Program Number

Readiness Rating for Continuity of Dairy Operations in a FMD Control Area

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A tool for sustaining farms during an outbreak

Introduction

With increases in global trade, travel, and threats of bioterrorism, nations that are now free of Foot-and-Mouth Disease (FMD) face increasing likelihood of a domestic outbreak with severe repercussions (1). Analyses of prior outbreaks suggest that these nations would be well served by strategies for response that balance competing objectives: to control disease and to sustain livestock operations, to seal them off and to keep them in business. Biosecurity is key to such a balance, and tactics toward that end are developing rapidly (2,3). Among the most essential include better ways to set biosecurity benchmarks that stakeholders can trust and that Incident Command can use in an emergency, as in issuing permits for milk pick-up from uninfected herds in a FMD Control Area (4,5). The objective of the present work is to research, develop and demonstrate such a tool – a "Readiness Rating" – for Incident Command to use in rapid, incident-appropriate decisions and to help producers prepare for them (5).

Materials and methods

A study using field techniques conventional in cultural anthropology was conducted among State Animal Health Officials (SAHO) as they assessed the FMD-vulnerability of dairy operations in their jurisdictions. The study isolated about 50 criteria that SAHOs use in determining if a farm would be judged "biosecure enough" to present negligible risk of FMD transmission during milk pick-up. Analytic Hierarchy Processing (AHP) was used to calculate relative weights of the criteria, as evaluated by the SAHOs, state-health regulators, district and national APHIS authorities. With these weights and a composite, normalized "Readiness Rating," dairy farms in the region are being surveyed and assigned Ratings. Results are being tested in regional exercises of FMD response (5).

Results

Ethnographic findings confirm remarkable consensus among animal-health officials in identifying and weighing biosecurity preparedness. The criteria that they prefer fit national Secure Milk Supply (SMS) performance standards (4,5). Over 60% of the licensed dairy farms in 6 states have now been surveyed using those criteria, and all six have agreed to share a single SMS plan using Readiness Ratings.

Conclusions

Results of the present study indicate that the Readiness Rating could be a useful tool in promoting sustainability of dairy operations during a FMD outbreak. Its value includes compatibility with transparent, flexible emergency preparedness and response.

Weights of Criteria in Composite Rating

Farm Perimeter
(distance to other herds, traffic, gates, signs . . .)

19 %

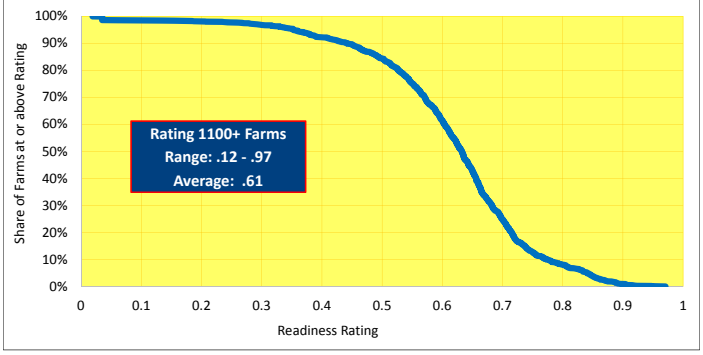
Sanitation of Lane
(control point, run-off, single-purpose, permeability . . .)

23 %

Capability to Clean and Disinfect
(foot baths, wash station, site, decon supplies . . .)

58 %

Readiness Ratings of New England Dairy Farms, 2015



Literature cited

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Further information

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