

HUMAN PLAGUE OUTBREAK IN TWO VILLAGES, YUNNAN PROVINCE, CHINA, 2005

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Abstract. Plague is still a serious public health problem in Asia. On July 5, 2005, a suspected outbreak of human plague in two Chinese villages was reported to Yunnan Institute of Endemic Disease Control and Prevention (YIEDC). Active case finding, laboratory investigation, environmental inspection, and control measures were conducted by provincial and local health authorities. A suspected case was an individual who resided in one of the two villages and developed fever and painful swollen lymph nodes in the groin, axilla, and neck between June 26 and July 11, 2005. Confirmation was by indirect hemagglutination test (IHA) for plague F1 antibody. A confirmed animal plague case was an animal that tested positive for one of the following tests: IHA, reverse indirect hemagglutination, or bacterial culture. There were three confirmed and one suspected case of human plague. Of nine retrieved rats, three were confirmed cases. Most surveyed houses had poor sanitation, and there was a history of dead rats observed in the villages. After control measures were implemented, the rat density and flea index decreased to acceptable levels and no new cases occurred. The cause of this outbreak was likely due to rat die off in the villages, such that rat flea populations migrated to humans under environmentally favorable conditions. The outbreak was controlled after implementing environmental and educational control measures.

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