Veterinary Services

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# Emergency Response: Foot-and-Mouth Disease and Other Foreign Animal Diseases

### **Surveillance Efforts**

The U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) has a strong system in place for detecting and responding to outbreaks of foreign animal diseases, including foot-and-mouth disease (FMD), in the United States. This system begins with a cadre of USDA-certified private veterinary practitioners who partner with livestock producers and APHIS to report any suspected foreign animal disease cases to State and Federal officials.

When a possible case of a foreign animal disease is reported, APHIS works with the State involved to immediately dispatch one of the more than 400 specially trained foreign animal disease diagnosticians to the scene. The diagnostician is responsible for collecting disease samples from affected animals and establishing initial quarantines. The samples are immediately transported to APHIS' National Veterinary Services Laboratories (NVSL) in Ames, Iowa, or to NVSL's Foreign Animal Disease Diagnostic Laboratory (FADDL) on Plum Island, NY, for diagnosis. Samples from foreign animal disease investigations receive immediate attention at these facilities. Initial diagnostic results are often available within 24 hours of sample collection.

### Responding to a Foreign Animal Disease Detection

If APHIS laboratory officials confirm that the sample is indeed positive for a foreign animal disease agent, APHIS and State animal health officials immediately begin investigating the source and trace all animals that may have come into contact with the disease. These officials apprise other State and Federal counterparts of the status of their investigation and initiate emergency response efforts at the State and local level. Factors such as high mortality and morbidity as well as other signs consistent with a foreign animal disease prompt APHIS emergency response teams to take immediate measures. These measures include ensuring the biosecurity of the affected site,

establishing and maintaining animal movement quarantines, and alerting officials in neighboring States. In addition, the APHIS Emergency Operations Center in Riverdale, MD, can be activated to begin coordinating with Federal, State, and local officials on communication and disease eradication efforts, with the ultimate goal of returning the United States to disease-free classification in the world marketplace.

## APHIS' Response Plans for Highly Contagious Diseases

Because specific outbreak situations vary, and each State's emergency response capabilities differ, APHIS' response plans for highly contagious diseases like FMD are designed to be flexible and dynamic. In recent years, with increased attention placed on the possibility of a severe foreign animal disease introduction in the United States, APHIS has been working to partner even more closely with State and Federal agencies to expand the pool of resources available. APHIS' response plans are designed to tap State and Federal resources as available and allow APHIS' animal health expertise and coordination skills to fill any remaining gaps.

As part of these ongoing efforts, APHIS has urged States to respond to animal health crises with the same emergency response systems that are in place for other severe emergencies, such as floods and other natural disasters. For States that have adopted such measures, APHIS' response plans enable the agency to act as a cooperator in initial disease eradication and control efforts. Conversely, for other States without integrated animal health emergency response plans, APHIS would operate jointly with State and local officials to coordinate response efforts. Regardless of the level of a State's animal health emergency planning, in the event of an FMD detection, APHIS officials will work to ensure that a consistent and appropriate response to the disease is carried out not only in the affected area, but in surrounding regions and the rest of the United States.

To accomplish this goal, APHIS also partners with other Federal agencies, including the Department of Homeland Security's Federal Emergency Management Agency, the Environmental Protection Agency, and the Department of Defense, in regard to animal disease outbreaks. In the event of a significant animal health situation, all relevant Federal agencies will follow National Response Plan guidelines. Should an FMD outbreak occur in the United States, other Federal agencies are prepared to recognize APHIS'

animal health authority and expertise; numerous cooperative Federal agencies would provide resources to USDA as necessary to control and eradicate an FMD outbreak.

## **APHIS' Emergency Operations Center**

Due to FMD's highly contagious nature, any detection of the disease in the United States would warrant immediate activation of APHIS' Emergency Operations Center. APHIS officials stationed in the Center would help to coordinate local, State, and Federal response and eradication efforts, coordinate interagency planning, and implement national communication and information-sharing strategies.

The Emergency Operations Center's responsibilities during the initial stages of an FMD outbreak would also include immediately notifying animal health officials in Canada and Mexico about the FMD detection and subsequent response efforts. APHIS' North American partners are prepared to implement similar disease surveillance and control measures should FMD be detected in the United States. These steps would assist in safeguarding livestock resources in other areas of North America and help to prevent additional introductions of the disease. On the domestic front, officials in the Emergency Operations Center would also be available to help develop emergency response plans and interim regulations as needed.

Looking beyond North America, APHIS officials working in the Emergency Operations Center would stay in close contact with U.S. trading partners to provide information and monitor for unnecessary trade restrictions on U.S. products. APHIS must also notify the World Organization for Animal Health (OIE), the international animal health governing body, of certain animal disease outbreaks and all steps taken to control FMD.

## Stamping Out an FMD Outbreak

APHIS' response plans are focused on eradicating the disease. After confirming an outbreak, the agency would move quickly to trace infected or exposed animals, establish and maintain FMD quarantines, and destroy infected or disease-exposed animals. APHIS is prepared to work with State and local officials to humanely euthanize animals and dispose of carcasses in approved manners. Additionally, indemnity would be paid to affected producers for the fair market value of animals that must be depopulated.

## **National Veterinary Stockpile**

The National Veterinary Stockpile (NVS) is the Nation's repository of vaccines and other critical veterinary supplies and equipment. The NVS is designed to augment State and local resources in the fight against dangerous animal diseases that could poten-

tially devastate American agriculture, seriously affect the economy, and threaten the public's health.

Homeland Security Presidential Directive 9 (HSPD-9) established the NVS in 2004. The Directive requires the NVS to be able to deploy within 24 hours "sufficient amounts of animal vaccine, antiviral, or therapeutic products to appropriately respond to the most damaging animal diseases affecting human health and the economy..." APHIS' efforts to implement the Directive and to make the NVS operational have improved our Nation's ability to deliver rapidly and with less cost, large quantities of critical veterinary supplies and equipment in response to complicated animal disease scenarios. One such potential scenario includes a situation in which there would be numerous, large-scale animal disease outbreaks occurring simultaneously at multiple locations.

## North American Foot-and-Mouth Disease Vaccine Bank

As a further precaution against a widespread FMD outbreak, agency officials have worked with Canada and Mexico to develop the North American Foot-and-Mouth Disease Vaccine Bank (please refer to the APHIS factsheet on FMD vaccine). While APHIS does not currently believe widespread vaccination is an appropriate first step against the disease, recent exercises simulating an FMD outbreak in North America, and modeling based on the 2001 United Kingdom FMD outbreak, have shown that vaccinating animals may enhance other eradication activities and help limit the overall impact of an outbreak. APHIS is prepared to quickly implement a targeted FMD vaccination program if agency officials determine during an actual outbreak that it would benefit the agency's control and eradication efforts.

#### Recovering From an FMD Outbreak

Once an FMD outbreak is brought under control, APHIS' efforts will move toward assisting producers in recovering from their losses. Specifically, APHIS will evaluate the disease situation in the United States and work to regionalize any remaining affected areas. In this way, disease eradication resources can be focused in key areas, and animals in other parts of the country can be classified as disease-free, making them eligible for interstate movement and slaughter. APHIS will also work with agriculture officials in other countries to relay critical disease monitoring information and keep export markets open for animals and products certified as disease-free. APHIS officials will meet with Federal, State, and local cooperators to assess FMD response activities after the disease has been eradicated from the United States. Such assessments aid in the development of new strategies for sharing resources and improving response efforts.

### **For More Information Contact**

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