

Development and Use of a Survey Tool to Determine the Efficacy of Livestock Truck Washes in Iowa

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Amber Danielson, Research Assistant;
Anna Johnson, Associate Professor;
Kenneth Stalder, Professor,
Department of Animal Science, Iowa State University;
Rodney Baker, Senior Clinician and Trask Professorship,
Department of Vet Diagnostic & Production Animal
Medicine;
Troy Bigelow, Surveillance, Preparedness and Response
Services, Senior Staff Veterinarian, USDA, APHIS, VS;
Daniel Andersen, Assistant Professor, Department of
Agricultural and Biosystems Engineering

Summary and Implications

The transmission of disease among livestock farms could be addressed by the efficiency of truck washes to clean and disinfect trailers used for transporting animals. Collecting swab samples from trailers and cabs of identified truck wash trailers will help to determine the proper procedures and steps needed to reduce the transmission of disease. Truck washes in the state of Iowa were identified and invited to participate in a questionnaire that will provide helpful information for this research. The main goals of this study are to 1) determine the areas in the truck washing process that pose a high risk to transmit disease, and 2) to identify the location of current livestock truck washes and their capability in the event that some disease outbreak requires their involvement.

This survey tool could help to provide necessary information in order to determine which service methods are best for reducing back contamination and the spread of disease among livestock herds. Determining what locations would be beneficial in collecting samples will be easier overall when the surveys are completed.

Introduction

The efficacy of cleaning and disinfecting livestock trucks is critical for maintaining biosecurity. A survey tool has been created outlining the areas of importance needed when identifying where truck washes are at risk for transmission of disease. The survey has 5 main sections to help outline the areas of high risk: 1) location and contact information, 2) description of services, 3) environmental impact, 4) facilities and operations, and 5) cost for services.

Materials and Methods

Overall, there is a compiled list of twenty-six livestock truck wash locations and eighteen have been surveyed. The

location and survey process will continue and be completed by January 2015.

Truck washing location and contact information:

Truck washes were located within the state of Iowa using the Livestock Network for Iowa washouts, professional field staff, and industry professionals. Once all truck wash locations were identified, an Excel spreadsheet was compiled so survey information could be entered. All surveys were completed by phone or in-person.

Description of services: This survey section allowed the interviewer to see the most common services provided by truck washes. Questions about the washing process included: water usage (recycled or fresh water), pressure of water, detergent and disinfectant utilized, and drying methods, among others.

Environmental impact: This survey section determined if the truck wash cleaning and washing disposal of waste methods have an environmental impact. Waste handling was the main topic of this section. Storage and testing of wastewater, disposal methods, and the flow of the draining system were some questions that were asked.

Facilities and operations: The importance of biosecurity was the focus of this section. Facilities need to establish proper flow of traffic and prevent back contamination within their buildings. Some questions asked were about facility segregation, clean up disinfection of bays, and post-wash inspection of trailers.

Cost for services: For this section of the survey, the main goal was to determine the overall cost of a trailer being washed. There are many steps and options that could be included when determining overall cost for a wash: flush, flush with pressure and detergent, final disinfectant, and the heat baker if applicable.

Results and Discussion

While surveying truck washes throughout Iowa, it was clear that results vary among facilities. Biosecurity is an important aspect to look at when surveying livestock truck washes. During this study, biosecurity was difficult to view because majority of the surveys being conducted were by phone. Overall, results of the livestock truck washes varied among all five sections of the survey tool.

The information provided in the completed surveys will be used to determine what truck wash locations will be further analyzed through collection of microbiological samples.

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