness,

timeliness, and retrieval capabilities of information from ICVIs and other animal health documents. This makes the integration of ADTS activities into the handling and processes involving ICVIs and other animal health documents imperative. These changes will continue to alter responsibilities for NDA staff and require executive support.

4.7.4 Staffing

The ADTS support staff currently consists of two, full-time Office Specialists. The Office Specialists are responsible for the scanning and filing of ICVIs and related documents. They are also responsible for developing and maintaining spreadsheets or appropriate methods to tabulate animal movement data. Additionally, they handle calls from veterinarians, markets, and producers. They have authority to make decisions needed to resolve many issues.

The workload for the current staff requires the full-time commitment of both individuals. The addition of the Import Program Specialist continues to show value in the staff maintaining status on all activities.

The ADTS support staff must have an above-average competency and comfort level with computer technologies. They must also be capable of comprehending the overall vision and mission of ADT activities. Professional credentials and certification are not an issue except as guidelines for determining the probable capabilities of an individual being considered for a position.

There is limited opportunity to leverage existing staff from other Department activities to assist in routine data input functions during periods of heavier volume.

The ADTS function has been viewed as a stand-alone, distinct function within the Department. This Road Map helps guide efforts to integrate ADTS activities into the Department's animal health efforts.

4.7.5 Budget requirements

ADTS activities in Nebraska are funded by cooperative agreement funds. State funds are utilized to meet contribution requirements when needed. The State's contribution requirement could usually be met in the personnel and fringe benefits budget categories.

The budget for each plan year is determined each year following determination of the funds available to the state through that year's cooperative agreement. The net result is objectives are evaluated and prioritized in light of funding available that year, not by

establishing objectives and then acquiring funds to accomplish them.

The cooperative agreement funding for the 2022 work plan was \$328,362. Based upon that number and continued system efficiencies and staff salary being adjusted for cost of living only, annual funding will be adequate.

4.7.6 Outreach

4.7.6.1 *Accredited veterinarians*

The actions of this group will be key to the Department meeting the four performance standards for animal disease traceability.

Informing and educating veterinarians was initiated in 2011. This involved a series of meetings across the state for livestock market operators and livestock market veterinarians. The emphasis on veterinarians improving the quality of ICVIs was very strong. The need to meet timeline requirements for submitting the ICVIs to the State Veterinarian was also addressed. These activities and points of emphasis continued through 2015. They will continue to be emphasized in the time frame covered by this Road Map.

The Import Program Specialist will work with the Department to develop and begin distribution of a quarterly newsletter to veterinarians in the state. Informational articles regarding the emphasis on improving the quality of information on ICVIs will be submitted to the Nebraska Veterinary Medical Association's (NVMA) newsletter. Articles regarding ADTS and how changes will affect veterinarians will be included.

Additionally, efforts will be made to address district meetings of the NVMA and to gain presentation time at other NVMA events. These activities will continue and possibly increase during 2023 through 2025.

All the previously mentioned ICVI quality improvements will continue to be emphasized by review of ICVIs in the Department. When the review of ICVIs shows continued deficiencies from a veterinarian, the signing veterinarian will be

counseled on correct completion of an ICVI. They will also be informed the incorrect ICVI has been forwarded and contact from the receiving state should be expected. This contact will provide opportunity to reinforce the need to meet quality standards when preparing ICVIs.

The accredited veterinarians will also be encouraged to utilize computer-generated ICVIs as much as practical. A new eICVI App developed by NDA and Mi-Corporation is available and being promoted for use. This will continue to be made available to Nebraska large animal practitioners.

All the previously mentioned activities involving veterinarians will require extensive contact. This contact will take place in group meetings by district or areas and in “one-on-one” meetings at the veterinarians’ facilities. The “one-on-one” meetings will occur primarily with VFOs.

4.7.6.2 Slaughter plants

- The Department will meet with packing plants to evaluate biosecurity plans and collaborate on enhanced traceability at slaughter.
- After working with plants, the Department will document contact information so that it can be readily available when necessary.

4.7.6.3 Industry as a whole

Presentations to producer groups and other interested parties will be made through the years covered by this Road Map. ADTS articles will be prepared for inclusion in producer group newsletters and magazines. As funds are available media campaigns will be conducted to convey the facts of what is needed for movement of livestock across state lines. This activity will continue in 2023 through 2025.

The quality of ICVIs produced by Nebraska veterinarians has improved in each of the years and will continue to improve in 2023 through 2025. A major point of emphasis in 2023 continues to be increasing the percentage of interstate animal

movements which are properly documented. This is a significant issue along each of our state lines where producers have operations in each state. Many of these undocumented movements are occurring as normal operations with the producer having no previous experiences of being required to identify and document. A major effort will be to continue improving how Commuter Herd Agreements are dealt with. Veterinarians and producers must know the steps of receiving one and how to comply with requirements.

While all species will be addressed, the main emphasis will be the cow-calf, exhibition, rodeo, and dairy producers. Except for the dairy animals, these are the areas with the lowest levels of trace capabilities.

4.8 Monitoring and reporting interstate movement activity

This activity will again rely on the use of information contained in the ICVIs. The data retrieval capabilities of OnBase allow excellent monitoring of interstate movement activities. The information entered into OnBase will include the tabulations on number of ICVIs for imports and exports and the total number of animals by specie involved. Other electronic ICVI platforms are queried for the information they contain.

The information on the distribution volume of official identification device and back tags will be obtained from the AIMS, brucellosis vaccination tag order records and “Brite” tag distribution logs from the VS Office.

V. ADVANCING TRACEABILITY

5.1 Ranking of priorities for advancement

- Streamline accurate handling of ICVI and encourage and support the transition to eCVI use.
- Easing the transition of RFID use for interstate movements for Nebraska constituents.
- Prioritize outreach as a way to build trust with constituents and facilitate the successful transition to the above technology.

5.2 Implementation of objectives

- Increase number of export ICVIs in electronic formats which will facilitate data

pulled into OnBase without manual indexing or data stored on third party electronic ICVI services;

- Target, develop and implement outreach messaging encouraging cattle producers to officially identify breeding and potential breeding stock at transfer of ownership in addition to interstate movement; and
- Implement re-training for accredited veterinarians on livestock movement requirements