

ADVANCING ANIMAL DISEASE TRACEABILITY ROAD MAP FOR OHIO

A Three-Year Plan

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Table of Contents

I.	EXECUTIVE SUMMARY	2
II.	CURRENT TRACEABILITY SITUATION.....	3
	2.1 Who are we?	3
	2.2 Where are we now?.....	4
	2.3 Strengths and Weaknesses	6
	2.4 Opportunities and Threats.....	7
	2.5 Inventory of existing infrastructure and suitability assessment	8
III.	VISION AND MISSION CONTEXT FOR ADVANCING TRACEABILITY	9
	3.1 Vision Statement.....	9
	3.2 Mission Statement.....	9
IV.	TRACEABILITY GOALS	10
	4.1 Strategic Goals.....	10
	4.2 Programmatic Goals (Objectives).....	10
V.	TRACEABILITY REQUIREMENTS AND IMPLEMENTATION	10
	5.1 Animal Disease Traceability Performance Measures	11
	5.1.2 Reporting of Compliance Issues	12
	5.2 Administration of Official Identification	12
	5.2.1 Distribution of Records of Official Identification.....	13
	5.3 Information Sharing	16
	5.4 Electronic Records	17
	5.4.1 Official Identification Distribution REcords.....	18
	5.5 Outreach.....	20
	5.5.1 Producers.....	20
	5.5.2 Livestock Markets and Dealers	21
	5.5.3 Accredited Veterinarians	21
	5.5.4 Slaughter Plants	22
	5.5.5 Underserved Communities.....	22
	5.5.6 Other Government Agencies.....	22
	5.6 Compliance and Enforcement of Traceability Regulations	22
	5.6.1 Actions to be reviewed	23

I. EXECUTIVE SUMMARY

The Ohio Department of Agriculture’s Division of Animal Health is charged with protecting and promoting the health of Ohio’s livestock and poultry industries. Animal Disease Traceability (ADT) is defined as the ability to track animal movements using business and animal marketing records and identification. In Ohio, we recognize the importance of being able to trace where diseased and at-risk animals are, and have been, in as rapid amount of time possible to prevent additional animals from being exposed. We want to find the most efficient ways to capture the information and reduce the number of producers and animals who may be impacted when a disease incident occurs. Our ADT program includes cross cutting components from our state livestock dealer licensing and animal disease programs, including slaughter surveillance of Ohio livestock to maintain our consistent state and disease-free statuses.

Ohio is rich in the variety of livestock industries active within our state including poultry, swine, beef, dairy, goats, and sheep. We work with stakeholders in adhering to the ADT regulations while trying to minimize its impact on the speed of commerce. Ohio Department of Agriculture (ODA) and USDA Veterinary Services (VS) Ohio understand that not all livestock facilities are the same, and therefore monitoring at each may look different. However, the difficulty in minimizing the impact an animal disease may have is complicated by three factors; the volume of livestock at facilities throughout the state, commingling of livestock from multiple sources, and the rapid movement of animal groups out of the concentration point to locations throughout the country.

This ADT roadmap outlines our intended enhancement of our traceability infrastructure for the 2019-2022 timeline. We are committed to improving our data capturing methods as well as data sharing abilities to rapidly identify the origin of disease livestock along with any location exposed animals may have been moved. We plan to increase our monitoring of livestock facilities to improve compliance and streamline the application of official identification and movement documentation. Our focus of all activities will be to ensure that animals are officially identified as required, that they move interstate with required documentation, and that the identification devices are removed and/or recorded at termination points as required. We will continue to partner with our livestock marketing stakeholders in identifying critical points in their systems and developing improvements that will make our state traceability better.

II. CURRENT TRACEABILITY SITUATION

2.1 Who are we?

The Ohio Department of Agriculture (ODA) and the United States Department of Agriculture-Animal Plant Health Inspection Service-Veterinary Services Ohio office (VS-Ohio) are the primary constituents tasked with implementing animal disease traceability in the State of Ohio. We often times work in conjunction with several external entities to ensure that traceability is achieved. Some of the external constituents include: other divisions within ODA (i.e., Meat Inspection, Food Safety, Dairy), Ohio Department of Natural Resources Division of Wildlife, the Ohio office of USDA-Wildlife Services, the Food and Drug Administration, USDA-Food Safety Inspection Service, county 4-H extension offices, livestock markets/auctions, and state industry/commodity organizations (i.e., Ohio Livestock Coalition, Ohio Cattlemen's Association, Ohio Pork Producers Council, Ohio Poultry Association). The groups listed above will work in a collaborative manner to ensure that livestock moving into and out of the state of Ohio will be compliant with Animal Disease Traceability requirements.

Traceability data allows ODA and VS-Ohio to efficiently and effectively manage reportable and program diseases. Testing history and farm/herd/flock

statuses can readily be found using available databases that collect traceability data. Other activities that are completed using available traceability data include: identifying lost and found animals, completing tissue residue investigations, and monitoring compliance with Ohio's Dealer Law (ORC 943). In addition to the everyday activities that are conducted within ODA and VS Ohio, traceability data can influence policy and trade practices; and plays a vital role in interstate and international export.

The mission of the ODA Division of Animal Health is to protect and promote the health of Ohio's livestock and poultry industries. The mission of our agency is the driving force to implement traceability requirements for livestock and poultry moving into and out of Ohio. Traceability has the capability to make a distinct difference in our ability to quickly identify and respond to an animal disease emergency, and therefore positively affect the industries that we serve.

Animal disease traceability is a priority for ODA and VS-Ohio, and we will continue to work together to advance our position on this national issue. An internal working group, consisting of ODA and VS-Ohio personnel, has been formed and is currently meeting regularly to discuss necessary revisions to the ADT Roadmap. In addition to the internal working group, we will be working closely with our advisory group, the Ohio Livestock Coalition, which consists of individuals representing various state livestock and poultry industries.

2.2 Where are we now?

Traceability is measured by the accuracy, specificity and speed in being able to determine movements of diseased, exposed or at-risk animals, in an effort to minimize the number of producers included in a disease investigation. Several of the standards set forth by disease programs like brucellosis, scrapie, and tuberculosis combined with the Animal Disease Traceability (ADT) requirements, and the Ohio livestock dealer licensing program and import regulations, provide parameters that help us measure progress. While the desired end result is meeting the requirements, the Ohio Department of Agriculture (ODA), Division of Animal Health is continually looking to improve the way we capture ADT pertinent information into an accessible electronic format.

Coordination in Ohio is based on our working relationship with our area APHIS Veterinary Services staff. Joint communication and coordination occur routinely between Ohio's Assistant State Veterinarian, Agriculture Inspection Manager, Animal Identification Coordinator (AIC) and federal Epidemiologist to monitor policies and activities of both state and federal field staff. The State Veterinarian and Area Veterinarian in Charge provide valuable oversight in all

disease trace-back or trace-forward investigations. Monitoring of auction markets, exhibitions, and dealer activities occurs seamlessly between our state and federal personnel. Ohio's 88 counties are divided amongst both state and federal employees with the majority of work (regardless of being state or federal run programs) being performed by the VMO and AHT assigned to that county.

Presently we perform regular monitoring of livestock movements through marketing channels, market/dealer record audits, Scrapie traces, Scrapie snapshots, TB traces, drug residue traces, and rendering and slaughter plant inspections to assess compliance with the ADT regulations. We check to ensure records and official Identification are present to allow traceability in the event of a disease concern or situation. Priority is placed for personnel to be in attendance at regular market sale days and other points of commingling. This allows for not only monitoring activities to check for compliance, but also provides the platform to educate market personnel and livestock dealers in recognizing when official ID and movement documentation are required.

The value of livestock, poultry, and their products sold by Ohio producers is over \$3.4 Billion. We recognize the importance of animal agriculture to our State's economy and continuously work to strengthen relationships with all individuals and groups that are involved. On a statewide basis, meetings including State Dairy and Food Safety Inspection Divisions, Ohio Department of Natural Resources (ODNR), accredited veterinarians, OVMA, and Ohio Department of Health (ODH) occur often. Many families in Ohio are active in youth farm organizations and 4-H programs, and therefore a strong collaboration with the Ohio State Extension offices currently exists. State and federal VMO's and AHT's often attend and participate in outreach programs with the Colleges of Agriculture and The Ohio State University College of Veterinary Medicine. Routine communication often occurs between ODA's Ag Inspection Manager and other divisions housed on the Ohio Department of Agriculture campus.

ODA's IT structure consists of multiple databases and electronic spreadsheets. In 2012, ODA began capturing data found on Ohio certificates of veterinary inspection (CVI), as well as CVIs received from other states into an excel spreadsheet. Use of the CVI spreadsheet continued up until April of 2015, when this data, along with TB test records, then began getting entered into the USAHerds database. Individual official IDs along with scans or uploads of the electronic certificates, statements and test records are also being recorded in USAHerds. This database is capable of locating an animal entered into the system and can also generate numerous reports that are beneficial when the need to trace animal movements or events/sightings occurs. Brucellosis test records and vaccination certificates are entered into USAHerds. A separate

access database is used to capture TB testing response rates by accredited veterinarians.

We also utilize excel spreadsheets to record distribution of health certificates, and distribution of official identification tags to accredited veterinarians, approved tagging sites, and producers. The state uses the national premise allocator (through USA Herds) to assign state premise identification numbers to everyone who requests to receive official ID tags. Accredited veterinarians report further distribution of official ID tags to the state office within 7 days of the transfer. To date, our capturing of this additional distribution in AIMS is impeded by the fact that NUES tag shipments from the Kansas City National warehouse to accredited veterinarians or ODA are not automatically present in the AIMS system. All new veterinarian accounts being created in the warehouse system are being submitted with assigned premise ID's to enable AIMS entry.

Normal business hours for ODA and VS are from 8:00-5:00 Monday through Friday. There is an emergency "on call" system in place though if trace information is needed outside of normal hours.

Federal funding has a direct impact on how Ohio can advance its animal disease traceability activities. With budgetary restraints, it is challenging to complete the needed data entry without people in positions to carry-out these duties.

2.3 Strengths and Weaknesses

Strengths

- Dealer law allows enhanced traceability efforts through required licensing, audits, and inspections
- State Meat, Dairy, and Food Safety Inspection Programs
- Strong Extension/4-H programs and history of cooperation with State and Federal
- Interaction with Colleges of Agriculture and Veterinary Medicine, and Ohio Agricultural Research and Development Center
- Interaction with OVMA, Ohio Dairy Veterinarians Group, and Ohio Pork Producers Council
- USAHerds, USA LIMS, eCVIs, mCVIs, and other IT systems available
- Animal agriculture contributes \$109 billion to State's economy
- Ohio Department of Agriculture's Animal Health Division and Animal Disease Diagnostic Laboratory co-located
- Interaction with Ohio Poultry Association through work with Ohio Egg Quality Assurance Program
- Work with Ohio Livestock Coalition (OLC)

- ORC/OAC laws in place
- MOU between USDA, ODA, and GIPSA
- Cooperation/collaboration between ODA & USDA
- Experienced, tenured field staff

Weaknesses

- Limited personnel resources to monitor animal movements
- No fulltime ADT Coordinator for State
- Many accredited veterinarians still using paper-based CVIs and very limited IT usage, such as RFID or MIMS.
- No mandatory ID or record keeping requirements for intrastate movement, except for sheep and goats
- Lack of resources to supply and distribute RFIDs and other official IDs
- Voluntary premises registration
- Data/information sharing difficulties due to a lack of IT portal between State and Federal systems

2.4 Opportunities and Threats

Opportunities

- Standardize inspection and enforcement
- Increase animal marketability for OH producers
- Increase cooperation and collaboration with industry
- Increase use of currently available technologies
- Quickly identify ownership of displaced animals
- Improve data sharing between states and stakeholders

Threats

- Swap meets, sales and exhibitions
- Turnover of personnel within cooperator and stakeholder groups
- Non-compliant animal movements
- Complex or unorthodox movements
- Movements without proper documentation (CVIs, OSS's or permits) and/or identification
- Incomplete distribution of required documentation to State
- Variable state import requirements
- Unidentified displaced animals
- Insufficient knowledge of identification and animal movement requirements
- Lack of acceptance for purchase and use of RFID tags on the farm before animals are moved as best practice. Economics of purchasing the tags and infrastructure are frequently cited as a barrier.

2.5 Inventory of existing infrastructure and suitability assessment

Human resources

- The following office positions have some responsibility within animal traceability: Asst. State Veterinarian, Ag Inspection Mgr., Business Opr. Mgr, (2) Licensure Examiner, and Customer Service Asst.
- The following ODA, Animal Health field staff positions: (4) Veterinary Administrators and (8) Animal Health Inspectors.
- The following USDA, APHIS, VS field staff positions: (5) Veterinarians, (2) Epidemiology Officers, (2) Animal Health Technicians and (1) Animal Identification Coordinator.

Space availability

- ODA has adequate office space for office personnel.

Connectivity resources, both in office and in the field

- All ODA office staff and field staff are equipped with personal computers with email and internet capability
- Each field staff member is equipped with a smart phone allowing for versatile sharing of information in the field
- Field members have also been provided with printers and scanners.
- State field and office personnel have access to USAHerds data base allowing them to view animal information.

Organization of all existing paper record systems used to access animal disease traceability or animal health information

- Information from CVIs is being entered, scanned and uploaded into USAHerds. Currently a large volume of traceability data, including premises, ICVI, state-disease program data, is contained within USAHerds. Official disease work including brucellosis and tuberculosis test data and official vaccination data is entered and held in USAHerds. Traceability data can be uploaded into USAHerds when provided to ODA from outside sources. Data can also be exported out of USAHerds for dissemination to necessary agencies and officials. Prior to implementation of this system (USAHerds began in October 2013) paper copies were retained for 2 yrs and filed by the month they were received. The current year was kept in the office and the previous year stored off site.
- Animal and TB test information is being entered into USAHerds to identify the farm on which the animal was tested. TB test charts are kept in house for 5 years. Paper charts are filed alphabetically by owners name and year.

- Brucellosis test charts are stored in the ADDL USALims data base. A paper copy is scanned and attached to the accession pertaining to the testing completed. This information is kept for 3 years.
- Brucellosis vaccination certificates are stored on site for 7 years. All information on these certificates is captured by entering into USAHerds.
- Animal identification application and distribution records kept for 5 years.

Computerized data management capability, including present storage size, speed, security, etc.

- Data is captured via USAHerds & USALims. Current storage space is adequate to maintain this information.
- ODAs IT security is composed of a watch guard perimeter firewall.
- All data stored on ODA servers is backed-up nightly on site and backed up bi-weekly offsite.

Automated data capture capability

- ODA currently has the ability to automatically capture data for samples tested at ADDL only.
- State of Ohio security currently does not allow for automated capture of information from electronic CVIs although the technology is there.
- Data from electronic CVI's transfers into USAHerds.

III. VISION AND MISSION CONTEXT FOR ADVANCING TRACEABILITY

3.1 Vision Statement

The mission of the Ohio Department of Agriculture is to protect Ohio citizens by ensuring the safety of the state's food supply, to maintain the health of Ohio's animals and plant life, and to create economic opportunities for Ohio's farmers, food processors and agribusinesses.

3.2 Mission Statement

Protecting the Health of Livestock and Poultry: The Division of Animal Health is charged with protecting and promoting the health of Ohio's livestock and poultry industries. Responsibilities include livestock and poultry testing and inspection, licensing, controlling animal diseases in Ohio, and providing veterinary diagnostic laboratory services. In addition, the division is responsible for supervision of the exhibition

livestock testing. The division cooperates with the Food and Drug Administration (FDA) to investigate drug residue violation cases, which further protects consumers. In 1995, the ODA Animal Disease Diagnostic Laboratory (ADDL) received accreditation by the American Association of Veterinary Laboratory Diagnosticians (AAVLD). The ADDL joined a prestigious national network of 60 laboratories in the United States carrying the designation. The laboratory provides credible results, which assist veterinarians and producers in herd health management and enhance the global marketability of Ohio's livestock.

IV. TRACEABILITY GOALS

4.1 Strategic Goals

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

4.2 Programmatic Goals (Objectives)

- Outreach & education
- Consistent implementation of ADT standards
- Consistent enforcement of ADT standards
- Increased data input efficiency utilizing ODA's current IT systems
- Increased cooperation/collaboration amongst state ADT coordinators
- Increased cooperation/collaboration with industry

V. TRACEABILITY REQUIREMENTS AND IMPLEMENTATION

Priorities for advancement and implementation of objectives

1. Outreach & education
 - Standardized messaging
 - Producers, markets, AVs, dealers, slaughter plants, underserved communities, other government agencies, other identified stakeholders
 - A more in-depth description of Outreach activities can be found in Section 5.4
2. Increased cooperation/collaboration with industry and amongst State ADT coordinators
 - Actively engaging with industry for increased communication
 - Develop a network of ADT coordinators and their contact information for the states we work with most often

3. Increased data input efficiency utilizing ODA's current IT systems
 - Ongoing trainings for staff
 - Encourage AVs to utilize electronic CVIs through outreach & education
 - Encourage industry to utilize EMRS Gateway through outreach & education
4. Consistent implementation of ADT standards
 - Field staff will utilize the "Livestock Facility Inspection Handbook" during inspections of livestock concentration points
 - Improved reporting to SAHO and/or AVIC in regard to any ADT related compliance issue (i.e., OSS/ICVIs, livestock facility inspections, etc.)
 - Improve reporting of tag distribution by accredited veterinarians back to ODA for entry into appropriate database
5. Consistent enforcement of ADT standards

5.1 Animal Disease Traceability Performance Measures

Traceability Performance Measures (TPM) activities involve officially identified cattle and are chosen from a variety of sources including CVIs, test charts, brucellosis vaccination records, actual traces that were received from other states, and cattle sighted at livestock concentration points (within Ohio and outside of Ohio).

When possible, out of state official ID's are forwarded to the state of origin, in order that they may use the ID to fulfill one of their TPM quota's.

TPM activities are primarily started by the ADT Staff or Animal ID Coordinator (AIC) in EMRS2 after coordinating that ODA personnel are available to work on the performance measure since there is a time clock running. We follow the outlined process established by the ADT staff in effort to have consistent measures nationally. The length of time spent on a specific TPM and whether trace is successfully completed is recorded. The 2018 TPM Administration Guide outlines Individual State Ratings Reports. Cases where the median elapsed times > 30 hours or percent successfully completed is less than 85% (for TPMs 2, 3 and 4) will be noted as areas that need improvement, and CA work plans require explanation of actions being taken by the State to address these shortfalls.

There are currently four TPM activities used nationally to test each states ability to trace applied official ID and animal movement records.

State quotas for the number of each TPM to perform, were set based on the cattle population within the state. TPM activities 1 and 2 involve tracing the official Identification device distribution records; while TPM activities 3 and 4 involve tracing the animal movement records. Each TPM is described below.

1) In what State was an imported animal officially identified?

This activity measures the time it takes to determine the state/tribe where an imported animal was officially identified. Only AIN (840) identification tags are applicable for testing this measure.

The AIMS database allows quick identification of AIN distribution records, thus the quota for testing TPM 1 is lower than the other TPM quotas. Currently, the Ohio quota for TPM activity 1 is 3 tests per cooperative agreement period.

2) Where in your state was the animal officially identified?

TPM activity 2 measures the time it takes to determine the physical location (production unit, farm/ranch, etc.) where the animal was officially identified.

This activity evaluates the accuracy and accessibility of tag distribution and application records. These would include official NUES, vaccination or AIN tags that have been distributed to the state office, official tagging sites, accredited veterinarians or producers. The animal does not have to have moved interstate in order to test this TPM activity. Currently, the Ohio quota for TPM activity 2 is 7 tests per cooperative agreement period.

3) From what state was an animal shipped?

TPM activity 3 measures the time it takes to determine the state an imported animal was moved from when it was moved interstate into our state. This activity can often be tested in conjunction with TPM activity 1. This measures the accessibility of movement documents (most commonly CVI or OSS). Currently, the Ohio quota for TPM activity 3 is 7 tests per cooperative agreement period.

4) From what location in your state was an exported animal shipped?

TPM activity 4 measures the time it takes to determine the physical location (production unit, farm/ranch, etc.) within our state that an exported animal was shipped from when it moved interstate. This activity

may be tested in conjunction with TPM activity 2. This measures the accessibility of movement documents (most commonly CVI or OSS). Currently, the Ohio quota for TPM activity 4 is 7 tests per cooperative agreement period.

5.1.2 Reporting of compliance issues found during TPM activities along with subsequent enforcement actions taken to AVIC

ODA will report any compliance issue related to the tracing of TPM exercises to the OH AVIC to be included in the VS quarterly ADT Enforcement Action Summary Report

5.2 Administration of Official ID

Administration and Manufacturing of Official Identification Devices

APHIS approves manufacturers of official identification devices and authorizes the manufacturer to imprint the Official Eartag Shield, which designates the tag as an official identification device as described in the *Code of Federal Regulations* and the ADT General Standards document.

Approved manufacturers are responsible for the proper administration of official identification devices. APHIS will monitor the activities below, as well as others deemed appropriate, to ensure that approved identification device manufacturers are properly administering official identification devices by:

- Imprinting official identification numbers and the Official Eartag Shield in accordance with printing criteria and only on approved devices.
- Maintaining the uniqueness of the official identification numbers allocated to them.
- Reporting distribution of official identification devices as prescribed, including the reporting of AIN devices to the Animal Identification Management System (AIMS).

December 31, 2019 USDA will discontinue providing free metal tags. However, approved vendors will still be permitted to produce official metal tags for one additional year. Approved vendor tags will be available for purchase on a State-by-State basis as authorized by each State animal health official through December 31, 2020.

January 1, 2021 USDA will no longer approve vendor production of metal ear tags with the official USDA shield. Accredited veterinarians and/or producers can no longer apply metal ear tags for official identification and must start using only Official RFID tags.

January 1, 2023 RFID ear tags will be required for beef and dairy cattle and bison moving interstate that meet the above requirements. Animals previously tagged with metal ear tags will have to be retagged with RFID ear tags in order to move interstate. Feeder cattle and animals moving directly to slaughter are not subject to RFID requirements.

5.2.1 Distribution Records of Official Identification Devices

The ADT regulations do not require producers to report animal identification information when animals are officially identified. Therefore, the distribution records for official identification devices must be complete and accurate. These records will provide the basic information to determine where the animal was first officially identified. Additionally, the information must be retrieved quickly when responding to an animal disease event.

Federal and State officials have primary responsibility for administering NUES tags. States may provide NUES tags directly to producers. Activities to monitor proper administration of NUES tags could include:

- Reviewing the process for properly recording NUES tag distribution to animal owners.
- Randomly selecting NUES tag numbers that are either attached or likely to be attached to an animal and reviewing availability and completeness of tag distribution records.

VS Assistant Directors could assign personnel from their offices to visit State offices to review completeness of these administrative functions and to perform tests with random numbers from issued NUES tags.

All 840 AIN tag distribution records must be submitted to the AIMS. Review of compliance with this policy will include:

- Reviewing inventory reports with the physical AIN 840 tag inventory that animal health officials and AIN managers maintain.
- Randomly selecting 840 tag numbers from various documents (ICVIs, test charts, tags collected at slaughter, etc.) to review tag distribution information available on AIMS.
- Identifying gaps in the reporting of AIN distribution records; informing individuals of discrepancies; and overseeing corrections.

Assistant Directors could assign personnel to review tag inventory reports with actual inventories at State offices and AIN managers or resellers.

Distribution of Official Identification Devices to producers and options for increasing the use of official RFID tags, and plan for how RFID tags will be read electronically after the initial application. Record maintenance of distributed and/or applied Official Identification devices to ensure timely retrieval of such records when needed.

- Official ID tag orders are received from accredited veterinarians, livestock markets, livestock dealers, approved tagging sites and producers.
- ODA will distribute NUES tags (subject to availability) to accredited veterinarians and official tagging sites.
- Large NUES and Brucella Vaccination Ear Tag orders are emailed to the local USDA-APHIS-VS office. The local VS office then sends the order to the VS (Kansas City) warehouse where the tags are shipped directly to accredited veterinarians.
- ODA will make available for pick up NUES tags (subject to availability) to producers and livestock dealers.

- ODA will distribute Brucella Vaccination NUES Ear Tags (subject to availability) to accredited veterinarians.
- Brucella vaccination records which include corresponding identification are received by ODA when the animals have been vaccinated. The identification of all vaccinated animals is entered into USA Herds.
- Tag distribution records are currently maintained at ODA by entering data into an excel spread sheet. The spreadsheet includes the tag series number, the receiver of the tags and the date the tags were distributed. Future initiatives include entering the tag distribution information into the USA Herds database. Both systems allow for quick retrieval of tag distribution information.
- Tag distribution records for tags shipped directly from the VS warehouse are sent to ODA to update the spreadsheet maintained by ODA.
- Accredited veterinarians send records of NUES tags that they distribute to producers to ODA for tag transfer in AIMS. NUES tag distribution from the VS Warehouse is not currently entered into AIMS and therefore we are unaware of NUES tag distribution to accredited veterinarians until they are both applied and used on an ICVI or test chart; or the record of distribution is sent to ODA.
- All animal identification numbers received on ICVIs, tuberculosis test records and owner shipper statements are entered into USA Herds by ODA.
- Tagging sites are required to keep appropriate records for tag distribution. These records are routinely monitored at licensed dealers and/or livestock markets by VMOs/AHTs during quarterly inspections. Non-licensed dealers that are tagging sites, are required to submit ICVI/OSS with tagging distribution records to ODA office within 7 days of movement.
- AIN devices (840 tags) are not distributed by ODA. Accredited veterinarians can distribute them to producers, however they are required to submit records of distributed 840 tags to ODA. The 840 tags that are distributed from accredited veterinarian to producer can then be transferred in AIMS by ODA staff.
- Individual RFID ear tags will be required for animals covered by ADT regulations that move interstate beginning January 1, 2023. The exception to this requirement includes feeder cattle, and cattle and bison that move directly to slaughter. USDA will maintain a list of approved manufacturers for RFID ear tags. Accredited veterinarians or producers may purchase official, approved tags directly from tag manufacturers or retailers.
- As we transition from metal or visual ear tags to RFID ear tags, we will be innovative in how we support our producers and stakeholders

in implementing this change. This may include, but not limited to, cost sharing through federal cooperative agreement funds: 1) RFID ear tags and 2) equipment to support electronic readers.

- Continual explanation of the benefits of RFID ear tags to producers, accredited veterinarians, and other stakeholders will be crucial for Ohio to effectively implement a high level of animal disease traceability.
- RFID ear tags alone will not improve animal disease traceability. We must have technology in place to read the tags and properly use or distribute the information to the necessary parties. During the transition period to RFID ear tags, we will be working with livestock markets, tagging sites, and accredited veterinarians to identify and procure readers that ensure timely retrieval of data that properly meet the standards of ADT and electronic identification.
- The number and type of official ID devices distributed and/or applied will be captured and reported on the quarterly ADT report.

5.3 Information Sharing

The Ohio Department of Agriculture (ODA), Division of Animal Health is committed to improve our capturing of pertinent information in electronic format that is easily recoverable when needed. Location identification is accomplished through Premise Identification Numbers (PIN). PINs are obtained through the connection of USAHerds database with the national premise allocator. ODA personnel are able to utilize the Standardized Premises Identification System (SPIS) to assign PINs as a backup. Ohio producers can complete premises registration online or submit a paper form to the office. ODA will register their premise for them and send their PIN and password information back for the producer's records. We will continue to increase awareness of this process to producers and accredited veterinarians wanting to purchase or receive official ID to apply to their own animals.

Excel spreadsheets are used internally to record distribution of health certificates and official brucellosis vaccination tags; and metal NUES tags that are distributed to accredited veterinarians, approved tagging sites, and producers. Capturing all of the distribution within the state is paramount and yet continues to be challenging since one spreadsheet cannot be accessed currently by both state and federal personnel. For that reason, emphasis is to share distribution data on a monthly basis between ODA and Ohio's VS office. Data will be shared via email and reports created from all applicable spreadsheets and databases.

Additionally, we will increase outreach to accredited veterinarians to ensure that they are reporting further distribution of official ID tags to the state office within 7 days of the transfer. ODA and VS-Ohio will work to create AIMS record of NUES tags distributed directly from the Kansas City National warehouse to accredited veterinarians or ODA. ODA will then be able to record the additional distribution in AIMS.

State and Federal offices do exchange needed information within Ohio. Some federal databases are accessible to ODA personnel, including AIMS and EMRS. Currently access to USAHerds is limited to state personnel, but we are working to grant access to certain Federal personnel. Our systems do not “speak” to each other directly, however reports can be generated, and spreadsheets emailed to one another.

The ODA Animal Disease Diagnostic Laboratory (ADDL) records all information in the USALims database. USALims is able to store animal identification, owner information, and submitting veterinarian information on each test ran in our laboratory. Currently, USALims doesn't share testing data with USAHerds although we are working on enhancements to allow this sharing to occur.

The state of Ohio will share information with other States, Tribes, and Territories on an as needed basis with the exception of interstate certificates of veterinary inspection (ICVIs). All ICVI issued in Ohio will be scanned by ODA and distributed to state of destination within 7 days of receipt in our office.

Our top priority is real time entry of current CVIs and Owner Shipper Statements (OSS), tuberculosis (TB) test records, and brucellosis test records or vaccination certificates into USAHerds. In addition, ODA's goal is to also capture test charts and movement documents issued and received since April 2015 into the USAHerds database. Individual official IDs along with scans or uploads of the electronic certificates and statements are being recorded in USAHerds. Prior to April 2015 (as mentioned in section 2.2), this information was captured on Excel spreadsheets and/or Access database.

We will continue to improve monitoring of approved tagging sites to ensure records and specific official Identification is present to allow traceability in the event of a disease concern or situation. NUES tag distribution records for these sites will be collected and sent to the state office on a quarterly basis.

5.4 Electronic Records

Activities that increase volume of electronic records and optimize the search ability of animal disease traceability data eCVI's management and increasing use by Accredited veterinarians

RFID ear tags alone will not improve animal disease traceability. We must have technology in place to read the tags and properly use or distribute the information to the necessary parties. During the transition period to RFID ear tags, we will be working with livestock markets, tagging sites, and accredited veterinarians to identify and procure readers that ensure timely retrieval of data that properly meet the standards of ADT and electronic identification. Adequate readers at livestock markets and/or tagging sites would allow us to quickly capture official ID of animals and a specific location/point in time. In addition, depending on the capabilities of the database, origin and destination of the animal would also be captured; or at a minimum be tied to the facility database to link any other pertinent movement information.

Accredited veterinarians (AVs) will also play an integral part in our ability to optimize the search ability of animal disease traceability data. We will focus on getting RFID reading equipment in the possession of the veterinary clinics performing larger volumes of food animal work. The proper equipment will allow them to not only perform on-farm work quickly and efficiently, while reducing the likelihood of user error when recording visual IDs; but it will also allow faster creation of paper work and test charts for submission to State Department of Agriculture and/or Approved Laboratories. Mobile Information Management (MIM) is the current program/application that we are utilizing for this purpose. MIM is a VS program that supports official testing and ID verification/inspection, especially animals with AIN/RFID tags. It allows shared electronic inventories to be loaded into a mobile device, PDA or tablet for official ID verification or testing of herds. Official USDA test charts can be automatically generated through this program.

Increased use of electronic Interstate Certificates of Veterinary Inspection (ICVIs) will also be a continued focus while implementing Ohio's ADT Roadmap and to further advance Animal Disease Traceability. Currently, Ohio is educating AVs on the benefits of submitting electronic ICVIs and usage of products such as AgView CVI. AgView CVI mobile application allows for electronic submission of ICVIs by animal health officials and veterinarians. These certificates are required when many classes of livestock move across state lines. The application enhances a veterinarian's capabilities by allowing them to easily submit ICVIs from a mobile device, or store that information within the app for forwarding when data connectivity is available. The application greatly enhances the timeliness of communication about animal health movements and enhances animal disease traceability.

Previously submitted ICVIs can also be viewed to provide a better understanding of animal movements during an animal disease response.

Further outreach activities for livestock markets/tagging sites, dealers, and accredited veterinarians can be found later in the Roadmap within the outreach section. The number of Category II AVs using electronic ICVIs, the number of electronic ICVIs issued per species covered by ADT, and a listing of the electronic ICVI applications currently utilized by AVs will be recorded in the quarterly ADT report. In addition, Ohio may apply for additional ADT funding for more equipment and consider helping with cost for one cattle market to implement use of RFID equipment.

5.4.1 Official Identification Device Distribution Records

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5.5 Outreach

5.5.1 Producers

- ODA & USDA staff are available to attend meetings to facilitate outreach to stakeholders upon invitation
- We will have a booth at the Farm Science Review, and handouts available at the Ohio Quarter Horse Congress, the Ohio Dairy Expo, the Ohio Beef Expo, the Ohio Swine Health Symposium, and other venues in Ohio
- All handouts will contain species-specific information including proper tagging procedures to improve tag retention
- The importance of ADT will continue to be emphasized at commodity meetings and through appropriate committees such as small ruminant, cervid, swine health, cattle health, Ohio Livestock Coalition, and others
- Ohio industry includes all livestock species, as well as equine, cervid & camelids
- The Ohio Livestock Coalition, a working group, has been reestablished
- Continue to identify producers
- Continue to disseminate ADT information, such as where producers can acquire tags- through ODA or their AV
- Continue to encourage and facilitate premises registration
- Prepare handouts, posters, and PowerPoint presentation for use with education. Make this available to field staff for use to educate smaller local groups. Use USDA factsheet April 2019.
- USDA/ODA will have at least two regional vet meeting to discuss ADT changes, and at least one regional producer meetings. ODA will send out mailings and pamphlets to advertise for these meetings.
- USDA/ODA field personnel will make contact and provide handouts to fair boards, BQA meetings, BEST shows, grazing conferences, and veterinary clinics.
- USDA/ODA field staff communicate one on one and provide educational handouts to producers and haulers of livestock.

- USDA/ODA field staff make personal contact with all county agriculture/4H extension offices providing handouts and offer to participate in any producer meetings.

5.5.2 Livestock Markets and Dealers

- Auction markets and concentration yards are licensed as dealers in Ohio
- Continue efforts in registering markets and dealers as official tagging sites
- ODA & USDA AHTs & VMOs routinely visit to discuss and review animal movements and ID
- Continual records review and audits of animal movements and ID
- Continual communication with managers & employees regarding ADT requirements
- Joint ODA/USDA meetings are held regularly to ensure established oversight procedures (such as the market inspection checklist) are being conducted consistently
- All of Ohio's markets are tagging sites, therefore increased education is conducted at these facilities and for the employees in regard to animal movement and ID responsibilities
- ADT information is posted at these facilities
- Focused meetings with dealers and markets.
- Meet with dealers and markets with updated ADT info.
- USDA/ODA field staff communicate one on one and provide handouts to dock personnel at the markets. Inspectors and VMO's talk with dock workers, sale managers, and owners regarding ADT and the markets. Tri-fold pamphlets will be created and available for distribution.
- Canvass parking lot looking for out of state trucks & trailers attempting to make contact with them.
- Educational handouts available in the office and mailed out with checks to consignors.

5.5.3 Accredited Veterinarians

- VMOs & AHTs are meeting with AVs throughout the state and providing continual education about the benefits and need/requirements of electronic ICVIs. Priority will be given to Category II AVs. Increase and enhance this education effort in 2019.
- VMOs & AHTs will identify and participate in local AV meetings.
- Conduct ongoing meetings with market AVs to review and discuss ADT requirements.

- Animal ID/traceability is part of NVAP core orientation for graduating veterinarians.
- Information on state & federal regulations are included within offered curriculum at annual Midwest Vet Conference held in Columbus, OH.
- Educate AVs on acquisition and distribution of tags, record keeping requirements for application of tags, and the requirement to report information back to ODA when acting as a tag distributor by issuing tags to a producer.
- Audit AV for documentation, record keeping, and tags distributed to producers.
- Implement traces and/or mock traces to monitor ADT compliance by AVs.

5.5.4 Slaughter Plants

- ODA & USDA VMOs & AHTs routinely visit to discuss and review animal movements, types and requirements of ID, and the importance of ADT
- Continual records review including checking for movement documentation
- Place emphasis on recording all animal ID devices
- Continue to initiate and foster relationships between ODA, USDA-VS, and federal/state meat inspection personnel

5.5.5 Underserved Communities

- Will utilize OSU Extension and OFBF to assist with information dissemination
- Will utilize small farm conferences to assist with information dissemination
- May utilize Central State University Extension to assist with information dissemination

5.5.6 Other Government Agencies

- The importance of ADT will continue to be emphasized at commodity meetings and through appropriate advisory boards
- Continue to initiate and foster relationships with ODA-Enforcement, ODNR, Farm Service Agency, USDA-WS, USDA-IES, local humane societies, local law enforcement and others through mailings and invitations to speak at their conferences

5.6 Compliance and Enforcement of Traceability Regulations

The Animal Disease Traceability framework is focused on interstate movement and the accompanying ICVI or similar documentation for that

movement. To assure compliance with the requirements, monitoring and subsequent recording of such activities must be captured.

- 5.6.1 Actions to be reviewed at an administrative level within ODA include:
- Submission of the ICVI by the accredited veterinarian (AV) to the Ohio Department of Agriculture within 7 days of issuance
 - Submission of the Owner Shipment Statement (OSS) by the producer to ODA within 7 days of movement
 - Submission of the ICVI/OSS by ODA to the State of destination within 7 days of the day it was received
 - Information on ICVI/OSS is checked for accuracy and completeness

Any discrepancies in the above will be reported to the SAHO and/or AVIC for follow-up action.

The numbers of animals and number of shipments will be monitored through review of submitted OSS and CVIs. Information from both of these documents will be maintained in USAHerds to generate the figures as needed. The accessibility and accuracy of this data is verified and tested by completion of TPMs.

State and Federal field personnel will be monitoring compliance of traceability requirements at various field locations; including: 1) while animals are in transit, 2) at livestock concentration points (i.e., livestock markets, concentration yards, exhibitions, and other approved tagging sites), and 3) at livestock termination points (slaughter and rendering plants). The focus of all monitoring activities will be to ensure that animals are officially identified as required, that they move interstate with required documentation, and that the identification devices are removed and/or recorded at termination points as required.

- **While Animals are in Transit**
- The state and federal field workforce is not large enough to regularly monitor livestock vehicles, but we recognize that illegal animal movements can spread disease. Law enforcement agencies and the department of transportation have worked with us in the past to conduct exercises to stop vehicles transporting animals and animal products at weigh stations to check for appropriate ID and documentation. We plan to continue to build upon these working relationships with these organizations so that they are aware of interstate animal movement regulations and, more importantly, that

they know to contact the SAHO and/or AVIC if they see an issue regarding the transportation of livestock.

- **Livestock Concentration Points**

- Livestock Markets and other Concentration Points or Approved Tagging Sites – VMOs/AHTs conduct routine inspections of livestock markets and other concentration points to monitor and capture the following information:

1. Upon entering the facility:

- Personnel recognize and identify animals that have moved interstate to the facility
- Animals are officially identified as required
- Required movement documentation is presented or appropriate consignor information is captured at the loading dock

While at the facility:

- There is proper determination of which animals need to be identified
- There is proper determination of when animals need to be identified

When leaving the livestock facility:

- There is proper determination of which animals need to be identified
- There is proper determination of which animals need to be accompanied by an ICVI
- There is proper determination of which animals need to have the official ID number listed on the ICVI

ODA and VS-Ohio understand that not all livestock facilities are the same, and therefore monitoring at each may look different. Each facility will be responsible for identifying points in their system where things could go wrong, develop a plan to monitor those points, and provide corrective action. Summaries of these plans and actions are captured and recorded by VMO/AHT on an annual basis.

State and federal field staff are responsible for documenting and reporting their findings to the SAHO and/ AVIC. This is accomplished via the “Livestock Facility Inspection Workbook” or the area ADT compliance check form and email correspondence. In-depth records audits are completed periodically at these establishments as well as

other licensed dealers. Non-compliance is recorded on audit forms and the area ADT compliance check form.

- **Livestock Termination Points**

- Slaughter and Rendering Plants – VMOs/AHTs conduct inspections at slaughter and rendering plants. The frequency of inspections can be quarterly, semi-annually, or annually depending on the volume and type of production. During the inspection, the inspector reviews records and plant procedures to collect and record ID devices when required. Slaughter plant inspections are documented and reported using an Ohio form developed to include all elements of APHIS Listed Slaughter Facilities Inspection Form in VS Guidance 11201.3 plus Ohio-specific elements. Rendering plant inspections, for plants processing whole livestock carcasses, are documented and reported on APHIS Listed Rendering Facilities Inspection Form in VS Guidance 11202.3. Use of the “Slaughter/Rendering inspection workbook will be phased in after Ohio’s needs are included in the handbook as a fillable form. All slaughter and rendering plant inspections are entered in EMRS and copies of the inspection reports are attached in EMRS.