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

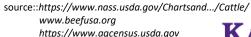
Production in every state

More concentrated than cattle

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

- 2/3 of all factory-farmed hogs and \sim 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 lowa
 - 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 lowa 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 nonveterinary 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 nonveterinary 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

Training Officer Course Schedule		
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 Email: <u>nabc@k-state.edu</u> Web: nabc.k-state.edu





Questions?

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