



KDA Foreign Animal Disease Response
& Ongoing Projects

KDA Response Model

- The Kansas Department of Agriculture is the lead agency listed under Emergency Support Function 11 in the Kansas Response Plan.
- During large-scale incidents, KDA representatives are co-located in the State Emergency Operations Center (EOC) in Topeka with other statewide response partners.
- KDA serves a support function for most incidents, but would be the lead agency in an agriculture specific incident.



KDA Response Model

What types of incidents might KDA take the lead in response?

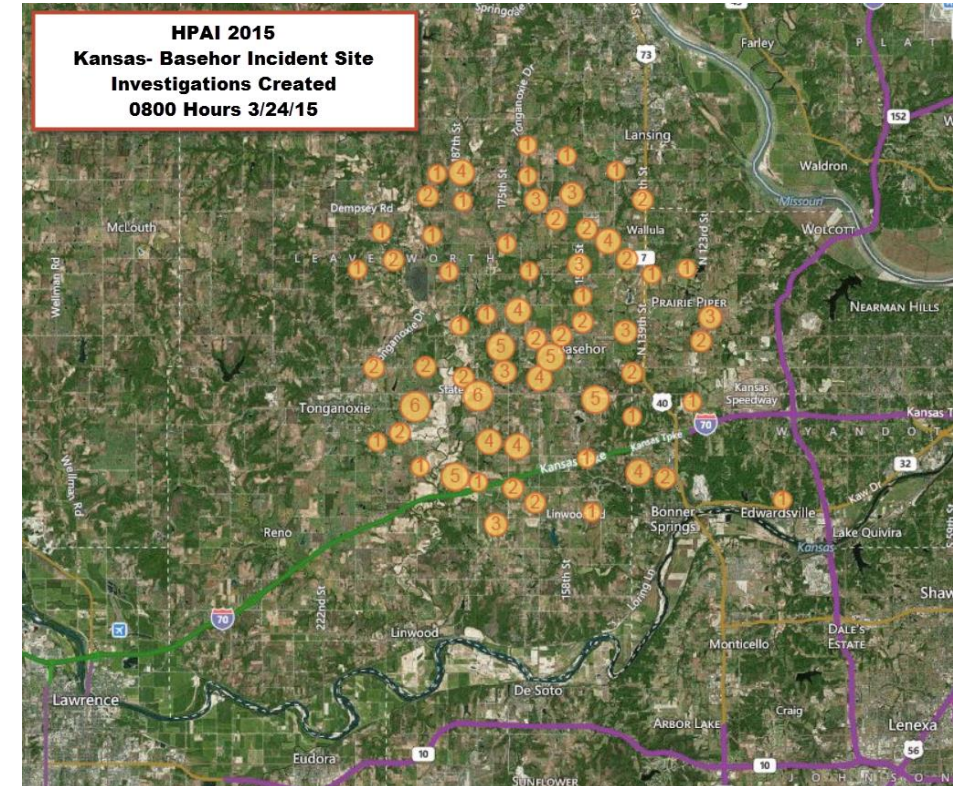
- Foreign Animal Disease Outbreak
- Intentional Food Safety Issue
- Plant Disease or Pest Outbreak
- Certain Water Issues



Of these threats, a Foreign Animal Disease Outbreak is considered the highest priority for KDA.

KDA Response Model

- A recent example of an incident in which KDA took a lead role in a response effort was the 2015 highly pathogenic avian influenza outbreak in eastern Kansas.
- KDA personnel worked with local emergency management officials to contain and control this outbreak.



Diseases of Concern

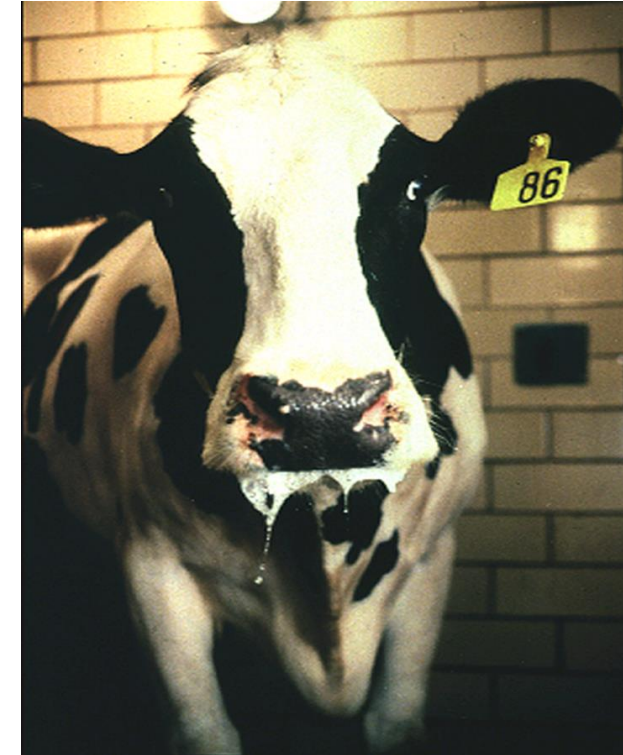
- Foreign animal diseases (FAD) not endemic in the U.S.
 - Foot & Mouth Disease
 - Exotic Newcastle Disease
 - Highly Pathogenic Avian Influenza
 - Classical Swine Fever (aka Hog Cholera)
 - African Swine Fever
 - Others

Diseases of Concern

What FAD are we most concerned about?

Foot and Mouth Disease

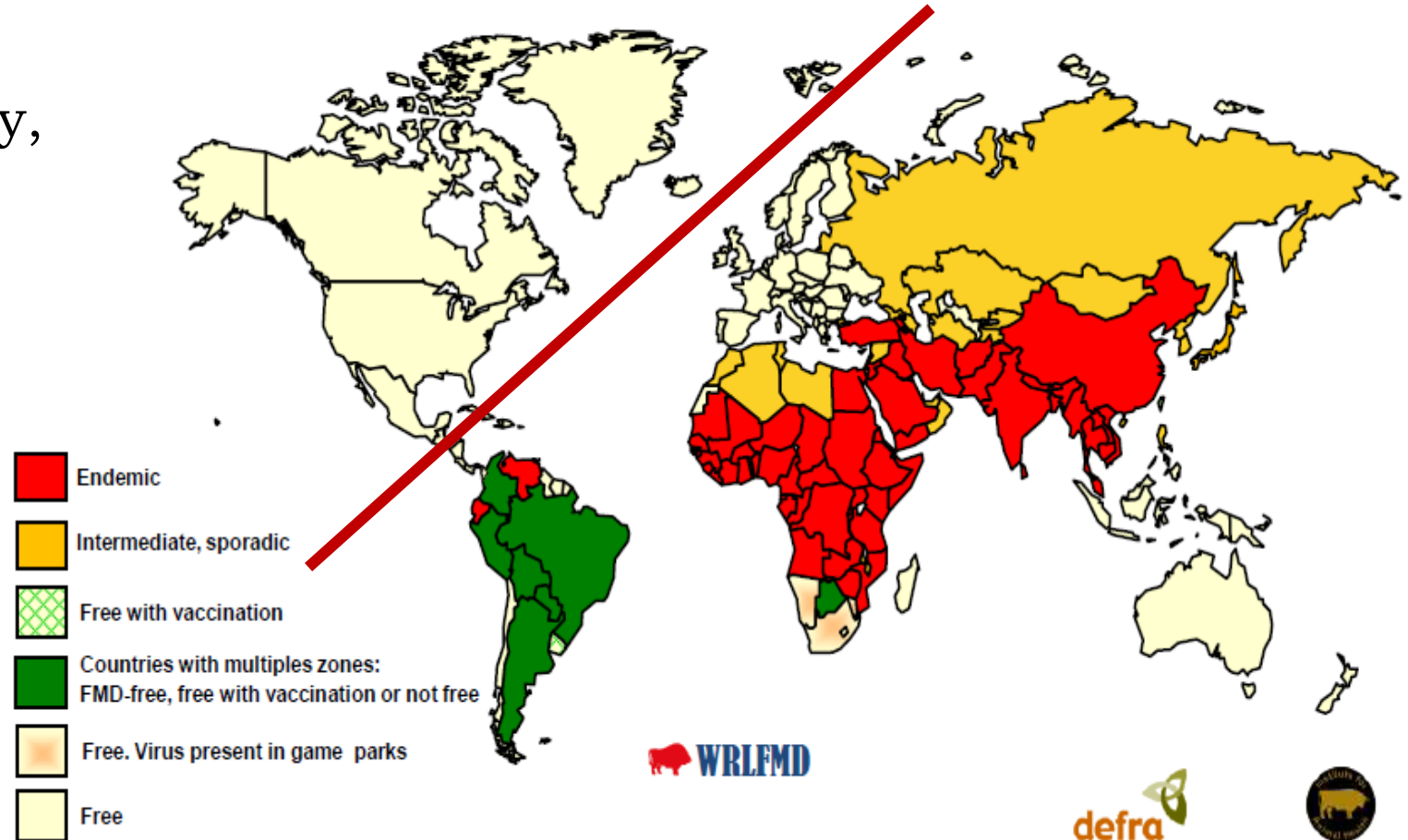
- Affects cattle, hogs, sheep, and other cloven-hooved animals.
- Highly contagious.
- Significantly affect production.
- Will change trade status around the world.
- Not a human health or food safety concern.



Diseases of Concern

Why such concern in Kansas?

- Kansas imports livestock daily, both to feed and slaughter.
- Livestock movement from state-to-state on I-70 and other roads.
- Concentration of livestock in both dairies and feedlots.



Economic Impact

The Revised Risk Assessment for the National Bio and Agro-defense Facility (NBAF) reported potential economic losses of between \$16 billion and \$140 billion from FMD escaping containment at the laboratory

- Direct Costs

- Indemnity
- Depopulation
- Disposal
- Cleaning and disinfection

- Indirect Costs

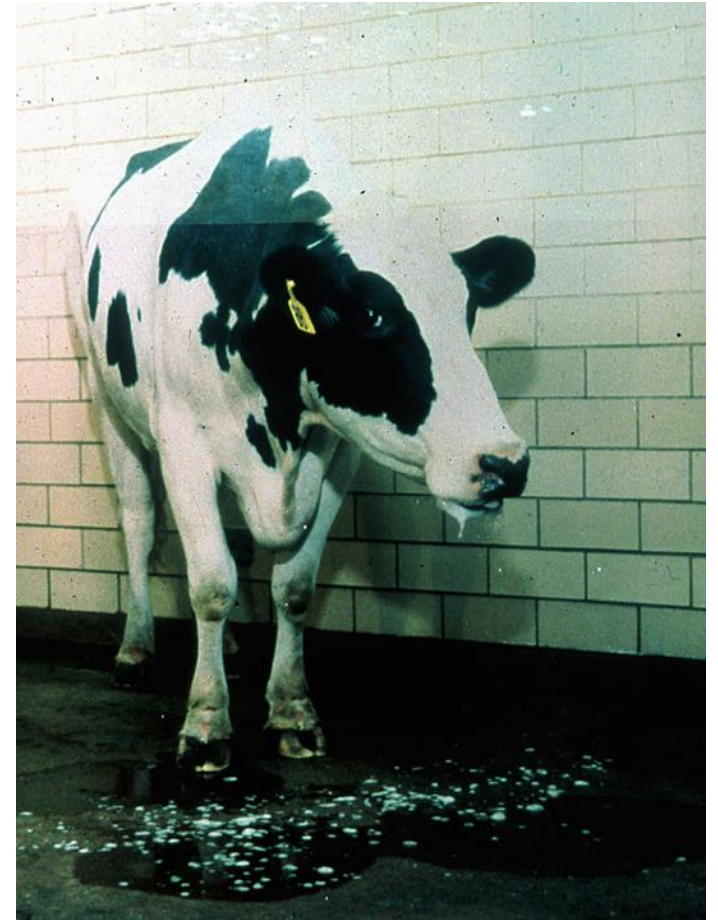
- Exports shutdown
- Lost farm income and taxes
- Consumer confidence/fear

Foreign Animal Disease Response

- Success in managing a foreign animal disease (FAD) is dependent upon early recognition and a rapid & effective response.
- Efficient control of an FAD is dependent upon producer cooperation and quick local response.
- An FAD could be introduced intentionally (agroterrorism), accidentally, through migration or movement of wildlife, or through natural disease emergence.
- An FAD could be transmitted and spread through direct contact, ingestion, airborne, fomites (particulate matter), or vectors (insects, rodents, etc.).
- The KDA Animal Health Department and IMT spends a great deal of time and energy training and exercising for responding to an FAD outbreak.

Detection - What

- Unusual/unexplained illness or animal behavior
- Animals with clinical signs of known FADs
- Symptoms not responsive to treatment
- Many farms or animals with similar symptoms
 - High morbidity
 - High mortality
- Other indicators
 - History of foreign travel, visitors, mail, etc.
 - Importation of animals, embryos, semen, etc.



Detection - Who

- Farmer/owner
- Veterinary practitioner
- Livestock market worker
- Slaughterhouse worker
- State diagnostic laboratory



Detection – Reporting & Investigation

- Report is made to Kansas Animal Health Commissioner or USDA APHIS VS Assistant Director in Topeka
- Foreign Animal Disease Diagnostician (FADD) trained veterinarian assigned to investigate
 - 6 FADDs employed by KDA
 - 4 FADDs employed by USDA assigned to Kansas
- FADD conducts investigation ASAP
 - 100's of investigations nationally per year
- FADD makes field diagnosis and with the State Veterinarian, and USDA APHIS VS Assistant Director sets case priority
 - Immediate actions based on field diagnosis
 - Sample handling based on case priority



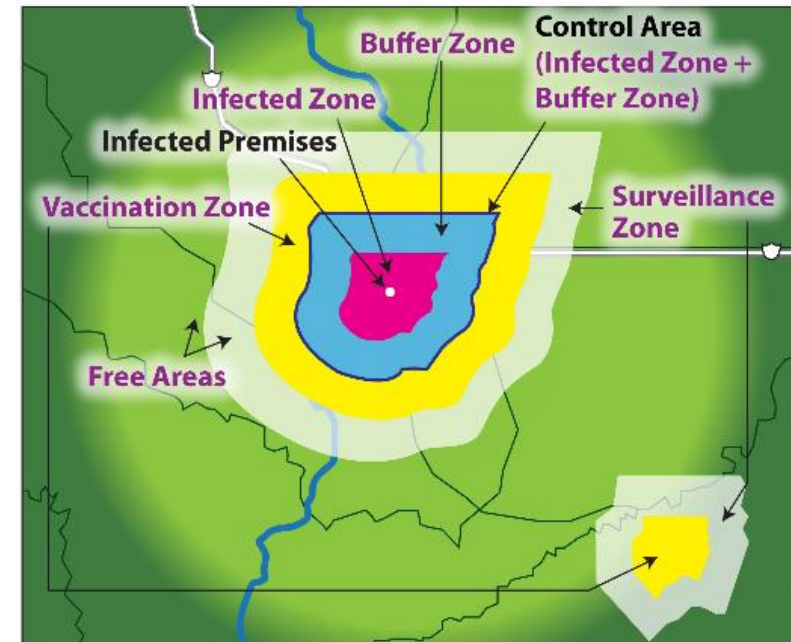
Detection – Diagnosis

- Highly Likely/High Suspicion Response Actions
 - Send samples “highest priority”
 - Send duplicate samples to the nearest National Animal Health Laboratory Network (NAHLN) Lab (Kansas State University)
 - Quarantine farm
 - Gather information on contacts
- Presumptive Positive
 - Local National Animal Health Laboratory Network (NAHLN) Lab
 - Results within 6-8 hours
 - Positive laboratory evidence and supporting epidemiology
- Confirmation
 - Plum Island (Foreign Animal Disease Diagnostic Laboratory [FADDL]) or the National Veterinary Services Laboratory (NVSL) in Ames, Iowa
 - Virus isolation typing and sub-typing



Confirmed Diagnosis

- After a confirmed positive diagnosis of a FAD, farm is quarantined and control area established
 - No movement of susceptible animals/products in/out of control area, unless under permit
 - No movement of people, animals or machinery off infected farm until decontaminated and other disease mitigation requirements are met
- Depopulate animals on infected and contact premises (possibly)
- Carcass disposal through appropriate method(s)
- Clean and disinfect the premises
- Restocking



Emergency Response Actions

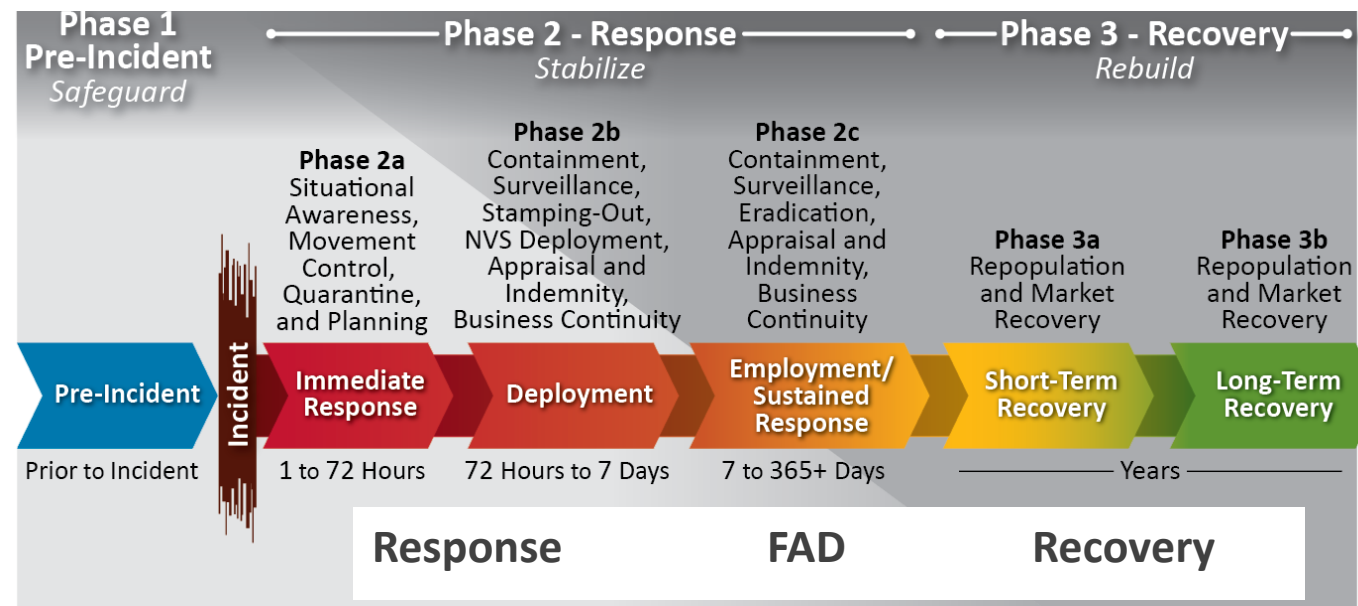
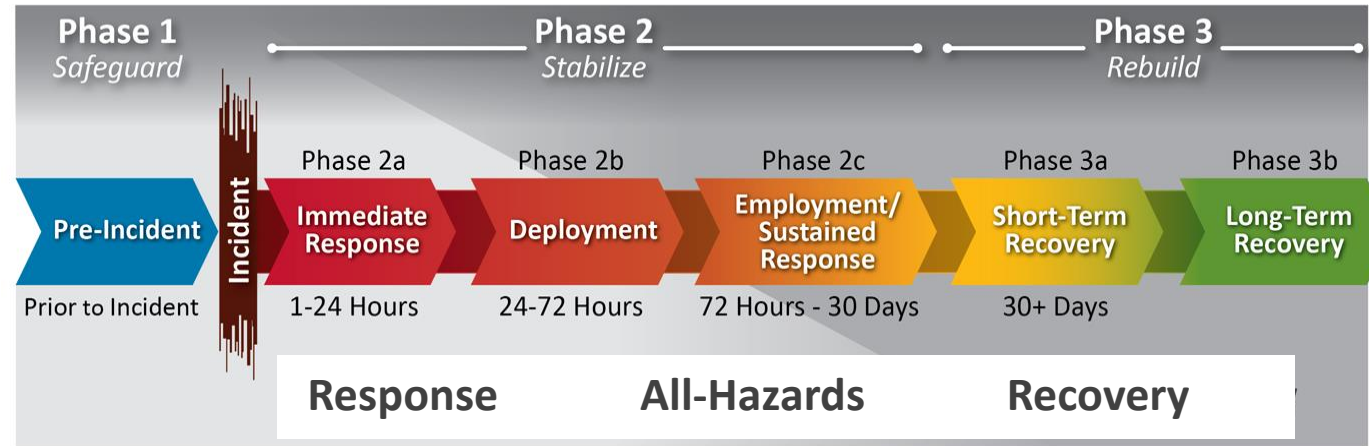
- Goal is to return to disease-free status as quickly as possible
 - Stamping-out alone is first option
 - May include strategic vaccination
 - May include preemptive slaughter
 - Carcass disposal is a major challenge
 - **FAD response doesn't fit the Local → State → Federal emergency response model typically seen in natural disasters**



FAD Response Model

- State-Federal (USDA) have response authority
- Local government support, no response authority
- Rapid response is critical; there's no time to debate response strategies or where resources are coming from
- Little agriculture emergency preparedness federal funding
- Generally, little impact to human life and property
- Huge potential for economic impact
- Response supports private industry
- Not likely to be considered a Stafford Act event

FEMA-FAD Model Comparison



Kansas FAD Response

A confirmation of Foot and Mouth Disease **anywhere in North America** will immediately change day-to-day operations of KDA into a response mode.



Kansas FAD Response

Upon Presumptive Positive FMD Case in North America (First 24 Hours)

- Mobilize KDA Incident Management Team
- Obtain Governor's declaration of emergency
- Announce stop movement order
- Stand-up border checkpoints
- Inform industry partners
- Activate KDA phone bank
- Coordinate with USDA partners
- Activate State Emergency Operations Center (possibly)



Kansas FAD Response

Upon Suspect or Confirmed FMD Case in Kansas

- Dispatch FADD to investigate.
- Issue quarantines as needed.
- Coordinate with local affected jurisdictions for:
 - Resources
 - Traffic Control and Security
- Determine control methodology:
 - Depopulation
 - Vaccination
 - Isolation
 - Combination
- Implement emergency permitting for commodity movements.
- Coordinate release of public information & education.



KDA Prevention & Preparedness

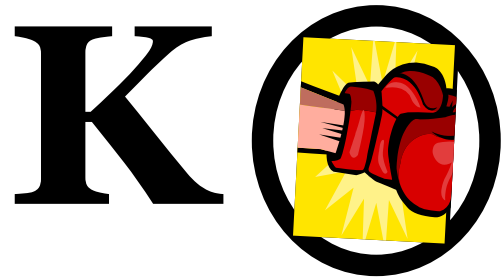
The Kansas Department of Agriculture is committed to a goal of being the most prepared state in the nation to respond to a high-consequence foreign animal disease outbreak.

Ongoing projects to meet this goal:

- KDA annual functional exercise
- Kansas Agriculture Emergency Response Corps
- Livestock Biosecurity Project

KDA Annual IMT Exercise

SAMS



AFTERBURN



INVISIBLE FIRE



PHOENIX

Volunteer Corps

The Kansas Agriculture Emergency Response Corps is developed and maintained by the Kansas Department of Agriculture to utilize the skills, expertise, and passion of Kansans to assist state and federal staff in responding to agricultural incidents.



What is the KAERC?

A partnership between KDA and local volunteers across the state of Kansas.

Volunteers Provide

- Additional Responders
- Local Knowledge & Expertise
- Broad Skillsets
- Local Passion

KDA Provides

- Statewide Organization
- Unified Response
- Position-Specific Training
- Authority to Respond

Who can join the volunteer corps?

The volunteer corps is a multi-discipline, statewide volunteer force made up of a wide-variety of backgrounds and experiences, including but not limited to:

- Local Family Farmers
- Feedlot Operators
- Dairy Operators
- Swine Producers
- Poultry Producers
- Equine Owners
- Goat & Sheep Producers
- Veterinarians
- Researchers
- Laboratory Technicians
- Vet Technicians
- Extension Agents
- Professors
- Students
- First Responders
- Communication Experts
- Bankers
- Heavy Equipment Operators
- Truckers
- Risk Managers
- COOP Operators

Volunteer Integration in a FAD Outbreak

As volunteers are activated in a FAD Outbreak, the geographic nature of the event will lead to different volunteers being needed at different locations for different purposes. These will likely include:

- Manhattan – at the KDA Operations Center
- In a local affected jurisdiction – likely to support a county Emergency Operations Center
- At an infected premise.
- At suspect premises across the state.

Volunteer Integration in a FAD Outbreak

Possible Volunteer Usage in Manhattan

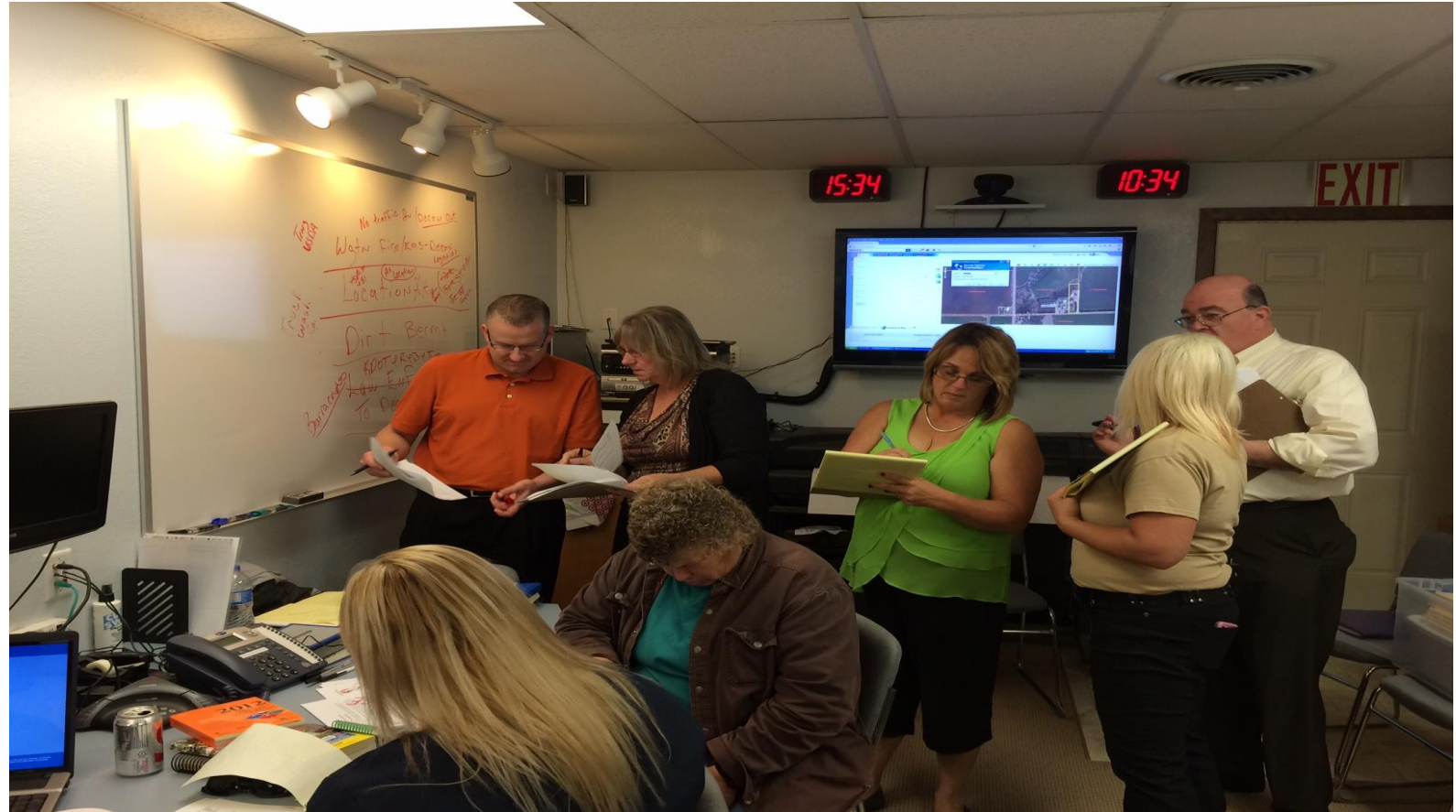
- Data Entry or Record Management
- Epidemiologist
- Communications
- Risk Analyst
- Appraiser
- IT & GIS
- Resource Allocation
- Finance & Accounting



Volunteer Integration in a FAD Outbreak

Possible Volunteer Usage in a Local Jurisdiction

- Community Liaison
- Communications
- Appraiser
- Resource Allocation
- Public Educator
- Traffic Control & Security
- Case Management
- Warehouse Management
- Psychologist
- Training Officer



Volunteer Integration in a FAD Outbreak

Possible Volunteer Usage at an Infected Premises

- Cleaning & Disinfection
- Case Management
- Disease Surveillance
- Physical Laborer
- Slaughter & Culling
- Traffic Control & Security
- Transportation



Volunteer Integration in a FAD Outbreak

Possible Volunteer Usage at a Suspect or Clean Premises

- Cleaning & Disinfection
- Case Management
- Disease Surveillance
- Physical Laborer
- Traffic Control & Security
- Transportation
- Risk Analyst



Livestock Biosecurity Project

- Summer 2017 - Utilized 3 summer interns to develop biosecurity plans for dairies and feedlots that would be consistent with guidance issued from the Secure Milk and Secure Beef working groups.
- Gain an understanding of the amount of work necessary to create such plans.
- Integrate the biosecurity guidance distributed by Dr. Larry Hollis to feedlots with the Secure Beef Supply guidance to create a single, consistent document for Kansas feedlots.
- Increase overall awareness of biosecurity planning and resources.



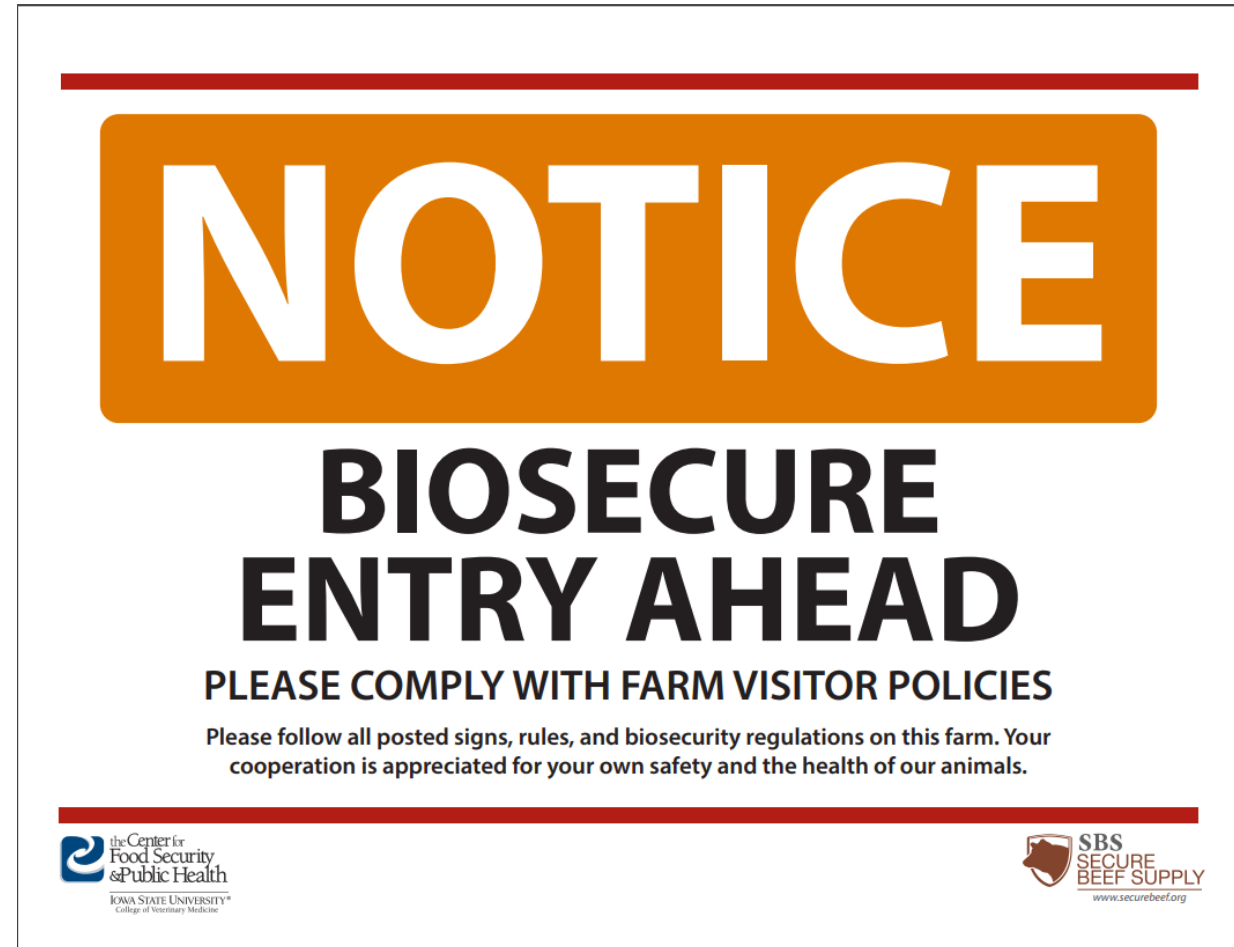
Initial Partner Agencies

- Forget-Me-Not Dairy in Cimarron, Kansas
- Innovative Livestock Services in Great Bend, Kansas



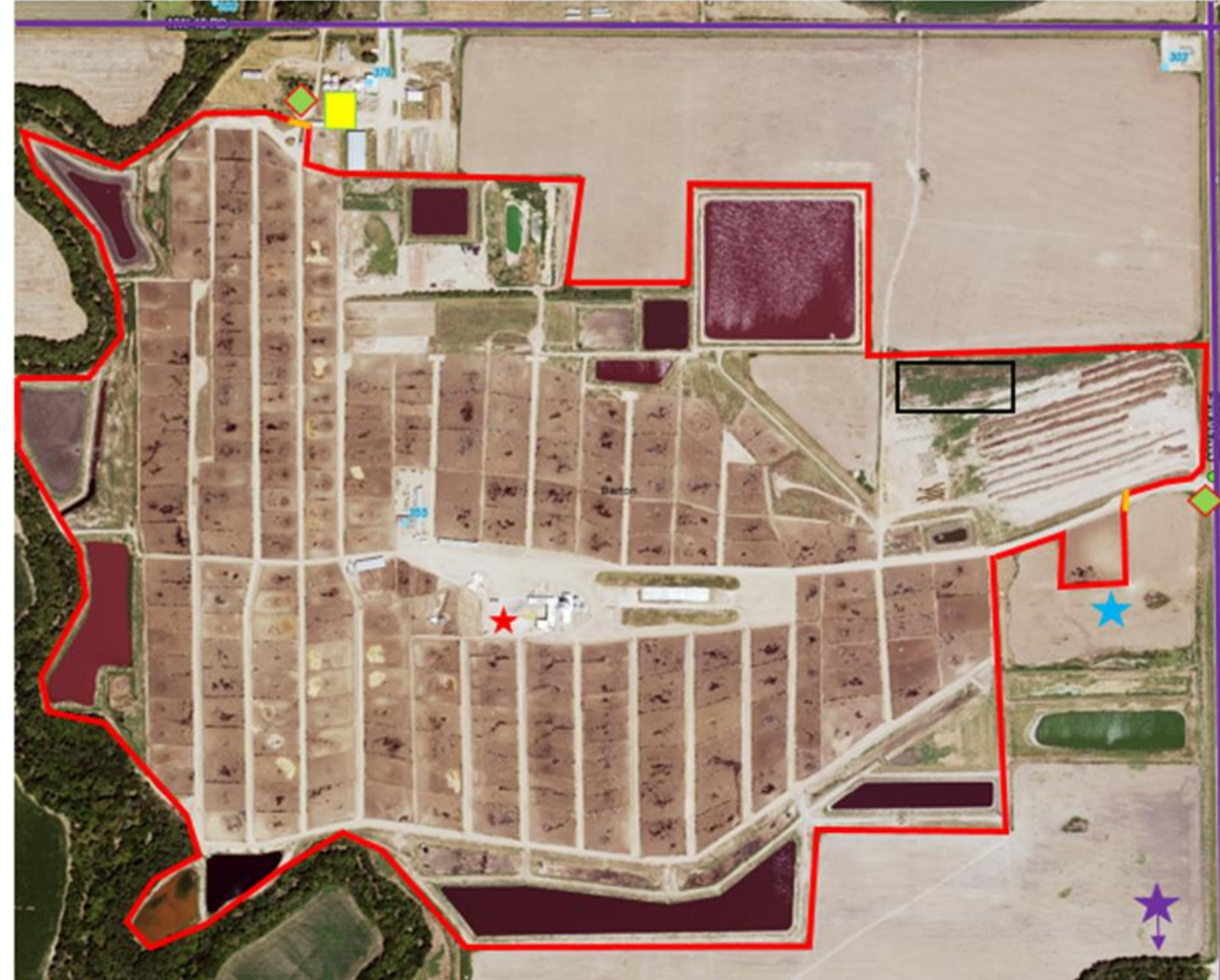
Key Plan Components

- Designate a Biosecurity Manager
- Compose and Implement an Enhanced Biosecurity Plan
- Train Employees
- Establish a Line of Separation
- Create Cleaning and Disinfection Stations
- Identify Necessary Movement on and off the premises
- Identify Essential Personnel
- Facilitate a Deeper Understanding of FAD Response



Line of Separation

- Example LOS From Great Bend Feeding
- Try to minimize access points and keep cattle protected
- Employee Parking outside LOS
- Designate Cleaning & Disinfection Stations



Long-Term Project Goals

- Create a standardized biosecurity guidance document and template for Kansas feedlots and dairies.
- Create a training program for personnel from feedlots and dairies to be trained in biosecurity plan writing and maintenance.
- Encourage Kansas feedlots and dairies to create, train, and exercise written biosecurity plans.
- Continue to use interns to assist premises in plan writing and plan reviewing.
- Collaborate with the Animal Health Commissioner to integrate the emergency permitting process with biosecurity planning.
- Continue working with Secure Food Supply working groups and other states to ensure that plan guidance and templates are workable and standardized across state lines.

Responding to Other Incidents

As local EMs or first responders, know that KDA is happy to assist with response or recovery efforts when it is not the lead agency but the incident has significantly impacted a sector of the agricultural industry. During such an event, volunteers could again be requested to respond alongside KDA employees. Examples of such events could include:

- Wildfires
- Severe weather or tornadoes
- Winter weather
- HAZMAT or Transportation Incidents
- Industrial Incidents





Thank you for attending.