

Mobile Devices Assist 2007 NM TB Incident

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The Veterinary Services Office of the Chief Information Officer (formerly the Center for Animal Disease Information and Analysis) Mobile Information Management (MIM) team supported the 2007 New Mexico tuberculosis (TB) incident by supplying the TB MIM application and working directly with the field and command staff to meet the evolving data needs throughout the incident.

The TB MIM is a Personal Digital Assistant (PDA)-based application that supports the use of both Radio Frequency Identification (RFID) and barcode technologies. The TB MIM application is designed to increase the efficiency and accuracy of bovine tuberculosis testing using Personal Digital Assistants (PDAs) that have been loaded with herd and premises information.

The application is intended to assist field veterinarians and their supporting staff when they record and submit data from the field, such as test results and herd inventory. In addition to the PDA component, a companion desktop application called TB MIM Manager provides support for the PDA. The manager performs several functions, including: loading data onto or removing data from the PDA, managing data from the PDA, merging data from multiple PDAs, and editing data.

VS has developed MIM applications for several of the national animal disease programs. These applications enable animal health officials to collect data, produce reports and official forms, create lab submissions, and manage animal information in the field where the program work is conducted. The MIM applications produce a data file that can be exchanged with other databases.

The Michigan Department of Agriculture originally developed the TB MIM application, formerly known as RegTest. The RegTest application connected to the Farm Animal Identification and Records database for data uploading and retrieval. With the goal of developing an application to assist with nationwide TB surveillance and disease eradication, the MIM team collaborated with the Michigan Department of Agriculture and began enhancements to the RegTest application in early 2007.

In June 2007, the TB MIM application was first demonstrated in the field at a New Mexico dairy. Based on the MIM team's observations and input from field personnel, the application underwent further enhancements designed to meet additional needs discovered during the initial field test. In August 2007, the MIM team began assisting in the New Mexico TB incident with the deployment of the TB MIM application.

The initial role for TB MIM was to assist with TB testing in the field and produce the necessary reports for epidemiologists and program staff. Throughout the New Mexico TB incident, the role of TB MIM expanded as field and incident needs required. On many occasions, the team made these application changes and implemented them overnight. TB MIM proved a useful tool that helped save many person-hours and assisted incident commanders with planning, animal management, data integrity, and the production of necessary forms. During the depopulation phase of the incident, additional benefits included the merging of appraisal data with previously collected inventory data. In addition to local reports and form generation, the application supports the uploading of data to a variety of databases, including the generic database (GDB) and other State databases through the TB MIM Web services component.

With the completion of the New Mexico TB incident, the team is currently focusing on finalizing the management of the herd inventories generated either during a testing event or as a separate function, which includes the upload to databases and download of those inventories back to the handheld device. One of our exciting future projects includes collaboration with the National Animal Identification System and brucellosis programs to develop a mobile application that will collect vaccination and testing data.

For additional information on MIM applications please contact
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