

Use of a Novel Medium for Swine Disease Surveillance

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Historically, disease surveillance efforts have centered on down-the-road or first point of collection blood sampling protocols to achieve disease control goals. These systems require a widely distributed effort which can be difficult to coordinate, and which has limited epidemiologic power. A novel sampling tool has been developed for PRV monitoring which has capabilities to expand USA swine industry in disease surveillance efforts. Three critical components comprise this tool. Source generation for each sample is maintained by use of market-based producer identification which complies with federal swine movement identification requirements. The samples are procured by collection and processing portions of “hanging tender” to obtain antibodies for testing using existing ELISA test technologies. The third component encompasses data manipulations that enable selective testing of procured samples to meet risk-based sampling algorithms. The capabilities and capacities of this system to provide epidemiologically-sound and cost-effective surveillance of market and cull swine will be explored.