Advancing Animal Disease Traceability (ADT) Road Map for North Dakota

A Three-Year Plan

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I. EXECUTIVE SUMMARY

The goal is to improve North Dakota's capability to trace animals that are either infected with or potentially exposed to federal program diseases or emerging diseases and to help identify animals in major natural disaster related situations (floods, blizzards, fires, etc.). The most efficient means to accomplish this goal is to identify those systems that are currently in place that can be improved upon or changed, with minimal financial impact to livestock producers and stakeholders. The need for change must be understood, shared and supported by all stakeholders in order to be successful in our long-term traceability efforts. Relatively successful, federal eradication programs have had the unintended consequence of decreasing the amount of testing and tagging requirements for animals that move interstate and intrastate. When states are declared 'Free' of some of the formerly longstanding endemic diseases such as tuberculosis or brucellosis, trading partner states and producers no longer see the need to monitor the health of those animals as closely. They rely much more on slaughter surveillance to help identify disease occurrences versus live animal testing. The benefit to the industry is that live animals can be handled less and moved more easily at much less expense to the buyers and the sellers.

As the livestock industries have become more disease free, they also improved the ability to move their commodities more easily into international and global markets. Trade agreements the US enters, allows lives animals and associated commodities to be imported into the United States. People, animals, and products will continue to move in and out of the US at increasing rates, which makes the introduction of foreign animal diseases (intentionally or unintentionally) more plausible.

Our current, in office, disease tracing capabilities are focused around the interstate and international certificates of veterinary inspection (ICVIs). The incoming ICVIs sent by other state animal health officials are sorted and information from each CVI is entered or digitally received into an electronic database (USAHERDS). Currently, the CVIs are digitally filed and retained for the required retention guidelines. Outgoing CVIs are also filed according to the state of destination and the date sent. Disease testing for sale or interstate or international movement purposes also serves as a method of identifying the location of animals during future disease investigations. The goal is to switch from a paper or excel database system to a searchable electronic database system that incorporates CVIs, disease testing, and improve emergency response with a commercial off-the-shelf software. The primary benefit of an electronic system will be quicker traceability, to help with disease 'prevention' and 'eradication' efforts. This goal has been partially achieved with USAHERDS but continue to utilize multiple databases to retrieve some traceability data from outside federal databases.

Our goal is to increase the amount of data we receive which can be entered into a single searchable database. Since technologic capabilities will increase in the field, we
to invest in the capabilities of USAHERDS to receive information efficiently and accurately with less manual manipulation and monitoring required. We plan to internalize data inputting to our own full or part time staff that have developed expertise over time from issuing permit numbers and reviewing health certificates for accredited veterinarians.

The North Dakota State Board of Animal Health has consistently been a strong advocate of disease prevention. They put into policy and rule actions needed to improve the traceability of animals for the sake of maintaining a healthy herd in the state. The Board's jurisdiction stops at the borders, but they have led by example when identification was needed for the sake of preventing disease risks associated with interstate and international movements. They understand the need to be able to quickly trace animals.

Our state system continues to be available for use by the tribes in ND. The major livestock markets are within the states so it would make sense for the tribes to work with the states and treat animal movements on and off the reservations just as they would interstate movements. We will offer entering MOUs as a possible solution to help avoid the need or the expense, for tribes to develop another separate data base.

II. CURRENT TRACEABILITY SITUATION

2.1 Who are we?

**Who are the primary constituents?**
Animal Health Division of the North Dakota Department of Agriculture (NDDA) and the ND Board of Animal Health (BOAH).

**Who are the external constituents?**
The BOAH is comprised of a representative from the purebred beef industry, the commercial cattle industry, the dairy industry, the sheep industry, the swine industry, the bison industry, the nontraditional livestock industry and two private veterinary practitioners. They are charged with representing their constituents, producers, and associated industry groups.

**What does statewide, tribal-wide, territory-wide mean?**
It means different geographic locations and different authorities. It would be better to also look at markets used and what jurisdictions they are under.

**How are traceability data used internally, externally?**
Traceability data such as ICVIs and test information are used when it has been determined that there has been a disease outbreak which could drastically impact the health of animals and/or people, and it is necessary to identify and address risk of animals that are either infected or potentially exposed to the disease. During a natural disaster, the ability to identify animals has also been proven to be critical.
**What values guide the ADT system?**
The main value that underlies our states animal disease traceability system is the producers' trust that data is held in confidence and is to only be used for animal health purposes. Other values would include cost effective, efficient and user friendly for veterinarians, producers, and our Animal Health Division staff.

**What is the make-up of the ADT advisory group? How and how often are they engaged?**
The advisory group includes representatives from all of the various livestock industry groups in our state, representation from the Board of Animal Health, the Chief Brand Inspector, and the veterinarians from the state veterinarian's office. They meet 1 to 2 times a year or as needed. The BOAH meets quarterly and is kept informed of ongoing investigations.

### 2.2 Where are we now?

ICVIs are manually reviewed and entered into an excel spreadsheet or received electronically from approved digital CVI vendors.

Paper copies of all incoming and outgoing CVIs are retained for 10 years in a digitally stored format. CVIs prior to implementation of USAHERDS will be stored in boxes for years.

Electronic CVIs are reviewed and stored in USAHERDS within the ND.gov system and backed up in the Cloud.

Search capabilities are limited to the capabilities of USAHERDS.

Accredited veterinarians send in written ICVIs, and the state forwards a copy to the correct states or federal offices. Most states are now sharing these copies digitally.

During the week, during business hours, someone is always available to answer questions. After hours and on weekends 24/7 there are 3 veterinarians who respond to questions and provide permit numbers for CVIs to North Dakota.

**How is animal disease traceability currently defined?**
Currently it is defined as the ability to identify an animal in a manner that leaves no room for doubt or legal challenge that the animal(s) in question is the animal being looked for.  **Is it viewed as a cross-cutting component to animal health information systems?** Yes, in ND animal disease traceability involves all information available to identify and verify animals.  **Is it viewed as a stand-alone initiative?** No, we work
with the brand inspection program also in ND to help identify animals and monitor movements.

**What measures of traceability capability are currently being used?**
We have been keeping track of the amount of time it takes for us to search for and find animals that other states may be looking for or that our brand inspectors need more information on during their investigations as well. **What are the specific values and associated interpretation?** The value is the amount of time and the success in finding the animal and from those parameters we can surmise how successful we may be in an emergency where tracking animals in a short amount of time is going to be critical to the success of preventing a disease outbreak or quickly controlling an outbreak already in progress.

**How is coordination being currently achieved within the unit?**
The Animal Health Division of the DOA is under the direction of the State Veterinarian who is the appointed executive of the BOAH. The State Veterinarians office carries out the rules and orders of the Board.

**How is coordination being currently achieved state-wide, tribal- wide, territory-wide?**
The AD's office in South Dakota, has served as the conduit for coordinating animal health efforts between the state, the tribes and the federal governments.

**How does the present unit coordinate activities with other existing agencies/units?**
We utilize the use of e-mail, scanning and faxing capabilities and the EMRS2 system to share information with our AD's office in SD.

**What standards for traceability are currently being used?**
We strive for 100% traceability of breeding animals that enter ND and for feeder animals that come from high-risk areas or states, in the shortest amount of time possible. **Are they appropriate?** From an epidemiological standpoint, absolutely, but from a practical and politically popular standpoint, not currently. Major disease outbreaks usually decrease the lack of support.

**What is the state of technology infrastructure?**
We are currently limited to the use of an Excel spreadsheet for capturing the ICVI data. The federal office and our office have also successfully utilized the Mobile Information Management system (MIMs) when TB testing herds involved in trace investigations. **Capability in terms of size?** Excel databases are somewhat size limited and electronic CVIs must be manually entered. **Compatibility within and outside the agency/unit/department/etc. for sharing data when needed?**
Fortunately, private veterinarians also are using Excel spreadsheets to capture data while they are working animals in the field. Practitioners are not yet familiar with, nor proficient in the use of the MIMs system yet.

Are requests for information available 24/7, or only available M-F, 40 hours per week, if authorized personnel are present?

24/7- ITO support can be a limiting factor.

What is the impact of state, tribe, or territory funding on capability?
Funding is critical if we are to progress to a database that supports traceability for an animal by capturing animal IDs and movement information. How does Federal funding fit into the plan? Federal requirements will dictate what the funding needs will be in most states. States that are not financially able to meet the federal requirements will become the weak links in traceability throughout the nation if they are not provided federal assistance to meet federal requirements. Latitude will be needed in future cooperative agreements since some states will need equipment some will need staff, and some will need both. Traceability needs to be a national and unified effort with their state counterparts and 'most' importantly with the support of the livestock industry, in order to be successful.

2.3 Strengths and Weaknesses

What are the strengths of the organization in terms of technology, human resources, personnel capabilities, etc.?
The Board of Animal Health is made up of producers and veterinarians and allows for good communication which fosters understanding and support for requirements which improve traceability of animals entering North Dakota.

What are the weaknesses in terms of "lack of" technology, human resources, personnel capabilities, etc.?
The Animal Health Division must use the required state's procurement process and there are multiple people that must approve of purchases and actions, so the process is robust, but inherently slow.

2.4 Opportunities and Threats

Does this plan enable or avoid consequences of potential threats?
Confidentiality of data collected is critical to avoid potential misuse of data and maintain the trust of those we regulate. Foreign and domestic actors continue to attempt to access state and local databases. Our database is
hidden inside the ND.gov system with multiple levels of security to pass. We do not allow the exporting of data directly out of our system and ND State Law 36-01-36 allows the release and sharing of defined information only under specific circumstances as written in statute.

**Does this plan provide for better use of available resources than current approaches?**
Yes, continued flexibility and growth of our internal database allows for a single point access location for ADT.

**Does this plan enhance networking opportunities?**
Yes, other states are currently using off-the-shelf software databases and encouraging the use of electronic CVIs. The focus of the software is to enable knowledgeable official to evaluate data from multiple sources, synthesize it, and apply it to animal disease surveillance.

**If this plan is not implemented, what are the threats?**
The threat is that as trade increases and our risk for disease introduction increases, we do not have an adequate disease traceability system in place. We learned that after the BSE finding in Canada, we've documented how slow our average TB investigation takes and FMD exercises have pointed out our weaknesses repeatedly.

**If this plan is not implemented, will others be tasked with doing so?**
The ND statute directs the animal health official to protect the health of livestock in the state. If traceability is done for animal health purposes that is where the task will remain.

**Have previous efforts to coordinate with other entities within the applicant's boundaries, and outside the applicant's boundaries, been complicated or unavailable for not having this plan in place?**
Yes, especially when a trace requires us to search through old paper health certificates and multiple fields on the health certificates must be searched that the certificates are not filed by.

### 2.5 Inventory of existing infrastructure and suitability assessment

**Human resources:**
3 veterinarians, 3 support staff and 2 field investigators, with additional management support from the North Dakota Department of Agriculture.

**Space availability:**
Limited in the state office for additional equipment and limited space at most of the auction markets.

**Connectivity resources, both in office and in the field:**
Limited since no budget for additional connectivity between the state office and markets and veterinary clinics. Some rural markets and premises do not have adequate internet access to move data electronically. This is an area of increased focus as we move forward.

**Access to USDA animal disease traceability and animal health information resources:**
This is of concern to the state, due to the need for usernames and password that expire and due to the lack of 24/7 service by federal support staff that routinely support the federal databases locally and nationally.

**Organization of all existing paper record systems used to access animal disease traceability or animal health information:**
Currently all CVIs prior to implementation of USAHERDSA are stored chronologically in a vault. CVIs received after January 2, 2020, are stored in the cloud with access through USAHERDS. Computerized data management capability, including present storage size, speed, security, etc.

**Automated data capture capability:**
USAHERDS has allowed for the reduction in manual entry of data, and we continue to enhance the capabilities of the asset to decrease manual data entry and manipulation.

### III. VISION AND MISSION CONTEXT FOR ADVANCING TRACEABILITY

#### 3.1 Vision Statement

Our vision is directed by responsibilities dictated to us through NDCC Chapter 36 ([https://www.ndlegis.gov/cencode/t36c01.pdf](https://www.ndlegis.gov/cencode/t36c01.pdf)), while guided by the controls outlined in state law:

Chapter 36-01-36. Premises identification, animal identification, and animal tracking - Open records - Exception. 1. The board shall maintain the confidentiality of information created, collected, or maintained by the state veterinarian for purposes of premises identification, animal identification, or animal tracking, including the name and address of the owner or lessee of the property where an animal found, is located. 2. The information described in subsection 1 is not subject to section 44-04-18 and may not be disclosed unless:

a. Every individual who is the subject of the information provides written consent to the release of information;
b. The disclosure is authorized pursuant to federal law;
c. The disclosure is necessary to provide a state or federal agency with information to assist in animal disease control or tracing an animal disease;
d. The disclosure is to the attorney general or to law enforcement to assist in a criminal investigation;
e. A court of competent jurisdiction orders the disclosure; or
f. The disclosure is to provide the North Dakota stockmen's association with information pursuant to section 4.1-72-05. 3. A person violating this section is subject to the remedies set forth in section 44-04-21.2. For purposes of applying section 44-04-21.2, "public entity" includes any person that has contracted with the state for the provision of services related to a premises identification, animal identification, or animal tracking database program.

3.2 Mission Statement

https://www.ndlegis.gov/cencode/t36c01.pdf

The North Dakota Board of Animal Health is statutorily charged (NDCC 36-01-08) to protect the health of the domestic animals and nontraditional Livestock of this state and shall determine and employ the most efficient and practical means for the prevention, suppression, control, and eradication of dangerous, contagious, and infectious diseases among the domestic animals and nontraditional livestock of this state.

The North Dakota Department of Agriculture fosters the long-term well-being of North Dakota by promoting a healthy economic, environmental, and social climate for agriculture and the rural community through leadership, advocacy, education, regulation, and other services. To carry out its mandate, the North Dakota Department of Agriculture is committed to the following responsibilities:
• Serving as an advocate for family farmers and ranchers and for the rural community.
• Providing services that ensure safe, high-quality and marketable agricultural products.
• Developing and expanding markets for agricultural commodities and value-added products.
• Reducing the risk of financial loss to agricultural producers and to buyers and sellers of agricultural commodities.
• Safeguarding livestock and other domestic animals from communicable diseases.
• Ensuring compliance with laws administered by the Department of Agriculture through understandable regulations, information, education, and even-handed enforcement.
• Ensuring human safety and a healthy environment through proper use of pesticides.
• Verifying the contents of pesticides, fertilizers, soil conditioners, animal feeds and veterinary medicines.
• Reducing agricultural losses from noxious weeds, predatory animals, insects, and diseases.
• Gathering and disseminating information concerning agriculture to the general public.
• Providing fair and timely dispute resolution services to agricultural producers, creditors, and others.

IV. TRACEABILITY REQUIREMENTS

The following categories must be described in the Road Map:

2.1 Strategic goal(s)

Inherent in applying and accepting Federal funding for advancing ADT is accepting the overarching strategic goals of ADT:

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).**

   North Dakota is working towards sharing data as allowed under state and Federal laws. North Dakota state law requires us to protect specific producer information. With the limitations placed on us by state law, AHER will need to be implemented under a different plan than is being currently provided to us by USDA. Our plan will be to develop an alternative sharing mechanism that allows BOAH and DOA oversight of how and what information is released and by what mechanism to fulfill our obligations in protecting the information of our constituents. USAHERDS is a complete database that contains not only ADT information, but also additional information that is not pertinent to the ADT discussion and needs to be protected. Additionally, USAHERDS is imbedded in the ND.gov system which will require us to develop a conduit for sharing that is controlled on the state side. Increasing international data threats and concerns with data security require additional control points for managing the flow of information. We have guidance under state law and from the Attorney General of North Dakota when and how this information can be released.

2. **Increase use of electronic ID tags for animals requiring individual identification to make the transmission of data more efficient.**

   North Dakota is working with veterinarians to distribute and encourage the use of RFID tags by providing tags, systems, and education to veterinarians.
3. **Enhance the ability to track animals from birth to slaughter through a system that allows tracking data points to be connected.**

USAHERDS allows us to use a single database for tracking these movements. We routinely work with other states in sharing information to achieve our goals of data sharing. We share tracking points as allowed by state and federal law.

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.** Entities must develop or implement a State-wide, Tribal-wide, or Territory-wide infrastructure for advancing ADT compatible with State, Tribe, Territory and USDA standards.

ND accepts most forms of approved commercially approved products for private veterinarians. As additional technologies become available, we actively incorporate them into USAHERDS and our system.

North Dakota recently implemented VetCVI, a product available through USAHERDS which allows all Tribal, state, and private entities to provide electronic CVIs free of charge. We have created an ID Subcommittee of the BOAH that is working with industry to help solve some of our problems and inconsistencies with data collection and failure of animals to meet import requirements.

### 4.2 Programmatic goals (objectives)

**Target, develop, and implement outreach messaging regarding data quality and processing for animal health information forms such as ICVIs.**

Our outreach has been and will continue to be to the Animal ID working group, industry groups, field investigators, and the Board of Animal Health members.

**Monitor ICVI data quality.**

This is done now but will continue to need monitoring for quality and accuracy.

**Input data into appropriate systems.**

Our goal has been to switch from a paper or excel database system to a searchable electronic database system. While we have achieved portions of this goal, we continue to improve the database to be more inclusive,
accurate and responsive to the daily needs of the office and protection of our state resources.

**Improve retrieval of available traceability information.**
Our ability to retrieve data through the new database continues to grow exponentially. We will continue to improve and invest in the capabilities of this database to make it more flexible and adaptable to outside data sources.

**Establish compatible standards for sharing data with States/Tribes/Territories and USDA when needed.**
The national Assembly of State Animal Health Officials are leading the effort in this area. Our digital system allows for routine data sharing growth and adaptation to meet standards as they change.

**Integrate surveillance and traceability data.**
We will keep pursing the dumping of all ICVIs and test results into the state's ATD.

**Establish advisory committee.**
ND brought together all of the industry and regulatory stake holders and formed an Animal Identification Working Group several years ago. We have benefited greatly from their input and hopefully they have a good understand of why we need to continue to improve our traceability. We have added a ID Subcommittee to the BOAH that is working towards consistency and fairness in ADT.

**Establish authority.**
The state veterinarian, who is to carry out the orders and policies of the Board of Animal Health, works with the Brand inspectors to assure that animals are not imported without meeting our import requirements. Animals that move out of state without an ICVI are reported to the destination state's animal health official.

**Develop policy.**
The ND State Board of Animal Health helps to develop policies that the state veterinarian and associated staff are to carry out. The Animal Identification Working Group has also provided guidance on what policies are feasible and that the industries will support.

**Enhance IT infrastructure.**
Enhancement of the IT infrastructure at the state level will require funds and staff time. The cooperative agreements need to financially help support those needs as we need to keep updating our IT systems to be more compatible with other state and federal systems. NDIT and the Department
of Agriculture have been great assets in implementing the digital databases through the funds available through the cooperative agreement.

**Establish and/or update tag distribution record system.**
We currently receive AIN number information. The Brucellosis tags are currently recorded into the federal system by our office staff. The USDA brite tags are recorded in our office but we rely on the veterinarians that request them to be able to provide us information on the cattle that they're placed in.

### 4.3 ADT Trace Performance Measures (TPMs)

1. TPM: 1084:22 - In what State was an imported animal officially identified? ND
2. TPM: 1085:22 - From what State was the imported animal shipped? ID
3. TPM: 1099:22 - In what State was an imported animal officially identified? MT
4. TPM: 1100:22 - From what State was an imported animal shipped? WY
5. TPM: 1107:22 - Where in your State was the animal officially identified? Glen Ullin, ND
6. TPM: 1108:22 - From what location in your State was an exported animal shipped? Rugby, ND

### 4.4 Data requirements

**Fully describe standards to be used for official animal identification, including arrangements with other States, Tribes, Territories, as well as official identification methods/devices used within the cooperator's jurisdiction.**

North Dakota requires official identification on all sexually intact animals that enter ND. OCV tags, USDA NEUS tags, and RFID tags are all recognized as official identification.

**What tag distribution record keeping systems are being used?**
RFID tags are being entered through AIN Manager, Brucellosis tags and NUES tags are being entered into USAHERDS.

**What data requirements exist for commuter herd agreements?**
ND does not have commuter herd agreements but does allow for grazing permits. The grazing permits require official ID be documented on all returning animals.
What forms are approved for interstate movement in addition to ICVIs?
ICVIs are the only forms currently recognized unless animals are moving on a VS 127 for a direct to slaughter movement. Owner shipper statement is allowed for movement to an auction market.

How and when will data be shared with other States, Tribes, Territories, and USDA?
On a case-by-case basis under the requirements and guidelines provided by the laws of the US and ND. When requested for animal health purposed by another animal health official or disaster is declared by the Secretary of Agriculture. Data will be shared when the requirements of 36-01-36 are met under statute. Our USAHERDS database is secured within the ND.gov system. NDIT requires that we allow only secured information into the database and no unapproved data moves out. We will provide summary data to those that require the data under the strict guidance of State and Federal law.

How will group/lot official numbers be handled within the system?
It is feasible that a group lot number for pigs, or for a group of cattle, that are not to be commingled, could be entered into new database.

4.5 Information technology plan

Our IT is under the supervision of NDIT that runs the ND.gov platform for the State of North Dakota. The security of the platform and protection of the information in the database is our number one priority. USAHERDS on the ND.gov platform is owned by the State of ND and access to that system is protected at the highest level. The Azure system is backed up in triplicate and is unable to be accessed by outside entities including AHER. We will develop a plan that will allow for a work around that protects the server and information but can meet the needs of the ADT agreement.

4.6 Resource requirements

Is specific expertise needed that is not currently available?
We will need partners in USDA that will help us protect our industry from the forces that are aligned against animal agriculture. The legislature and industry in North Dakota have made it clear producer information in our system is confidential.

Will consultants be needed?
We currently have access to consultants on our NDIT and through USAHERDS, but they come at a cost that increase as the database grows.
Is a continuity of operation plan (COOP) in place and how frequently is it tested?
NDIT and USAHERDS are constantly evaluating the safety and performance. A recovery test is currently being scheduled from our backups.

Are automated data capture resources needed?
Yes. Our livestock auction markets and veterinarians are in the greatest need of automated capture resources. We are currently requesting additional funds from the legislature for automated data capture grants.

4.7 Organizational needs
4.7.1 Executive support

Is additional support from executive management needed?
No.

How is accountability provided?
Election of the Agriculture Commissioner and appointment of the State Veterinarian by the Commissioner. BOAH is appointed by the Governor at the recommendation of specific industries. Multiple, experienced employees work together to complete tasks.

How are officials briefed on progress and baseline measures of performance?
Weekly updates are provided to the Commissioner and the BOAH meets quarterly.

4.7.2 Coordination and oversight procedures

What is the make-up of the applicant's ADT advisory group?
How frequently are they engaged?
Our advisory group meets as needed and a ID Subcommittee has been formed to discuss ID requirements outside those mandated by the Federal government.

How are emergency preparedness resources engaged or responded to when necessary?
Within the DOA we have a Emergency manager and we are integrated into the ND DES and coordinate with DOH. We have a 20-veterinarian emergency Reserve Corp.

How is compatibility with other States, Tribes, Territories, and USDA monitored?
Actual investigations, trace exercises, discussions, surveys, e-mails, and conference calls. We coordinate additionally by Teams and Zoom with multiple federal and state agencies.

**How are responsibilities assigned for implementing the plan?**
Since our animal health staff is relatively small, we firmly believe in cross training so duties can be assigned as needed. Primary duties are often overseen by one staff member, but others must be able to assume those duties in their absence.

**How are disputes arbitrated?**
If animal identification is being challenged, we have resorted to DNA testing of tissue to confirm that the ID device does indeed belong to the animal in question.

**How is feedback obtained relative to perception of successful implementation above and below the administrative authority?**
It is asked for from some and offered by others. Constructive criticism is welcomed.

**How is transition achieved when administrators are replaced?**
More than one support staff member can carry out each duty. Since the support staff is responsible for technical aspects of the databases, when administration changes it should have little to no impact on the integrity of the day-to-day activities within our division.

4.7.3 Policy

**How does the applicants' policies align with the ADT general standards document and achievement of traceability goals?**
Our ADT policies are based on the Federal ADT program directions outlined by USDA for animals over 18-months of age. We require those same requirements for all intact animals under 18-months of age.

**Is there a need to address or change a state policy to align with 9CFR part 86 or the ADT General Standards document?**
No.

4.7.4 Staffing

**How is full-time, paid support staff justified?**
They have multiple duties, and we need more than one person capable of proficiently carrying out each duty.

**What qualifications are needed?**
There are specific PIQs and job descriptions for each of our staff.

**What personnel are needed to implement the plan?**
Secretarial, administrative and IT staff are all necessary within our state animal health official's office. In the field we need accredited large animal veterinarians and producers that are willing to work with us. The AD's office staffs, and the AD play a vital support and training role in carrying out our traceability plan.

**Can other human resources be leveraged to assist in implementing the plan?**
We have tried to use outside resources, but without experience reading ICVIs it did not prove to be the way to protect the integrity of the data that was being input.

**Are professional credentials and certification an issue?**
Experience is the most important credential needed when evaluating ICVIs and recording the appropriate information.

**Are job descriptions for the roles needed provided?**
Yes

**Is ADT information a distinct function within the unit or an add-on "coordinated by committee" versus an individually coordinated, stand-alone sub-unit?**
Animal Disease traceability is at the core of daily duties as health certificates are reviewed and some of the data is entered into a spreadsheet and stored.

### 4.7.5 Budget requirements

**How are you funded for ADT? State, Tribe, Territory versus Federal?**
We are funded with State and Federal funds.

**What are the funding requirements projected by year for first, second and third year for implementing this plan?**
We have purchased USAHERDS. Maintenance fees are $27,000 per year. A monthly cost of about $400 a month for a test server is required when specific upgrades are made to the network. We anticipate approximately $1,800 this coming year based on past
years numbers. We will continue to purchase upgrades to function as practical and required.

**How is cost sharing achieved?**
We do not have any funding specific to animal disease traceability other than what is appropriated to us through the federal government. All expenses covered in excess of Federal funds is covered by general funds appropriated to the DOA and BOAH.

**How can the applicant insulate against budget cuts and shortfalls?**
Budget cuts will lead to reduction in labor resources that will come from the department. We have no surplus of funds.

**Can other funding sources be leveraged to support this plan?**
There are no additional funding sources available.

4.7.6 Outreach

4.7.6.1 Accredited veterinarians

**What is the plan for informing accredited veterinarians of the new guidelines for official ID and the specific three-year plan for implementation?**
We attend and present at the annual NDVMA meeting. We provide outreach and education through timely emails and mailings.

**What continuing education is being planned for improving data quality relative to animal health information systems being used?**
We coordinate with USAHERDS, GVL and other providers to offer on-line training and education. We are going to sponsor a booth at the NDVMA to share our advances, VetCVI and EECVI.

**Submitting official forms in a timely manner?**
We directly contact via phone veterinarians that are not in compliance and mail copies of rejected or problem emails to the veterinarians.

**What is the plan for enhancing the use of eICVIs, if any?**
We coordinate with USAHERDS, GVL and other providers to offer on-line training and education. We are going to sponsor a booth at the NDVMA to share our advances, VetCVI and EECVI.
What role, if any, does the accredited veterinarian have in providing low-cost, official identification tags/devices to producers?
The accredited veterinarians order NEUS and RFID tags now and record the identification on CVIs. If NEUS tags are going to be used more for identification purposes, the veterinarians may play a critical role in helping to record who the tags were issued to.

4.7.6.2 Slaughter plants

What continuing education efforts are being planned for addressing the concerns of the slaughter plants in the jurisdiction?
Our office does not regulate the slaughter plants in ND. It is regulated by another division in the DOA.

What is the plan for accessing or requesting traceability information from slaughter plants?
Routine traceability information has not been provided to our office from slaughter plants. We must request it when we have specific concerns.

4.7.6.3 Industry as a whole

How is industry being informed of the implementation plan?
The plan will be conveyed by the state veterinarian's office through information provided to the Board of Animal Health, through producer group meetings, through PSAs and media outlets, through the accredited veterinarians and the AVIC's VMOs and Animal Identification Coordinator and through our Field Investigator. We coordinate with the Stockmen's Association on routine investigations and requests for information. We engage with industry groups through emails and mailings.

How is the advisory committee being leveraged for this continuing education purpose?
We have created a BOAH ID Subcommittee to assist in creating greater input to the Board from industry and the advisory committee.
What other resources are available for industry outreach?
Email and on-line meetings have created a new avenue for sharing.

What constitutes industry? What species are involved?
Cattle, swine, sheep, goats, bison and farmed cervids are the main species that make up the industries we oversee animal health programs for.

How are under-represented and under-served communities being included in the outreach plan?
Our messages are carried by numerous media outlets. Private practitioners and extension agents also have a vital role in providing information and listening to feedback from underserved areas.

4.8 Monitoring and reporting interstate movement activity

How will the number of animals and the number of shipments be monitored that move interstate?
Our current importation permit system will allow us to quickly provide estimated summary information on the number of shipments we receive and the number of animals in those shipments. Feeder steers from Free states are not required to have a permit number on their health certificate, but we receive the HCs within 30 days and then can manually add up and account for those shipments as well.

How will the data be verified or validated?
Our field inspector is tasked with spot checking animals that enter North Dakota to assure the Board that imported animals meet their import requirements. We also share information back and forth with the brand inspectors since it may be that someone has sought a brand release before moving animals, but they failed to acquire a CVI for the movement. What we appreciate most is when other producers report that someone seems to be moving cattle without meeting import requirements. That tells us that producers support sound regulations that protect the health of everyone's livestock in ND.

The following data should be tracked and available upon request:
o Number of ICVIs and other interstate movement documents created within the State/Tribe/Territory on a year-to-date basis for move-out animals.

o Number of ICVIs and other interstate movement documents received for move-in animals.

o 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.

o 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 … (such as steers in ND, since all sexually intact cattle coming into ND must be individually officially identified.)

o Volume of distribution for each official numbering system/device issued by the State/Tribe/Territory and/or AD office, including backtags by market or processing (slaughter) facility.

Since we have not captured all the above information in the past, nor have we been required to ever provide exact numerical information, we cannot promise that all the information asked for in the above list can be provided. That is part of the overarching goal of our 3-year traceability plan. Because of our importation permit requirement, we know that our state can provide most of the above information. Since tribes are not being directed to work only with a state veterinarian, we cannot be responsible for tags that they may receive from other sources. We do not have the authority to expect that they should report use of official tags to the state of ND. We will work together with the federal office to try and help capture information pertaining to the tribes' use of official identification tags. There is still a delay in the mailing of some ICVIs to the state office that also causes our records to be inaccurate until those CVIs are received.

V. ADVANCING TRACEABILITY

5.1 Ranking of priorities for advancement

- Moving forward we are making great strides in use and implementation of RFID in cattle. We need to continue to provide and promote those resources until they become a necessary component within industry.

- We are expanding our internal uses within USAHERDS and consolidating the platform to a single use station for all animal health programs. This allows us to improve efficiency and allow for more consistent and dependable retrieval.
- We are offering additional services to veterinarians like VetCVI, EECVI, and various online trainings to expand their knowledge and comfort with digital platforms.
- AHER implementation is a priority of this office through a cooperative arrangement with USDA to meet the needs of industry, state, and federal government.

**Is a phased-in approach appropriate over the three-year period?**
Now that mandatory ID has been tabled for the short-term, industry will drive the growth. We need to focus on education and providing the products to meet their needs. We are in a great position to leverage our expertise in this area.

**Are various components dependent upon measurable successes rather than defined time periods?**
We are seeing measurable successes daily, but they are hard to measure and are often unpredictable since they are being driven by market and demand.

5.2 Implementation of objectives

Our objectives and goals have not changed. Our goal is 100% traceability. We are making great progress with the advancement of technology in our office. We will leverage that technology advancement to better serve industry and improve traceability. Please see the attached cooperative agreement application for 2022 and associated objectives. As veterinarians that haven't forget epidemiologic principles of prevention of disease movement, our goal is 100% traceability. Our objectives and more importantly our 'actions' to achieve that goal, may change depending upon federal regulations or guidance and available federal and/or state funding for resources needed to accomplish full traceability. In addition, we may be limited by the industries and legislature that provide us with our mandate and guidance for implementation and enforcement.