



## Other Abstracts

# Hospital Injury Surveillance Makes a Difference for Preventing Injuries in the Community.

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### **Introduction:**

Injury surveillance has been recognized as a key issue in injury prevention and safety promotion. It helped identify problems, define extend and determine causative factors that was amenable to intervention. Hospital emergency department was a common source of data for injury surveillance (Schelp and Svanstrom 1987). The paper presented the experience of Princess Margaret Hospital in the development and implementation of an automated injury surveillance system in the emergency department. The significant use in community injury prevention would also be shared.

### **Purpose of the Project**

The purpose was to implement automated injury surveillance in the hospital, which helped design, implementation and evaluation of effective injury prevention programs in the community.

### **Material & Methods:**

A working group has been formed with domain knowledge and information technology input. The system helped to answer scenario based query for various type of injuries. Recent enhanced version system also embraced the Geographic Information System (GIS) and interactive body map for accurate injury coding. The result was interpreted by the concerned specialist (appendix 1) like traffic engineer, community nurse, occupational therapist and physiotherapist. Safety promotion approach was then imitated and preceded for preventing injury. The surveillance system would also be used for programs evaluation.

### **Findings:**

It was proven to be a cost effective injury surveillance system (20 seconds per case entry, 85% capture rate). There was no missing data as it was guarded by preset logic control. The system could also help preventing community injury, especially for identifying location of event (appendix 2) and accurate injury coding for ICD-10<sup>1</sup>, AIS 05<sup>2</sup> and calculation for ISS<sup>3</sup>. Recently, a pilot program was done in two identified residential homes for elderly (RCHE). There was significant result with reduced 36.5% and 17.6% of injury cases in 6 months respectively, which contributed direct injury cost-saving of HK\$ 154,990.

### **Conclusion:**

It was feasible to develop an automatic surveillance system to collect the valuable data to prevent injury in the community. It included a structure of personnel, activities and supporting system. The model has positive implication for injury prevention, especially for outdoor injuries. Adding together, cost effective and target intervention programs would be produced with significant results.

### Note

1. ICD-10 International Classification of Diseases, WHO, (2) AIS 05 Abbreviated Injury Scale (AIS) 2005, Association for the Advancement of Automotive Medicine (AAAM), (3) ISS - Injury Severity Score (ISS), Association for the Advancement of Automotive Medicine (AAAM)