



United States Department of Agriculture

Disaster Preparedness For Veterinary Practices

Dr. Anna Ruman
Emergency Coordinator
USDA/APHIS/VS

Are you prepared to continue practicing in the aftermath of a disaster?



Awareness of emergencies that could occur

- Floods
- Earthquakes
- Tornadoes
- Radiological
- Fires
- Hurricanes
- FAD
- ??



Written disaster plan should include:

- Emergency relocation of animals
- Medical record backup
- Continuity of operations
- Security
- General emergency planning
- Fire prevention
- Insurance and legal issues

Relocation of animals

- Leashes, carriers, species specific supplies
- Pre-arranged animal transport
- Temporary animal holding location
- 24 hr client contact list (off-site access)
- Secure and weather resistant patient ID

Medical record backup

- Off site computer back up
- Off site copies of important documents
- Itemized inventory (on and off site)
- Digital storage

Continuity of operations

- Communications (what not to rely on)
- Alternate power and fuel source
- List of suppliers
- Alternate food and water sources
- 5-7 days worth of food and water
- Alternate practice location (reciprocal agreements?)

Security of building and personnel

- Phone tree for emergencies
- O₂ tanks isolated for safety
- Secure practice from theft/looting
- Emergency lighting/exits/floor plan
- Off site meeting location
- Method to keep all staff informed
- Hazardous/controlled substance list (off site)
- First aid training for employees

General emergency planning

- Training on PPE and biosecurity (FAD)
- Awareness of hazardous materials
- Emergency response personnel contact numbers

Fire prevention

- Identify major fire hazards, potential ignition sources
- Procedures to control accumulations of flammable and combustible materials
- Regular maintenance of potentially hazardous/heat producing equipment and assigning responsible person

Insurance coverage and legal issues

- Current and comprehensive policy
- Receipts for all purchases
- Videotape and photograph inventory
- Business interruption insurance
- Extra expenses (OT or relocation)
- Tax laws and deductible disaster expenses
- Preventing further damage after an event







Preparing your clients

➤ <https://www.youtube.com/watch?v=Q9NRJkFKAm4>

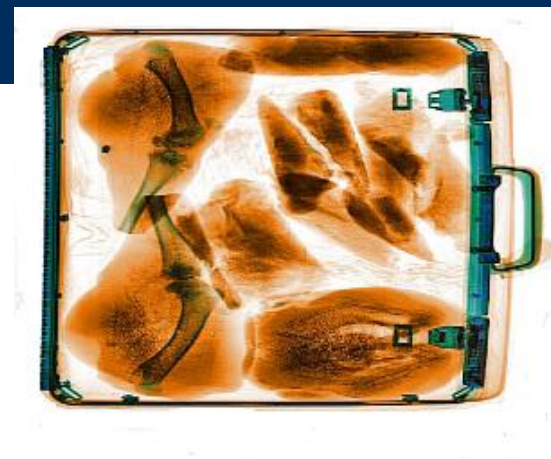
How disease can enter

- Food products
 - smuggled
 - unintentional
- Decorative objects
- Live animals
- Vectors/insects
- Terrorists
- Feral swine



Illegal Movements

- Live animals
- Produce
- Insects
- Meat products



Our Risk Has Increased

- Number of farms decreasing
- Animal numbers rising on farms
- Lack of genetic diversity
- Aging human population
- 75% of “new” diseases are zoonotic
- One billion people travel internationally/yr
- Increased antibiotic resistance

Biosecurity on and off the farm

- Do not share equipment
- Keep track of visitors
- Isolate new animals and know where they came from
- Reduce wildlife contact
- Frequent cleaning
- Secure entrances



Vulnerabilities

- High density husbandry
- Mixing at auction markets or transport by vehicles
- Poor traceability of animals
- No immunity to foreign animal diseases/widespread in other countries
- Centralized feed supply
- Expanded international trade/travel



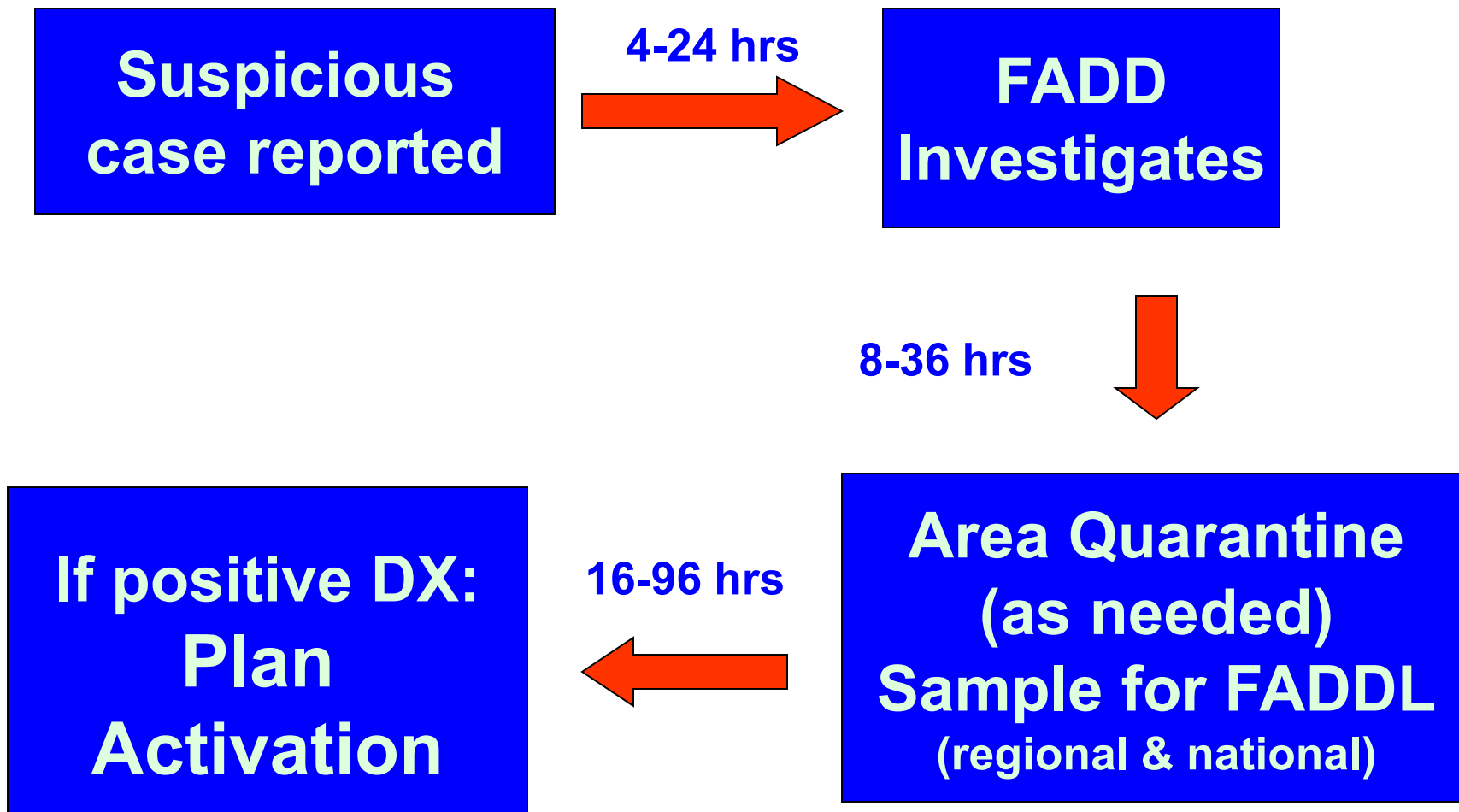
Basic Biosecurity Elements

- Awareness of importance
- Understand disease transmission
- Biosecurity measures
 - Movement control or restriction
 - People, animals, vehicles, equipment
 - Personal protective equipment
 - Isolation of infected and suspected animals
 - Proper C&D procedures
 - Vector control



Response to a foreign animal disease & HOW YOU COULD HELP

Foreign Animal Disease Response Flowchart



What elements of a case should make you call

- High death rate
- Multiple species affected
- Multiple farms affected
- Unusual lesions or combination of lesions
- Unique case history (foreign travel, etc.)

The FAD investigation

- Done by a trained foreign animal disease diagnostician (state or federal)
- It is kept confidential
- Samples may be sent to multiple laboratories
- Extra samples may be taken
- The FADD receives guidance from the lab
- The type of samples taken may be predetermined from guidance documents
- Case histories will be needed from you or producer

17 Most Damaging Animal Disease Threats

H5N1 Avian Influenza Virus
Source: PHIL CDC

1. Highly Pathogenic AI (F)
2. Foot-and-Mouth disease
3. Rift Valley fever (F)
4. Exotic Newcastle disease
5. Nipah and Hendra virus (F)
6. Classical swine fever
7. African swine fever
8. Bovine spongiform encephalopathy (?)
9. Rinderpest
10. Japanese encephalitis (F)
11. African horse sickness
12. Venezuelan equine encephalitis (F)
13. Contagious bovine pleuropneumonia
14. Ehrlichia ruminantium (Heartwater)
15. Eastern equine encephalitis (F)
16. Coxiella burnetii (F)
17. Akabane virus

Critical Resources

- Veterinary professionals
 - Livestock practitioners
 - Public health veterinarians
 - Trained incident management teams
- Laboratory
 - What is the necessary surge capacity?
- Industry specialists



National Veterinary Stockpile

- Augments state resources by deploying within 24 hours “sufficient amounts of animal vaccine, antiviral, or therapeutic products to appropriately respond to the most damaging animal diseases affecting human health and the economy”
- Will they be “available” if we are not the first state affected??

Current Deployable Capabilities



- Poultry depopulation foaming units
- Push packs of PPE and decon supplies
- Bulk PPE individual kits
- Antivirals
- AI vaccine
- AI field test kits
- Portable vaccine shipment / storage containers
- Depopulation, disposal, & decontamination (3D) commercial services

Stop Movement Orders

➤ **Federal/state orders to halt movement of livestock and livestock products:**

- Some or all species
- Some or all products

➤ **Once stopped:**

- May or may not be diseased animals or tainted products
- May not be able to return to origin
- Could involve hundreds or thousands of animals in some communities!!!!



Quarantine Components

- Risk assessment
- Law enforcement
- Public notification
 - Signs, media
- Industry partnership
- Community cooperation
- Ongoing surveillance
- Preservation of essential services



Animal Health Emergency Response Tasks (continued)

- Mortality management
 - Depopulation
 - Disposal
 - Indemnity programs
- Decontamination of affected premises
 - Cleaning
 - Disinfection
 - Environmental testing



Animal Health Emergency Response Tasks (continued)

- Individual animal ID programs
- Care, treatment, vaccination programs
- Biosecurity & producer education
- Responder/victim mental health issues
- Public information/education!!



Agricultural Industry

Continuity of Operations Planning

➤ Overall goals:

- Continued, safe, and effective operation of the U.S. agricultural industry
- Preservation of a safe and plentiful food supply
- Private industry must embrace this issue!
- Government must facilitate this process!

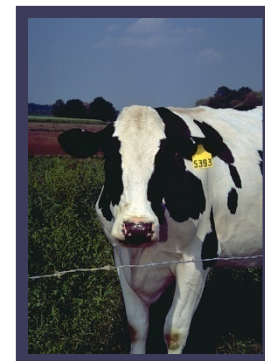
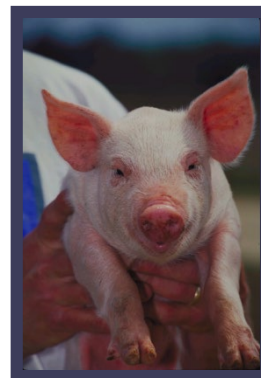
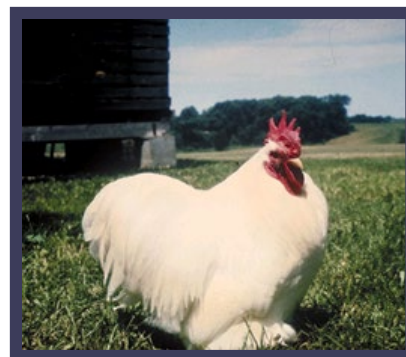
Key Elements in Plans

Will vary depending on the industry and specific commodity

- Risk assessments
- Surveillance requirements
- Biosecurity guidelines
- Cleaning and disinfection procedures
- Epidemiology information
- Permitting guidance

Planning Initiatives

- Government, private sector, and academia working together to create business continuity plans for:
- Secure milk supply
 - Secure pork supply
 - Secure egg supply



Goals During a Foreign Animal Disease Outbreak

1. Detect, control, and contain as quickly as possible
2. Eradicate the disease using strategies that seek to stabilize animal agriculture, the food supply, the economy, and protect public health
3. Provide science and risk based approaches to facilitate continuity of business

Local communities will be involved in:

- Quarantine enforcement
- Local veterinary support
- Mapping/GIS assistance
- Public education & outreach
- Community mental health
- Public health issues
- Mortality management
- Logistical support
- Long-term community recovery



Consequences of a FAD outbreak

- Disruptions to interstate commerce
- International trade halted
- Commodity prices fall
- Collateral markets impacted (grain, products)
- Stakeholder impacts: economic losses, other damages

Other actions to take

- Get involved with your county's emergency plan
- Join NAHERC- National Animal Health Emergency Response Corp (Vets & Techs)
- Help prepare your clients
- Have a plan!!



United States Department of Agriculture

AVMA GUIDANCE DOCUMENTS

➤ Add link

Thank you for your attention

