Secure Sheep and Wool Supply Plan – What Producers Need to Know

Center for Food Security and Public Health at Iowa State University

Swine producers are nervously watching the outbreaks of African Swine Fever (ASF) that are happening around the world. Did you know there is a disease just as devastating that can impact sheep? It is called foot and mouth disease (FMD).

Luckily, the United States (U.S) has not had a case of FMD since 1929. However, with global travel and trade, the risk of FMD introduction to the U.S. exists. An FMD outbreak could cost the industry $15 to $100 billion U.S. dollars. The U.S. sheep industry has benefited from an expansion in lamb exports and more than half of our wool is exported. One case of FMD in the U.S. and our export market would be shut down. The American Sheep Industry Association (ASI) values preparedness. The ASI funded the development of the [Secure Sheep and Wool Supply (SSWS) Plan](https://securesheepwool.org/Assets/Secure-Sheep-and-Wool-Supply-Plan-for-Continuity-of-Business.pdf) ([securesheepwool.org](https://securesheepwool.org/)) to help producers protect their flocks from FMD. Recently, the United States Department of Agriculture (USDA) partnered with the ASI to fund outreach materials and efforts to increase FMD awareness of producers and other stakeholders.

# What Does FMD Look Like?

Foot and mouth disease (sometimes called “hoof” and mouth disease) causes blisters on the feet and in the mouth of cloven-hooved animals (sheep, cattle, pigs, and goats). FMD is a very contagious animal disease. It is NOT the same as hand, foot, and mouth disease in people and does NOT affect people or food safety. Meat and milk are safe for consumption.

Cattle infected with FMD show signs of lameness, drooling, and reluctance to move or eat because of the painful sores. However, FMD-infected adult sheep often show no, or only mild signs of infection, but can still readily spread the disease to other sheep, cattle, pigs, and goats. Signs of FMD that adult sheep may show can be easily confused with other common diseases, making FMD diagnosis very difficult. Young lambs with FMD are much more likely to die, often due to heart problems.

# Preventing FMD Spread

Controlling the spread of FMD involves stopping animal and animal product movement. Animal products include raw wool, wool products, semen, embryos, and manure. At the beginning of an FMD outbreak, the USDA is recommending a 72-hour national movement standstill for all cloven-hoofed livestock and their products. After this time, movement controls will continue in the areas around infected animals, throughout a state, or even a region. Restarting movement will require a special permit. The permit will be issued by Regulatory Officials after a producer meets certain requirements. The SSWS Plan provides guidance for producers who have sheep with no evidence of FMD infection to meet movement permit requirements, such as those listed here: securesheepwool.org/producers/permit-guidance/.

# Secure Sheep and Wool Supply (SSWS) Plan

The SSWS Plan was written with input from industry, State and Federal Animal Health officials, and university partners. The plan supports FMD control for infected farms and business continuity for uninfected farms. State and Federal Animal Health officials recognize the need to destroy FMD without destroying the livestock industry, which is a tough balancing act. The SSWS Plan provides resources to help producers voluntarily prepare BEFORE an FMD outbreak. Following the guidance will help producers with sheep that have no evidence of infection, to:

* Limit exposure of their animals to FMD through enhanced biosecurity,
* Move animals to processing or other premises under a movement permit issued by Regulatory Officials, and
* Maintain business continuity for the sheep industry, including producers, haulers, packers and wool processors during an FMD outbreak.

Producers wanting to tip the scales in favor of surviving an FMD outbreak can prepare now by:

* Having a National Premises Identification Number (PIN) issued by the office of the State Animal Health Official (SAHO): <https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/traceability/state-pin>.
* Working with your flock veterinarian to write an operation-specific, enhanced biosecurity plan.
  + Resources are available on the SSWS website such as Biosecurity Checklists, Information Manuals for Enhanced Biosecurity for FMD Prevention, and an enhanced biosecurity plan template at: <https://securesheepwool.org/producers/biosecurity/>
* Keeping movement records of animals, people, and equipment. Movement logs are available at: <https://securesheepwool.org/producers/movement-records>
* Developing contingency plans for their operation in the case of limited movement

# Disease Monitoring

To limit disease spread during an FMD outbreak, animals must be monitored often. Animal caretakers should be trained on the signs of FMD in sheep. Producers should have or establish a relationship with a USDA Category II Accredited Veterinarian. These veterinarians may be needed for disease monitoring and sample collection during an FMD outbreak. To find an accredited veterinarian, use the USDA Accredited Veterinarian locator: <https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/nvap/ct_locate_av>

Producers should report suspicious signs of disease to their flock veterinarian or State or Federal Animal Health Official. More guidance to help producers identify FMD signs in their flock, keep records, and report signs of disease is under development.

# Wool Handling and Movement

During an FMD outbreak, it’s possible that FMD-infected sheep could be shorn, and their wool stored or moved before the flock is diagnosed. FMD does not cause any visible damage to the wool and it is not possible to detect FMD virus in wool by looking at it. There are no USDA-approved tests to detect FMD in wool (as of March 2021). Depending on several factors, FMD may survive in raw wool for months. There are several methods to kill FMD virus in wool. Biosecure wool storage, identifying bales, and keeping accurate, complete wool movement records are critical in controlling disease spread. Recommendations for handling and moving wool can be found here: <https://securesheepwool.org/Assets/SSWS_Wool-Handling-During-FMD-Outbreak.pdf>.

# FMD Vaccination

Vaccination of animals against FMD is one tool that may be used during an outbreak. Many factors affect the use of FMD vaccine and are explained in this 8-minute video: <https://www.youtube.com/watch?v=MKf-aMgb-y0>

In addition, [www.aphis.usda.gov/fadprep](http://www.aphis.usda.gov/fadprep) is a place to find more resources.

# Next Steps

Explore resources to help you protect your animals and business ([securesheepwool.org](http://securesheepwool.org)). Contact the office of your SAHO to learn more about the SSWS Plan in your state.