

## **Temporal and spatial mapping of hand, foot and mouth disease in Sarawak, Malaysia**

### **ABSTRACT**

Hand, foot and mouth disease (HFMD) is endemic in Sarawak, Malaysia. In this study, a geographical information system (GIS) was used to investigate the relationship between the reported HFMD cases and the spatial patterns in 11 districts of Sarawak from 2006 to 2012. Within this 7-years period, the highest number of reported HFMD cases occurred in 2006, followed by 2012, 2008, 2009, 2007, 2010 and 2011, in descending order. However, while there was no significant distribution pattern or clustering in the first part of the study period (2006 to 2011) based on Moran's I statistic, spatial autocorrelation ( $P = 0.068$ ) was observed in 2012.

**Keyword:** Hand; Foot and mouth disease; Geographical information systems; Spatial autocorrelation; Malaysia