

REPORT OF THE USAHA/AAVLD COMMITTEE ON ANIMAL EMERGENCY MANAGEMENT

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The Committee met on October 25, 2008 at the Sheraton Greensboro Hotel Greensboro, North Carolina, from 8:00 a.m. to 5:00 p.m. There were 33 members and 81 guests present. The Co-Chairs recapped issues and discussion topics from the year's conference calls which are reflected in today's presentations and resolutions.

Jose' Diez, Emergency Management and Diagnostics (EMD), Veterinary Services (VS), Animal and Plant Health Inspection Service (APHIS), United States Department of Agriculture (USDA), presented the USDA-APHIS-VS Emergency Management and Diagnostics Update. EMD made revisions to the Operational Guidance and reworked the national response plans and objectives for highly pathogenic avian influenza (HPAI) and foot-and-mouth disease (FMD) (in draft). The plans are National Incident Management System (NIMS) compliant, specific and comprehensive. Actions and responsible officials are clearly defined.

VS Memo 580.4 was revised to clarify priority designations and process and emphasize actions and responsible officials. Contracts have been put in place to fast-track diagnostic laboratory sample delivery to ensure Priority 1 or Priority A laboratory sample delivery in less than eight hours. Priority A is used when there is not high suspicion of a foreign animal disease, but circumstances indicate that it is prudent to obtain laboratory results as rapidly as possible.

Progress has been made in continuity of business planning. Greater emphasis has been placed in response pre-planning to minimize disruptions to business operations in future outbreaks. Commodity-based risk assessments and industry biosecurity programs integrated into Area Command or Unified Command decision making. Movement and permits for animals and animal products, by commodity and biosecurity program in three areas: 1) within control area; 2) into control area; and 3) out of control area. The bottom line is establishing contingency plans for hour-zero forward.

National Veterinary Stockpile (NVS) has expanded capabilities. Diez indicated they will manage vigorous outreach effort. Key efforts include:

- publish the NVS guide to educate States about NVS and recommend actions they need to plan;
- a State/Federal liaison available;
- operate NVS website on www.aphis.usda.gov;
- staff 24/7 emergency hotline for States requesting help; and
- support State exercises to test readiness.

Other activities include:

- international transport of antigen to manufacturers overseas for processing and return of vaccine
- international transport of commercial vaccine from manufacturers overseas
- transport of samples and reagents to labs
- 3D contractor large animal handling and depopulation training
- partner with Department of Homeland Security (DHS) to develop and evaluate second generation, US manufactured FMD vaccines for single shot immunity and longer shelf-life

Diez next updated the National Response Preparedness FMD Planning, including upcoming exercises:

- Iowa HPAI exercise (Oct 2008)
- New England FMD exercise (Nov 2008)
- Florida Rift Valley fever (RVF) exercise (Nov 2008)
- NVS Multi-State FMD Exercise (2009)
- National Level Exercise -- APHIS-led with Federal Emergency Management Agency (FEMA) support (2010).

A number of interagency collaboration efforts are underway, which include:

- DHS FMD Response Planning;
- Interagency Bioterrorism Risk Assessment Working Group;
- Federal Bureau of Investigation (FBI) Joint Agroterrorism Working Group
- Joint Modeling Operations Center
- Quadrilateral Scientific Collaboration (QUADs) Countries (Australia, Canada, New Zealand, United States) 3D Technical Working Group
- embedded liaisons at Centers for Disease Control and Prevention (CDC) and the National Center for Medical Intelligence (NCMI)

Regarding issues of depopulation and disposal, Diez discussed that APHIS, in collaboration with Carcass Disposal Working Group members, has developed online training modules:

- In-House Composting
- Outdoor Composting
- Onsite Treatment/Burial
- Secure Transport
- Offsite Treatment/Burial
- Cleaning and Disinfection

Jessica Fantinato, Homeland Security Office, USDA, provided the Update on Food and Ag Sector Coordinating Council's (FASCC) Activities and the Sector Specific Plan (SSP). The SSP describes how the Food and Agriculture Sector will protect its critical infrastructure as directed by the National Infrastructure Protection Plan. Its components include:

- identifying critical assets or systems
- assessing vulnerabilities
- developing protective measures
- conducting research and development
- measuring progress

In 2006, USDA and U.S. Department of Health and Human Services (USDHHS), Food and Drug Administration (FDA) collaborated with Sector partners (Federal, State, Tribal, local, and industry) to write the plans for protecting infrastructure in the sector. However, time and resource limitations impacted Sector input.

In 2008, USDA and FDA developed an SSP update document which outlines changes since the original was released. Food and Agriculture Government and Sector Coordinating Councils (GCC and SCC) meet monthly by conference call.

2008 Sector Goals include:

- Sector Tabletop Exercise using DHS' Homeland Security Exercise and Evaluation Program (HSEEP)
- Food Agriculture Sector Criticality Assessment Tool (FASCAT) Implementation
- Sector Communications and Homeland Security Information Network (HSIN), including a metric to define success for HSIN

- Revision of the Sector Specific Plan to include, at a minimum, FASCAT, the Food Protection Plan, and the Import Safety Plan.

Tom McGinn, Office of Health Affairs (OHA), DHS, provided the DHS-OHA update. He addressed the FASCAT, which is designed to determine what are the most critical elements, nodes and sub-systems in the food and agriculture infrastructure. The benefits to States includes:

- provide an effective response to future DHS National Data Calls for information on critical infrastructure components for the food and agriculture
- identify sector systems/sub-systems that are both critical to key state commodity chains or food distribution systems
- priority for further state or organizational level vulnerability assessment, protective measures and mitigation strategy development

DHS has identified the following planned goals for Fiscal Year 2009:

- liaison positions between APHIS and Customs and Border Protection (CBP) headquarters
- institutionalize pest risk committees
- integrate systems for data collection and information sharing
- develop a format for Ag-related post-seizure analysis and post-interdiction review
- develop risk-based staffing model, or equivalent, for agricultural canine deployment

Ron DeHaven, American Veterinary Medical Association (AVMA), presented What in the World is Going on Here: The Changing Environment in Veterinary Medicine and Our Future. DeHaven noted that we are at a critical crossroads in veterinary medicine and animal health. Animal welfare concerns are increasing. World demand for protein (meat) are increasing. AVMA policies must be scientific, practical and socially acceptable.

DeHaven next addressed the One Health Initiative, in place for the protection of people, animals and food. The incubation period for most infectious diseases is now longer than the time it takes to transport them across the globe. The issues that create the need for the one health concept are the fact that:

- 60 percent of human pathogens are zoonotic
- 80 percent of animal pathogens are multi-host
- 75 percent of emerging pathogens are zoonotic

Finally, DeHaven stressed that veterinary workforce expansion and education are critical for the future of food safety.

Dave Filson, Penn State Cooperative Extension, Penn State University, presented Ready Ag: Continuity of Business Planning Project.

Ready Ag is a web-based tool developed to assist farmers and ranchers to become better prepared for any disaster. It will:

- IDENTIFY vulnerable areas of production and management
- PRIORITIZE areas to strengthen
- create an ACTION PLAN specific to your operation
- develop an accurate INVENTORY of your assets
- identify and engage LOCAL CRITICAL SERVICES
- find additional HELP

Modules have been developed for beef cattle, dairy, swine, poultry, crops, and fruit and vegetables.

This multi-state collaborative project has utilized the expertise of Cooperative Extension professionals from multiple Land-Grant universities in the development of a set of disaster planning and continuity of operations modules for each of the major agriculture commodities.

Lee Myers, National Veterinary Stockpile (NVS), VS-APHIS-USDA, presented the National Veterinary Stockpile Strategic Plan and State Planning Template.

NVS is a national repository of critical veterinary supplies, equipment, vaccines, and services.

An overview of inventory is as follows:

- large quantities of personal protective equipment and decontamination supplies
- foam/vaccination equipment
- restricted biologicals – vaccines/diagnostics

- commercial services for depopulation, disposal, and decontamination (3D)
- Deployable Capabilities include:
- poultry depopulation foaming units
 - push packs of personal protective equipment
 - PPE individual kits
 - antivirals
 - AI vaccine
 - AI field test kits
 - portable satellite communication equipment
 - portable vaccine shipment / storage containers
 - disinfectants
 - 3D commercial services who are:
 - qualified and managed by NVS; services arranged through US Coast Guard basic ordering agreement
 - scalable in response - 3D in total, part, or none
 - self-contained (equipment, supplies, personnel)
 - have large numbers of trained, medically qualified responders starting within 24 hours
 - have expertise in all-hazard response, ICS, C and D, transport of hazardous material, etc.

States leaders need to understand the following points in order to deploy the NVS.

- Request NVS deployment
- Receive NVS assets (as well as state and local supplies) at the receipt and storage site (RSS)
- Store assets (including temporary refrigeration)
- Stage assets for delivery to multiple outbreak sites
- Manage inventory for efficacy and replenishment
- Deliver assets to outbreak sites
- Recover unused and reusable assets

Jon Zack, National Center for Animal Health Emergency Management, (NCAHEM)-VS-APHIS-USDA, presented Veterinary Services, National Center for Animal Health Emergency Management Preparedness and Incident Coordination Update

Zack highlighted the goals of foreign animal disease (FAD) response and preparedness:

- identify the veterinary functions and countermeasures that are necessary to contain and control the outbreak of a foreign animal disease
- integrate these veterinary functions and countermeasures with the emergency management systems and operations that will be conducted in joint and unified operations by local, State and Federal officials

Zack then discussed the NCAHEM FAD preparedness and response efforts, which includes:

- Continuity of Business Planning Strategies;
- National Veterinary Stockpile (NVS);
- National Animal Health Laboratory Network (NAHLN)
- National Animal Health Emergency Response Corps (NAHERC).

Pam Hullinger, Lawrence Livermore National Laboratory, presented Foot-and-Mouth Personnel Resources Estimate Project Update

National-scale animal disease spread models have been identified by both a Blue Ribbon Panel and the FAD threat working group as critical decision support tools.

One question this model answers is “What resources are necessary over the course of a response and what impact does limited resources have on the outcome?” This model evaluates the feasibility of existing State and Federal FMD response plans with respect to required personnel resources.

Personnel position titles included in the modeling are from the Animal Emergency Response (AER) positions credentials:

- Veterinarian (DVM)
- Animal Disease Epidemiologist (ADE)

- Animal Technician (AT)
- Animal Handling Specialist (AHS)
- Unskilled Lay Individual (ULI)
 - unskilled lay may be farm employees
 - not included in AER position credentials

For scenarios initiated in a Tulare, California dairy, the DVM resources are overwhelmed about 15 percent of the time, while the AT resources are overwhelmed 100 percent of the time.

Vaccination on first confirmation reduces the number of infected-premises-related resources required for the duration of the outbreak.

Neville Clarke, Director National Center for Foreign Animal and Zoonotic Disease Defense, presented Brief on National Center for Foreign Animal and Zoonotic Disease Defense. Clarke gave a summary of research and education accomplishments for the Center which include:

- development of interstate transportation model for cattle and swine
- development of FASCAT to identify agriculture system critical infrastructure
- creation of National FMD model
- vaccine development and rapid detection field tests for FMD, Rift Valley fever and avian influenza
- training for Avian Influenza Response Personnel

Carla Thomas, National Plant Diagnostic Network, University of California, Davis presented All Hazards Agriculture Emergency Response Plan Template for Counties. Partnerships in the development of the template include:

- California Department of Food and Agriculture (CDFA)
- USDA-APHIS
- State of California Office of Emergency Services (CA OES)
- California Office of Homeland Security(CA OHS)
- National Plant Diagnostic Network

Plan contents include:

- Authorities
- Roles and Responsibilities Matrices
- Activation and Notification Charts
- Detection, Response and Recovery
- Contact Lists and Crisis Communication
- Emergency Declaration Instructions
- Resource Check Lists, Forms and Maps
- Field Operations Guide (FOG)

The Response Template is:

- NIMS compliant
- available for use by others
- All-Hazards Food and Agriculture Emergency Response Plan Workgroup exists in FoodSHIELD.

Request a FoodShield Account from Carla Thomas 530-304-0689 or cthomas@ucdavis.edu.

Tracey Lynn, Center for Emerging Issues (CEI), Center for Epidemiology and Animal Health (CEAH), VS-APHIS-USDA, presented Pro-Active Risk Assessments to Facilitate Emergency Response. Doing risk assessments proactively, in advance of an actual outbreak, allows responders to assess the risk of specific product movements more rapidly during an outbreak.

Designed to bring expertise from government, academia, and industry to develop risk assessments that are:

- usable by incident command
- understood by industry
- aid in capacity-building for risk analysis in academia and industry

Future directions include:

- development of additional analytical tools to estimate risk from spatial models used as data layers in an analysis

- move to compartmentalization
- integration/use of trade data
- develop risk assessments for other diseases and industries

Committee Business:

The Committee approved a Resolution concerning mass depopulation tasking USDA, DHS and AVMA to review mass depopulation methods and collaborate to create operational guidelines for control or eradication of emergency and program diseases.

A second Resolution relative to development of continuity of business plans and response on a regional basis was approved.

The Committee conference call schedule for the following year was established as the last Thursday of each month.

The primary item identified for the Committee's focus is: Continued efforts to increase and secure funding to State Animal Health officials for emergency management purposes.