

Protecting the Inevitable Risk: Biosecurity Evaluation at a Truck Wash

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Key Point

- Monitoring cab cleaning and hot shot handle cleaning via Glo Germ Gel is simple and cost-effective.
- Wiping down the cab interior with intervention wipes only adds around 5 minutes.
 - These minor cost and time additions to truck wash procedures can help to prevent a million dollars PRRS break.
- Truck wash crew and trailer washers are often overlooked but perform a job that is essential in maintaining biosecurity and disease outbreak and therefore herd health.

Introduction

Iowa Select Farms did a major overhaul of their truck wash procedures and wanted a second level of investigation to see if there were any potential biosecurity risks as pig transport biosecurity is critical for bioexclusion and biocontainment. Therefore, the objective of this study was to assess overall biosecurity at the truck wash and identify potential areas of concern, measure and evaluate these areas of concern, and suggest solutions.

Material and Methods

Initial data was collected after spending three days with truck wash monitors, wash crew, and wash managers. This way the flow of trucks, people, and equipment was better understood at a truck wash that washes trailers from both PRRS positive and PRRS negative sites. Only one truck wash was assessed.

Potential Areas of Concern Identified

Cab Cleaning: The interior of cabs were not being cleaned as well as possible. The areas observed for cleaning included: steering wheel, dash, handles, climate control buttons, and radio. These areas were not being focused on- but are critical areas touched each time a driver is in the cab. In addition, it was difficult for monitors to tell if a cab had been cleaned or not by visual inspection alone.

Equipment Movement: All equipment was originally identified as potential areas of concern. However, after the three day observation period it became apparent that all other equipment besides hot shots stays in the dryers. Thus, hot shots were identified as the main equipment of concern. Hot shots were not returning with each trailer load which leads to biosecurity concerns if they are not being properly disinfected between each load. Since this truck wash also washes both PRRS positive and PRRS negative trailers movement between the respective equipment sheds was an additional concern.

Monitor Movement: Monitors inspect both PRRS positive and PRRS negative trailers throughout the day before the wash crew is allowed to disinfect each trailer. Although monitors change boots and put on Tyvek before inspecting negative trailers, there is no true “clean dirty line” where they change shoes. The concern was that the monitors could be contaminating negative trailers when they inspect them after having inspected positive trailers.

Evaluation

Evaluation was performed in the three specific areas of potential concern identified: cab cleaning, equipment movement, and personnel (i.e. monitor) movement.

Cab Cleaning: Five (i.e. steering wheel, dash, door handle, climate control buttons, and radio control buttons) critical areas in the cab were evaluated on how well they were cleaned with a Glo Germ Gel product. The Glo Germ Gel was applied while the trucks were waiting in line to be cleaned. That night the assessment was performed using a UV light for any trace of the Glo Germ, which indicated whether the surface had or had not been cleaned. The interior of cabs were not being cleaned as well as possible as evidenced by the amount of fluorescence that was detected in those five critical areas (Figure 1).

Equipment Movement: All of the hot shot handles and prods were numbered in both the PRRS positive and PRRS negative equipment sheds on a Sunday. Every night for the next five days it was checked if each hot shot was present, which equipment shed it was in, and new ones were numbered as they appeared. Throughout the course of those five days hot shot handles and prods were not being returned on a consistent basis. This was concerning for obvious biosecurity reasons. However, hot shot handles and prods were not switching between the PRRS positive and PRRS negative equipment sheds which was good.

Monitor Movement: Glo Germ Gel and Powder was applied to the shoes of monitors and on positive trailers before monitors inspected them. That same evening the negative wash office, negative wash bays, negative trailers and the negative to positive trailers that had been washed in the negative wash bay were inspected with a UV light for any trace of the Glo Germ. Although no Glo Germ was appreciated it may still be a potential area of concern and should be further evaluated.

Solutions/Interventions

Cab Cleaning: In order to ensure that the interior of cabs were being cleaned as well as possible, the truck wash crew was shown images of the cab interiors with the Glo Germ Gel comparing interiors that were wiped down and those that were not. Current protocols could be clarified, and the importance of cab cleaning should be emphasized. Glo Germ Gel also gives the monitors the ability to do random internal audits of cab cleaning and provides a better way to confirm if the cabs were truly cleaned other than just visually assessing them.

Equipment Movement: In order to check hot shot handle and prod cleanliness Glo Germ can be applied at the same time monitors put Glo Germ in the cabs. To encourage returning hot shots the truck wash crew can continue to write down cull and gilt trailers that don't return with a hot shot. To stop any potential cross-contamination of hot shots the PRRS positive hot shots could be painted red.

Monitor Movement: Although no Glo Germ was appreciated it is possible that monitor movement is still a potential biosecurity risk and should be further evaluated. It appears that the Glo Germ washed right off as the trailers were wet when the monitors inspected them. A potential solution will still need to be found in order to maximize biosecurity at this truck wash. I'm still unclear if they will be applying glo gel outside the study. If not, I'm not sure how they would be able to tell if the cab is cleaned. This may not be very important, but it makes the paragraph feel ambiguous.

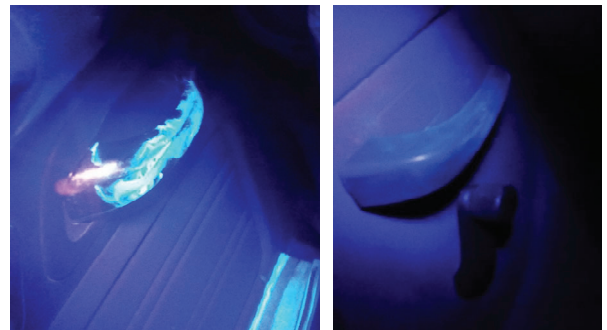


Figure 1. Images showing what Glo Germ Gel looks like with a UV light when the door handle was not cleaned (left) and was wiped down (right).

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