

Workshop discusses national bio-surveillance system for US swine industry

Last week, the Institute for Infectious Animal Diseases (IIAD), a Department of Homeland Security (DHS) Center of Excellence, along with the National Pork Board (NPB) and the Swine Health Information Center (SHIC), hosted a workshop to discuss the development of a national bio-surveillance system for the U.S. swine industry. The meeting, which also received sponsorship from the DHS Science and Technology Directorate, aimed to foster a focused, interactive discussion between the industry representatives and state and federal animal health officials in attendance. Through interactive discussions, participants were asked to build upon previous and current industry and government efforts in identifying and developing a road map to address gaps for a workable, credible, affordable and robust nationally coordinated bio-surveillance system to meet commerce and trade needs for the US swine industry.

The meeting was designed as a way to look forward to what the industry needs. The United States Department of Agriculture, Animal and Plant Health Inspection Service (USDA APHIS) currently has regulatory surveillance programs (pseudorabies, brucellosis and classical swine fever), monitors for influenza and vesicular diseases and is in the process of evaluating the parameters to develop a comprehensive U.S. swine surveillance program. Additionally, the U.S. pork industry daily actively monitors for swine diseases in a continual effort to protect the health and welfare of the country's swine herd.

There was a significant consensus among the industry stakeholders participating in the workshop regarding the attributes of an optimal risk-based comprehensive disease preparedness system and that a modern robust national bio-surveillance system is a vital component. Those preparedness attributes include: allowing granular, access-controlled information sharing to protect data; leveraging easy-to-collect, aggregate samples (i.e. oral fluids) collected by trained production personnel on farm for testing; using triggers to automatically identify anomalies for further investigation; and utilizing standardized, electronic, real-time data capture for movements, premises production, slaughter, and veterinary diagnostic laboratory information. Priority actions to develop the identified needed surveillance system were also articulated and included, among others, validation of an oral-fluids-based diagnostic assay for priority FADs and establishing a network of producers, state animal health officials and National Animal Health Laboratory Network laboratories in core pork producing states to work together on key gaps and opportunities. A complete list of key elements and priority action items to achieve progress towards such a system, can be found [here](#).

Steve Brier, a member of the NPB Swine Health Committee, presented industry views at the workshop and said that a “nationally coordinated bio-surveillance system is an industry-identified priority to improve capacity to prepare, detect and rapidly respond to regulatory FADs, emerging and re-emerging diseases, as well as contribute to successful implementation of the Secure Pork Supply Plan to facilitate business continuity in the face of high consequence disease outbreaks.”

Among all participants there was a commitment to timely forward progress. “Though we have a good consensus among our stakeholders, we have to work on these action items with a sense of urgency – including developing a timeline for completion of activities,” said Paul Sundberg, DVM, Ph.D., DACVPM, SHIC executive director.

Swine health and food safety is of paramount importance – the industry has more than 60,000 pork producers who annually market more than 110 million hogs, equals total gross receipts of \$23.4 billion, supports 550,000 jobs and contributes \$39 billion to the U.S. Gross Domestic Product. With record industry expansion in recent years, pork production exports have risen to more than 26% of U.S. production – a number that is expected to continue to increase. With an ever-expanding industry, diseases that can disrupt trade and commerce are of increasing concern, making adapting the nation’s current surveillance system to keep up with the industry’s needs and speed of commerce of utmost importance.

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