

# ADVANCING ANIMAL DISEASE TRACEABILITY ROAD MAP FOR ARIZONA

A Three-Year Plan

Submitted by:

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## Table of Contents

I.	EXECUTIVE SUMMARY.....	3
II.	CURRENT TRACEABILITY SITUATION.....	4
	<b>2.1</b> Who Are We.....	4
	<b>2.2</b> Where Are We Now.....	4
	<b>2.3</b> Strengths and Weaknesses .....	5
	<b>2.4</b> Opportunities and Threats.....	5
	<b>2.5</b> Inventory of Existing Infrastructure and Suitability Assessment .....	6
III.	VISION AND MISSION CONTEXT FOR ADVANCING TRACEABILITY.....	6
	<b>3.1</b> Vision Statement .....	6
	<b>3.2</b> Mission Statements.....	7
IV.	TRACEABILITY REQUIREMENTS.....	7
	<b>4.1</b> Strategic Goals.....	7
	<b>4.2</b> Programmatic Goals (Objectives).....	7
	<b>4.3</b> Animal Disease Traceability Performance Measures .....	8
	<b>4.4</b> Data Requirements .....	8
	<b>4.5</b> Information Technology Plan.....	9
	<b>4.6</b> Resource Requirements.....	10
	<b>4.7</b> Organizational Needs.....	10
	<b>4.7.1</b> Executive support.....	10
	<b>4.7.2</b> Coordination and Oversight Procedures.....	10
	<b>4.7.3</b> Policy.....	11
	<b>4.7.4</b> Staffing.....	11
	<b>4.7.5</b> Budget requirements.....	11
	<b>4.7.6</b> Outreach.....	12
	<b>4.7.6.1</b> Accredited Veterinarians.....	12
	<b>4.7.6.2</b> Livestock Markets.....	13
	<b>4.7.6.3</b> Industry as a Whole.....	13
	<b>4.8</b> Monitoring and Reporting Interstate Movement Activity.....	13
V.	TRACEABILITY IMPLEMENTATION.....	13
	<b>5.1</b> Ranking of Priorities for Advancement.....	13
	<b>5.2</b> Implementation of Objectives.....	14

## I. EXECUTIVE SUMMARY

The goal is to improve Arizona's ability and capacity to trace animals that are either exposed to a Foreign Animal Disease (FAD) or potentially infected with a Federal Program Disease. The Arizona Department of Agriculture (ADA) mission is to regulate and support Arizona agriculture in a manner that encourages farming, ranching, and agribusiness while protecting consumers and natural resources. We protect the public from contagious and infectious disease in livestock, poultry, commercially raised fish, meat, milk, and eggs.

Since traceability is the key to protecting and limiting the costs to industry associated with an animal disease outbreak, a strong educational program needs to be a component of this program. The need for change must be understood and supported by all stakeholders to have a successful program. In this state we have been very successful in the eradication of several federal program diseases and have achieved a "Free" status with both Brucellosis and Tuberculosis. This often leads to complacency by producers as there has been a resulting decrease in testing and tagging requirements for animal movement. We need to respond quickly during a disease outbreak and limit economic losses to the industry and protect producer's livelihoods. In order to limit the spread of disease with limited response capacity, a strong traceability program though animal identification going forward is essential.

Our current disease traceability is done by searching interstate and international certificates of veterinary inspection (IVCIs) which consist currently of paper files. We can also search testing paperwork done for export to help identify animals during a disease investigation. In Arizona all National Uniform Eartagging System (NUES) brucellosis and silver tags are dispensed from the regional USDA office in Albuquerque, NM so we do not currently have all staff trained or access to SCS access to these numbers for searchability. State personnel also need to be trained and gain access to the AIMS database to locate 840 tags going forward.

Our goal is to have an electronic system for quicker traceability and get data from CVI's entered into a compatible software system that will allow us to search various fields. We can then have all federally distributed tag numbers added to the system to streamline traceability efforts. We are currently exploring an electronic data base to work with intrastate movement of animals though livestock inspections and self-inspection to speed up the process and help with traceability.

The ADA relies heavily on federal cooperative funding to support the administrative functions, personnel and activities associated with the Animal Disease Traceability (ADT) regulatory requirements and policies.

## II. CURRENT TRACEABILITY SITUATION

### 2.1 Who Are We?

We are the ADA Animal Services Division (ASD). ADA ASD internal constituents are 8 Livestock Officers (Certified Peace Officers), 7 Livestock Inspectors, 6 Deputy Livestock Inspectors, 4 office support staff, 2 Assistant State Veterinarians and State Veterinarian (position currently vacant and looking to be filled). We have an advisory council made up of members from the various industries such as, range cattle, cattle feeding, dairy, meat packing, sheep and goat, swine, equine, poultry and ratite. The advisory council makes up a majority of our external constituents which also would include, the University of Arizona staff including extension agents, the various Tribal Nations, and the general public of our state as well.

We use the traceability data from ICVI's and test information when there has been a disease outbreak that could impact the health of the public and risk of animals that were exposed or potentially exposed to a FAD. Other uses would be in a disaster response.

### 2.2 Where Are We Now?

The ADA has the task in Arizona to protect the livestock industry from theft and the livestock and poultry from contagious and infectious disease. To do this effectively the State Veterinarian's Office (SVO) must rely on its ability to locate diseased and at-risk animals quickly. With this in mind, animal identification and traceability is important to the mission.

Arizona is a brand state. Currently there is on-going discussion as to how to implement brands in a higher-technological, closer-scrutiny international marketplace. We also have self-inspection and livestock inspection for movement of animals so disease traceability is integrally tied to animal movement both intrastate and interstate.

The SVO is the primary user of traceability information. The current data flows are via traditional paper (CVI) records, eCVIs (via others' use of GlobalVetLink and iCVI), premise registrations and both electronic and traditional official ID. Animal traceability is the crux of disease surveillance in the state.

One full-time Animal Disease Traceability Coordinator (ADTC) oversees the program. They report directly to the State Veterinarian. This arrangement allows for close coordination of animal identification with needs in the field.

### 2.3 Strengths and Weaknesses

ADA has a strong connection through our personnel to the livestock community. Our Livestock Inspectors and Livestock Officers know the industry where they work. They know most producers and what operations they may be associated with around the state. They work closely with producers as well as sale yards and the fair community. They are willing to work with producers to solve issues and limit animal movement during a disease investigation. We also have a good cadre of veterinarians in the state that have some basic foreign animal disease training and are our first line of response to disease outbreaks.

Our weakness would be a lack of personnel to do manual data entry and funding to put in an automated data entry system. Current traceability is limited as all NUES tags are issued from the USDA office and we currently have limited database access to whom tag numbers are issued due to limited staff training. Current traceability of 840 tags is limited as no one in our office has access or been trained to use the AIMS database. Our current business process is receiving and filing of paper files which can take a long time to locate an animal in question. Other obstacles that slow down the process would be confusion from sale yards and producers about the need for tagging animals as many still operate under brands as official identification.

### 2.4 Opportunities and Threats

Many opportunities exist to educate producers through continued dialogue. We also have the opportunity to obtain more premise identifications. Better identification of populations at risk improves the quality of the response. Better information in regards to location of populations at risk improves the speed and efficiency of the response. Both strategic aims are enhanced via this plan. This ability to quickly locate and decrease the spread of food animal diseases will give the Arizona consumer greater confidence in our product.

## 2.5 Inventory of Existing Infrastructure and Suitability Assessment

Currently our primary field staff consists of 21 Animal Health and Welfare Program Livestock Officers, Inspectors and Deputy Inspectors who are located throughout the state and assist the veterinarians in the SVO with animal identification and tracking. We are currently investigating electronic field units to help with information flow from the field to the office. This would help identify animals that are consigned to sales and where they originated as this is currently being captured in hand written sheets with limited searchability.

While we currently have ample office space available and sufficient bandwidth available to address foreseeable network issues, connectivity in the field can be limited due to areas of inadequate internet access in the state. There currently are limited funds available to increase IT infrastructure for needed storage space and support for an automated data capture system. Paper documentation handling system with archiving of data onto disk space is a current unmet need, both for data redundancy as well as data accessibility.

Although inroads have been made to increase staff accessibility to the USDA database, it is limited and of concern to the state. With new staff members who have not been trained or do not have access to the databases, we often have to rely on limited federal resources to access the databases as needed. Timely training and access to databases will resolve this issue going forward.

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

#### 3.1 Vision Statement

Be able to identify a location involved in any disease situation within 48 hours of notice and move necessary resources into place in order to begin control of the matter.

## 3.2 Mission Statements

### Mission statement for Animal Services Division:

We protect the public from contagious and infectious disease in livestock, poultry, commercially raised fish, meat, milk, and eggs. We do this by enforcing laws concerning the movement, sale, importation, transport, slaughter, and theft of livestock. In addition, we regulate food processing and manufacturing facilities and conduct substantial food safety and quality inspections of Dairy, Meat, and Egg products produced or stored in Arizona.

### Mission Statement for Animal Disease Traceability Program:

State veterinarians are responsible for testing programs, epidemiology of disease outbreaks, conduct disease tracebacks, and technical support for the administration. The Livestock Inspectors are required to inspect livestock (except equine) for health, marks, and brands before they are slaughtered, sold, purchased, driven, transported, shipped, or conveyed. They also respond to stray and ownership dispute calls. In addition to these duties, the officers investigate theft, welfare, and neglect cases. Officers also assist in testing programs and limiting animal movement when a quarantine is in place. Office staff gather and maintain records on calfhood vaccinations, herd records, test results, import and export requirements.

As part of an agency goal to eradicate infectious and contagious livestock diseases throughout the state, Arizona continues to be Brucellosis, Tuberculosis and Pseudorabies free.

## IV. TRACEABILITY REQUIREMENTS

### 4.1 Strategic Goals

To build upon and continue to develop and implement a State-wide animal disease traceability infrastructure that identifies animal owners and movement information to give confidence to producers and consumers through our ability to identify and mitigate animal disease outbreaks.

### 4.2 Programmatic Goals (Objectives)

- Over the next three years our goal is to increase the electronically collected data on ownership and movement of animals through software to capture self-inspection documentation and sale yard transfer of ownership.

- Shift data from a paper based system to electronic documentation for ICVI's, vaccinations and testing to better integrate data and enhance traceability. This will improve retrieval of available traceability information.
- Integrate surveillance and traceability data through CoreOne integration.
- Work with the APHIS VS office to obtain tag information on tags sent to tagging stations and veterinarians for our data base by updated tag distribution record system.
- Provide education to accredited veterinarians on electronic gathering and reporting for movement and testing to facilitate animal movement.
- Attend association meetings as well as county fairs and livestock events throughout the state as presenters or exhibitors to educate producers on the need for ADT and how this benefits the industry.

#### 4.3 Animal Disease Traceability Performance Measures

It is our goal maintain the current ADT process which currently takes approximately seven to fourteen days to complete parts 2-4 of the trace performance exercise. An achievable goal would be to reduce these time frames to under 48 hours in successive years and would depend on funding to increase personnel until a more searchable electronic database can be implemented. One concern is that even with good tagging there seems to be a lack of proper tag recording on test records by practitioners. This often leads to an inadequate trace.

Historically there has been difficulty with the correlation of official ID to the carcass at federally inspected slaughter plants. This has led to either a delay in starting a disease investigation or unnecessary testing of herds where this animal may have been located. Improved communication is also needed between the federal government and state to decrease the time it would take to start the trace on a diseased animal with confidence that the correct herd is being impacted by the investigation.

#### 4.4 Data Requirements

Arizona is using standards which were created by the USDA under the NAIS system for determination of locations and there is no foreseeable change in this in the near future.

Official ID in Arizona consists of NUES tags and 840 tags as well as breed registered tattoos when the complete registration number is recorded on the CVI and is accompanied by the registration paperwork. Registered brands will be used for animal identification for intrastate movement.

Currently tags are applied by accredited veterinarians, Livestock Officers, as well as producers that order their own 840 tags and scrapie tags.

All tags currently are approved and distributed by the regional USDA field office in Albuquerque where records of distribution are currently entered into SCS. This has caused a roadblock for the state as we have not had access or training on all the databases. Going forward these issues will be resolved with increased joint trainings. It seems that even with the regulation to keep the numbers for 5 years, the change to SCS in 2012 makes it difficult to access records from before 2012. This would allow for distribution records to be more readily available.

Search of test records is often a challenge for the state as better communication is needed between the state and USDA field office. Both offices need to make sure that there is sharing of vaccination and test records.

Commuter herd agreements have not been in effect in AZ for several years. We do not foresee employing them in the future.

All animals meeting the ADT requirements must have official ID on CVI or in limited cases on a brand inspection from neighboring states or identified and going to tagging stations to be tagged prior to comingling with other animals at auctions. We also accept NPIP 9-3 forms for bird entry.

When requested by another animal health individual for animal health purposes data is shared as needed. CVIs are sent weekly to other states.

#### 4.5 Information Technology Plan

Over the next three years our goal is to increase the electronically collected data on ownership and movement of animals through software to capture self-inspection documentation and sale yard transfer of ownership. ADA IT planning for future needs involving moving to a data base that can capture animal movement through the electronic capture of CVIs as well as the ability to issue entry permits online.

#### 4.6 Resource Requirements

While ADA has IT personnel that can manage the database, it would be a benefit if we had someone that had a strong understanding of animal health and how to efficiently set up a system for traceability. We currently do not have the manpower to do the data input required to take our paper files and enter the information into a data base.

Peripheral resources will be required – data acquisition/retrieval platforms primarily, including automated capture capability.

We will need hosting funds for software support and a data recognition scanner to upload paper document. We also are in need of more wands, PDA's and computers to help capture data in the field.

#### 4.7 Organizational Needs

Existing State organization and staffing is only able to conduct the minimal requirements of this program.

##### 4.7.1 Executive Support

ADA has an open chain of command that culminates with the ADA Director. The current administration realizes that an ADT system will benefit both the livestock and poultry industry as long as it does not interfere with commerce.

##### 4.7.2 Coordination and Oversight Procedures

The SVO in ADA coordinates and oversees the current plan and will continue to do so going forward.

ADA is part of the Arizona State Emergency Response and Recovery Plan and actively participates in exercises to train and educate in the event of a disaster.

The SVO works with Arizona Livestock Incident and Response Team veterinarians and the Arizona Veterinary Medical Association to provide emergency resources as well as extensive liaison avenues with producers.

Since we are a small staff, even though primary duties are often over seen by one individual, tasks are often shared so there is a continuity of duties should it be needed.

#### 4.7.3 Policy

While this is a voluntary program in AZ per state statute, with education and the need to move animal out of state for commerce there has been a good response. We hope to build on this going forward.

#### 4.7.4 Staffing

Currently a 0.5 FTE handles the entire program while also working on program diseases in cooperation with USDA in Arizona. Other ADA-ASD personnel to the equivalent of 0.25 FTE are utilized in data acquisition as well as promoting the program. We could utilize increased staff for data entry as we go forward to move from a paper based system to an electronic data base. Field inspection staff doing market auctions and import/export duties also support this program.

#### 4.7.5 Budget Requirements

The ADT Coordinator oversees ADT efforts under the guidance of the ASD Associate Director and is partially supported from the federal funding of the ADT grant. Other ADT support such as staff, equipment and outreach/education effort is funded entirely by cooperative funding. While there is currently not federal cost share requirements, the ADA has spent approximately \$1,200,000 in non-federal money in education programs as well as market inspections and import/export programs which are intricately tied to the ADT program.

ADA is a state agency and subject to the legislative process for funding. With budget cuts and having to lay off field staff in previous years, we are limited in staff availability to perform many of the extra exercises required by the ADT grant. Office staff is often used to help cover field work when needed. The addition of a dedicated office person to do data entry and dedicate time to the trace exercises would decrease the time involved in performing a trace and get us to the goal of being able to identify the movement of animals through CVI and inspections. This would move our trace timeline down to the goal of under 48 hours over the next 3 years.

## Funding Requirements

The current grant is \$80,000.00. ADA is dependent on federal cooperative support to advance ADT in Arizona. Increases or decreases to cooperative funding will proportionally impact the amount of resources we can provide to support roadmap objectives.

In order to get trace exercise results down to the goal of 48 hours over the next couple of years, it will require that ADA go to some type of searchable data base and a dedicated person to input data and be the primary person to perform traces to find individual animals. Due to lack of funds to invest in software and the resources to create our own data base, we have investigated the option to utilize the StateVet.com program. This will allow us to have our data into CoreOne which we already utilize on a limited basis. The costs of increase personnel and software support as well as data collection devices in the first year at sale yards and livestock inspections would increase the grant needed from the current amount to the following:

2016 ~ \$200,000

2017 ~ \$160,000

2018 ~ \$160,000

While not required under the grant, partial cost sharing is achieved via ADA budgeted dollars being applied to field personnel, all of whom do support this program. (See above.)

### 4.7.6 Outreach

#### 4.7.6.1. Accredited Veterinarians

Letters would be sent to accredited veterinarians involved with dairy, equine and beef cattle, including Arizona Livestock Incident Response Team veterinarians

The ADTC would do presentations at VMA meetings.

Incorporate education materials and encouraging use of eCVI forms and appropriate tagging during

state accreditation training and in industry newsletters to advance ADT.

4.7.6.2. Livestock Markets

Arizona's 5 auction markets will have an appointment set to discuss the program and their role in supporting the ADT program in all species.

On-going education will be provided on a semi-annual basis and making sure compliance is being adhered to by the livestock markets.

4.7.6.3. Industry as a Whole

SVO is involved with many livestock groups and will continue to promote the program through educational opportunities.

ADA-ASD field staff will promote at various shows and exhibitions as well as education to cooperative extension and 4H and FFA groups to understand the process behind animal identification.

4.8. Monitoring and Reporting Interstate Movement Activity

Outbound interstate livestock movements and the animals associated with the movements are recorded on CVIs by state accredited veterinarians and sent to the SVO. These are then sent on to the state of destination. For inbound movement we issue entry permits and the state of origin forwards a copy of the CVI to the State Veterinarian. We currently spot check this via hand counts on a monthly basis. As our IT plan is implemented more will be able to be accomplished electronically.

V. TRACEABILITY IMPLEMENTATION

5.1 Ranking of Priorities for Advancement

The first years of the program have had many successes, yet there is still room for improvement in the identification of animal movement in and out of the state as well as intrastate movement of animals. We know that the use of an electronic database for the interstate movement as well as the addition of a program and devices to collect data and shift market and field inspection from a paper process to electronic will give us increased

speed and accuracy in tracing animals. This will help us to obtain the goal of locating an animal that has come into the state or moved again through the state in less than 48 hours. Our priorities are:

- Maintain current ability to collect animal health movement information and to make it electronically searchable using data entry staff as funded,
- Shift Livestock Inspection (market/field) from a paper process to electronic data collection using electronic data capture devices and programs to increase availability of electronically searching intra and interstate animal movement,
- Utilize cooperative resources to support data entry and staff to train electronic gathering officers on the equipment to gather movement information,
- Provide outreach and education to veterinarians and livestock markets to advance ADT, and
- Provide accurate quarterly reports and traceability exercises by implementing the above.

Measurements of success will include an increased number of eCVIs, a decreased number of disease traces without point of origin and over a 3 year period the ability to perform a trace within 24-48 hours.

## 5.2 Implementation of Objectives

ADA advancing of ADT work over the next 3 years will proportionally have to adjust to annual federal cooperative resources received to support these roadmap objectives.

Outreach objectives will be met primarily through extensive person contact with markets, veterinarians and livestock groups.

Our efforts over what we are doing will increase electronic data collection and data entry over the first two years to get our database searchable funding dependent. During this time we will be educating field personnel on data capture and assimilate this into a complete data base. We need to examine ways to increase RFID device usage by accredited veterinarians so individual identification can be captured and increase the use of iCVIs.

We will continue to work with our AD to expand traceability efforts in our state through cooperative efforts from both offices to increase livestock identification over the next three years, while working to set up programs to detect intrastate movement of animals through the state of Arizona.