

Secure Milk Supply (SMS) Plan for Continuity of Business

August 2017



Introduction

The Secure Milk Supply (SMS) Plan provides a workable continuity of business (COB) plan for dairy premises with no evidence of foot and mouth disease (FMD) infection in a regulatory Control Area to move raw milk to processing that is credible to Responsible Regulatory Officials (local, state, tribal, and federal officials, as appropriate). Officials must balance the risks of allowing movement of raw milk against the risk of not allowing movement and thus the necessity for on farm disposal of raw milk. FMD is a highly contagious foreign animal disease that infects cattle and other cloven-hooved livestock, such as swine, sheep, goats, and deer. FMD is not a public health or food safety concern. FMD has been eradicated from the U.S. since 1929 but it is present in many other countries and causes severe production losses in animals.

The SMS Plan is the result of a multi-year collaborative effort by industry, state, federal, and academic representatives. Funding for its development was provided by USDA Animal and Plant Health Inspection Service (APHIS). The SMS Plan provides **guidance only**. In an actual outbreak, decisions will be made by the Responsible Regulatory Officials based on the unique characteristics of each outbreak.

Milk Movement at the Beginning of an FMD Outbreak

In an FMD outbreak, Responsible Regulatory Officials have the authority and responsibility to establish Control Areas around FMD Infected Premises¹ and to manage animal and animal product (such as milk) movement within, into, and out of the Control Area. Decisions on raw milk movement will depend on factors unique to each outbreak and Control Area. Processing of milk from a Control Area always must include pasteurization. There may be additional restrictions if milk is to be moved outside of the Control Area or into another state for processing. The following recommendation provides the flexibility for Responsible Regulatory Officials to manage milk movement during an FMD outbreak according to their collective judgement and the circumstances surrounding the outbreak.

Dairy premises in any FMD Control Area that are **designated as Infected, Suspect², or Contact³ Premises** will not be allowed to move milk until a permit is issued by Responsible Regulatory Officials.

Dairy premises in any FMD Control Area that are **NOT designated as Infected, Suspect, or Contact Premises** will be informed by Responsible Regulatory Officials that they either:

1. Continue moving milk to processing with or without additional requirements (such as a PIN, increased premises biosecurity, truck and driver biosecurity, and/or some form of pre-certification by their state) depending on the characteristics of the outbreak.

OR

2. Stop movement of milk, become a Monitored Premises⁴ (which requires having a valid National Premises Identification Number (PIN), and be inspected to ensure adequate biosecurity and surveillance) and obtain a permit to move milk to processing. In the event a permit is required, guidance is included in this SMS Plan.

¹ Infected Premises: Premises where presumptive positive case or confirmed positive case exists based on laboratory results, compatible clinical signs, FMD case definition, and international standards. *USDA FMD Response Plan, 2014*

² Suspect Premises: Premises under investigation due to the presence of susceptible animals reported to have clinical signs compatible with FMD. This is intended to be a short-term premises designation. *USDA FMD Response Plan, 2014*

³ Contact Premises: Premises with susceptible animals that may have been exposed to FMD, either directly or indirectly, including but not limited to exposure to animals, animal products, fomites, or people from Infected Premises. *USDA FMD Response Plan, 2014*

⁴ Monitored Premises (MP): Premises objectively demonstrates that it is not an Infected Premises, Contact Premises, or Suspect Premises. Only At-Risk Premises are eligible to become MP. MP meet a set of defined criteria in seeking to move susceptible animals or products out of the Control Area by permit. *USDA FMD Response Plan, 2014*

Dairy premises in an FMD Control Area must **immediately** increase biosecurity as recommended in this Secure Milk Supply Plan in order to best protect their animals from becoming infected and to become designated as a Monitored Premises. Premises must be a Monitored Premises in order to request a permit for the movement of any live animals. Components of the SMS Plan for milk movement may also apply to animal movement and this is indicated where applicable. More information about animal movement is provided separately (see *Managed Movement of Cattle* as part of the Secure Beef Supply Plan). Participation in either Plan is voluntary.

Rationale for allowing continued movement of milk from dairies in Control Areas under certain circumstances

FMD virus is not a food safety or public health concern. Each Control Area is at least 120 square miles around an Infected Premises and may be much larger. This could include many dairy premises and overwhelm the ability of Responsible Regulatory Officials to certify dairy premises as having valid PINs, adequate biosecurity, and surveillance to be designated as Monitored Premises, resulting in prolonged dumping of milk.

- Dumping milk presents hazards for FMD virus spread and environmental concerns.
- In a large outbreak, dumping excessive amounts of milk could lead to shortages of milk and milk products for consumers.
- Indemnity for dumped milk is unlikely to be available during an outbreak due to federal policy guiding the use of taxpayer money in disease outbreaks.
- Dumping milk at the start of the outbreak sends the erroneous message that the milk is not safe and wholesome for human consumption. This message will be hard to change if the outbreak expands and the milk is later allowed to move for processing and to market.
- Responsible Regulatory Officials will be focusing on critical response activities with competing priorities, such as:
 - Trace back/trace forward of all movements from Infected Premises (cattle, swine, sheep, goat).
 - Rapid investigation of Suspect and Contact Premises.
 - Quarantine, stop movement, and biocontainment on Infected Premises.
 - Any necessary depopulation, disposal, and virus elimination activities as dictated by the response strategy.
 - Surveillance in and around the Control Area(s).
 - Permitting critical/essential movements such as feed, equipment, etc.

FMD Response Guidance Documents

There are several guidance documents for Responsible Regulatory Officials to use in an FMD Outbreak and the SMS Plan aligns with them.

- **Strategic guidance** for responding to FMD in the United States can be found in the following *Foreign Animal Disease Preparedness and Response Plan (FAD PReP)* documents:
 - *Foot-and-Mouth Disease Response Plan: The Red Book*
www.aphis.usda.gov/animal_health/emergency_management/downloads/fmd_responseplan.pdf
 - *Ready Reference Guides*, which accompany many of the detailed documents and materials below, offer quick summaries of the information for training and educational purposes.
www.aphis.usda.gov/aphis/ourfocus/animalhealth/emergency-management/ct_fadprep_readyreferenceguides
- Strategies for a managed response to an FMD outbreak will change as the outbreak progresses (phase) and will depend upon the magnitude (type), location of the outbreak, vaccine availability, and other characteristics. These pre-defined **phases and types of an FMD outbreak** are described in the guidance document *FAD PReP Classification of Phases and Types of a Foot-and-Mouth Disease Outbreak and Response*. This document helps facilitate the development of adaptable emergency

response and business continuity plans for the U.S. livestock industry in the event of an FMD outbreak in North America.

www.cfsph.iastate.edu/pdf/phases-and-types-of-an-fmd-outbreak

- **Surveillance, epidemiology, and tracing** techniques will be utilized by Responsible Regulatory Officials during the outbreak to detect new cases, understand and adapt to the outbreak situation, and provide information for decision making and disease control procedures. The USDA has developed the *FAD PReP/National Animal Health Emergency Management System (NAHEMS) Guidelines: Surveillance, Epidemiology, and Tracing*. These activities likely will lead to additional regulatory activities such as quarantine and movement controls.
www.aphis.usda.gov/animal_health/emergency_management/downloads/nahems_guidelines/nahems_sur_epi_trac.pdf
- **Animal surveillance** methods to demonstrate a lack of evidence of FMD infection to allow animal and/or product movement to support business continuity without spreading infection are described in *Surveillance Guidance to Support the Secure Milk Supply (SMS) Continuity of Business Plan during an FMD Outbreak* at: http://securemilksupply.org/Assets/SMS_FMDv-Surveillance-Guidance.pdf. This document discusses current limitations of testing individual cattle to provide a high degree of confidence that herds are not infected. These limitations are likely to slow the ability to move cattle in a Control Area at the beginning of an outbreak. It is not possible to prove that an animal is not infected with FMD. It is only possible to establish the lack of evidence of infection.
- **Bulk-tank Milk Surveillance:** Cattle can shed FMD virus in their milk 2-4 days prior to the onset of clinical signs. FMD is not a public health or food safety concern. Identifying infected premises during the subclinical phase could be done by testing bulk-tank milk using real-time reverse transcription polymerase chain reaction (rRT-PCR). Bulk-tank milk samples must be transported to a National Animal Health Laboratory Network lab for testing; commercial milk testing labs have not been proficiency tested or USDA approved to perform this test. This screening test is not designed to be a just-in-time test for permitting daily milk movement (raw or pasteurized) during an outbreak due to the length of time required for sample delivery and testing (minimum of 8 hours). Rather the test can identify FMD virus in the milk sample, indicating one or more lactating cattle that contributed to the bulk-tank milk sample are shedding virus, helping to identify newly infected dairy herds. More information is provided in *Potential uses of a rRT-PCR assay for FMD in bulk-tank milk in the United States*, June 2017 available at (**coming soon**).
- **Quarantine and movement controls** are critical activities to control FMD. These approaches include establishing a Control Area around each infected premises and issuing movement restrictions for cattle and other susceptible animals and their products in a Control Area. The USDA has developed the *FAD PReP/NAHEMS Guidelines: Quarantine and Movement Control* to describe these measures.
www.aphis.usda.gov/animal_health/emergency_management/downloads/nahems_guidelines/nahems_qmc.pdf
- **Continuity of business (COB)** activities for premises with no evidence of infection in a Control Area aim to minimize disruptions in commerce caused by quarantine and movement restrictions and decrease the economic consequences of an FMD outbreak. The USDA has developed *FAD PReP/NAHEMS Continuity of Business (COB) Guidelines*. These guidelines provide the basis for managed movement – which is an important component of business continuity – of animals with no evidence of infection and their products from within a Control Area in a foreign animal disease incident.
www.aphis.usda.gov/animal_health/emergency_management/downloads/nahems_guidelines/cob_nahems.pdf

- **Emergency response management** during an FMD outbreak involves considerable amounts of data, including investigation records, premises identification numbers, individual animal and herd-level laboratory test results, movement permits, and resource allocation information. Producers in a Control Area may be required to have a National Premises Identification Number (PIN) to request movement permits in an outbreak. PINs are available from the office of the State Animal Health Official. States are encouraged to transfer their premises data into the USDA Emergency Management Response System (EMRS) prior to any outbreak. EMRS is the USDA APHIS official system of record for all animal health incidents; therefore, all data needed to request movement permits will need to be entered into EMRS. This greatly facilitates response efforts. For more information, refer to *USDA Premises Data Transfer to EMRS from External/State-Based Systems*, June 16, 2016 at: www.aphis.usda.gov/animal_health/emergency_management/downloads/emrs_premisesdatatransfer.pdf and *Introduction to EMRS 2 Ready Reference Guide*, May 2016 at: www.aphis.usda.gov/animal_health/emergency_management/downloads/emrs_rrg_intro.pdf

Managed Movement of Animals and Milk in an FMD Response

An effective strategy for managing an FMD outbreak involves stopping movement of susceptible animals and their products (milk, semen, embryos) for a period of time. Movement restrictions may be put in place for the Control Area(s) to limit risk of disease spread by animals, animal products, vehicles, and other equipment. Movement permits, if required, will be issued based on the risk posed by movement of that item and the dairy operation's ability to meet permit requirements. Dairy operations that follow the guidance in this SMS Plan will be better prepared to request a **milk** movement permit in the event permits are required by Responsible Regulatory Officials. At the beginning of an FMD outbreak, several days or weeks may be needed before the livestock industry, federal and state officials have sufficient knowledge of the extent of the outbreak to have confidence that **animals** with no evidence of infection can be moved safely without contributing to disease spread. Based on risk, permitting animal movement likely will be delayed. A summary of movement permit guidance for milk (if required) and animals is provided in Tables 1 and 2, respectively.

It is the Responsible Regulatory Officials' responsibility during an outbreak to detect, control, and contain FMD as quickly as possible with the ultimate goal of eradication. Responsible Regulatory Officials managing the incident will be making permitting decisions regarding the movements of animals and animal products (milk, semen, embryos) within, out of, and through Control Areas based on the unique characteristics of the outbreak, the status of the premises, and the potential risks and mitigations involved with the types of movement. Officials must balance the risks of allowing movement of raw milk against the risk of not allowing movement and thus the necessity for on-farm disposal of raw milk. They may or may not require milk movement permits.

It is the producer's responsibility during an FMD outbreak to keep his/her animals from becoming infected, focusing on what producers can control on their operation. To facilitate business continuity (movement), producers will need to provide assurances to the Responsible Regulatory Officials that they are not contributing to the spread of disease nor putting their own animals at risk of exposure. Some movements (live animals) carry more risk than others (raw milk to processing). Biosecurity will be paramount to limiting disease spread. Developing an enhanced biosecurity plan prior to an outbreak and sharing that with State Animal Health Officials builds trust and confidence when requesting movement permits during an outbreak. Further, an enhanced biosecurity plan increases individual preparedness to maintain COB in the face of an FMD outbreak.

- If a milk movement permit is required, producers should be ready to provide evidence that they have implemented the *SMS Biosecurity Performance Standards for Raw Milk Collection and Transport* available at www.securemilksupply.org. Additional permit guidance is included in Table 1.
- When requesting an animal movement permit, producers should be ready to provide evidence that they have implemented all of the enhanced biosecurity measures recommended in the *SMS Self-*

Assessment Checklist for Enhanced Biosecurity for FMD Prevention available at www.securemilksupply.org.

- Additionally, producers should be prepared to manage their dairy premises if they are not allowed to move animals (calves, heifers, bulls, steers, dry cows, etc.) for several days or weeks. Such contingency plans will be important to implement during the timeframe when Responsible Regulatory Officials are conducting appropriate surveillance to demonstrate a lack of evidence of disease and more confidence that an animal movement does not present a significant risk for disease spread. Additional permit guidance is included in Table 2.

Milk processors are essential to the success of business continuity for the dairy industry during an FMD outbreak. Since cows may shed FMD virus in the milk before they show clinical signs, it must be assumed that, in some cases, milk from infected and undetected herds will enter the human food chain. FMD is not a public health or food safety concern. Milk processing per the Food and Drug Administration (FDA) [Grade “A” Pasteurized Milk Ordinance \(PMO\)](#), assures milk and milk products are safe and wholesome for human consumption. These same principles apply to milk that meets all quality PMO standards from an FMD affected herd.

- It is not necessary to recall from commerce pasteurized milk or milk products for human consumption. This and additional recommendations for products for animal consumption are included in *SMS Plan Recommendations for Processors during an FMD Outbreak*, available at www.securemilksupply.org.
- A review of inactivation of FMD virus in milk products was completed in 2012 and is available at: <http://www.cfsph.iastate.edu/pdf/inactivation-of-foot-and-mouth-disease-virus-in-milk-products>

Processing plant employees, milk haulers, truck drivers, and others who contact raw milk or raw milk products must observe proper biosecurity protocols to avoid transmitting the FMD virus to susceptible animals when these individuals leave the plant. All personnel must be instructed on biosecurity steps to follow prior to and after leaving the plant.

- Biosecurity guidance for plant employees, milk haulers, and truck drivers is provided in the *SMS Biosecurity Performance Standards for Raw Milk Collection and Transport* available at www.securemilksupply.org

Participation in the SMS Plan includes guidance for producers (when requesting) and officials (when evaluating requests) for animal and/or animal product movement permits. There may be additional requirements depending on the scope of the outbreak. If permits are required, following the guidance in this SMS Plan could enable milk movement sooner.

Participation in the Secure Milk Supply Plan

During an outbreak, dairy premises in a Control Area that need to move milk may need to comply with the SMS Plan guidelines to request and receive a milk movement permit, if required by Responsible Regulatory Officials. These officials may also implement additional requirements depending on the scope of the outbreak. All interstate movements must meet normal movement/state entry requirements in addition to these outbreak-specific conditions. Implementing the guidance outlined in the SMS Plan before an outbreak decreases the risk of disease spread and facilitates issuing milk movement permits for premises with no evidence of infection and allied industries.

To Prepare Prior to the Outbreak:

Request a National Premises Identification Number (PremID or PIN) from the office of your State Animal Health Official: Having a PIN facilitates requesting movement permits during an outbreak. A PIN includes a valid 911 address and a set of matching coordinates (longitude and latitude) reflecting the actual location of the animals on the premises. A PIN is required for both the premises of origin and the premises of destination. Producers and processors are encouraged to validate their PIN with State Animal Health Officials to ensure their data on file accurately represents the location of the animals and not a mailbox at a

residence or business affiliated with the animal premises. Validated PINs speed up communication and response during an outbreak.

Develop an enhanced biosecurity plan: Mitigations are needed to prevent FMD virus spread through the movement of raw milk. Additional mitigations are needed for animal movement. See Table 3, SMS Resources for Milk and Animal Movement, for links to this information.

- If a milk movement permit is required, the dairy operation should work with its veterinarian to develop a written, operation-specific enhanced biosecurity plan that meets or exceeds the *Biosecurity Performance Standards (BPS) for Raw Milk Collection and Transport*. This document describes the mitigations needed for the dairy operation, milk hauler/truck driver, and the milk truck/tanker to limit FMD virus spread.
- To request an animal movement permit, the dairy operation should work with its veterinarian to develop a written, operation-specific enhanced biosecurity plan that meets or exceeds the items in the *Self-Assessment Checklist for Enhanced Biosecurity for FMD Prevention: Dairy* (Biosecurity Checklist). This document addresses the BPS along with other prevention practices designed to prevent disease exposure from multiple routes (personnel, vehicles, semen, manure, carcasses, etc.).
- Producers are encouraged to share their enhanced biosecurity plan with State Animal Health Officials prior to an outbreak.

Designate dairy premises personnel who will conduct FMD surveillance and sample collection: Animal caretakers should be able to recognize abnormal findings (clinical signs and/or changes in production parameters) that may be an early indicator of FMD virus infection, and be able to document that there is no evidence of an FMD virus infection in their herd through Active Observational Surveillance (AOS). Educational materials include presentations, handouts, and posters that visually depict clinical signs of FMD in cattle. Materials (once finalized) are available in English and Spanish on the SMS website: www.securemilksupply.org/training-materials.php. Record keeping templates are also available for dairies that do not already use a system to document health observations, milk production, and feed consumption data. Dairy producers should ask their herd veterinarian if they are accredited by USDA. If not, they should establish a relationship with a USDA Accredited Veterinarian as they may be a necessary component of surveillance during an outbreak.

Maintain movement records: Premises in a Control Area will be required to provide epidemiological information at the beginning of an outbreak to identify potential previous exposure to the disease. Maintaining accurate records of movement of animals, milk, feed, supplies, equipment, personnel, and visitors enables producers to provide accurate trace-back epidemiological information. In addition, producers should maintain records of the names, addresses, and telephone numbers of milk haulers, animal transporters (truckers), employed personnel, feed suppliers, etc., Sample movement logs can be found in the *Information Manual for Enhanced Biosecurity for FMD Prevention: Dairy*. This information will be used to determine the scope of the outbreak, but it can be daunting to provide a lot of detail on short notice. Producers can use the *Secure Milk Supply Practice Questionnaire (coming soon)* to get a feel for the information that will be needed in an outbreak.

Once FMD is Diagnosed in the U.S.

Implement the Operation-Specific Enhanced Biosecurity Plan: If FMD is diagnosed anywhere in the U.S., dairy farm owners/managers should review, update as necessary, and implement the operation-specific enhanced biosecurity plan to minimize the risk of exposing their animals. If the dairy operation is located in an FMD Control Area, Responsible Regulatory Officials may require that all of the items on the Biosecurity Checklist, and possibly others, be implemented before animal movement is allowed, and perhaps before raw milk movement to processing is allowed.

- If a milk movement permit is required, the dairy operation should, at a minimum, implement the portions of its enhanced biosecurity plan that meet or exceed the *Biosecurity Performance Standards (BPS) for Raw Milk Collection and Transport*.

Conduct Surveillance: The document, *Surveillance Guidance to Support the Secure Milk Supply (SMS) Continuity of Business Plan during an FMD Outbreak*, summarizes surveillance options for cattle premises within a Control Area to demonstrate a lack of evidence of FMD virus infection to support continuity of business movements. At this time, the ability to provide a very high degree of confidence that animals are negative for FMD virus using currently available, validated laboratory testing methods, and sample collection protocols for large groups or certain types of animals is limited. Diagnostic tests to be performed and sampling protocols may evolve throughout the outbreak based on new knowledge and technology. Protocols will be determined by Responsible Regulatory Officials and may include:

- Virological surveillance (e.g., oral swabs, bulk-tank milk)
- Conducting Active Observational Surveillance (AOS) daily by trained Cattle Health Monitors employed by the premises
- Periodic inspection of cattle and daily AOS records by Accredited Veterinarians under the authority of Responsible Regulatory Officials
- Follow-up laboratory testing for animals with any suspicious clinical signs.

Provide epidemiological information: Premises within an FMD Control Area may be required to provide epidemiological information at the beginning of an outbreak to identify potential exposure to the virus. Responses help Responsible Regulatory Officials determine the status of the premises – Contact, At-Risk, or Monitored. These designations guide additional surveillance and permitting decisions.

Requesting a Secure Food Supply Movement Permit During an Outbreak

Before requesting a Secure Food Supply movement permit for dairy cattle or milk (if required), both the premises of origin and the premises of destination need to have a National PIN, and the premises of destination needs to be willing to accept the risk of receiving the animals or milk. Each premises requesting a movement permit must be registered through the office of their State Animal Health Official and/or established as a premises in the USDA’s Emergency Management Response System (EMRS) before requesting a permit. For premises participating in the SMS Plan, permits should be requested through the EMRS Customer Permit Gateway or similar State-approved permitting request system that is capable of exporting data required for USDA APHIS EMRS during an outbreak, or vice versa. If a State elects to use their own information management system to handle permitting, the information must, in near real-time, be linked into EMRS, especially for interstate movements where approval of both origin and destination state must be granted and Unified Incident Command be informed. EMRS is the USDA APHIS official system of record for all animal health incidents.

Further information on Secure Food Supply permits and permitted movements is available in the document *FAD PReP Manual 6-0: Permitted Movement*, available at https://www.aphis.usda.gov/animal_health/emergency_management/downloads/documents_manuals/fadprep_man6-0_permit-mvmt.pdf. It contains detailed information on the different types of permits and movements as well as thorough explanations of the permitting process.

Provide the following information (it will be recorded in EMRS):

- Permit class—where you want to move animals or animal products in relation to the Control Area (such as out of Control Area).
- Permit reason—why you want to move animals or animal products (such as milk to processing).
- Origin premises—premises location (physical latitude/longitude) including validated National PIN must be entered in a State information system. For permits issued by EMRS or the EMRS Gateway, the National PIN must be entered into EMRS. (State information systems and EMRS will share data before or during incidents.)
- Destination premises—premises location (physical latitude/longitude) including validated National PIN must be entered in a State information system. For permits issued by EMRS or the EMRS

Gateway, the national PIN must be entered into EMRS. (State information systems and EMRS will share data before or during incidents.)

- Item(s) permitted—category of what you are moving (animals, milk, feed, manure, etc.).
- Item class—specifically what you want to move (such as pre-weaned calves to heifer grower).
- Duration/span of permit— first movement date, how long the permit is valid, and over what time period movements are expected to occur.

For any permitted movement, the Origin State can request documentation from the premises making the request, and attach that documentation to the permit request in EMRS or make the information available through a workable data management system. This documentation may include:

- Epidemiological information.
- Enhanced biosecurity plan
 - For milk movement, a written plan that describes the operation-specific biosecurity performance standards (BPS) for raw milk collection and transport. This could be included in the operation-specific enhanced biosecurity plan or kept separate.
 - For animal movement, a completed copy of the Biosecurity Checklist and the operation-specific enhanced biosecurity plan.
- Written assurance by the producer of compliance with the BPS (milk) and Biosecurity Checklist (animals, animal products other than milk).
- Information demonstrating normal health status for the animals on the production site involved (such as cattle health monitoring documents and/or Certificate of Veterinary Inspection signed by an Accredited Veterinarian at the time the animals are loaded).
- Diagnostic testing results from samples tested. When submitting samples for testing, it is imperative that the PIN for the location sampled is always included with the diagnostic submission (the recommended type and number of samples to collect and frequency of collection are being developed).
- For animal movements to another production premises, the destination premises must indicate that they understand and accept the risks associated with receiving the animals.

Completed movement permit requests will be reviewed first by the Origin State. The permit can be recommended for approval to the Destination State, not recommended for approval to the Destination State, or rejected. If approved by the Origin State, then the Destination State reviews and approves or rejects the permit. The destination premises may also have the ability to reject a permit. If the permit request is not approved, an explanation for denial will be provided in the EMRS Gateway. If approved, the producer will receive the approved permit (likely as an electronic PDF) from the appropriate official working to inform Unified Incident Command; it is also available for download directly from the EMRS Gateway. The permitted movement must comply with all requirements on the permit; all subsequent permitted movements associated with that permit must be submitted to and recorded in EMRS through the permit Gateway or other State-approved data information system for permits.

Table 1. Summary of Movement Permit Guidance, if required, for Raw Milk located within a Control Area during an FMD Response

Permitting Guidance for Movement of Milk	Condition Met?
1. Traceability information is available (PIN, GPS Coordinates, and identification information on truck/tanker moved)	Yes
2. Biosecurity performance standards for raw milk collection and transport are in place and acceptable to Responsible Regulatory Officials	Yes
3. Dairy operation is not designated as Infected, Suspect, or Contact Premises	Yes
4. Destination premises and State are willing to accept the milk	Yes
5. No evidence of infection based on surveillance	Yes
6. Permit guidance to move milk if all above responses are “Yes”	Consider Issuing MOVEMENT PERMIT

Table 2. Summary of Movement Permit Guidance for Cattle, Semen and Embryos located within a Control Area during an FMD Response

Permitting Guidance for Movement of Cattle/Semen/Embryos	Condition Met?
1. Traceability information is available (PIN, GPS Coordinates, and information on type and number of animals/quantity of semen/embryos to be moved)	Yes
2. Biosecurity measures listed in the Biosecurity Checklist are in place and acceptable to Responsible Regulatory Officials	Yes
3. Epidemiology information is acceptable	Yes
4. Destination premises and State are willing to accept the cattle/semen/embryos	Yes
5. No evidence of infection based on surveillance	Yes
6. Permit guidance to move cattle/semen/embryos if all above responses are “Yes”	Consider Issuing MOVEMENT PERMIT

Table 3. Summary of Resources for Milk and Animal Movement

Milk	Animal	Resource
X		Milk Movement from Control Areas in an FMD Outbreak: Responsible Regulatory Officials have the authority and responsibility to manage milk movement within, into, and out of the Control Area. They may require that dairy premises meet certain requirements as described in <i>Milk Movement from Control Areas in an FMD Outbreak</i> , October 2016 available at: http://securemilksupply.org/Assets/SMS-Milk-Movement-FMD-Control-Areas_FINAL.pdf
X		Biosecurity Performance Standards (BPS) for Raw Milk Collection and Transport: Recommended BPS for dairy premises, milk haulers, and dairy processing plants to implement to reduce the chance of spreading FMD via milk trucks/tankers and

Milk	Animal	Resource
		haulers/drivers. http://securemilksupply.org/Assets/SMS-BPS-Raw-Milk-Collection-Transport-Factors_FINAL-DRAFT.pdf
X		Risk Assessments for Raw Milk Movement: Two proactive risk assessments were conducted that evaluated the movement of raw milk from an FMD infected, but undetected, dairy premises during an outbreak. The first report identified areas of risk that could result in further spread of FMD virus under current industry standards (no additional mitigations or restrictions in place). The second report evaluated the effectiveness of the BPS for Dairy Premises, Milk Haulers, and Dairy Processing Plants to mitigate the risk. A summary of results is available at: http://securemilksupply.org/Assets/SMS-Proactive-Risk-Assessments-Results-Summary.pdf
X	X	Animal Surveillance: Designated dairy operation personnel should be trained in Active Observational Surveillance (AOS) for routinely monitoring cattle for potential signs of early FMD virus infection during an outbreak. This is another assurance to other producers, processors, and Responsible Regulatory Officials that they are not contributing to the spread of disease nor putting their own animals at risk of exposure. AOS training materials and a record keeping system to track observations, milk production, and feed consumption data are available in English and Spanish at: www.securemilksupply.org
X	X	Enhanced Biosecurity: Existing biosecurity plans for dairies may offer protection against endemic diseases but heightened precautions are needed for FMD. Enhanced biosecurity recommendations in the <i>Self-Assessment Checklist for Enhanced Dairy Biosecurity</i> are based on the known exposure routes for FMD. Writing an operation-specific enhanced biosecurity plan and training individuals before an FMD outbreak occurs provides the best chance to prevent animals on the operation from being exposed once fully implemented. <ul style="list-style-type: none"> • Self-Assessment Checklist for Enhanced Biosecurity for FMD Prevention • Information Manual for Enhanced Biosecurity for FMD Prevention • Enhanced Biosecurity Plan Templates: <ul style="list-style-type: none"> ○ Fillable Word document ○ Write in • Enhanced Biosecurity Information Manual Logs
X		Permit Guidance: In the event permits are needed to move milk, documents are available for those needing to navigate the permit requesting or issuing process. <ul style="list-style-type: none"> Regulatory Officials Dairy Producers Milk Haulers Milk Processors

Acknowledgments

This Secure Milk Supply (SMS) Plan for Continuity of Business was developed by the Center for Food Security and Public Health (CFSPH), Iowa State University (ISU), College of Veterinary Medicine and reviewed by representatives from the dairy industry, state and federal agencies, and academia. Funding was provided by the USDA APHIS Veterinary Services Surveillance, Preparedness and Response Services, National Preparedness and Incident Coordination Center.

Comments

Please send comments or suggested edits for improvement to: smsinfo@iastate.edu

Additional Resources

The Secure Milk Supply website has additional resources available at: www.securemilksupply.org