Special Issue

Plague Diagnostic Workshop¹

May C. Chu

Centers for Disease Control and Prevention, Fort Collins, Colorado, USA

The Plague Diagnostic Workshop, cosponsored by the Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO), was held on March 8 and 12, 1998. Participants represented major laboratories involved in plague diagnostic test implementation and development, the WHO Collaborating Centers for Plague Research and Reference (Almaty, Kazakhstan; Stavropol, Russia; and Fort Collins, Colorado, USA), the WHO Collaborating Center for Yersiniosis (Paris, France), WHO headquarters, and the Pan American Health Organization. Other participants came from Brazil, China, Indonesia, Kazakhstan, Madagascar, Myanmar, Peru, Russia, South Africa, Taiwan, Tanzania, United Kingdom, United States, Venezuela, and Vietnam. From the United States, state and local public health laboratory specialists from California and New Mexico, Naval Medical Research Unit #2, and private industry personnel also participated.

The goals of the workshop were to assess the laboratories' capabilities to perform plague diagnostic tests worldwide; discuss test methods; develop a program for molecular characterization of *Yersinia pestis*, with emphasis on monitoring drug resistance strains; and initiate worldwide electronic links between laboratories. During the first session, representatives reported on their countries' plague activities and presented results on improved and new tests for plague. During the second session, presenters discussed molecular methods used in typing *Y. pestis* and electronic methods for linking laboratories through the Internet. Participants also met during the International Conference on Emerging Infectious Diseases to discuss issues ranging from plague diagnostic criteria to adoption of new test methods.

Recommendations were made to broaden and refine the plague laboratory diagnostic criteria. Three working groups were created to evaluate and develop international standards of *Y. pestis*specific F1 antigen, F1 antigen-sensitized sheep red blood cells, and specific bacteriophage stock. A fourth working group was charged with evaluating new diagnostic tests. Guidelines and recommendations were made for molecular typing of isolates using plasmid and protein profiling, pulsed-field gel electrophoresis, and ribotyping. The workshop participants also worked toward establishing an electronic bulletin board and soliciting support for another workshop in 2 years to certify the results of the working groups.

¹Summary of Satellite Session