

721

---

**MAYARO FEVER VIRUS OUTBREAK IN SANTA BARBARA,  
PARÁ STATE, BRAZIL, 2008**

Raimunda S. Azevedo, Valéria L. Carvalho, Eliana V. da Silva,  
Jannifer O. Chiang, Joaquim P. Nunes Neto, Hamilton A.  
Monteiro, Daniele F. Henriques, Márcio R. Nunes, Vítor S. Peixoto,  
Sueli G. Rodrigues, **Pedro F. Vasconcelos**

*Instituto Evandro Chagas, Belém, Brazil*

Mayaro fever virus (Togaviridae: Alphavirus) is associated with febrile disease in tropical South America, and transmitted by *Haemagogus janthinomys* mosquitoes. In February 2008 an outbreak of a dengue-like rash febrile disease was recognized in a settlement in the Santa Barbara municipality 38 km eastern Belém, Brazil. Febrile patients and their relatives were bled for attempts of virus isolation and IgM detection by ELISA, respectively. A total of 105 people (53 residents in the settlement and 52 students of a public university which were training in the area) were bled and blood samples taken in Santa Barbara municipality. All serum samples were submitted to an IgM ELISA against Mayaro fever virus antigens, while blood of acute febrile patients were inoculated into C6/36 cells and suckling mice. Two Mayaro virus strains from febrile patients were isolated in both systems and were confirmed by serologic and molecular techniques. By serology, 36 (34.3%) serum samples were positive to IgM detection; 43.4% (23/53) people resident in the settlement and 25% (13/52) students. Age of Mayaro confirmed cases ranged from 4 to 55 years old; 21 (58.3%) were male and 15 (41.7%) female; 47.8% were agriculture workers, 30.4% students, and 21.8% of other occupation. The clinical picture presented by infected people was characterized by a febrile illness with a sudden onset. The most important symptoms/signs were headache (63.8%), retroocular pain (44.4%), myalgia (75%), arthralgia (88.9%), articular edema (58.3%) and skin rash (63.8%). Other symptoms presents were dizziness (25%), vomiting (13.9%), itching (33.3%), anorexia (22.2%) and lymph nodes (16.7%). Differential diagnosis with other common maculopapular exanthema illnesses in Brazil including dengue fever resulted negative. After the rainy season, the transmission was interrupted in the area. This is the first Mayaro fever virus outbreak in Santa Barbara.