

Animal Disease Response Training (ADRT)



Animal Disease
Response Training

National Livestock Readiness Program Feedback Session

**February 8, 2018
Manhattan, Kansas**

Discussion Topics

1. Why is Animal Disease Response Important?
2. History of Animal Disease Response Training (ADRT)
3. What is the ADRT Curriculum?
4. Scheduling ADRT Classes
5. Questions?



Why is Animal Disease Response Important?



- Animal agriculture constitutes the majority of agricultural commodities in the U.S.
 - **Cattle:** \$76.4 billion dollar industry and 19% of total U.S. agriculture
 - **Dairy cattle and milk production:** \$35.5 billion dollar industry and 9% of U.S. agriculture
 - **Poultry and egg production:** \$42.8 billion dollar industry and 11% of total U.S. agriculture
 - **Swine:** \$22.5 billion dollar industry with up to 25% of U.S. agriculture

Livestock Production Becoming Much More Concentrated

- **US Cattle Industry**

~92 million cattle/calves

Production in every state

~ 100,000 feeding operations

~ 90% of cattle – concentrated at 2% of all operations

1/3 of cattle/calves - 5 states

Texas, Nebraska, Kansas, California, Oklahoma



- **US Hog Industry**

~ 68 million hogs

Production in every state

More concentrated than cattle

~ 20 operations – account for > 40% of all production

2/3 of all factory-farmed hogs and ~ 60% of all hog production

– 5 states

Iowa, North Carolina, Minnesota, Illinois, and Indiana



Impact of Animal Disease Outbreaks

- Stop Movement Orders, Export Market Closings, Coordination of Large-Scale Animal Disease Response
 - Rapid Response will Minimize Impact**
- Extensive Movement of Livestock will Create Unprecedented Challenges in a Transboundary Animal Disease (TAD) Outbreak
 - Approx. 1,000,000 swine in transit daily in US**
 - Approx. 500,000 cattle in transit daily in US**
- Rapid Disease Spread will Affect Large Numbers of Animals over a Great Geographical Area
 - Morbidity of FMD is near 100% in cattle and swine**
- Recovery from a TAD will create many challenges in animal depopulation, waste management, and decontamination
 - One Feedlot (100,000 head of cattle) = greater than 100M lbs. biomass, will need 1,677 30-ton transport containers to transport to disposal site, and a 151 mile burial trench that can manage 4,000 gallons of leachate**

Recent TAD Outbreaks

- 2013-2014: Porcine Epidemic Diarrhea virus (PEDV) outbreak
 - Currently present in 34 states
 - Resulted in an estimated \$900 million loss to the swine industry
 - Estimated that 7-8 million pigs were lost to disease
 - Hog slaughter expected to be down 10%



- 2015: Highly Pathogenic Avian Influenza (HPAI) outbreak in Iowa
 - 34% reduction in egg-laying hen production with \$521.3 million reduction in poultry sector output in Iowa
 - Estimates of outbreak for entire year indicate total output in Iowa would decline by \$957.2 million
 - Equates to \$327 million reduction in value added to the gross domestic product as well as \$111 million in earnings and 2,809 jobs



Federal Veterinary Workforce Emergency Response and Post-Outbreak Assessment

- 2012, Estimated a potential need for total of 105,043 veterinary and non-veterinary responders over time in a large-scale FMD outbreak.
- Current USDA/APHIS statistics - in the first six months of the recent Highly Pathogenic Avian Influenza (HPAI) outbreak over 3200 state, federal, and contracted personnel were involved in the response.
- Reflects a serious challenge to provide adequate veterinary and non-veterinary personnel trained in animal disease response.



Animal Disease Response Training (ADRT)

- With the natural turnover of emergency response personnel, TAD training needs to be a continuous process
- Knowledge in animal disease response should always be updated to current levels of information and standards of care
- Animal Health Industry workers (feedlot cowboys, livestock producers, rendering and packing plant employees, extension personnel), if properly trained, can provide a valuable source of qualified response personnel in the event of a high-consequence TAD outbreak.
- High-consequence TAD response begins at the local level but will quickly escalate to the state and federal levels.
- Local responders should have an understanding of why response actions are important and be able to clearly and effectively communicate with the state and federal officials.

ADRT History

- Created in 2004 through DHS funding and first offered by the AgPreparedness Center at Kirkwood Community College in Cedar Rapids, Iowa
- From 2005-2009 Kirkwood presented 101 ADRT classes, training approximately 2,500 Ag First Responders in 15 states
- DHS funding for AgPreparedness Center and ADRT was discontinued in 2010
- NABC housed all ADRT materials and pursued funding to continue the curriculum
- 2014 – NABC received funding from DHS / OHA Food, Ag, and Veterinary Defense group to update ADRT to current levels of knowledge and standards of care
- August, 2015 – NABC received FEMA notification that ADRT was accepted into the FEMA National Training and Education (NTED) State and Federal Catalogs of approved courses
- 2016-2018 - In the last 2 ½ years, NABC has provided 15 ADRT classes to over 450 non-traditional first responders in Kansas and Nebraska

ADRT Curriculum

- ADRT comes to you – taught by Mobile Training Teams (MTT)
- Class size ranges from 30 – 60 students
- ADRT class is eight hours delivered over one instructional day
- State DHS training dollars can be used to fund ADRT
- Students completing ADRT receive a DHS Certificate of Completion

<i>Training Officer Course Schedule</i>		
Time	Activity	Time in minutes
0800-0845	Course Overview/Administration/Pre-test	45
0845-0945	Introduction to Animal Disease Response	60
0945-1000	Break	15
1000-1100	Personal Protective Equipment (PPE)	60
1100-1200	Biosecurity and Quarantine	60
1200-1300	Lunch	60
1300-1400	Euthanasia and Disposal	60
1400-1500	Cleaning & Disinfecting (C&D)	60
1500-1515	Break	15
1515-1615	PPE Activity Group Scenarios (Includes break)	60
1615-1700	Post Test and Evaluation	45

Scheduling ADRT Classes

- Classes schedule approximately 2 mos. in advance of desired date to allow for necessary logistics

For More Information or to Schedule an ADRT Class:

National Agricultural Biosecurity Center (NABC)

Kansas State University

Phone: (785) 532-6193

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Questions?

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