

MEDICINE Health

The Official Journal of The Faculty of Medicine UKM



DENGUE CLUSTER MONITORING USING GEOGRAPHICAL INFORMATION SYSTEM (GIS) IN SEREMBAN, NEGERI SEMBILAN.

² Vector Borne Disease Unit, State Health Department, Negeri Sembilan, Malaysia

Background:

The Ministry of Health (MOH) Malaysia is giving serious attention to the rising national trend of dengue cases over the last few years. In Negeri Sembilan, Seremban reported the highest number of dengue cases over the years. To understand the transmission dynamic of dengue we use GIS to analyse and visualize the cases in Seremban.

Materials and Methods:

Data for the dengue cases from 2008 to 2009 was taken from VEKPRO System, Vector Borne Disease Unit, State Health Department, Negeri Sembilan. The data was then overlay with digital map of Negeri Sembilan and analyse using ArcGIS 9.2.

Results:

In district of Seremban, the highest dengue cases reported was in Ampangan subdistrict. Clusters of dengue cases can be visualized in many residential areas such as Taman Paroi Jaya, Taman Tuanku Jaafar and Taman Seremban Jaya.

Conclusion:

Dengue transmission depends on vector population and density of population in the affected areas. Using GIS we could visualize the pattern of dengue transmission in the community and perhaps providing better prevention and control in the future.

Keywords:

dengue, GIS, cluster, visualization

¹Department of Community Health, Faculty of Medicine, Universiti Kebangsaan Malaysia Medical Centre, Kuala Lumpur, Malaysia