United States Secure Goat Supply Plan

Introduction

Many contagious animal diseases affect goats and other livestock. Some, like Coxiellosis (Q Fever) are zoonotic and thus can be a public health or food safety concern, but tend to be species-specific. Others, including Foot and Mouth disease (FMD) are highly contagious and have the potential to devastate the entire livestock industry. Although FMD was wiped out here in the US, this foreign disease continues to pose a serious threat to US producers. State, and federal officials have worked collaboratively with disease experts to develop response plans should FMD virus infect susceptible animals in the United States. However, there is no plan that will work effectively within the goat industry due to its fragmented nature.

The Secure Goat Supply Plan (GSP) provides guidance for the goat industry by outlining effective response strategies for controlling and stopping the spread of highly contagious animal disease. It includes controlling movement of susceptible goats and their products, rapid identification of infected goats, strategic depopulation with proper disposal, and vaccination. This plan outlines how producers and goat owners (hereinafter referred to as producers) are expected to cooperate with regulatory officials in regard to quarantine, management of goats and goat products (semen and embryos, dairy products and fiber products) movement within, into, and out of the quarantined areas.

The GSP contains specific guidelines for three major sectors of the goat industry; meat, dairy and fiber, each of which can be found at the end of this document. It also contains guidelines for the pack goat and brush control segments that have additional concerns to address.

Purpose

The purpose of this document is to provide a succinct overview of the GSP and related resources for industry stakeholders and government officials. It facilitates goat industry preparedness for, and response to, a highly contagious animal disease outbreak.

The GSP provides a workable business continuity outline for goat premises with no evidence of being infected by the listed diseases within a quarantined area and allied industries that is credible to Regulatory Officials. Continuity of business for the goat industry revolves around the ability to move goat products such as milk and fiber to processors and market, as well as goats to slaughter and processing facilities and between production premises.

Officials must balance the risks of allowing movement of goats to slaughter and processing facilities, between production premises, and to and from contracted browse control areas and pack goat areas against the negative repercussions of prohibiting movement.

Producer participation is voluntary. The availability of GSP guidance prior to a disease outbreak will enhance coordination and communication between all stakeholders. It is intended to expedite a successful response and eventually enable the issuance of movement permits after the extent of the...
outbreak is understood. This will support Continuation of Business for goat producers, transporters, packers, processors, and allied industries who choose to participate.

The GSP is funded by a cooperative agreement between the American Goat Federation (AGF) and USDA/APHIS/VS. If an actual outbreak of a highly contagious animal disease requiring the measures outlined in this plan were to occur, decisions will be made by Regulatory Officials based on the unique characteristics of the outbreak.

**Response Guidance Documents**
There are several guidance documents for Regulatory Officials to use in a highly contagious animal disease such as FMD Outbreak. The goals of and guidance documents made available through the GSP are aligned with these guidance documents.

**Strategic guidance** for responding to highly contagious animal disease outbreaks in the United States can be found in the following resources:


c. Ready Reference Guides, that offer quick summaries of the information for training and educational purposes  

**Strategies for a managed response** to a highly contagious animal disease outbreak that would apply to an outbreak of FMD would be expected to change as the disease progresses and would depend on the magnitude, disease, location, availability of vaccine, and other characteristics. Pre-defined phases and types of an FMD outbreak which can be applied to any highly contagious animal disease are described in the guideline document:

a. Classification of Phases and Types of a Foot- and-Mouth Disease Outbreak and Response  

**Surveillance, epidemiology, and tracing** techniques will be utilized by 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. USDA has developed the FAD PReP/National Animal Health Emergency Management System (NAHEMS) Guidelines: Surveillance, Epidemiology, and Tracing.  

**Quarantine and movement controls** are critical activities to control highly contagious animal diseases. These approaches include establishing a Control Area around each infected premises and issuing movement restrictions for goats and other susceptible animals and their products in the Control Area. The USDA PReP/NAHEMS Guidelines: Quarantine and Movement Control describe these measures.  
Continuity of business (COB) activities for premises with no evidence of infection in a Control Area aim to minimize disruptions to commerce caused by quarantine and movement restrictions and decrease the economic consequences of a highly contagious animal disease outbreak.

The USDA FAD PReP/NAHEMS Continuity of Business (COB) Guidelines provide the basis for managed movement of animals with no evidence of infection and their products from within a Control Area in a highly contagious animal disease incident.


Emergency response management during a highly contagious animal disease 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 will be required to have a National Premises Identification Number (PIN) in order to request movement permits during an outbreak. PINs are available from the producer’s State Animal Health Official. This number is different from the Scrapie Flock ID that goat producers are familiar with. 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 the following:

a. USDA Premises Data Transfer to EMRS from External/State-Based Systems

b. Introduction to Emergency Management Response System 2.0 EMRS

Managed Movement of Goats in a Highly Contagious Animal Disease Response
An effective strategy for managing outbreaks involves stopping movement of susceptible goats and their products for a defined time period. Movement restrictions may be put in place for the Control Areas(s) to limit risk of disease spread by animals, animal products, vehicles, and other equipment. Movement will be by permit only. Permits will be issued based on the risk posed by that movement and the premises’ ability to meet permit requirements. Goat operations that follow the guidance in this GSP will be better prepared to request a movement permit. At the beginning of an 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 goats with no evidence of infection can be moved safely without contributing to disease spread. A summary of movement permit guidance is provided below.
Summary of Movement Permit Guidance for Goats, Semen, and Embryos located within a Control Area during a Highly Contagious Animal Disease Response

<table>
<thead>
<tr>
<th>Permitting Guidance for Movement of Goats, Semen, and Embryos</th>
<th>Conditions have been Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Traceability information is available (PIN, GPS Coordinates, and information on type and number of goats moved)</td>
<td>Yes</td>
</tr>
<tr>
<td>2. Biosecurity measures are in place and acceptable to Regulatory Officials</td>
<td>Yes</td>
</tr>
<tr>
<td>3. Epidemiology information is acceptable</td>
<td>Yes</td>
</tr>
<tr>
<td>4. Destination premises and State are willing to accept the goat, semen, or embryos</td>
<td>Yes</td>
</tr>
<tr>
<td>5. No evidence of infection based on surveillance</td>
<td>Yes</td>
</tr>
<tr>
<td>6. Permit guidance to move goats, semen, or embryos if all above responses are “Yes”</td>
<td>Consider Issuing Movement Permit</td>
</tr>
</tbody>
</table>

**Regulatory Officials** are responsible for detecting, controlling, and containing the highly contagious animal disease as quickly as possible during an outbreak, with eradication being the ultimate goal. Regulatory Officials managing the incident will make permitting decisions regarding the movements of goats and goat products within, into, out of, and through Control Areas based on the unique characteristics of the outbreak, the status of the premises, and the risks and mitigations involved with the types of movement.

**Producers** are responsible for protecting their goats from becoming infected during an outbreak, by focusing on what they can control on their operation. To facilitate business continuity (movement), Producers will need to provide assurances to the Regulatory Officials that they are not contributing to the spread of disease nor putting their own goats at risk of exposure. Some movements carry more risk than others. 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 a movement permit during an outbreak. Further, an enhanced biosecurity plan increases individual preparedness to maintain COB in the face of a highly contagious animal disease outbreak. Producers should be ready to provide evidence that they have implemented all of the enhanced biosecurity measures similar to those in the SL&GS Self-Assessment Checklist for Enhanced Biosecurity for FMD Prevention available at the other livestock species sites. Additionally, producers should be prepared to manage their goat operations if they are not allowed to move goats for several days or weeks. Such contingency plans will be important to implement during the timeframe 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.

**Packers and Processors** are essential to the success of business continuity for the goat industry during a highly contagious animal disease outbreak. Participation in the GSP includes guidance for producers and packers (when they are 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. Following the guidance in the GSP could enable movement sooner, once animal movement is resumed.

a. Diseases such as FMD are not a public health or food safety concern. Therefore, goats that pass ante-mortem and post-mortem inspection by USDA Food Safety Inspection Service (FSIS) are safe and wholesome for human consumption, even if they are in the pre-clinical or recovery stage of FMD infection. Many packing plants have on-site rendering capacity for non-edible products, so any virus in those products would be destroyed. Processing all healthy animals in a slaughter facility and in transit to the facility is the fastest way to eliminate virus amplification and further spread of FMD. Processing also preserves high quality protein for human consumption and reduces the need for carcass disposal. Processing healthy animals from a regulatory control area should continue, even if FMD infected animals are suspected or proven to already be in the packing plant. Product that has passed FSIS inspection is safe for human consumption and potentially may be released into commerce for human consumption.

Packing plant employees, truck drivers, and others who contact animals or their bodily fluids 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.

More information about managed movement of animals in an FMD response will be made available and titled Managed Movement of Goats in the U.S. in a Foot and Mouth Disease Outbreak, (to be patterned after the document available at: https://securebeef.org/.

For any highly contagious zoonotic animal disease outbreak all of the above must be applied. In addition, producers would need to cooperate with Regulatory Officials to protect humans in the Control Area.

**Participation in the Secure Goat Supply Plan**

During an outbreak, premises in a Control Area that need to move goats with no evidence of FMD infection may need to comply with the GSP guidelines to request and receive a movement permit, provided their state participates in the GSP. Regulatory Officials also may implement additional requirements depending on the scope of the outbreak. All interstate movements must also meet existing movement/state entry requirements in addition to these outbreak-specific conditions. Implementing the guidance outlined in the GSP before an outbreak will decrease the risk of disease spread as well as facilitate the eventual issuance of movement permits for goat premises with no evidence of infection, and for allied industries.

**To Prepare Prior to an Outbreak**

**Request a National Premises Identification Number (PremID or PIN) from the office of the 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 goats on the premises. A PIN is required for both
the premises of origin and the premises of destination. When a specific premise becomes infected, all premises with the same PIN number will be considered to be infected. Generally, it is best to have separate PIN numbers for premises with goats that are under the same ownership or management but reared off-site and accessed via a public road.

Producers and packers 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. AGF will assist producers who request assistance with the verification process.

**Develop an enhanced biosecurity plan:** Mitigation is needed to prevent FMD virus spread through movement of animals. To request an animal movement permit, the goat operation should work with its veterinarian to develop a written, operation-specific biosecurity plan that meets or exceeds the items in the *Self-Assessment Checklist for Enhanced Biosecurity for FMD Prevention* (Biosecurity Checklist). This document describes the mitigations needed to prevent disease exposure from multiple routes (personnel, vehicles, semen, manure, carcasses, etc.) based on known exposure routes for FMD.

The Biosecurity Checklist, the *Information Manual for Enhanced Biosecurity for FMD Prevention* (assists in writing a biosecurity plan), biosecurity plan templates, and materials for educating individuals that work on the operation (in English and Spanish) will be available on the GSP website: -----------------. Implementing all items in the checklist before an FMD outbreak occurs can help prevent animals on the operation from being exposed. However, implementing effective biosecurity to protect animals raised outdoors from FMD can be expensive and inconvenient. Therefore, once the biosecurity plan is written, owners/managers of the goat operation should decide which items from the checklist they will implement in the absence of FMD in the U.S. and which will be suspended until an outbreak occurs. Producers are encouraged to share this plan with State Animal Health Officials prior to an outbreak.

**Designate personnel on the goat operation 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). Materials include presentations, handouts, and posters that visually depict clinical signs of FMD in goats. Educational materials (once finalized) will be available in English and Spanish on the GSP website: ----------------- Record keeping templates also are available for operations that do not already use a system to document health observations and feed consumption data. Producers should ask their herd veterinarian if they are accredited by the USDA and if not, they should establish a relationship with one, 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, feed, supplies, equipment, personnel, and visitors enables producers to provide accurate trace-back epidemiological information. In addition, owners/managers should maintain records of the names, addresses, and telephone
numbers of animal transporters (truckers), employed personnel, feed suppliers, etc. Sample movement logs can be found in the Information Manual for Enhanced Biosecurity for FMD Prevention. 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 Goat Supply Practice Questionnaire 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., owners/managers of the goat operation should review, update as necessary, and implement their operation-specific biosecurity plan to minimize the risk of exposing their animals. If the goat 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.

Conduct Surveillance: The document, Surveillance Guidance to Support the Secure Goat Goat Supply (GSP) Continuity of Business (COB) Plan during an FMD Outbreak, summarizes surveillance options for goat 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 (such as oral swabs)
- Conducting Active Observational Surveillance (AOS) daily by trained Goat Health Monitors employed by the premises
- Periodic inspection of goats and AOS records by Accredited Veterinarians under the authority of Responsible Regulatory Officials
- Follow-up laboratory testing for goats 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 goats or goat products (semen or embryos, milk and milk products, or fiber), both the premises of origin and the premises of destination, including packing plants, need to have a National PIN, and the premises and State of destination needs to be willing to accept the risk of receiving the animals. Each premises requesting a movement permit must be registered through the office of their State Animal Health Official and/or established as a premise in the USDA’s Emergency Management Response System (EMRS) before requesting a permit. For premises participating in the GSP, permits should be requested through the
EMRS Customer Permit Gateway or similar State-approved permitting 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.


**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 direct to slaughter).
- 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. The destination premises must sign a statement that they understand the risk of accepting animals from the Control Area. 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 want to move (groups of animals, feed, manure, etc.).
- Item class—specifically what is moving (such as lamb or meat goats to slaughter).
- 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.
- A completed copy of the Biosecurity Checklist and the operation-specific enhanced biosecurity plan.
- Written assurance by the producer of compliance with the Biosecurity Checklist.
- Information demonstrating normal health status for the animals on the production premises involved (such as goat 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 National 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 Destination State, not recommended for approval to Destination State, or rejected. If approved, 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.

**GSP Fiber Industry specifics:**
This Secure Goat Supply Plan (GSP)

**GSP Dairy Industry specifics:**
This Secure Goat Supply Plan (GSP)

**GSP Meat Industry specifics:**
This Secure Goat Supply Plan (GSP)

**GSP Pack Goat Industry specifics:**
This Secure Goat Supply Plan (GSP)

**GSP Brush Control Industry specifics:**
This Secure Goat Supply Plan (GSP)

**Acknowledgments**
This Secure Goat Supply Plan (GSP) was developed by modifying the documents found on the USDA/APHIS website, review of the Secure Lamb Supply Supply, Dairy Supply and Beef Supply documents, and input from goat industry stakeholders and professionals, veterinary professionals, universities, other knowledgeable individuals, and other livestock industries.