

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

Linda Detwiller\* and Aida M. Boghossian

---

## **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 certified private veterinary practitioners who partner with APHIS to report any suspected foreign animal disease cases to federal officials. These surveillance efforts are further augmented by the work of 450 specially trained animal disease diagnosticians from state, federal, and military ranks who actively search for FMD and other diseases across the country.

Once APHIS learns of possible disease detection, the Agency immediately dispatches a team of trained diagnosticians to the scene. The diagnosticians are responsible for collecting disease samples from affected animals and establishing initial necessary quarantines. The samples are then sent to APHIS' National Veterinary Services Laboratories (NVSL) in Ames, Iowa, or the Foreign Animal Disease Diagnostic Laboratories (FADDL) on Plum Island, New York, for diagnosis. Foreign animal disease samples receive immediate attention at these facilities.

## **Responding to a Foreign Animal Disease Detection**

If NVSL or FADDL officials confirm that the sample is indeed a foreign animal disease, APHIS and state officials immediately begin investigating the source and trace all animals that may have come into contact with the disease. These officials apprise both state and federal officials on the status

of their investigation and will also initiate emergency response efforts at the state and local level. These measures include notifying state agriculture and, if necessary, public health officials of the disease detection, securing the biosecurity of the affected site, establishing and maintaining animal movement quarantines, and alerting officials in neighboring states. In addition, these officials can recommend that APHIS' Emergency Operations Center in Riverdale, Maryland, be activated to begin coordinating communication efforts and manage, along with state and local officials, disease eradication efforts. Activation of APHIS' Emergency Operations Center would also set off a series of immediate measures designed to detect and eradicate other cases as quickly as possible, with the ultimate goal of returning the United States to disease-free classification in the world marketplace.

## **APHIS' FMD Response Plan**

Because specific outbreak situations vary, and each state's emergency response capabilities differ, APHIS' FMD response plan is 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 to involved officials. APHIS' FMD response plan taps state and federal resources as available, and allows the Agency's 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' FMD response plan enables the Agency to act as a cooperater in initial disease eradication and control efforts. Conversely, for other states without integrated animal health emergency response plans, APHIS Regional Emergency Animal Disease Eradication Organizations would operate jointly with state and local officials to coordinate FMD 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 also in surrounding regions and the rest of the United States.

---

*L. Detwiller and A. Boghossian*  
USDA, APHIS, Veterinary Services  
Emergency Programs  
4700 River Road, Unit 41  
Riverdale, Maryland 20737-1231

APHIS Emergency Operations Center  
Telephone: (800) 601-9327  
e-mail: [emoc@aphis.usda.gov](mailto:emoc@aphis.usda.gov)

*Proceedings of the 54th Reciprocal Meat Conference (2001)*

To accomplish this goal, APHIS also partners with other federal agencies, including the Federal Emergency Management 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 have pledged to follow Federal Response Plan guidelines. Should an FMD outbreak occur in the United States, other federal agencies would recognize APHIS' expertise in animal health matters and are prepared to give full authority and provide other resources to APHIS as necessary to control and eradicate the outbreak.

### **APHIS' Emergency Operations Center**

Due to FMD's highly infectious nature, any detection of the disease in the United States would warrant immediate activation of APHIS' Emergency Operations Center. Currently, the Center is monitoring the FMD situation in the United Kingdom and France, in addition to other sites around the world, and is ready to act should FMD be found here in the United States. In this case, APHIS officials stationed in the Center would help to coordinate local, state, and federal response and eradication efforts, coordinate inter-agency planning, and implement national communication and information-sharing strategies.

The Emergency Operations Center's other 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 APHIS detect FMD 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, APHIS officials in the Operations Center would also be available to help develop emergency response plans and other interim regulations as needed.

In the event of an outbreak, APHIS officials stationed 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 apprise the Office International des Epizooties, the international animal health governing body, of all steps taken to control FMD.

### **Stamping Out an FMD Outbreak**

APHIS' longstanding FMD response plan includes eradicating the disease by depopulating affected and exposed animals. 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 their animals.

As a further precaution against a widespread FMD outbreak, Agency officials would also order and have on hand an adequate supply of FMD vaccine from the North American Foot-and-Mouth Disease Vaccine Bank (please refer to the APHIS fact sheet on the FMD vaccine). While APHIS does not believe widespread vaccination is an appropriate first step against the disease, recent exercises simulating an FMD outbreak in North America have shown that vaccinating animals may enhance other eradication activities and help to prevent a more severe outbreak of the disease. Vaccination may also be useful in helping to insulate disease-free areas from areas where FMD is rampant. Should APHIS decide that FMD vaccination is necessary, the Agency is ready to quickly carry out this operation by coordinating vaccination teams consisting of state, federal, and other veterinary personnel.

### **Recovering From an FMD Outbreak**

Once the FMD outbreak has been brought under control, APHIS' efforts would move toward assisting producers recover from their losses. Specifically, APHIS would evaluate the disease situation in the United States and work to regionalize any remaining affected areas. In this way, disease eradication resources could be focused in key areas, and animals in other parts of the country could be classified as disease-free, making them eligible for interstate movement and slaughter. APHIS would also work with agriculture officials in other countries to relay critical disease monitoring information and keep export markets open for animals certified as disease-free. APHIS officials would 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.