

IMPACT OF DENGUE IN THAILAND AT THE FAMILY AND POPULATION LEVELS

Clark DV, Hansen PH and Mammen MP

Dengue fever/dengue hemorrhagic fever, considered by the World Health Organization as the most important resurgent tropical infectious disease, constitutes a substantial health burden on Thai people. This study compiled disease burden data, which are used in resource allocation decisions, for dengue in Thailand at the family and population levels; the impact of dengue fever on the families of patients in the Kamphaeng Phet district hospital with laboratory confirmed dengue in 2001 was assessed, and the Disability Adjusted Life Years (DALYs) lost for fatal and non-fatal cases of dengue were calculated for Thailand as a whole. Summing the direct cost of hospitalization (found to be ~US\$24) and indirect costs due to loss of productivity (~US\$20 for 4.2 reported days of missed work) and multiplying by the average number of persons infected per family (found to be 1.4 persons) resulted in a financial loss of ~US\$61 per family, which is more than the net average monthly income in Thailand. Calculation of DALYs used select results from the family level survey, and resulted in an estimated 731.7 DALYs/million population in 2001. This figure is on the same order of magnitude as the impact of the tropical cluster (trypanosomiasis, chagas disease, schistosomiasis, leishmaniasis, lymphatic filariasis, and onchocerciasis), malaria, meningitis, and hepatitis in all of Southeast Asia in 2000. These results indicate that dengue prevention, research, and control should be considered equally as important as that of diseases currently given priority.

**51st Annual Meeting of the American Society of Tropical Medicine and Hygiene.
Denver, Colorado, USA. 10-14 November 2002.**
