REPORT OF THE COMMITTEE ON ANIMAL EMERGENCY MANAGEMENT

Chair: Charlotte Krugler, SC
Vice Chair: Sarah McReynolds, KS

Bruce Akey, TX; Catherine Alexander, MN; Gary Anderson, KS; Celia Maria Antognoli, CO; Marianne Ash, IN; Rich Baca, CO; Sarah Bailey, ND; Deanna Baldwin, MD; Erin Beasley, NC; Karen Beck, NC; Lisa Becton, IA; Danelle Bickett-Weddle, IA; Carolynn Bissett, VA; Fred Bourgeois, LA; Van Brass, AZ; Becky Brewer-Walker, AR; Charlie Broaddus, VA; Kenneth Burton, KS; Minden Buswell, WA; Gregory Christy, FL; Maria Cooper, IN; Dustin Cox, NM; Stephen Crawford, NH; Chelsea Crawford, UT; Tarrie Crnic, KS; Marie Culhane, MN; Ignacio dela Cruz, MP; Amy Delgado, CO; Thomas DeLiberto, CO; Barbara Determan, IA; Leah Dorman, OH; Brandon Doss, AR; Roger Dudley, NE; Stéphie-Anne Dulièpre, NY; Tracy DuVernoy, MD; Anita Edmondson, CA; Jamee Eggers, IA; Cheryl Eia, MN; Brigid Elchos, MS; Dee Ellis, TX; Larry Elsken, IA; François Elvinger, NY; Allison Flinn, DC; Larry Forgey, MO; Tam Garland, TX; Cyril Gay, MD; Robert Gerlach, AK; Sandra Gilmore, IL; Michael Gilsdorf, MD; K. Fred Gingrich II, OH; Linda Glaser, MN; Alicia Gorczyca-Southerland, OK; Kristin Haas, VT; Rod Hall, OK; Timothy Hanosh, NM; Charles Hatcher, TN; Susannah Haupt, MI; Andy Hawkins, KS; Bill Hawks, DC; Burke L. Healey, CO; Carl Heckendorf, CO; Julie Helm, SC; Janemarie Hennebelle, GA; Warren Hess, IL; Heather Hirst, DE; Donald Hoenig, ME; Dennis Hughes, NE; Pamela Hullinger, CA; David Hunter, MT; Carla Huston, MS; Annette Jones, CA; Jamie Jonker, VA; Subhashinie Kariyawasam, PA; Bradley Keough, KY; Naree Ketusing, VA; Darlene Konkle, WI; Charlotte Krugler, SC; T.R. Lansford, TX; Dale Lauer, MN; Elizabeth Lautner, IA; Brad LeaMaster, OR; Molly Jean Lee, IA; Randall Levings, IA; Mary Jane Lis, CT; Eric Liska, MT; Lindsey Long, WI; Margie Lyness, GA; Kathryn MacDonald, VA; Kevin Maher, IA; Bret Marsh, IN; Scott Marshall, RI; Michael Martin, NC; Beatriz Martinez Lopez, CA; Chuck Massengill, MO; James Maxwell, WV; Katherine McNamara, VT; Sara McReynolds, KS; David Meeker, VA; Shelley Mehlenbacher, VT; Marvin Meinders, VA; Gay Miller, IL; Mendel Miller, SD; Fawzi Mohamed, CT; Peter Mundschenk, AZ; Lee Myers, GA; Yvonne Nadler, IL; Sherrie Nash, MT; Michael Neault, NC; Cheryl Nelson, KY; Dustin Oedekoven, SD; Kenneth Olson, IL; Greg Onstott, MO; Kristy Pabilonia, CO; Elizabeth Parker, TX; Steve Parker, GA; Boyd Parr, SC; Allison Phibbs, DC; Barry Pittman, UT; Barbara Porter-Spalding, NC; Lisa Quiroz, CA; Jeanne Rankin, MT; Julia Ridpath, IA; Jonathan Roberts, LA; Paul Rodgers, WV; Keith Roehr, CO; Susan Rollo, TX; James Roth, IA; Margaret Rush, MD; Mo Salman, CO; John Sanders, WV; Amy Schaffer, KS; Joni Scheftel, MN; David Schmitt, IA; Kathryn Simmons, DC; Julie Smith, VT; David Smith, NY; Justin Smith, KS; Harry Snelson, IA; Diane Stacy, LA; Patricia Stonger Lonsdale, WI; Nick Striegel, CO; Darrel Styles, MD; Gregory Suskovic, MN; Tahnee Szymanski, MT; Manoel Tamassia, NJ; Vincent Tavella, VA; Todd Tedrow, SD; Belinda Thompson, NY; Jimmy Tickel, NC; Peter Timoney, KY; Alyssa Toillion, KS; Liz Wagstrom, DC; Michele Walsh, ME; John Walther, LA; James Watson, MS; Patrick Webb, IA; Rodney White, MD; John Williams, MD; Mark Wood, GA; Melissa Yates, MD.

The Committee met on October 27, 2019, at the Rhode Island Convention Center in Providence, Rhode Island, from 1:00 pm until 5:45 pm. There were 69 members and 68 guests present. During the welcome and overview, instructions for sign-in and requests to join the committee were shared, the committee mission statement was reviewed, and the status (and responses) of each of some past resolutions was briefly discussed: 2018 USAHA Resolution 4: *African Swine Fever (ASF) Surveillance Program and Tissues for Official ASF Testing in National Animal Health Laboratory Network Laboratories*; 2018 USAHA Resolution 5: *Enhancing Classical Swine Fever Surveillance in National Animal Health Laboratory Network Diagnostic Laboratories*; 2018 Resolution 6: *Implementation of Pseudorabies Virus Deoxyribonucleic Acid Detection (Polymerase Chain Reaction) in National Animal Health Laboratory Network Veterinary Diagnostic Laboratories*; and 2016 *Radiological Incident Response and Resources.*

There were seven (7) presentations at the meeting. Summaries are below.

Presentations

Farm Bill Update -- Dr. Liz Wagstrom, Chief Veterinarian, National Pork Producers Council

The 2018 Farm Bill, through section 12101, established a three-part program to comprehensively support animal disease prevention and management. The bill included funding to create two new programs: the National Animal Vaccine and Veterinary Countermeasures Bank (vaccine bank) and the National Animal Disease Preparedness and Response Program (NADPRP). It also expands funding opportunities for the existing National Animal Health Laboratory Network (NAHLN). Over the five-year life of the Farm Bill there was $150 million of mandatory funding authorized. Of the $150 million, $38 million is required to be used to fund the NADPRP portion of the program.

In September APHIS issued a sources sought notice to gather updated information from vaccine manufacturers interested in supplying the vaccine bank. The information will be used to develop a forward-looking vaccine acquisition strategy leading to one or more requests for proposals for foot-and-mouth disease (FMD) vaccine to address a potential outbreak. For 2019, APHIS also made available up to $10 million in funding to be divided between NADPRP and NAHLN based on the quality of proposed projects. Livestock commodity groups continue to engage with USDA on the implementation of the program.

Emergency Management Response System (EMRS)2 Update -- Dr. Fred Bourgeois, Emergency Management Response System National Coordinator, NPIC, USDA APHIS VS

The presentation was an overview of outbreak activities and exercise participation over the past year and new and enhanced functionality of the Emergency Management Response System.

Field Operations Logistics Center, National Veterinary Stockpile (NVS) Updates: NVS Organization, Training & Exercises, State Plans -- Mr. Rodney White, Director, Field Operations, Logistics Center, NVS, USDA-APHIS

Mr. White provided an update on the new Field Operations Logistics Center structure and the National Veterinary Stockpile Training and Exercise Program. Mr. White will also share updates on supplies and equipment available in the National Veterinary Stockpile.

Virulent Newcastle Disease: New Insights into an Extended Response in Today's World -- Annette Jones, DVM, Director and State Veterinarian, Animal Health and Food Safety Services, California Department of Food and Agriculture

Based on experience gained during the 2018-2019 emergency response to virulent Newcastle Disease (vND) in Southern California, which spanned more than one and a half years, Dr. Jones briefly outlined several areas as important to a successful, sustained response in today's world. Highlights covered included:

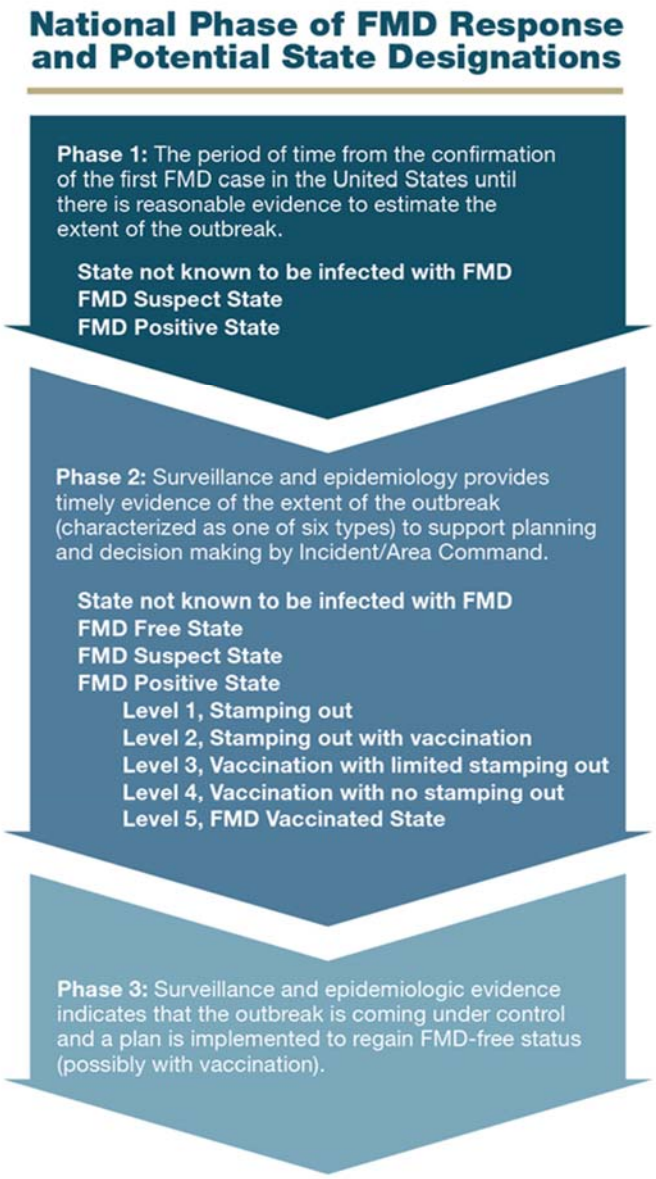
- **Response Triggers** – Emergency response plans should include triggers for declared emergencies and United States Department of Agriculture extra-ordinary declarations in order to ensure appropriate priority and resources are applied in a timely manner. These triggers may also help appointees and elected officials make science-based decisions in the face of changing political pressures.
- **Incident Management Teams / Staffing** – National Incident Management Teams are essential to a prolonged response and training should continue to be a priority. Rotations introduce instability that can be partially managed through incident standard operating procedures, written

delegation of authority, formal transition documents, embedded State staff, immediate hiring of local workers, robust just in time training, and assignment of one executive manager for the duration of the response.

- **Use of Epidemiologists** – Epidemiologists in the Planning Section can best be used to focus on advance planning, strategy development and progress reporting, while tactical epidemiologists embedded in the Operations Section or Planning Section can help direct and prioritize specific field activities. Off-site support is well positioned to analyze data and advise Planning Section Epidemiologists. Periodic conference calls between all epidemiologists rotating on-site helps ensure continuity of approach.
- **Laboratory Communication** – Laboratory Coordinator is critical as a single point of contact – one at the laboratory and one on the incident. Electronic messaging must include result, order and confirmation components in order to reduce errors, speed result messaging and relieve staffing pressure at the laboratory.
- **Phylogenetic Analysis –** Particularly useful epidemiology tool, particularly for RNA virus and a prolonged outbreak. This analysis can inform response strategies and add information to support or refute epidemiologic assumptions. Continued resource support is critical.
- **Social Media** – While Agricultural Departments are well versed in outreach, social media best practices can be beyond current response staffing models. Several specific positions were created during the 2018-2019 outbreak that facilitated and improved response strategies.
- **Secure Food Supply (SFS) –** The vND outbreak provided an extensive opportunity to ground truth the California SFS concepts. These principles will continue to be core to all responses in California and the semi-uniform application across states that is currently underway will serve the industry well, while preventing spread of disease between producers.
- **Data Management / Emergency Management Response System** – Extended responses can involve more the 500,000 official documents making a single national data management system that all who rotate to assist can use critical.
- **Law Enforcement** – Important enforcement tools include contracts with law enforcement agencies, notices of activity to local law enforcement and ability to rapidly obtain warrants in support of regulatory authority.

***Framework for Interstate Movement Decisions During a Foot and Mouth Disease Outbreak in the United States* – Update** -- James A. Roth, DVM, PhD, DACVM, Center for Food Security and Public Health, College of Veterinary Medicine, Iowa State University

In the event of a foot and mouth disease outbreak (FMD) in the U.S., each state will respond differently due to their individual situation. A draft document that proposes a potential framework to classify the status of FMD infection/vaccination in individual states has been developed for discussion. The draft Framework for Interstate Movement Decisions document provides a possible designation for the FMD status of individual states (see figure).



The FAD PReP Strategy Document: Classification of Phases and Types of a Foot-And-Mouth Disease Outbreak and Response (http://www.cfsph.iastate.edu/pdf/phases-and-types-of-an-fmd-outbreak) addresses the FMD status of the U.S. on a national scale. Having a common agreement on status of the outbreak by state could lead to a framework for agreement on movement between states based on the status of each state, on priorities for allocation of vaccine and other resources, and a process for moving toward FMD free status for the nation.

The Agricultural Response Management and Resources (ARMAR) FMD exercise in May 2018 made it clear that individual states will respond differently to FMD outbreaks. Each State Animal Health Official (SAHO) is responsible for managing the outbreak response within their state. Livestock and processing industries vary widely between states and each state has different laws that impact their ability to respond to the outbreak and implement movement controls. There is a need for SAHOs to discuss approaches for controlling movement between states depending on the infection status of the states. This approach is likely to change from Phase 1 at the beginning of an FMD outbreak to Phase 2 as the outbreak is spreading and during Phase 3 as the outbreak is being brought under control. The approach taken by states needs to consider the recommendations that Federal Animal Health Officials make regarding animal movement, the SAHOs' need to protect their livestock industries from infection, the business continuity needs of industry and the public's need for a safe and wholesome food supply. In some cases, USDA may impose a Federal quarantine or other movement control by Federal Register Order (under the Animal Health Protection Act and Code of Federal Regulations) when requested by SAHOs or as directed by the Secretary of Agriculture. A framework of potential state responses and movement permitting based on the situation in each state will help to reduce uncertainty and encourage uniformity and cooperation. The response and recovery phases in an FMD outbreak will likely need to be individualized state by state. The draft document has been presented to the National Assembly of State Animal Health Officials (NASAHO) and shared with USDA APHIS VS leadership. NASAHO appointed a Working Group to review and make suggestions for revision of the document. This is still a work in progress. Any recommendations in this document will be guidelines only, and Responsible Regulatory Officials will make decisions based on available information at the time of the outbreak.

American Veterinary Medical Association (AVMA) Responder Certificate Program --
Dr. Warren Hess, Assistant Director, Division of Animal and Public Health, AVMA

Veterinary Disaster Responder Entry Level Core Competencies
(Awareness Level Training)

1. **Opportunities for Veterinary Responders**

Comments: AVMA has a recorded webinar on opportunities for veterinary responders. NASAAEP has a recording of a webinar that AVMA helped to present on licensing portability during emergencies. It has separate links for the slides and the audio.

   a. Understand formal opportunities for trained veterinary responders
   b. Explain why Spontaneous Unaffiliated Volunteers (SUVs) may create more of a problem that they help solve
   c. Explain 3 possible avenues for veterinary license reciprocity during disasters or animal health emergencies

2. **Basics of Emergency Planning**

Comments: Evacuation/Rescue should include "feed in place". Some of these topics could utilize aspects of NASAAEP's Best Practice Documents. 3a should provide big picture of how to address overall challenges that county/state level animal response might face and how to assess/understand what has happened. This will help to understand when, how, and where to start a response. Should include instruction on service animals with explanation of difference between service and emotional support animals.

   a. IS-10.A: Animals in Disasters: Awareness and Preparedness
   b. IS-111.A: Livestock in Disasters - FEMA
   c. Assessment of Animal/Owner Needs
   d. Animal Evacuation (livestock/pets)
   e. Animal/Owner Rescue
   f. Animal Decontamination
   g. Animal Disaster Triage
   h. Emergency Sheltering & Emergency Medical Care
   i. Reunification

3. **Introduction to Impacts of Disasters to include (FEMA Lifelines):**

Comments: Should include discussion on how different types of disasters may lead to similar impacts (all can lead to food/water, fuel, shelter shortages). Power/Fuel should focus on how a lack of those resources can affect animal response.

   a. Safety & Security
   b. Food, Water, Shelter
   c. Health & Medical
   d. Energy (Power, Fuel)
   e. Communications
   f. Transportation
   g. Hazardous Material

4. **Key Partnerships and Interagency Coordination**

Comments: To include coordination with agencies and teams that don't normally think about animals. Also, to include coordination and cooperation with animal agencies/teams from those rescuing animals from the event all the way to those working on reunification efforts and everything in between. Understanding of the agencies that have jurisdictional authority over specific classes of animals is essential.
Veterinarians may be involved locally and be working with an interagency planning group through a local VMA chapter or through their EMA. Many states also have a state emergency response team. There also may be veterinarians that work locally with law enforcement but are also on a state ASAR group. It would

be helpful to veterinary students and veterinarians to understand how those lines of communication and authority are addressed.

Utilizes a network of traditional and non-traditional partners to identify and pursue preparedness and response goals.

a. ICS-100: Introduction to the Incident Command System
b. ICS-200: ICS for Single Resources and Initial Action Incidents
c. IS-700: National Incident Management System, An Introduction
d. IS-11.A: Animals in Disasters: Community Planning
e. Develop partnerships with other agencies that have authority in animal-related situations including the Chief Animal Health Official (CAHO/State Veterinarian), Federal Area Veterinarian in Charge (AVIC), and animal control agencies; clarify roles and responsibilities.
f. Maintain a current directory of partners and identify appropriate methods of contact in disasters and emergencies.
g. Use established communication systems for coordination among the response community during a disaster or animal health emergency.
h. Maintain regular communication with emergency response partners.
i. Consider community needs when developing and implementing local/state animal preparedness, response, and recovery policies.
j. Foster community participation and involvement in local/state animal preparedness, response, and recovery initiatives.
k. Create or leverage opportunities to develop new partnerships.
l. Maintain agreements with partners from within the jurisdiction and from other jurisdictions to foster teamwork, information sharing, and cooperation.
m. Explain how various organizations, positions, and roles contribute to carrying out animal preparedness, response, and recovery functions and essential services.
n. Apply strategies to resolve conflicts.
o. Interact appropriately based on the situation.
p. Interact appropriately with persons from diverse cultural, socioeconomic, educational, racial, ethnic, and professional backgrounds.

5. Utilization of Space for Animal Welfare/Disease Prevention, Biosecurity Principles, PPE

Comments: This would ideally include interactive activities (setting up zones, control areas and then practice PPE for example).
APHIS has interactive modules in some of these subjects as part of National Veterinary Accreditation Program (NVAP). Here is a list of the modules that cover some of these areas:
Module 4 (Preventing Disease Introduction and Spread)
Module 22 (Animal Welfare: An Introduction)
Module 25 (Using Animal Behavior to Assess Animal Welfare)

6. Public Health and Disease Response (zoonoses, food/water safety, wildlife interactions, FADs)

Comments: Keep in mind this is an awareness level training. Courses such as FAD PReP and CSU's FAD course would be far beyond what is expected here but would be a great next level training. FADD training would be a top-level training that is not available to just any veterinarian.

KSU Animal Disease Response Training may be a model to use.

7. Humane Euthanasia/Depopulation/Disposal

Comments: Again, this is an awareness level training. Concepts taught should be compliant with AVMA's Guidelines for the Euthanasia of Animals and the soon to be released Guidelines for the Depopulation of Animals. Jan Shearer at Iowa State University has some video trainings and may have a recorded webinar. https://vetmed.iastate.edu/vdpam/about/production-animal-medicine/dairy/dairy-extension/humane-euthanasia

a. Explain the difference between euthanasia and depopulation
b. Explain under what circumstances depopulation techniques would be appropriate during disasters and animal health emergencies
c. Explain what agencies are involved in deciding how large quantities of animal carcasses are disposed
d. Understand current accepted methods of carcass disposal

8. Psychological First Aid

Comments: Bringing in a psychologist or social worker experienced in mental health impacts of disaster response would be very helpful.
The following might be good places to get training ideas/resources:
https://www.criticalincidentstress.com/what_is_cism_
https://mobile.va.gov/app/pfa-mobile
http://getyourheadright.com.au/products/

9. Disaster Responder Physical Fitness/Safety & Protection/Situational Awareness

APHIS has interactive modules in some of these subjects as part of National Veterinary Accreditation Program (NVAP). Here is a list of the modules that cover some of these areas:
Module 10 (Personal Protective Equipment for Veterinarians)
Module 19 (Animal Health Emergency Response)

a. Physical Fitness

Understands the health and fitness requirements that may be encountered in austere environments during disaster and animal health emergencies.

i. Explain general health risks associated with disasters and animal health emergencies
ii. Explain personal fitness risks and requirements associated with disasters and animal health emergencies

b. Safety & Protection

Ensures health and safety of self and others.

i. Explain general safety risks associated with disasters and animal health emergencies
ii. Describe risk reduction measures that can be implemented to mitigate or prevent infectious and hazardous exposures in a disaster or animal health emergency
iii. Demonstrate proficiency in the assessment, selection, and use of health and safety measures (e.g., technology, equipment, devices, situations)
iv. Demonstrate effective use of personal protective equipment (PPE)
v. Adhere to applicable industry regulations, guidelines, and safety precautions related to the use of PPE and other devices.
vi. Demonstrate effective use of emergency communication equipment.

c. Situational Awareness

Maintains an awareness of the critical elements of an emergency by seeking, filtering, and processing information from available sources. Supports collective awareness through the provision of information.

i. Identify sources of information relevant to critical elements of disaster or emergency
ii. Use tools (e.g., communication) to support situational awareness
iii. Review situation reports to remain up-to-date on a crisis.
iv. Attend to new information and adapt activities as appropriate.
v. Contribute to the content of the situational report.
vi. Maintain an awareness of own behavior and consider the perspectives of others to resolve or avoid cultural issues or misinterpretations.
vii. Identify general indicators and epidemiological clues that may signal the onset or exacerbation of a disaster or animal health emergency

10. Veterinary Business Resiliency/Continuity of Operations

Comments: AVMA has a course developed and others are developing training as well. Should be NFPA 1600 compliant.

a. Demonstrate personal and family preparedness for disasters and emergencies
b. Prepare a personal/family disaster/emergency plan
c. Gather disaster supplies/equipment consistent with personal/family plan
d. Practice your personal/family disaster plan at least annually
e. Describe methods for enhancing personal resilience, including physical and mental health and well-being, as part of disaster/emergency preparation and planning
f. Prepare a personal professional disaster plan consistent with one's overall business, agency, organizational, and/or jurisdictional plan
g. Contact with your local (city/county) emergency manager and inform them of what resources your business can offer to the community and what resources you may need to be prioritized for during a disaster/emergency
h. Determine a consistent method of assessing risks to your business resources
i. Determine mitigation techniques to decrease the risk to your business resources
j. Create a rapid evacuation plan for your business, including animals
k. Practice your business disaster/emergency plan at least annually

Regional Alliance Updates:

Southern Agriculture and Animal Disaster Response Alliance (SAADRA) -- Dr. Kathryn MacDonald, Emergency Coordination Officer, VA Department of Agriculture and Consumer Services

SAADRA was established after Hurricane Katrina in 2005, and is an interactive collaboration of states at risk from similar natural, intentional, technological, and disease disasters affecting agriculture and animals. It works to strengthen all-hazard capabilities through partnerships with the public, animal and agriculture industries, and every level of government. The thirteen SAADRA states work together to increase communication and coordination during emergency events, share training opportunities, share state plans and templates, and create working groups to develop practical solutions. The Southern Animal Health Association (SAHA) is working with USDA to conduct a regional foreign animal disease exercise in November 2020. The fully functional Foreign Animal Disease Southern Agriculture Functional Exercise (FAD SAFE) will simulate a Foot-and-Mouth Disease (FMD) outbreak affecting multiple states. SAADRA is supporting SAHA by assisting with planning efforts and helping to create a consistent and collaborative regional approach to a foreign animal disease response.

Multi-States Partnership for Security in Agriculture (MSP) – including a proposal for a National Secure Food Supply System Framework

The Multi-State Partnership for Security in Agriculture (MSP) held their annual meeting in St. Paul, MN, this past spring with 17 of the 18 member states participating. As a precursor to the annual meeting, in conjunction with the Veterinary Services Training and Exercise Plan (VSTEP) was a Secure Milk Supply pilot exercise that was held with industry representatives from Minnesota and Wisconsin. Secure Food Supply planning continues to be a priority for the MSP. The MSP also approved funding to support the Center for Food Security and Public Health website with the vast resources such as Just-in-Time trainings and message maps for animal disease emergencies.

MSP is a collaborator on the National Pork Board, AASV, and Iowa State Authorized Swine Testing Agent program. MSP states are going to pilot the program. Another focus is swine cold weather depopulation, carcass disposal, and cleaning and disinfection research and training.

New England States Animal Agricultural Security Alliance (NESAASA)

NESAASA coordinates regional discussions on issues including emergency management and disaster response. In the absence of a regional exercise this year, NESAASA worked through a number of issues that created challenges and problems for animal health regulators in the northeast.

Members discussed the use of waivers of CVI requirements in animal welfare cases where livestock are seized and may need to be moved immediately across state lines for safe housing. NESAASA continued to seek a resolution to the fact that cattle imported from Canada are not necessarily required to have complete and accurate traceability information (e.g. accurate address-of-destination, etc.) on import documents. USDA VS and NESAASA members worked with USDA FSIS to update written protocols for handling neurological animals at slaughter in the region. NESAASA members continue to work on resolving a lack of reporting of reportable diseases in the region by private laboratories.

The State of Maine and USDA VS are in the planning and development stages for a National Veterinary Stockpile table top exercise in 2020 and a full scale NVS exercise in 2021.

Committee Business:
Five (5) resolutions were submitted by committee members. The following four (4) were adopted/approved through motions made, seconded and passed by voice vote:

- ASF/CSF Surveillance Program and Tissues for Official ASF Testing in NAHLN Laboratories
- Adequate Funding for Vaccine / Countermeasures Bank and NAHLN
- AVMA Veterinary Responder Certification Program
- Strengthening the U.S. Animal Disease Traceability and Disease Prevention Infrastructure

The meeting was adjourned at approximately 5:10 p.m.