



Self-Assessment Checklist for Enhanced Biosecurity for FMD Prevention: Goat Operations

Target Audience

This Self-Assessment Checklist and corresponding Information Manual apply to:

- Goat Operations (Operations) of all sizes and management types that raise goats destined for slaughter, including large Pasture/Rangeland Operations as well as Farmstead Operations and small Backyard Operations. This includes, but is not limited to grazing, purebred/seed stock Operations, and commercial goat Operations.
- Operations of all sizes and management types that produce goat products, including meat, milk and fiber products either for direct sales to consumers or shipment to processing facilities.
- Operations that involve the rental of goats for brush and fire control on public and/or private land.
- Operations that involve the use of goats for packing for hunters, hikers and businesses on public and/or private land.
- Operations that involve services on premises to the general public, such as yoga centers, agritourism, etc.
- Operations with or without other susceptible species (e.g., cattle, pigs, sheep) kept on the premises, including pasture and/or rangeland.
- All individuals delivering to, servicing, or working on the Operation (including family members and/or non-family employees working on or visiting the Operation).
- Goats on operations that have never been infected with or vaccinated for foot and mouth disease (FMD).

Goats browsed and/or utilized on public lands have some unique FMD exposure risk challenges. These public land operations need to be aware of the exposure risks and implement strict, enhanced biosecurity procedures wherever possible to protect the herd. In addition to this checklist, please refer to the document: *Considerations for Enhanced Biosecurity for Sheep Grazing on Public Land Allotments* at: https://seuresheepwool.org/Assets/SSWS_Enhanced-Biosecurity-Considerations-Public-Lands.pdf

Introduction

In the event of a foot and mouth disease (FMD) outbreak in the U.S., maintaining business continuity, as well as animal health and well-being are critical to the U.S. goat industry. The goal of the voluntary Secure Goat, Milk & Mohair Supply Plan (SGMMS) is to provide a workable business continuity plan for goat producers and owners who have goats with no evidence of FMD infection and for associated stakeholders. **The plan must be credible to Responsible Regulatory Officials (RROs)** (local, state, tribal, and federal officials, as appropriate) and provides guidelines only. In an actual FMD outbreak, decisions will be made by the RROs based on the unique characteristics of each outbreak.

During an FMD outbreak, it is the producer's responsibility to keep their animals from becoming infected, focusing on what they can control on their Operation. Biosecurity approaches are both structural and operational.

- Structural biosecurity is built into the physical construction and maintenance of a facility.
- Operational biosecurity involves management practices designed to prevent the introduction and spread of disease agents onto or off of the Operation.

FMD will test the effectiveness of operational biosecurity because the FMD virus is highly contagious. Successful implementation of these practices depends on the awareness level and behavior of individuals on the Operation. Implementing effective biosecurity measures to protect the Operation's goats from FMD can be expensive and inconvenient, and protecting goats on pasture, private or public rangeland, and utilized for brush control or packing can add extra need for planning. However, a failure of biosecurity resulting in FMD infection of the herd can be devastating.

FMD is highly contagious and has a major impact on animal health and international trade; however, it does not pose a food safety or public health concern. Existing Operation biosecurity plans may offer protection against endemic diseases (diseases regularly found in goat herds) but heightened precautions are needed for FMD. The enhanced biosecurity recommendations outlined in this document are based on the known exposure routes for FMD.

Operations with susceptible species raised outdoors (on pasture, open range) may have more difficulty preventing FMD exposure depending on their proximity to infected premises and the presence of wildlife in the area. This checklist for enhanced biosecurity and the corresponding document *Information Manual for Enhanced Biosecurity: Goats on Pasture/Rangeland* can be used to develop an operation-specific, written, enhanced Biosecurity Plan prior to an FMD outbreak. It emphasizes three concepts that all goat operations should have in place prior to an FMD outbreak in the U.S.

1. A Biosecurity Manager,
2. A written location-specific enhanced biosecurity plan, and
3. A Line of Separation.

All operations should designate a Biosecurity Manager; Item 1 on this Checklist. The Biosecurity Manager develops the biosecurity plan PRIOR TO an outbreak. The plan should address items 2-11 on this checklist. The biosecurity plan should describe the scope of the operation, contain forms for documentation of training and signatures, explanations of procedures and signage used by the Operation, and protocols written and communicated effectively in languages that are fully understood by the individuals responsible for implementation.

Implementing the biosecurity plan, including training individuals, before an FMD outbreak occurs will provide the best chance to prevent animals on the Operation from being exposed. Once the biosecurity plan is written, Operation owners/managers may use the checklist in one of the following ways:

- **In the absence of FMD in the United States**, Operation owners/managers should decide which items (#2-11) they will implement. The biosecurity plan should describe the strategy for how each item could be implemented (necessary supplies, changes in management practice, etc.). These items may supplement or replace measures included in the Operation's everyday biosecurity plan.
- **If FMD is diagnosed anywhere in the U.S.**, Operation owners/managers should immediately implement ALL of the items in the checklist that apply to their Operation in order to minimize the risk of exposing their animals.
- **If the Operation is located in an FMD Control Area**, RROs may require that all of the applicable items on the checklist, and possibly others, be implemented before animal movement is permitted.

Scope of Biosecurity Plan

Each location (premises) should have its own biosecurity plan. Begin by defining your premises, clearly describing the animals (all species) and animal housing (buildings, pastures, and dry lots) associated with the premises. Other businesses operated from the same premises will need to be accounted for in the biosecurity plan (distribution or sales of feed, mineral, fertilizer, compost, seed, equipment, hosting farm tours, etc.). Additionally, biosecurity plans for off-premises activities such as packing and brush control

need to be written and ready to put into effect in the event of an FMD outbreak. Biosecurity plans for premises owned/managed similarly may have significant overlap.

A Premises Identification Number (PIN) facilitates requesting movement permits during an outbreak. A PIN is linked to the geospatial location reflecting the actual location of the animals on the premises. This includes a valid 911 address and a set of matching coordinates (latitude and longitude). A PIN is required for both the premises of origin and the premises of destination:

<https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/traceability/state-pin/>

When animals on a premises become infected, all locations with the same PIN will be considered infected. Generally, it is best to have separate PINs for premises with animals that are under the same ownership or management but reared/housed off-site and accessed via a public road.

A Line of Separation

Each location (premises) should have already mapped out separation lines from adjacent property and public roadways.

Acknowledgments

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Recommendations for Biosecurity

Each self-assessment checklist item has four possible responses. Implementation of each component is essential to prevent virus entry and protect the health and well-being of the animals on the operation.

These responses are:

- **In place:** All items are addressed in the biosecurity plan and are, or are capable of being, implemented on the Operation as evidenced by visual inspection or by signed and/or dated documentation, as applicable.
- **In progress:** Some, but not all, of the items are addressed in the biosecurity plan and are, or are capable of being, implemented on the Operation as evidenced by visual inspection or by signed and/or dated documentation, as applicable.
- **Not in place:** The items have not been addressed in the biosecurity plan or are not capable of being implemented on the Operation.
- **Does Not apply:** The items do not apply to this particular Operation.

1. Biosecurity Manager and Written Plan

Select an individual to act as Biosecurity Manager for the Operation. For small and/or backyard operations this will most likely be the individual owner. This individual is responsible for developing the written Biosecurity Plan with the assistance of a veterinarian (if they are not a veterinarian and/or a veterinarian is available). The Biosecurity Manager is responsible for ensuring biosecurity training of, or communicating biosecurity measures with, all individuals who enter the Operation. The Biosecurity Manager has the written authority to ensure compliance with biosecurity protocols and take corrective action as needed.

In place In progress Not in place

An Operation-specific, written, enhanced biosecurity plan has been developed by the Biosecurity Manager. The plan is reviewed at least annually and whenever the Operation goes through a change that affects biosecurity (expands, adds a new aspect of the business, etc.). The biosecurity plan clearly defines the scope of the operation and includes biosecurity for other susceptible species kept on the premises. The biosecurity plan includes a map of the Operation indicating the Line of Separation (LOS), LOS Access Point(s), cleaning and disinfection (C&D) station(s), designated parking area, and carcass disposal/pickup location. The map indicates vehicle movements (animal transport vehicles, deliveries, etc.) and carcass removal pathways.

For brush control and/or pack goat operations where goats may be off premises at locations that are either private or public land, the Biosecurity Manager should ensure that the biosecurity plan includes procedures for collecting goats and facilitating their return to the home premises. This will involve having in place policies that clearly outline how and when to coordinate with RROs at the off-premises location.

The Biosecurity Manager ensures that all individuals entering the Operation frequently (weekly or more often) have access to a copy of the biosecurity plan. The Biosecurity Manager is capable of implementing the written plan if FMD is diagnosed in the U.S.

In place In progress Not in place

2. Training

The Biosecurity Manager reviews the biosecurity measures necessary to keep FMD out of the Operation population with essential personnel at least annually, and trains any new personal as they first enter the Operation. The training is documented. The Biosecurity Manager informs all individuals entering the operation of biosecurity measures they are to follow in a language they understand. Effective training ensures that individuals are aware of the concepts and procedures that apply to their specific areas of responsibility. The Biosecurity Plan describes training required before entering this Operation.

In place In progress Not in place

3. Protecting the Operation

Line of Separation (LOS)

The biosecurity plan includes an LOS, which is established as an outer control boundary around, or within, the premises to limit movement of virus into areas where susceptible animals can be exposed. The LOS is clearly defined in the biosecurity plan and is clearly marked on the premises. Animals, vehicles, people, or items only cross the LOS through clearly marked and controlled LOS Access Point(s), following appropriate biosecurity measures. Goats are prevented from nose-to-nose contact with livestock on adjacent premises. Goats do not have access to streams, waterways, or runoff water that may have come from other premises with FMD-susceptible species.

It is important to Maximize the Distance between susceptible livestock on adjacent premises, With rangeland and other public/private land this will require coordination with owners/operators of those premises.

In place In progress Not in place

LOS Access Point(s)

Entry to the Operation is restricted to a limited number of controlled LOS Access Points. The LOS Access Points are protected with a suitable barrier (e.g., gate, cable, rope) to prevent unauthorized vehicles and personnel from entering. Each LOS Access Point is clearly marked with a sign in a language understood by all entering. Vehicles moving through an LOS Access Points are cleaned to remove visible contamination and then disinfected. People and items moving through LOS Access Points follow specific biosecurity steps. The animal load-out/load-in area(s) does not serve as a people entry point. All movements (animals, vehicles, equipment, people) that cross the LOS are recorded and are available for review upon request. Deliveries not essential to operations inside the LOS are made outside the LOS at a designated area indicated on the premises map.

In place In progress Not in place

Cleaning and Disinfection (C&D) Station

There is an operational, clearly marked, and equipped C&D station with the means to remove visible contamination and then disinfect vehicles, equipment, and items needing to cross the LOS. The C&D station is operated by individuals who have received documented training in proper selection and use of personal protective equipment (PPE) and the principles of C&D. Runoff from the C&D station is managed following state and local regulations, ensuring it does not enter waterways, animal housing, or on-farm traffic areas. The biosecurity plan contains contingency plans for vehicle and equipment C&D in inclement weather.

In place In progress Not in place

Designated Parking Area

There is a clearly marked, designated parking area outside of the LOS, away from animal areas, for vehicles that will not enter the LOS and have not been cleaned and disinfected.

- In place In progress Not in place

4. Vehicles and Equipment

Vehicles and Equipment (non-animal transport)

All vehicles (including empty livestock trailers) and equipment are cleaned and effectively disinfected prior to crossing the LOS, otherwise, entry is prohibited.

- In place In progress Not in place

Livestock Trucks/Trailers (animal transport vehicles)

All animal transport vehicles delivering animals to the Operation are cleaned and effectively disinfected before animals are loaded for delivery to the Operation (incoming loads). Vehicles moving through an LOS Access Point should have the tires and undercarriage cleaned to remove visible contamination and then disinfected.

- In place In progress Not in place

5. Personnel

Prior to Arriving at the Operation

Crossing the LOS is limited to individuals who are essential to the management of the operation. Everyone crossing the LOS on foot or exiting a vehicle inside the LOS arrives at the Operation having showered and wearing clean clothing and footwear since last contacting susceptible animals. All individuals crossing the LOS have a signed agreement on file agreeing to follow these instructions.

- In place In progress Not in place

Entry Logbook

Everyone crossing the LOS Access Point(s) completes the entry logbook, unless they are a scheduled worker. The entry logbook is monitored by a worker on the Operation to ensure accurate completion. The contact information and work schedule records for all workers are maintained.

- In place In progress Not in place

Biosecure Entry/Exit Procedures

All individuals who cross an LOS Access Point on foot or exit their vehicle inside the LOS ensure that visible contamination on their footwear, clothing or exposed skin does not enter or exit the Operation, following the biosecure entry and exit procedure as specified in the Biosecurity Plan.

- In place In progress Not in place

6. Animal Movement

Incoming Animals

Animals come only from sources with documented biosecurity practices that either are not in an FMD Control Area *OR* are held in quarantine separately from the destination herd and carefully observed for clinical signs of FMD for 30 days before crossing the LOS.

- In place In progress Not in place

Pre-movement Isolation Period

No animals from an FMD Control Area are introduced onto the premises for at least 14 days prior to moving animals to another production site with susceptible animals.

- In place In progress Not in place

Contingency Plan for Interrupted Animal Movement

A plan exists to manage animals in a biosecure manner on-site in the event animal movement is stopped for several weeks.

- In place In progress Not in place

Animal Load-out and Load-in

The Biosecurity Plan describes whether or not the livestock truck crosses the LOS, the drive path to the animal load-out/load-in area(s), and the capabilities to clean and disinfect between animal load-out and load-in *OR* there are separate and dedicated animal load-out and load-in areas that prevent cross-contamination. The animal load-out/load-in area(s) is NOT a people entry point. These details are labeled on the premises map. Animals are loaded-out using a staged procedure.

- In place In progress Not in place

7. Animal Product Movement

Semen - Embryos

Semen and embryos collected after FMD has been diagnosed in the U.S. come from sources with documented, enhanced biosecurity practices and no current or previous evidence of FMD infection. Semen and embryos are transported in containers whose exteriors can be cleaned and effectively disinfected to minimize the risk of virus contamination.

- In place In progress Not in place
 Does Not apply [explanation included in the Biosecurity Plan]

Feeding Dairy Products

Goats on the operation are fed either colostrum/milk originating from the operation where they are housed or colostrum/milk replacer manufactured according to World Organization for Animal Health (OIE) recommendations for inactivation of FMD virus for animal consumption.

- In place In progress Not in place
 Does Not apply [explanation included in the Biosecurity Plan]

Dairy & Meat Products

Direct Sales to Consumers

Dairy and meat products sold directly to consumers are handled according to the written biosecurity guidelines prior to crossing out of the LOS. Consumers are not allowed to enter beyond the LOS.

- In place In progress Not in place
 Does Not apply [explanation included in the Biosecurity Plan]

Dairy & Meat Products [Shipped]

Dairy and meat products shipped from the premises are handled according to the written biosecurity guidelines prior to crossing out of the LOS. Incoming transport vehicles are cleaned and disinfected according to written biosecurity guidelines.

- In place In progress Not in place
- Does Not apply [explanation included in the Biosecurity Plan]

Disposal of Dairy & Meat Products

Written plans are in place for disposing of meat and/or dairy product on site in a biosecure manner in the event there is no market.

- In place In progress Not in place
- Does Not apply [explanation included in the Biosecurity Plan]

Mohair & Cashmere Shearing and Handling

Shearing Clothing and Footwear

All shearers' clothing and footwear such as moccasins, shearing singlets, and shearing trousers are free of visible contamination and have been cleaned and disinfected according to the written biosecurity guidelines prior to crossing the LOS.

- In place In progress Not in place
- Does Not apply [explanation included in the Biosecurity Plan]

Shearing Equipment

All shearing equipment such as clippers and shearing machines, slings, combs/cutters, and blades are either new or have been disinfected according to the written biosecurity guidelines prior to crossing the LOS. Blade washes/coolants/cleaners/conditioners either are previously unopened products or have only been used on animals within the LOS. Shearing trailers are cleaned and disinfected according to written biosecurity guidelines.

- In place In progress Not in place
- Does Not apply [explanation included in the Biosecurity Plan]

Mohair & Cashmere Handling Equipment

All handling equipment such as cotton or paper twine, burlap or plastic wool bags, nylon bales, brooms, sorting containers and tables, balers, or clips are new (preferable) or have been cleaned and disinfected prior to being brought onto the premises according to the written biosecurity guidelines.

- In place In progress Not in place
- Does Not apply [explanation included in the Biosecurity Plan]

Mohair & Cashmere Handling and Storage

Plans are in place for storing raw fiber product on site for a prolonged period in a biosecure manner.

- In place In progress Not in place
- Does Not apply [explanation included in the Biosecurity Plan]

Mohair & Cashmere Disposal

Written plans are in place for disposing of fiber product on site in a biosecure manner in the event there is no market.

- In place In progress Not in place
 Does Not apply [explanation included in the Biosecurity Plan]

8. Feed

Feedstuffs are delivered, stored, mixed, and fed in a manner that minimizes contamination, and feed spills are cleaned up promptly to avoid attracting wildlife.

- In place In progress Not in place

9. Carcass Disposal

Dead animals are disposed of in a manner that prevents the attraction of wildlife, rodents, and other scavengers to the Operation. Rendering trucks and other vehicles hauling dead animals to a common disposal site do not cross the LOS.

- In place In progress Not in place

10. Manure Management

Manure is stored and removed in a manner that prevents exposure of susceptible animals (either on or off the premises of origin) to disease agents and meets state, local, and Responsible Regulatory Officials' regulations.

- In place In progress Not in place

A plan exists for storing manure on-site in the event it cannot be permitted to move off-site during an outbreak.

- In place In progress Not in place

11. Other Animal Control

Livestock Guardians and Herding Dogs

Livestock guardians, herding dogs and ranch horses are restricted to their own herds and/or pastures, rangeland or off-premises area of activity. If they leave and need to re-enter the premises, biosecurity measures are taken to ensure visible contamination is removed from their fur and feet/hooves and their fur is decontaminated prior to entry.

- In place In progress Not in place

Other Animals

Control measures are in place to minimize interaction between goats and other animals (deer, feral pigs, coyotes, rodents, non-livestock guardian and herding dogs, cats, etc.).

- In place In progress Not in place

Comments

Please send comments or suggested edits for improvement to: office@AmericanGoatFederation.org