Title: Estimating the National Prevalence of Salmonella spp. In Lymph Nodes from Market Hogs and Sows – NPB #16-074

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Scientific abstract

In this study, we used popliteal lymph nodes from swine carcass across the U.S., twenty-one commercial pork harvest and processing facilities, representing northern (n = 12) or southern (n = 9) geographical regions reaching slaughter houses to determine the prevalence of Salmonella. Salmonella prevalence was detected in 12.55% of the porcine lymph nodes tested. Only 23 isolates were used for WGS while consent from the establishments restricted the use of other 44 isolates for the genomic analysis. Whole genome sequencing based serotype determination identified 14 different serotypes of Salmonella when a subset of isolates was analyzed. Many of these serotypes identified have been known to cause human Salmonellosis in the past. Therefore, results from this study indicates the need for further surveillance and tracking of swine associated Salmonella in the United States.