

# DRAFT

## **Milk Handling from FMD Infected, Suspect, or Contact Dairies During an Extensive FMD Outbreak When These Premises are Not Depopulated April 8, 2014**

### Background:

A large or extensive FMD outbreak may affect multiple dairy farms with thousands of exposed or infected lactating cows. There may be too many animals and/or premises infected to utilize a “stamping-out” strategy for infected dairies. FMD vaccination of dairies will likely occur, but there may not be sufficient vaccine available to vaccinate all dairies. If this occurs, plans need to be developed in advance for handling large volumes of milk from dairy farms that are designated as FMD Infected, Suspect, or Contact premises with or without vaccination. Those plans need to be acceptable to producers, processors, response officials, and the public.

Pasteurized milk or milk products made from milk that may contain FMD virus are not a public health or food safety concern. Raw milk routinely contains low levels of other non-zoonotic viruses and bacteria. Since cows may shed FMD virus in the milk before they show clinical signs, it must be assumed that, in some cases, milk from infected and undetected herds will enter the human food chain. As always, milk processing, per the Grade “A” Pasteurized Milk Ordinance (PMO) assures milk and milk products are safe and wholesome for human consumption. (<http://www.idfa.org/docs/default-source/news-files/2013-pmo-final.pdf?sfvrsn=0>). These same principles apply to “normal” milk from an FMD affected herd.

After a dairy herd becomes infected with FMD, it will be very difficult to prove that all cows have cleared the infection at a given point in time. If the milk is not processed, this could result in a prolonged period of discarding very large volumes of safe and wholesome milk from affected farms. Acceptable uses for milk from known or suspect infected herds should be identified, discussed, and agreed to before an FMD outbreak. The goals are to minimize disease spread to other susceptible animals and reduce potential environmental issues associated with milk disposal while ensuring safe and wholesome milk and dairy product availability to consumers (business continuity for the dairy industry).

A “vaccination-to-live strategy” may be used as a response option on dairies in an FMD outbreak. FMD vaccine is one of the most widely used animal vaccines globally. There is no milk withdrawal time required following FMD vaccination. Milk from FMD exposed, infected and/or vaccinated animals is consumed routinely in the more than 90 countries that are endemic for FMD, with no adverse human health consequences. Currently, dairy products from countries vaccinating for FMD are legally imported into the US and enter US markets.

All impacted commodity groups will need to manage the risks of FMD transmission while continuing the production of safe and wholesome food when implementing continuity of business plans. The Secure

Pork Supply Plan is currently addressing similar challenges. During an FMD outbreak, it is impossible to know that all swine being processed are 100% free of FMD virus. It is assumed that some swine will be processed that are clinically normal, but may be in an early stage of infection with FMD virus. The recommendation in the SPS Plan is that all swine which pass FSIS ante-mortem and post-mortem inspection are safe and wholesome for human consumption and should enter market channels, even if they may have been exposed to the FMD virus. There has been no work on a Secure Beef Supply Plan, but a similar recommendation is likely for beef. **Essentially, FSIS inspection standards and the Grade “A” PMO are in place to ensure that meat and pasteurized Grade “A” milk in the U.S. are safe and wholesome on a daily basis given the presence of multiple endemic diseases in livestock. Applying the same standards during an FMD outbreak will continue to ensure that meat and milk are safe and wholesome for consumers.**

Not allowing normal milk from FMD Infected, Suspect, or Contact herds to enter normal commercial channels will send a mixed-message to the public that the milk is not safe and wholesome. Correcting this mixed-message in a large protracted FMD outbreak may become necessary and could be very difficult. Hence, it is in the best interest of the dairy industry to discuss and seek consensus on milk handling procedures pre-outbreak so that consistency in messaging about the safety of pasteurized milk and milk products prevails.

A review of inactivation of FMD virus in milk products was completed in 2012 and is available at: <http://www.cfsph.iastate.edu/pdf/inactivation-of-foot-and-mouth-disease-virus-in-milk-products>

The OIE, Terrestrial Animal Health Code guidance for the processing of milk for human or animal consumption is available at (Articles 8.6.38 and 8.6.39): [http://www.oie.int/index.php?id=169&L=0&htmfile=chapitre\\_1.8.6.htm](http://www.oie.int/index.php?id=169&L=0&htmfile=chapitre_1.8.6.htm)

**Recommendation:**

**Under the overarching guidance of the Secure Milk Supply (SMS) Plan and the current Biosecurity Performance Standards for the movement of raw milk, the following actions for handling milk from FMD virus infected dairy herds that are not depopulated during an extensive FMD outbreak are recommended:**

- Stop milking and dry off severely affected cows that have markedly decreased milk production.
- Discard all milk from cows that develop teat lesions until the lesions heal. Teat lesions may contaminate the milk with blood or tissue fluid during milking. Discard milk which does not meet the standard requirements of the Grade “A” Pasteurized Milk Ordinance (PMO) (<http://www.idfa.org/docs/default-source/news-files/2013-pmo-final.pdf?sfvrsn=0>):  
*“Lactating animals which show evidence of the secretion of milk with abnormalities in one or more quarters, based on bacteriological, chemical or physical examination, shall be milked last or with separate equipment and the milk shall be discarded.” “Bloody, stringy, off-colored milk, or milk that is abnormal to sight or odor, is so handled and disposed of as to preclude the infection of other lactating animals and the contamination of milk utensils.”*

- Continue milking other cows according to their normal schedules.
- Milk from infected cows/herds which meets the requirements of the Grade “A” PMO may be transported in a biosecure manner (under conditions meeting the SMS Biosecurity Performance Standards) to commercial processing for pasteurization according to PMO standards and enter normal commerce for human consumption.

Please see the Secure Milk Website for complete plan details ([www.securemilksupply.org/](http://www.securemilksupply.org/))

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