The California Pilot Project

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A review of problems identified during the 2002-2003 outbreak and mitigation of exotic Newcastle disease (END) in southern California resulted in the development of the California Pilot Project (CPP). During the outbreak, a comprehensive team of cross-organization field collection agents, field inspection teams, and laboratory diagnosticians began the task of sampling almost every premises that contained any avian species within and around the quarantine zone and testing those samples for the presence of the disease.

At the height of the cooperative task force program there were more than 300 people in the field, 40 data entry persons, and approximately 32 laboratory personnel. Data were being entered into four separate computer systems for three separate organizations representing up to six different branches within those organizations.

Due to the nature of the standard pen-and-paper data collection—and due to the heavy workload associated with the taskforce—several case-submission forms were illegible, incomplete, or incorrectly filled out. To further complicate issues, each of the three organizations received copies of these submission forms independently, and each attempted to perform data entry based upon them. In addition, each organization had different protocols to gather and correct missing or illegible information. As a result, when the management teams attempted to review taskforce status each of their reports were consistently different.

The CPP was developed specifically to combat these issues. When this project is completed it will provide the groundwork for future implementation of surveillance and mitigation efforts by streamlining data collection and facilitating information exchange. It is expected that significant resources will be freed from the burden of data entry and that those resources will be better utilized for more valuable work.

The CPP is a joint effort among the California Animal Health and Food Safety Laboratory (CAHFS) at UC Davis, the Animal Health Branch of the California Department of Food and Agriculture (CDFA), and the USDA Animal Plant Health Inspection Service (APHIS). In late 2004, the project was organized and sponsored by Dr. Jack Shere, USDA; Dr. Alex Ardans, CAHFS; and Dr. Annette Whiteford, CDFA. The project includes all levels of personnel within each organization, such as field collectors, laboratory personnel, program managers, and epidemiologists. Representatives from each organization have been involved since the early stages of the project to help ensure that the project adequately delivers its goals.

The avian influenza and END (avian health) surveillance program in California will function as a test environment to ensure that the designed solution achieves the goals of the project and functions as expected in the “real world.”

Key goals for the project include:

- Developing a solution that reduces the number of data-collection problems and generally improves quality and efficiency of data collection.
- Once implemented, the system should be able to function both as a standard surveillance and emergency taskforce system.

- The implemented system must expand to handle multiple surveillance and test data.
- The system will be designed to help improve the quality of data from the source (the field).
- The system will allow all necessary data collected in the field to be shared among all approved organizations without the need for manual data entry.
- They system will provide greater chain-of-custody assurance from a legal and diagnostic perspective.

The scope of the project includes equipping the 15 field collectors in the CDFA and USDA Avian Health Group working out of Garden Grove, CA with field-collection computer hardware and software, which will facilitate the rapid and accurate collection of samples and data. These devices will share the collected information as needed with the diagnostic lab (CAHFS and the National Veterinary Services Laboratories), and will send the data to the primary information systems within CDFA and USDA. To assist in data entry and to further improve data quality, bar-coding will be implemented as key identifiers for samples collected and for cases submitted.

The initial testing of the design will occur in October 2005, with actual deployment occurring in December 2005. A detailed presentation on the progress of the project and an overview of the tools utilized for the project will be presented at the United States Animal Health Association/American Association of Veterinary Laboratory Diagnosticians meeting in Hershey, PA in November, 2005. The project will wrap up in March 2006.

Please contact Jay Ross at email jpross@ucdavis.edu or phone (530)-752-6597 with any questions or comments pertaining to the CPP.