



GOVERNMENT OF PUERTO RICO

Department of Agriculture

**ANIMAL DISEASE
TRACEABILITY ROAD MAP
FOR
PUERTO RICO DEPARTMENT OF AGRICULTURE**

A Three-Year Plan

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I. EXECUTIVE SUMMARY

The Department of Agriculture Puerto Rico (PRDA) and office of Veterinary Services (VS), whose mission is to keep free of economically important diseases, communicable, contagious and / or zoonotic animal populations. The PRDA-VS is developing a written Animal Disease Traceability Road Map in accordance with guidelines provided by USDA-VS

As part of this effort PRDA-VS in conjunction with USDA-APHIS-VS, have initiated a program of uniformity in the identification of premises for cattle, horses, small ruminants, pigs and poultry, using the points of global positioning system (GPS) for a quick and efficient location for a possible emergency that may be caused by foreign disease (FAD) affecting the animal population or in an emergency situation caused by other (hurricane, earthquake, etc.).

PRDA-VS recognize the need for traceability but also recognize the role that USDA will need to play in bringing uniformity, funding and a lasting commitment to make the efforts successful. With the identification of premises and after that, the introduction of electronic (E-Id) official ID animal of the premises, which can keep track of animals that can quickly get all the information about the owner, place of origin, etc. PRDA-VS may respond to an emergency quickly and efficiently by having a record using current methodology and equipment.

With this joint effort, information of movement of animals within the island can be maintained information of movement of animals within the island and provide better tracking in case of an outbreak that could affect other premises.

In order to maintain the status-free to diseases such as bovine brucellosis (BR) and Tuberculosis (TB), swine brucellosis, classical swine fever and pseudorabies, HP & LP avian influenza, etc. PRDA-VS will require that all animals originated on the territory and imported have an E-ID. PRDA-VS will be more efficient taking measures to ensure that all animals are properly identified.

Currently, the Animal Disease Traceability Program (ADT) has a total of 3668 registered premises. Currently, PRDA-VS had registered 100% of the dairy premises in the ADT program and works to maintain the records updated every six (6) months. In addition PRDA-VS have registered 100% swine garbage premises (568) that are legally authorized to feed their hogs with treated waste. Presently, we are coordinating with the fund for the Development of the Pork Industry of Puerto Rico to identify all the commercial swine premises. PRDA-VS plan to assist the industry in implementation of a federal rule that provides for a uniform, effective and flexible national system to control and eradicate animal disease.

USDA VS and PRDA have working to gather the GPS-coordinates of all the small ruminants premises registered as members of the Fund for the Development of the Small Ruminants Industry (FFSRI), organization that group most of the goats and sheep's producers on the island.

And plans to meet with the small ruminant producers to explain the benefits of implementation the E-ID system and the National Scrapie Eradication Program in your flocks.

In addition PRDA-VS had identified all the port of entry (seaports, airports, etc.) where most the livestock, equine and poultry legally enter to Puerto Rico.

For PRDA-VS, animal disease traceability and the adoption of an effective response system is critical to the success of disease control activities and must be in place in the event of a disease outbreak. Since Puerto Rico could easily be maintain as a "close herd" to FAD, prevention measures shall be our priority.

A benefits of the E-ID system is, that enables PRDA-VS and APHIS-VS to monitor the movement of animals on the island. By identifying all animals arriving from other states, it's possible to maintain a database in case an emergency situation, allowing us to locate then determine the source of infection immediately. The potential emergence of highly contagious diseases makes the need even more urgent. To be better able to prevent disease from spreading and to eradicate disease where it exists, we must be able to quickly trace infected and exposed animals.

Since the best organized livestock sector in Puerto Rico is the milk industry, and all their replacement animals are imported from other states, our efforts should implement the EID system on the dairy industry first.

The data and animal health information will be shared with those organized livestock sector that officially request it and with APHIS-VS when necessary.

Annual budgets can be established only after a program is further defined. Since 2014, PRDA-VS has spent an average of \$18,000 annually on animal disease traceability with 100% of this coming from Federal Cooperative Agreement funding.

II. CURRENT TRACEABILITY SITUATION

2.1 The Department of Agriculture of Puerto Rico and Veterinary Office (PRDA-VS) is the governmental agency whose mission is to promote, educate, participate in preventing prevent entry of any disease affecting animal health. In conjunction with the District Office of USDA-VS will make efforts to implement the necessary mechanisms to achieve these objectives.

To achieve these objectives, PRDA-VS maintains regular communication with APHIS-VS and inform the dairy, pig/hogs, beef, small ruminant's producers, etc. of the benefits of identifying their premises in the ADT program and their animals with electronic ID-Tags.

2.2 Where are we now?

In Puerto Rico's dairy industries, there are a large range of management practices among the producers. Including those that are every reluctant to adopt the E-ID and recordkeeping requirements as the ADT program request. Some producers utilize individual animal identification for improved management capabilities while others use it as a source of verification. Other producers manage their animals without any official identification.

PRDA-VS continue efforts to protect Puerto Rico agriculture as changes and challenges are addressed to prevent the entry of economically important diseases, communicable, prevention and foreign animal diseases to the animal population.

Currently, tracing in Puerto Rico is accomplished by a combination of hand search and utilization of databases such Core One and EMRS2 programs. Traces initiated based on an official identification such as back tag or official ear tags are frequently requested for disease surveillances.

Traces that identify only the premise of origin/destination, number of animals that arrived. Herd records (when available) are a key factor in the success of these traces. Lack of herd records often necessitates broader investigations.

In Puerto Rico, we are fortunate to have a close working relationship with the veterinarians involved in the food animal industries and can contact them for additional specifics requiring inquiries based on a particular shipment.

Fortunately the Puerto Rico geographical position helps to control the entry of animals. There are two sea-ports and two airports allowing Puerto Rico the ability to receive animals (cattle, pigs and horses) via sea and air.

PRDA-VS, maintains control over entry of animals that are introduced to Puerto Rico. They meet a series of requisites to arrive. Requirement includes an import permit that comply with the requisites established by PRDA-VS- for each animal species.

Requires a certificate of veterinary health inspection for any animal to reach Puerto Rico once is approved membership, staff of the PRDA-VS will be notified of the arrival of these animals which will be subjected to a visual inspection at ports of arrival. Paper copies of CVI's submitted by issuing veterinarian are filed in the state office. These files can be searched, by hand, chronologically by species and by destination or state of origin.

PRDA-VS are notified of the need to trace animals for a variety of reasons. Most commonly the tracing of animals is related to a disease situation (possible exposure or potential infected animal). Notification is received by email, fax, and phone calls. This notification can originate from the USDA/APHIS/VS District Office, and be various types. The following bullets describe how these traces are carried out based on the initial information provided.

Notification = Back tag number for residue concerns or slaughter surveillance suspects (##XX-#### format)

- A slaughter date will be included in these trace request.
- Back tag indicates the Livestock Dealer who presented the animal for slaughter by the two letter code.
 - We have access to these records as needed.
 - Based on the report we can identify the name of the consignor of the animal to the market.
- We contact the consignor of the back tag in question and confirm that they did sell one or more animals on said date and we gather all pertinent information regarding the specific animal in question and the herd in general.

Notification = Official ear tag (xxxxx##### or xxxx#####)

- Official ear tags are distributed by USDA to specific venues such as accredited veterinarians
- Official ear tags are applied as part of program activities

Notification = Premises of issue

- We contact premises and hope for owner records to aid in search.

2.3 Strengths and Weaknesses

Strengths:

- PRDA-VS, Import and Export area, Field Staff.
- PRDA Veterinary Diagnostic Lab. (PRDA-VDL).
- Puerto Rico Emergency Management System (ESF 11 Level).
- Open and Productive Dialogue with Industry.
- Outreach Strategies and Effective Communication.
- Traceability included as an integral component of animal disease control.

Weaknesses:

- Fewer personnel for data management.
- Labor intensive, tracking system.
- Reduction of state and federal budgets.
- The acceptance of animal identification program by producers.

2.4 Opportunities and Threats

Part of the challenge and the constant threat of foreign diseases are due to the proximity of countries with, Classical Swine Fever, bovine brucellosis, the migratory movement of birds or illegal movement of people, which increases progressively to the extent that our borders are not protected properly.

2.5 Inventory of existing infrastructure and suitability assessment

The PRDA-VS have the capability to implement animal disease traceability as part of an overarching plan to protect the consumers and producers of livestock from devastation caused by animal diseases. Access to USDA resources remains a critical factor in the eventual success of such programs.

III VISION AND MISSION CONTEXT FOR ADVANCING TRACEABILITY

3.1 Vision Statement

The vision of the PRDA-VS is to enforce state animal health regulations to prevent, control, and eradicate infectious or communicable diseases of livestock and domestic animals. The PRDA-VS also works to protect the state from animal pests and diseases that threaten economic and public health.

3.2 Mission Statement

The mission of the PRDA-VS is to safeguard the animal health, enforce the animal health regulations to prevent, control, and eradicate infectious or communicable diseases of livestock and domestic animals and respond to Emergency Support Function (ESF-11) emergencies related to man-made and/or natural disasters affecting animals.

IV TRACEABILITY REQUIREMENTS

These goals and objectives are intended to be progressive for the coming years and are not specific to any single year.

4.1 Strategic Goals:

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

The purpose of PRDA-VS is development in conjunction with USDA-VS a system comprehensive of animal disease traceability.

4.2 Programmatic goals

Input available animal movement data into Core One and EMRS2 programs.

Improve retrieval capabilities of available traceability information

Establish compatible standards for sharing data with States/Tribes/Territories and USDA when needed

Integrate surveillance and traceability data

Develop state policy to pertaining to traceability

Target, develop, and implement outreach messaging regarding data quality and processing for animal health information forms

4.3 Animal disease traceability performance measures.

Traceability Performance Standards.

1. Notify State was reference animals were officially identified.

2. Identify traceability unit in which reference animals were identified.
3. Notify State from which reference animals were shipped.
4. Identify traceability unit from which reference animals were shipped.

Performance-Measures

- a) Time required reporting to the State of official tagging/identifying of an animal in question that has moved interstate.
- b) Time required for the State of first officially tagging/identifying of an animal in question that has moved interstate to provide record of the official tag distribution.
- c) Time required reporting to the State from which the animal has moved interstate
- d) Time required for the State from which the animal has moved interstate to provide the location and contact information from which the animal was moved interstate

4.4 Data requirements

Animal disease traceability data are acquired through various programs. Storage, retrieval and utilization will continue to be by a multi-faceted approach. Efforts will continue to make data searchable in the most efficient manner possible. Electronic means are being merged with paper-based systems. Valuable traceability data are currently collected and provided via paper formats and these are sorted and filed by date, species and destination. This system will be integrated into any developing animal disease traceability information system. The shortage of human resources restricts progress of data management.

Standards used for location identification will mirror USDA guidelines.

Standards used for official animal identification will duplicate federal standards as prescribed by Code of Federal Regulations (CFR).

CFR will define any official identification methods/devices accepted in

Puerto Rico.

PRDA-VS will expand the utilization of official metal ear tags beyond the current system on a voluntary basis with producers and practitioners.

Tags distribution will be a collaborative effort.

VS Memo 578.12 will serve as a guideline for Electronic ID ear tags distribution. The data collection and entering of the tags is being done by USDA- VS and PRDA. The state does not have an official from to collect the data.

The Electronic ID ear tag utilization and estimated annual volume of tags is dependent on adoption of federal requirements for official identification.

Record keeping is a core component to Electronic ID ear tag and all official tag systems. Tags will be assigned to an official premises/premises owner. The veterinarian or livestock owner applying the tags will be responsible for timely submission of accurate and complete records.

PRDA-VS recognize the need for and support all efforts to move towards more efficient storage and retrieval of animal disease traceability information.

Data will be shared with other States, Territories, and USDA through USDA programs. Current protocol will extend to traceability programs.

Data requirements for commuter herd agreements will be species specific.

4.5 Information technology plan

PRDA-VS recognize the need for and support all efforts to move towards more efficient storage and retrieval of animal disease traceability information. Current efforts include adoption of a process to include electronic search capabilities with paper storage of Official Certification of Veterinary Inspection

4.6 Resource requirements

Current PRDA-VS staff has specific expertise to implement traceability.

PRDA-VS need additional data management staff to record, process and track large volumes of animal movement data.

Automated data capture equipment is available is limited supply currently. Additional equipment will help to facilitate further adoption by veterinary practitioners and producers.

4.7 Organizational needs

4.7.1 Executive support

Department of Agriculture and Veterinary Services are fully supportive of the development of an animal disease traceability system.

4.7.2 Coordination and oversight procedures

Internal program oversight is under the direction of Puerto Rico State Veterinarian and the Secretary Puerto Rico Department of Agriculture.

A description of the Puerto Rico Animal Disease Traceability Working Group:

The Puerto Rico Animal Disease Traceability Working Group may be assigned a sub-committee of the Puerto Rico Animal Industry Technical Council (PR-AITC). The PR-AITC is an official advisory board created under, Puerto Rico Statutes to advise and make recommendations to the Department of Agriculture on issues concerning the protection of the animal and livestock interests of Puerto Rico. The Traceability Working Group includes a producers, veterinary practitioners, livestock market owners, Dairy Industry “Asociacion de Agricultores”, etc.

This group meets in person approximately two times each year. Additional meetings can be held as necessary to respond to program announcements. Information is shared via written correspondence and conference calls are scheduled as needed. Meetings of this PR-AITC sub-committee are open to all interested parties in addition to the committee members.

Additional feedback is gained through working with all industry groups and stakeholders to implement traceability.

4.7.3 Policy

The information which is required to register any premises is basic and not normally considered proprietary.

Individual animal identification and destination data would be considered proprietary in most cases. In order to protect producer’s privacy, the Puerto Rico Department of Agriculture and Veterinary Services, does not plan to become a manager of individual animal identification numbers or trade information.

4.7.4 Staffing

Existing PRDA-VS staff is currently utilized for implementing animal disease traceability. Traceability is included as part of many activities of the PRDA-VS. In addition, key staff members are identified as traceability program managers. Additional staff would be needed to increase the scale of operations to include more data management and an increase in services provided.

4.7.5 Budget requirements

Annual budgets can be established only after a program is further defined. Since 2014, PRDA-VS have spent an average of \$ 18,497.00 annually on animal disease traceability with 100% of this coming from Federal Cooperative Agreement funding.

4.7.6 Outreach

The PRDA-VS outreach Plan includes Livestock Producers, Swine Feeder Producers, Poultry Producers, Dairy Cattle Producers, Small Ruminants and individuals from all industry sectors.

Outreach will be needed to explain USDA plans for rule implementation and state actions to help producers meet traceability requirements.

Efforts will focus on outreach to make producers aware of the major initiative to enhance traceability. Emphasis will be placed on continuing to maintain a premises registration on Core One and EMRS2 programs.

Additional emphasis will be placed on planning to enable livestock producers and the state to meet traceability requirements for implementation of federal regulations. State personnel will explain the shift to the need for development of a plan to enhance traceability and potentially respond to new regulations that are enacted.

Specific outreach will continue serving the Dairy Industry sector. Outreach to and through USDA Accredited Veterinarians will foster understanding of traceability by veterinarians and equip them to be animal identification resources for their customers.

Information will need to be provided to producers on identification methods that will meet the requirements for official ID. Tags will have to be provided that have been manufactured and recorded through an approved AIN manager to ensure data capture of

correlated producer premises identification number and assigned tag numbers.

A system will be implemented to assign and distribute USDA Official NUES (bright/metal) tags directly to producers. Records of tags distribution and utilization will be captured through data entry with costs covered by cooperative agreement to the extent possible.

General outreach will continue to extent possible with allowances for reductions is state (PRDA-VS) budgets and Federal Cooperative Agreement budgets. Priorities will include maintenance of premises identification infrastructure, premises renewals and providing timely and accurate information to all stakeholders.

Outreach will include initiatives to encourage producers who have previously registered their premises to update their premises records as needed. PRD-VS will continue to engage producers and industry stakeholders to seek feedback for improving traceability.

4.7.6.1. Accredited veterinarians

The Puerto Rico Traceability Coordinating Group could be include accredited veterinarians. We are fortunate to have a close working relationship with the veterinarians involved in the food animal industries of Puerto Rico.

Outreach to accredited veterinarians is ongoing. PRDA-VS Animal Industry staff maintains the ability to contact all food animal practitioners through working with the industry to facilitate this conference.

Traceability information is routinely shared as part of this conference program.

Official Premises identification provided by PRDA-VS can be made available to producers through their veterinarians. The USDA plan for NUES distribution includes veterinarians.

4.7.6.2. Industry as a whole

General outreach will continue to the extent possible through media and participation in producer meetings. The PRDA-VS staff is involved with all types of producers groups of all types from various food animal, equine and poultry species.

The University of Puerto Rico, Campus Mayaguez, “Colegio de Ciencias Pecuarias” (UPR-RM CCP) is a major outreach partner in that information can be shared through their Cooperative Extension offices in every county.

4.8. Monitoring and reporting interstate movement activity

The PRDA-VS Monthly and Annual Reports show:

- Number of Import Permit Numbers assigned for Veterinary Inspection and other interstate movement documents for movement into Puerto Rico.
- Number of Interstate Certificates of Veterinary Inspection and other interstate movement documents for movement out of Puerto Rico.
- Numbers of animals by species and class for all interstate movements

V TRACEABILITY IMPLEMENTATION

5.1 Ranking of priorities for advancement

Maintain Current Animal Disease Traceability Infrastructure
Further Refine Tracing Capabilities and Procedures
Continue Premises Identification and Registration
Continue Industry Outreach and Involvement Through All Possible Means
Enhance Current Traceability Capability
Optimize the Acquisition and Search Capability of Animal Disease Traceability Data
Increase the utilization of official identification in Puerto Rico livestock.
Prepare livestock producers, markets and shippers to meet future interstate movement requirements and to better insure traceability.

5.2 Implementation of objectives

Objective 1 –PRDA-VS Maintain Current Animal Disease Traceability Infrastructure.

Three core components of Puerto Rico’s Traceability program are identified

Premises-Registration:

- Continue Premises Registration
- Maintain and Update SPRS Data
- Register additional premises through all means available

Increase Search capability for existing records:

- Continue to maintain high priority for filing paper records
- Develop system(s) to make paper files searchable electronically
- Encourage utilization of electronic data collection and storage

Increase Individual Animal Identification in Puerto Rico.

- Make NUES tags available to all interested participants.
- Ensure that records are maintained for all tags distributed
- Network with owners of captured individual animal movement data

Objective 2 – Enhance Current Traceability Capability

PRDA-VS have documented effective response in foreign or program animal disease traceability. Examples of recent challenges include: Bovine TB and BRT in a large dairy herd.

Time required for response to traces depends on level of priority for each case. PRDA-VS have proven its ability to respond rapidly when circumstances warrant. Efforts are more focused on completeness and attention to detail than on speed.

Efforts are being made to establish baseline data on livestock transported into and out of state to characterize numbers of shipments, number of animals, use of ICVI and type of identification. This basic information is needed to address planning for establishing a mandatory requirement for animal identification and documentation of the state’s level of traceability. This information is needed to plan for tag acquisition and distribution after official identification is required to move animal’s interstate.

Under cooperative agreements, PRDA-VS will work with the USDA Area Office to establish a distribution methodology and record capture system for official NUES “bright” tags.

Participation by producers can be expected to increase significantly if identification for interstate movement is required. Distribution of these tags at no cost to the producer will require additional resources for tag distribution and recordkeeping.

Tracing will be initially from point of origin and point of premises, slaughter, then later each animal movement by recording and capturing animal and premises data.

Objective 3 –Optimize the Acquisition and Search Capability of Animal Disease Traceability Data

The PRDA-VS will initiate efforts to enhance electronic accessibility of traceability data associated with program disease work. PRDA-VS will support standardized traceability data entry of animal movement data into electronically searchable format. PRDA-VS hope to work with USDA to develop an automated system which specifically addresses animal disease traceability.

Objective 4 –Implement an Outreach Plan to include accredited Veterinarians, Livestock Producers and producers of all sectors.

Outreach will be needed to explain USDA plans for rule implementation and state actions to help producers meet traceability requirements.

Efforts will focus on outreach to make producers aware of the major initiative to enhance traceability. Emphasis will be placed on continuing to maintain a premises registration database. Additional emphasis will be placed on planning to enable livestock producers and the state to meet traceability requirements for implementation of a federal regulation. State personnel will explain the shift to a state-tribal based system and the need for development of a plan to enhance traceability and potentially respond to new regulations that are enacted.

Specific outreach will continue to private veterinarians serving the cattle sector. Outreach to and through USDA Accredited Veterinarians will foster understanding of traceability by veterinarians and equip them to be animal identification resources for their customers. Program managers will be involved in training practitioners and their technicians in utilization of the VSPS.

General outreach will continue to the extent possible with allowances for reductions in state (PRDA-VS) budgets and Federal Cooperative Agreement budgets. Priorities will include maintenance of premises

identification infrastructure, premises renewals and providing timely and accurate information to all stakeholders.

Outreach will include initiatives to encourage producers who have previously registered their premises to update their premises records as needed. PRDA-VS will continue to engage producers and industry stakeholders to seek feedback for improving traceability.