

ANIMAL DISEASE TRACEABILITY ROAD MAP FOR MICHIGAN

**A Three-Year Plan
Updated September 12, 2016**

Submitted by:

JAMES AVERILL, DVM, PHD

**STATE VETERINARIAN, ANIMAL INDUSTRY DIVISION DIRECTOR
MICHIGAN DEPARTMENT OF AGRICULTURE AND RURAL DEVELOPMENT
525 W. ALLEGAN STREET, LANSING, MI 48913
800-292-3939**

Submitted to:

**VETERINARY SERVICES
ANIMAL AND PLANT HEALTH INSPECTION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE**

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EXECUTIVE SUMMARY

The Michigan Department of Agriculture and Rural Development (MDARD) Animal Industry Division (AID) supports a functional, nationally accepted system for animal disease traceability. It is important to be able to accurately trace animals back to their premises of origin and/or forward to their current premises, and to do so in a quick, efficient, and cost-effective manner. This is especially the case when dealing with contagious animal diseases which spread rapidly, affect multiple species of animals, or have zoonotic potential.

As a result of bovine tuberculosis in the northeast portion of the Lower Peninsula, Michigan has been on the cutting edge of animal disease traceability with the use of Radio Frequency Identification (RFID) in cattle and the utilization of USAHerds as a database for tracking cattle movement. Historically, the focus of traceability in Michigan has been on cattle movement within and out of the state. The previous three-year plan initiated actions to expand animal disease traceability to cattle moving into the state, as well as to incorporate other livestock species into the traceability program. AID recognizes the need to build upon those initiatives to strengthen animal disease traceability and protect Michigan's livestock industry in a more effective and efficient manner.

Currently, there is a strong system to trace Michigan cattle and privately owned cervids. Improvements could still be made through increased monitoring at livestock markets and slaughter plants, better enforcement of interstate movement regulations, and enhanced use of new technologies to streamline processes for producers, veterinarians, and regulators. Exploration of new technologies for tracking animal movement will be considered as technology continues to advance in this area.

Additionally, communication material and projects are needed to inform all stakeholders affected by animal disease traceability. To accomplish this, Michigan will cooperate with USDA APHIS VS staff to create outreach activities educating Michigan veterinarians, livestock producers, fairs and exhibitions, markets, haulers, and slaughter facilities on the importance of Interstate Certificates of Veterinary Inspection and key animal information necessary to have effective animal traceability, such as official identification.

CURRENT TRACEABILITY SITUATION

Who are we?

The Michigan Department of Agriculture and Rural Development (MDARD) Animal Industry Division (AID) is responsible for animal traceability as authorized under Public Act 466 of 1988, as amended, the Animal Industry Act.

In Michigan, there is a close working relationship between AID and the United States Department of Agriculture Animal and Plant Health Inspection Service Veterinary Services Michigan Area Office. The two agencies share resources and duties for animal health programs.

External partners for animal disease traceability are:

- Michigan Allied Poultry Industries (MAPI)
- Michigan Beef Industry Commission (MBIC)
- Michigan Cattlemen's Association (MCA)
- Michigan Farm Bureau (MFB)
- Michigan Horse Council (MHC)
- Michigan Milk Producer's Association (MMPA)
- Michigan Pork Producer's Association (MPPA)
- Michigan Sheep Producer's Association (MSPA)
- Michigan State Police (MSP)
- Michigan State University-Extension (MSU-E)
- National Institute for Animal Agriculture (NIAA)
- United Deer Farmers of Michigan (UDFM)
- United States Animal Health Association (USAHA)
- United States Department of Agriculture (USDA), Animal and Plant Health Inspection Services (APHIS), Veterinary Services (VS)

Where are we now?

Interstate Certificates of Veterinary Inspection (CVIs)

Michigan accepts interstate CVIs completed on paper or using electronic formats offered by GlobalVetLINK and USDA Veterinary Services Process Streamlining (VSPS) system. Emphasis is placed on checking all CVIs for accuracy. If inaccuracies are discovered, the state in which the issuing veterinarian wrote the CVI is notified to address the issue(s) with hope of preventing future mistakes when completing CVIs. Standard operating procedures have been developed for enforcement of major offenses such as lack of official identification, disease testing, and/or vaccinations, which includes notifying USDA APHIS VS. All CVIs are filed electronically in a searchable format and retained per state retention policies. AID has a staff person designated to review CVIs for accuracy, a staff person to send notifications to veterinarians regarding CVIs with inaccuracies, and a student assistant to electronically file CVIs.

MDARD is completing a website update to provide clear requirements to move animals into, out of, and within the state of Michigan. Additional resources on the website will be specifically for USDA-accredited veterinarians, such as which types of animal identification are considered official and guidance on proper completion of interstate Certificates of Veterinary Inspection.

Cattle

On January 9, 2006, the Michigan Commission of Agriculture adopted a policy mandating application of radio frequency identification (RFID) ear tags in cattle leaving any premises in Michigan. The commission charged MDARD with developing an implementation plan and set the mandate to begin March 1, 2007. The mandate was implemented at this time and is still enforced. MDARD worked with external stakeholders and developed a RFID working group in 2013 that looked at developing agreements under the parameters set within 9 CFR Part 86 with external stakeholders in interested states.

RFID tag distribution records from both manufacturers and authorized Michigan livestock markets are downloaded into USAHerds and linked to each purchaser's national premises identification number.

Metal NUES tags are distributed by AID to accredited veterinarians for use in cattle. AID's inventory of NUES tags is maintained in the USAHerds database and tags are reallocated to the accredited veterinarian in USAHerds upon distribution. Accredited veterinarians are notified of the requirement to maintain their own tag distribution records for five years.

Michigan has one (1) USDA approved livestock market for cattle and a total of 21 licensed and state inspected livestock markets. Thirteen (13) markets are equipped with stationary RFID readers and five (5) livestock markets are equipped with portable hand held readers for scanning RFID tags, either for primary or secondary use. Weekly sales reports from the livestock markets are received in the MDARD office and compared to the number of cattle actually scanned to assess the effectiveness of RFID scanning equipment. These numbers are also compared to previous year data for the same time frame. In addition, the livestock markets submit a weekly RFID tag sale report to MDARD. This report includes the producer's national premises identification number and the RFID tag numbers purchased by each producer so the RFID tags can be reallocated from the livestock market to the producer's premises in USAHerds.

Livestock markets are monitored for movement violations. Regulatory staff visits the northern markets on a weekly basis and the southern markets are visited at least once monthly. Failure to use RFID tags in cattle is reported to the Lansing office.

There are five large slaughter plants in three states equipped with stationary RFID read equipment which receive a majority of Michigan cattle weekly. There is a mid-size slaughter plant in Michigan equipped with a portable RFID reader. Both livestock and slaughter facilities with stationary readers are monitored daily for reader performance and functionality. Data from these facilities are recorded and maintained in our USAHerds database. In addition, Michigan has a total of 130 FSIS-inspected and custom slaughter plants. The majority of these plants are small and family operated. MDARD and USDA field staff collect RFID tags from these facilities and enter them into USAHerds database to confirm end movement of cattle. USDA field staff routinely monitors two main slaughter plants in Michigan for the presence of RFID tags in Michigan cattle. Loads of cattle brought to the plant which have RFID tags in less than 90% of the animals are reported to MDARD's Compliance Investigative Unit.

To address Michigan's unique challenge to manage and monitor the presence of Bovine Tuberculosis within selected areas of the State's cattle herds, AID installed the USAHerds database application on January 4, 2010. The browser-based application incorporates an Electronic Identification program that will enable MDARD and USDA to capture and coordinate key demographic data associated with each animal, including relocations of each animal, primarily from Mobile Information Management (MIM) input from regulatory and private

veterinarians. When executed correctly, the movement of all cattle within the Modified Accredited Zone (MAZ) will be traceable to their final location within Michigan and even to a limited number of markets and slaughter plants outside of Michigan. Without this tracking and verification, cattle from the MAZ would not be able to be sold outside of Michigan. USAHerds database is used for cattle traceability which includes, and is not limited to:

- Producer animal inventory
- Intrastate movement certificates
- TB test results
- Wildlife Risk Mitigation Project assessments, action plans and verifications
- Herd plan inspections
- Freezer beef inspections
- NUES tag allocations
- RFID tag allocations
- RFID sighting events
- Special reports

In 2011, MDARD's TB Program implemented the use of a secondary identification to be used on all cattle in the MAZ when the animals are tested and/or moved off of a MAZ premises to any other premises to enhance animal traceability from this area of the state. This is also part of Michigan's current Memorandum of Understanding (MOU) with the USDA as it relates to Bovine Tuberculosis.

Sheep/Goat

In Michigan, a scrapie tag is mandatory for movement of goats or sheep from any premises. Michigan has one (1) USDA approved market for sheep and goats. All livestock markets are monitored for movement violations and, if found, are reported to AID. Violations are followed up by the AID Compliance Unit. USDA APHIS Veterinary Services maintains two databases, AIMS and SCS CoreOne, to store scrapie tag distribution data used to trace animals to the farm of origin when a disease investigation is being conducted. These tags are tied to a unique scrapie flock identification number.

Cervids

All privately owned cervid facilities are required to be licensed in the State of Michigan. Two forms of identification, at least one official, are required on cervids on all facilities except ranch operations by the time the cervids are 12 months of age. This means any cervids moved intrastate in Michigan are required to have official identification and a farm tag. NUES and RFID tags are sent from MDARD to producers and tracked in USAHerds with premises information and list of tags distributed. Each privately owned cervid (POC) operation has a unique premises identifier maintained in USAHerds.

Equine

Michigan does not track individual identification on horses in a database. Either group identification numbers or descriptive information is collected on CVIs. Some horses are identified by tattoo number or by implanted microchip numbers.

Poultry

Michigan is not tracking individual identification on poultry in a database. Either group identification from VS 9-3 forms are used to track large poultry movements or CVIs that are received by the office from exporting states. Poultry movement is followed as allowed in 9 CFR Part 86. Occasional individual bird band numbers are received on CVIs.

Swine

While not mandatory, most commercial swine operations have premises identification numbers that are entered in USAHerds. There are identification requirements for both feeder pigs and breeding swine entering and moving within Michigan with exceptions for swine going direct to slaughter and swine herds with official commuter herd plans or as written in USDA memos concerning swine identification. Plastic NUES tags are distributed by AID to fairs for use in exhibition swine. Tag numbers are allocated to each fair in USAHerds upon initial distribution. Fairs are required to maintain tag distribution records for five years.

Strengths and Weaknesses

The strengths of AID Animal Disease Traceability program are based on an Administration that supports the program, mandatory individual identification for some species to move within the state, and use of technology to track animal movement. Michigan's current Governor is supportive of agriculture and the use of technology to advance agribusiness. This mindset is seen in both MDARD and AID Administrations. Michigan requires that all cattle, sheep, goats, and privately-owned cervids leaving any Michigan premises must have unique official identification, as well as all swine being exhibited in Michigan. Furthermore, all cattle producers have been specifically mandated to use RFID tags since March 2007. In January 2010, AID implemented the USAHerds database to track animal identification and movement of cattle for the bovine tuberculosis program. The USAHerds database now houses the vast majority of animal traceability data in the state of Michigan. This database also includes a unique national premises identification number for all known livestock premises in Michigan. Since February 2016, Michigan producers purchasing RFID tags from authorized livestock markets have been required to report their national premises identification number at the time of sale. Enforcement of this requirement resulted in the registration of 473 existing but previously unknown cattle premises within the first six (6) months.

Weaknesses on Michigan's animal traceability program revolve around obsolete traceability equipment, human resource needs, and financial constraints to effectively manage and coordinate a strong animal traceability program. Technology allowing for flow of data from existing RFID read equipment installed at livestock markets and high-volume slaughter plants is no longer being supported by the manufacturer; therefore this equipment cannot be replaced when it fails. New technological enhancements are being explored but will require a significant amount of financial support. Additionally, the majority of livestock markets continue to use sales software based on backtag numbers instead of RFID numbers, leading to a significant area of deficiency in Michigan's traceability.

Additional technology support staff is needed to monitor the flow of data entering USAHerds, identify and correct data errors, and support the use of technology in the field. Additional human resources are also needed to enhance ADT monitoring at livestock markets, exhibitions, and slaughter facilities; to increase the frequency of RFID tag pick-up at custom slaughter facilities; and to promote use of electronic CVIs so that CVIs may be processed in a timely manner. Federal funding is essential to address Michigan's resource needs for an efficient and effective animal traceability program.

VISION AND MISSION CONTEXT FOR ADVANCING TRACEABILITY

Vision Statement

Public health, animal health and well-being, and animal industries are safeguarded through collaborative efforts and implementation of effective programs.

Mission Statement

Protect, Regulate, and Promote Animal Health.

TRACEABILITY REQUIREMENTS

Strategic goal(s)

Michigan is determined to continue to enhance our state-wide infrastructure for advancing animal disease traceability for all species and to be compatible with USDA standards as set forth in 9 CFR Part 86 and species-specific USDA memos on traceability.

Programmatic goals

Objectives for FY 2017

- Meet traceability performance standards by recording trace exercises in EMRS2.
- Determine standard operating procedures to monitor data flow and fix errors in USAHerds from external data sources such as MIM, WLIC, AIMS reports from Cognos, and livestock market RFID distribution spreadsheets.
- Improve USAHerds data quality.
- In cooperation with USDA APHIS VS, enhance monitoring of Michigan livestock markets, exhibitions, and slaughter plants for state and federal animal movement violations.
- In cooperation with USDA APHIS VS, continue implementing outreach activities to educate and assist livestock dealers, producers, veterinarians, and other stakeholders on animal disease traceability.
- Update and maintain the MDARD website with clear species-specific movement requirements consistent with federal and state regulations, as well as proper completion and submission of CVIs.
- Develop and implement a standardized veterinary compliance program for repeat offenders of poor quality CVIs with USDA APHIS VS.

- Explore availability and functionality of additional electronic CVI systems to determine options for use in Michigan, and then promote their use to Michigan's accredited veterinarians.
- Replace discontinued RFID read equipment with newly-developed technology when feasible. A new system may be phased in, with a pilot program at one market to confirm functionality and effective data flow into USAHerds before expanding use to remaining livestock markets and slaughter plants.
- Explore the use of USAHerds for electronic storage and retrieval of CVIs.
- Explore technology options to link cattle RFID with backtag numbers, and then explore the feasibility of using this technology at all Michigan livestock markets.

Objectives for FY 2018

- Meet traceability performance standards by recording trace exercises in EMRS2.
- In cooperation with USDA APHIS VS, enhance monitoring of Michigan livestock markets, exhibitions, and slaughter plants for state and federal animal movement requirement violations.
- In cooperation with USDA APHIS VS, continue implementing outreach activities to educate and assist livestock dealers, producers, veterinarians, and other stakeholders on animal disease traceability.
- Continue promoting usage of electronic CVIs to Michigan's accredited veterinarians.
- If pilot program was implemented and found to be successful, begin expanding use of new technology for RFID read data at other livestock markets and slaughter plants.
- If USAHerds is determined to be a practical database for CVI storage and retrieval, the testing phase will begin. Ultimately, the goal is to link an CVI with the issuing veterinarian (Michigan exports only), Michigan producer premises identification number (either as consignor or consignee), and individual animal identification numbers in one database for improved traceability.

Objectives for FY 2019

- Meet traceability performance standards by recording trace exercises in EMRS2.
- In cooperation with USDA APHIS VS, enhance monitoring of Michigan livestock markets, exhibitions, and slaughter plants for state and federal animal movement requirement violations.
- In cooperation with USDA APHIS VS, continue implementing outreach activities to educate and assist livestock dealers, producers, veterinarians, and other stakeholders on animal disease traceability.
- Continue promoting usage of electronic CVIs to Michigan's accredited veterinarians with goal of 40% export CVIs being electronic by the end of this fiscal year.
- If pilot program was implemented and found to be successful, complete expansion of new technology for RFID read data at remaining livestock markets and slaughter plants.
- If USAHerds tests well for CVI storage, move to production phase. Due to volume of CVIs received and potential for increased processing time in USAHerds, production may be limited initially to cattle CVIs.

Animal disease traceability performance measures

Animal disease traceability performance measures are generated by a local USDA representative in EMRS2. The activities measure the lapsed time it takes to answer one of the following specific questions:

- In what State was an imported animal officially identified?
- Where in the State was the animal officially identified?
- From what State was an imported animal shipped?
- From what location was an exported animal shipped?

Michigan will continue completing trace performances measure exercises as they are received and will record outcomes in EMRS2 as required by the cooperative agreement.

Data requirements

Michigan acquires data from several sources that aid our animal traceability program, such as CVIs, TB surveillance testing, and official identification tag distribution systems. Data from most sources are stored in the USAHerds database. The remaining sources of data include brucellosis vaccination records which are stored in a paper filing system, some poultry and swine movement records which are stored electronically on the MDARD AID shared drive, and interstate Certificates of Veterinary Inspection (CVIs), which are stored electronically in the HP Records Manager database. In Michigan, scrapie tags are distributed through USDA APHIS Veterinary Services and two databases, AIMS and SCS CoreOne, house data for distribution of scrapie tags to various sheep and goat producers. Several MDARD personnel have access to AIMS to retrieve this data, as needed. In the event that a State/Tribe requests information on animal(s) that may have originated from Michigan, the databases are searched to determine if identification can be found and traced to the herd/flock of origin.

USAHerds

Michigan utilizes USAHerds to manage data for our bovine tuberculosis eradication program and our privately-owned cervid program, including TB test results and individual animal identification information. Information for other species' programs is being added when feasible. The database communicates with National Premises Allocator to obtain a unique identifier for a premises. Occasionally, a national premises number will be used to identify more than one physical location owned or rented by the same individual, but MDARD is working to eliminate this practice and assign a unique identifier to each physical location. This database also allows for creation of restricted movement permits and can designate quarantines or other incidents.

NUES tags are distributed by MDARD to USDA-accredited veterinarians for use in cattle, to producers for use in privately-owned cervids, and to Michigan fairs for use in exhibition swine. MDARD stores its NUES tag inventory in USAHerds and manually allocates tags in the database to each requestor. Veterinarians and fairs are responsible for maintaining tag distribution records for five years.

MDARD and USDA staff have access to the USAHerds database 24 hours a day, 7 days a week.

Animal Movement Data from Stationary RFID Readers

In Michigan livestock auction markets selling cattle, as well as slaughter plants in three states receiving high numbers of Michigan cattle, RFID reader panels have been installed by MDARD. As cattle move past a panel reader, the RFID tag is passively scanned and the data is temporarily stored. MDARD has a contract with the Wisconsin Livestock Identification Consortium (WLIC) to retrieve this data, reformat it as a datalogger file, and send it to MDARD for export into USAHerds. In USAHerds, the animal with each RFID number is either designated as having been sighted at that market on the date of the auction, or designated as having been slaughtered, depending on where the data was gathered.

Animal Movement Data from RFID Reader Wands

For Michigan livestock auction markets handling large numbers of calves and for mid- to low-volume slaughter facilities, it is easier to use a reader wand than a stationary panel reader to obtain RFID tag numbers. Data collected on reader wands is either downloaded to the market's database and emailed to MDARD weekly or downloaded by MDARD staff and entered into USAHerds. The data designates the animal with each RFID number as having been sighted at that market premises on the date of the auction or slaughtered at that facility, depending on the location.

Cattle Movement Data from Northern Michigan Livestock (NML)

Due to the presence of bovine tuberculosis in four counties of the northeastern lower peninsula of Michigan, the Northern Michigan Livestock market has a unique system for ensuring proper movement of cattle out of the MAZ. Utilizing RFID wands, tablets, stationary panel readers, computers with USAHerds access, and the market's auction software, RFID tags can be used to verify TB Zone, national premises identification numbers, and last negative whole herd test. Both seller and purchaser information is captured, as well. Data files are sent to MDARD weekly and uploaded to USAHerds to ensure traceability of high-risk cattle from the MAZ.

Animal Identification Management System

USDA's Animal Identification Management System (AIMS) is the national database for official animal identification number (AIN) tags distributed by tag manufacturers. Tag manufacturers record each purchaser's national premises identification number, the AIN tag numbers shipped to that purchaser, and the shipment date. Data from AIMS can be accessed via a state report in the Cognos system. A new procedure is being developed to enter data from this report into USAHerds, which will allow for tracing of a specific AIN tag to the premises of origin.

RFID Tag Distribution Spreadsheets

Radio Frequency Identification tags sold at Michigan livestock auction markets must be reported to MDARD on a spreadsheet within a week of sale. Spreadsheets submitted prior to January 1, 2017 are manually entered into USAHerds. No later than January 1, 2017, a new automated process will be available to export data directly from a standardized spreadsheet template into USAHerds. Occasional reports of RFID tag sales from other Michigan vendors

not already reporting into AIMS, such as veterinary clinics and farm supply stores, may necessitate manual data entry into USAHerds after January 1, 2017. All RFID tag distribution data in USAHerds links each RFID tag number with the national premises identification number of the tag seller, the national premises identification number of the tag purchaser, and the date of the sale transaction.

MIM

Michigan uses Mobile Information Management (MIM) technology for gathering animal data and identification (ID). Animal records includes RFID, USDA metal tags, management ID, tattoos, breed registration numbers, as well as age, breed and sex. The data is submitted to the MIM Repository in Fort Collins via the MIM Manager application and from there is uploaded to the General Data Base (GDB), USAHerds, and the AIMS databases. The data is collected and submitted during Bovine Tuberculosis testing (annual tests, movement tests, accreditation testing) by MDARD and USDA staff along with approximately 27 Veterinary Clinics using the MIM application. Data from hand-written test charts is being entered by USDA staff utilizing the MIM application and is also being uploaded electronically to the GDB, USAHerds and AIMS database. MDARD and USDA encourages the use of MIM to decrease the risk of human error in transposing numbers, to reduce the numbers of hours needed by State and Federal staff to hand enter the data into the system and to submit the data to the various databases.

Interstate Certificates of Veterinary Inspection (CVIs)

Interstate CVIs for movement into and out of Michigan are individually monitored for quality. Critical information includes, but is not limited to, addresses for where the animal(s) came from and where animal(s) went, animal identification and/or descriptive information, and necessary test results for the species of interest. CVIs are received by MDARD in a multitude of formats, including on paper, as a PDF, and via electronic submission through GlobalVetLINK and USDA's Veterinary Services Process Streamlining (VSPS). All formats are stored electronically as PDFs and indexed for searchable retrieval in HP Records Manager. CVIs received prior to 2014 may be filed electronically in HP Records Manager or paper filed by year, import or export, and then by species.

Information technology plan

Information technology (IT) will be crucial to fully implement the State-wide infrastructure for our animal traceability program. USAHerds enhancements, training, and improved data quality will be needed to create a successful program covering all livestock species. Additional IT equipment and support may be required by MDARD personnel, fee-basis veterinarians, and at markets and slaughter facilities to create an effective ADT system.

Michigan is currently receiving electronic CVIs from private and public (USDA) vendors. We will continue to receive these documents and encourage accredited veterinarians to utilize electronic CVIs via computer or mobile app programs.

As opportunities for advancement of Michigan's IT portion of the animal traceability program are identified, they will be fully explored. Examples may be,

but are not limited to, electronic identification for sheep and goats, livestock markets' ability to correlate backtags with electronic identification, and purchase of hardware to help field staff capture accurate data.

Resource requirements

Key impediments to having a successful animal traceability program are limited financial and human resources. As Michigan moves forward with its animal traceability program there will be a need for resources and we will address these needs in the cooperative agreement.

Organizational needs

In 2007, Michigan implemented mandatory electronic identification of cattle. Successful implementation was due in part to the support of industry and our administration. This support for animal traceability continues today at all levels in Michigan. To fully implement a State-wide infrastructure for animal traceability will require additional financial resources. As we demonstrate value and identify opportunities we will make further advancements with the program.

Outreach

Successful implementation of an animal traceability program requires education of stakeholders. Informed stakeholders will assist in advancement of animal traceability and therefore play a key role in the program. Outreach may include and is not limited to the following:

Accredited veterinarians

In conjunction with the USDA Assistant Director and local VMOs, outreach activities will be developed to educate accredited veterinarians on the importance of correctly completing CVIs and using "official" animal identification devices. Outreach activities will be implemented as webinars, presentations, and/or displays at local and state veterinary meetings. Discussion topics may include, but are not limited to:

- Federal and state requirements for interstate movement of livestock
- How and why to properly fill out CVIs
- Use of IT, such as electronic CVIs, for improved efficiencies
- Proper animal identification devices by species
- Their role in developing a strong animal disease traceability program

Livestock markets

Livestock markets have played a key role in implementing mandatory electronic identification of cattle. Currently all livestock markets have the ability to scan electronic identification. They will continue to be key players for further enhancements of Michigan's animal traceability program. Discussion topics may include, but are not limited to:

- Federal and state requirements for interstate movement of livestock
- Proper animal identification devices by species
- Their role in developing a strong animal disease traceability program
- Use of IT for improved efficiencies

Industry as a whole

The cattle industry was pivotal in implementing electronic identification in Michigan. In addition sheep, goats, and cervids must also bear an USDA official identification when leaving any Michigan premises. Other livestock industries are in support of what is being done in Michigan. Discussion topics for outreach activities to industry groups may include, but are not limited to:

- Federal and state requirements for interstate movement of livestock
- Proper animal identification devices by species
- The importance of a strong animal disease traceability program
- Use of IT for improved efficiencies

Monitoring and reporting interstate movement activity

Monitoring of animal disease traceability performance measures is dictated within the annual agreements. Modifications in reporting requirements are made on an annual basis based upon USDA requirements.

TRACEABILITY IMPLEMENTATION

Ranking of priorities for implementation

Specific programmatic goals to advance animal disease traceability in Michigan are identified under *Traceability Requirements* and ranked by priority for implementation using a phased-in approach over a period of three years.