

Master of Public Health
Integrative Learning Experience Report

***APPLIED ANIMAL DISEASE TRACEABILITY AND SECURE FOOD SUPPLY
PREPAREDNESS WITHIN THE KANSAS DEPARTMENT OF AGRICULTURE***
by

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MASTER OF PUBLIC HEALTH

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Abstract

This Applied Practical Experience (APE) examined foreign animal disease (FAD) preparedness, animal disease traceability (ADT) systems, and Secure Food Supply (SFS) initiatives within the Kansas Department of Agriculture (KDA) Division of Animal Health in Manhattan, Kansas. The purpose of the project was to support FAD preparedness, ADT implementation, and continuity of business planning through the development of practical preparedness tools and operational resources. The project addressed the broader veterinary public health issue of protecting animal agriculture, food security, and agricultural trade from the potential economic and societal impacts of highly contagious transboundary diseases such as foot-and-mouth disease (FMD). As livestock production systems continue to become more interconnected, rapid detection, effective surveillance, coordinated communication, and timely movement controls become essential components of disease preparedness and food supply protection.

Activities conducted with the KDA Division of Animal Health involved direct observation, document review, stakeholder engagement, and the development of operational preparedness resources. Methods included participating in state and federal meetings, visiting livestock markets, evaluating regulatory frameworks, and synthesizing technical information into operational guidance. Several practical deliverables were developed, including the Kansas Priority Tracing (KPT) Project Overview to evaluate veterinarian recordkeeping and trace performance under simulated outbreak conditions, as well as the KDA BackTag User Guide to support standardized livestock market reporting and electronic data submission. The Kansas Secure Food Supply Master Spreadsheet was also redeveloped and maintained to organize participating operation metrics, and a SFS Assessment Trend Analysis was conducted to summarize recurring operational challenges reported by enrolled operations. These projects were supported by coursework completed in the Master of Public Health program at Kansas State University.

The APE demonstrated that while Kansas animal agriculture maintains strong foundational preparedness, operational gaps remain regarding recordkeeping consistency, database interoperability, and reporting procedures. The KPT project established a standardized framework for evaluating trace-back and trace-forward performance, while the BackTag user guide addresses communication barriers and reporting consistency among accredited

veterinarians and KDA staff. Furthermore, the SFS trend analysis revealed that many continuity-of-business challenges are operational rather than technical, emphasizing the need for flexible, real-world preparedness planning.

The significance of this work lies in its contribution to strengthening ADT systems, improving communication pathways, and supporting coordination under frameworks established by the United States Department of Agriculture Animal and Plant Health Inspection Service (USDA APHIS) and the World Organization for Animal Health (WOAH). Recommendations include expanding electronic identification (EID) systems, conducting routine trace performance exercises, standardizing electronic reporting, and continuing to update preparedness resources based on future exercise evaluations. These findings highlight the importance of systems thinking within veterinary public health and demonstrate how practical preparedness tools directly support disease containment, continuity of commerce, and the protection of the food supply. Ultimately, this experience reinforced the critical role of surveillance and interdisciplinary collaboration in safeguarding animal agriculture and prepared the MPH candidate to contribute effectively to animal health preparedness systems.

Subject Keywords: Animal disease traceability, foreign animal disease preparedness, secure food supply, veterinary public health, foot-and-mouth disease, disease surveillance, systems thinking

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Chapter 1 - Literature Review

1.1 Background: Foreign Animal Diseases and Public Health

Foreign animal diseases (FADs), also known as transboundary animal diseases, are infectious diseases that can potentially affect animal health, agricultural production, food security, and economic stability. Although these diseases primarily affect livestock populations, their consequences extend far beyond animal agriculture. Outbreaks can disrupt domestic and international trade, interrupt food supply chains, strain emergency response systems, and negatively affect the livelihoods of producers and rural communities (Knight-Jones & Rushton, 2013). As a result, preparedness for FAD outbreaks has become a multidisciplinary public health concern involving animal health officials, public health agencies, emergency management systems, agricultural stakeholders, and international regulatory organizations.

Veterinary public health recognizes that animal health and human well-being are closely interconnected. The World Organization for Animal Health (WOAH) defines veterinary public health as the contribution of veterinary science to the physical, mental, and social well-being of humans through the understanding and application of veterinary medicine (WOAH, 2026, Chapter 6.1). Though many FADs do not directly threaten human health, their effects on food production systems, agricultural economies, and international commerce can have widespread public health implications. Protecting animal health helps support food security, economic resilience, and confidence in agricultural systems.

One of the most economically devastating FADs is foot-and-mouth disease (FMD), a highly contagious viral disease affecting cloven-hooved animals including cattle, swine, sheep, and goats. (Knight-Jones & Rushton, 2013). Although FMD is not generally considered a human health concern, it can cause devastating economic and societal consequences because of the speed at which it spreads and the extensive control measures required to contain an outbreak. Historical outbreaks have demonstrated that the greatest impact rarely occurs from animal mortality alone, but from movement restrictions, depopulation efforts, supply chain disruptions, and the temporary loss of domestic and international trade markets (Ferguson et al., 2001; Gibbens et al., 2001; Kim et al., 2017).

The importance of FAD preparedness has increased as livestock production systems continue to become more interconnected. Modern animal agriculture depends on the routine

movement of animals, animal products, feed, personnel, and transportation networks across local, state, national, and international boundaries. Though these systems improve production efficiency and market access, they also increase the risk of disease dissemination if an outbreak occurs. Because of this, rapid detection, effective surveillance, coordinated communication, and timely movement controls all become essential components of FAD preparedness (Bates et al., 2003; Kao et al., 2006; Kim et al., 2017).

Preparedness for FADs extends beyond emergency response to encompass systems, relationships, and resources developed before an outbreak occurs, all of which allow animal health officials to respond efficiently while minimizing unnecessary disruptions to modern animal agriculture. These efforts include disease surveillance systems, animal disease traceability (ADT), emergency response planning, enhanced biosecurity, and collaboration among producers, veterinarians, state animal health officials (SAHOs), and other industry stakeholders. These efforts help create confidence that disease events can be rapidly identified, investigated, and managed while supporting continuity of business whenever possible.

International organizations also play an important role in FAD preparedness. The World Organization for Animal Health establishes international standards related to disease surveillance, disease notification, veterinary services, and animal health systems. At the same time, the World Trade Organization (WTO), through the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement), provides the framework for science-based measures that protect animal and public health while minimizing unnecessary trade barriers (Kastner & Powell, 2002). Together, these organizations emphasize that effective surveillance, traceability, and preparedness systems are all critical for disease control and the maintenance of domestic and international agricultural trade. FAD preparedness is therefore no longer just an agricultural issue, but a broader public health, food security, and emergency management concern.

1.2 Motivation: Achieving Biosecurity Through Animal Disease Traceability

ADT systems are critical to modern animal health preparedness and disease response infrastructure. Traceability serves as the foundation for effective outbreak response because it allows animal health officials to quickly identify where at-risk animals originated, where they moved, and which operations may have been exposed during an outbreak investigation.

Historically, the U.S. has adopted multiple approaches to animal identification and traceability. Today, the ADT framework is built around official animal identification, premises identification, and movement documentation, which together provide the information needed to rapidly reconstruct animal movements during a disease investigation (USDA APHIS, 2013). Recent modernization efforts have focused on electronic identification (EID) systems that use RFID technology to improve traceability, trace-back, and trace-forward efficiency. Electronic identification has improved the speed and accuracy with which animal movement information can be retrieved, allowing SAHOs to respond more efficiently during disease investigations. However, official identification alone is not sufficient. Effective traceability also depends on complete movement records, current premises information, and timely communication and data sharing among producers, veterinarians, and regulatory officials (Mardones et al., 2012; USDA APHIS, 2013).

Rapid traceability systems improve outbreak response efficiency and help reduce economic losses during FAD events. Rapid response becomes especially important during highly contagious outbreaks where even small delays in tracing animal movements can significantly increase disease spread (Mardones et al., 2012). During an outbreak, SAHOs must not only identify infected animals, but also determine where those animals originated, where they have moved, and which additional animals or premises may have been exposed. The ability to rapidly retrieve this information supports surveillance, epidemiologic investigations, movement control decisions, and more targeted disease response efforts.

ADT also plays a major role in continuity of business planning and Secure Food Supply (SFS) initiatives. Rapid access to movement records, premises information, and surveillance data is essential for movement permitting and managed movement strategies during outbreaks, ultimately enabling the continued safe movement of the food supply (USDA APHIS, 2015). Rather than viewing ADT solely as a regulatory requirement, it should be viewed as a preparedness system that provides the information necessary to support disease control while minimizing unnecessary disruptions to animal agriculture and commerce. The relationship between traceability, continuity of business, and SFS planning became a central theme throughout the Applied Practical Experience and is discussed in later chapters of this report.

Despite the recognized importance of traceability systems, several operational challenges continue to hamper implementation efforts, including producer concerns, inconsistent

recordkeeping, interoperability limitations, and workforce. Technology alone is not enough if communication systems, reporting structures, and working relationships between agencies and industry partners are not functioning effectively. Continued collaboration among producers, veterinarians, SAHOs, and USDA APHIS remains essential to maintaining an effective traceability system that supports rapid disease response and protects the U.S. food system.

1.3 Foreign Animal Disease Preparedness and Response

Preparedness for FAD outbreaks requires substantial planning, surveillance, communication, and coordination across multiple sectors and jurisdictions. Effective preparedness systems rely on agencies and stakeholders working together quickly and efficiently during emergencies. WOAHP suggests that official control programs should include surveillance systems, emergency preparedness plans, movement controls, communication systems, reporting structures, biosecurity measures, and collaboration among authorities and stakeholders (WOAHP, 2026, Chapter 4.19). Preparedness systems depend heavily on clear communication and reporting structures, especially during fast-moving disease events, where delays in information sharing can affect response efforts. WOAHP reporting standards further emphasize the importance of rapidly communicating information regarding emerging diseases to support coordinated outbreak response efforts (WOAHP, 2026, Chapter 1.1).

Simulation exercises and traceability performance exercises are often used to evaluate response capacity and identify preparedness gaps before an actual outbreak occurs (Bates et al., 2003). These exercises provide an opportunity to assess existing response plans, communication pathways, and traceability systems under simulated outbreak conditions. Identifying weaknesses before an emergency occurs allows response plans to be refined and improves overall preparedness for future disease events (Bates et al., 2003).

Movement restrictions and enhanced biosecurity are also essential components of FAD response because they help reduce disease spread while epidemiologic investigations are underway. However, effective preparedness extends beyond disease control alone. Emergency response efforts must also consider how to maintain continuity of business operations with no evidence of disease while continuing to protect animal health and limit disease transmission. Preparedness therefore requires balancing disease control measures with the ability to safely maintain portions of the livestock industry and food supply whenever possible. Preparedness also

depends on maintaining strong relationships. Establishing these relationships in advance improves communication, facilitates information sharing, and allows response activities to be implemented more effectively during an emergency.

While each project and program completed during this APE serves a different purpose, they collectively strengthen the state's ability to rapidly identify disease, coordinate response efforts, and support continuity of business during FAD outbreaks.

1.4 Policy Opportunities: Federal and State Coordination in Animal Health Preparedness

Preparedness and response for FADs in the U.S. rely on extensive coordination between federal and state agencies. This partnership is important because livestock industries and animal movement systems extend across jurisdictional boundaries. During disease outbreaks, agencies must work together to support disease surveillance, movement controls, outbreak investigations, and continuity of business efforts.

USDA Animal and Plant Health Inspection Service (APHIS) Veterinary Services provide leadership for FAD preparedness, as well as guardrails and frameworks for FAD response activities, while SAHOs oversee and manage FAD activities within their respective states. Area Veterinarians in Charge (AVICs), USDA APHIS Veterinary Services officials assigned to represent each state or region, serve as the primary liaison between USDA APHIS and state animal health agencies, helping to coordinate surveillance, disease investigations, emergency response activities, and implementation of federal animal health programs.

Figure 1 illustrates the relationship between USDA APHIS, the AVIC, and the Kansas Department of Agriculture during a FAD outbreak. While USDA APHIS provides national leadership and establishes the federal response framework and guardrails, the AVIC facilitates coordination between the federal and state levels, and the Kansas Department of Agriculture (KDA) implements disease response activities within Kansas. Together, these roles support disease containment, continuity of business, and the restoration of market access both locally and internationally. Effective FAD preparedness depends on clearly defined federal and state responsibilities, supported by continuous communication and coordination. Differences in resources, communication systems, staffing, and operational priorities can create challenges,

highlighting the importance of coordinated systems and clearly defined communication pathways to ensure an efficient and effective response.

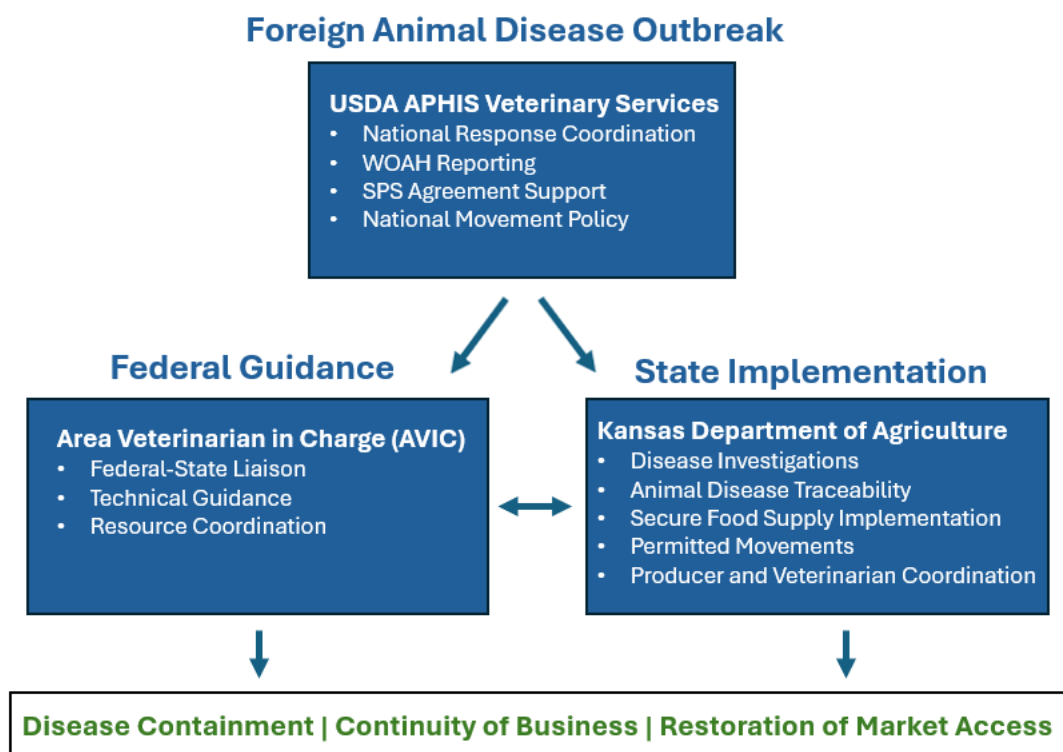


Figure 1: State and Federal FAD Response Coordination

Preparedness also depends on collaboration beyond government agencies. Accredited veterinarians, producers, livestock markets, diagnostic laboratories, and industry organizations all contribute information that supports surveillance and traceability. Maintaining these relationships before an outbreak occurs strengthens communication when an emergency arises. This collaborative approach reflects the systems-based nature of FAD preparedness. No single agency is responsible for every aspect of disease response. Instead, preparedness relies on coordinated communication, clearly defined responsibilities, and the timely exchange of information between federal, state, and industry partners. These partnerships ultimately strengthen surveillance, ADT, and continuity of business during outbreaks.

1.5 Innovative Solutions: Secure Food Supply and Continuity of Business

SFS planning represents an important component of modern FAD preparedness systems. Past disease outbreaks have demonstrated that broad movement restrictions and depopulation efforts can create major disruptions within livestock production systems and food supply chains. SFS planning aims to reduce unnecessary disruptions by allowing low-risk operations to continue functioning under enhanced surveillance and biosecurity measures, using science-based, risk-based movement management strategies. Rather than replacing disease control measures, SFS plans are intended to complement them by guiding the maintenance of business continuity while minimizing the risk of disease spread.

ADT systems play a major role in continuity of business planning because movement permitting and managed movement strategies depend heavily on accurate identification of livestock and rapid access to movement records during outbreaks (Mardones et al., 2012). SFS plans aim to address public health and food security concerns by maintaining supply chain stability while minimizing disease spread.

Although SFS planning was developed to support continuity of business within the U.S., it also contributes to broader agricultural resilience. Maintaining the movement of animals and animal products from operations with no evidence of disease helps reduce unnecessary production losses, supports animal welfare, limits supply chain disruptions, and reduces economic impacts on producers, processors, and allied industries (Knight-Jones & Rushton, 2013). These efforts do not eliminate the international trade restrictions associated with an FMD outbreak; however, they help maintain portions of the domestic food supply chain while eradication and recovery efforts are underway.

The effectiveness of SFS planning depends on several interconnected preparedness systems. ADT provides information regarding animal IDs and movement, while current premises information identifies the operations involved and supports epidemiologic investigations. Together with surveillance, enhanced biosecurity, and coordinated permitted decisions, these systems allow SAHOs to make decisions regarding managed movement during an outbreak. This relationship forms the foundation for many of the projects completed during this APE and is discussed further in Chapter 3.

1.6 Surveillance, Traceability, and Systems Thinking

Animal disease preparedness systems are complex and interconnected, involving multiple stakeholders, technologies, communication pathways, regulatory structures, and operational processes. Animal health surveillance systems include several components such as laboratories, veterinarians, producers, livestock markets, transportation systems, movement databases, diagnostic testing, and reporting systems. WOAHA indicates that surveillance systems should support early detection, disease monitoring, risk analysis, decision-making, and transparency (WOAHA, 2026, Chapter 1.4). Traceability systems bridge interconnected systems to surveillance goals, as they require the same cooperation among the groups involved. Rather than functioning as independent programs, surveillance and traceability systems complement one another by providing the information needed to detect disease, evaluate potential disease spread, and support timely response decisions.

Livestock Markets and collection points serve as important dissemination points during outbreaks because of the large number of animal movements and contacts involved. Auctions also provide easy access to implement ADT systems. Veterinarians can apply official EID tags to cattle passing through the market and provide movement data via Certificates of Veterinary Inspection (CVIs) and backtag reports that meet state animal health requirements. These reports connect producer contact information to individual animal movements and often include health and vaccine status. During a disease outbreak, state animal health officials can use market data to conduct traceback and trace-forward investigations to address and eliminate threats to disease spread.

Information collected through routine animal movements, official identification, veterinary inspections, livestock markets, and premises information can later be integrated during an outbreak to support epidemiologic investigations and response activities. Strengthening any one component of the system ultimately improves the effectiveness of the entire preparedness network. This example of multidisciplinary coordination reflects how interconnected modern disease preparedness systems really are and how dependent they are on communication and cooperation between multiple groups and agencies. This systems-based approach reinforces the importance of ADT, SFS planning, and coordinated surveillance efforts as complementary components of FAD preparedness rather than independent programs.

1.7 Purpose of the Experiential Learning Projects and Analytical Questions

The purpose of this project was to support FAD preparedness, ADT, and SFS planning efforts within the KDA Division of Animal Health. Project activities focused on developing practical preparedness tools and operational resources intended to support outbreak response efficiency, SFS planning, traceability evaluation, and stakeholder communication.

Animal agriculture represents a critical component of both the Kansas and U.S. economies, contributing significantly to food production, agricultural trade, and rural economic stability. Because FAD outbreaks have the potential to disrupt livestock movement, domestic commerce, and international trade, preparedness activities that strengthen surveillance, traceability, and continuity of business are essential to protecting the livestock industry and maintaining confidence in the food supply (Fisher, 1980; Knight-Jones & Rushton, 2013).

The project has reinforced the importance of interdisciplinary collaboration, systems thinking, surveillance infrastructure, and stakeholder coordination within public health preparedness systems for animal agriculture and FAD response. The projects completed during this APE were designed to strengthen existing preparedness systems by improving traceability resources, supporting continuity of business planning, and enhancing the availability of information used by producers, veterinarians, and animal health officials during routine operations and disease emergencies.

Though significant progress has been made in disease preparedness and traceability infrastructure, studies consistently identify operational gaps and implementation challenges that affect preparedness capacity.

Commonly identified challenges include inconsistent recordkeeping systems, limited interoperability between databases, workforce shortages, delayed reporting, and communication barriers between agencies and stakeholders. Producer participation and stakeholder trust also remain important considerations. Concerns regarding privacy, cost, data ownership, and operational burden have affected participation in traceability initiatives. Preparedness systems must continue improving communication, education, surveillance infrastructure, and stakeholder collaboration to strengthen outbreak response capacity for ADT systems. Addressing these challenges before an outbreak occurs improves the ability of animal health officials to rapidly conduct disease investigations, implement movement controls, and support continuity of business during a FAD response. Continued investment in traceability infrastructure, stakeholder

engagement, and preparedness planning will remain essential as livestock production systems continue to evolve.

Combining the above issues, challenges, and gaps, this project sought to explore three analytical questions, namely:

1. What are the principal operational gaps in current FAD preparedness and ADT systems?
2. What opportunities exist to strengthen FAD preparedness through improvements in ADT surveillance, and continuity of business planning?
3. How can operational preparedness resources strengthen FAD preparedness and support an effective response?

1.8 Location

The Applied Practical Experience associated with this project was completed with the KDA Division of Animal Health in Manhattan, Kansas. The Division of Animal Health works collaboratively with USDA APHIS, Veterinary Services, producers, veterinarians, livestock markets, and industry stakeholders to support disease prevention, outbreak preparedness, continuity of business planning, traceability efforts, and emergency response coordination throughout the state.

As the state's animal health authority, KDA plays an important role in implementing ADT programs, maintaining preparedness resources, supporting SFS planning, coordinating disease surveillance activities, and assisting with emergency response efforts. This collaborative environment provided the opportunity to understand better how state and federal animal health programs work together to strengthen FAD preparedness while supporting Kansas livestock producers and the broader agricultural industry.

Chapter 2 - Learning Objectives, Project Description, and Methods Adopted

2.1 Objectives

Several professional objectives governed the investigator's work on this project. These include the following:

- **Objective 1** – Strengthen understanding of ADT systems and their role in FAD preparedness.
- **Objective 2** – Apply systems-thinking concepts to better understand the relationships between surveillance systems, movement controls, traceability infrastructure, and continuity of business planning.
- **Objective 3** – Develop practical preparedness tools intended to support outbreak response efficiency and communication.
- **Objective 4** – Increase understanding of federal and state coordination within animal health preparedness systems.
- **Objective 5** – Strengthen skills related to epidemiologic surveillance, preparedness planning, and operational public health communication.
- **Objective 6** – Evaluate preparedness challenges and opportunities associated with traceability systems and SFS implementation.

2.2 Project Description

The Applied Practical Experience (APE) with the Kansas Department of Agriculture (KDA) Division of Animal Health began in May of 2025 under the supervision of Dr. Sara McReynolds, Garrett Girk, and Kelly Halbleib. Before the experience began, meetings and discussions were conducted regarding the project goals and potential areas where additional preparedness tools and resources could support ongoing efforts related to animal disease traceability and FAD preparedness.

Throughout the experience, the student participated in projects related to ADT, SFS planning, and FAD response systems. Major activities included developing preparedness

resources to support traceability evaluations, outbreak response efficiency, data collection, and organizational preparedness efforts within Kansas animal agriculture systems.

A major focus of the experience involved developing an ADT trace performance measures guide, entitled Kansas Priority Tracing (KPT), to support traceability exercises and preparedness evaluations within Kansas. Additional activities included developing SFS organizational resources, preparedness tracking systems, and educational or operational materials related to traceback investigations and animal movement systems, such as the KDA BackTag Program.

2.3 Project Methods

To pursue this project, several methodological approaches were adopted. These included the following:

1. Direct Observation

The investigator participated in and observed routine animal health preparedness activities through state and federal meetings, livestock market visits, producer meetings, trainings, and daily operational activities within the KDA Division of Animal Health. These experiences provided opportunities to observe surveillance systems, disease investigations, movement controls, ADT implementation, SFS planning, and communication among state, federal, and industry partners.

2. Document and Resource Review

Federal guidance documents, Kansas animal health statutes and regulations, SFS resources, ADT materials, and standard operating procedures (SOPs) were reviewed to understand better current preparedness strategies, operational processes, and existing response resources.

3. Stakeholder Engagement

The student collaborated with KDA personnel, accredited veterinarians, livestock markets, producers, and other agricultural stakeholders through meetings and project activities to better understand operational needs, preparedness priorities, and interagency coordination efforts.

4. Development of Operational Preparedness Resources

Information obtained through direct observation, document review, and stakeholder engagement was applied to develop operational preparedness resources designed to strengthen ADT, continuity of business planning, and FAD preparedness.

Chapter 3 - Products and Results

3.1 Findings by analytical question

Throughout the Applied Practice Experience, the investigator attended state and federal meetings related to ADT, SFS planning, preparedness coordination, and animal health systems. These experiences provided important opportunities to observe how state agencies, federal agencies, industry stakeholders, and veterinarians collaborate to support preparedness and outbreak response efforts. Across these meetings and activities, several recurring operational challenges, opportunities for improvement, and preparedness priorities emerged that informed the analytical questions explored in this project and assisted in the development of the preparedness resources described later in this chapter. Activities included:

- USDA ADT conference calls, which highlighted challenges related to inconsistent animal identification, data sharing, and traceability records. Discussions emphasized opportunities to improve electronic identification, standardized trace performance measures, and recordkeeping consistency.
- Meetings regarding SFS planning, identified barriers to producer participation, preparedness, and permitted movement planning.
- Through livestock market visits supporting KDA BackTag implementation, several challenges were demonstrated, including maintaining accurate animal identification and movement records. Discussions emphasized consistent BackTag use and standardized documentation to improve traceability.
- Meetings regarding proposed revisions to Kansas animal health statutes and regulations illustrated challenges related to regulatory implementation and identified opportunities to clarify and modernize animal health policies.
- KDA joint USDA meetings highlighted the importance of communication and coordination among state and federal partners.

These experiences reinforced how complex and interconnected animal health preparedness systems truly are, as discussions frequently involved topics such as EIDs,

surveillance systems, emerging animal diseases and pests, traceback capabilities, and communication improvements.

One of the most interesting aspects of these meetings was observing how policy, preparedness, and operational systems all interact. Discussions regarding the modification and clarification of Kansas animal health statutes highlighted how legal and regulatory systems may directly affect outbreak response capabilities, traceability infrastructure, and continuity of business efforts. These experiences highlighted the importance of communication and collaboration between SAHOs, USDA APHIS, producers, and other agricultural stakeholders.

Throughout these meetings, the investigator observed how FAD preparedness involved coordination among multiple agencies and stakeholders. These meetings provided additional background for the projects completed during this APE and demonstrated how state and federal agencies coordinate preparedness activities before and during FAD outbreaks.

This ILE proposed three analytical questions (see p. 13) regarding operational gaps, opportunities for programmatic improvements, and resources for preparedness. With regard to the first analytical question, the investigator was most impressed with the opportunity to use relatively simple “fixes” (e.g. not providing paper CVI books anymore) to increase operational efficiency. With regard to the second analytical question, ADT recordkeeping can be strengthened through the KPT Project. With regard to the third analytical question, the KPT Project described below comprised the most innovative way to firm up Kansas traceability systems.

3.2 Applied Practical Experience Products

During the Applied Practice Experience, multiple preparedness and operational resources were developed to support ADT, SFS planning, and outbreak response preparedness within Kansas animal agriculture systems. Each product addresses a different operational component of preparedness and is included in Appendix 3, with the exception of product 3a, which contains proprietary information.

Product 1 – Kansas Priority Tracing Project Overview

One of the primary projects completed during this experience was developing the KPT project guide. The TPM guide was developed to strengthen ADT preparedness by evaluating trace-back and trace-forward performance before an actual FAD outbreak occurs. Modeled after the USDA APHIS National Priority Tracing program, the project establishes a standardized approach for evaluating traceability performance, identifying operational gaps, and promoting consistent traceability practices throughout Kansas. The program is designed to evaluate veterinarian-maintained official identification records through simulated trace exercises, providing accredited veterinarians across Kansas with opportunities to assess and improve their recordkeeping practices. Over time, the long-term goal is to strengthen statewide ADT performance through continuous evaluation, education, and improved recordkeeping, ultimately strengthening Kansas's preparedness for a FAD outbreak.

The guide was developed to provide a view of the project, establish standardized terminology, describe trace-back and trace-forward performance measures, and outline procedures for future implementation. The document also identifies project objectives, reporting expectations, and workflow to promote consistency among personnel participating in traceability performance exercises. The guide serves as an internal operational resource that supports future KPT activities and provides standardized guidance for evaluating traceability performance within Kansas. By evaluating traceability systems under simulated disease investigation scenarios, the project supports continuous improvement of disease preparedness, outbreak response capabilities, and continuity of business.

Product 2 – KDA BackTag User Guide

A KDA BackTag User Guide was developed to provide veterinarians, livestock market personnel, and KDA field staff with standardized guidance regarding participation in the KDA BackTag Program. The guide serves as a how-to guide while also describing program objectives, reporting procedures, user responsibilities, troubleshooting recommendations, and frequently asked questions for the reporting system. The BackTag program serves as an ADT resource by documenting temporary backtags applied to cattle and bison at livestock markets and associating them with official animal identification when available or applied. The reporting system captures official identification numbers, backtag information, and additional animal data, including sex, age, pregnancy status, seller information, and the date of the sale that animal was accounted for.

The electronic reporting system allows accredited veterinarians to rapidly submit standardized data directly to KDA, improving interoperability between livestock markets, veterinarians, and SAHOs while reducing manual data entry and minimizing transcription errors. Collecting standardized identification and movement records improves traceability by strengthening the ability to rapidly locate and trace animals during a disease investigation, supporting more efficient disease surveillance. Educational graphics and step-by-step instructions were incorporated to improve usability and encourage consistent reporting practices. The completed guide serves as an educational and operational resource intended to improve understanding of the program and promote standardized livestock market reporting.

Product 3a – Kansas Secure Food Supply Master Spreadsheet (proprietary product)

Another major project involved development and maintenance of the Kansas SFS Master Spreadsheet. The spreadsheet organizes information for enrolled operations participating in the Kansas SFS program, including premises identification numbers, production type, operation contacts, designated biosecurity managers, veterinarian contact information, enrollment status, and annual preparedness assessment records. Biosecurity plans and operation maps were also updated and organized to improve accessibility for future preparedness activities. This resource provides a centralized organizational tool that supports the Kansas SFS program administration.

Product 3b – Secure Food Supply Assessment Trend Analysis (public product)

Annual preparedness assessments submitted by SFS participants were reviewed and summarized to identify recurring preparedness concerns and implementation challenges. Assessment responses were analyzed to evaluate trends related to staffing, communication, movement logistics, biosecurity implementation, and continuity of business planning. The results were summarized graphically to help KDA personnel identify common preparedness needs and opportunities for future program improvement. This analysis provides an additional planning resource that can be used to support future educational efforts and continued enhancement of the Kansas SFS Program.

Chapter 4 - Discussion

4.1 Interpretation of Findings

Throughout this Applied Practice Experience, the student became aware of how interconnected public health preparedness systems, agricultural systems, communication systems, surveillance systems, and economic systems truly are. Prior to beginning this experience, the investigator primarily viewed ADT as a livestock movement and traceback system. While traceback investigations are certainly one important component of ADT infrastructure, this experience reinforced that traceability systems support much larger priorities. These include, but are not limited to, efficient outbreak response, continuity of commerce, and economic protection.

Through work with the KPT project initiative, livestock market reporting systems, and SFS planning progressed, the investigator recognized how heavily outbreak response systems depend on communication and accessibility of information. During FAD outbreaks such as foot-and-mouth disease, rapid access to movement records and communication pathways may significantly affect the ability of animal health officials to identify exposed premises, evaluate movement risks, and implement disease control strategies (Mardones et al., 2012). This became especially clear while developing the KPT guide. Throughout this process, the student gained a much stronger understanding of how traceback systems function operationally during outbreak investigations. Prior to this experience, the student had not fully realized how many operational groups and communication systems must function together during traceback activities. Traceability systems depend heavily on coordination between producers, livestock markets, veterinarians, laboratories, state animal health officials, and federal agencies.

As work on the TPM project continued, the investigator also recognized how preparedness evaluations may help identify operational gaps before emergencies occur. Evaluating traceback speed, communication systems, and accessibility of movement records allows agencies to identify weaknesses within preparedness infrastructure prior to actual outbreak situations (Bates et al., 2003).

Developing the KPT guide also demonstrated that preparedness activities should not begin during an emergency. Instead, evaluating traceability performance before an outbreak provides opportunities to improve communication pathways, clarify operational procedures, and

strengthen coordination among responding agencies before those systems are needed during an actual disease response.

The Kansas BackTag Program User Guide similarly reinforced how communication systems and reporting consistency support larger surveillance and preparedness infrastructures. Prior to this experience, the student had limited understanding of how livestock markets function within outbreak response systems. While working on the BackTag Guide, the investigator recognized how livestock markets may function as major dissemination points during outbreak situations because of the large number of animal contacts and interstate movements involved. This project reinforced the importance of practical communication tools within preparedness systems. Traceability systems and movement reporting infrastructure may become ineffective if reporting expectations and procedures are not clearly understood by field staff, veterinarians, and livestock market personnel. Development of the BackTag Guide therefore involved translating technical traceability concepts into operational guidance intended for real-world use within livestock systems. This project also emphasized that successful preparedness depends on collecting accurate information and ensuring reporting procedures are consistently understood and applied by program participants.

As work on livestock movement reporting systems continued, the student also began recognizing how movement documentation and traceability infrastructure support continuity of commerce during outbreak situations. Effective reporting systems support movement permitting decisions, outbreak investigations, and continuity planning by improving officials' ability to evaluate movement risks and rapidly identify potentially exposed operations.

The SFS project ultimately became one of the most meaningful and comprehensive parts of this experience because it reinforced how preparedness systems must remain both operationally realistic and flexible in order to function effectively during emergencies. Throughout this experience, the investigator worked with SFS enrollment systems, organizational spreadsheets, preparedness assessments, and biosecurity planning resources. The student also assisted with organizing and storing biosecurity plans and operational maps to ensure preparedness information remained readily accessible during outbreaks. As involvement in SFS systems increased, the investigator recognized how continuity of business efforts depends heavily on organization, communication systems, surveillance infrastructure, and accessibility of preparedness information.

Historically, outbreaks such as foot-and-mouth disease have created devastating impacts because of prolonged movement restrictions, depopulation efforts, trade disruptions, and supply chain interruptions (Gibbens et al., 2001; Knight-Jones & Rushton, 2013). While working with SFS plans, the investigator recognized how continuity of business planning attempts to bridge disease control and continuity of commerce. During outbreaks, animal health officials must make rapid decisions regarding movement restrictions, continuity of operations, surveillance activities, and disease containment strategies. Without effective traceability infrastructure and surveillance systems, these decisions may require broader movement restrictions that significantly affect agricultural and food production systems.

SFS systems attempt to reduce unnecessary disruptions by allowing low-risk movements and operations to continue functioning under enhanced surveillance and biosecurity protocols. The yearly preparedness assessments completed by participating operations were also one of the most interesting aspects of this project. Throughout the review of these assessments, the student recognized how operational preparedness challenges vary significantly between operations depending on staffing availability, production type, movement systems, communication systems, and operational resources. The trend analysis further demonstrated that many preparedness challenges were operational rather than technical. Analyzing these preparedness trends reinforced the need for preparedness systems to remain realistic and adaptable to function effectively during actual emergencies. Preparedness planning cannot simply exist as written guidance alone. Rather, preparedness systems must function within real-world agricultural settings involving operational limitations, workforce pressures, communication challenges, and logistical constraints. See Appendix 3.

Throughout this experience, the investigator also developed a much greater understanding of how international trade systems and animal health preparedness systems interact together. Initially, the student viewed traceability systems primarily from a state-level preparedness perspective. However, as involvement in SFS planning and ADT systems increased, the investigator recognized how international standards and trade frameworks influence preparedness infrastructure within the United States.

Under the World Trade Organization (WTO) Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement), countries are permitted to implement science-

based disease control measures that protect animal and public health while minimizing unnecessary trade barriers. Organizations such as the World Organization for Animal Health (WOAH) establish international standards related to disease reporting, surveillance systems, Veterinary Services, outbreak response, and movement controls. These international standards provide the framework that state and federal animal health agencies use when developing preparedness programs and responding to FAD outbreaks.

As work with preparedness systems continued, the student recognized how traceability infrastructure supports many of these international expectations. Effective surveillance systems and traceback infrastructure support rapid outbreak detection, movement investigations, zoning strategies, and continuity of trade during outbreak situations. Trading partners rely heavily on confidence in surveillance systems and outbreak response infrastructure when evaluating import and export risks. These systems additionally support continuity of commerce, food system protection, economic stability, and confidence in animal health systems during emergencies.

Another major theme reinforced throughout this experience was the importance of systems thinking within public health preparedness systems. Initially, the student viewed many preparedness activities as independent programs. However, as the investigator attended state and federal ADT meetings, SFS meetings, and discussions regarding Kansas animal health statutes, the interconnected nature of these systems became increasingly clear. While working on process maps and organizational diagrams involving State Animal Health Officials and Area Veterinarians in Charge, the student recognized how communication pathways and operational coordination affect outbreak preparedness systems. This experience reinforced that preparedness infrastructure depends heavily on communication, information accessibility, collaboration, and clearly defined operational responsibilities.

Throughout the MPH coursework at Kansas State University, the student developed foundational skills that directly supported the work completed during the Applied Practice Experience with the Kansas Department of Agriculture (KDA) Division of Animal Health.

4.2 Coursework Contributions to the APE

Courses related to epidemiology, systems thinking, surveillance, public health preparedness, and communication all contributed to the investigator's understanding of how

ADT systems function within larger public health and agricultural systems. Coursework related to epidemiologic methods and disease surveillance strengthened the student's understanding of outbreak investigations, movement tracing, surveillance systems, and disease dissemination. These concepts became especially important throughout work involving ADT, traceback systems, and SFS preparedness planning. Additionally, coursework involving systems thinking and public health preparedness helped clarify how communication systems, movement records, surveillance infrastructure, emergency management systems, and stakeholder coordination all interact during outbreak response activities.

Two graduate courses were particularly influential in connecting the APE to broader public health and agriculture systems. DMP 816 Trade and Agricultural Health provided a foundation in international trade, animal health, food safety, and agricultural policy, reinforcing how disease preparedness systems support both animal health protection and domestic and international commerce. DMP 888 Globalization, Cooperation, and the Food Trade expanded this perspective by examining food security, international cooperation, agricultural economics, and public health policy, helping the student recognize the broader economic and trade implications associated with FAD preparedness.

Several other courses also strengthened the student's ability to interpret preparedness data and evaluate operational systems. This became especially important while analyzing SFS preparedness assessments and evaluating recurring preparedness concerns reported by enrolled operations. Through these experiences, the investigator increasingly recognized how public health preparedness systems rely heavily on organization, communication, and accessibility across multiple agencies and stakeholders. Coursework emphasizing communication and interdisciplinary collaboration further strengthened the student's ability to translate technical preparedness concepts into operational resources that could be realistically used by producers, veterinarians, livestock markets, and animal health officials. These concepts became particularly important during the development of educational and operational resources such as the Kansas BackTag Program User Guide and KPT materials.

Overall, the MPH coursework provided the academic framework necessary to understand better the relationship between surveillance systems, outbreak response, continuity of business planning, food security, and economic protection within animal agriculture systems. Rather than

viewing traceability, preparedness, and trade as separate concepts, the coursework demonstrated how they function together to support veterinary public health and strengthen the resilience of animal agriculture during FAD outbreaks.

4.3 Limitations

This APE was conducted within a single state animal health agency and therefore reflects operational practices specific to the Kansas Department of Agriculture Division of Animal Health. While many concepts related to FAD preparedness are broadly applicable, procedures, regulations, and preparedness activities may differ among states. This project primarily focused on preparedness planning rather than response to an actual FAD outbreak. Observations regarding outbreak response are based on preparedness exercises, operational planning activities, and establishing guidance rather than real-world outbreak implementation. Finally, the preparedness resources developed have not yet been evaluated during an actual or simulated emergency response, limiting the ability to assess their effectiveness.

4.4 Future Directions

Future efforts should continue improving ADT through expanded electronic identification, standardized trace performance evaluations, and interoperability among animal health information systems. Continued and increased participation in SFS planning and preparedness assessments may strengthen continuity of business planning before emergencies occur. Additional evaluation and continued updates to the operational resources developed during this APE would determine their effectiveness during exercises and future disease response activities, and help identify where improvements can be made and any additional gaps that need to be addressed. As FAD preparedness continues to evolve, collaboration among state agencies, federal partners, producers, and veterinarians will remain essential for strengthening surveillance, traceability, and coordinated outbreak response.

4.5 Conclusion

Overall, this Applied Practice Experience fundamentally changed the student's understanding of FAD disease preparedness and veterinary public health. Prior to this experience, the investigator viewed ADT, SFS planning, and surveillance as largely independent programs. Through developing the project deliverables, the student recognized that these systems

function collectively to strengthen animal agriculture amid the threat of disease. Most importantly, this experience reinforced that success depends not only on technical systems and regulatory authority, but also on communication, collaboration, operational realism, and coordination among producers, veterinarians, livestock markets, SAHOs, and federal agencies.

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Appendix 1 - Synthesis and/or Integration of Competencies

Table A.1 Synthesis and Integration of Competencies

Competency	Description of Synthesis and Integration
Apply Epidemiological Methods to Settings and Situations in Public Health Practice – Foundational Competency 1	Epidemiologic concepts were integrated across coursework and applied experiences to evaluate ADT and FAD preparedness. Through the KPT project, Kansas BackTag Program, and SFS preparedness activities, principles of disease transmission and outbreak investigation were applied to animal identification, movement records, premises information, and communication among animal health officials. These concepts were synthesized to evaluate how routine animal movement and premises information can support timely tracing and identification of potentially exposed and at-risk animals and premises. This integration demonstrates how epidemiologic methods can inform evidence-based improvements in traceability and preparedness by identifying information needed for timely disease investigation and response.
Interpret Results of Data Analysis for Public Health Research, Policy or Practice – Foundational Competency 4	Operational and preparedness information was interpreted and synthesized to identify patterns that could support future animal health preparedness efforts. Annual assessments completed by operations participating in the Kansas SFS Program were reviewed and analyzed for recurring concerns related to implementing biosecurity plans and maintaining operations during an outbreak. These

	responses were evaluated collectively to identify broader preparedness trends, and a visual summary of the most commonly reported concerns and challenges was developed. This process translated concerns reported by participating livestock operations into evidence that may help prioritize improvements in producer outreach, preparedness planning, and continuity-of-business guidance. Reflecting on recurring barriers across operations helped the investigator perceive why these improvements are an animal health priority; unresolved preparedness challenges may limit implementation of biosecurity measures and continuity of operations during an outbreak.
Disease Surveillance – IDZ Emphasis Area Competency 4	Disease surveillance was integrated across the ILE through coursework and applied experiences in ADT, livestock movement reports, and SFS planning. The KPT project, BackTag program, and maintenance of SFS information contributed to a stronger understanding of how animal identification, movement records, livestock market charts, and current premises data contribute to the larger process of identifying and investigating disease risk. Through these activities, the investigator integrated multiple sources of surveillance information to evaluate disease risk, identify at-risk populations, and support informed outbreak response decisions.

Across the ILE, these three competencies operated as an interconnected framework that integrated academic learning with applied experiences in ADT and FAD preparedness. By

applying epidemiologic concepts, the student evaluated how animal identification, movement records, and accurate premises information are important for identifying potentially exposed and at-risk animals. This understanding directly assisted work with the KPT project and BackTag user guide, while interpretation of SFS assessments allowed the investigator to identify broader trends in challenges related to continuity of business during an outbreak. Disease surveillance demonstrates how information collected through routine traceability undergirds state-federal synergistic preparedness efforts of ADT and SFS planning. Together, these competencies strengthened the student's understanding of how epidemiology, data interpretation, and surveillance function together to support disease containment and continuity of business planning within Kansas animal agriculture.

Appendix 2 - Demonstration of Competency Attainment

Table A.2 Attainment of Competencies

Practice-Based Products that Demonstrate Competency Attainment			
Specific Product		Competency Addressed	
1	KPT Project Overview	1	Apply epidemiological concepts to ADT and outbreak preparedness.
		9	Develop a standardized project framework to support KPT project activities.
		IDZ 4	Apply disease surveillance concepts to the retrieval and use of animal movement and premises information
2	KDA BackTag User Guide	9	Develop a practical resource to improve understanding and use of the BackTag program.
		IDZ 4	Support the collection of animal identification and movement information used in disease surveillance.
3a	Kansas SFS Master Spreadsheet	9	Develop and organize a centralized resource for managing Kansas SFS Plans information.
		IDZ 3	Organize premises, production, and animal population information relevant to FAD preparedness.
		IDZ 4	Maintain premises and animal population information that can support disease surveillance and outbreak response.
3b	Kansas SFS Yearly Assessment Trend Analysis and Graphic	4	Interpret preparedness assessment data to identify recurring challenges among participating operations.
		IDZ 3	Identify operational and production-related factors that may influence implementation of SFS plans.

Foundational Competency 1- Apply Epidemiological Methods to Settings and Situations in Public Health Practice

During the APE, the student gained a greater appreciation for how epidemiologic principles are applied during animal disease investigations. Assisting in the development of the KPT project

overview required an understanding of how animal identification, movement records, vaccination records, and premises information support tracebacks and trace forwards during disease outbreaks. This experience reinforced the importance of timely, accurate information for identifying potentially exposed animals and supporting disease response efforts.

Foundational Competency 4- Interpret Results of Data Analysis for Public Health Research, Policy, or Practice

As part of the work with the Kansas SFS Program, annual preparedness assessments submitted by participating operations were reviewed and evaluated for recurring concerns across those responses. After each assessment was reviewed individually, common themes were identified and a graphic summarizing the most frequently reported foreseen challenges and changes in critical plan information was developed. This process strengthened the investigator's ability to interpret operational data and recognize how those findings can be used to improve future preparedness efforts and program planning throughout Kansas.

Foundational Competency 9- Design a Population-Based Policy, Program, Project, or Intervention

Throughout the APE, several resources were developed to improve ADT efforts across Kansas. The KPT Project Overview provides a more organized framework for future trace performance activities. At the same time, the KDA BackTag User Guide was developed to improve consistency and understanding among Kansas livestock markets. Developing these resources demonstrated how practical projects can improve preparedness and support animal health officials before an emergency occurs.

IDZ Emphasis Area Competency 3- Environmental/Ecological Influences

Working with the Kansas SFS Program allowed the student to better understand how differences among livestock operations influence disease preparedness. While maintaining and entering active plans into KDA's database and reviewing annual assessments, the investigator recognized that production type, facility design, available resources, and biosecurity practices vary considerably from one operation to another. This highlighted the importance of developing

preparedness efforts that are flexible enough to meet the needs of different operations while still supporting an effective and efficient disease response.

IDZ Emphasis Area Competency 4- Disease Surveillance

When developing the KDA BackTag user guide and drafting the KPT Project Overview, the student strengthened understanding of how data is turned into important information used to identify where at-risk animals are located, a critical component of disease surveillance. Work on SFS plans demonstrated the importance of up-to-date premises information and preparedness records in supporting surveillance and continuity of business planning even before an outbreak occurs. Separate from the project products, the investigator also contributed to routine surveillance activities by manually entering import and export CVIs, and official calfhood vaccination charts, converting livestock market charts from paper or spreadsheet formats into standardized electronic data for direct upload into the state animal health database, and verifying or updating premises addresses and map locations to improve traceability data accuracy. Together, these experiences reinforced the importance of maintaining accurate information before it is needed during an emergency.

Appendix 3 - Portfolio Products

Appendix 3 features each of the following products, sequentially listed on the following pages for Taylor Hedrick's APE, with the exception of product 3a, which contains proprietary information.

Product 1 – Kansas Priority Tracing Project Overview

Product 2 – KDA BackTag User Guide

Product 3a – Kansas Secure Food Supply Master Spreadsheet (proprietary product)

Product 3b – Secure Food Supply Assessment Trend Analysis

Kansas Priority Tracing

Kansas Animal Disease Traceability

Internal Draft - Subject to Change

Overview

The Kansas Priority Tracing (KPT) program is a Kansas Department of Agriculture – Division of Animal Health (KDA-DAH) initiative developed to strengthen animal disease traceability by evaluating and improving veterinarian-maintained official identification records used during animal disease investigations. Modeled after the United States Department of Agriculture – Animal and Plant Health Inspection Service (USDA-APHIS) National Priority Tracing (NPT) exercises, KPT provides a practical, educational approach to assessing the efficiency of record retrieval while promoting consistent recordkeeping practices among Kansas-accredited veterinarians. The program is intended to complement existing state and federal traceability efforts by enhancing preparedness at the point where official identification records are first generated and maintained.

Rapid access to accurate animal identification records is essential during animal disease investigations. Delays in locating official identification information can increase the time required to trace potentially exposed animals, prolong disease response activities, and increase the economic consequences associated with livestock disease outbreaks. 9 CFR 86.3(a) (Recordkeeping Requirements) indicates that “*Any State, Tribe, accredited veterinarian, or other person or entity who distributes official identification devices must maintain for 5 years a record of the names and addresses of anyone to whom the devices were distributed.*” Under the USDA 2024 Final ADT Rule, these records must be in a searchable format and reproducible within 48 hours if requested by a federal or state animal health official. These requirements reinforce the importance of maintaining complete, accurate, and readily accessible official identification records that support rapid traceback investigations and emergency disease response.

Since 2020, KDA-DAH, in conjunction with USDA-APHIS, has offered Kansas-accredited veterinarians and licensed livestock markets no-cost electronic identification tags (EID tags) to support implementation of the national ADT program. Kansas veterinarians and livestock markets have adopted EID tags with well over 1.5 million no-cost tags distributed since October 2020 and another 1.5 million EID tags bought during the same period*. This widespread adoption of electronic identification provides an opportunity to strengthen the quality and accessibility of associated distribution records while reinforcing the importance of maintaining records in accordance with federal requirements.

Kansas has consistently demonstrated exceptional performance during USDA NPT exercises, with average completion times ranging from 0.28 to 0.32 hours across all four Trace Performance Measures (TPMs) during the 2023-2024 cooperative agreement period. While NPT evaluates the ability of state animal health officials to retrieve official identification and interstate movement records, KPT expands upon this success by evaluating veterinarian-maintained records that frequently serve as the initial source of official identification during disease investigations. By identifying opportunities to improve recordkeeping before an actual disease event occurs, KPT further strengthens Kansas’ overall animal disease preparedness.

*Data provided is subject to change

KPT is designed as a collaborative preparedness exercise rather than a regulatory audit. The program provides participating veterinarians with practical experience responding to realistic trace requests, identifies opportunities to improve recordkeeping systems, and enables KDA-DAH to better understand statewide strengths and challenges associated with official identification record retrieval. Information gathered through KPT will support future educational outreach, encourage continued adoption of searchable electronic recordkeeping practices, and strengthen Kansas' animal disease traceability system in support of emergency response, disease control, and livestock industry continuity.

Background

The USDA ADT program provides the national framework for tracing livestock during animal disease investigations. The program establishes standards for official identification, interstate movement documentation, and information sharing to support rapid traceback and trace forward activities during disease outbreaks. Effective traceability depends on accurate records maintained by multiple stakeholders, including producers, accredited veterinarians, livestock markets, and state and federal animal health officials.

EID tags serve as the link between an individual animal and the records documenting its ownership, movement, and health history. As adoption of electronic identification has increased, the availability of electronic records has improved the speed and accuracy of disease investigations while reducing reliance on paper-based record systems.

To measure traceability performance, USDA APHIS developed the NPT program. Through standardized TPMs, NPT evaluates the ability of state animal health officials to retrieve official identification and interstate movement records during simulated disease investigations. These exercises provide a consistent method for evaluating traceability performance, identifying areas for improvement, and strengthening disease preparedness nationwide.

Building upon the NPT framework, the KPT program extends traceability preparedness to veterinarian-maintained official identification records. Because accredited veterinarians frequently serve as the initial point of distribution for EID tags, maintaining accessible distribution records is essential to supporting rapid disease investigations. KPT provides an opportunity to evaluate these records under realistic tracing scenarios while promoting consistent recordkeeping practices across Kansas.

Kansas Priority Tracing Program

The KPT program is a voluntary exercise administered by KDA-DAH to evaluate the accessibility and quality of veterinarian-maintained official identification records. The program is designed to strengthen traceability preparedness by providing Kansas accredited veterinarians with an opportunity to participate in realistic trace requests modeled after animal disease investigations.

Historically, Kansas veterinarians have submitted tag distribution records to KDA-DAH; however, KDA-DAH knows that not all tags are always reported. To increase the record-keeping requirements outlined in 9 CFR 86.3(a), and to emphasize the importance of accurate record-keeping to Kansas-accredited veterinarians, KDA – DAH looks to implement Kansas Priority Tracing (KPT) a program that mimics the National Priority Tracing – Trace Performance Measures set forth by USDA – APHIS to State and Tribal

Cooperators. The goal of KPT would be to initiate a trace for those requesting additional no-cost EID tags based on an EID tag already received.

When specifically looking at how state and tribal cooperators have improved traceability through the National Priority Tracing – Trace Performance Measures since 2013, there has been an overall downward trend in the elapsed time to complete each Trace Performance Measure (TPM), which reflects the improvement in each cooperator’s animal disease traceability system. Furthermore, USDA–APHIS indicates that improvement continues to be made when states and tribes:

- Increase the usage of electronic record-keeping processes, electronic identification (EID), and electronic certificates of veterinary inspection (CVI).
- Record TPMs directly into the EMERS2 database, which allows [USDA] ADT staff to provide oversight and traceability training to cooperators while TPMs are in progress.
- Increased familiarity with TPMs; the advance notice to cooperators in 2020-2022 allowed them to choose times when they could treat the traces as the highest priority work.
- Sustained educational outreach by VS ADT staff and a higher level of cooperator understanding (content knowledge, familiarity with methods, and relevant databases) which facilitates a greater ability to successfully complete these traces in less time.

The goal of administering the KPTs is to continue to increase the usage of electronic recordkeeping, electronic CVIs, familiarity with what a real trace might look like, and continued education of the Animal Disease Traceability (ADT) program. It is expected that progress will slow; however, over a period, it is likely that Kansas veterinarians will decrease the amount of time required to complete the trace exercise.

Administration of Kansas Priority Tracing

The participant will receive a notification containing an official identification number (e.g., 840 Animal Identification Number (AIN)) previously distributed to that veterinarian or veterinary clinic. Since the KPT evaluates the tracing capabilities of cattle and bison covered under the ADT rule, only official identification numbers assigned to these species will be used during the exercise. The official identification numbers will be sourced from tag application records or documents (e.g., official test records, vaccination records, or CVIs) generated within the last year.

The Kansas ADT Coordinator will select the official identification numbers used for each exercise and notify the participant by email. Upon receipt of the notification, participants will complete the mock traces by searching their records as they would during a disease outbreak. The “elapsed time” value, in hours, is measured for each KPT and will begin when the notification email is sent and will end when the participant submits a response to the initial email containing the requested information.

The Kansas Priority Trace Exercise may ask any of the following questions:

1. What was the address of the animal at the time of vaccination?
2. On what date was the animal officially identified (tagged)?
3. To what state was the animal shipped?
4. On what date was the animal shipped?

Each participant is expected to complete all four KPT questions, with each question having a different tag number. If at any point the answer to the KPT question being posed cannot be found, the requestor can terminate the KPT, and a new one shall be reissued.

During the initial year of implementation, KPT exercises will be administered to veterinarians and veterinary clinics that have obtained more than 3,000 official IDs during the previous year. Approximately 35 veterinarians and/or clinics are anticipated to participate in the 2025 exercise. *

Performance Period & Reporting

Upon completion of each KPT, the ADT Coordinator will notify the participant of the time it took to complete the KPT and provide the current statewide average for comparison. The ADT Coordinator will document individual participant results and maintain statewide performance data to evaluate program progress over time. The initial year of KPT implementation will establish a statewide baseline for veterinarian traceability performance. Results from subsequent years will be compared to the baseline to evaluate changes in record retrieval times and identify trends in statewide traceability preparedness.

Following completion of each KPT, participants will be asked to complete a brief survey to assist KDA-DAH in identifying opportunities for program improvement. Survey questions may include challenges encountered during the exercise, factors that affected record retrieval, current recordkeeping methods, and recommendations for improving future KPT exercises. Information gathered through the survey will be used to guide future educational outreach and program development.

It is anticipated that participants may require additional time to complete KPT exercises during the initial implementation year as they become familiar with the exercise format and evaluate their current recordkeeping systems. As participation continues and recordkeeping practices improve, KDA-DAH expects statewide trace performance to improve over time, similar to the improvements observed through the USDA APHIS National Priority Tracing program.

USDA No-Cost Tags

If no-cost EID tags remain available from USDA, completion of a KPT may be required **before** additional no-cost tags are distributed. This requirement is intended to encourage participation in KPT while reinforcing the importance of maintaining complete and accessible official identification records. Veterinarians who choose not to participate in KPT may continue to obtain official EID tags through commercial vendors at market price. Participation in KPT is associated only with the distribution of USDA no-cost EID tags and does not affect the availability of commercially purchased official identification devices.

*Data provided is subject to change.

Timeline of Kansas Priority Tracing

Estimated Date	Task
November 1, 2024 - May 1, 2026	Build a framework of the Kansas Priority Tracing Exercise
October 1 – April 30, 2027	Outreach to veterinarians & veterinary clinics for participation
May 28, 2027	Hold an informational call with those who are participating
May 28 – June 13, 2027	Gather official IDs for the KPT
June 16, 2027	Send KPTs to participants
June 16 – 20, 2027	KPT information gathering
June 16 – 20, 2027	Send a follow-up survey
June 16 – 20, 2027	Survey information gathering
June 20 – July 14, 2027	Compile final report
July 14, 2027	Send out the final report to participants
July 16, 2027	Internally discuss outcomes and next steps
July 17 – December 31, 2027	Complete

Selection of Official Identification Numbers for KPT

Official identification numbers used for KPT exercises will be selected by the KDA ADT Coordinator prior to initiation of each exercise.

Official identification numbers selected for KPT exercises should meet the following criteria:

- Be an official AIN assigned to cattle or bison covered under the USDA ADT regulations.
- Have been previously distributed to the participating veterinarian or veterinary clinic.
- Be supported by official documentation generated within the previous 12 months, when available.
- Be associated with records maintained by the participating veterinarian or veterinary clinic.

Official identification numbers may be identified using records maintained by KDA-DAH, including but not limited to:

- Official identification tag distribution records
- Certificates of Veterinary Inspection
- Official vaccination records
- Official test records
- Other official documents containing the official identification number

Each KPT question should utilize a different official identification number. Official identification numbers will be selected to provide a realistic traceability exercise while minimizing the likelihood of participants retrieving duplicate records during the same exercise.

KDA-DAH reserves the right to exclude official identification numbers that are incomplete, duplicated, associated with active disease investigations, or otherwise unsuitable for use in a simulated tracing exercise.

KPT Exercise Workflow

The following workflow outlines the sequence of activities completed during a KPT exercise

1	Kansas ADT Coordinator selects an official Animal Identification Number (AIN) for the exercise.
2	Participants receive a KPT notification email containing the AIN and trace question.
3	Elapsed time begins upon transmission of the notification email.
4	Participant searches existing records using normal recordkeeping practices.
5	Participants submit the requested information through the KPT Formsite.
6	Elapsed time ends upon successful submission of the Formsite response.
7	KDA records the elapsed time and reviews the submitted response.
8	Participants receive their elapsed time and the statewide average.
9	Participant completes the post-exercise survey.
10	KDA compiles results for program evaluation and future outreach efforts.

Sample KPT Notification Email

Subject: Kansas Priority Tracing Exercise Notification

Dear Dr. [Last Name],

As part of the Kansas Department of Agriculture – Division of Animal Health Kansas Priority Tracing (KPT) program, your veterinary clinic has been selected to participate in a KPT exercise.

The purpose of this exercise is to evaluate the accessibility of official identification records maintained by participating veterinarians and veterinary clinics while strengthening statewide ADT preparedness.

Official Identification Number (AIN):

840 XXX XXX XXX XXX

Kansas Priority Trace Question:

To what state was this animal shipped?

Please retrieve the requested information using your existing recordkeeping system and submit your response using the link below.

KPT Submission Link

[Insert Formsite URL]

For purposes of this exercise, elapsed time begins when this notification email is transmitted and ends when your completed response is submitted through Formsite.

If the requested information cannot be located, please indicate this within the submission form.

If you have questions regarding this exercise, please contact:

Kansas Department of Agriculture

Division of Animal Health

Animal Disease Traceability Coordinator

[Insert Contact Name, Email, and Phone]

Thank you for your participation in the Kansas Priority Tracing Program.

QUICK TIPS



- Make sure caps locks remains on the entire tieme you utilize KDA-BACKTAG.



- To edit entries after submitting: Highlight the row you wish to edit, double click and begin editing.



- Exporting data to Excel: Return to Admin Screen, Open View/Download Data, Select the data you want to export, Click Export to Excel Workbook



- To quickly see specific information filter by Backtag, Name, or Ticket number.



- To find previous Backtag reports, enter the sale date, and Market Code on the Admin Screen then click View/Download Data.



User Guide

For any additional questions please contact:

Garrett Girk

Animal Disease Traceability Coordinator

Kansas Department of Agriculture

Division of Animal Health

785- 564 -6606

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Notes

Welcome to KDA Backtag, a program designed to assist you in quick accurate input of sale day cattle identification information for easy submission to the Kansas Department of Agriculture.

This program is designed to run on a laptop offline for use in locations without internet access.



Notes



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Home/Admin Screen Overview

First Enter Setup Information

Information field required to start new sale day entries.

Data Entry Session

Once all required setup information has been entered, the “Start Data Entry Session” button will take you to the animal entry page.

Update KDA (online)

Any text entries in red are sale days that have not yet been submitted to KDA.

Once a sale day is finished and you are connected to the internet, choose the sale date and enter the market code, then click the “Send data to the KDA” button.

Data Functions

The “Update Authentication Settings” button will provide the Client ID (username) and the Client Secret (password).

***The Client secret expires every two years from the date it was created. A new client secret will be provided by KDA. If the secret has not yet been changed and is expired, the user will get an error message and will not be able to submit data to KDA. However, all data is saved and you can still enter new sale info.**

The “Run DB Structure Updates” button will update program functions if applicable.

The “View/Download Data” button gives you access to bulk edit market entries, create charge sheets, create market overviews, and to export entries to an excel workbook for use in CVI applications.



Troubleshooting Guide

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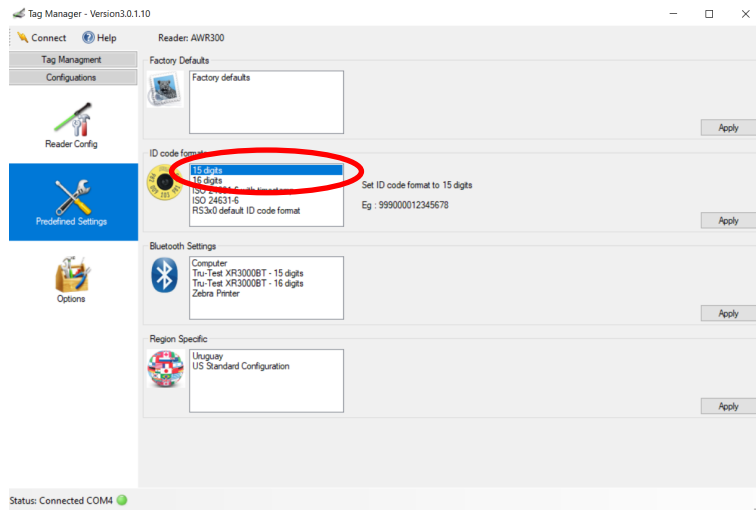
785- 564 -6606

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Troubleshooting Guide

- Select “Predefined Settings” on the left hand side of the page.
- Under “ID code formats” select “15 digits”.



- Click “Apply”.
- Exit the program and test scan an ID to ensure settings were changed successfully.



Starting a New Sale Day

To start a new sale day you will need to enter setup information.

- Enter the date of the sale

If you are entering data before/after the actual sale day still enter the date the animals will be sold

- Select the market code via drop box
- Type in the name of the individual entering the information
- Type in the veterinarians name

Once all information is entered click “Start Data Entry Session”

Home

First Enter Setup Info

Complete the following fields, then choose an action below.

Sale Date*

Market (Sale Barn) Code*

Data Entry Person*

Vet Business Name*

Start Data Entry Session

Start a Data Entry Session for the selected Sale Date and Market Code:

Update KDA (online)

When connected online, click the KDA logo to send data for the selected Sale Date and Market Code:

Sale Dates not yet sent: 4/29/21



Data Functions

View/ download data from your local database.



Starting Animal Entries

Filter/Select Owner

*Veterinarians servicing one market will need to unselect the “Filter by Market Code” option before searching for owners.

Previous sellers can be selected through the drop box or be searched in the open text box. Verify the information is correct or click the “EDIT” button and make any necessary corrections.

To add a new owner, click the “Add Owner”. It is recommend by KDA to provide a city and state to the owner name.

*new programs will come with previous seller information installed

Enter Head Information for Selected Owner

Ticket: This section is an optional field.

Backtag: Enter in the last four digits of the backtag in the box following the market code. If you are applying tags in sequential order, select the “Retain/auto” box and the field will be filled automatically for you on the next animal entry; if you are not in sequence unselect the box.

Official ID: Enter in NUES9 or 840 tags in this field. NA can also be used for animals that are not officially IDed.

If using a wand to scan ID’s, the curser must be placed in this field to enter correctly. See page 23 “Virtual Keyboard” for more information regarding wand use.

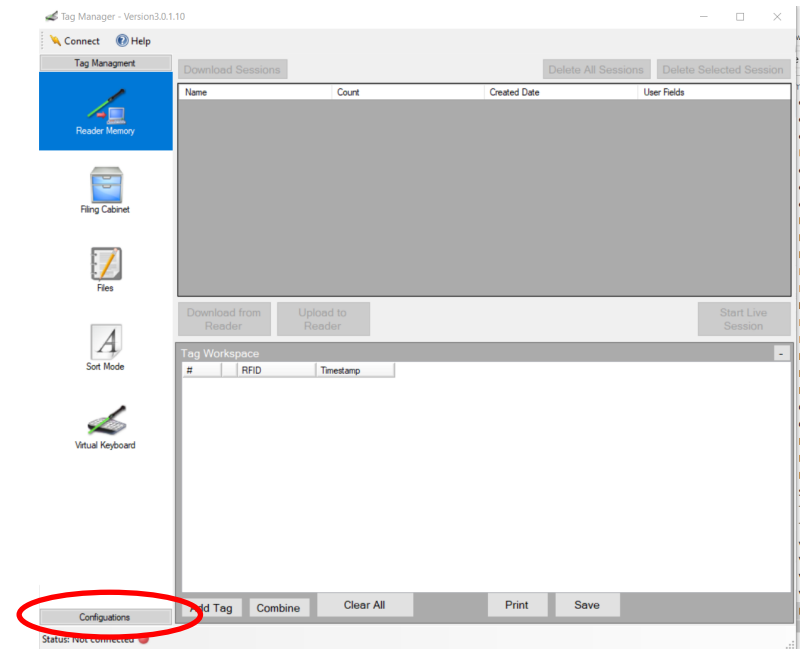
If you are applying new official IDs enter them into the “Starting new tag” field. This feature works optimally when applying tags in sequential order. The next tag will come up in sequence when you click the “New” button.



Troubleshooting Guide

Changing Wand Reader Settings Using Tag Manager

- Connect the Data-Power Cable to your wand.
- Connect the cable to your computer using the USB port.
- Power on your wand.
- Open the Tag Manager application on your computer.
- Select “Configuration” on Tag Manager.

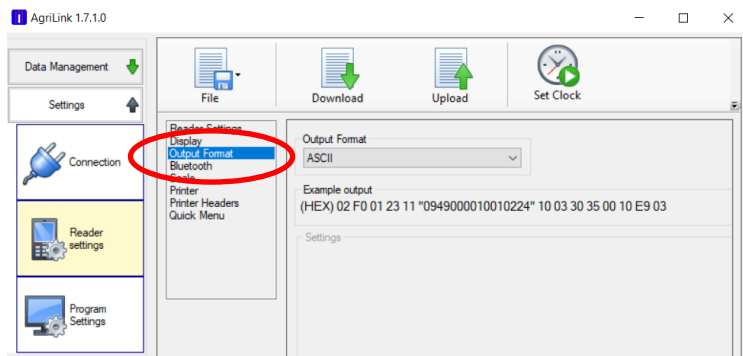


Continued on page 32.

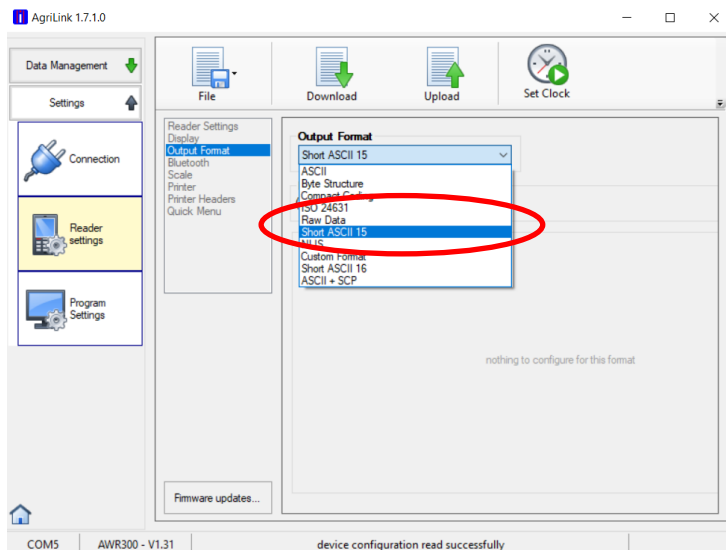


Troubleshooting Guide

- Click on “Reader Settings”
- Select “Output Format”



- On the “Output Format” drop down menu, select “Short ASCII 15”.



- Exit the AgriLink program, and test scan an ID to ensure settings were changed successfully.



Secondary ID: This section is an optional field. Add any additional official ID's in this field.

Breed (color): Enter the breed or color (i.e. BLK) in the open text field. If a large number in line are the same type click the “Retain” button to automatically fill in the next animal.

Sex: Select the sex (M or F) from the drop box. Click the “retain” button if a large group are of the same sex to avoid reentry.

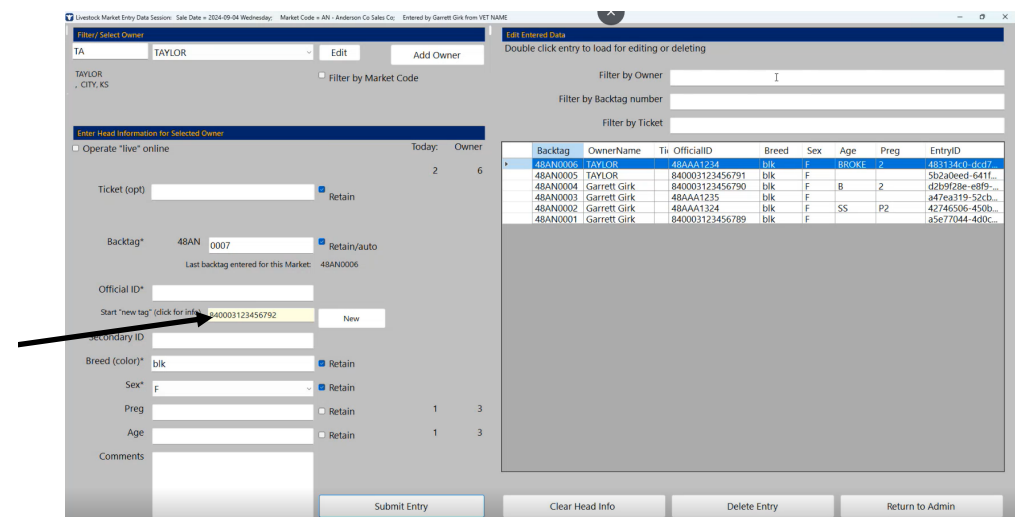
Preg & Age: Enter in the information in these open text fields. It is not recommended to retain the preg and age fields

Comments: Add any additional notes in this field.

Once all information is entered for the animal, click the “**Submit Entry**” button.

Any entered information will appear in the window on the right.

Columns can be made larger or smaller for your convenience.





Editing Animal Entries

If you notice an error in an entry, double click the entry on the right side screen. The screen will turn yellow to indicate you are in editing mode.

All animal information can be edited. When finished click “Submit Changes” to save.

The ability to delete an entry is also available. Simply double click the entry and click “Delete Entry”.

Additional Features

Owner Counts: Total animal counts are available when an Owner is selected in the top left. The total number of animals for that owner, as well as total animals for the whole sale day can be seen. Total preg and age counts can be seen for the owner and sale day as a whole.

Filter Search: When searching entries, you can filter by owner, backtag, or ticket. Animals falling within the selected filter parameters will appear on the right side of the screen.

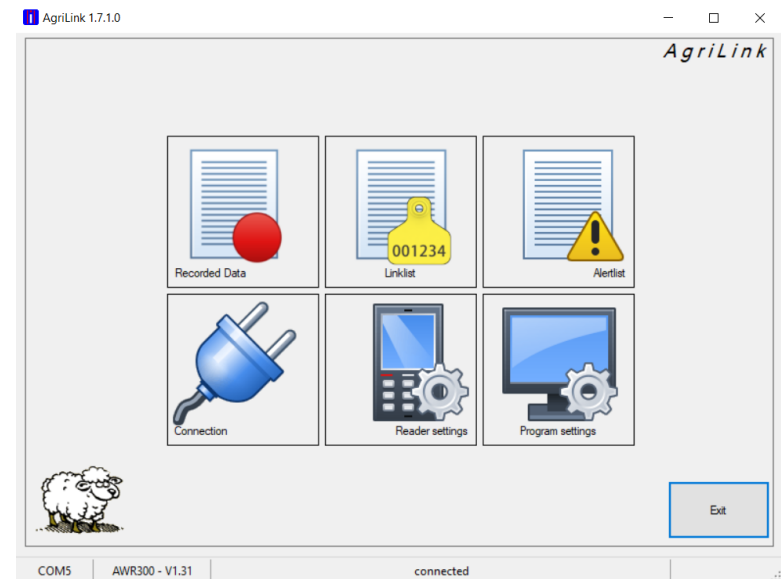
Live Share: Live updates are available by clicking the “Operate “live” online” button. This feature will allow the market office to receive real time animal entry updates. However, you must be connected to the internet to use this function. See page 17 for more info.



Troubleshooting Guide

Changing Wand Reader Settings Using AgriLink

- Connect the Data-Power Cable to your wand.
- Connect the cable to your computer using the USB port.
- Power on your wand.
- Open the AgriLink application on your computer.



Continued on page 30.



Troubleshooting Guide

Official ID Entry Error

When scanning tags while in HID mode, if a tag appears as "840003333.....", your computer will lock up.

To Fix:

- Scan another tag to unlock the screen.
- Clear the ID field entry box on KDA backtag.
- Change wand mode from HID to SPP
 - Go to Menu on the wand screen
 - Select Interface Set Up
 - Select Bluetooth
 - Click Bluetooth Profile
 - Select SPP
- Connect to Virtual Keyboard using Tag Manager. See page 23
- After Virtual Keyboard has been connected, continue with animal entries.



Backtag	OwnerName	Ti	OfficialID	Breed	Sex	Age	Preg	EntryID
48AN0006	TALOR		48AAA1234	blk	F	BROKE	2	483134c0-dc07
48AN0005	TALOR		840003123456791	blk	F	B	2	5b2a0eed-641f
48AN0004	Garrett Girk		840003123456790	blk	F	B	2	d2b9f2be-e8f9
48AN0003	Garrett Girk		48AAA1235	blk	F			a47ea319-52cb
48AN0002	Garrett Girk		48AAA1324	blk	F	S5	P1	42746506-450b
48AN0001	Garrett Girk		840003123456789	blk	F			a5e77044-480c

Backtag	OwnerName	Ti	OfficialID	Breed	Sex	Age	Preg	EntryID
48AN0006	TAYLOR		48AAA13714	blk	F	BROKE	2	483134c0-dc07
48AN0005	TAYLOR		840003123456791	blk	F	B	2	5b2a0eed-641f
48AN0004	Garrett Girk		840003123456790	blk	F	B	2	d2b9f2be-e8f9
48AN0003	Garrett Girk		48AAA1235	blk	F			a47ea319-52cb
48AN0002	Garrett Girk		48AAA1324	blk	F	S5	P2	42746506-450b
48AN0001	Garrett Girk		840003123456789	blk	F			a5e77044-480c

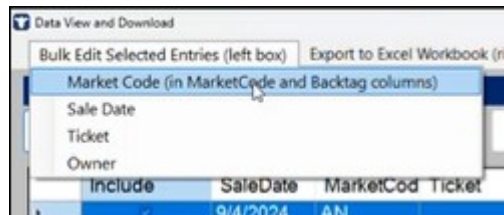


Bulk Editing

From the home screen, the “View/Download Data” button will allow you to bulk edit animal entries to avoid editing individual entries.

You can bulk edit any of the following: market code, sale date, ticket, and owner

- Select any animal entries that need editing
- In the top lefthand corner select “Bulk Edit Selected Entries (left box)”
- Select which item you would like to edit for the selected animals



Export to Excel

To export animals to an excel spreadsheet, select which animals you want and click the “Move Right—>” button.

After all selected animals have appeared in the right side box, select the “Export to Excel Workbook (right box)” button at the top of the screen. Save the excel sheet for later use in CVI applications.

To create another excel sheet with different animals, simply select the “Delete Checked” box. This will NOT delete any animal entries but just remove them from the right side box.



Troubleshooting Guide

Official ID Entry Error

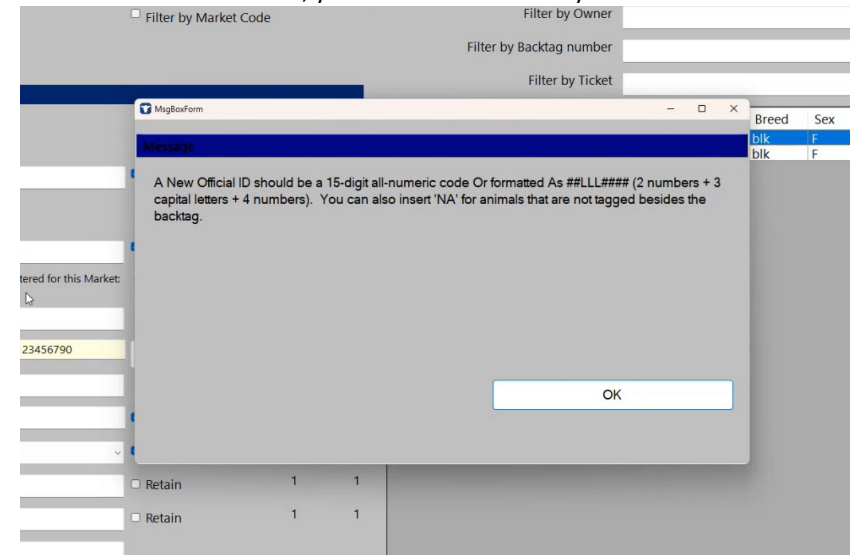
When entering official ID's an error field (seen below) will appear if the entered ID does not meet one of the accepted formats.

Official ID's must fit on the following formats:

- 840003123456789
- 12ABC1234
- NA (for animals that are not tagged)

Any ID that is not a 15 digit all numeric EID with no spaces or a NUES9 (bangs tag) will not be accepted and the entry will not be submitted.

Once the error is corrected, you can submit the entry.



***If your reader does not read tags without spaces or other info, it can be changed within the settings, see page 29 or call KDA for additional help. 785-564-6606**



Troubleshooting Guide

Reconnecting the Wand if Bluetooth Disconnects

After successfully connecting the wand and computer together through Bluetooth, you may find that the connection is lost at some point. This is likely due to inactivity and the connection timing out.

If/when the wand goes to sleep, in 60 seconds the computer and wand will disconnect. They will NOT automatically reconnect.

To manually reconnect:

- Turn the wand back on by clicking the green arrow button.
- Wait for the Bluetooth icon to turn blue on the wand's screen.
- Close Tag Manager and reopen.
- Click the [Connect](#) button at the top left
- Select [Port Search](#). It may take 10-20 seconds to reconnect.

The length of time the wand display is on before switching to a sleep mode can be altered (+/-).

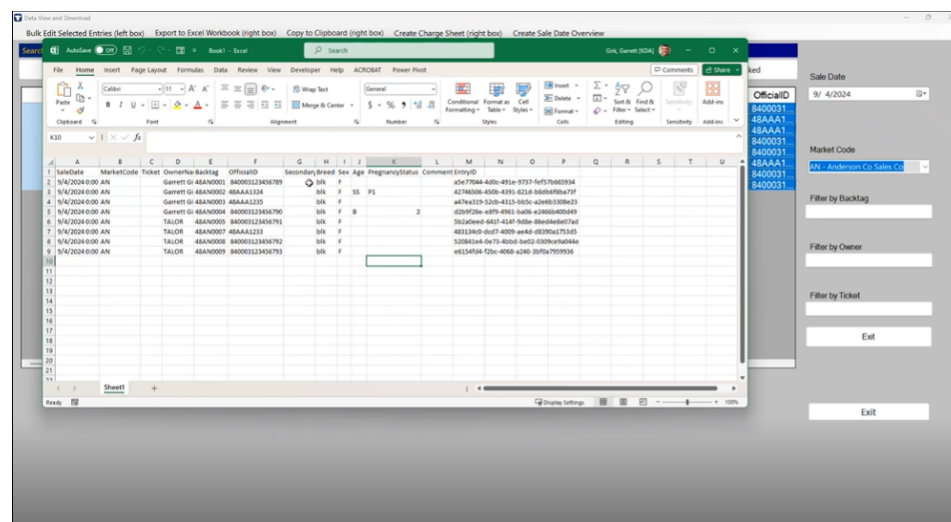
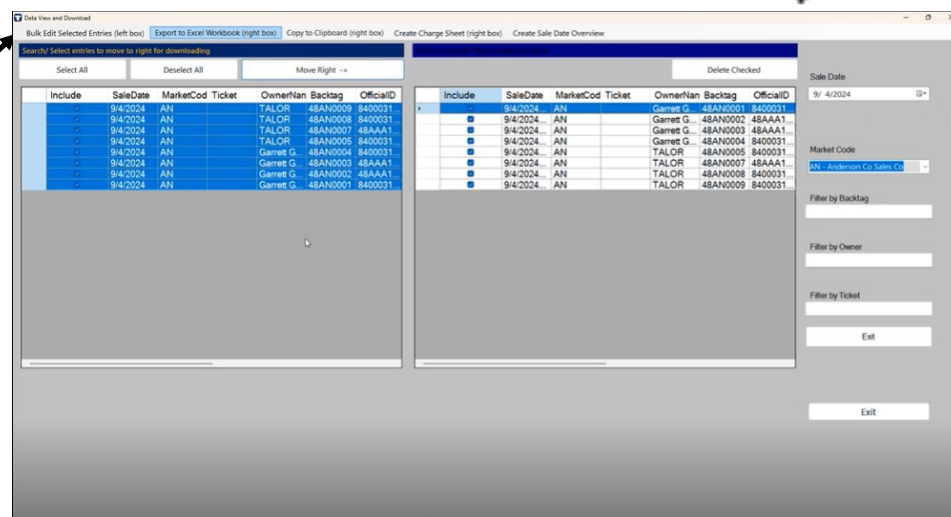
To change the length of time:

- Select [Menu](#) by clicking the orange button.
- Use the arrow buttons to highlight [Setup](#). Then, click the green arrow button.
- Use the arrow buttons to highlight [Display](#). Then, click the green arrow button.
- Use the arrow buttons to highlight [Set Date/Time](#). Then, click the green arrow button.
- Use the up and down arrow buttons to adjust the time. Then, click the green arrow button to accept the time change.

keep in consideration that the extended time period the wand display is on will reduce battery life



Searching Tip: To avoid scrolling through all animal entries, use the filter options on the right side of the page.

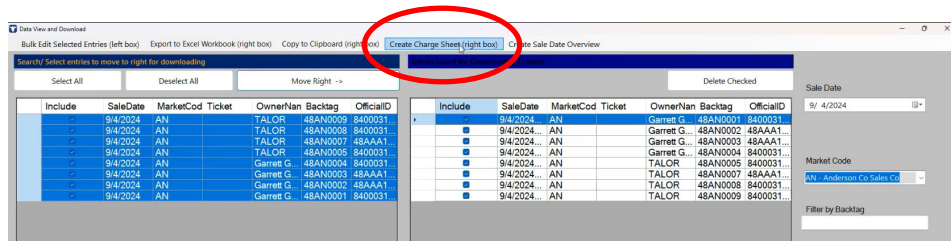




Creating a Charge Sheet

Creating a charge sheet allows users to put in rates for services preformed

- Go to the “View/Download Data” page
- Click the “Select All” button
- Click the “Move Right ->” button
- Once all animals have moved to the right box select the “Create Charge Sheet (right box)” button at the top of the screen.



- The charge sheet only captures information from the animal entry screen. You can add additional services by typing them in and entering in the rate and count.
- Adjust the service rates as needed
- Add an address or any additional comments if you wish
- When finished click “Store Listed Rates/Services/Address”
- Click “Calculate” to adjust the total

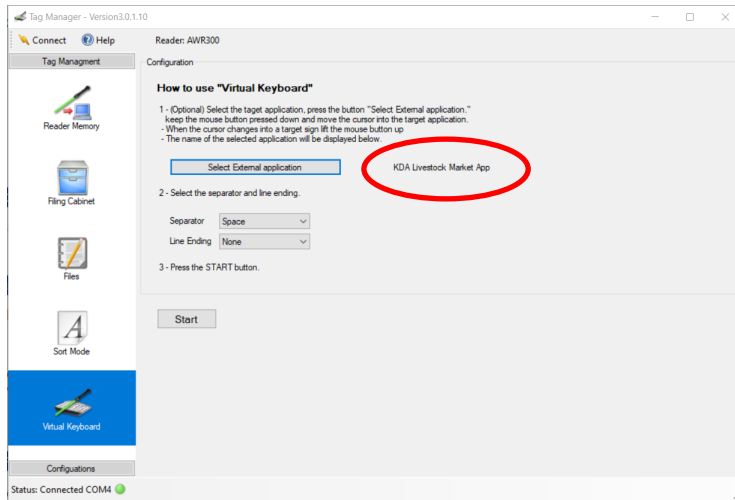


Connecting the Wand Using the Data-Power Cable

- Open the Allflex EID Tag Manager application from the shortcut found on your desktop.
- Connect the Data-Power Cable to your wand.
- Connect the cable to your computer using the USB port.
- Power on your wand and begin use.



- When connected, “KDA Livestock Market App” will appear next to the “Select External Application” button within Tag Manager.



- Select the “Start” button within Tag Manager to begin scanning. The Tag Manager window will minimize.

Make sure you have the mouse cursor placed in the correct target/entry field before scanning the animal.

Official ID*

After a tag is scanned, it will be sent directly to the target field in KDA backtag.

You are free to tab and type throughout KDA backtag as the virtual keyboard is still running.



Charge Sheet

Store Listed Rates/ Services/ Address Calculate Print Exit

Veterinarian Services Invoice

Invoice #

Address

09/04/24 AN - Anderson Co Sales Co

	Service	Count	Rate	LineTotal
▶	ID, M	0	\$1.00	\$0.00
	ID, F	8	\$1.00	\$8.00
	Aqe	2	\$3.00	\$6.00
	Preq	2	\$500.00	\$1,000.00
	DHORN	0	\$0.50	\$0.00
*				

Total: \$1,014.00

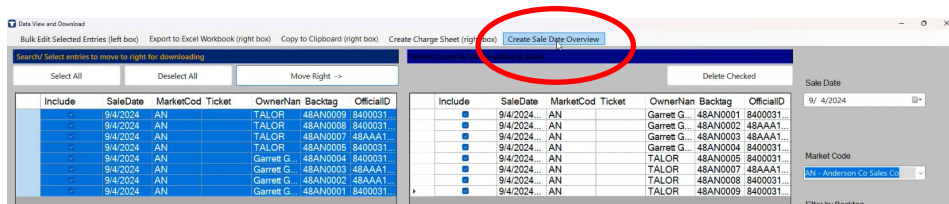
Comments:



Creating a Sale Day Overview

Creating a sale day overview allows users to adjust service rates and see a breakdown of seller information and subtotals.

- Go to the “View/Download Data” page
- Click the “Select All” button
- Click the “Move Right ->” button
- Once all animals have moved to the right box select the “Create Charge Sheet (right box)” button at the top of the screen.



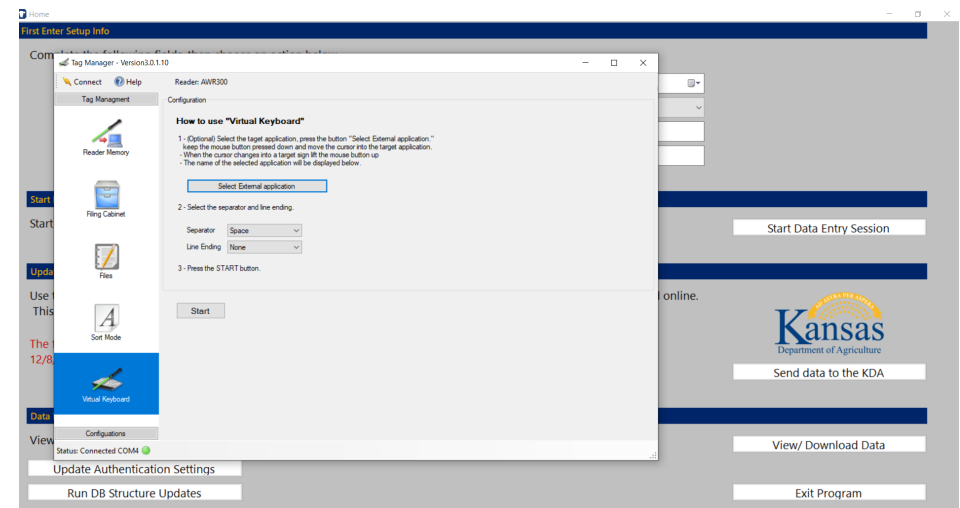
- Adjust the rates as needed
- Add an address or any additional comments if you wish
- When finished click “Store Listed Rates/Services/Address”
- Click “Calculate” to adjust the total



Virtual Keyboard

This module allows you to read tags into KDA backtag in real time.

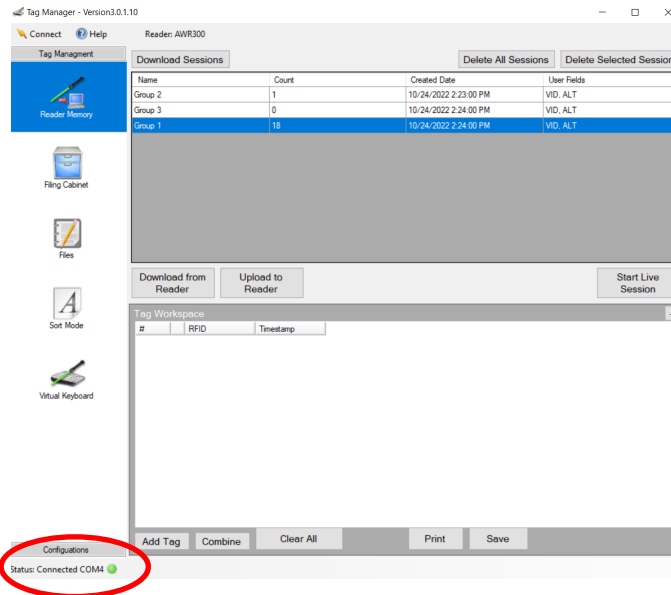
- Once the wand is connected to your computer, open KDA backtag.
- Open the Tag Manager application and click “Virtual Keyboard” on the left hand side.
- Open KDA backtag and Tag Manager so they can be seen simultaneously (as seen below).



- Within Tag Manager, select and hold the “Select External Application” button and while keeping the mouse button pressed down, move the cursor into KDA backtag.
- The cursor will appear as a bullseye when moved into KDA backtag.



- If the wand and computer connect, the wand will make a confirmation noise and the Tag Manager's bottom left corner will be green.



If they do NOT connect...

- On your computer in the Allflex EID Tag Manager application click the "Connect" icon in the top left corner.
- Click "Connect Bluetooth reader..."
- Click on "Search for devices".
- Once the wand is found, highlight your wand by clicking on it and then click "Connect Reader". IF wand and computer connect, the wand will make a confirmation noise, the Tag Manager's left hand pane will change from gray to colors, and the Bluetooth icon on the wand will change to green.
- Lastly, if the Bluetooth configuration window did not automatically close, click "Close".



Sale Day Overview

Store Listed Rates/ Address Calculate Print Exit

Address

ID Rate, M: 1.00
ID Rate, F: 1.00
Age Rate: 3.00
Preg Rate: 500.00

09/04/2024 AN - Anderson Co Sales Co

	Ticket	Seller	D_M	ID_F	Age	Preg	SubTotal
		Garrett Girk	0	4	2	2	\$1,010.00
		TALOR	0	4	0	0	\$4.00
**							

Total: \$1,014.00

Comments:



Finishing/Submitting a Sale Day

After all information is entered and all necessary changes have been made, return to the Admin/home screen page.

Markets that have not yet been sent will appear in red.

Once internet access has been reestablished, select the sale date and market code in the “First Enter Setup Info” section

Click “Send data to the KDA” to submit market datasets.

First Enter Setup Info

Complete the following fields, then choose an action below.

Sale Date*

Market (Sale Barn) Code*

Data Entry Person* Garrett Girk

Vet Business Name* VET NAME

Start Data Entry Session

Start a Data Entry Session for the selected Sale Date and Market Code:

Update KDA with Finalized Data (online)

Use this feature at the end of a market sale date, once all changes are finalized and sales completed, and when connected online. This sends data to the Department of Agriculture for the selected Sale Date and Market Code.

The following Sale Date-Market Code datasets include data not yet sent to KDA:
11/9/2023-AL; 9/3/2024-AN;

Send data to the KDA

Data Functions

View/ download data from your local database.

Update Authentication Settings

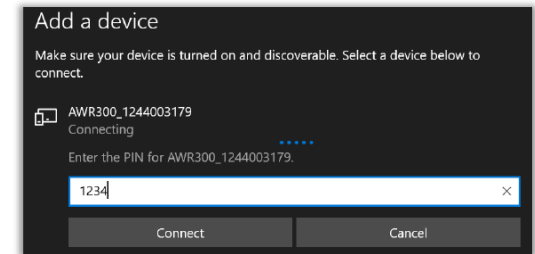
Run DB Structure Updates

View/ Download Data

Exit Program

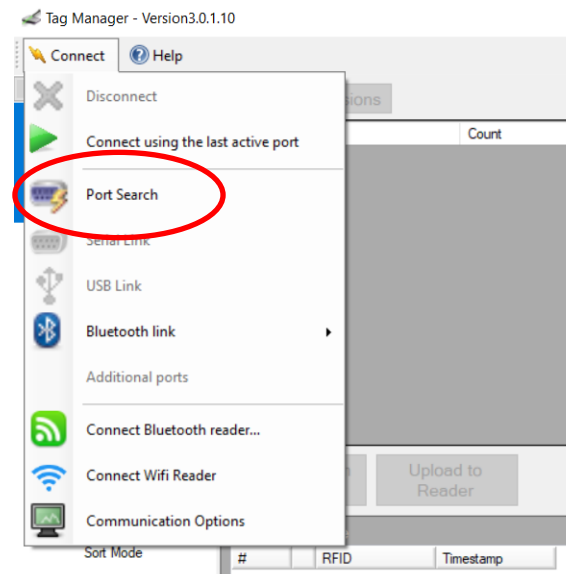


- Confirm that your computer accepted the wand's Blue-tooth by selected the AWR300 wand and typing the PIN "1234". Then, click connect .



The PIN will always be "1234"

- Start the EID Tag Manager application, wait for the program to finish searching, it WILL LIKELY fail.
- On your computer in the Allflex EID Tag Manager application click the “Connect” icon in the top left corner.
- Click “Port Search”





Connecting the Wand Using a Bluetooth Connection

If the wand has already been connected, wait until the Tag Manager icon in the bottom left corner turns green and proceed. See Page 23 to start.

To pair the computer with the wand for the first time, first open the computer's Bluetooth Settings.

Start the process of adding a new Bluetooth device. If the computer adds an Unknown Device, wait. It should switch the name in a few more seconds to "AWR300", likely followed by the serial number.

To Get Started

- Power on your wand and make sure the Bluetooth capabilities are turned on.
- Select [Menu](#) by clicking the orange button.
- Use the arrow buttons to highlight [Setup](#). Then, click the green button.
- Use the arrow buttons to highlight [Interface Setup](#). Then, click the green button.
- Use the arrow buttons to highlight [Bluetooth](#). Then, click the green button.
- On your computer, go to your Bluetooth Settings. Click to add a Bluetooth device.
- Use the arrow buttons to highlight [Start BT Inquiry](#). Then, click the green button.
- Once the wand locates your computer's Bluetooth, your computer's identifying name will appear on the wand's screen. Click the green button. Then, click the exit button.

make sure wand is on at least a 2 min. time limit before it goes to sleep



Market Live Share Overview

Live updates are available by clicking the "Operate "live" online" button. This feature will allow the market office to receive real time animal entry updates.

To use this feature, you MUST be connected to the internet chute side.

Market Office Use:

- Log in to your KDA Livestock Market Portal
- Click "View Backtags"

Livestock Market Reports

 **View Reports**
View livestock market reports for the past 24 months.

 **Create Report**
Submit a new livestock market report.

 **View Backtags**
View uploaded backtags for the past 3 months.

- Click "View Details" of the sale date you are currently working.

***Continued details on page 18**



Market Live Share Overview

After clicking “View Details” you will see an updated list of animal entries .

ST00000Z
(785) 448-3811

[Refresh](#)

Entry Id	SC	Owner Name	Backtag	Official ID	Breed	Sex
520841e4-0e73-4bbd-be02-0309ce9a044e		TALOR	48AN0008	840003123456792	blk	F
483134c0-dcd7-4009-ae4d-d8390a1753d5		TALOR	48AN0007	48AAA1233	blk	F
42746506-450b-4391-821d-b8db6f8ba73f		Garrett Girk	48AN0002	48AAA1324	blk	F
5b2a0eed-641f-414f-9d8e-86ed4e8e07ad		TALOR	48AN0005	840003123456791	blk	F
d2b9f28e-e8f9-4961-ba06-e2466b400d49		Garrett Girk	48AN0004	840003123456790	blk	F
a47ea319-52cb-4315-bb5c-a2e6b3308e23		Garrett Girk	48AN0003	48AAA1235	blk	F
a5e77044-4d0c-491e-9737-fef57b665934		Garrett Girk	48AN0001	840003123456789	blk	F

- Animal Entries will NOT appear automatically, you will need to click the green “Refresh” button to see an updated list every few minutes.
- If an edit is made on an animal entry in the backtag program, you will NOT receive a notification on the market office side. However, the changes will update when you click “Refresh”.



Market Live Share Overview

Filter options are available at the top of every column for easy searching.

Backtag	Official ID	Breed
48AN0009		
48AN0008		
48AN0007		
48AN0002		
48AN0005		
48AN0004	840003123456790	blk

An option to export animal entries to a CSV file in Excel is also available.

If you refresh the animal entries page after exporting to excel, a new excel sheet will have to be made in order to see an updated list.

ANDERSON COUNTY SALES COMPANY, LLC

SALE DATE: 9/4/2024

430 N MAPLE ST GARNETT, KS 66032-1074

ST00000Z

(785) 448-3811

[Back to List](#) [Export CSV](#)

[Refresh](#)

SC	Owner Name	Backtag	Official ID	Breed	Sex	Age	Preg.	Address
----	------------	---------	-------------	-------	-----	-----	-------	---------

Combined Trends for Beef, Milk, and Pork 2026 Assessments

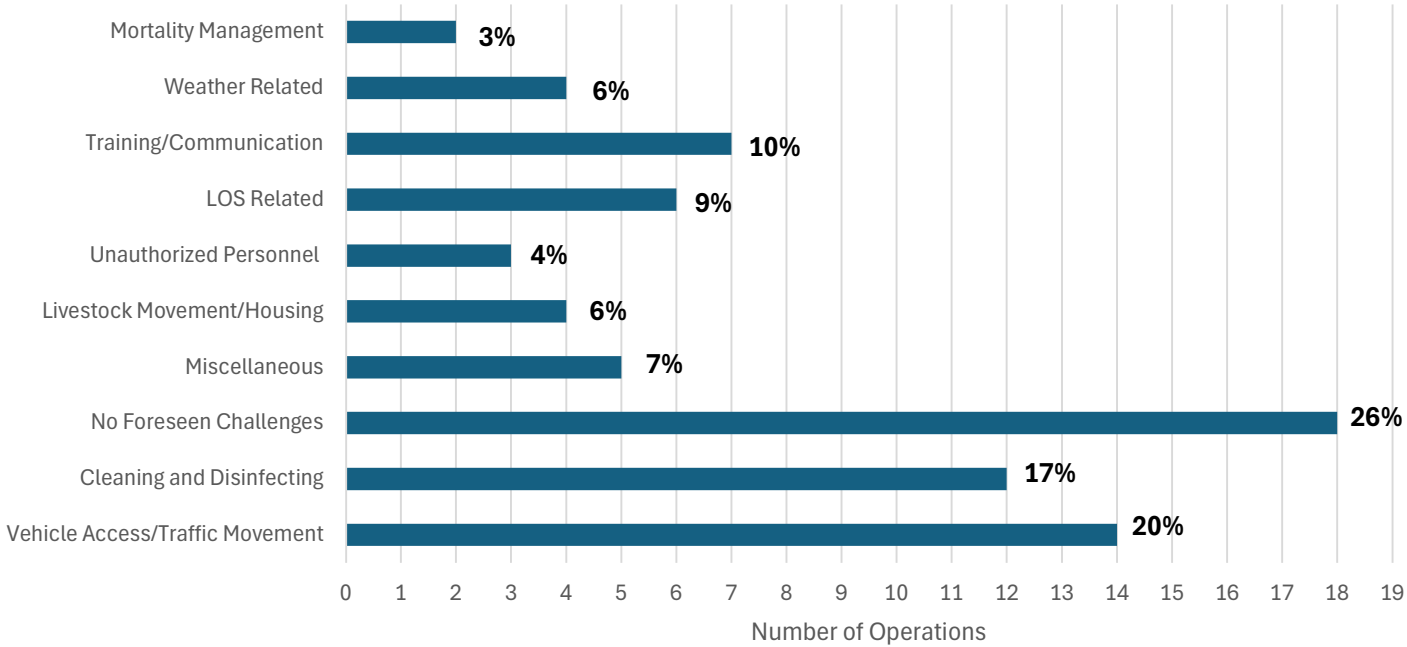
Greatest Foreseen Challenges

Vehicle Access/Traffic Movement	14	20%
Cleaning and Disinfecting	12	17%
No Foreseen Challenges	18	26%
Miscellaneous	5	7%
Livestock Movement/Housing	4	6%
Unauthorized Personnel	3	4%
LOS Related	6	9%
Training/Communication	7	10%
Weather Related	4	6%
Mortality Management	2	3%

TOTALS

	Yes		No	
Changes in Leadership?	11	27%	30	73% Excludes Pork
Completed Annual Training?	65	94%	4	6%
Stood Up Plan?	54	78%	15	22%
Can Provide Records?	69	100%		
Made Changes to Facility?	2	3%	67	97%
Made Changed to Plan?	6	9%	63	91%
Want Access to RABapp?	52	75%	17	25%

Greatest Foreseen Challenges



Total Assessments

Beef	34
Milk	7
Pork	28
	69