Am J Trop Med Hyg 2008 Sep;79(3):364-71.

## Clinical characteristics and national economic cost of the 2005 dengue epidemic in Panama.

Armien B, Suaya JA, Quiroz E, Sah BK, Bayard V, Marchena L, Campos C, Shepard DS.

Department of Genomics and Proteomics, Instituto Conmemorativo Gorgas de Estudio de la Salud, Panamá. barmien@gorgas.gob.pa

In 2005, Panama experienced the largest dengue epidemic since 1993. We conducted both a prospective clinical and a national economic study. The full cost analysis measured costs of dengue cases and of dengue control efforts in the entire country. Costs are in 2005 US\$. Ambulatory patients were 130 of the 136 participants, with 82% adults (18+) and 62% women. Duration of fever and illness averaged 6.1 (standard deviation [SD], 5.3) and 21.2 (SD 13.5) days, respectively. Loss in quality of life averaged 67% (SD 21) during the worst days of illness. An average ambulatory and hospitalized case cost \$332 and \$1,065, respectively. Although 5,489 cases were officially reported, the Ministry of Health (MOH) estimated 32,900 actual cases, implying a total cost of \$11.8 million. Additionally, estimated government spending on dengue control efforts was \$5 million. This dengue epidemic had a major disease impact and an economic cost of \$16.9 million (\$5.22 per capita).