



AgConnect

Maintaining Business Continuity and Performing Risk Management During an Animal Disease Outbreak.

The AgConnect® Business Continuity project offers an approach to mitigating disruption of commerce for animals and associated products that will occur during an outbreak of a high-consequence animal disease in the U.S.

THE CHALLENGE

When faced with the uncertainties of a major disease outbreak, responders and decision makers at all levels require access to data and tools to help impart order in the response, and to select strategies that will minimize damage to animal health, human health and the economy. Response must include engagement of emergency management professionals and coordinated involvement from all impacted stakeholders, including agricultural and allied industries, veterinary practitioners, biosurveillance programs, and veterinary diagnostic laboratories.

THE SOLUTION

There is a significant need for information sharing and a management environment that will allow for business sensitive data to be distributed in a controlled manner, and then integrated to support shared situational awareness and decision making in regards to business continuity efforts. The overall goal is to facilitate maintenance of business operations in the agriculture and food industries, while mitigating the risk of disease spread from movements.

AgConnect® Business Continuity

Researchers from the Institute for Infectious Animal Diseases (IIAD) are developing innovative information technology tools to enhance situational awareness and decision support within each of these stakeholder communities.

Data Integration, Visualization and Analysis Technology

IIAD piloted AgConnect® Business Continuity technology and demonstrated how it can be used to facilitate emergency response by improving efficiency and effectiveness through situational awareness and facilitated decision-making. This technology is based on a information sharing and management architecture that allows for sensitive data to be distributed in a controlled, compartmentalized, and permissioned manner. Integrated access and synthesis of different data streams includes movement data, certificates of veterinary inspection, veterinary reports, diagnostic test orders and results, surveillance reports, geospatial and biosecurity information. Filtering, processing and presentation of these data, in near real time, into a common integrated display allows for maintenance of situational awareness regarding disease status in an area, determination of control zones, disease impact assessment, and facilitation of traceability and movement decisions.

The AgConnect® Business Continuity tools enhance emergency response and expedite recovery back to normal business operations.



APPLICATIONS

Secure Food Supply Plans

IIAD is working with Iowa State University's Center for Food Security and Public Health to leverage their ongoing efforts to develop Secure Food Supply Plans for the pork, egg, turkey, milk and beef industries. Each plan has the need for real-time integration and display of emergency data. The Institute is facilitating the development of data-sharing technologies that can provide data integration and visualization in an outbreak situation.

Business Continuity in the Swine Industry

A foreign or emerging animal disease outbreak could result in significant economic loss to pork producers. Recognizing this vulnerability, the pork industry is working with the USDA and other stakeholders to improve animal health infrastructure to a level that would support operational business continuity. USDA has funded the Secure Pork Supply Plan, which establishes standards to allow the safe movement of animals and animal products, with no evidence of infection, from operations in a disease control zone to a processing plant or to other sites to accommodate different stages of production. The plan requires key pieces of data from multiple federal, state and private sources (e.g., premises locations, livestock census information, disease surveillance results, and animal movements) to be readily available for analysis. This information exists in multiple places and systems; however, the data must be collated and synthesized into more actionable information that can be used to support business continuity. IIAD is working with government and industry stakeholders to develop the capability to securely collect, aggregate, share and synthesize user defined, access controlled information for decision makers.

Technology Fielding and Transition

AgConnect[®] integrates real-world data and provides tools to support day-to-day and response needs. Prototype technologies have been fielded to industry users and are undergoing evaluation.

- IIAD researchers use a spiral development process, which informs stakeholders and promotes frequent interaction throughout the development cycle.
- IIAD is piloting and fielding technologies, collecting feedback, and refining development, while working closely with a number of stakeholders, including:
 - o The National Pork Board
 - o Production companies of varying types and sizes
 - o State Animal Health Officials
 - o State and Federal responders
- IIAD is actively working with multiple third-party entities to identify strategies and explore different opportunities for long-term sustainment of AgConnect[®] technologies to ensure they remain accessible and operational for end-users.



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