



Worthwhile Operational Guidelines & Suggestions

BROILER PROCESSING TIMELY INFORMATION – JUNE 2005

To clean or not to clean? That is the question...

Most of the information available on transport crate cleaning is focused on bacterial recovery and decontamination methods. Due to the stress of transportation, it is well-known that broilers in crates can shed *Campylobacter* and *Salmonella* at an increased rate. Crates that return to farms without cleaning and disinfection may be a source of contamination for negative flocks. Recently, poultry operations have encountered difficulties with necrotic enteritis breaks in broiler flocks. The organism responsible for this illness is *Clostridium perfringens*, which is a gram positive, spore-forming, anaerobic bacterium. This organism is found naturally in the poultry house environment and since it can form a spore, is capable of surviving adverse conditions such as heating or drying.

Cleaning and sanitation of transportation crates is important, but it is very difficult to implement under commercial conditions. Recent research at Auburn University has determined what cleaning and disinfection regimes would work best to reduce *C. perfringens* numbers on



small plastic transport containers. Dirty crates were subjected to four different cleaning methods: power-washing alone, power-washing and sun-drying for 2 hours, power-washing and a chlorine dip, and power-washing and a quaternary ammonium dip. Results indicate that power-washing alone was enough to effectively reduce *C. perfringens* numbers on crates. The benefits of adding this step to the transportation process are noticeable. It appears from these results that physical removal of feces is enough to decrease the load of *C. perfringens* by at least 1.5 log₁₀ cfu.



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