



REGIONAL BEEF PACKER MEETING SUMMARY

September 2022

ABSTRACT

The Regional Beef Packer Meeting was held in May 2022 with 46 stakeholders from Colorado, Kansas, Nebraska, Missouri, Oklahoma, Texas, and five other states gathering to further the development and implementation of the Secure Beef Supply (SBS) Plan for Continuity of Business during a foot-and-mouth Disease (FMD) outbreak. This facilitated discussion among the beef packing industry, livestock transporters, national and state livestock industry associations, renderers, state and federal animal health agencies, and academia addressed four main topics based on attendee pre-submitted questions. They include 1) Roles of States, USDA APHIS and USDA FSIS in FAD Response Management and Communicating Expectations, 2) Movement Permit Requirements and Process for Live Animals, Products, Conveyances, 3) Packer and Transporter Role in Biosecurity/Preventing Spread/Cleaning and Disinfection, and 4) Processing FMD Vaccinated Animals. In all, 15 action items were captured on topics such as mitigating the risk from secondary products, trucks/drivers, and rendering trucks, biosecurity guidance for packing plants that do not have infected/suspect/contact animals in a Control Area, tracking vaccinated animals, ensuring ready access to criteria expectations and approved permits, and advancing communication mechanisms among stakeholders. The six-state region is committed to continuing the regional approach to implementing the SBS Plan, working together with other stakeholders to address gaps and discuss opportunities. Funding for this meeting was provided to the Kansas Department of Agriculture (KDA) from the USDA Animal and Plant Health Inspection Service through the National Animal Disease Preparedness and Response Program (NADPRP).

Regional Beef Packer Meeting Summary

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INTRODUCTION

The Regional Beef Packer Meeting was held May 3 and 4, 2022 in Kansas City, MO where 46 stakeholders gathered to discuss the packing industry's perspective and impact of a foreign animal disease (FAD) outbreak affecting beef cattle. Attendees were from 11 different states and represented the beef packing industry, livestock transporters, national and state livestock industry associations, renderers, state and federal animal health agencies, and academia. The event was hosted by the Kansas Department of Agriculture with funding from USDA National Animal Disease Preparedness and Response Planning (NADPRP). The six-state region includes Colorado, Kansas, Nebraska, Missouri, Oklahoma, and Texas.

The goal of this meeting was to further the development and implementation of the Secure Beef Supply (SBS) Plan for Continuity of Business during a foot-and-mouth disease (FMD) outbreak. Each State invited participants and requested they submit questions to be addressed during the meeting. In all, 17 questions were submitted and used to create the agenda. Presentations were created using existing resources that answered some of the questions. The meeting was primarily a facilitated discussion allowing stakeholders to learn and share perspectives on FMD response activities and business continuity challenges and opportunities.

Prior to the meeting, attendees were provided with resources about the SBS Plan, FMD virus, and FAD Guidance created by the North American Meat Institute (NAMI) for packers. Attendees submitted additional questions after day one which were addressed May 4. All attendees had access to all presented slides as well as the attendee list. Grant funding was used to pay for the meeting venue and provided to non-federal attendees to cover hotel and travel expenses.

DISCUSSION TOPICS

There were four main topic areas addressed during the meeting. Each was summarized with resources for more information and key points below.

FAD RESPONSE MANAGEMENT AND COMMUNICATING EXPECTATIONS

Roles of USDA APHIS and States

The United States has the status of FMD free without vaccination according to the World Organization for Animal Health (WOAH, formerly OIE). If FMD is diagnosed in the United States, the USDA Animal and Plant Health Inspection Service (APHIS) will be the lead federal agency to manage the response and recovery. The USDA must notify the WOAH within 24 hours of the diagnosis who then informs all other WOAH member countries. The USDA National Center for Import and Export (NCIE) can no longer certify animals and their products are FMD free without vaccination. U.S. trade partners will determine their acceptance or rejection of animals and animal products from susceptible animals. For the purposes of this meeting, it was assumed that export of meat and meat products from cattle, pigs, sheep, goats and

other FMD susceptible animals would cease for weeks to months. This will impact all U.S. packing plants regardless of size, species processed, or proximity to the infected herd/flock. The meeting focused on the logistics necessary to maintain domestic movement of cattle to packing.

Following an FMD diagnosis, USDA may recommend a 72-hour movement standstill of cloven-hooved animals, semen, and embryos. More information available in the USDA FMD Response Plan: https://www.aphis.usda.gov/animal_health/emergency_management/downloads/fmd_responseplan.pdf. However, without a Federal Order from the U.S. Secretary of Agriculture, a movement standstill is up to the States to implement through their quarantine authority. Livestock en route to a destination should continue onto their destination (e.g., feeder cattle to a packing plant). No new movements of livestock, semen, or embryos should occur during the standstill as an effort to limit disease spread. During the 72 hours, regulatory Control Areas will be set up around infected premises. The standstill will be lifted for those outside the Control Areas. Movement in the Control Areas will be by permit only, based on risk. The States have the authority to determine the permit requirements that need to be met to protect livestock in their state from disease exposure. If the state does not have a Control Area after the initial 72-hour standstill, it may not have any movement restrictions or permit requirements.

Infected premises, including packing plants with infected animals, will be managed by USDA APHIS and States under the guidance in the USDA FMD Response Plan and state plans. The USDA APHIS and States will work under a Unified Command creating policies, executing them, and coordinating response activities. States have the authority to quarantine and issue movement permits. APHIS authorizes funding for indemnity, depopulation, disposal, virus elimination procedures, cooperative agreements, and direct contracts for response and recovery activities.

With respect to federally inspected packing plants, APHIS will provide guidance to FSIS on handling animals with suspect lesions found on antemortem or post-mortem inspection. For state inspected packing plants, the states will provide the guidance for handling suspect animals.

It was noted that USDA has 11 mitigation requirements for countries with the status FMD-free with vaccination to meet before the U.S. will accept imports of animals and animal products (see Appendix A). If the U.S. gets FMD, packing plants should be prepared to meet these requirements before export markets would reopen. It took 11 years after bovine spongiform encephalopathy (BSE) was diagnosed to get trade back from all countries.

Role of USDA FSIS

FMD is not a food safety concern, therefore FSIS will rely on guidance from APHIS during the outbreak regarding slaughter and permitting requirements for this animal disease. FSIS cannot conduct diagnostic testing for FMD as that is under APHIS oversight through the National Animal Health Laboratory Network (NAHLN). If permits are required to move to a packing plant, FSIS will enforce the requirement based on information provided from the States to APHIS to FSIS. They will be there for animal off-loading. If animals pass antemortem and post-mortem inspection, FSIS will not restrict them nor their products.

If a suspect animal is found during antemortem inspection, FSIS would contact APHIS to do an FAD investigation. That lot would not be allowed to go into the slaughter plant until the investigation is completed and APHIS makes its determination. This is to prevent animal disease spread.

If FSIS finds a suspect lesion during post-mortem inspection, the carcass is railed off. FSIS would retain all product from that carcass and any other animals from that lot showing lesions. Everything would be retained within the plant until the FAD investigation is completed and APHIS makes its determination. Plants and renderers do not have a lot of storage, possibly only enough for about a day and a half, depending on the facility. FSIS does not anticipate stopping production and would rely on APHIS guidance. APHIS anticipates processing would continue. The goal is to conduct the FAD investigation and have results within 24 hours.

Communicating Expectations

Packers, transporters, and renderers seek to know the location of Control Areas and as much outbreak information as is shareable. States vary in their legal ability to share premises level details for infected premises and Control Area locations. When possible, States' websites will provide information to industry with the level of detail allowed by their state code. The States will have daily or weekly calls with industry to provide outbreak updates and expectations for permits, testing, etc. States will communicate to APHIS their permit criteria expectations. APHIS will communicate this information with FSIS.

USDA APHIS can provide situation reports and infected premises information by county level on their website. In other FAD outbreaks in the U.S., APHIS holds daily calls with all State Animal Health Officials, periodic calls with industry, as well as informational webinars.

FSIS currently holds a monthly call with all processors to give updates. They also have a number to call to get the last month's updates. This may be another way to share information with processors from States and APHIS during an outbreak.

Packing plants should notify renderers if a positive animal is processed. Renderers are regulated by the FDA which may stop them from operating if they render an infected animal. This happened during the highly pathogenic avian influenza outbreak in 2022.

MOVEMENT PERMIT REQUIREMENTS AND PROCESS FOR LIVE ANIMALS, PRODUCTS, CONVEYANCES

Permits serve as a verification of safe movement for the animal/product as well as traceability records. The six-state region has set movement permit criteria for live animals and their products leaving or moving within a Control Area (see Appendix B). This aligns with the guidance in the Secure Beef Supply (SBS) Plan. Continuity of business permits will only be issued to operations with animals that are not known to be infected with FMD. The origin and destination need to have a Premises Identification Number (PIN). This includes all premises receiving/shipping cattle, live or dead (livestock operations, packing plants, rendering plants). The destination needs to be willing to accept the animals/product/carcass. The six-state region has agreed to approve the livestock operation shipping cattle rather than each individual load. If vaccination is used, this may change to tracking individual vaccinates to slaughter.

The following items need a permit to leave a packing plant located inside a Control Area:

- Carcasses (dead on arrival, no evidence of FMD)
- Products destined for animal feed without further treatment to inactivate FMD virus
- Hides, raw or unprocessed
- Head products

- Oocytes

Once live cattle reach a packing plant, they are not to be reshipped to any other destination. It is recommended that packing plants have a carcass disposal plan for any animals that arrive dead. Rendering is an option for animals that are not infected with FMD.

FSIS has oversight of food for human consumption leaving a plant. FDA has oversight for animal feed. Record keeping on the movements for traceability purposes may be needed but permits will not be required for USDA FSIS-inspected susceptible animal products or other negligible risk products.¹ USDA APHIS will provide “a specific list of what items are exempt from movement restrictions” in the event of a movement standstill.²

Renderers picking up carcasses or product destined for animal feed from a Control Area should have a copy of the permit with them. It is up to the origin to request the permit. It is not anticipated that permits will be needed for renderers that pick-up waste meat from grocery stores or restaurants in a Control Area. The same truck may pick up an on-farm dead animal then pick up at a restaurant. If the livestock operation has a line of separation in place as stated in their SBS Enhanced Biosecurity Plan and the rendering truck does not enter the premises, the risk of spread can be minimized.

The State where the movement originates will be the first to review the permit. They will set the duration/span of the permit from the approval date until approval end (how long the permit is valid). All movements on that permit need to be reported to the origin state.

The consignor needs to propose the truck route for the movement. The state will review proposed routes and approve or advise alternate routes based on the origin, destination, and Control Area locations. Interstate movements require approval by the receiving state. Pass through states, those in between the origin and destination, do NOT need to review or approve the permit.

The consignor also needs to describe the transit biosecurity requirements. Guidance is provided in the SBS Enhanced Biosecurity Plan Information Manual. The state will approve or request additional steps based on the risk of the movement and information provided. More information on biosecurity is in the next section.

Cattle operations in a Control Area with no evidence of FMD infection can use the guidance in the Secure Beef Supply (SBS) Plan to protect their herd from exposure and prepare to meet movement permit requirements: <https://securebeef.org/Assets/Secure-Beef-Supply-Plan-for-COB.pdf>

Permit Process

Permits need to be requested/filled out by the person signing the permit who can attest to statements about the cattle or their products, health status, and biosecurity protocols. States use a variety of permit issuing/tracking systems (commercially developed and state-built). The USDA Emergency Response Management System (EMRS) is another option. In ALL cases, FSIS, the packers, transporters, and renderers prefer an electronic permit to ensure the driver has the information they need when they

¹ USDA FMD Response: Chronology and State Checklist, January 29, 2021 at: https://www.aphis.usda.gov/animal_health/emergency_management/downloads/fmd-state-checklist.pdf

² USDA FMD Response Plan, October 2020 at: https://www.aphis.usda.gov/animal_health/emergency_management/downloads/fmd_responseplan.pdf

arrive. FSIS and packers would prefer to receive the permit before the truck/animal's arrival, especially if the plant is not in a Control Area.

Packers expressed concerns with the variety of permitting systems in use given how many states from which they receive animals. Packers have the capability of using a third-party program for traceability to track animals from time of receipt all the way to the pen. The example of certificate of veterinary inspection (CVI) was given as to how information is successfully transferred across different software applications.

PACKER AND TRANSPORTER ROLE IN BIOSECURITY/PREVENTING SPREAD/CLEANING AND DISINFECTION

FMD can be spread on contaminated conveyances, shavings, sorting sticks, clothing, and footwear. For known infected premises, there are a set of criteria that need to be met to contain the virus. For instance, having a cleaning and disinfection station for items that can carry virus, using other heat/drying treatments to eliminate/inactivate the virus in products destined for livestock, and mitigations for the clothing and footwear of people that contact live animals, or their body fluids is critical. The WOAHP Terrestrial Animal Health Code provides guidance on inactivating virus in raw and semi-processed hides and skins, available under Chapter 8.8 Infection with FMD Virus, Articles 8.8.26, 8.8.27, and 8.8.34 at:

https://www.woah.org/fileadmin/Home/eng/Health_standards/tahc/current/chapitre_fmd.pdf

Criteria for plants without infected animals yet in a Control Area will be different as the risk is different. Specific details have not been determined. Given the variety of plant layouts, traffic flow, containment of wastewater and rainwater, plants are encouraged to work with animal health officials to discuss capabilities, limitations, and regulations prior to an outbreak.

It is widely recognized there are far more livestock and rendering trucks in use than there are truck wash bays in the U.S. It was also noted that trucks may haul multiple loads before cattle are examined antemortem at the plant. Trucks do not always return to the same premises. Commingling trucks at a limited number of truck washes was identified as a concern.

The North American Meat Institute (NAMI) created a document in May 2021 titled "FAD Guidance #4: Biosecurity and Cleaning/Disinfection" that provides a framework for the components of a biosecurity plan relative to being in a Control Area. It primarily focuses on swine due to the African Swine Fever exercises that were conducted in 2021. Some principles are applicable to cattle. The document is available at: <http://www.meat institute.org/ht/a/GetDocumentAction/i/160779>

If a cleaning and disinfection station is needed at a packing plant with infected animals, there are resources to establish and operate one on the Iowa Department of Agriculture and Land Stewardship (IDALS) website: <https://iowaagriculture.gov/animal-industry-bureau/biosecurity>. USDA maintains a list of EPA-registered disinfectants for FMD virus at:

https://www.aphis.usda.gov/animal_health/emergency_management/downloads/fmd-virus-disinfectants.pdf. APHIS and the State will work with the plant and FSIS to determine what products are currently used in the plant as food safety is still the number one goal.

PROCESSING FMD VACCINATED ANIMALS

Several resources exist regarding the emergency use of FMD vaccines as a control strategy in an outbreak (listed below). USDA APHIS sets the policy which guides state planning. States will determine

which production sites and types of animals will receive the vaccine and set expectations for traceability. States are in various stages of developing their FMD vaccination plans. States have different approaches for which animals will be eligible for vaccine based on demographics of the livestock in their state. States vary in their ability to issue mandatory vaccination orders. USDA may have the authority to require vaccination to move cattle to slaughter.

- USDA FMD Vaccination Policy in the U.S., October 2020: www.aphis.usda.gov/animal_health/emergency_management/downloads/fmd-vac-policy.pdf
- USDA NAHEMS Guidelines: Vaccination for Contagious Diseases, Appendix A: FMD, May 2015: www.aphis.usda.gov/animal_health/emergency_management/downloads/naheems_guidelines/naheems_guidelines_appa_vacfmdv2.pdf
- State FMD Vaccination Plans: Contact the Office of the State Animal Health Official for more information
- FMD Vaccination: What Livestock Producers Need to Know (8 min video): <https://www.youtube.com/watch?v=MKf-aMgb-y0>

Regaining export markets is dependent on the U.S. ability to contain, control, and eradicate FMD, with or without emergency vaccination. From the *USDA Foot-and-Mouth Disease Vaccination Policy in the U.S. (2020)*, “Historically, a key justification for the exclusive or predominant use of stamping-out has been that access to foreign export markets would be regained more quickly. However, the time to reapply for FMD-free status to the [WOAH] is the same (3 months) for both stamping-out, and stamping-out with vaccination-to-slaughter or kill (Article 8.8.7 [1a, 1b]). For stamping-out with vaccination to live, the [WOAH] Terrestrial Animal Health Code indicates that a country can reapply for freedom after 6 months, as long as surveillance is conducted in accordance with [WOAH] requirements (Article 8.8.7, [1c]).”

Several states expressed their plan to request vaccine if FMD is diagnosed in the U.S. For more information on vaccine availability, see the *USDA Foot-and-Mouth Disease Vaccination Policy in the U.S., 2020* and “USDA Announces Initial Purchase of Vaccine for National Animal Vaccine and Veterinary Countermeasures Bank”, 2020 at: https://www.aphis.usda.gov/aphis/newsroom/stakeholder-info/sa_by_date/sa-2020/sa-07/fmd-vaccine-purchase.

Traceability of vaccinated animals until their death is a requirement of WOA to regain FMD free status. Discussions are underway between States and USDA APHIS to determine feasible and practical identification methods that align with current management practices on livestock operations and through the supply chain. Animals that are moved as a group or lot through production channels may not need individual identification.

For this meeting, it was assumed all vaccinated animals will need a permit to move to slaughter. The number of animals on the permit needs to be verified at the plant. Certain plants can verify head counts for specific groups of cattle (e.g., grass fed verified). More commonly, packers track how many animals cross the scale, but head counts are not always exact. Packers preferred to have individual visual ear tags if they are required to track and account for the receipt of an exact number of animals instead of RFID tags. Packers in some states can retain ear tags for 24 hours if needed by APHIS or State officials.

Vaccinated animals that die on an operation would need a permit to move the carcass. It would be the producer’s responsibility to notify the State, not the renderer.

If a vaccinated animal arrives dead on arrival or fails to pass inspection, the slaughter plant would need to notify APHIS of the animal and their identification number. APHIS would expect the packers to have a process in place to track that information. The goal of any system that is developed would be to limit the interruption of a packer's normal business process.

For emergency situations, FSIS does not see changing the HACCP plans. If there is a prolonged vaccination campaign, discussions may be needed.

Most FMD vaccines are labeled for a 21-day meat withdrawal. Oil-adjuvanted FMD vaccines may cause local injection site inflammation. When used, the FMD vaccine should be given following Beef Quality Assurance (BQA) guidance and given in the neck. Cattle may have an injection site lesion. APHIS expects that lesions for a lot would all be on the same side of the animal's neck based on how they were handled on the premises giving the vaccines. Therefore, cattle with one injection site lesion found upon inspection could be passed with trim of the area and no further testing would be required, up to 60 days post-vaccine.

NEXT STEPS AND ACTION ITEMS

The six-state region is committed to continuing the regional approach to implementing the SBS Plan, working together with other stakeholders to address gaps and discuss opportunities. Next steps are described below and grouped by the audiences represented at the May 2022 meeting.

Multiple Stakeholders

- Continue the regional approach and expand discussions to include more states, packers, transporters to implementing Secure Beef Supply during an FMD outbreak.
- Identify risk mitigations for the movement of secondary product (tallow, hides, etc.) from plants that processed infected cattle and determine permit guidance. May require a literature review and input from the USDA Center for Epidemiology and Animal Health (CEAH) as WOAHA does not provide tallow guidance.
- Explore the feasibility of specific drivers and trucks for hauling into/out of Control Areas with limited access to truck washes.
- Evaluate the risk of uncovered rendering trucks carrying carcasses and waste products from commercial entities from Control Areas.

State and Federal Agencies

- Update the six-state regional permit template to include FMD vaccination status.
- Further define the need for cleaning and disinfection for plants in a Control Area but with no infected, suspect, or contact animals.
- Discuss the options for tracking vaccinated animals and reporting requirements by livestock operations and packing plants.
- Continue working on electronic permitting systems and identify areas of compatibility between entities (USDA APHIS, FSIS, States, packers) needing ready access to the information.
- State animal health agencies need to continue developing priorities for permitted movement given the number of requests that may arise and limited human resources.

- Consider testing the FSIS to processor monthly communication calls with information from APHIS or a State.

Packers

- Review the list of EPA-registered disinfectants effective against FMD virus and compare it with the disinfectants they currently use (active ingredients, specific products). Explore feasibility of chemical compound approval rather than specific products.
- Ensure the State Animal Health Official has up to date contact information for their facilities.
- Work with NAMI to update FAD Guidance #4: Biosecurity and Cleaning/Disinfection to include cattle facility references, capabilities.
- Develop individual plant response plans using the NAMI FAD Guidance #4 considering capabilities and prepare to discuss with State Animal Health Officials.
- Determine options for carcass holding/disposal for animals that arrive dead from a Control Area.

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CONTACT

Sara McReynolds, DVM, MPH, PhD
Assistant Animal Health Commissioner
Kansas Department of Agriculture,
Division of Animal Health
sara.mcreynolds@ks.gov

AUTHOR

Danelle Bickett-Weddle, DVM, MPH, PhD, DACVPM
Owner, Preventalytics, LLC
dbw@preventalytics.com