Controlling a Tuberculosis Outbreak in Connecticut

In recent years, progress toward reducing tuberculosis (TB) rates has slowed in the United States, where more than 13,000 TB cases were reported in 2007. TB is a substantial health concern in correctional facilities; inmates and employees are at high risk, and TB outbreaks can affect surrounding communities. In early 2006, following their release from a Department of Corrections (DOC) facility in Connecticut, two people were diagnosed with TB. These people were part of complex, multi-family social networks. Later, seven additional cases of TB were identified, including three children under the age of two. To prevent the disease from spreading further, the Connecticut Department of Public Health launched an investigation and asked CDC for help.

CDC Epidemic Intelligence Service (EIS) officers worked with local investigators to determine when the patients with TB were contagious and with whom they came in contact while they were contagious. During the investigation, EIS officers reviewed records and reports from a community hospital, the health department, the DOC, the laboratory, the state’s TB control program, and employee rosters related to each patient. They entered this information in a single, comprehensive database of contacts. The EIS officers also visited and evaluated several locations associated with the outbreak, and created a social-network diagram to paint a picture of the complex investigation.

As a result of this collaborative investigation, the outbreak was contained, and no further cases have been connected with this outbreak. In addition, the Connecticut Department of Public Health has worked with the DOC to improve discharge planning and case management practices at the facility where the outbreak began. The investigation also led to collaborations among CDC, the state health department, the local hospital system, and TB experts from academia to train community providers in the management of clinical TB.

CDC’s investigation of a TB outbreak in Connecticut is just one example of the work of fellows in CDC programs such as EIS. CDC funds fellowships that recruit and train approximately 200 epidemiologists, economists, informaticians, physicians, and other health leaders into the field of public health each year. More than 70 percent of these fellows remain in public health after graduation from their programs, working at the federal, state, and local levels to prevent and detect disease, and prepare for threats before people become sick or injured.

A colorized scanning electron micrograph image of Mycobacterium tuberculosis bacteria

For more information about CDC at Work, please contact us at (202) 245-0600 or go to http://www.cdc.gov/washington/.