INTRODUCTION

An outbreak of FMD in any livestock sector will have immediate and serious negative domestic economic and international trade impacts. It is imperative to emphasize any effective response to an outbreak of FMD in the United States will require unity of purpose from States, Tribes, private sector and USDA. No single entity can conduct FMD response in isolation, but we can effectively respond together. Depending upon outbreak jurisdiction, response actions and authorities will begin with the State or Tribe, with supporting USDA coordination, resources and authority.

The United States’ primary eradication strategy for a small, focal FMD outbreak is stamping-out infected animals, however stamping-out, alone, will be an insufficient response to a moderate, or larger, outbreak. A stamping-out response strategy is conducted with critical response actions including movement control (establishing Control Areas and Free Areas), increased biosecurity, increased surveillance (active and passive surveillance), epidemiological investigation and contact tracing. Adding a vaccination strategy will add another layer of complexity to the response and requires vaccination buffer zones, “at-risk premises” designations within zones, and vaccine resource allocation.

USDA’s immediate actions follow:

- USDA will issue a declaration of extraordinary emergency in order to effectively respond with appropriate resources and assist impacted States and Tribes.
- USDA will issue a 72-hour National Movement Standstill for a detection of FMD in domestic and/or feral susceptible animals.
- Since FMD affects cloven-hoofed animals, USDA endorsement of certificates for International trade of cattle, sheep, goats, elk, pig, deer, and bison products will stop, as determined by bilateral trade agreements (those that require United States free of foot-and-mouth disease).

The 72-hour movement standstill is for all FMD susceptible animals and their germplasm only and not bovine, ovine, caprine, cervid, or swine meat or products that have passed FSIS inspection. All susceptible animals in interstate commerce at the start of the movement standstill will continue to their destination or return to point-of-origin. A standardized start and stop time for the national standstill will be established.

APHIS acknowledges that there will be significant challenges to eradicating the FMD virus, depending on the size of the outbreak. Movement controls and other regulatory measures are critical since FMD is readily spread by infected susceptible animals and contaminated fomites, and airborne spread is possible.
It is essential movement controls are science and risk based, so that disruption to normal business is minimized and response resources are appropriately allocated. To assist in doing so, contact tracing and standard Control Areas movement controls will be utilized. APHIS will provide guidance on any additional methods designed to target response resources to high-risk epidemiologically linked premises during an FMD outbreak on the FAD PReP website.

**CHRONOLOGY OF FMD RESPONSE ACTIONS**

**Presumptive Positive Detection of FMD in the United States**

- Establish State quarantine and hold orders on Infected Premises
- Initiate appraisal process
- Begin preparatory depopulation activities
- Establish Control Area(s) and movement controls
- Implement increased biosecurity measures
- Begin an epidemiological investigation and tracing activities
- Begin data collection and information management in Emergency Management Response System 2.0 (EMRS2)
- Begin confirmatory diagnostics and further virus typing
- Initiate incident management organizational structures and processes

**Confirmed Positive Detection of FMD in the United States**

- Deploy National Incident Management Team (IMT)
- Notify DHS, FBI, States, industry, trading partners, media
- Initiate Incident Coordination Group activities
- Activate NAHLN laboratories as needed
- Evaluate and enforce quarantine and movement controls
- Ensure compensation process moves forward for indemnity
- Conduct depopulation and disposal
- Continue timely and accurate data entry in EMRS2
- Initiate public awareness messaging and communication campaign
- Implement and enforce increased biosecurity measures
- Initiate continuity of business plans
- Determine vaccine availability and define vaccination strategy, if used
- Initiate surveillance plan
- Continue epidemiological investigation and tracing activities
- Assess and characterize the location(s), scale, and scope of the outbreak
- Expand public awareness campaign
- Ramp up permitting and continuity of business activities

Use of appropriate critical activities and tools continues throughout FMD response
72-Hour National Movement Standstill and “Hour 73”

Purpose of the 72-hour national movement standstill.

1) Communicate outbreak and implement immediate actions needed.

2) Establish initial or first Control Area(s).

3) Communicate location of initial Control Area(s) and Free Areas; i.e., communicate where movement controls and permits are needed at start of hour 73.

4) Conduct contact tracing for Infected Premises. Establish first Contact Premises and controls for Contact Premises.

5) Increase national biosecurity and passive surveillance.

6) Increase national active surveillance with available capabilities.

7) Halt international trade of cattle, sheep, goats, elk, pig, deer, and bison and their products as necessary.

8) Assess and evaluate locations, scale, size and epidemiology of outbreak known at hour 72 for hour 73 actions.

National Movement Standstill: “Hour 73” Options.

Depending upon the circumstances of the outbreak, USDA APHIS policy options for national movement standstill at hour 73 include:

1) The 72 Hour National Movement Standstill ends at hour 73.

   - Premises in Free Areas resume interstate commerce of listed species and their germplasm at hour 73. Premises not in Control Areas or not identified as Direct Contact Premises resume intrastate and interstate commerce.
   - Premises in established Control Areas will need permits for intrastate and interstate commerce.
   - Direct Contact Premises will need permits for intrastate and interstate commerce.

2) Continue national movement standstill for an additional period of time beyond hour 73.

3) Establish a regional or other smaller geographical or jurisdictional movement standstill for interstate commerce beyond hour 73.

4) Implement other actions as needed. For example, interstate commerce for swine to slaughter resumes within Free Areas at hour 73, but interstate commerce for finishing pigs within Free Areas resumes at hour 96 or other criteria.
Standards for 72-Hour National Movement Standstill

1) Geographical and jurisdictional area is nationwide.

2) All shipments of FMD-susceptible animals/germplasm in transit at issuance of standstill must reach a destination or return to point-of-origin and not be held in transit.

3) Standard national start time and end time for the movement standstill (i.e., 9:00am EST).

4) Live cattle, sheep, goats, elk, pig, deer, and bison and their germplasm are subject to the Movement Standstill.

5) A national movement standstill notice does not include milk.

6) Products exempt from Movement Standstill include USDA Food Safety and Inspection Service (FSIS)-inspected susceptible animal products or other negligible risk products.

7) A national movement standstill notice is not a substitute for existing or elevated biosecurity measures on a premises.

USDA APHIS FMD Preparedness and Response Information

The USDA APHIS FAD PReP website will be updated with any new FMD response and policy guidance during an active outbreak: http://www.aphis.usda.gov/fadprep.

FAD PReP documents and materials directly related to FMD Include:
- Foot-and-Mouth Disease Response Plan: The Red Book
- FMD Response: The Red Book Presentation (Long/Short)
- Overview of the FMD Response Plan: The Red Book
- FMD Vaccination Priorities

FMD Response State Checklist

Is there a presumptive case of FMD in domestic or feral susceptible species?
☐ Reference the Case Definition if needed. Reference FMD Response Plan: The Red Book, Section 4.2.

☐ Communicate immediately with the VS Field Operations (FiOps) Area Veterinarian In-Charge (AVIC) and appropriate FiOps leadership. Reference VS Guidance 12001.x if needed.

☐ If duplicate samples were collected during the initial investigation, ensure you have the tracking information of the sample sent to NVSL; if a sample will be forwarded from a NAHLN laboratory, check on its status and obtain tracking information.

☐ Anyone submitting diagnostic samples must ensure samples have accurate national premises ID numbers on samples and on sample submission forms.
☐ If samples still need to be collected and/or shipped, discuss speed/transport options with your VS AVIC immediately.

- For a presumptive positive case of FMD, APHIS and State will begin elevated coordination and planning of response activities when presumptive positive case definition is met.
- NVSL confirmation is needed for official OIE notifications: VS Strategy & Policy (S&P) will determine when bilateral and multilateral trade notifications are made.
- Upon confirmed positive case, official response activities will begin.

☐ Immediately confer about depopulation with the company/producer involved and the appropriate State and APHIS officials (including appropriate method, required equipment and personnel, and other logistics). For an initial case of FMD in a State, NVSL confirmation is required prior to depopulation if requesting funds from APHIS; the State Animal Health Official and APHIS must both agree to depopulation if requesting funds from APHIS.

☐ Discuss disposal options of carcasses and other materials (including appropriate method, required equipment and personnel, applicable regulations, etc.). The APHIS Carcass Management Dashboard is available to help you get started if needed. Please note, written verification that disposal operations are approved by the state environmental regulatory agency will be required if APHIS pays indemnity.

☐ Get premises loaded into EMRS2 and State systems, if your State does not have pre-loaded premises data. (Loading prior to an incident is strongly preferred, more information is here).

☐ NAHLN laboratories need to begin electronic messaging of results immediately, if not already doing so. If results are unable to be messaged, make sure a communication process is in place to relay results to all necessary parties, including EMRS2.

☐ Immediately initiate premises temporary hold order, quarantine, and/or some form of stop movement by State authority or Tribal authority upon strong suspicion of FMD on a premises. Confirmation of FMD by NVSL is not needed for States, or Tribes, to implement quarantines and/or movement controls on individual premises during an investigation.

THEN, REVIEW POLICY GUIDANCE DOCUMENTS FOR RESPONSE...

FMD will be a new type of response for USDA and the States. Policy guidance documents will be produced and posted on APHIS website. Please communicate as much as needed with APHIS (FiOps and S&P) to ensure you are aware of existing guidance and have the appropriate information needed to respond.

☐ Communication & Coordination

- State public affairs, APHIS Legislative and Public Affairs, APHIS Trade Staff, & industry should coordinate timing and content for ANY public announcements and bilateral trade notifications.
- Activate communication plans and provide notifications to stakeholders.
- Calls between relevant parties, including but not limited to appropriate APHIS officials, company officials, and affected States, should begin immediately. More communication is always better in an outbreak.
Zones and Premises

♦ Establish quarantine and hold orders on Infected Premises.
♦ Establish Control Area(s) and movement controls.
♦ Begin an epidemiological investigation and tracing activities.
♦ Implement increased biosecurity measures.
♦ Investigate direct contact premises.
♦ Prepare for movement related to animal business into, within, and out of a Control Area to cease due to initial 72-hour national movement standstill.
♦ Establish movement controls and implement surveillance plans.

Appraisal and Indemnity Procedures

♦ Initiate appraisal, depopulation and disposal plans.
♦ The Appraisal and Indemnity Request Forms are the first documents that must be signed by owners and contractors/growers, USDA, and the State Veterinarian (or appropriate Tribal leader) in order to commence depopulation activities of infected animals or herds.
♦ Ensure all information for the VS 1-23 is collected as soon as possible.

Depopulation

♦ To be most effective in stopping disease transmission, it is necessary to prioritize depopulation (of premises or even within a single premises) based on clinical signs and epidemiological information.
♦ Implement and enforce increased biosecurity measures on infected premises, as well as any contact or network premises.
♦ Obtain State and APHIS approvals for all indemnity request forms and herd plans.

Surveillance & Epidemiology

♦ Use the Foot-and-Mouth Disease Standard Operating Procedures: Surveillance to determine the best way to gather the most critical information about premises.
♦ Immediately initiate surveillance activities to determine any wildlife contact.
♦ Rapidly follow up on any sick calls.
♦ Rapidly collect trace-back and trace-forward information for at least 28 days before the appearance of clinical signs in FMD infected animals.
♦ Tracing information will be obtained from many sources (such as reports from field veterinarians, producers, industry, farm service providers, or the public).

NVS Support

♦ The National Veterinary Stockpile (NVS) has a limited supply of captive bolt and other depopulation equipment, as well as animal handling equipment, supplies, and vaccines.
♦ NVS contractors are not on contract to perform, nor are they capable of performing, large animal depopulation; however, they can provide labor and transport services.
♦ To contact the NVS and/or request resources, please email NVS@usda.gov.

Biosecurity
Rapidly implement increased biosecurity measures on any infected premises; responders also need to observe strict biosecurity procedures to prevent virus spread. The Secure Pork Supply, Secure Beef Supply, and Secure Sheep and Wool Supply, and Secure Milk Supply plans provide further information on enhanced biosecurity plans.

Owners, producers, veterinarians, and responders should observe strict biosecurity measures during an incident or suspected incident.

Key aim is to contain the virus on infected premises (biocontainment) and prevent the introduction of FMD virus from the movement of personnel and fomites to naïve premises (bioexclusion).

Movement Control, Permitting, & Continuity of Business

- Determine appropriate zones, areas, and premises designations in the event of an FMD outbreak, and re-evaluate these designations as needed throughout the outbreak based on the epidemiological situation.
- Each State’s animal health emergency response plans should describe the implementation of quarantine and movement controls. Initial movement standstills may occur at the State, Regional, or National level. Refer to the Quarantine, Movement Control, and Continuity of Business for further information.
- The Secure Pork Supply, Secure Beef Supply, Secure Sheep and Wool Supply, and Secure Milk Supply plans provide permitting guidance and assists in preparing the various animal industries, including producers, haulers, and packers to maintain business continuity during an outbreak.
- For general permitting, see FAD PReP Manual 6-0 Permitted Movement; the EMRS2 Customer Permit Gateway can be used for permit requests— an Overview of the EMRS2 Gateway document is also available last updated in 2017.

Information Management

- Begin data collection and information management in State systems and EMRS2.
- Ensure processes are in place to maintain and report information; EMRS2 is the official system of record for USDA APHIS during an FMD outbreak. More information on EMRS2 is located here.
- For general information management, see FAD PReP Manual 3-0 Incident Information Management and Reporting.

More Information

- The FAD PReP website will be updated with any new FMD response and policy guidance during an active outbreak: http://www.aphis.usda.gov/fadprep.
- Other FAD PReP documents and materials relating to FMD are as follows:
  - Foot-and-Mouth Disease Response Plan: The Red Book
  - FMD Response: The Red Book Presentation (Long/Short)
  - Overview of the FMD Response Plan: The Red Book
  - FMD Vaccination Priorities
  - Overview of Emergency Vaccination RRG
  - USDA APHIS | Foot-and-Mouth Disease (FMD)
FMD VACCINE IMPLEMENTATION

While stamping-out (rapid depopulation) of infected animals will be among our first response actions, APHIS will immediately begin to consider whether vaccination will be among response option. The use of emergency vaccination in the United States will be determined by the Unified IC, the SAHO(s), and the VSDA, who is also the U.S. Chief Veterinary Officer (VSDA/CVO).

☐ The decision to initiate a State vaccine request will be made by the State Veterinarian, in consultation with the IMT Policy Group and the USDA APHIS VS Area Veterinarian in Charge (AVIC) and District Director (DD).

☐ The unified IMT Policy group will notify appropriate state officials, in accordance with state guidelines, of the intention to implement vaccination in the State as part of the FMD response.

☐ To support the request, the State Veterinarian must provide to APHIS-VS the state’s FMD Vaccination Plan and the Emergency FMD Vaccine Authorization and Request. APHIS-VS will coordinate review and approval of the request by the U.S. Chief Veterinary Medical Officer. Guidance documents, such as the Foot-and-Mouth Disease Response Plan: The Red Book can be found at USDA APHIS | Foot-and-Mouth Disease (FMD) along with priority document.

☐ At the direction of the State Veterinarian, the IMT will prepare the resource request and enter it into EMRS2.

☐ The IMT will prepare to initiate logistics needed to receive and manage vaccine through vaccination strike teams and with use of EMRS2. Vaccine may be delivered from 10-15 days from the date that APHIS-VS ordered it from the manufacturer. Depending upon the size and scale of the outbreak, a State may not receive the full quantity it ordered, meaning that additional prioritization may need to occur.

☐ Ensure or obtain resources necessary to maintain and document cold chain, for vaccine in storage and in transit to vaccination premises.

☐ Ensure a coordinated effort to obtain recommendations on the best use of vaccine, with a focus on containment or slowing the spread of disease, and/or on preserving unique genetic stock or breeding stock needed to regenerate the state/national herd.

☐ Coordinate with facilities slated for vaccination, in advance of vaccine delivery, and ensure personnel and infrastructure are available or obtained to support the vaccination effort. Verify the herd plan includes vaccination.

☐ Develop and employ a process for identification of and tracking information regarding vaccinates.

☐ Ensure Accredited Veterinarian, or other official, will oversee the end delivery of vaccine to animals by:

a. Picking up the vaccine from the state distribution point.
b. Maintaining the cold chain and chain-of-custody for the vaccine.
c. Overseeing administering the vaccine to the animals.
d. Ensuring animals are properly identified and data is in an electronic format that can be entered into EMRS.
e. Collecting samples for compliance testing on a specified number of premises after vaccine is administered if requested.
f. Working with the herd owner to complete the FMD Vaccination Herd Management plan.