

Ebola Hemorrhagic Fever in Western Kasai: Patterns of Transmission & Procedures for Containment

Angela R. Noyce, Charlene M. Barton†*

**Johns Hopkins Hospital, Baltimore, MD, USA;*

† Department of Public Health, San Francisco, CA

ABSTRACT

During 2007, an outbreak of Ebola Haemorrhagic Fever (EHF) occurred in the Western Kasai (Kasai Occidental) province in the Democratic Republic of the Congo (DRC). Between April and October, more than 170 victims died from EHF, with more than 400 infected. Consistent with findings in the Oct 23, 2007 issue of the Proceedings of the National Academy of Sciences, sample analysis of the Kasai isolates indicated the involvement of an emerging genetic lineage of Ebola named lineage B.

Ebola is a highly contagious disease that proves lethal in 50% to 90% of cases. Initial symptoms include fever, headache, joint and muscle aches, sore throat and weakness. Subsequent symptoms may include diarrhea, vomiting and stomach pain, and internal/external bleeding. There is no vaccine or specific treatment for the disease, making containment and isolation the only effective treatment.

Working from mobile laboratories alongside WHO's Global Alert and Response Network in Kasai Occidental, we were able to identify and isolate the transmission vectors for the outbreak, with complete containment of the epidemic by mid-November 2007. In documenting our process for isolation and containment, we suggest the most likely risk factors and probable patterns of spread involved in the Kasai epidemic.