

# Dengue and West Nile Virus Transmission in Children and Adults in Coastal Kenya

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Dengue virus (DENV) and West Nile virus (WNV) are important reemerging arboviruses that are under-recognized in many parts of Africa due to lack of surveillance. As a part of a study on flavivirus, alphavirus, and parasite exposure in coastal Kenya, we measured neutralizing antibody against DENV and, to evaluate assay specificity, WNV in serum samples that tested positive for serum anti-DENV IgG by enzyme-linked immunosorbent assay. Of 830 anti-DENV IgG-positive samples that were tested for neutralizing activity, 488 (58.8%) neutralized DENV and 94 (11.3%) neutralized WNV. Of children ≤ 10 years of age, 23% and 17% had serum neutralizing antibody to DENV and WNV, respectively, indicating that DENV and WNV transmission has occurred in this region within the past decade. The results suggest that ongoing DENV and WNV transmission continues on the coast of Kenya and supports a need for routine arboviral surveillance in the area to detect and respond to future outbreaks.