

West Nile virus activity in mosquitoes and domestic animals in Chiapas, México.

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Abstract

Prior to 2006, West Nile virus (WNV) had not been definitively detected in Chiapas, the southernmost state of Mexico, although it circulates elsewhere in Mexico and Central America. We collected over 30,000 mosquitoes and blood-sampled 351 domestic animals in Chiapas in search for evidence of current or recent transmission of WNV. Two mosquito pools tested positive for WNV RNA and 17 domestic animals tested positive for specific WNV-neutralizing antibodies, including young animals (<1 year old) in four of five sampled locations. The two WNV-positive mosquito pools were collected on the Pacific coastal plain of Chiapas in June, 2006, and included a pool of *Culex nigripalpus*, a suspected vector of WNV, and a pool of *Cx. interrogator*. The sequence of a 537-nucleotide portion of a cDNA amplicon derived from the WNV NS5 gene from the *Cx. interrogator* pool contained a single silent nucleotide substitution when compared to WNV strain NY99.