

0039 **GIS AND IS BASED TRAFFIC ACCIDENT IN KHONKAEN MUNICIPALITY, THAILAND**

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10.1136/ip.2010.029215.39

KhonKaenHospital, has been developed the Injury Surveillance (IS) system since 1989 and the Geographic Information System (GIS) since 1998. Beyond these database, the most common causes of the traffic crash was human error (ie, drunk driver 37%, non-helmet driver 50%, non-seatbelt used 75%), moreover the road environment were also impact on the number of crashes. **Objectives** This study aimed to monitor and evaluation the provincial road safety action and utilises the results for traffic injury prevention.

**Method** Both IS and GIS information were distributed to the provincial road safety committee and implemented to road side by road safety auditor and municipality road safety team, then re-evaluated by those databases. It was retrospective data of the traffic injuries in Khon Kaen municipality, registered to the hospital from 1 January 2007 to 30 June 2009. By using IS and GIS software and analysed by descriptive study.

**Results** It was 256 road sections and 62 intersections in whole municipality. Within 2.5 years, the 1540 injuries were indicated the increasing injury rate in 15 intersections and eight road sections were distributed to the committee and then notified for road safety auditing.

**Recommendation** The GIS and IS database were effective tools to monitor and evaluate the road safety outcome.