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ABSTRACT

This study observed the pattern of reported dengue infections, clinical manifestations, and circulating dengue serotypes in Negeri Sembilan, Malaysia. The aim of this study was to determine the co-circulation of the four different dengue virus serotypes in Negeri Sembilan. We analyzed the surveillance data (VEKPRO) from Negeri Sembilan State Health Department and National Public Health Laboratory, Malaysia on reported dengue infections from 1st January 2010 to 31st December 2010. There were 1466 reported dengue infections, 1342 (91.5%) cases were dengue fever (DF) and 124 (8.5%) were dengue hemorrhagic fever (DHF). The mean age was 32.2± 15.8 years old and most were young adults, aged 15 years old and older. Males (p < 0.05), and those residing in Seremban district (p < 0.05) were more likely to get dengue infections. Symptoms presented upon admission were fever (100%), headache (99.9%), myalgia and arthralgia (98.8%), rash(24.2%), petechiae (16.0%), bleeding tendencies (7.0%) and neurological deficits(1.2%). All four dengue serotypes (DEN 1 – 4) were present, the pre-dominant serotype was DEN-3, noted in January, then existed together with DEN-2 until around May. DEN-1 was the most pre-dominant circulating dengue serotype afterwards, reaching a peak in December 2010. Dengue affected all age groups particularly young adults and males. Most cases reported were in urban areas and Seremban district. Most of the dengue infections occurred in the first half of the year, with the DEN-2 and DEN-3 serotypes being the most predominant.

Key words: Dengue fever (DF), dengue haemorrhagic fever (DHF), socio-demographic factors, dengue serology, dengue serotype.