

Michigan Dairy Review

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Consider Increasing Your Farm's Biosecurity and Awareness

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Introduction

Recent world events in the Middle East and outbreaks of Foot-and-Mouth disease (FMD) in South Korea, suggest we should continue to update ourselves about possible threats to our food system. For livestock producers this means looking at biosecurity and emergency plans for all foreign animal diseases (FADs) including FMD, a highly contagious viral disease of cloven-hoofed animals. Foot and mouth disease affects cattle, swine, sheep, goats, deer and other ruminants. Livestock owners fear FMD because it spreads rapidly and results in severe economic losses, shutting down exports and loss of consumer confidence. A quick response is vitally important in containing an outbreak. We can learn from other countries' response efforts to FADs. What you do to guard your business from other diseases will reduce the risk FADs entering your herd.

Five Things You Can Do

1. Develop or Enhance Your Visitors' Policy: Visitors can be a route for disease transmission into your farm. Establishing a visitors' policy for routine and non-routine visitors can reduce your risk. A visitors' policy states what you expect each visitor to read and do while on your premises. Here is an example:

VISITOR POLICY: "The health and welfare of our cattle and the safety of the product we produce is of highest priority to us. To help protect our cattle and you, we have developed a visitor's policy."

- **Do not enter farm animal facilities if you have been in another country in the past 7 days.**
- If you are coming from another farm, we ask that you do not come in contact with our animals if your clothes are soiled.
- Sign our visitors' log.
- Wear plastic boots or clean and sanitize personal boots.
- Please stay out of areas marked "Employees Only" or "Disease Prevention Area" (such as our calf facility).
- Wash or sanitize hands prior to departure.
- Enjoy your visit.

It is important to communicate expectations and at the same time make people feel they are welcome particularly if you provide tours for the public. So there is a need to balance the openness of your facilities with appropriate, responsible biosecurity measures to reduce risks, knowing we cannot eliminate all risks.

2. Set Up Farm Gate Biosecurity Protocols

Farm gate biosecurity and traffic control will reduce the risk of a number of diseases, including FMD, entering your farm. Some of these steps also enhance farm security. So consider it a form of general insurance, not just for the potential of FADs.

Consider implementing the following farm gate biosecurity protocols.

- One driveway as entry point to farm.
- Designated visitor parking area.
- “STOP” sign at driveway entry stating that all visitors must check with management before entering premises and animal facilities.
- Sign-in log to screen visitors for recent visits to other farms and countries.
- Boot disinfecting station(s), instructions, plastic boots and disposal container.
- Vehicle wash station.
- Foreign animal disease outbreak traffic control plan.

See website at www.cvm.msu.edu/biosecurity for more information on setting up farm gate biosecurity protocols.

3. Know the Signs of FMD and Other FADs

Contact your veterinarian any time you see any signs of disease that are unusual. Early signs of FMD include:

- Drop in feed consumption and milk production of infected animals.
- Elevated temperatures, especially in young animals.

Followed by:

- Blisters (vesicles) and erosions ulcers in the mouth, on the tongue, muzzle and lips, on the teats and around the feet.
- Excessive salivation and saliva that is sticky, foamy and stringy.
- Lameness with reluctance to move.
- Abortions.

4. Increase Your Surveillance (Be Aware)

Surveillance is essential. Observe your animals daily for early signs of disease such as FMD. Train all individuals and employees who work with animals about the signs of disease. If you notice the signs that resemble those of FMD, call your veterinarian immediately, or the MDARD hotline at 517-373-1077 from 8 a.m. to 5 p.m. or 517-373-0440 after hours, or USDA APHIS at 517-324-5290.

Then:

- Self-quarantine your farm.
- Immediately implement strict biosecurity practices.

Quick action will reduce the impact of any FAD such as FMD on the livestock industry. Also train your family, neighbors and employees to watch for individuals who look out of place or are doing something suspicious. Having individuals sign in, wear boots and visitor tags will deter some unwanted individuals from entering or walking around your premises.

5. Review Information about FMD and Other FADs and What Would Happen if an Outbreak Occurred (Be Prepared)

There are four aspects you should be aware of if a FAD outbreak occurs in Michigan or anywhere else in the U.S.

- What to expect if a FAD outbreak is suspected in a herd.
- What to expect once FAD is confirmed in the first herd.
- What to do and your role if a FAD outbreak occurs anywhere in North America.
- Traffic control on your farm during a FAD outbreak. (These topics are covered in the two publications which are referenced in the electronic version of this article at, www.msu.edu/user/mdr/).

There is an FMD wall chart titled “Foot and Mouth Disease -- Prevention and Preparedness” at www.cvm.msu.edu/biosecurity/documents that you can print and post for family and employees. It is a PDF file and includes photos of signs of FMD. If you would like a laminated copy, email Ted Ferris, ferris@msu.edu.

A list of countries free of FMD can be found at:

<http://www.oie.int/en/animal-health-in-the-world/official-disease-status/fmd/list-of-fmd-free-members/>

Other FADs include rift valley fever, contagious bovine pleuropneumonia, vesicular stomatitis, and heartwater. For more information on these diseases go to <http://www.cfsph.iastate.edu/> or <http://www.oie.int/animal-health-in-the-world/>.

References:

Ferris, T., Grooms, D., Frank, N., Roth, P. 2007. What to expect with a foot and mouth disease outbreak. *Michigan Dairy Review*. <https://www.msu.edu/user/mdr/vol12no4/ferris.html>

Ferris, T., Grooms, D., Frank, N., Roth, P. 2008. Does your dairy farm have an emergency plan for a foot and mouth disease outbreak? *Michigan Dairy Review*. <https://www.msu.edu/user/mdr/vol13no1/ferris.html>