Advancing Animal Disease Traceability Road Map for South dakota

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I. EXECUTIVE SUMMARY

The South Dakota Animal Industry Board (SDAIB) oversees animal disease traceability in South Dakota and works daily to maintain and advance the accuracy and efficiency of all animal health information systems involved in traceability.

- A robust system for capturing and storing animal traceability data is in place involving:
    - Import permitting system
    - Interstate Certificates of Veterinary Inspection (ICVI) for imports and exports
    - Change-of-ownership identification data on breeding cattle
    - Back tag reports from auction markets
    - Program disease test and vaccination records
    - Official tag distribution and application records maintained by accredited veterinarians, USDA APHIS VS, and SDAIB
    - Access to USDA APHIS VS databases and emergency response systems
    - Sales records of livestock auction markets and dealers
    - Brand inspection records

- The SDAIB enjoys an excellent working relationship with all stakeholders involved with animal disease traceability.
    - USDA APHIS VS
    - South Dakota Brand Board
    - South Dakota Department of Agriculture and Natural Resources
    - South Dakota Cooperative Extension
    - Livestock Auction Markets and Dealers
    - Accredited Veterinarians
    - Livestock Producers

USDA APHIS VS Cooperative Agreement funds along with State cost-share funds have been used to advance animal disease traceability since 2005. Federal funds have advanced traceability in South Dakota by providing for outreach and education, data entry and maintenance personnel, and equipment for electronic data capture.

This plan addresses gaps in animal disease traceability in South Dakota.

- Non-compliance is a cause of gaps in traceability and results in incomplete records or a total lack of essential animal health data. Outreach and education are needed to inform all stakeholders of the importance of their contribution to effective and efficient traceability.

- Progress has been made in the volume and quality of information gathered and stored in paper and electronic files. An increase in electronically collected and stored animal health data is needed to further increase efficiency in traceability.

Outreach and education will encourage stakeholders to use electronic means to submit animal movement data to SDAIB. Updated equipment and software for electronic collection and transfer of data may be needed as more information is submitted electronically. Personnel will be required to maintain and assess the search ability of collected data.

The following road map outlines a plan to advance animal disease traceability in South Dakota that includes outreach and education, the collection and storage of traceability data, monitoring and improving the quality of data, evaluating data search ability, and increasing electronic data capture and storage.

II. CURRENT TRACEABILITY SITUATION

2.1   Who are we?

Agencies and stakeholders involved in animal disease traceability:
- SDAIB
- USDA APHIS VS
- South Dakota Brand Board
- South Dakota Department of Agriculture and Natural Resources
- South Dakota Cooperative Extension
- South Dakota Animal Disease Research & Diagnostic Laboratory
- South Dakota livestock auction markets
- South Dakota accredited veterinarians
- South Dakota livestock dealers
- Livestock producers

Traceability data is used for disease control and eradication, NASS data, animal import and export data, and statistical analysis for budgeting purposes.

The animal disease traceability system in SD is measured by the ability to locate animals and premises involved in disease investigations in a timely, efficient, and complete manner.

The South Dakota Animal Disease Traceability Advisory Group meets at the discretion of the State Veterinarian annually or as needed. The group consists of representatives of producer, processor, veterinary and marketing organizations, animal health officials, and cooperative extension.

2.2   Where are we now?

The electronic and paper records maintained by and available to SDAIB currently provide good animal disease traceability and search ability.

SDAIB has a good working relationship with all agencies and stakeholders listed previously for animal disease traceability data sharing.

Animal disease traceability information in South Dakota is available during office hours and outside of office hours by contacting staff veterinarians by phone, fax, or email.

Federal funding supports SDAIB efforts to provide outreach and education activities, equipment for data collection and storage, and the personnel to complete this plan.

2.3   Strengths and Weaknesses

Adequate search ability currently exists in files and databases that are maintained by and are accessible to the SDAIB. These files provide quick access to animal identification, animal location, and owner contact information. When all pieces of essential data are present, adequate traceability in terms of tracing a reference animal can be achieved in minutes. Tracing exposed and other at-risk animals can be achieved within hours to days. However, when crucial pieces of information are missing, traceability may be unattainable. Non-compliance with requirements can cause significant interference with animal health data completeness.

Many of the pieces of data needed in an animal disease investigation are currently recorded and maintained in paper and electronic files. Traceability is hindered when pieces of information are missing, most often due to non-compliance.

2.4   Opportunities and Threats

The data collected and maintained due to the plan would be available and an excellent source of information in the case of a catastrophic event. For example: traceability information was successfully used to match cattle carcasses to their respective owners during recovery after winter storm ATLAS in October 2013.

2.5   Inventory of existing infrastructure and suitability assessment

SDAIB utilizes electronic and paper files to gather and store animal movement and disease control data. SDAIB employs veterinarians and staff to enter and maintain animal health data, to oversee data maintenance, and to conduct trace activities.

SDAIB accessible databases and files, and their animal disease traceability capabilities:

SDAIB housed databases and files:

- Interstate import certificates and import permits – managed using CVICentral, a TraceFirst product that facilitates the upload of import ICVI data from electronic and paper certificates into the SCS database provided by USDA APHIS. Import ICVI data is electronically searchable by many fields including but not limited to date, consignor, consignee, veterinarian, individual ID, and number and type of livestock.

- Interstate export certificates – searchable by date, state, number and type of livestock and ICVI number. Copies are filed electronically or hard copy.

- Change of ownership database – electronically searchable by owner, veterinarian, auction market, date, individual ID, number and type of livestock. Covers interstate movements of breeding cattle, intrastate sale of breeding cattle 18 months and older, and dairy animals moved into the state and identified on arrival.

- Back tag report files – searchable by auction market, back tag number, and date.

- NPIP database information on import of poultry searchable by the fields on VS form 9-3.

- Captive Non-Domestic database electronically searchable by many fields including but not limited to producer, individual ID, and number and type of livestock.

- Reportable Disease Files on multiple species to monitor animal health in South Dakota.

Files maintained by other entities available when needed:

- Sales records of livestock auction markets and dealers are required by SD law to be kept and made available when requested for investigation by animal health officials. Such records must be maintained for a minimum of seven years.

- Brand inspection records – required by law when cattle change ownership or move out of the inspection area.

USDA accessible databases for state use:

- USDA/APHIS SCS (Surveillance Collaboration Services) for program disease control.

- USDA/APHIS Emergency Management Response System (EMRS) for investigation and tracing activities during a program disease or a foreign animal disease response.

- USDA/APHIS SPIS (Standard Premises Identification System) for premises identification and information.

- USDA/APHIS AIMS (Animal Identification Management System) for official eartag distribution.
- SD specific non-electronic disease traceability information housed by USDA may also be obtained as needed.

The SDAIB is responsible for maintaining the data related to import and export ICVI's, change-of-ownership records, and backtag records.

SD State and Federal animal health officials and staff work together on data entry of information received on VS forms. Both State and Federal offices collaborate as needed to access respective databases for essential information in an animal disease event.

III.   VISION AND MISSION CONTEXT FOR ADVANCING TRACEABILITY

3.1   Vision Statement

A functional animal disease traceability system in South Dakota would provide for the ability to efficiently gather essential data in the event of an animal disease event and would allow animal health officials to effectively trace animal movements, to identify exposed animals and at-risk animals, and to obtain contact information on individuals who need to be informed. Ideally, initial location identification and identification of exposed animals would be successful within minutes to hours of notification.

3.2   Mission Statement

The SDAIB mission is to improve the completeness, accuracy, and timeliness of animal traceability data to allow for effective and timely traceability of livestock and to protect the health and viability of the SD livestock industry.

IV.   TRACEABILITY REQUIREMENTS

4.1   Strategic goal(s)

To develop and implement a State-wide infrastructure for advancing animal disease traceability compatible with State and USDA standards.

4.2   Programmatic goals (objectives)

April 2022 to March 2025
- Outreach and education
- Advisory committee as needed

- Monitor compliance
- Monitor ICVI data quality
- Continue to maintain, evaluate, and improve SD traceability data systems
- Continue to increase the use of electronic data submission (ex. ICVI's and backtag reports)
- Work with SD Bureau of Information and Telecommunication as needed to upgrade SDAIB databases to improve electronic data capture, maintenance, and retrieval.

4.3   Animal disease traceability performance measures (required)

SDAIB will enter trace performance measures in EMRS. The required trace performance measures to be entered in EMRS include:

a. The time required for SD to determine the State in which an animal of interest was officially identified and to notify the State of the official ID number.
b. The time required for SD to confirm that SD did issue an official ID number of interest and to locate the contact information attached to the number.
c. The time required for SD to determine the State from which an animal of interest was moved interstate into SD and to notify that State of the animal's official ID number.
d. The time required for SD to determine the address/location from which an animal of interest was shipped from SD to another State.

4.4   Data requirements

a. Import ICVI's: All import ICVI's. electronic and paper, are processed using Tracefirst's CVICentral software. Once the ICVIs have been reviewed for completeness and processed, the movement data is uploaded into the SCS database provided by USDA APHIS.
b. Export ICVI's: The paper and electronic ICVI's received are filed either electronically or hard copy. Information is processed using CVICentral and stored in SCS.
c. Change-of-Ownership reports: Data received in hard copy or electronically is entered by staff into the SDAIB database. The change-of-ownership information is electronically searchable and includes date sold, owner, individual official ID, and salebarn if applicable.
d. Program disease activity: Data is received by hard copy and electronically. SDAIB staff and VS staff enter test data into the SCS.
e. Backtag reports: Data is received in hard copy and electronically. SDAIB staff enters date, tag ranges, and auction market into the SDAIB database. The reports are filed electronically.

As data is entered in the above databases, the timeliness, completeness, and accuracy of submitted records are evaluated. Veterinarians and auction markets are notified and provided guidance on proper record submission, such as the federal requirement that issued ICVI's be submitted within seven calendar days.

Location identification: SDAIB uses USDA / APHIS systems for location identification: SPIS, EMRS2, and the Scrapie flock identification system.

South Dakota allows the distribution of NUES and AIN tags beyond program disease work. NUES and AIN tags may be applied by and distributed to producers by accredited veterinarians. Accredited veterinarians will keep records of tag distribution and application, enter tag distribution in AIMS, or submit records to SDAIB for maintenance.

4.5 Information technology plan

The SDAIB databases are maintained by SDAIB staff with technical assistance from the State of South Dakota's Bureau of Information and Telecommunications (BIT). SDAIB will work with BIT to upgrade SDAIB databases to improve electronic data capture, maintenance, and retrieval.

SDAIB has contracted with Tracefirst to utilize CVICentral to process import and export ICVI's and upload movement data into USDA's SCS.

4.6 Resource requirements

Automated data capture equipment and resources may be needed as more veterinarians and auction markets explore the options of electronic data capture.

4.7 Organizational needs

4.7.1 Executive support
All executives, including within the SDAIB, SD Department of Agriculture & Natural Resources and SD Governor's Office are keenly aware of the need for improved animal disease traceability.

4.7.2 Coordination and oversight procedures

The SD Animal Disease Traceability Advisory Committee will meet annually or as issues arise. Agendas will be prepared by the State Veterinarian.

Minutes, attendance, and other administrative duties will be performed by the SDAIB's project coordinator.

The purpose of advisory committee meetings will be to provide updated information on animal disease traceability in SD, and to gain input from industry on developing a plan for advancing animal disease traceability.

The SD Animal Disease Traceability Advisory Committee will consist of leaders from the following industry groups:

a) Producers, processor/marketing organizations
        SD Cattlemen's Assn.
        SD Stockgrower's Assn.
        SD Pork Producer's Council
        SD Sheepgrowers
        Northern Plains Dairy Goat Assn.
        SD Elk Breeders Assn.
        SD Beef Industry Council
        Central Plains Dairy Assn.
        Dakota Territory Buffalo Assn.
        SD Brand Board
        SD Poultry Industry Assn.
        SD Horseman's Assn.
        SD Horse Council
        SD Livestock Market Assn.
        SD Assn. of Meat Processors
        Cimpl's
        SD Farmers Union
        SD Farm Bureau

b) Government
        USDA/APHIS—SD ADD
        SDAIB
        SD Department of Ag & Natural Resources
c) Academia and/or Extension
        SDSU Cooperative Extension

d) Service Providers
        SD Veterinary Medical Assn.

SDAIB interacts with the Office of Emergency Management (OEM) and other State agencies as necessary as issues arise. This was demonstrated with SDAIB activities and cooperation with OEM and other State agencies during the ATLAS storm response in October 2013.

Compatibility with other States is accomplished through routine meetings, conference calls, e-mails, and other communication with States.

4.7.3   Policy

South Dakota implemented an Act effective July 1, 2005 providing for the development and implementation of animal identification programs to maintain animal health and ensure the safety of the food supply. This law allows SDAIB to promulgate rules for the implementation of ID programs, and to specify all conditions for such programs.

The ADT rule published March 2013 established federal standards for the interstate movement of livestock.

4.7.4   Staffing

SDAIB veterinarians on staff in the Pierre office will oversee the collection, maintenance, storage, and availability of traceability data.

SDAIB field veterinarians will oversee compliance and investigation of traceability events in the field.

SDAIB compliance officers will respond to traceability events in the field.

Office staff personnel will perform assigned duties relating to gathering, entering, and filing traceability data.

4.7.5   Budget requirements

South Dakota animal disease traceability is funded using both State and Federal funds. USDA APHIS VS cooperative agreement funding provides $88,387 annually to support SDAIB animal disease traceability goals.

4.7.6   Outreach (required to be addressed within the Road Map)

4.7.6.1.   Accredited veterinarians

SDAIB will use newsletters, website, and informational meetings to reach all accredited veterinarians with updates on animal disease traceability. Accredited veterinarians will be informed about the ADT rule with emphasis on the complete and timely submission of ICVI's within seven calendar days. Veterinarians will be encouraged to use electronic certificates and forms.

4.7.6.2.   Livestock markets

SDAIB will use newsletters, websites, meetings, and site visits to reach all auction markets with updates on animal disease traceability and the importance of auction market records in an animal disease event. Auction markets will be encouraged to submit backtag reports in a timely manner. Markets will be encouraged to support their inspecting veterinarians in gathering and submitting timely and accurate animal movement data. SDAIB will conduct random and routine reviews of auction markets as approved tagging sites.

4.7.6.3.   Industry as a whole

Newsletters, website, producer meetings, industry meetings, and advisory group meetings will be used to reach livestock producers with the importance of animal disease traceability and their role in keeping and/or submitting animal identification data.

4.8.   Monitoring and reporting interstate movement activity (required)

- Import and export movement data is captured using TraceFirst's CVICentral product. Interstate movement data is uploaded into USDA's SCS where it is stored in a searchable database and accessible for reporting. Import CVIs are reviewed for compliance. The SDAIB import permit system and database collect data on number of shipments and number of animals imported into SD. Numbers of shipments and animals exported from the state are collected from electronic and paper ICVI's received.
- Information collected at the time of import permit call is verified once the import ICVI is received in the SDAIB office. Discrepancies are corrected after contacting the issuing veterinarian.

V. TRACEABILITY IMPLEMENTATION

5.1   Ranking of priorities for advancement

1. April 2022 to March 2025:
   a. Maintain, assess and update SDAIB traceability databases
   b. Increase the use of electronic data submission
   c. Continue outreach and education
   d. Monitor compliance

5.2   Implementation of objectives

1. Maintain, assess and update SDAIB traceability databases
    a. Monitor search ability of all SDAIB databases
    b. Pursue the conversion of paper-based systems to electronic systems
    c. Improve the use of CVICentral to capture import and export ICVI information.

2. Increase the use of electronic systems to collect and submit traceability data.
    a. Encourage accredited veterinarians to use electronic ICVI's
    b. Encourage auction markets to submit records electronically
    c. Provide auction market inspecting veterinarians with the capabilities to collect and share traceability records electronically.

3. Continue outreach and education – through newsletters, website, informational meetings targeting:
    a. Accredited veterinarians
    b. Livestock markets and dealers
    c. Livestock producers

4. Monitor compliance
    a. Continue to review the completeness of records received
        i.   ICVI's
        ii. Change-of-ownership
        iii. Backtag reports
        iv. Tag distribution reports
        v.   Program disease records
    b. Continue to monitor NVSL TB granuloma submission reports for adequate official identification recovered at slaughter.