A ‘Readiness Rating’ for Balancing Biosecurity Priorities in FMD Preparedness and Response

by Richard Horwitz for the Open Session of the European Commission for the Control of FMD
Cascais, Portugal – October 26, 2016
Topics

• Tension in Response Priorities
• SMS Project in New England
• Readiness Rating
# Objectives, Benchmarks and Risks in Managing Milk Movement

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Routine Traffic to/from Dairy Farms
Dairy Farming: Iconic New England

Number of Farms by Size of Milk Cow Herd in New England and in the US, 2007

Portion of All Farms with Dairy Cows

- New England
- United States

Milk Cows Per Herd

- 1 to 9
- 10 to 19
- 20 to 49
- 50 to 99
- 100 to 199
- 200 to 499
- 500 to 999
- 1,000 or more
Dairy Farm-to-Market Traffic in New England
Stakes, If Dairy Traffic Interrupted in New England

Minimum Market Loss and Waste Generated Per Day on New England Dairy Farms With State vs. Regional Stops of Milk Movement

- With State Stops: 0.4 Million Pounds
- With Region Stops: 4.8 Million Pounds

Minimum Supply Loss Per Day for New England Dairy Plants With State vs. Regional Stops of Milk Movement

- With State Stops: 3.2 Million Pounds
- With Region Stops: 7.5 Million Pounds
Regional Agreement

Memorandum of Understanding
On the New England Secure Milk Supply Plan

1.0 Purpose

This (MOU) is intended to advance adoption of the New England Secure Milk Supply (SMS) Plan that NESAASA has been developing since its charter. The Plan specifies conditions under which unpasteurized milk may be permitted to move from farms to processing plants during a Foot-and-Mouth Disease (FMD) outbreak. This MOU establishes principles under which the New England states agree to use the Plan in response to an outbreak of FMD.
On-line Resources

New England States Animal Agricultural Security Alliance

nesaasa.weebly.com
Decision Tree for Determining ‘Eligibility’ for Permit to Move Milk / COB
Biosecurity – Concept / Ideal

Bio-Security:

Bio-exclusion:
- Keeping infectious organisms from entering a facility or population

Bio-containment
- Keeping infectious organisms from leaving a facility or population
Poor biosecurity in US ‘has helped spread bird flu’

From www.worldpoultry.net - July 5, 5:53 AM

"Poor biosecurity and airborne infection have played a key role in the spread of high pathogenic avian influenza in the US this year, a report from the country’s Animal and Plant Health Inspection Service (Aphis) has suggested."

Biosecurity – Avatar

United States Department of Agriculture
Animal and Plant Health Inspection Service

Pirates of the Caribbean - The Canine Calamity

BIOSECURITY IS IN OUR HANDS
Resources for Managing Readiness Data

- Log-in for regulatory authorities to manage data on milk producers, processors, and haulers (IIAD)
- Log-in for regulatory authorities to manage IDs and passwords for access to dairy data (IIAD)
- Log-in for regulatory authorities to compare and weigh Readiness criteria (Decision Lens)

Richard P. Horwitz, Consultant to NESAAASA and USDA-APHIS, 2010-2015

FOOT-AND-MOUTH DISEASE RESPONSE PLAN
THE RED BOOK
Biosecurity, Infection Control, and Continuity of Dairy Operations in FMD Response: A New England Perspective

by

Richard P. Horwitz, Ph.D.
Consultant
Key Points


– Anticipate conflict in aims: disease control vs. business continuity.

– Recognize limits of “science” and resources in response and remediation.

– Extend lessons of “infection-control” in human health care facilities.
A “Pareto View” of Biosecurity: Effort, Results, and the “Point of Diminishing Returns”
SMS Biosecurity Criteria

Readiness
Readiness Rating with Weighted Components

Readiness Rating
(0.0 - 1.0)

Security of Perimeter
19%

Sanitation of Lane
23%

Capacity to C & D
58%
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Progress in Assessment of Farms

Coverage – about 70% of all licensed dairy farms in six states
Ideal Readiness

Share of Farms At or Above Rating

Business Continuity Ideal

Ideal Preparedness

Range: 1.0 - 1.0
Average: 1.0

Disease Control Ideal
Actual Readiness, 2016

Range: .12 - .97
Average: .61
Exercises

2014 in Concord, NH and 2015 in White River Junction, VT
Thanks to you and to . . .
Contact Information

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