

DENGUE OUTBREAK ALERT SYSTEM EMPLOYED AT KANCHANADIT HOSPITAL, SURAT THANI PROVINCE, THAILAND

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Abstract. An alert system for dengue epidemic was designed as a web application for all 18 sub-district health offices of Kanchanadit Hospital network in Surat Thani Province, southern Thailand. A dengue database was developed using MySQL software and Apache Server, with programming conducted with PHP-script. A PHP mailer and SMS API were employed for notification via E-mail and mobile phone. Google Chart and Google Maps™ API technology were adopted for data representation of dengue cases. Hospital administrators managed dengue patients' data in the province and general users were able to access the overall status of dengue and other pertinent information. The system generated a report on dengue cases in an online graphical format enabling hospital personnel and public to prepare and take appropriate preventive measures. Data on dengue epidemic provided by this alert system should be useful for decision makers and help guide development of public health policy to control future dengue epidemics in this region of the country.

Keywords: alert system, dengue epidemic, E-mail, SMS, spatial distribution

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