

*Secretary's Advisory Committee on Foreign Animal and Poultry Diseases
(5 June 2003)*

The opening of the meeting by Secretary Veneman highlights the dedication and commitment of the USDA to address all foreign animal and poultry disease issues and is very much appreciated.

The Committee recognizes the prominent work done by APHIS over the last year to move to a new and expanded emergency management system (based on Incident Command System) and to integrate with other agencies within USDA and across other departments regarding this capacity. In addition, there were an unprecedented number of foreign animal disease outbreaks. Recently, infectious salmon anemia, low pathogenic avian influenza, spring viremia of carp, exotic Newcastle disease, and the announcement of bovine spongiform encephalopathy in Canada, have taxed all available resources, yet APHIS responses were unequivocally outstanding and effective.

Our vision for the future of USDA follows, identifying our priorities. Thank you for your confidence in asking us to serve in this advisory capacity.

Agricultural Issues within the Department of Homeland Security

The most recent report from the Gilmore Commission states that agriculture and food have only recently been acknowledged as critical sectors and that relatively little action has been taken to address the threat of agroterrorism. The Committee concurs with this report and is especially concerned regarding the apparent lack of attention to agroterrorism within the Department of Homeland Security (DHS).

The Committee urges the Secretary of Agriculture to work directly with the Secretary of the Department of Homeland Security to enhance preparedness efforts against agriterrorism. Specific recommendations include:

- Establish new USDA liaison positions within DHS at each appropriate Undersecretary level to ensure adequate coordination and communication between the two departments. (The Committee does not support moving existing personnel or resources from USDA to DHS.)
- Move quickly to establish an Emergency Support Function (ESF) for agriculture and food to be included in the National Incidence Response Plan.
- Ensure that all current existing resources for research at Plum Island continue to be directed to ARS programs.
- If additional resources are appropriated to DHS to address agroterrorism, these funds should be principally directed to USDA, the primary department in leading prevention and response activities.

Emergency Response

The Committee recognizes and wishes to extend our appreciation to APHIS for their commitment and efforts to date to address recent disease outbreaks. However, the Committee is

most concerned that the U.S. is not adequately prepared at this time to respond effectively to the potential introduction of a highly contagious foreign animal disease or any other biological agent that might disrupt the food supply chain, with the consequences of significant economic impacts to many other segments of the U.S. economy. Therefore the Committee urges the Secretary of Agriculture to fully engage all resources within the Department of Agriculture to elevate the coordination and planning required at the national, state and local levels and to fully implement National Animal Health Emergency Management System (NAHEMS), including the need to utilize the NAHEMS Steering Committee as the primary implementation vehicle to fully coordinate the support and engagement of all stakeholders, including the Department of Homeland Security.

The National Animal Health Emergency Management System (NAHEMS) has been created to address all animal health emergencies, including foreign animal disease (FAD) incursions. The primary goal is to form an operating partnership among key stakeholder groups to deliver a nationally coordinated first response system, beginning at the local and state levels, with commensurate support from all other stakeholder groups, including federal, state and industry resources. The NAHEMS Steering Committee has established a deadline for implementation of a world class emergency management system for the United States by 2007. Considerable progress has been achieved in implementation of the new system but additional steps are needed to meet the timeframe. The following recommendations will help strengthen implementation of this essential program:

- Deputy Associate Administrator for Emergency Programs within Veterinary Services should assume responsibility for overseeing the management and implementation for NAHEMS including the oversight, support and strategic planning process for the NAHEMS Steering Committee. Utilize NAHEMS Steering Committee to establish a system of national coordination and policy direction for animal health emergency management planning, as well as coordination with the Department of Homeland Security.
- In the absence of new funding, resources within USDA should be reallocated to provide personnel in the states to implement local animal health emergency plans with appropriate partners including industry, veterinary, laboratory, and state and local emergency management groups and first responders.
- Expand the Emergency Management operations staff at APHIS headquarters and regional offices to provide emergency management oversight and technical support for area/state animal health emergency management groups. A dedicated central emergency management training team should be utilized to implement this recommendation.
- The Secretary should have authority to immediately access CCC funds in the event of an outbreak of a highly contagious disease (e.g., foot-and-mouth disease, classical swine fever, highly pathogenic avian influenza, exotic Newcastle disease, etc.)

Emerging and foreign animal diseases continue to plague agriculture, public health, and wildlife, often with economic disruptions. The capacity to respond to each new emerging disease requires adequate preparedness - laboratory facilities and personnel to investigate new outbreaks. The Committee recommends:

- The continued development of the National Animal Health Laboratory Network. These strategically located laboratories will effectively shorten the turnaround time needed to

obtain accurate diagnoses from suspect FAD specimens. The established, as well as new, laboratory support system is of vital importance if we are to keep abreast of the diagnostic and research needs necessary to be able to detect new and emerging diseases.

- That USDA re-examine its preparedness to respond to an FAD incursion, such as FMD, with special emphasis on early (first 48 hours) response preparedness, working within the NAHEMS.
- States should be supplied with the new guidelines for the increased collection of potential BSE specimens. Provisions for monetary incentives would be very helpful in increasing the number of specimens submitted from “downer” cows, from those with neurologic signs, and from farm mortalities within the “high risk” profile.
- That USDA be encouraged to discuss with states, academia and industry various options to protect the U.S. animal population from emerging diseases while meeting our international trade obligations. This request is necessitated as disease conditions emerge where the etiologic agent(s) are not identified, but a case definition could be developed, or when an agent is identified, but may have different manifestations or disease severity in various populations.

Information on identification and location of animals is essential in predicting transmission and conducting tracebacks, both critical in controlling an outbreak. For animal location, geographic information systems technology permits identification of premises, type of animals, boundaries, water sources, roads, etc., all of which can be utilized to contain the outbreak. There have been significant challenges in implementing identification systems in addition to what is required for program diseases and interstate regulations. One of the main concerns is confidentiality of the database. Consequently, the Committee recommends that:

- USDA provide the resources necessary to implement the National Food Animal Identification Work Plan drafted by the National Food Animal Identification Task Force and endorsed by the U.S. Animal Health Association.
- The Secretary provide leadership for new legislation that allows collection of data (premises, location, name, numbers of animals, GIS coordinates, etc.) necessary to prepare and respond to agricultural emergencies, but which also assures confidentiality and protects this data from freedom of information requests and inappropriate releases.

Avian Diseases in Backyard Flocks - The current exotic Newcastle disease outbreak has demonstrated the serious risk that backyard flocks pose for entry and dissemination of exotic avian diseases. It is critical that local programs be implemented to expand identification, education, biosecurity and surveillance in these backyard flocks. The Committee recommends that:

- USDA work with states, and all appropriate stakeholders within the poultry industry, to coordinate and develop a national strategy to advance an outreach plan for backyard flocks to encourage identification, education, biosecurity, and disease surveillance.
- In addition, USDA should develop strategies with Mexico for joint eradication efforts for avian diseases that continue to threaten both countries.

Laboratories

The Committee applauds the initiation of the *National Animal Health Laboratory Network* and the start of construction on the integrated ARS/APHIS facility at Ames. This increased capacity for testing and surveillance in the event of a foreign animal disease outbreak is essential for protecting our agricultural resources. Sustainability of the laboratory system and completion of construction begun at Ames are necessary components of foreign animal disease preparedness. Therefore, the Committee recommends that:

- The planned expansion of the network to include all accredited veterinary diagnostic laboratories should progress.
- Continuous funding as a line item in the APHIS-VS budget is essential to maintain integrity and participation of the laboratories
- Every effort should be made to secure continuous congressional appropriations for the full development of the laboratories in Ames.

The partnership between APHIS and ARS to create rapid diagnostic testing for several of the foreign animal diseases (FADs) is most welcome. These diseases include: foot-and-mouth disease, classical swine fever, African swine fever, vesicular stomatitis virus, rinderpest, lumpy skin disease, contagious bovine pleuropneumonia, avian influenza virus, and Newcastle disease virus. Development of the tests through ARS and its affiliated universities is progressing well, as witnessed in the recent avian influenza and Newcastle disease outbreaks. Validation of newly developed tests by APHIS is experiencing some slowdowns due to shortage of personnel and selection of appropriate sites for field and laboratory testing. In addition, the committee had some concerns about the agents on the list. Lumpy skin disease and contagious bovine pleuropneumonia are probably not high priority agents for causing economic devastation after introduction. The committee questioned the absence of Rift Valley fever and other emerging zoonotic/agricultural agents from the list. Therefore, the Committee recommends that:

- The threat list be reexamined and if priorities have changed, to shift emphasis accordingly.
- Increased support of the validation portion be allocated in order to expedite transfer of these tests to routine use.

Research on foreign animal diseases is conducted at a number of federal facilities. Preeminent among these is the Plum Island Animal Disease Center (PIADC), which has the nation's only collection of investigators and viral stocks concerning foot-and-mouth disease. The Center is inadequately staffed for sufficient research on foreign animal diseases of economic importance. Of particular concern is the inadequate level of research conducted on novel control strategies, including fast-acting vaccine development and anti-viral strategies. With the transfer of the PIADC to the Department of Homeland Security (DHS), it is likely that the historical mission regarding foot-and-mouth disease research could receive less priority. In this regard, the transfer of half of the FY 04 ARS foreign animal disease research budget for Plum Island to DHS is disconcerting. The Committee recommends that:

- The Secretary secure sustained and enhanced funding for FAD research at Plum Island.
- The DHS be strongly encouraged to optimally utilize the Plum Island Animal Disease Center to reflect its unique capacities for the study of foreign animal diseases and its historical mission.

Vaccine strategies - The United States, in concert with Canada and Mexico, maintains preparedness for an outbreak of foot-and-mouth disease through the North American FMD Vaccine Bank. Not all FMD serotypes are currently available for mass production. Although there are plans to add additional serotypes, the committee is concerned that the levels of current stocks are inadequate in the event of an outbreak. In the light of recent global events, especially occurrence of FMD outbreaks in many parts of the world, the Committee recommends that:

- The FMD Vaccine Bank be reevaluated with a view to increasing the stocks both qualitatively and quantitatively.
- Vaccine strategies be examined for effective delivery as well as acceptability of the product post-vaccination.
- Development of fast-acting vaccine and anti-virals receive enhanced support.

The use of vaccination in the event of a FAD outbreak is being discussed with greater frequency. Given the volume and frequency in both national and international trade in animals and animal products, vaccination may prove to be a more viable option than other control measures.

Consequently, the committee recommends that:

- the prospect of vaccine availability be examined for other of the foreign animal diseases, most prominently avian influenza and classical swine fever. This availability could be achieved through USDA-maintained national banks, through memoranda with commercial enterprises, or other means.

Miscellaneous

Aquaculture is assuming greater importance to food production and the economic well being of the nation. There are minimal capabilities for diagnosis or control of disease of fish and shellfish within USDA. Protection of this vital industry will require increased laboratory support for surveillance, diagnosis and control. The line item for aquaculture within the VS budget does not appear to reflect this priority. Therefore, the Committee recommends that:

- USDA evaluate infrastructure needs to support aquaculture.

Organic standards that require outdoor exposure of animals are in direct conflict with the desire to protect the animals from exposure to serious contagious diseases. It should be noted that these standards will increase our possibilities of exotic disease incursions, especially with respect to poultry.

Secure communications in the event of an agroterror incident are essential. Communications between Departments of Agriculture and other responsible animal health agencies with federal counterparts has been restricted at times because classified information has been involved. Many times this information has been supplied by the states. There was even an occasion when the Advisory Committee was denied a discussion in an area which had been identified as classified. Therefore the Committee recommends that:

- State administrators and state veterinary representatives be given at least minimum security clearance on animal health and agroterrorism activities.
- APHIS should investigate use of secure hotline being developed by Washington office of the National Association of State Departments of Agriculture.

Prohibited meat entering the US is a continual cause for concern. With the transfer of APHIS port of entry inspection to the Homeland Security Department, USDA has available only limited personnel to further investigate and apprehend prohibited shipments of meat into the U.S. that bypass these inspections. The Committee recommends that:

- Veterinary Services take immediate action to expand and upgrade the USDA Smuggling Interdiction and Trade Compliance (SITC) group of inspectors nationwide.