

Advancing Animal Disease Traceability Road Map for SOUTH DAKOTA

A Three-Year Plan

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Date: April 1, 2025

Table of Contents

I.	EXECUTIVE SUMMARY	3
II.	CURRENT TRACEABILITY SITUATION	4
2.1	<i>Who are we?</i>	4
2.2	<i>Where are we now?</i>	5
2.3	<i>Strengths and Weaknesses</i>	5
2.4	<i>Opportunities and Threats</i>	5
2.5	<i>Inventory of existing infrastructure and suitability assessment</i>	5
III.	VISION AND MISSION CONTEXT FOR ADVANCING TRACEABILITY	7
3.1	<i>Vision Statement</i>	7
3.2	<i>Mission Statement</i>	7
IV.	TRACEABILITY REQUIREMENTS	8
2.1	<i>Strategic goal(s)</i>	8
4.2	<i>Programmatic goals (objectives)</i>	8
4.3	<i>ADT Trace Performance Measures (TPMs)</i>	8
4.4	<i>Data requirements</i>	8
4.5	<i>Information technology plan</i>	9
4.6	<i>Resource requirements</i>	9
4.7	<i>Organizational needs</i>	10
4.7.1	<i>Executive support</i>	10
4.7.2	<i>Coordination and oversight procedures</i>	10
4.7.3	<i>Policy</i>	11
4.7.4	<i>Staffing</i>	11
4.7.5	<i>Budget requirements</i>	11
4.7.6	<i>Outreach (required to be addressed within the Road Map)</i>	12
4.8	<i>Monitoring and reporting interstate movement activity</i>	12
V.	ADVANCING TRACEABILITY	13
5.1	<i>Ranking of priorities for advancement</i>	13
5.2	<i>Implementation of objectives</i>	13

I. EXECUTIVE SUMMARY

The South Dakota Animal Industry Board (SDAIB) oversees animal disease traceability in South Dakota. It works daily to maintain and enhance 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 maintains an excellent working relationship with all stakeholders involved in animal disease traceability:

- USDA APHIS VS
- South Dakota Brand Board
- South Dakota Department of Agriculture and Natural Resources
- South Dakota Cooperative Extension
- South Dakota Department of Health
- Livestock Auction Markets and Dealers
- Accredited Veterinarians
- Livestock Producers

USDA APHIS VS Cooperative Agreement funds and State cost-share funds have advanced animal disease traceability since 2005. Federal funds have enhanced traceability in South Dakota by supporting outreach and education initiatives, providing personnel for data entry and maintenance, and supplying equipment for electronic data capture and management.

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

- Non-compliance contributes to gaps in traceability, resulting in incomplete records or a total absence of essential animal health data. Outreach and education are necessary to inform all stakeholders of the importance of their contributions to achieving effective and efficient traceability.

- Progress has been made in the volume and quality of information collected and stored in paper and electronic formats. Increased electronically collected and stored animal health data is necessary to enhance traceability efficiency. Outreach and education will encourage stakeholders to use electronic means to submit animal movement data to the SDAIB. Updated equipment and software for electronic data collection and transfer may be required as more information is submitted electronically. Personnel will be needed to maintain and assess the searchability of the collected data.

The following roadmap outlines a plan to advance animal disease traceability in South Dakota, encompassing outreach and education, data collection and storage, data quality monitoring and improvement, data searchability evaluation, and enhanced 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 Department of Health
- South Dakota livestock auction markets
- South Dakota accredited veterinarians
- South Dakota livestock dealers
- Livestock producers

Traceability data is used for disease control and eradication, as well as for 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 annually or as needed at the discretion of the State Veterinarian. The group consists of representatives of producers, processors, veterinary and marketing organizations, animal health officials, and cooperative extension.

2.2 Where are we now?

SDAIB's electronic and paper records offer effective animal disease traceability and search capabilities.

SDAIB maintains a good working relationship with all agencies and stakeholders listed previously to share animal disease traceability data.

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

Federal funding supports SDAIB's efforts to provide outreach and education activities, collect and store data, and hire personnel to implement this plan.

2.3 Strengths and Weaknesses

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

Many data points necessary for an animal disease investigation are recorded and stored in paper and electronic files. Traceability is compromised when information is missing, often due to non-compliance with regulations.

2.4 Opportunities and Threats

The data collected and maintained according to the plan would be available and serve as an excellent source of information in the event of a catastrophic occurrence. For instance, traceability information was effectively utilized to match cattle carcasses to their respective owners during the recovery period following a winter storm and subsequent investigations, including those for Anthrax, *Brucella ovis*, Brucellosis, CWD, Trichomoniasis, Tuberculosis, and a potential Swine FMD case.

2.5 Inventory of existing infrastructure and suitability assessment

SDAIB utilizes both electronic and paper files to gather and store data on animal movement and disease control. SDAIB employs veterinarians and staff to input and maintain animal health data, manage data, and conduct trace activities.

SDAIB's accessible databases and files, along with their animal disease traceability capabilities, include the following:

- CVIs and import permits – searchable electronically by various fields, including but not limited to date, consignor, consignee, veterinarian, individual ID, and number and type of livestock.
- CVIs are searchable by date, state, number, type of livestock, and ICVI number. Copies are maintained electronically or in hard copy.
- Change of ownership data – searchable electronically by owner, veterinarian, auction market, date, individual ID, and number and type of livestock. This covers interstate movements of breeding cattle, intrastate sales of breeding cattle aged 18 months and older, and dairy animals moved into the state and identified upon arrival.
- Back tag report files – searchable by auction market, back tag number, and date.
- NPIP database information on poultry imports is searchable by fields on VS form 9-3.
- A captive non-domestic database that is electronically searchable by various fields, including, but not limited to, producer, individual ID, and the number and type of livestock.
- Reportable Disease Files on multiple species to monitor animal health in South Dakota.
- As of January 1, 2026, the board will only accept electronic CVIs.
- CoreOne database features significant enhancements in premises management, herd and animal movements, laboratory records, CWD and poultry permitting, as well as comprehensive AIB data management. These improvements will enhance the efficiency of tracebacks during disease outbreaks.

Files maintained by other entities are available when needed:

- SD law requires livestock auction markets and dealers to maintain and make available sales records upon request for investigation by animal health officials. Such records must be retained for a minimum of seven years.
- Brand inspection records are required by law when cattle change ownership or move out of the inspection area.
- NPIP – poultry movements require NPIP compliance without a CVI.
- US SHIP – a collaborative program for US pork industry participants, ranging from small show pig farmers to large commercial producers and slaughter facilities.
- AgView and RABapp – secure pig movements for rapid access to information in animal health events.
- Global Vet Link – access to animal movement data.
- SDSU ADRDL – laboratory diagnostic reporting.

USDA accessible databases for state use:

- USDA/APHIS SCS (Surveillance Collaboration Services) for disease control programs.
- USDA/APHIS Emergency Management Response System (EMRS) for investigation and tracing activities during a program or 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 ear tag distribution.
- SD-specific non-electronic disease traceability information housed by the USDA may also be obtained as needed.

The SDAIB is responsible for maintaining the data related to import and export ICVIs, 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. 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 will efficiently gather essential data during an animal disease event. It will enable animal health officials to effectively track animal movements, identify exposed and at-risk animals, and obtain contact information for individuals who need to be informed. Ideally, initial location identification and identification of exposed animals are successful within minutes to hours of notification.

3.2 Mission Statement

The SDAIB mission is to enhance the completeness, accuracy, and timeliness of animal traceability data, enabling effective and timely traceability of livestock and safeguarding the health and viability of the SD livestock industry.

IV. TRACEABILITY REQUIREMENTS

The following categories must be described in the Road Map:

4.1 Strategic goal(s)

To continue developing, implementing, and enhancing a Statewide infrastructure for advancing animal disease traceability that is compatible with State and USDA standards.

4.2 Programmatic goals (objectives)

April 2025 to March 2028

- 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., ICVIs, change of ownership, and backtag reports)
- Collaborate with the SD Bureau of Information and Telecommunication to upgrade SDAIB databases, enhancing electronic data capture, maintenance, and retrieval.
- Utilizing the CoreOne as the primary database.

4.3 ADT Trace Performance Measures (TPMs)

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 where 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 issued an official ID number of interest and to locate the contact information associated with 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 or location from which an animal of interest was shipped from SD to another State.

4.4 Data requirements

- a. Import ICVI: All information gathered by the import permitting system is stored in the SDAIB CoreOne database. The date of receipt is compared to the date of issue. The completeness of each ICVI is verified by staff.

- b. Export ICVI: The paper and electronic ICVIs received are filed either electronically or in hard copy. SDAIB enters information into the export ICVI database. Paper ICVIs will be eliminated in December 2025.
- c. Change-of-ownership reports: Staff enter data received in hard copy or electronically into the SDAIB database. If applicable, the change-of-ownership information is electronically searchable, including the date sold, owner, individual official ID, and sale barn.
- d. Program disease activity: Data is received electronically and in hard copy format. SDAIB staff and VS staff enter test data into the SCS.
- e. Backtag reports: Data is received electronically and in hard copy. SDAIB staff enter the date, individual tags, owner, and auction market into the SDAIB database.

As data is entered into the above databases, the timeliness, completeness, and accuracy of submitted records are evaluated. Veterinarians and auction markets are notified and guided on proper record submission, including the federal requirement that ICVIs be submitted within seven calendar days.

Location identification: SDAIB utilizes USDA/APHIS systems for location identification, including Premises Management, EMRS2, AIMS, and the Scrapie Flock Identification System.

South Dakota allows the distribution of AIN tags beyond the scope of program disease work. Accredited veterinarians may apply and distribute AIN tags to producers. Accredited veterinarians will maintain records of tag distribution and application, enter tag distribution information into AIMS, or submit documents to SDAIB for maintenance.

4.5 Information technology plan

SDAIB staff maintain the SDAIB databases with technical assistance from the South Dakota Bureau of Information and Telecommunications.

SDAIB collaborates with the SD Bureau of Information and Telecommunication to upgrade its databases, enhancing electronic data capture, maintenance, and retrieval. A platform has been developed to automatically import ICVIs generated by AgView into SDAIB's import database. The platform utilizes the USAHA eCVI XML Data Standards. Platforms for auto-upload from other electronic ICVI systems will be developed over the next several years.

4.6 Resource requirements

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

4.7 Organizational needs

4.7.1 Executive support

All SDAIB, SD Department of Agriculture and Natural Resources, and SD Governor's Office executives are keenly aware of the need for animal disease traceability.

4.7.2 Coordination and oversight procedures

The SD Animal Disease Traceability Advisory Committee will meet annually or as needed to address emerging issues and concerns. The State Veterinarian will prepare agendas. The SDAIB's project coordinator will perform minutes, attendance, and other administrative duties.

Advisory committee meetings will provide updated information on animal disease traceability in South Dakota and gather industry input on developing a plan to advance it.

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

a) Producers, processor/marketing organizations

- American Foods Group
- Central Plains Dairy Assn.
- Dakota Territory Buffalo Assn.
- Northern Plains Dairy Goat Assn.
- SD Assn. of Meat Processors
- SD Beef Industry Council
- SD Cattlemen's Assn.
- SD Dairy Producers
- SD Deer and Elk Breeders Assn.
- SD Farm Bureau
- SD Farmers Union
- SD Horsemen's Assn.
- SD Horse Council
- SD Livestock Market Assn.
- SD Pork Producers Council
- SD Poultry Industry Assn.
- SD Sheep Growers Assn.
- SD Stockgrowers Assn.
- SD Wildlife Federation

b) Government

- SDAIB
- SD Brand Board
- SD Department of Agriculture and Natural Resources

SD Department of Health
SD Game, Fish and Parks
USDA/APHIS

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 issues arise. This was demonstrated by SDAIB activities and cooperation with OEM and other state agencies during a winter storm and subsequent investigations, including those for Anthrax, Brucella ovis, Bovine Brucellosis, CWD, Trichomonas, Tuberculosis, and a potential Swine FMD case.

Compatibility with other States is achieved through regular meetings, conference calls, emails, and other forms of communication.

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 enables SDAIB to promulgate rules for implementing ID programs and to specify all conditions associated with such programs.

The ADT rule, which was published in March 2013, established federal standards for the interstate movement of livestock. The 2024 ADT rule requires cattle and bison to have official electronic identification that is both visually and electronically readable.

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.

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

Office staff personnel will perform assigned duties to gather, enter, and file 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 \$83,791 annually to support SDAIB animal disease traceability goals.

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

Successful implementation of any plan to advance ADT cannot be achieved without outreach to constituents primarily affected by the plan.

4.7.6.1 *Accredited veterinarians*

SDAIB will utilize newsletters, the website, and informational meetings to disseminate updates on animal disease traceability to all accredited veterinarians. Accredited veterinarians will be informed about the ADT rule, with a focus on the complete and timely submission of ICVIs within seven calendar days. As South Dakota phases out paper ICVIs, receipts should be issued more promptly.

4.7.6.2 *Livestock markets*

SDAIB will utilize newsletters, websites, meetings, and site visits to disseminate updates on animal disease traceability and the importance of maintaining accurate auction market records in the event of an animal disease outbreak. Auction markets will be encouraged to submit backtag reports on time and to support 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, websites, producer meetings, industry meetings, and advisory group meetings will be used to reach livestock producers and educate them about 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

- The SDAIB import permit system and database collect data on the number of shipments and animals imported into SD. The number of shipments and animals exported from the state is collected from electronic and paper ICVIs received.
- Information gathered during the import permit call is verified upon receipt of the import ICVI at the SDAIB office. Any discrepancies are rectified after contacting the issuing veterinarian.

V. ADVANCING TRACEABILITY

5.1 Ranking of priorities for advancement

1. April 2025 to March 2028:
 - a. Maintain, assess, and update SDAIB traceability databases and fully utilize the capabilities of CoreOne
 - 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 capability to auto-upload electronic ICVIs into SDAIB databases using the USAHA eCVI XML Data Standards
2. Increase the use of electronic systems to collect and submit traceability data.
 - a. Implement the use of eCVIs on January 1, 2026
 - b. Educate auction market staff and veterinarians to comply with the January 1, 2026, date
 - c. Provide auction market inspecting veterinarians with the ability to collect and share electronic traceability records
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. ICVIs
 - ii. Change-of-ownership
 - iii. Backtag reports
 - iv. Tag distribution reports
 - v. Program disease records
 - b. Continue monitoring NVSL TB granuloma submission reports for adequate official identification recovered at slaughter.