

# Table of Contents

<b>1 Executive Summary .....</b>	<b>1</b>
<b>2 Background: Traceability and Key Resources.....</b>	<b>4</b>
Introduction	
The Role of Traceability in Disease Control Programs	
The Current Challenge	
Resources	
<b>3 Strategies to Advance Traceability .....</b>	<b>10</b>
Increasing Participation in the NAIS	
Strategy 1: Prioritize NAIS Implementation by Species/Sector	
Strategy 2: Harmonize Animal ID Programs	
Strategy 3: Converge NAIS Data Standards in Disease Programs and Regulations	
Strategy 4: Integrate Automated Data Capture Technology with Disease Programs	
Strategy 5: Partner with States, Tribes and Territories	
Strategy 6: Collaborate with Industry	
Strategy 7: Advance Identification Technologies	
<b>4 NAIS Budget Summaries and Plans.....</b>	<b>32</b>
Summary of Funds and Obligations	
Utilization of Funds by Budget Category	
FY07 Funds and Investments	
2008 Budget Plan	
Summary of Accomplishments	
<b>5 Timelines and Outcomes.....</b>	<b>41</b>
Summary of Strategies and Actions	
Key Outcomes	
<b>6 Appendices.....</b>	<b>46</b>
Appendix 1: VS Animal Health Information Systems	
Appendix 2: Case Studies – Recent Animal Disease Investigations	
Appendix 3: NAIS Pilot Projects and Field Trials	
Appendix 4: Acronyms	

## Executive Summary

The ability to successfully trace an animal disease to its source is critical to the health and economic well-being of commercial livestock and poultry industries in the United States. Animal health officials require accurate and complete information to respond effectively to animal disease events and to successfully conduct disease surveillance programs. Rapid response minimizes the potential spread of contagious diseases, and lessens the detrimental effects of disease events. Our emergency response capabilities can be improved through greater standardization of the data elements needed for animal disease control programs, as well as increased premises registration and animal identification.

### Key Objectives

This report identifies significant opportunities and strategies for advancing the U.S. animal disease traceability infrastructure. Improvements will result from strategies that support the:

- Utilization of national standards in disease programs to increase the compatibility of information systems,
- Incorporation of national standards in producer-industry programs, and;
- Integration of technologies to improve efficiency and accuracy of data collection.

USDA defines retrieval of traceback data within a 48-hour window as optimal for efficient, effective disease containment. Within this timeframe, animal health officials must have the data required to trace a disease back to its source and limit potential harm to animal agriculture, such as loss of producer income. The sooner reliable data is available, the sooner affected animals can be located, appropriate response measures can be established, and disease spread can be halted.

The National Animal Identification System (NAIS), developed in partnership with State animal health authorities, the animal agriculture production industry, and USDA, provides the common data standards required to close traceability gaps. Although the optimal 48-hour window remains the vision of NAIS and its long-term goal, the industry can make immediate progress towards meeting the needs of animal health officials, in addition to maintaining the confidence of consumers and trading partners.

The strategies discussed in this report support progress to the long-term goal of 48-hour traceback with continued focus on increasing the number of premises registered and now, initiating efforts to increase the number of animals identified to the premises of origin. USDA is prioritizing their efforts by species/sectors where increase in traceability infrastructure can have the greatest return on investment. Traceability objectives, action timelines and participation benchmarks are provided for the priority species.

Collaboration between USDA, State animal health authorities, and the animal agriculture production industry remains the catalyst for continued traceability progress. Our collaborators will be crucial to the success of the actions identified in this plan, as well as future strategies—including more detailed actions related to the collection of data on animal movements—as we progress toward our long-term goal. Industry organizations and the NAIS Species Working Groups and Subcommittee will take an active role in the review of these strategies and provide feedback and additional recommendations as we move forward to advance animal disease traceability.

This report defines the following strategies to advance animal disease traceability in the United States:

#### **Strategy 1: Prioritize Species/Sectors**

The establishment of priorities among species and sectors within species industries will ensure resources are applied where improvement in traceability is needed the most. This business plan first categorizes species based on existing tracing capabilities and the need for improvement. Tier 1 species include the primary commercial food animal industries – cattle, poultry (chickens and turkeys), swine, sheep, and goats. The competition horse industry is included as Tier 1 due in part to frequent animal movement. All other livestock and poultry are Tier 2 and will have traceability strategies defined at a later date. Additionally, sectors within the Tier 1 species have been prioritized to direct additional emphasis; for example, the beef and dairy breeding herds are the highest priorities within the cattle sector.

#### **Strategy 2: Harmonize Animal Identification Systems**

The need for standardized animal identification in government and industry programs is more evident now than ever before. Some disease control programs that are winding down, brucellosis for example, required a high level of identification and traceability. In fact, there are numerous disease control programs that require and/or benefit from official animal identification. The standardization of animal identification and data collection in these existing systems presents a clear opportunity to enhance traceability. In the private sector, producers are seeking improved and flexible identification methods, and compatible processes and data standards that may be used for multiple purposes. The harmonization of animal identification systems will undoubtedly result in more cost-effective options benefiting producers while achieving increased animal disease traceability for the entire industry.

#### **Strategy 3: Converge NAIS Data Standards in Disease Programs and Regulations**

USDA will take steps to adopt and apply NAIS data standards in existing disease programs, including international/interstate commerce regulations. For example, establishing national data standards that identify premises importing and exporting livestock, locations participating in official disease control programs, and origin and destination premises listed on Interstate Certificates of Veterinary Inspection (ICVI) will greatly enhance animal disease tracing and emergency response capabilities.

#### **Strategy 4: Integrate Automated Data Capture Technologies with Disease Programs**

USDA will take steps to integrate electronic data capture and reporting technologies into existing disease programs. By using NAIS-compliant radio frequency identification (RFID) devices and integrating handheld computers/readers to replace paper-based forms, animal health officials will be able to electronically record and submit essential data to the USDA Animal Health and Surveillance Monitoring database and other appropriate animal health databases. The electronic collection of data will increase volume and quality, minimize data errors, and speed data entry into a searchable database.

#### **Strategy 5: Partner with States, Tribes and Territories**

State animal health authorities play a critical role in advancing national animal disease traceability. Working in close partnership with State, Tribal and Territorial officials, USDA will continue to support the advancement of each State's disease traceability infrastructure. Each State Animal Health Officials will administer and manage localized plans reflecting the animal health priorities in individual regions.

### **Strategy 6: Collaborate with Industry**

Achieving traceability objectives requires a partnership between the production sector and animal health officials. Producer organizations, representing member interests, can accelerate the adoption of practices that advance traceability. USDA has entered into cooperative agreements with non-profit industry organizations to promote premises registration within various species groups. Collaboration with USDA accredited veterinarians will enable the delivery of accurate information to clients as well as enhancing the adoption of NAIS data standards in everyday production management systems and disease program activities at the producer level. Additional partnership efforts with industry alliances, service providers, auction markets, feedlots, harvesting facilities, and other industry sectors are a priority for USDA.

### **Strategy 7: Advance Identification Technologies**

Continued advancements in traceability require practical, affordable technology solutions that improve efficiency and accuracy of animal ID data collection. USDA will collaborate with stakeholders to establish performance standards for ID devices and evaluate emerging technologies with emphasis on systems that can operate at the "speed of commerce."

### **Outcomes and Timelines**

Significant progress will result from the planned strategies and actions detailed in this business plan. As noted previously, because the need to advance traceability differs among the various species and sectors, it is important for USDA to establish clear priorities as we proceed with NAIS. Targeted timelines for the key strategies and actions are summarized on Section 5 to guide the implementation of these priorities.

At this time, the cattle industry has the greatest need to advance traceability, due, in part, to its size and diversification. These challenges require more resources and time to achieve optimum tracing capability for the cattle industry. Success of the plan is then determined by the level of traceability improvement, and for the cattle industry is defined as achieving 70 percent of the cattle breeding herd identified to their birth premises by January 2009. Other species traceability objectives are defined in this section.

### **Conclusion**

Opportunities to advance traceability will continue to evolve as these strategies are successfully implemented. Additionally, industries will face new animal health demands as the animal agriculture industry changes. Therefore, the strategies will continue to be evaluated and adjusted to ensure that we continue to advance towards the optimum goal of a 48-hour traceback as timely and efficiently as possible.