To evaluate Emergency department-based geo-information injury surveillance (IS) system using guidelines from WHO and Centre for Disease Control and Prevention (CDC). According to criteria of WHO IS guidelines and CDC checklists of public health surveillance system, the process and utilisation on data collected by electronic emergency-based geo-information injury system in 2009 was evaluated. References were also taken from policy briefing on IS: a health policy priority from EuroSafe (2009) and evaluation framework for IS systems developed by Mitchell et al (2008). Results were analysed according to WHO IS attributes: sensitivity, reliability, timeliness, simplicity, acceptability, flexibility and utilisation. And evaluated using CDC checklists of public health surveillance system: (a) Engage stakeholders in evaluation; (b) Evaluation of IS system according to public health importance, purpose, operation system and available resources; (c) Focus on evaluation design; (d) Credible evidence regarding performance of IS system; (e) Justify, state conclusions and make recommendations; and (f) Ensure use of evaluation findings and share lessons learned. The use of Geographic Information System helped to identify high risk/clustering of injuries, in developing specific interventions based on locations, mechanisms and high risk groups. It is feasible to develop IS system that satisfies largely WHO and CDC guidelines. Geo-spatial is a powerful tool for analysis and presentation of injury information for planning and implementation of safety promotion and injury prevention strategies.