

**Cross-sectional Survey of Rift Valley Fever Virus Exposure in Bodhei Village
Located in a Transitional Coastal Forest Habitat in Lamu County, Kenya.**

**Muiruri S., Kabiru E. W., Muchiri E. M., Hussein H., Kagonda F.,
LaBeaud A. D., King C. H.**

Abstract

Few studies have focused on Rift Valley fever virus (RVFV) transmission in less arid, transitional landscapes surrounding known high-risk regions. The objective of this study was to identify evidence of RVFV exposure in Bodhei Village in a forested area at the edge of the RVFV-epidemic Garissa region. In a household cluster-based survey conducted between epidemics in early 2006, 211 participants were enrolled. Overall seroprevalence for anti-RVFV was high (18%) and comparable with rates in the more arid, dense brush regions farther north. Seroprevalence of adults was 28%, whereas that of children was significantly lower (3%; $P < 0.001$); the youngest positive child was age 3 years. Males were more likely to be seropositive than females (25% versus 11%; $P < 0.01$), and animal husbandry activities (birthing, sheltering, and butchering) were strongly associated with seropositivity. The results confirm that significant RVFV transmission occurs outside of recognized high-risk areas and independent of known epidemic periods.