

## **USAHA/AAVLD COMMITTEE ON ANIMAL EMERGENCY MANAGEMENT**

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Nick Striegel, CO

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The Committee met on October 1, 2011 at the Adam's Mark Hotel in Buffalo, New York, from 8:00 a.m. to 2:00 p.m. There were 66 members and 84 guests present.

### **Presentations**

#### **WELCOME; RECAP OF 2010 RESOLUTION & RESPONSES; BUSINESS MEETING TIME AND QUORUM REQUIRED; MISSION STATEMENT**

**Dr. Marilyn Simunich/ Dr. Nick Striegel, CAEM Co-Chairs**

Supportive responses were received from USDA on 2010 resolutions regarding National Veterinary Stockpile Catalog, Restricted Animal Vaccine Usage Guidance, Animal Agriculture Critical Infrastructure Protection.

#### **USDA-APHIS-VS EMERGENCY MANAGEMENT & DIAGNOSTICS PROGRAMS UPDATE**

**Dr. Jose' R. Diez, Associate Deputy Administrator, USDA-APHIS-Veterinary Services (VS), National Center for Animal Health Emergency Management (NCAHEM)**

APHIS Emergency Management and Diagnostics (EM&D) consists of five units: The National Veterinary Services Laboratories (NVSL); the Center for Veterinary Biologics (CVB), the National Center for Animal Health Emergency Management (NCAHEM) which consists of Preparedness and Incident Coordination, Interagency Coordination, and National Veterinary Stockpile.

**FAD PR&P Documents:** Preparedness and Incident Coordination (PIC) is headed by Dr. Jon Zack. Dr. Zack and his team continue to improve the Foreign Animal Disease Preparedness and Response (FAD

PReP) tool box. The FAD PReP raises awareness, defines expectations and improves capabilities for FAD preparedness and response.

Despite the fact that we invest a lot of man power in to preparedness, we recognize that stakeholder engagement is crucial to planning and response. Therefore, we started a series of Stakeholder meetings to make our Stakeholders aware of our capabilities, listen to their concerns, and together, develop a new FMD response strategy that includes vaccination as a viable response tool. Dr. Jane Rooney will speak more on that.

Dr. Zack's team continues to develop and refine several preparedness documents that can be found in the FAD PReP websites:

<https://fadprep.lmi.org>

<http://inside.aphis.usda.gov/vs/em/fadprep/shtml>

In 2011 PIC created and refined several preparedness and planning materials in the categories of response plans, SOPs, ready reference guides, NAHEMS guidelines, and industry manuals. Some of these materials include the HPAI and FMD Red Books; National Animal Health Emergency Management System (NAHEMS) Guidelines that address Surveillance, Epidemiology and Tracing, FMD Vaccines, Mass Depopulation, Industry Manuals - Beef Feedlot, Swine, Dairy; Ready Reference Guides that address control areas, movement control, FMD response strategies, and Standard Operating Procedures (SOPs) for epidemiological investigation and tracing, biosecurity, etc.

Of note is that the NAHEMS guidelines and the Industry Manuals are developed in cooperation with Iowa State University.

In 2011 PIC collaborated on several continuity of business projects, including the Secure Egg Supply and Secure Milk Supply.

The continuity of business collaborations are public-private-academic partnerships to develop strategies and capabilities for the management of non-infected premises and non-contaminated animal products in FAD regulatory control areas.

Other tools being cooperatively developed are the California Department of Food and Agriculture (CDFA) – California Animal Health Emergency Management System (CAHEMS) tool (for responders in an incident command post structure), and the Texas A&M Foreign Animal Zoonotic Disease Defense (FAZD) Emergency Response Support System (ERSS) tool, which is a prototype emergency management dashboard.

**National Animal Health Emergency Response Corps (NAHERC):** NAHERC was formed in 2001 to provide an emergency reserve of veterinary professionals to assist State and Federal responders during an animal health emergency. NAHERC volunteers become temporary Federal employees when activated by USDA. In 2011, NAHERC increased enrollment and name recognition among the animal health community. To date, 1,640 applicants have qualified for NAHERC through the USAJOBS web site: these include 678 veterinary medical officers and 962 animal health technicians. NAHERC personnel receive training via Computer based training modules available through Iowa State University. These training modules were developed in coordination with the National Veterinary Accreditation training modules. 830 users have completed at least one module. PIC produces a NAHERC news letter to keep APHIS personnel and Stakeholders informed

**Interagency Coordination Staff:** Dr. Mark Teachman is Director of the Interagency Coordination (IC) group which coordinates APHIS' interaction with other agencies inside and outside the federal government. IC staff identifies resources and clarifies roles in an animal emergency through participation in interagency and international working groups and permanent assignments at other Federal agencies. The ICS participates in the development of radiological animal health response strategies in the US. Most recently, our radiological response Subject Matter Expert (SME) traveled to Japan with the International Fund for Animal Welfare to help the Japanese government develop strategies for radiological survey and rescue of livestock, pets, and wildlife from the 20K exclusion zone around the Fukushima Dai-ichi Nuclear Power Plant. IC Staff embedded at the National Center for Military Intelligence (NCMI), co-authors intelligence products and responds to DOD requests for information. They also support the Intelligence Community collections requirements to obtain critical health and infectious disease information. IC staff contributed to the FDA's development of the Food Related Emergency Exercise Boxed (FREE-B) set: A collection of scenarios that will help government regulators, public health organizations, and industry partners (stakeholders) test their readiness for food emergencies.

IC staff contributed to FEMA's development of a training video that addresses the best practices for disposal of contaminated biomass in the case of an agricultural emergency. IC staff works on cross border collaboration issues as briefed by Dr. Jane Rooney.

While the Interagency Coordination group is specifically charged with interacting with other groups, all of NCAHEM- Planning and Incident Coordination, National Veterinary Stockpile and Interagency Coordination- work with many sectors involved in animal health emergency management. This chart gives an idea of the variety of collaborators for NCAHEM as a whole.

**3-D Planning:** within NCAHEM three staff members concentrate their time and effort in the specialized areas important to animal health emergency response: Depopulation – Darrel Styles; Disposal – Lori Miller and Disinfection – Nate Birnbaum.

**Depopulation:** NCAHEM continues to partner with DHS, and the EPA to fund research projects related to cleaning and disinfection methods. APHIS and DHS Science and Technology, in a joint effort, initiated projects to develop on-farm gas depopulation of swine (initiated 2009 and concludes 2012); improve and validate the use of captive-bolt technology (both portable pneumatic bolt and extended-bolt hand-held devices) for the mass depopulation of cattle (initiated 2011 and concludes 2013). VS and Animal Care continue to support and improve the foaming technology for poultry working towards making it acceptable as a euthanasia technology. Recent improvements to foam include developing foam technology to address caged reared poultry and using foam as a disinfectant tool.

**Disposal:** NCAHEM has invested in two research efforts regarding disposal: first is a joint APHIS and EPA effort to evaluate the emissions of a pathogen during the rendering process so that containment and targeted cleaning can be developed (ongoing now); and the second project will be launched this year is the logistical infrastructure pilot project which identify and map disposal resources (e.g. rendering, carcass competent managed landfills) initially in two states. NCAHEM also maintains an emergency management tools Web site that includes a carcass disposal decision tree and several online training modules detailing composting, onsite burial and treatment, secure transport, offsite burial and treatment, and cleaning and disinfection. The site also has a database function which identifies disposal locations around the country. In collaboration with EPA, the database was expanded to include rendering facilities in 2010.

[http://www.aphis.usda.gov/emergency\\_response/tools/aphis\\_role\\_emergency\\_tools\\_disposal\\_training.shtml](http://www.aphis.usda.gov/emergency_response/tools/aphis_role_emergency_tools_disposal_training.shtml)

**Disinfection:** working with ARS and EPA to develop substantiating data for the use of selected generic chemicals during an emergency animal disease situation when there are no or few EPA registered disinfectants or these registered disinfectants are not available (completing year 3 of projected 5 year study).

**The National Veterinary Stockpile (NVS):** The NVS was established by Presidential Directive (PSD-9) in 2004 to protect the nation's food supply. The mission of the NVS is to provide the veterinary countermeasures (supplies, equipment, field tests, vaccines, and response support services) that States, Tribes, and Territories need to respond to damaging animal disease outbreaks. Dr. Lee Myers will brief the NVS in detail.

## **CRITICAL MASS FOR ANIMAL HEALTH EMERGENCY RESPONSE**

**Dr. Jack Shere, Eastern Region Director, USDA-APHIS-VS**

Dr. Shere will be presenting a national summary in regard to State and Federal employees, job categories, and boots on the ground response capabilities. From surveys of state and federal personnel, approximately 90% of state animal health personnel would be available for an in-state response, while only 35% (153 veterinarians plus others to total 406) would be made available for an out-of-state response. About 80% of federal animal health personnel could be utilized for an in-state response, where 77% (1353 – one third of which are veterinarians) might be made available for an out-of-state deployment. 375 of those federal persons would be boots-on-the-ground personnel. As of July 2011, five hundred (500) state and federal foreign animal disease diagnosticians (FADDs) are available for a foreign animal disease investigation.

## **CROSS BORDER COLLABORATION ISSUES & PNWER (PACIFIC-NORTHWEST ECONOMIC REGION) ACTION ITEMS**

**Dr. Jane Rooney, USDA-APHIS-Veterinary Services, NCAHEM**

The 2011 Cross Border Livestock Health Conference (CBLHC) took place July 21 and 22, 2011 in conjunction with the 21<sup>st</sup> Pacific Northwest Economic Region (PNWER) Annual Summit. The CBLHC focused on the impact of a hypothetical Foot-and-Mouth Disease (FMD) outbreak in the Pacific Northwest affecting the USA/Canada border. Participants discussed preparedness, response and recovery using a scenario driven workshop format.

The main objective of the two day conference was to enhance cross border cooperation on animal health issues. Specific objectives were:

- ◆ Enhanced relationships and build networks between US state and Canadian provincial jurisdictions
- ◆ Exchange information on animal health issues/concerns
- ◆ Develop a common understanding of disease policies
- ◆ Exchange information on emergency response for emerging and foreign/transboundary animal diseases
- ◆ Advance Canadian and American animal health interests
- ◆ Identify and execute action items to collectively address animal health and cross border issues

At the end of the session action items were developed based on the discussion that took place over the past two days. Action item leads and team members were also identified. Dr. Rooney will describe in more detail progress to date on Action item #1 (below) and give an update on related National Center for Animal Health Emergency Management activities.

- Action Item 1 - FMD Vaccination - work with stakeholders to prepare in advance and build a common understanding of the tools (vaccination) and strategies that can be used to respond to an FMD outbreak in both Canada and the US.

Team Lead - USDA - Dr. Jane Rooney, CFIA - Dr. Tom Smylie

Team Members - Dr. Jag Dhanda - CFIA

## **USDA-APHIS AND CFIA PROJECT FOR ENHANCING ZONE RECOGNITION**

**Dr. Francine Lord, Director, Deputy Chief Veterinary Officer for Canada and Director, Terrestrial Animal Health Division (TAHD), Canadian Food Inspection Agency (CFIA)**

The objective of this project is to enhance mutual understanding of each country's processes for zoning and potentially enable the agencies to formally recognize each other's zoning decisions in the event of a foreign animal disease (FAD) outbreak, with the goal to minimize the disruption of trade from disease-free zones while ensuring the safety of this trade.

In order to assess zoning processes in each country, an evaluation of the veterinary infrastructure was necessary, including legislation, organization, human and material resources, reporting, disease control programs, foreign animal disease preparedness and response, and monitoring and audit programs. Secondly, a review of the procedures for establishing a zone was conducted, including the different phases for zoning (suspect, investigation, activation, action, and return to normal) and how the integrity of the zone is maintained. Details of the zoning procedures were all thoroughly reviewed and evaluated, including definitions, investigation methods, sampling, diagnostics, outbreak epidemiology and tracing, reporting, movement controls, farm biosecurity, vector/wildlife control, surveillance, disposal of contaminated material, surveillance in disease free areas, decontamination, cleaning, disinfection, vaccination, and finally, proof of freedom.

Documents have been prepared and exchanged on the veterinary infrastructure, surveillance, disease monitoring and national emergency response plans in the event of an FAD introduction (focus on highly contagious diseases such as foot and mouth disease). Currently an overall evaluation document of the other country's capacity to contain and eradicate FAD outbreaks by zoning is being completed before year-end. This document will then be subjected to the review and critique of the veterinary authorities in each country and a decision taken by the Chief Veterinary Officers.

**BENEFIT OF HARMONIZED IMPORT CONDITIONS FOR CANADA-USA**  
**Dr. Debbie Barr, National Manager, Import/Export Section, TAHD, CFIA**

The objective of this presentation is to discuss one health and emergency management principles from an international trade perspective and to introduce the concept of anticipation into the traditional model of prevention, detection, response and recovery.

In the complex environment of animal, public, economic and environmental health, anticipation and prevention are key but often overlooked, factors in the emergency management continuum. Much focus is placed on disease management and early response but what is really wanted is to keep disease out wherever possible. There are many situations that can't be controlled, such as, migratory animals, climate change and vector incursions and illegal imports. Import conditions are, however, designed to mitigate the possibility of disease entry through legal importation. The volume of trade between Canada and the US is significant and international trade decisions taken by one country can easily affect the other. As such, it benefits both countries to harmonize import conditions where possible and where disease status is equivalent. Criteria for defining harmonized conditions include the recognition that the goal is equivalence of outcomes rather than identical import conditions. Other criteria include recognition of international guidelines, agreement on the diseases of concern, how to best evaluate those diseases, options for risk mitigation and agreement on disease response principles. Examples of current initiatives and areas of future opportunity will be provided.

Finally, it is also important to realize that decisions made during disease preparation and response can significantly affect market recovery. Implementation of vaccination strategies and timing of cleaning and disinfection of infected premises can shorten or lengthen the duration of trade disruptions. Perspectives between domestic producers whose animals have been affected by a disease and exporters of the same species of animals can differ widely and communication is essential to ensuring a shared viewpoint can be reached.

**NATIONAL VETERINARY STOCKPILE PROGRESS & NAVAJO NATION NVS 2011 LOGISTICS EXERCISE**  
**Dr. Lee Myers, NVS State Federal Liaison, USDA-APHIS-Veterinary Services (VS), NCAHEM**

Dr. Lee Myers, State Federal Liaison for the National Veterinary Stockpile (NVS), APHIS VS, shared with the committee about the progress of NVS Program since the 2010 USAHA annual meeting. She also reviewed highlights of the recent NVS full scale logistics exercise with the Navajo Nation.

Dr. Myers reviewed the APHIS list of damaging animal diseases and explained that the list was under review. Dr. Cyril Gay, Agricultural Research Service, will lead this effort and is expected to report to the NVS Strategic Steering Committee in December of 2011. The list not only identifies damaging animal disease threats, but also prioritizes their concern. Dr. Myers then reviewed the countermeasures that the NVS program acquired over the past year. Two additional modules are now available to support emergency vaccination. The modules contain vaccination ancillary supplies, such as self-refilling syringes, disposable needles and syringes, sharps disposal containers, all-weather paint sticks, ear tagging pliers, and foot and mouth disease pink vaccination ear tags. A contract that will support cold chain transportation, such as shipping containers and temperature monitoring devices, is expected to be awarded soon. The NVS program has also purchased multiple sets of large animal handling equipment, including cattle and swine gates and panels, cattle and swine mobile chutes, and mobile corrals. The equipment is stationed with contractors required to store, maintain, repair, deploy, and set up the equipment when needed. The NVS program can procure additional large animal handling equipment through existing indefinite delivery/indefinite quantity contracts.

Dr. Myers was very pleased to announce the posting of an NVS Logistics Catalog on the NVS website accessible only to NVS planners. The Catalog describes the contents of 24 Hour Push Packs, vaccination ancillary and antiviral supplies, large animal handling and poultry depopulation equipment, carcass disposal supplies, and communication equipment. The Catalog addresses the 2010 USAHA Resolution initiated by the Committee on Animal Emergency Management and will assist NVS planners better understand the type and kind of countermeasures available.

Dr. Myers then explained the improvements and revisions to the updated NVS Guide for Federal, State, Tribal, and Territory Officials and the NVS State Plan Template, both soon posted on the public

NVS website to assist in NVS preparedness efforts. Enhancements to both documents were based on lessons learned from planners using the documents to write NVS plans and conduct logistics exercises.

Dr. Myers reviewed the highlights of the Navajo Nation and NVS 2011 Logistics Exercise in April. The event represented the first APHIS-sponsored full scale exercise on Tribal lands and illustrated the partnership between APHIS and the Navajo Nation in preparing to respond logistically to an animal disease outbreak. USDA Undersecretary for Marketing and Regulatory Programs Edward Avalos and Navajo Nation President Ben Shelly both attended the exercise and commemorated the occasion with a press conference. More than 28 agencies and organizations participated in the exercise with representatives serving in the roles of players, observers, evaluators, or controllers. The exercise was a distinct success in meeting the exercise objectives of testing the NVS program's ability to deploy and ship NVS countermeasures based on a request from the Navajo Nation. The exercise also tested the implementation of the Navajo Nation NVS Tribal Plan to conduct logistics warehouse and inventory management operations. Lessons learned from the exercise will ensure both agencies are well equipped to protect animal agriculture from potential damaging animal diseases in the future.

## **FMD CROSS-SPECIES COMMUNICATION TEAM...A UNIFIED APPROACH: PREPARING FOR AN FMD OUTBREAK**

**Ms. Cindy Cunningham, Assistant Vice President, Communications, National Pork Board**

If a widespread Foot and Mouth Disease (FMD) outbreak occurs in the United States, it will require a fast, unified and coordinated response from both the government and livestock industry associations. Prompted by the 2001 outbreak in the United Kingdom, the U.S. beef, pork, dairy and sheep industries recognized the need to prepare and take action, in case a similar situation were to arise in the country. As a result, the communications and issues management specialists from National Cattlemen's Beef Association (NCBA), the National Pork Board (NPB), American Sheep Institute (ASI) and Dairy Management Inc. (DMI) have worked together to develop a coordinated communications response plan.

### **Understanding Consumers' Perceptions**

The FMD team conducted research to better understand how consumers felt and perceived issues surrounding FMD, to lay the foundation for communications planning and message development. The research demonstrated that consumers lack knowledge about FMD. In fact, when surveyed, 72 percent of consumers thought FMD affected humans. Another 69 percent of consumers believed people could contract FMD from eating infected meat. Clearly, consumer misconceptions would need to quickly be addressed with strong messaging, delivered consistently across the industry.

Consumer research also identified the types messengers who would best resonate with the public during outreach and education following an outbreak.

- **Industry spokespeople** are the most credible and reassuring when responses are consistent and provided by a variety of sources.
- **Livestock producers** are credible when speaking about the actions farmers take on the farm and how they cooperate with officials.
- **Local government officials** are more credible than federal agencies because they are connected to the community.
- **Veterinarians** are most credible for consumer health information about FMD.

### **Consistent**

Based on the research, the FMD team developed core messages and informational materials, such as initial standby statements and media fact sheets. While these materials continue to evolve based on new information and insights, they provide a consistent platform from which the industry can speak in the event of an outbreak. The umbrella FMD crisis response plan – developed and adopted by all team members – is designed to create a unified response, with a strong message platform and strong government partnerships to leverage during an outbreak. Such planning and reliable partnerships will help position the industry to respond in a unified manner, ensure consumer confidence in meat and milk safety, alleviate confusion and concern, and help protect animal health and the livestock industry.

### **Response**

## **SECURE MILK SUPPLY PLAN IN NE USA - CONTINUITY OF BUSINESS PLANNING FOR THE DAIRY INDUSTRY – Dr. Don Hoenig, Maine State Veterinarian**

This presentation presented a review of the Secure Milk Supply Project that the six New England states have been conducting over the past 18 months with funding assistance from a USDA, APHIS, VS cooperative agreement. This project was designed to examine milk movement in New England and propose a system under which milk farmers and processors could continue to ship milk during a foot and mouth disease (FMD) outbreak in the region. A consultant, Richard Horowitz from Rhode Island, was hired to implement the work plan of the cooperative agreement. The first phase of the project involved gathering and compiling data on milk movement within New England. The second phase, which started on July 1, 2011, will draft plans for a permitting process for milk movement in New England in the event of an FMD outbreak. A tabletop exercise, tentatively planned for the spring of 2012, will be incorporated into this phase of the project.

## **CONTINUITY OF DAIRY BUSINESS OPERATIONS: LOGISTICS OF BULK TANK MILK (BTM) SAMPLING AND TESTING DURING AN ANIMAL HEALTH OR FOOD SAFETY EMERGENCY - Stephanie R. Ostrowski, California Animal Health & Food Safety, Food Safety Resident (UC Davis)**

Nationally, development of emergency response protocols which utilize bulk tank milk (BTM) samples as part of farm-level screening during an animal health or food safety emergency response has been identified as a priority need. This project explores the utilization of routinely collected BTM samples in California for rapid testing in the event of an animal health or food safety emergency. Regulatory authority, sample collection and identification, transport of samples to the diagnostic laboratory, accessioning and results reporting are the key elements addressed.

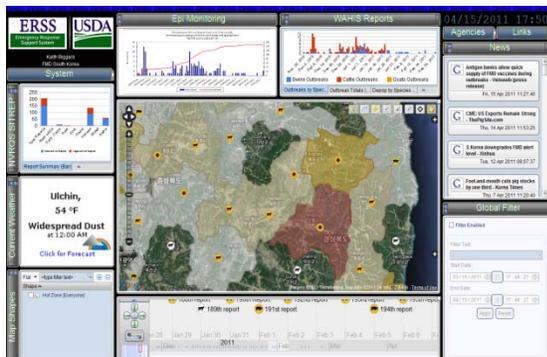
The challenge will be to rapidly and efficiently test each farm's bulk tank(s) in the geographic area of concern during a response to a perceived animal health or food safety threat. We propose a strategy to maximize the use of routinely-collected BTM samples to assist regulatory authorities and diagnostic laboratories to rapidly identify adulteration (chemical, microbial or radiological); the presence of a specific disease organism (FMD virus); or where negative, to demonstrate absence of the agent of concern. This type of information may be critical to maintain or restore consumer confidence and enable continuity of business during a response.

This planning activity supports California Department of Food and Agriculture (CDFA) emergency planning activities. It assumes that bulk tank sampling and testing by veterinary diagnostic laboratories may be required during future animal health and food safety emergencies such as feed mixing errors, foreign animal disease responses, and agro-terrorism threats.

The benefits of pre-planning BTM sampling logistics include: avoiding interruptions in raw milk movement from dairy farms to processing; maintaining a continuous supply of wholesome milk and milk products to consumers; and maintaining business continuity for dairy producers, haulers, and processors through appropriate response planning

## **FAZD ERSS OUTBREAK TOOL & NAHLN CAPACITY CALCULATOR – Dr. Jim Wall / Dr. Tammy Beckham - DHS Foreign Animal and Zoonotic Disease Defense Center, Texas A&M University System**

The Emergency Response Support System (ERSS) is an integrated, fully distributed, multi-purpose system for emergency managers that is capable of supporting the overall emergency response cycle by featuring operational, training, and analytical functionality as it relates to an animal disease outbreak. Once an outbreak occurs, whether naturally occurring or human-induced, response presents a complex challenge that very quickly involves several levels of decision makers (local, state, and federal). A common integrated view of all data (visual and textual) pertaining to an incident derived from authoritative sources and being presented to decision makers is vital to the effectiveness of the overall command and control environment. ERSS is



**The Emergency Response Support System**

being developed using innovative technology referred to as the Information Dashboard Framework (IDF) which will allow information sharing between USDA and state points of contact. IDF is a composable dashboard interface that allows rapid construction of a user-defined operational picture consisting of integrated maps and overlays, reports, decision support tools, data visualization, and video feeds that are dynamically updated. ERSS provides enhanced response capabilities by rapid sharing and organizing of relevant data from authoritative sources to decision makers wherever they may be thus facilitating shared situational awareness. Operational and economic efficiencies are realized from a single tool that supports both training and operations. Additional economic efficiencies result from the use of shared components and acceleration of the development process being enabled by use of the IDF. Finally, use across different agencies helps to mitigate interoperability issues. ERSS is a joint collaboration between USDA, APHIS, Veterinary Services, Emergency Programs (APHIS) and the Foreign Animal and Zoonotic Disease Center (FAZD).

**ANIMAL HEALTH EMERGENCY CROSS-BORDER PANEL DISCUSSION/ QUESTIONS** – Jose Diez, Jack Shere, Jane Rooney, Francine Lord, Debbie Barr, Lee Myers, Cindy Cunningham, Don Hoenig, Tammy Beckham, Darryl Styles

Time was reserved for questions for the speakers.

**VET-LRN, CVM'S NEW LABORATORY RESPONSE NETWORK - Dr. Renate Reimschuessel, FDA, Center for Veterinary Medicine, Veterinary Laboratory Response Network**

In 2010, CVM obtained funding to create a Veterinary Laboratory Response Network, (Vet-LRN) which will work with veterinary diagnostic laboratories to coordinate facilities, equipment and professional expertise of veterinary diagnostic laboratories to respond to high priority chemical and microbial feed/drug contamination events. This network examines data in reportable foods registries and other FDA portals to facilitate early detection of any animal feed adulteration. These efforts can contribute to overall food safety as animal feed events could signal potential issues in the human food system.

FDA's network Veterinary Laboratory Response Network is partnering with academic veterinary diagnostic laboratories to document, investigate and diagnose animal feed or drug related illnesses. These activities are supported by cooperative agreements which facilitate methods standardization, training and proficiency testing of the partner laboratories. Such activities strengthen the overall food safety system by developing increased capacity and capabilities to detect adulteration which could affect animals raised for human consumption or companion animals consuming ingredients used in both animal and human food products.

**APHIS, ANIMAL CARE EMERGENCY MANAGEMENT EVENTS & PROJECTS (ZOO EVACUATION, ANIMAL EMERGENCY MANAGEMENT COURSE, RADIOLOGICAL ANIMAL-RELATED ISSUES) - Dr. Kevin Dennison, Western Region Emergency Programs Manager, USDA-APHIS-Animal Care**

Multi-Agency Coordination:

- APHIS Animal Care has been engaged for some time in discussion among FEMA, USDA, and national stakeholders about effective mechanisms for coordination on animal issues during large scale emergencies. National Level Exercise 2011 (New Madrid Earthquake) piloted a pets MAC effort that was informative in spite of some serious exercise-related challenges. A revised concept of operations plan will be developed to provide a framework for real-world major incidents.

APHIS Animal Care Program Response Team (PRT):

- AC's regulatory responsibilities include potential confiscation of animals under the authority of the Animal Welfare Act. Such confiscations could range from one dog, to one elephant, to 50 dogs or 100 tigers, requiring AC to develop a flexible and scalable incident management capability. In August, we held a three-day training workshop for our PRT members. The PRT will be able to provide a 7+ member incident management group to help lead AC and partner efforts in varying scale confiscation incidents. The AC PRT will also be a resource available to States during disasters through a request to FEMA.

Zoological contingency planning:

- AC's Zoological Facility Contingency Planning Best Practice Working Group (ZBPWG) is complete and the products are available at [www.zooanimalhealthnetwork.org](http://www.zooanimalhealthnetwork.org). These include guidance documents on developing emergency plans for zoological facilities. This spring and summer, three zoos evacuated in ND and NE due to serious flooding (Minot and Bismarck, ND and Scottsbluff, NE). The ZBPWG materials were shared with these facilities and initial conference calls were held with the zoos, the Association of Zoos and Aquariums, and USDA to help provide insight on the use of the documents in planning response and recover actions.

NASAAEP Best Practice Working Groups:

- The National Alliance of State Animal and Agricultural Emergency Programs and Iowa State University, with support from APHIS has created an Animal Emergency Response Library with which to share the products of the 8 best practice working groups (Sheltering, Animal Search and Rescue, Evacuation and Transportation, Animal Decontamination, Veterinary Medical Care, Planning and Resource Management, Preparedness and Outreach, and Training). Access is open to all, but you need to set up a user account. Access is through [www.nasaaep.org](http://www.nasaaep.org).

Introduction to Animal Emergency Management:

- Animal Care has funded Iowa State University Center for Food Security and Public Health in the development of a 10 module course entitled Introduction to Animal Emergency Management. The primary purpose is to help train APHIS employees in supporting animal issues in natural and man-made disasters. The project is just now being completed. The primary audience is APHIS Animal Care employees with a secondary audience of other USDA, Federal, State or local emergency management personnel. This will not be a course for volunteers/responders.

Improvised Nuclear Device planning issues:

- Gordon Cleveland (VS) and Kevin Dennison (AC) have been APHIS representatives on a planning work group to attempt to identify and close gaps in national strategies pertaining to mass care and rescue operations following a nuclear detonation. Our emphasis is that animal issues (pets, livestock, and other animals) must be managed in order to better protect the public. While the issues are overwhelming, it is critical for State and local animal authorities and stakeholders to engage in radiological and nuclear planning efforts within their jurisdiction. Serious challenges exist in the mass decontamination of pets, livestock, zoo animals, and others and further research is needed to identify true best practices and critical efficient protocols. Two USDA funded research projects (TAMU and CSU) are a good initial start in closing some of those research gaps.

APHIS Assignments to FEMA IMAT teams:

- Recently, APHIS personnel have been asked to serve in support of FEMA Incident Management Assistance Teams in support of State, Tribal, or local response to disasters. Animal Care served on the IMAT in Joplin, Missouri after the May tornado for five weeks, acting as a liaison between FEMA and animal response personnel and providing technical assistance to the local community. VS and PPQ have both been asked to serve with IMATs in various incidents as well.

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### **3D RESEARCH STATUS OVERVIEW - Dr. Darrel Styles, Sr. Veterinary Officer, USDA-APHIS-NCAHEM**

#### **Disinfectant selection and use**

+ Use of Compressed Air Foaming Systems (CAFS) employing commercial disinfectant foams for the disinfection of housing, caging, transports, and environments of commercial poultry. This project is focused on the disinfection of poultry environments and equipment against common poultry and public health pathogens (e.g. Salmonella, Campylobacter, Newcastle Disease Virus (NDV), and Avian Influenza [AI]). Cooperator is Texas A&M University; funded by AC highly pathogenic AI (HPAI) funds; technical oversight by VS.

+ Efficacy of generic disinfectants (such as household bleach and citric acid) under a variety of conditions to verify that they will be effective in the field on wood, concrete, and metal surfaces against high priority animal disease agents. The project should result in recommendations on concentrations of generic disinfectants effective against specific high consequence organisms on defined surfaces. Research was conducted by Agricultural Research Service (ARS) with Environmental Protection Agency (EPA) funding and VS technical advice.

#### **Humane emergency mass depopulation**

+ Emergency mass depopulation of poultry using high-expansion, medium expansion, compressed air, and CO<sub>2</sub> gas generated water-based foam projects are focused on performance, adaptation to multiple poultry species/settings, training, and improving humane performance parameters. Cooperators are University of Delaware, University of Georgia, Texas A&M University, and North Carolina Department of Agriculture; funded by Animal Care HPAI funds; technical oversight by Veterinary Services.

+ Emergency on-farm inhaled gas mass depopulation of swine. This project examines the construction or adaptation of on-farm or easily acquired materials for the construction of ersatz gas chambers (e.g. roll-off dumpsters used to collect cull swine for rendering). The project has done extensive modeling on ideal gas filling dynamics and evaluated the use of CO<sub>2</sub> gas and CO<sub>2</sub> gas/N<sub>2</sub> gas mixtures to optimize welfare performance. Cooperator is North Carolina State University; funded jointly by the Department of Homeland Security, Science and Technology Directorate (DHS S&T) and VS.

+ Development of a portable pneumatic captive bolt system for the emergency mass depopulation of beef and dairy cattle in large numbers. This project revives an extant technology and will re-engineer the devices to ensure a sufficiently high mortality rate with optimal humane performance. Cooperators are Iowa State University (Beef) and Western University (Dairy); funded jointly by DHS S&T and VS.

#### **Disposal**

+ An APHIS/ EPA collaboration is underway to develop guidelines for safely using environmentally-friendly rendering to dispose of animal remains while containing pathogens and enabling plants to return to normal operations after emergency

+ Composting studies were completed (U. Delaware HPAI, Canadian Food Inspection Agency FMD), confirming that environmentally-friendly composting can inactivate pathogens.

+ An unlined burial study was partially completed (U. Saskatchewan), demonstrating that unlined burial can pose a significant risk to drinking water.

+ A DHS/ EPA collaboration with APHIS input is underway to provide a transportable gasifier to destroy animal remains quickly with low air emissions and minimal energy needs.

### **Re-cap of USDA/ U of MN/ State Animal Health Officials Permitting of Livestock Movement for Continuity of Business in Case of FMD – Gene Hugoson, Center for Animal Health and Food Safety, University of Minnesota**

#### **Key Points: SAHO FMD Dialogue Meeting**

1. While SAHOs are clear on the protocol for FAD suspect investigations, human resource constraints and distance affect the time to complete the investigation and submit samples to the laboratory. The addition of NAHLN laboratories for provisional PCR screening has significantly reduced the timeline for many.
2. Considerable differences exist among SAHOs about when and with whom to share information about investigations and preliminary findings. The strength of interpersonal relationships and trust dictates the degree of early communications. Information will be shared with other regulatory officials before sharing with producers or food processing industry. SAHOs recognize the importance of enlisting industry both in the process of planning for an FAD response and during an outbreak response.
3. Statewide stop movement orders of 3 or more days will be the immediate response to confirmed FMD outbreaks. While recognizing that stopping all movements is impractical, risk analyses would facilitate an understanding of what constitutes a 'dangerous movement'. SAHOs already recognize the need for expedited consideration of milk movement permitting.
4. SAHOs discussed targeting control measures based on a better understanding of animal and animal product movement for each commodity. Understanding industry practices and movement

pathways will be critical for the accurate assessment of risk and allocation of resources in an outbreak scenario. Insufficient resources currently exist to address the permitting necessary for the anticipated volume of movement from non-affected premises within control zones.

5. SAHOs pointed to the opportunity for risk assessments of specific commodities to establish pre-approved permits for non-susceptible species and commodities representing negligible risk of disease spread. Active engagement of industry in understanding these risks is imperative and lends transparency to the process.
6. SAHOs feel that movement and permitting processes and information technology should receive highest priority from APHIS. APHIS can play a valuable role by establishing national standards. SAHOs recognize the difficulty of developing national data systems and encourage piloting of prototypes along with enhancements to existing IT systems to support movement and permitting.
7. Efforts are underway to develop model permits (multi-state partnership), to establish farm-level biosecurity risk assessments (Secure Milk Supply), and to complete proactive risk assessments to support pre-approved movement permits (Secure Egg Supply). SAHOs strongly endorse these efforts and support continued investments on movement and permitting process development.

#### Future Meetings

- A small group meeting in person is preferable to a conference call or email.
- Emails and/or conference calls prior to in-person meetings are helpful.
- Brief and concise documents are needed such as the FMD red book overview as it is difficult to review large documents and provide meaningful feedback in a timely manner via email or conference calls.
- Conference calls could be used to elicit feedback from the SAHO working group for specific procedures such as the model permits from the SES work.
- Future working group dialogues could be piggy-backed on other meetings such as the NIAA.
- Participants suggested mid-spring 2012 for the next meeting.

#### National Dialogue Meeting

For national dialogue meeting in November, we appreciated your suggestion for baseline 'situational' presentations that set the stage for discussion of the needs/interests in the context of the overall FMD preparedness and response topic.

We appreciate your receptivity to sharing information from this meeting with the entire Assembly at USAHA.

#### **Committee Business**

##### Discussion & Vote of Resolutions and Recommendations -

Resolution 1 – IT Infrastructure for Electronic Certificates of Veterinary Inspection (eCVIs) for Canada/USA Livestock Movement - adopted

Resolution 2 – NAHLN Funding - adopted

##### Meeting schedule and objectives for 2011 - 2012

Monthly conference calls will remain the LAST Thursday of each month

NO November or December conference call for remainder of 2011

Please review the Mission Statement for over-arching objectives; committee members may suggest additional or alternate objectives by contacting the committee chair persons

There was no new business introduced for discussion, and the Committee will hold the monthly conference call on October 27, 2011.

#### **ADJOURNED**