



**SMS**  
**SECURE**  
**MILK SUPPLY**

# Secure Milk Supply Plan

## In the Event of a Foot and Mouth Disease Outbreak



### What is the Secure Milk Supply (SMS) Plan?

- Provides a workable business continuity plan for dairies that are under movement restrictions but *not infected* with foot and mouth disease (FMD)
- Offers movement guidance for producers, haulers, processing plants, and officials managing the outbreak
- Provides biosecurity and surveillance tools for producers

Business Continuity

### How will the U.S. respond to a Foot and Mouth Disease (FMD) outbreak?

- Response will focus on stopping the spread of this animal disease
- Control Areas will be set up around FMD infected and surrounding farms
- Movement restrictions will be put in place for animals and animal products (milk!) in Control Areas

Movement Guidance

Biosecurity

Surveillance

### Why is the Secure Milk Supply Plan needed?

- Help dairies in Control Areas whose cattle have no signs of FMD continue to move milk
- Limit milk disposal problems and lost income for dairies, haulers, processors, and grocers
- Maintain the supply of milk and milk products to consumers because FMD is not a public health or food safety concern

### How can you voluntarily participate in the Secure Milk Supply Plan?

- Contact your State Animal Health Official to request a Premises Identification Number (PIN)
- Visit the Secure Milk Supply website [securemilksupply.org](http://securemilksupply.org)
- Develop your dairy's SMS Plan using the materials available in English and Spanish



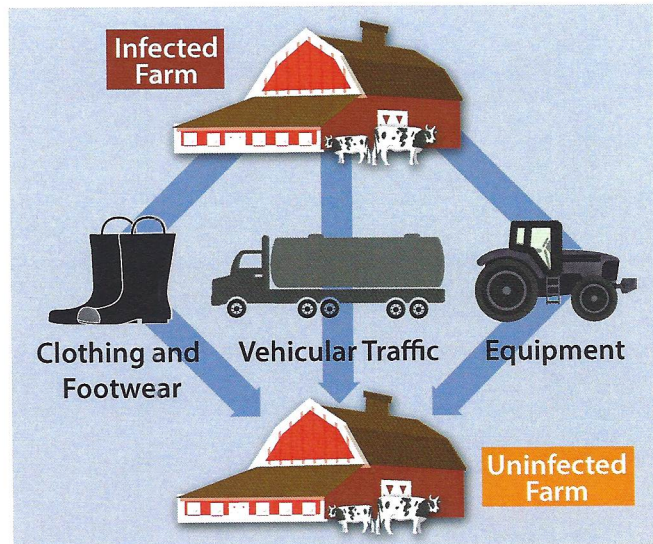
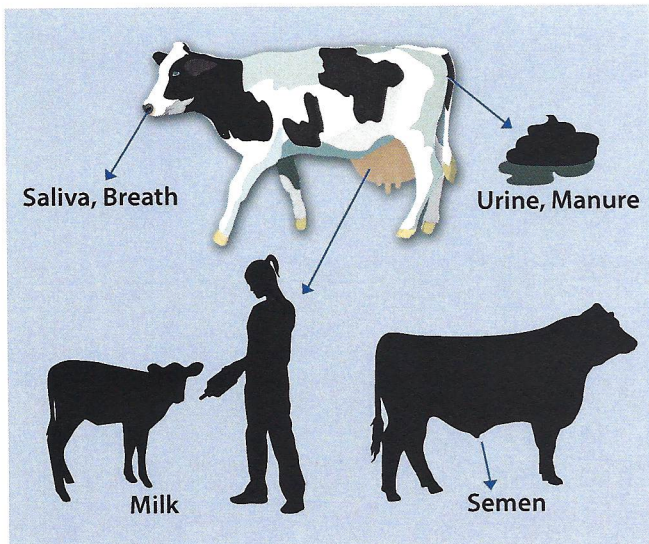
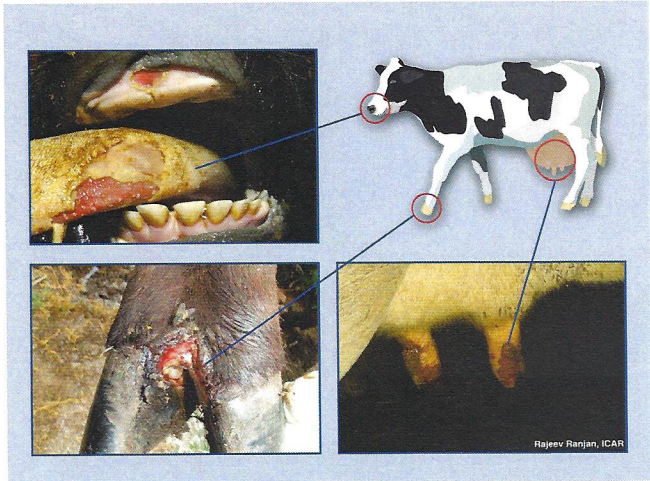
# Foot and Mouth Disease

Also referred to as "Hoof and Mouth Disease"



## What is Foot and Mouth Disease (FMD)?

- Most contagious virus of cloven-hoofed livestock (cows, pigs, goats, sheep)
- Does NOT affect public health or food safety
  - Milk and meat are safe for people to drink and eat
- Causes blisters on feet, in mouth, and on teats
- Other signs may include drooling, lameness, fever, nasal discharge, and going off feed
- Younger calves may die from heart disease
- Animals may be infected 2-4 days before showing signs
- Highly contagious
  - Virus is shed in saliva, breath, milk, semen, urine, and manure
- Can be spread directly between animals OR spread indirectly on clothing, footwear, vehicles, and equipment



## Where is it?

- Foot and Mouth Disease is found in more than 2/3 of the world!!
  - Parts of South America, Asia, Africa, and the Middle East
- NOT in United States, Canada, Mexico, or Central America

## How will Foot and Mouth Disease affect dairy producers if it enters the U.S.?

- Movements on and off farms could be stopped by State and Federal Officials to try and stop disease spread
  - Raw milk movement could stop
  - Animal movement (heifers, calves, cull cows) could stop
- When one animal on the farm becomes infected, the whole herd is likely to become sick

## What can you do to protect your herd?

- Participate in the Secure Milk Supply (SMS) Plan
  - It is voluntary
  - It describes biosecurity standards that dairy producers can put into place to help protect their cattle
  - It gives dairy producers an opportunity to keep shipping milk and keep their business running

# Milk Movement from Control Areas in an FMD Outbreak

October 11, 2016



## Milk Movement at the Beginning of an FMD Outbreak

In an FMD outbreak, Responsible Regulatory Officials (local, state, tribal, and federal officials, as appropriate) have the authority and responsibility to establish Control Areas around FMD infected premises and to manage animal and animal product (e.g., milk) movement within, into, and out of the Control Area. They 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 require that dairy premises meet certain requirements, such as being pre-certified by state officials or designated as a Monitored Premises before being permitted to move raw milk to processing, or they may allow dairy premises to continue movement of raw milk to processing with requirements for increased premises biosecurity and truck and driver biosecurity. Processing of milk from a Control Area must always include pasteurization. Decisions on raw milk movement will depend on factors unique to each outbreak and Control Area. 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 according to their collective judgement and the circumstances surrounding the outbreak.

Dairy premises in any FMD Control Area that are **designated as Infected, Suspect, or Contact 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 either:

1. They may continue moving milk to processing (this may require that the dairy already has a National Premises Identification Number (PIN) and/or some form of pre-certification by their state).
2. They must stop movement of milk, become a Monitored Premises (which requires having a valid PIN, and being inspected to ensure adequate biosecurity and surveillance) and obtain a permit to move milk to processing.

The dairy premises in an FMD Control Area must immediately begin working to increase biosecurity as recommended in the Secure Milk Supply Plan in order to best protect their site 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.

### **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 premises identification numbers, 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.

- The USDA does not have the resources to pay for the dumped milk.
- Dumping of 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 that have a higher priority than designating dairy premises as Monitored Premises for milk movement, 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 other critical/essential movements such as feed, equipment, etc.

### *Acknowledgments*

This Secure Milk Supply (SMS) “Milk Movement from Control Areas in an FMD Outbreak” document is the result of input from State Animal Health Officials, USDA APHIS, and representatives from the dairy industry, and was developed by the Center for Food Security and Public Health (CFSPH), Iowa State University (ISU), College of Veterinary Medicine. Funding was provided by 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](mailto:smsinfo@iastate.edu)

### *Additional Resources*

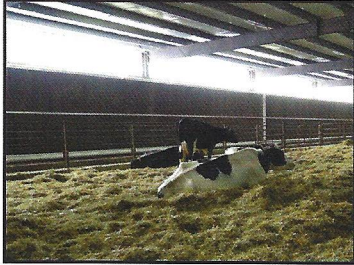
The Secure Milk Supply website has additional resources available at: [www.securemilksupply.org](http://www.securemilksupply.org)

# PROTECTING THE DAIRY HERD

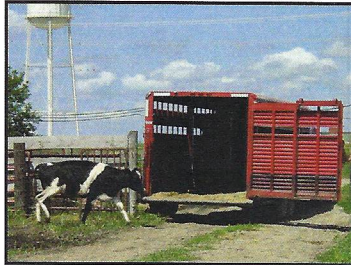
## Farm Activities

Preventing disease introduction and spread depends on awareness and following protocols daily.

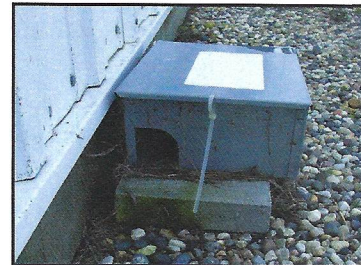
### ANIMAL INTRODUCTIONS



Incoming cattle can introduce disease to the herd of origin unless quarantined and managed separately for a period of time. Observe, test, and vaccinate as recommended by your veterinarian.

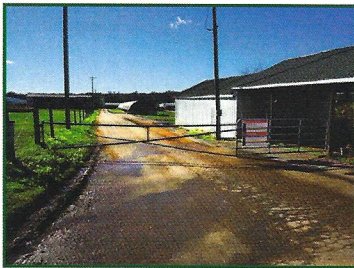


Livestock trailers can carry disease agents. Avoid sharing trailers with other operations unless they are first cleaned and disinfected before returning to farm of origin for use.



Unwanted wildlife, rodents, and insects have the potential to spread a variety of diseases to cattle; utilize integrated pest management programs.

### EQUIPMENT



Identify and clearly mark a "Line of Separation" (LOS) between on-site and off-site movements and activities. Inform those who need to cross the LOS of the required biosecurity protocols.



Dedicate equipment to your operation and task whenever possible. Avoid using the same equipment for handling manure, dead animals, and feed unless it is thoroughly cleaned, disinfected, and allowed to dry after use.

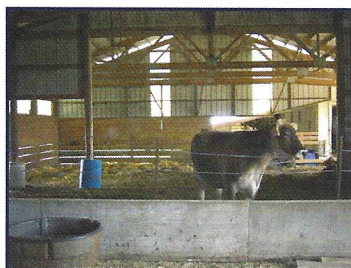


Instruments or equipment contacting blood, tissues, used in the mouth, or treating sick animals should be cleaned and disinfected between animals of different health status.

### CATTLE HEALTH



Recognize and examine sick and lame cattle early and immediately report any vesicles on cattle to animal health authorities. This cow has ruptured vesicles on her rear teats caused by Foot and Mouth Disease (FMD).

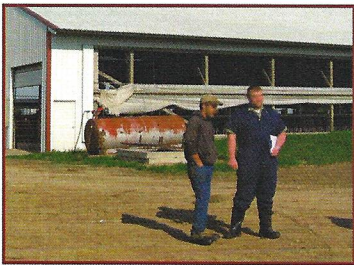


Isolate sick from healthy cattle and manage them separately. Personnel handling sick cattle should be dedicated to that task; with limited personnel, wash hands and all equipment used and change clothing/footwear after working with sick animals.

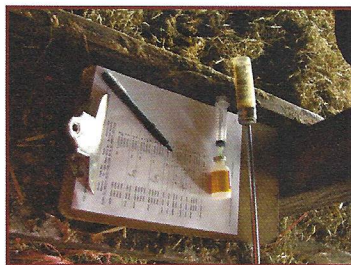


Ensure carcass disposal plans follow local and state regulations to prevent environmental contamination. Prevent the rendering truck from sharing drive paths with on-site vehicles or passing near live cattle to limit disease introduction. Protect carcasses from scavengers that can spread disease.

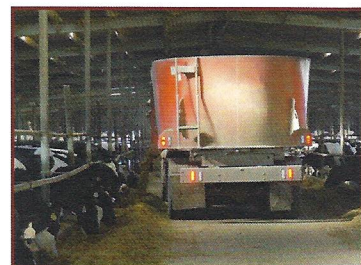
### PERSONNEL



Wear clean work clothing that has not been around animals on other operations and footwear that can be cleaned when moving between animal groups.



Keep records of animal identification numbers, vaccinations, and treatments given, at a minimum. In a disease outbreak, records of all animal, vehicle, and people movement onto and off of the operation should be kept.



Handle and feed young animals before older animals, leaving sick or treated cattle until last to limit disease spread; or use dedicated equipment and personnel for each group.

# PROTECTING THE DAIRY HERD

## Visitors Contacting Cattle

Ensure your actions on this operation benefit animal health and well-being.

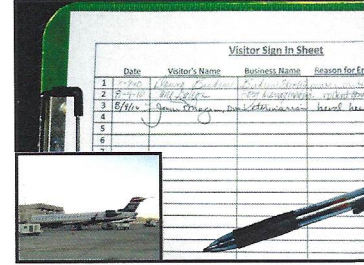
### ENTERING THE OPERATION



Make sure you have permission to enter this operation. Follow all posted signs and protocols.



Respect the Line of Separation (LOS) between off-site and on-site traffic. Drive and park in designated areas. Follow required biosecurity protocols when crossing the LOS.



Disclose prior animal contact or international travel and sign the visitor's log, if available.

### KEEP IT CLEAN



Wear clean work clothing that has not been around animals on other operations. Limit cattle contact to essential tasks.



Wear footwear that can be cleaned (manure removed) when moving between different animal groups and before leaving.



Clean equipment and supplies between different animal groups and operations to avoid cross-contamination.

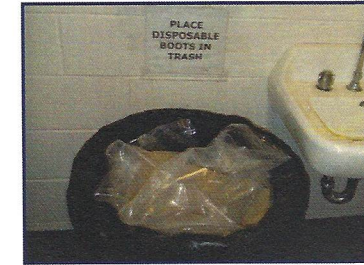
### LEAVE IT BEHIND



Ensure equipment, clothing, and footwear are cleaned and properly stored before entering vehicle to avoid cross-contamination between operations.



Keep your vehicle interior clean by ensuring equipment, clothing and footwear are clean before entering.



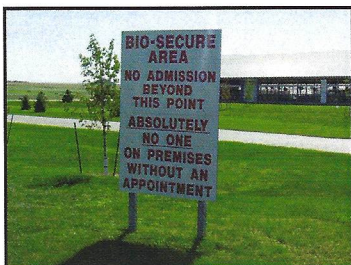
Leave trash generated on the operation behind.

# PROTECTING THE DAIRY HERD

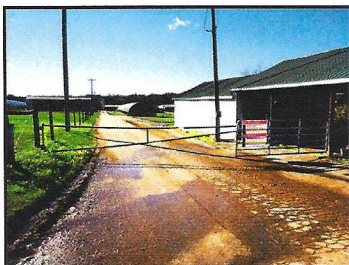
## Visitors Without Cattle Contact

Even without direct cattle contact, your actions on this operation could introduce disease causing agents through vehicle tires, equipment, and footwear.

### ENTERING THE OPERATION



Make sure you have permission to enter this operation.



Respect the Line of Separation (LOS) between off-site and on-site traffic. Follow required biosecurity protocols when crossing the LOS.

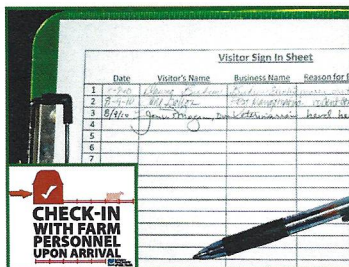


Drive and park in designated areas. Follow all posted signs.

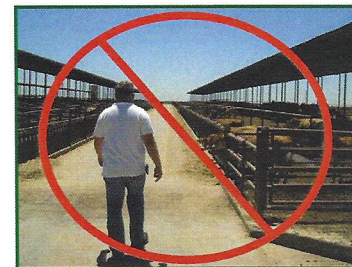
### EXITING YOUR VEHICLE



Wear clean footwear that can be cleaned if it becomes soiled with manure. If necessary, disposable boots may be provided by the operation for visitors.



Check in with farm personnel upon arrival and sign the visitor's log, if available.



Avoid direct contact with cattle, cattle feed, manure, and other excretions. If cattle contact becomes necessary, follow required biosecurity protocols to avoid introducing or spreading disease.

### EXITING THE OPERATION



Ensure equipment is properly cleaned before storing or moving to avoid cross-contamination between operations.



Keep your vehicle interior clean by ensuring equipment, clothing and footwear are clean before entering.



Leave trash generated on the operation behind.



**Ohio Secure Milk Supply Program  
Consultants**

**Dr. Bill Yost**

**[yostie6@gmail.com](mailto:yostie6@gmail.com)**

**Orrville, Ohio**

**330-682-2971**

**Dr. Eric Gordon**

**[gordon.46@osu.edu](mailto:gordon.46@osu.edu)**

**Marysville, Ohio**

**937-243-4356**

