

# 2009

## Injury Surveillance Report 傷害事故專題報告書



Kwai Tsing Safe Community and Healthy City Association  
葵青安全社區及健康城市協會

Kwai Tsing Safety Promotion and Injury Prevention Centre  
葵青安全促進及傷害預防中心



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## Injury surveillance report

## Foreword

Kwai Tsing Safe Community and Healthy City project launched in 2000 aims at creating a platform to build a safe and healthy living environment by involving community stakeholders in the process. Through the settings approach, numerous safety and health projects have been successfully completed with high regards from many local and overseas organizations.

In order to monitor the injurious status in the community, the Kwai Tsing Safe Community and Healthy City Association (KTSCHCA) joint hands with Princess Margaret Hospital (PMH) to pilot an injury surveillance system (ISS) in September 2003. Through collaborative efforts among the OSH Council, PMH and PolyU in 2005, a web system was designed to support electronic input at the triage station of the A&E of PMH. In 2007, with the support from the Kwai Tsing District Council and District Office, the system was further enhanced with Geographic Information System (GIS) and e-map of Hong Kong. With the new technology, more accurate record of the place, time, cause and context of the injuries was captured to form an injury database for the district. Furthermore, the GIS application is capable for better analysis and evaluation of injury prevention programs.

In 2007, the Kwai Tsing Safety Promotion and Injury Prevention Centre was set up in the Community Health Resource Centre of PMH. It is responsible to maintain the operations of the ISS; coordinate and manage various prevention programs: including research studies, statistical reports and liaison with government agencies in the areas of injury prevention and safety promotion.

This Kwai Tsing Injury Report 2009 is the first publication to report the statistics of the injured cases attended the A&E of PMH in the year. With the detailed analysis of the common types of injuries, the report would be a useful reference for government departments, organizations and individuals in setting safety policies in the community.

Our deepest gratitude is to Kwai Tsing District Council and Princess Margaret Hospital. Without their dedication and support, this report could not be completed and be useful in building up a safe and healthy community in Kwai Tsing.

Kwai Tsing Safety Promotion and Injury Prevention Centre Steering Committee  
Co-chairmen, Dr. Nancy Tung and Mr. Chow Yick Hay  
BBS JP

## 傷害監察系統報告

## 前言

葵青安全社區成立的目的是建立一個平台，讓社區機構可以參與，為社區共同建設一個安全健康的生活及工作環境。由 2000 年開始，很多安健計劃已成功地落實於社區人口聚集的地方；得到各方面的讚賞。

為了更有效地掌握地區意外受傷的情況，葵青安全社區及健康城市協會與瑪嘉烈醫院在 2003 年 9 月共同開展一個傷害監察系統的先導計劃。2005 年，在職安局的資助下，協會聯同香港理工大學及瑪嘉烈醫院進行研究，成功設計了一套意外傷害監測系統。其後在 2007 年得到葵青區議會的贊助，葵青民政事務處的協助採用地理電子系統，將受傷個案的原因、過程、地點等匯集成資料庫，透過電子地圖，將傷害數據進行分析及評估。

葵青區安全促進及預防傷害中心在 2007 年 12 月成立，設置於瑪嘉烈醫院社區健康資源中心。中心負責管理傷害監察系統的日常運作，統籌和推行各項預防傷害計劃及進行科研、分析、提交報告，並聯繫各政府機構以推動安全促進的工作。

「2009 年葵青區傷害報告書」是本中心首份公開發表的報告書。內容包括全年在葵青區發生在瑪嘉烈醫院急症室求診的受傷個案，為最普遍的受傷原因進行詳細分析。希望這份報告可以提供有用的數據予有關的政府部門、機構及人士，作為制定改善社區安全工作的參考資料。

本會十分感謝葵青區議會的贊助，瑪嘉烈醫院的協助進行分析及編寫，使本報告書得以順利出版；為葵青構建一個安全和健康的社區。

葵青安全促進及傷害預防中心督導委員會聯席主席

董秀英醫生

周奕希 BBS, JP

## Kwai Tsing Safe Community and Healthy City Association

## Safe Community

Safety is a fundamental human right as one of the guiding principles developed by the WHO, (1989) that deserves universal concern and concerted effort to promote globally. To be a safe community is not what has been achieved or the current status in safety issue, but a commitment to safety and a process and structure to achieve it continuously. Safe community is a long term development initiative that aims to promote and sustain safety for the population.

## Kwai Tsing Safe Community

Starting from the inauguration of the Kwai Tsing Safe Community, a wide range of safety promotional programs had been implemented: including projects for occupational safety and health, for home safety, for road safety and 6 for crime prevention. Several surveys had also been conducted to assess and raise the community's perception on safety issues. As reflected in the injury data collected from AED of PMH during 2001 to 2003, a nearly 50% reduction in injuries were achieved. After the site visit by WHO Official in November 2002, Kwai Tsing was designated as the 73rd Safe Community on 18 March 2003 and re-designated again on 26 November 2007.

## Kwai Tsing Safe Community and Healthy City Association

In August 2002, the Kwai Tsing Safe Community and Healthy City Association was established as a charitable organization. It seeks to provide a sustainable structure to continue the work towards a Safe Community. The Association works alongside with the Kwai Tsing District Council to coordinate community development projects through partnership and amalgamation of resources from the government, local organizations, health services, educational institutions, enterprises and voluntary agencies. Through the collaboration of the community partners, many local projects can be implemented to achieve a safe and healthy living environment for the local residents.

## Objectives of the Association:

1. To promote public health and public safety by establishing safe environments and healthy habits in daily living;
2. To recognize major public health and public safety issues and for such purposes to make innovative changes by the pooling of community resources and concerted efforts;
3. To create supportive environment that develop and sustain the public health and public safety of Kwai Tsing citizens through intersectoral participation and community partnership.
4. For the purpose of the Association, to promote equal right to access to health care regardless of one's race, religion, political belief, economic or social status;
5. To work in cooperation with World Health Organization and other international bodies to advance the objects of the Association.

## 葵青安全社區及健康城市協會

## 安全社區

根據世界衛生組織(世衛)於 1989 年訂定的原則，安全是人類基本人權並值得全球關注及推廣的議題。要被世衛確認為安全社區，不單是要達至安全的指標，更要有承擔及持續地建構社區成為一個長遠發展的項目，令居民有共同的理念與安全社區一起成長。

## 葵青安全社區

隨著葵青安全社區成立開始，安全促進的工作計劃亦陸續實行。其中包括針對不同年齡人士而設的安全促進活動；有關職業安全、預防家居意外、道路安全和防止罪案的活動亦成為安全社區的常設工作。與此同時，葵青區亦進行了多項調查，以剖析及提升居民對安全的意識和警覺性。在 2001 至 2003 年期間，在葵青區急症求診的意外傷亡數字大大減少近五成。於 2003 年 3 月 18 日及 2007 年 11 月 26 日經世界衛生組織正式獲確認及再確認為全球第七十三個「安全社區」。

## 葵青安全社區及健康城市協會

為持續發展安全社區，「葵青安全社區及健康城市協會」於 2002 年 8 月成立，並註冊成為非牟利團體。協會致力與葵青區內不同政府部門、地區組織、非政府機構、醫療服務、教育機構及工商企業，透過合辦不同的健康推廣計劃服務，持續為葵青區建立一個安全健康的生活及工作環境。

## 協會目標

1. 建立安全環境和文化以推廣公共健康及社區安全。
2. 匯集地區資源和力量，對公共健康及社區安全的議題作出改善。
3. 結合社區夥伴作為平台，以發展和維持葵青區居民大眾健康及安全。
4. 作為社區平台，讓不同種族、宗教、政治理念、經濟環境等各階層人士可獲得有關健康及安全訊息。
5. 與世衛及其他國際機構緊密合作推動安全社區。

## 1. Executive Summary

★ 1.1 Injures, unintentional or intentional, constitute a major public health problem.<sup>1</sup> Nowadays, injuries are known to be preventable. Safe Community and Healthy City Project in Kwai Tsing has been a long-term urban health development since Year 2000. To further plan and monitor the Safe Community movement, pioneering efforts were made to design and develop an injury surveillance system. The system was to capture data on injuries presented at the Accident and Emergency Department (AED) of Princess Margaret Hospital (PMH). An injury map was produced to show the prevalence of different types of injuries at different locations in the district.

★ 1.2 A total of 18,595 cases were captured in 2009. Male contributed to over 58.0% while female represented 42.0% of the injury attendance. About 13.3% were aged 14 or below. About 66.4% were aged 15-64. And the percentage for the elderly aged 65 and above was 20.3%. The great majority of the injury cases were unintentional (82.9%). Nearly one-third of injury events occurred at home (32.4%). About 17.2% happened on highway/street and about 7.6% in factory/workshop. About 39.7% of injury cases were caused by fall, 22.8% by other blunt force, and 7.4% by stab/cut.

★ 1.3 Further analyses on fall injuries, traffic injuries, work injuries, domestic violence and self harm were explored. Over half of the fall injuries were happened to females (53.1%) while 46.9% to their male counterparts. The percentages of fall injuries for infants aged below 4 and the elderly aged 75 and above were higher. About 40.8% of injury events occurred at home. For traffic injuries, the majority of the traffic injuries were happened to males (71.9%). The percentages of traffic injuries for adults aged between 25 and 54 were higher. For work injuries, the percentage was large for males (72.4%). The percentages of work injuries for adults aged 20 to 59 were higher. About 29.5% of work injury occurred at factory / workshop. About 10% of work injuries occurred in airport (10.3%), highway/street (9.8%) and container port/wharf (9.4%). Further 8.8% of work injuries occurred in office/company. About 40.6% of work injuries were happened to services workers, technicians (9.6%) and machine operators (6.3%). In fact, further research is suggested for conducting in-depth studies of different types of injuries as the analyses of injury surveillance system provide an overall picture instead of detail reference for policy making and solutions.

## 1. 行政概述

★ 1.1 故意或非故意的受傷是主要的公眾健康問題<sup>1</sup>。現今所知，受傷是可以避免的。早於 2000 年，葵青安全社區及健康城市協會計劃已開始建立長期的市區健康發展。為延續計劃和監察安全社區運動，事前著力設計和建立傷亡監察系統。系統用作收集瑪嘉烈醫院急症室所公佈的受傷數據，並製作受傷地圖來顯示區內不同位置、不同類型的受傷事故率。

★ 1.2 在 2009 年，共錄得 18,595 宗個案，受傷者中男性佔超過 58.0%，而女性則佔 42.0%，大約 13.3% 受傷者年齡介乎 14 歲或以下，大約 66.4% 受傷者年齡介乎 15-64 歲，而年齡介乎 65 歲或以上的長者則佔大約 20.3%。受傷個案大都是非故意的 (82.9%)，接近三分之一的受傷事固發生在家居 (32.4%)，大約 17.2% 發生在公路或街道，及大約 7.6% 發生在工廠 / 工場。受傷個案中跌倒的佔大約 39.7%，撞傷的佔 22.8% 及割傷的佔 7.4%。

★ 1.3 經進一步對跌傷，交通意外受傷，工作受傷，家庭暴力及自我損傷作分析和探討，跌倒受傷的傷者女性佔大多數 (53.1%)，男性佔 46.9%，四歲以下的嬰兒及 75 歲或以上的長者跌倒受傷的百分率較高，大約 40.8% 的受傷個案發生在家居。至於交通意外受傷的，傷者男性居多 (71.9%)，成人介乎 25 至 54 歲在交通意外受傷的佔大多數。除此之外，工作時受傷的傷者男性居多 (72.4%)，年齡介乎 20-59 歲所佔的百分率較高，工作時受傷的個案中，約 29.5% 發生在工廠或工場，工作時受傷的大約 10% 個案發生在機場 (10.3%)、公路或街道 (9.8%) 及貨櫃港口或碼頭 (9.4%)，其餘的 8.8% 發生在辦公室或公司，約有 40.6% 的工作受傷個案的傷者是服務人員、技工 (9.6%) 及機械操作員 (6.3%)。事實上，建議進行更深入調查不同類型的受傷，因為傷亡監察系統提供整體的情況，而不是詳細的參考決策和解決方案。

## 2. Introduction

### Injury could be prevented

★ 2.1 Injures, unintentional or intentional, constitute a major public health problem.<sup>2</sup> Nowadays, injuries are known to be preventable. It is essential to develop effective prevention strategies, by doing so, more information indicating the numbers and types of injuries that occur and how serious of the injury problem are needed. Therefore, injury surveillance is a crucial first step for reducing the burden of injury worldwide.

### A Safe Community & Healthy City Project in Kwai Tsing<sup>3</sup>

★ 2.2 Kwai Tsing (KT) is one of the 18 Administrative Districts in Hong Kong with 523,300 residents. It is famous for the large container terminal and highway networks; and is close to the international airport. Safe Community and Healthy City Project in KT has been a long-term urban health development since Year 2000. At the initial stage, efforts were made in establishing the structure so as to put the community partners together and working towards the same goal. In order to sustain the community work, the Kwai Tsing Safe Community and Healthy City Association as a Non-Governmental Organization was formed in August 2002. After SARS, a more systematic approach was adopted. A study on Community Diagnosis was conducted with issues identified and followed up by the local District Council. Setting approach was adopted to promote safety and health in schools, elderly homes, housing estates and hospital. Collaborative partners were set up to perform site inspection, health and safety promotion, education and management control. Moreover, to establish firm footings in the community, Community Health Resource Centre was set up in the PMH and Tsing Yi.

★ 2.3 In 2005, the Safe and Health Charter was launched. The program included 45 information display stations and 23 health galas for over 2,000 residents in KT. A movement was subsequently launched in 2006/07 for the prevention of 3-Highs, i.e. hypertension, high blood sugar and high blood cholesterol. Another demonstration project was the Diabetes Retinopathy Screening Program launched in November 2005. The target was to provide annual eye examination preventing blindness for diabetes patients.

## 2. 引言

### 傷亡是可以避免的

★ 2.1 故意或非故意的受傷是主要的公眾健康問題<sup>2</sup>。現今所知，受傷是可以避免的，所以，要建立有效的預防策略是非常重要的。要建立這些策略，需要更多資訊顯示發生受傷的次數和種類，及受傷問題之嚴重程度。因此，傷亡監察是減少整體受傷負荷的重要起步。

### 葵青區安全社區及健康城市計劃<sup>3</sup>

★ 2.2 葵青是香港十八區之一，有居民 523,300 人，以大型貨櫃碼頭和公路網絡聞名，而且葵青鄰近香港國際機場。自 2000 年起，葵青區的安全社區及健康城市計劃成為長期的市區健康發展。在初期，主要致力建立架構以集合社區伙伴，向共同目標進發。為維持社區工作，葵青安全社區及健康城市協會以非政府機構名義，於 2002 年 8 月成立。在 SARS 疫症發生後，協會採用更有系統的方法，進行了社區診斷的研究，得出問題所在，並由區議會跟進。協會以地區為本，在學校、安老院、屋邨和醫院推廣安全和健康。協會亦安排合作機構進行實地視察、安全和健康宣傳、教育及管理控制。此外，為建立穩固的基礎，協會於瑪嘉烈醫院和青衣設置社區健康資源中心。

★ 2.3 在 2005 年推出安全及健康約章，計劃包括為葵青超過 2,000 名居民設立 45 個安全健康資訊站和舉辦 23 個社區健康日。其後又在 2006/07 年推行預防「三高」的運動，即高血壓、高血糖和高膽固醇。另一個示範計劃是在 2005 年 11 月推出的糖尿病視網膜病變篩檢服務，目的是要為糖尿病患者提供每年眼睛檢查，以防眼盲。

<sup>1</sup> WHO, Injuries and Violence Prevention Department <sup>1</sup> 世界衛生組織預防傷患及暴力處

<sup>2</sup> WHO, Injuries and Violence Prevention Department

<sup>2</sup> 世界衛生組織預防傷患及暴力處

<sup>3</sup> Kwai Tsing Safe Community and Health City Project 2000-2007 <sup>3</sup> 葵青安全社區及健康城市計劃 2000-2007

★ 2.4 To further plan and monitor the Safe Community movement, pioneering efforts were made to design and develop an injury surveillance system. The system was to capture data on injuries presented at the Accident and Emergency Department (AED) of Princess Margaret Hospital (PMH). An injury map was produced to show the prevalence of different types of injuries at different locations in the district. The committee overcame considerable challenges and difficulties in achieving the target of 36% reduction of injuries from 2002. In the past 7 years, KT has set a role model to integrate safe community and healthy city in Hong Kong – i.e. firstly designated and re-designated as the 73rd Safe Community in 2003 and 2007, respectively; and became the Founding Member of the Alliance for Healthy Cities in 2004. It also provided a good foundation for the bottom-up approach in promoting community health in addition to the formal health services organizations.

### Injury Surveillance System

★ 2.5 An injury surveillance system was piloted at the Accidents and Emergency Department (AED) of Princess Margaret Hospital (PMH) in September 2003. Funded by OSH Council and assisted by Hong Kong Polytechnic University, the system was designed to capture the data related to all types of injuries at the AED of PMH. It is used to provide directions for injury prevention.<sup>4</sup>

★ 2.6 The surveillance system was developed in 4 phases.

#### Phase I

All injured attendances to the AED were assessed by the triage nurses using the injury classification (WHO&CDC, 2001).

#### Phase II

A local injury classification with electronic input was compiled.

#### Phase III

It involved prototype development, training and reliability check. The system would integrate with the hospital current database. These databases included the International Classification of disease (ICD-9-CM), Abbreviated Injury Scale (AIS) and Injury Severity Scale (ISS).

#### Phase IV

Usability test would be performed in phase 4 for system evaluation.

★ 2.4 為延續計劃和監察安全社區運動，較早前已開始著力設計和建立傷亡監察系統。系統用作收集瑪嘉烈醫院急症室所公佈的受傷數據，並製作受傷地圖來顯示區內不同位置、不同類型的受傷事故率。自 2002 年起，協會克服了數個挑戰和困難，達到減少 36% 受傷的目標。在過去 7 年，葵青區在香港各界成了結合社區安全和城市健康的模範，並在 2003 年獲確認為全球排名第 73 的安全社區，並於 2007 年再次獲得此確認。另外，葵青區亦在 2004 年成為健康城市聯盟的創始成員。此外，葵青區除了提供正統健康服務機構外，亦為由下而上推廣社區健康提供一個良好的基礎。

### 傷亡監察系統

★ 2.5 在 2003 年 9 月，葵青區在瑪嘉烈醫院急症室開展了傷亡監察系統先導計劃。系統開發得到職安局的資助，協會聯同香港理工大學，設計將瑪嘉烈醫院急症室所有種類的受傷資料匯集成資料庫，並為受傷數據進行了分類及評估。<sup>4</sup>

★ 2.6 監察系統的發展分為四個階段。

#### 第一階段

根據世衛受傷分類所指，為所有到急症室求診的傷者進行分流。(世界衛生組織及美國疾病控制及預防中心，2001)。

#### 第二階段

是把第一階段的受傷分類資料轉化成電子數據。

#### 第三階段

是監察系統的原型發展、訓練及可靠性測試。此系統軟件會與醫院的資料庫連結，當中包括國際疾病分類 (ICD-9-CM)，簡易受傷個案評估 (AIS) 及受傷嚴重程度評估 (ISS)。

#### 第四階段

是進行系統可行性測試，作系統評估。

★ 2.7 All the injury related AED attendance was recruited in 2006. The data entry points were located in the AED. After triage assessment, the nurse would enter the related information into the computer. The data was then retrieved from a reporting module with different levels of filtering. Standardized reports and scenario based reports were available. An analysis of data from injury surveillance system would provide a picture of the injury burden in the district.

★ 2.8 This report aims to make use of the data of 2009 obtained from the injury surveillance system which captured data on injuries presented at the Accident and Emergency Department (AED) of Princess Margaret Hospital (PMH) to inform relevant parties, including government departments, concern groups and other key players to increase and sustain action to prevent injuries. The report analyzes and firstly presents the profiles of the patients who suffered various injuries. Then, the report explores the potential leading causes of injury hospitalizations and associations to deaths. Later chapter further studies the specific areas of concern including fall injury, traffic injury, work injury, domestic violence and self harm injury. Exploration of risk factors based on these areas of concern is conducted to investigate the contribution and determinants of causing the injuries. Geographical analysis is also applied to locate hotspots where injuries are clustered and common. Finally, summary and recommendations address the concerns.

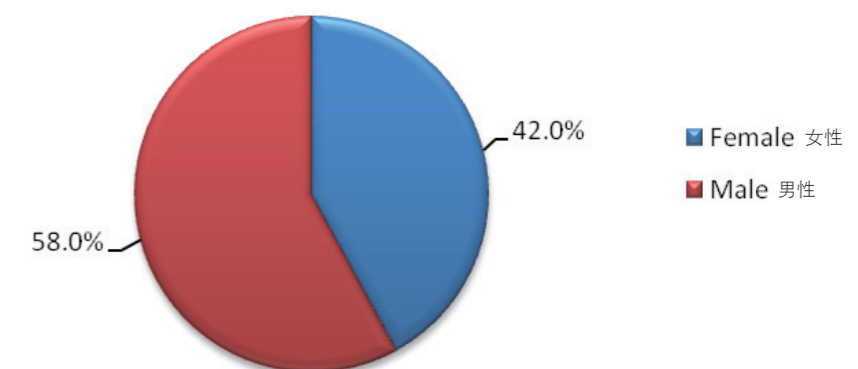
★ 2.9 There may be a slight discrepancy between the sum of individual items and the total as shown in the tables owing to rounding.

## 3. Descriptive analysis

★ 3.1 This chapter aims to explore the profile of the patients who were admitted to PMH for various injuries in 2009 captured in injury surveillance system.

★ 3.2 A total of 18,595 cases were captured. Male contributed to over 58.0% while female represented 42.0% of the injury attendance.

Percentage distribution by gender  
性別分佈



★ 2.7 在 2006 年，瑪嘉烈醫院收集所有因受傷到急症室求診的個案資料，資料輸入點位於急症室。醫護人員分流後，會把相關的資料數據輸入電腦，經過不同程度的資料過濾後，再從報表抽取數據，便可製成標準報告和特定情況報告。透過傷亡監察系統的資料數據分析，葵青區的受傷情況便可一目了然。

★ 2.8 本報告旨在使用從傷亡監察系統在 2009 年從瑪嘉烈醫院急症室所收集得的資料，告知有關人士，包括政府部門、關注團體和其他各主要成員，以增加和維持推廣活動，以防止傷亡。報告會分析並先舉列受到不同受傷之病人資料。然後，報告探究受傷住院的可能主因和受傷與死亡的關係。期後的章節會進一步研究問題的指定部分，包括跌倒、交通意外、工作受傷、家庭暴力和自我損傷。根據這幾個方面進行影響因素的探究，調查造成受傷的促成作用和決定因素，亦會採取地區分析的方法，找出受傷集中出現的地點。最後，報告將會提出問題的總結和建議。

★ 2.9 由於四捨五入關係，統計表內個別項目的數字加起來可能與總數略有出入。

## 3. 描述性分析

★ 3.1 本章旨在探究從傷亡監察系統中錄得，在 2009 年因各種受傷並在瑪嘉烈醫院入院的病人資料。

★ 3.2 合共錄得 18,595 宗個案。受傷的求診者中，男性的佔超過 58.0%，而女性佔了 42.0%。

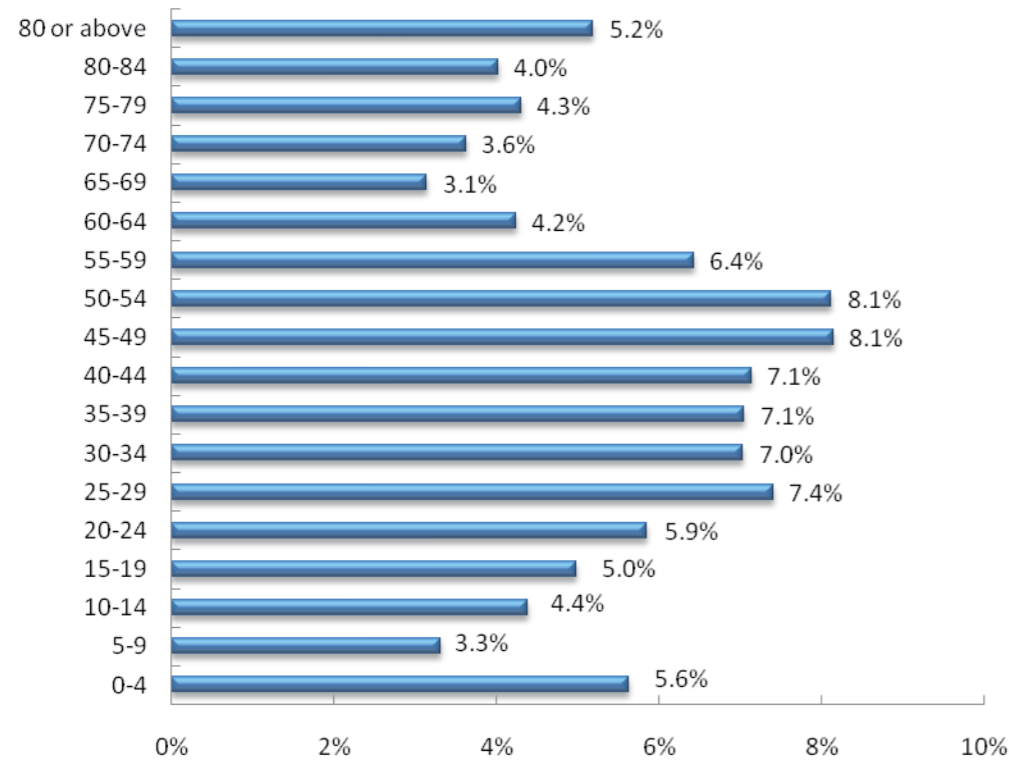
<sup>4</sup> Source: <http://www.ktschca.org.hk/enus/project/iss.php> <sup>4</sup> 資料來源：<http://www.ktschca.org.hk/enus/project/iss.php>

★ 3.3 About 13.3% were aged 14 or below. About 66.4% were aged 15-64. And the percentage for the elderly aged 65 and above was 20.3%.

★ 3.3 受傷的求診者中，約 13.3% 年齡為 14 歲或以下，約 66.4% 的年齡介乎 15-64 歲，而年齡為 65 歲或以上的長者的百分率為 20.3%。

Percentage distribution by age

年齡分佈

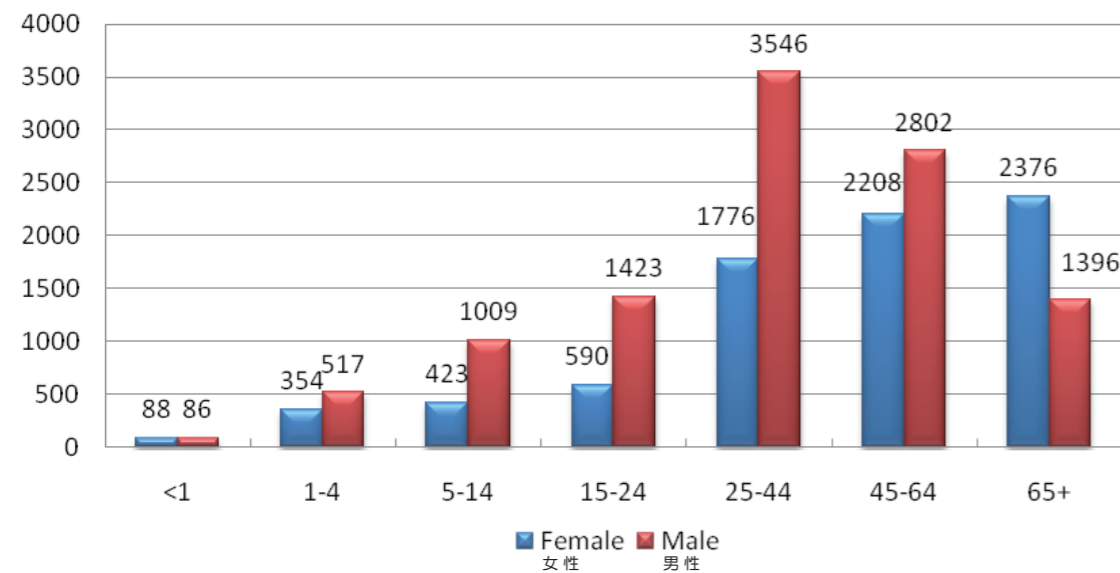


★ 3.4 Analyzed by age and by gender, the numbers of injuries for men was higher than those of their female counterparts aged 1 to 64 and vice versa.

★ 3.4 以年齡、性別來分析，年齡介乎 1 至 64 歲的男性受傷的數字相對高於女性。

Number of injury cases by age and by gender

按年齡組別及性別劃分的受傷個案數字

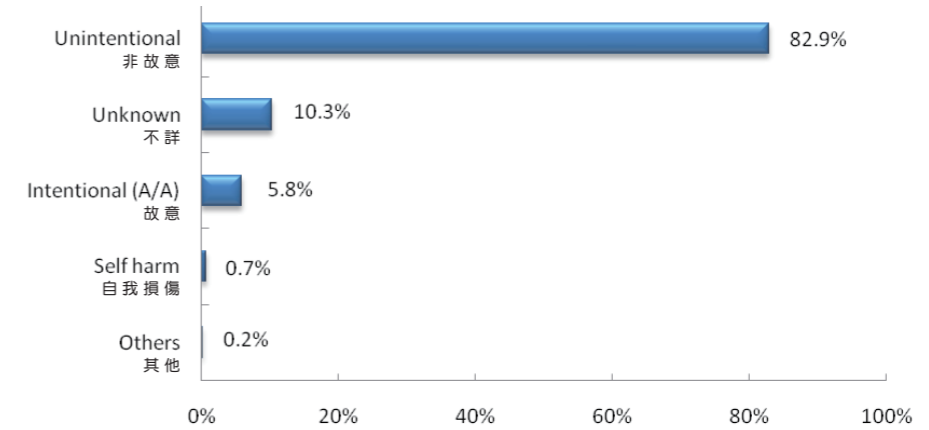


★ 3.5 The great majority of the injury cases were unintentional (82.9%) while 5.8% were intentional and 0.7% self harm.

★ 3.5 絕大多數的受傷個案是非故意的 (82.9%)，而只有 5.8% 的個案屬故意，0.7% 屬自我損傷。

Percentage distribution by intention

意圖分佈

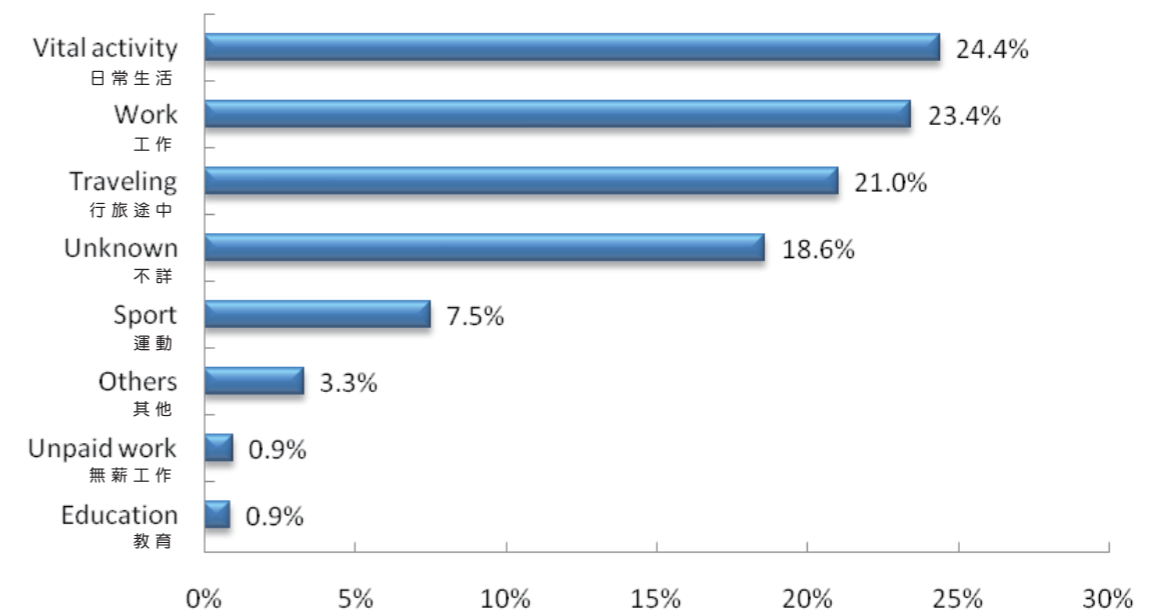


★ 3.6 Nearly a quarter of injury cases happened during doing vital activities at home such as laundry and mopping (24.4%), work (23.4%) and traveling (21.0%).

★ 3.6 接近四分一的受傷個案發生在進行日常生活中的活動時受傷，如在家中洗衣物和抹地 (24.4%)、工作 (23.4%) 和行程途中 (21.0%)。

Percentage distribution by activities

各項活動的分佈

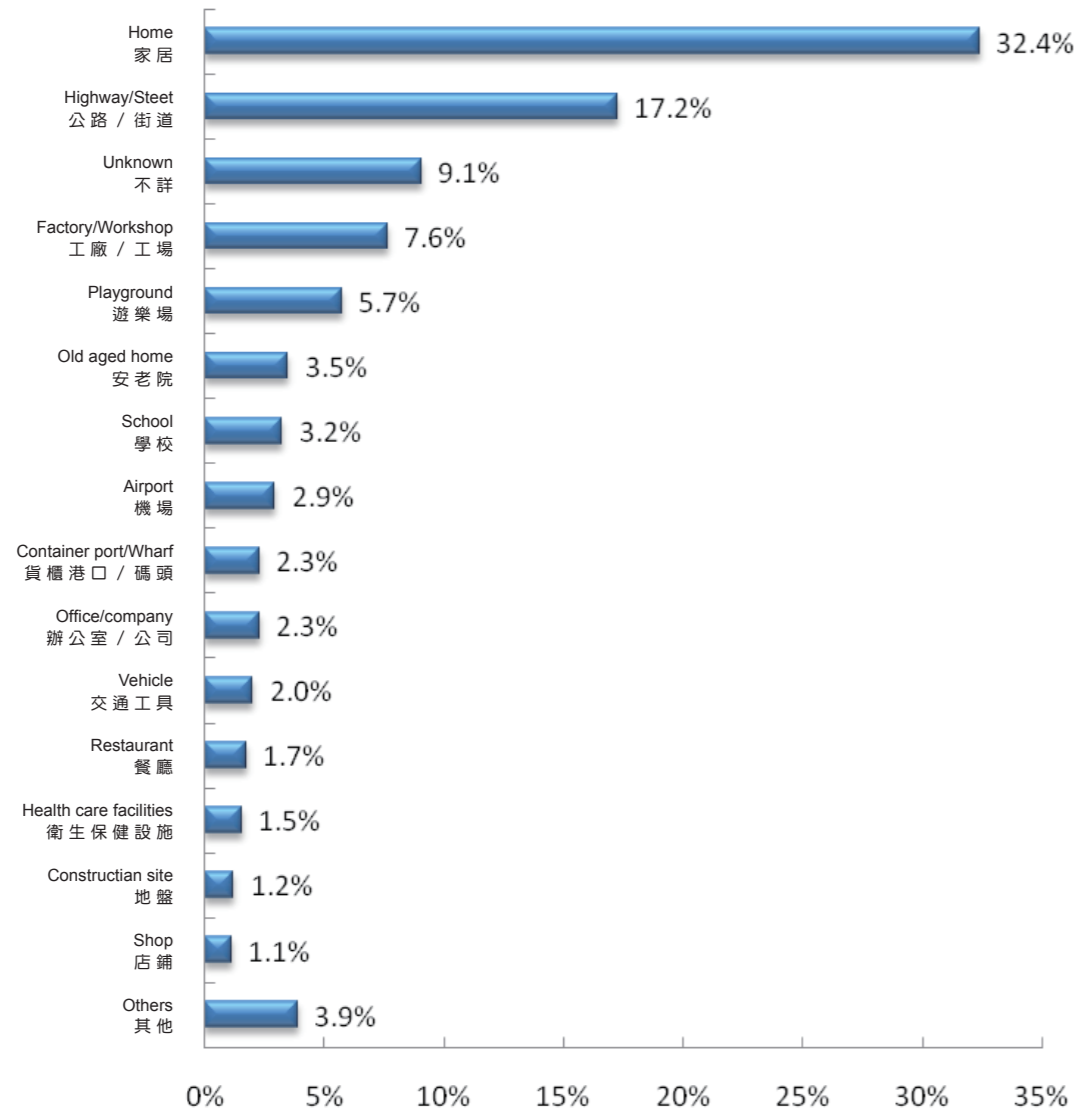


★ 3.7 Nearly one-third of injury events occurred at home (32.4%). About 17.2% happened on highway/street and about 7.6% in factory/workshop.

★ 3.7 接近三分一的受傷事故於家中發生 (32.4%)。約 17.2% 於公路 / 街道上發生，及約有 7.6% 在工廠 / 工場發生。

Percentage distribution by place of occurrence

發生事故地點的分佈



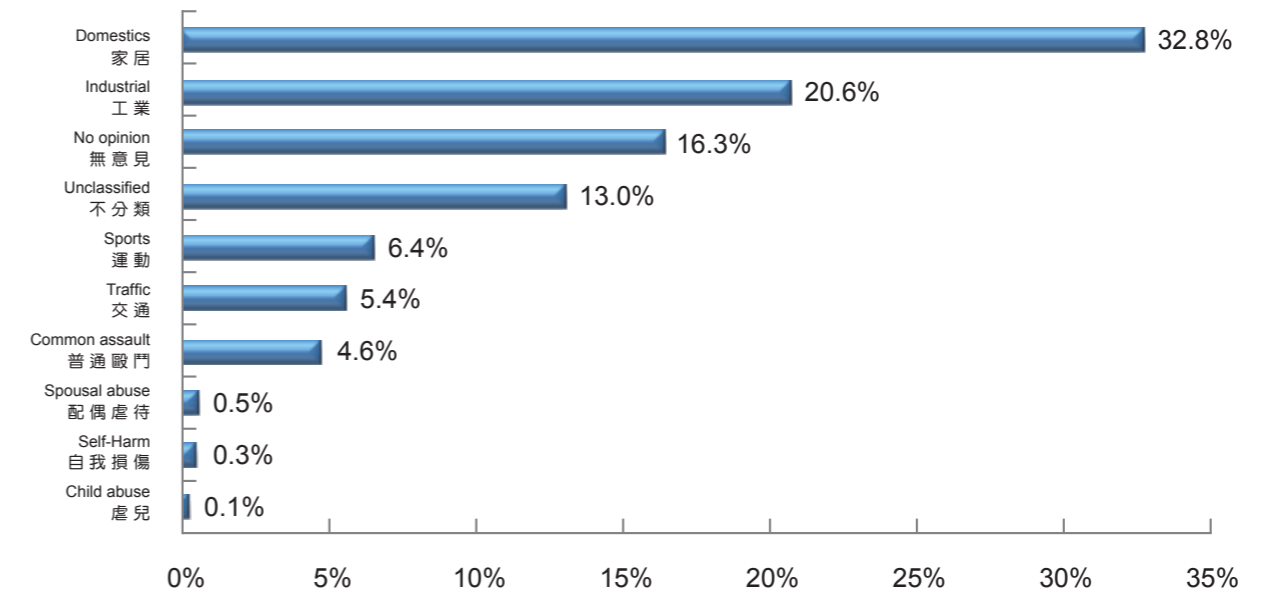
# Items with percentage less than 1 were deleted. # 百分率少於 1% 的項目被刪去

★ 3.8 About one third of injury cases resulted from domestics (32.8%) and about one fifth resulted from industrial situation (20.6%).

★ 3.8 約三分一的受傷個案是由於家庭事務 (32.8%) 導致的，約五分一的為工廠工作 (20.6%) 導致的。

Percentage distribution by traumatic situations

創傷情況的分佈

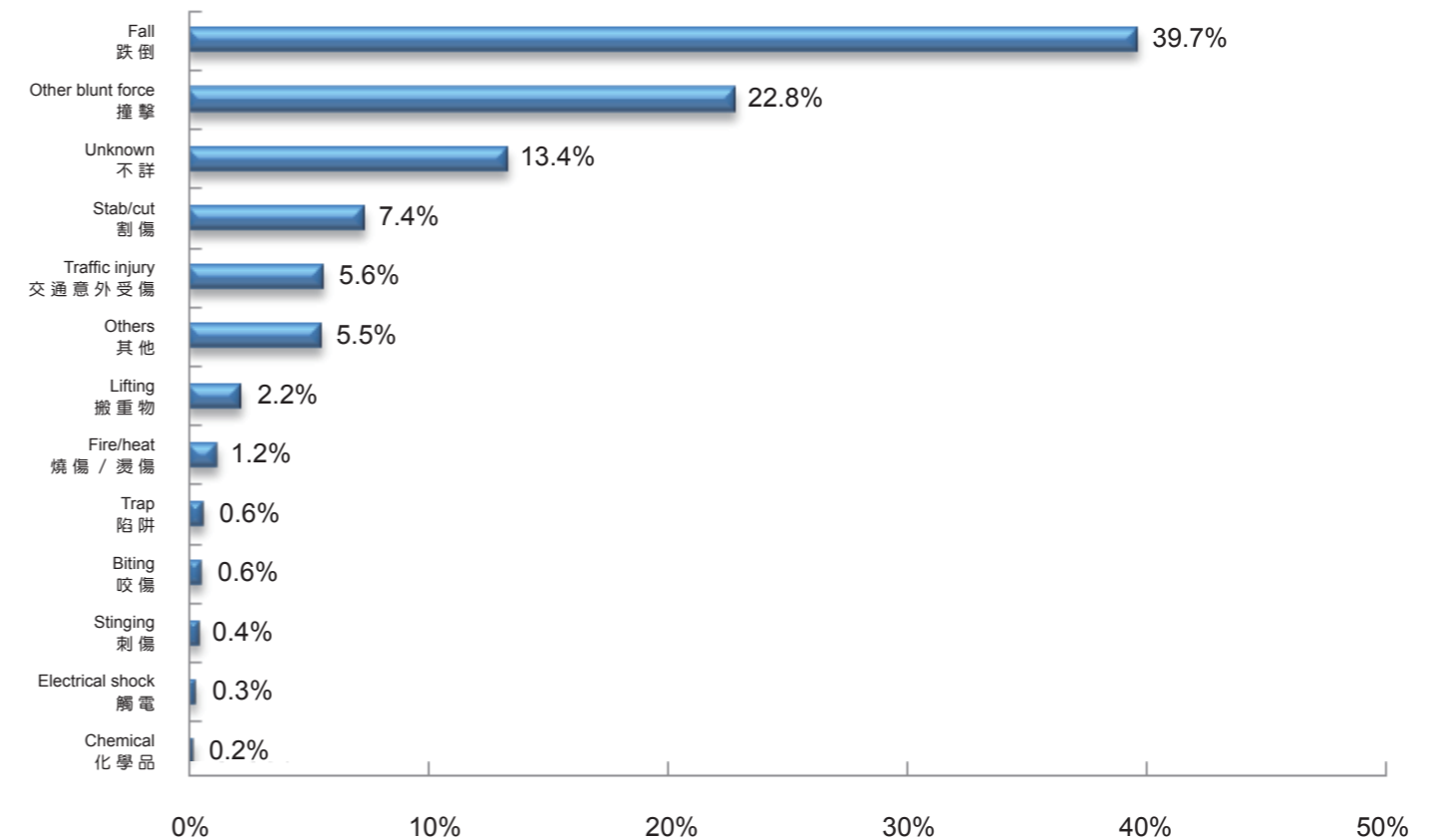


★ 3.9 About 39.7% of injury cases were caused by fall, 22.8% by other blunt force, and 7.4% by stab/cut.

★ 3.9 受傷原因主要是由於跌倒，大約佔 39.7%；其他撞傷佔大約 22.8%；割傷佔大約 7.4%。

Percentage distribution by causes of injury

受傷原因分佈



## 4. Leading causes of injury hospitalizations and association to deaths

### 4.1 Analysis of mechanism

★ 4.1.1 Analyzed the major mechanism of injuries especially fall and other blunt force by gender, the percentage of female (50.2%) was higher than their male counterparts (32.1%). Analyzed by age, higher percentage of patients aged more than 60 (71.3%) and nearly half of the patients aged below 15 (49.5%) were injured by fall.

		Total 合計	Female 女性	Male 男性	< 15	15 - 60	> 60
Traffic injury 交通意外受傷	n	1047	268	779	40	912	95
	%		3.4	7.2	1.6	7.8	2.2
Fall 跌傷	n	7357	3907	3450	1224	3024	3109
	%		<b>50.2</b>	32.1	<b>49.5</b>	25.8	<b>71.3</b>
Other blunt force 撞傷	n	4233	1373	2860	586	3289	358
	%		17.6	26.6	23.7	28.1	8.2
Stab/cut 割傷	n	1369	465	904	91	1129	149
	%		6.0	8.4	3.7	9.6	3.4
Fire/heat 燒傷 / 燙傷	n	222	116	106	31	159	32
	%		1.5	1.0	1.3	1.4	.7
Lifting 搬重物	n	400	132	268	10	358	32
	%		1.7	2.5	.4	3.1	.7

## 4. 受傷住院的主因及其與死亡的關係

### 4.1 途徑分析

★ 4.1.1 使用性別來分析受傷的主要途徑，特別是跌倒和其他撞傷，女性的百分率 (50.2%) 高於男性的百分率 (32.1%)。若使用年齡分析，年齡超過 60 歲的傷者因跌倒受傷百分率較高 (71.3%)，亦有接近半數 15 歲以下的傷者因跌倒受傷 (49.5%)。

★ 4.1.2 Analyzed the major causes of injuries in various activities, fall was the major injury type in vital activities (43.8%) and travel (56.3%). The percentages of other blunt forces which caused injuries were higher in work (35.7%) and education (44.4%).

★ 4.1.2 分析不同活動導致受傷的主因，對於日常生活 (43.8%) 和行程途中 (56.3%)，跌傷是主要受傷的類別。而發生其他撞傷的個案中，在工作 (35.7%) 和教育 (44.4%) 方面則較高。

		Total 合計	Work 工作	Education 教育	Sports 運動	Travel 旅遊	Bathing/ toileting 沐浴 / 如廁	household work/ unpaid work 家務 / 無薪工作	Vital activity 日常生活	Dinning/ eating / drinking 用膳 / 吃 / 喝	Sleeping/ getting up 睡覺 / 起床
Traffic injury 交通意外受傷	n	1047	182	2	19	572	0	11	194	0	0
	%		4.1	1.2	1.2	14.6	.0	4.2	4.3	.0	.0
Fall 跌傷	n	7357	859	62	606	2208	59	95	1984	21	27
	%		19.4	36.7	39.8	<b>56.3</b>	83.1	36.7	<b>43.8</b>	60.0	73.0
Other blunt force 撞傷	n	4233	1581	75	510	706	5	50	530	6	5
	%		<b>35.7</b>	<b>44.4</b>	33.5	18.0	7.0	19.3	11.7	17.1	13.5
Stab/cut 割傷	n	1369	705	16	15	106	0	53	206	3	1
	%		15.9	9.5	1.0	2.7	.0	20.5	4.6	8.6	2.7
Fire/heat 燒傷 / 燙傷	n	222	95	2	2	18	2	15	48	3	0
	%		2.1	1.2	.1	.5	2.8	5.8	1.1	8.6	.0
Lifting 搬重物	n	400	251	1	10	36	0	9	65	0	1
	%		5.7	.6	.7	.9	.0	3.5	1.4	.0	2.7

<sup>5</sup> Although the percentages of bathing / toileting (83.1%), sleeping / getting up (73.0%), dinning / eating / drinking (60.0%) were over 50%, the counts were relatively small. Readers should be careful in interpreting the data.

<sup>5</sup> 雖然沐浴 / 如廁 (83.1%)、睡覺 / 起床 (73.0%)、用膳 / 吃 / 喝 (60.0%) 的百分率高於 50%，但統計數據相對較少。讀者理解數據時應留意。



★ 4.1.3 Analyzed by the place of occurrence of injuries by gender, the percentage of female (42.7%) was higher than their male counterparts (25.1%) at home while vice versa in factory/workshop (4.2% for female; 10.2% for male) and playground (2.8% for female; 8.5% for male) whereas the percentages were almost the same for both genders (17.3% for female; 17.6% for male) on highway/street. Across different age groups, higher percentages of patients were injured at home (48.5% for aged 60 above; 47.2% for aged 15 below and 23.4% for aged 15-60). Similarly, higher percentage of patients aged 60 above and aged 15-60 was injured on highway/street (18.8% for aged 60 above; 18.6% for aged 15-60). On the other hand, the percentages of injuries in school and playground were higher for patients aged 15 below (14.4% at school and 11.9% at playground); and injuries in factory/workshop was higher for patients aged 15-60 (11.6%).

		Total 合計	Female 女性	Male 男性	< 15	15 - 60	> 60
Construction site	n	227	9	218	0	220	7
地盤	%		.1	2.0	.0	1.9	.2
Vehicles	n	372	109	263	14	317	41
車輛	%		1.4	2.4	.6	2.7	.9
Factory/Workshop	n	1425	324	1101	5	1358	62
工廠 / 工場	%		<b>4.2</b>	<b>10.2</b>	.2	<b>11.6</b>	1.4
Shop	n	327	181	146	43	188	96
店舖	%		2.3	1.4	1.7	1.6	2.2
Playground	n	1137	218	919	295	772	70
遊樂場	%		<b>2.8</b>	<b>8.5</b>	<b>11.9</b>	6.6	1.6
Home	n	6017	3322	2695	1169	2735	2113
家居	%		<b>42.7</b>	<b>25.1</b>	<b>47.2</b>	<b>23.4</b>	<b>48.5</b>
School	n	605	190	415	356	248	1
學校	%		2.4	3.9	<b>14.4</b>	2.1	.0
Highway/Street	n	3245	1349	1896	246	2181	818
公路 / 街道	%		<b>17.3</b>	<b>17.6</b>	9.9	<b>18.6</b>	<b>18.8</b>
Old aged home	n	645	452	193	0	84	561
安老院	%		5.8	1.8	.0	.7	12.9

★ 4.1.3 按性別分析意外發生地點，女性 (42.7%) 在家中發生意外比男性 (25.1%) 高，但在工廠 / 工場 (女性 4.2%；男性 10.2%) 和遊樂場 (女性 2.8%；男性 8.5%) 的有關數據則相反。然而，兩性在公路 / 街道受傷的百分比 (女性 17.3%；男性 17.6%) 近乎相同。在不同的年齡組別中，在家中受傷的百分比較高 (60 歲以上的是 48.5%；15 歲以下的是 47.2%，15-60 歲的是 23.4%)。同樣地，60 歲以上和年齡介乎 15-60 歲的傷者在公路 / 街道受傷的百分比較高 (60 歲以上的是 18.8%；15-60 歲的是 18.6%)。另一方面，15 歲以下傷者在學校和遊樂場受傷的百分比較高 (在學校受傷的有 14.4% 及在遊樂場受傷的有 11.9%)；年齡介乎 15-60 歲傷者在工廠 / 工場受傷的較高 (11.6%)。

★ 4.1.4 Analyzed by the place of injuries by activities, over 50% of injuries happened during sleeping/getting up, household work/unpaid work, bathing/toileting, vital activity, assault/argument and dining / eating / drinking took place at home. Higher percentages of injuries occurred in education and sports took place in schools (84.6%) and playground (55.2%) respectively.

★ 4.1.4 按活動分析意外發生地點，超過 50% 受傷個案發生在家中睡覺 / 起床、做家務 / 無薪工作、沐浴 / 如廁、日常生活、襲擊 / 爭執和用膳 / 吃 / 喝。在教育 and 運動方面受傷的個案中，發生在學校 (84.6%) 和遊樂場 (55.2%) 的百分比較高。

		Total 合計	Work 工作	Education 教育	Sports 運動	Travel 旅遊	Bathing/ toileting 沐浴 / 如廁	household work/ unpaid work 家務 / 無薪工作	Vital activity 日常生活	Assault / argument 襲擊 / 爭執	Dinning/ eating / drinking 用膳 / 吃 / 喝	Sleeping/ getting up 睡覺 / 起床
Factory/ Workshop	n	1425	1307	0	2	22	0	1	72	0	0	0
工廠 / 工場	%		29.5	.0	.1	.6	.0	.4	1.6	.0	.0	.0
Playground	n	1137	50	7	841	100	1	2	40	4	1	0
遊樂場	%		1.1	4.1	<b>55.2</b>	2.6	1.4	.8	.9	12.5	2.9	.0
Restaurant	n	325	212	1	2	40	1	1	23	3	9	0
餐廳	%		4.8	.6	.1	1.0	1.4	.4	.5	9.4	25.7	.0
Home	n	6017	239	8	93	1002	54	201	2801	19	19	37
家居	%		5.4	4.7	6.1	25.6	<b>76.1</b>	<b>77.6</b>	<b>61.9</b>	<b>59.4</b>	<b>54.3</b>	<b>100.0</b>
School	n	605	59	143	174	57	0	4	64	1	0	0
學校	%		1.3	<b>84.6</b>	11.4	1.5	.0	1.5	1.4	3.1	.0	.0
Highway/Street	n	3245	434	4	159	1928	0	23	218	3	2	0
街道 / 公路	%		9.8	2.4	10.4	49.2	.0	8.9	4.8	9.4	5.7	.0
Old aged home	n	645	47	1	3	178	10	7	203	0	1	0
安老院	%		1.1	.6	.2	4.5	14.1	2.7	4.5	.0	2.9	.0

## 4.2 Analysis of activities

★ 4.2.1 Analyzed by gender, the percentage of female (26.3%) was higher than their male counterparts (17.4%) when travel while vice versa at work (15.7% for female; 29.8% for male). Similarly, the percentage of female (28.7%) was higher than their male counterparts (21.3%) in vital activity. Across all age groups, higher percentages of patients was injured during vital activity (28.8% for aged 15 below; 20.5% for aged 15-60 and 32.4% for aged 60 above) and travel (19.2% for aged 15 below; 17.4% for aged 15-60 and 32.3% for aged 60 above). Certainly, higher percentages of younger cohort aged below 15 got hurt in playground and adult cohort aged 16-60 got hurt in work.

		Total 合計	Female 女性	Male 男性	< 15	15 - 60	> 60
Work	n	4426	1220	3206	10	4224	192
工作	%		15.7	29.8	.4	36.1	4.4
Sports	n	1524	304	1220	414	999	111
體育活動	%		3.9	11.3	16.7	8.5	2.5
Travel	n	3921	2045	1876	476	2038	1407
旅遊	%		26.3	17.4	19.2	17.4	32.3
Vital activity	n	4525	2235	2290	714	2397	1414
日常生活	%		28.7	21.3	28.8	20.5	32.4

## 4.2 活動分析

★ 4.2.1 按性別分析，在行程途中，女性受傷 (26.3%) 的百分比比較男性 (17.4%) 高，但在工作方面 (女性 15.7%；男性 29.8%) 卻相反。同樣地，女性在日常生活中受傷的百分比 (28.7%) 較男性 (21.3%) 高。在所有年齡組別中，傷者在日常生活中 (15 歲以下的是 28.8%；介乎 15-60 歲的是 20.5% 及 60 歲以上的是 32.4%) 和行程途中 (15 歲以下的是 19.2%；介乎 15-60 歲的是 17.4% 及 60 歲以上的是 32.3%) 受傷的百分比比較高。當然，15 歲以下的年輕一羣在遊樂場受傷，及 16-60 歲的成年一羣在工作受傷的百分比比較高。

## 4.3 Analysis of traumatic types

★ 4.3.1 Analyzed by gender, the percentage of female (52.5%) was higher than their male counterparts (28.9%) for domestics and vice versa for industrial (14.7% for female; 30.8% for male) and traffic (5.1% for female; 9.2% for male) incidents.

Analyzed by age, higher percentages of patients aged 15 below and aged 60 above were traumatized at domestics (59.4% for aged 15 below; 69.8% for aged 60 above) whereas higher percentage of patients aged 15-60 (36.5%) was traumatized at industrial incidents.

		Total 合計	Female 女性	Male 男性	< 15	15 - 60	> 60
Common assault	n	856	248	608	89	717	50
普通襲擊	%		3.9	6.7	4.3	7.2	1.4
Child abuse	n	21	7	14	19	2	0
虐兒	%		.1	.2	.9	.0	.0
Spousal abuse	n	94	79	15	0	90	4
配偶虐待	%		1.2	.2	.0	.9	.1
Traffic	n	1183	332	851	45	1005	133
交通	%		5.2	9.3	2.2	10.1	3.7
Industrial	n	3812	952	2860	4	3672	136
工業	%		14.8	31.4	.2	37.0	3.8
Domestics	n	6074	3393	2681	1258	2324	2492
家居	%		52.9	29.4	61.2	23.4	70.1
Sports	n	1005	148	857	218	770	17
運動	%		2.3	9.4	10.6	7.8	.5
Self harm	n	64	33	31	1	59	4
自我損傷	%		.5	.3	.0	.6	.1

## 4.3 創傷類型分析

★ 4.3.1 按性別來分析，女性 (52.9%) 因家居意外受傷的百分比比較男性 (29.4%) 高，但在工業意外 (女性為 14.8%；男性為 31.4%) 及交通意外 (女性為 5.2%；男性為 9.3%) 事故方面卻相反。按年齡來分析，15 歲以下 (61.2%) 和 60 歲以上 (70.1%) 傷者因家居意外受傷的百分比比較高，反之，年齡介乎 15-60 歲的傷者 (37.0%) 因工業意外受傷的百分比比較高。

★ 4.3.2 Analyzed traumatic types by activities, over 50% of patients were traumatized at home when sleeping/getting up (100%), bathing/toileting (79.6%), household work/unpaid work (65.1%), dining/eating/drinking (61.5%) and vital activity (53.9%).

★ 4.3.2 按活動分析創傷類別，超過 50% 的受傷個案是在家居發生，睡覺/起床時發生 (100%)；沐浴/如廁時發生 (79.6%)；處理家務/無薪工作時發生 (65.1%)；用膳/吃/喝時發生 (61.5%) 及在日常生活中發生 (53.9%)。

		Total 合計	Work 工作	Education 教育	Sports 運動	Travel 旅遊	Bathing/ toileting 沐浴/ 如廁	household work/ unpaid work 家務/ 無薪工作	Vital activity 日常生活	Assault/ argument 襲擊/ 爭執	Dinning / eating / drinking 用膳 / 吃 / 喝	Sleeping/ getting up 睡覺 / 起床
Common assault	n	856	105	14	17	122	0	0	286	16	3	0
普通襲擊	%		2.8	10.7	1.3	<b>4.1</b>	.0	.0	<b>6.9</b>	50.0	<b>11.5</b>	.0
Child abuse	n	21	0	2	0	0	0	2	9	1	0	0
虐兒	%		.0	1.5	.0	.0	.0	1.0	.2	3.1	.0	.0
Spousal abuse	n	94	0	0	0	2	0	3	38	5	0	0
配偶虐待	%		.0	.0	.0	.1	.0	1.5	.9	15.6	.0	.0
Traffic	n	1183	162	1	6	595	0	14	296	0	0	0
交通	%		4.3	.8	.5	<b>20.2</b>	.0	7.2	<b>7.1</b>	.0	.0	.0
Industrial	n	3812	3008	6	4	118	1	15	430	0	0	0
工業	%		<b>80.2</b>	4.6	.3	<b>4.0</b>	1.9	7.7	<b>10.4</b>	.0	.0	.0
Domestics	n	6074	292	52	278	1450	43	127	2235	4	16	30
家居	%		7.8	39.7	21.0	<b>49.2</b>	<b>79.6</b>	<b>65.1</b>	<b>53.9</b>	12.5	<b>61.5</b>	<b>100.0</b>
Sports	n	1223	11	16	886	71	0	5	135	0	1	0
運動	%		.3	12.2	67.0	2.4	.0	2.6	3.2	.0	3.7	.0

4.4 Analysis of places of occurrence

4.4 意外發生地點分析

★ 4.4.1 Analyzed place of occurrence by number of injures reported, traffic injury was particularly high on highway / street (69.2%) and in vehicle (19.7%). In fact, quite a number of injuries occurred on highway / street including fall (19.5%) and blunt force (16.3%). Meanwhile, home is a place where relatively higher numbers of injuries were reported. The injuries happened in home included fall (40.8%), blunt force (22.1%), and stab/cut (43.5). In factory / workshop, stab/cut (16.2%) and blunt force (10.1%) were also frequently reported.

★ 4.4.1 據報告所得的意外發生地點分析，在公路/街道 (69.2%) 和在交通工具 (19.7%) 上受傷的百分比特別高。事實上，相當多的受傷個案包括跌倒 (19.5%) 和撞傷 (16.3%) 是發生在公路/街道上，同時，家居受傷包括跌倒 (40.8%)、撞傷 (22.1%) 和割傷 (43.5%) 也錄得相對較高的數字。在工廠/工場也會經常錄得割傷 (16.2%) 及撞傷 (10.1%) 的受傷個案。

Place of Occurrence 意外發生地點	No. of injures reported 受傷報告數字			
	Fall 跌倒	Blunt force 撞傷	Stab/cut 割傷	Traffic injury 交通意外受傷
(n)	7357	4233	1369	1047
Factory 工廠 / Workshop 工場	3.14%	<b>10.11%</b>	<b>16.20%</b>	0.67%
Highway 公路 / Street 街道	<b>19.48%</b>	<b>16.31%</b>	5.26%	<b>69.24%</b>
Home 家居	<b>40.77%</b>	<b>22.09%</b>	<b>43.50%</b>	0.00%
Old aged home 安老院	7.13%	1.44%	0.88%	0.00%
Theme park 主題公園	5.57%	9.69%	1.09%	0.38%
Restaurant 餐廳	1.27%	1.74%	5.77%	0.00%
School 學校	3.36%	5.78%	2.48%	0.00%
Vehicle 交通工具	0.80%	0.66%	0.22%	<b>19.71%</b>
Warehouse 貨倉	0.09%	0.28%	0.44%	0.10%

## 4.5 Analysis by intention

★ 4.5.1 The percentage of unintentional injury was higher for fall (44.9%) and the percentage of intentional injury (A/A) was higher for other blunt force (78.4%). For self harm, the percentage of using stab/cut (40.5%) was relatively high.

途徑	意圖	Total 合計	Unintentional 非故意	Self harm 自我損傷	Intentional (A/A) 故意
Traffic injury	n	1047	971	2	0
交通意外受傷	%		6.3	1.5	.0
Fall	n	7357	6906	20	22
跌傷	%		<b>44.9</b>	15.3	2.0
Other blunt force	n	4233	3051	31	848
撞擊	%		19.8	23.7	<b>78.4</b>
Stab/cut	n	1369	1209	53	41
割傷	%		7.9	<b>40.5</b>	3.8
Fire/heat	n	222	210	0	1
燒傷 / 燙傷	%		1.4	.0	.1
Lifting	n	400	363	4	12
搬重物	%		2.4	3.1	1.1

## 4.5 意圖分析

★ 4.5.1 非故意受傷的個案中，主要是跌倒 (44.9%)；而故意受傷的主要是其他撞傷 (78.4%)；在自我損傷方面，割傷 (40.5%) 的百分比相對較高。

★ 4.5.2 Across different kinds of intention, the percentages were higher at home (33.8% for unintentional; 51.9% for self harm and 30.2% for intentional (A/A)) and on highway/street (17.9% for unintentional; 8.4% for self harm and 22.1% for intentional (A/A)). It is worth noting that the frequency of unintentional injury occurred was also high in factory / workshop, playground, old aged home and schools.

★ 4.5.2 在多個意圖中，在家中 (非故意的是 33.8%；自我損傷的是 51.9%；故意的是 30.2%) 和公路 / 街道 (非故意的是 17.9%；自我損傷的是 8.4%；故意的是 22.1%) 的百分比比較高。值得注意的是，非故意造成的受傷在工廠 / 工場、遊樂場、安老院和學校發生的次數亦很高。

意外發生地點	意圖	Total 合計	Unintentional 非故意	Self harm 自我損傷	Intentional (A/A) 故意
Construction site	n	227	213	2	3
地盤	%		1.4	1.5	.3
Vehicles	n	372	354	1	5
交通工具	%		2.3	.8	.5
Factory/Workshop	n	1425	1209	5	39
工廠 / 工場	%		7.9	3.8	3.6
Playground	n	1137	1024	6	29
遊樂場	%		6.7	4.6	2.7
Hospital	n	297	237	4	36
醫院	%		1.5	3.1	3.3
Home	n	6017	5202	68	326
家居	%		<b>33.8</b>	<b>51.9</b>	<b>30.2</b>
School	n	605	504	4	62
學校	%		3.3	3.1	5.7
Highway/Street	n	3245	2750	11	239
公路 / 街道	%		<b>17.9</b>	8.4	<b>22.1</b>
Old aged home	n	645	578	6	16
安老院	%		3.8	4.6	1.5

★ 4.5.3 Across different kinds of intention, the percentages were higher for vital activity (25.5% for unintentional; 26.7% for self harm and 30.8% for intentional (A/A)), work (25.7% for unintentional; 12.2% for self harm and 14.0% for intentional (A/A)) and travel (23.5% for unintentional; 13.0% for self harm and 12.9% for intentional (A/A)).

★ 4.5.3 在多個意圖中，在家中（非故意的是 33.8%；自我損傷的是 51.9%；故意的是 30.2%）和公路 / 街道（非故意的是 17.9%；自我損傷的是 8.4%；故意的是 22.1%）的百分比比較高。值得注意的是，非故意造成的受傷在工場 / 辦公室、遊樂場、安老院和學校發生的次數亦很高。

活動	意圖	Total 合計	Unintentional 非故意	Self harm 自我損傷	Intentional (A/A) 故意
Work 工作	n	4426	3955	16	151
	%		<b>25.7</b>	<b>12.2</b>	<b>14.0</b>
Sports 運動	n	1524	1423	5	20
	%		9.3	3.8	1.9
Travel 旅遊	n	3921	3611	17	139
	%		<b>23.5</b>	<b>13.0</b>	<b>12.9</b>
Household work/unpaid work 家務 / 無薪工作	n	259	241	1	9
	%		1.6	.8	.8
Vital activity 日常生活	n	4525	3925	35	333
	%		<b>25.5</b>	<b>26.7</b>	<b>30.8</b>

★ 4.5.4 For the analysis of traumatic types by intention, the percentage of unintentional injury was higher in domestics (41.2%) and industrial incidents came next (25.8%). In respect of intentional injury, common assault was high (77.5%) and spousal abuse also caught attention (8.8%).

★ 4.5.4 按意圖分析創傷類別，非故意受傷的個案大多發生在家居（41.2%），其次是工業意外受傷（25.8%）。對於故意受傷的個案中，佔大多數是普通襲擊（77.5%），而配偶虐待（8.8%）亦應該關注。

創傷類型	意圖	Total 合計	Unintentional 非故意	Self harm 自我損傷	Intentional (A/A) 故意
Common assault 普通襲擊	n	856	69	0	740
	%		.5	.0	<b>77.5</b>
Spousal abuse 配偶虐待	n	94	4	0	84
	%		.0	.0	<b>8.8</b>
Traffic 交通	n	1183	1059	2	1
	%		8.2	1.8	.1
Industrial 工業	n	3812	3343	11	37
	%		<b>25.8</b>	10.0	3.9
Domestics 家居	n	6074	5341	25	33
	%		<b>41.2</b>	22.7	3.5
Sports 運動	n	1223	1086	4	2
	%		8.4	3.6	.2
Self harm 自我損傷	n	64	3	51	5
	%		.0	46.4	.5

#### 4.6 Analysis by severity

★ 4.6.1 There were three levels of severity, namely, minor, moderate and serious. Among different levels of severity, the percentages were higher for fall (37.5% for minor; 67.3% for moderate and 56.5% for serious) and other blunt force (23.0% for minor; 23.2% for moderate and 18.3% for serious). It is worth noting that traffic injury (14.8%) was the third largest type in serious cases.

#### 4.6 嚴重程度分析

★ 4.6.1 嚴重程度可分三級：輕微、中等和嚴重。在這些等級中，跌倒（輕微的佔 37.5%；中等的佔 67.3%；嚴重的佔 56.5%）和其他撞傷（輕微的佔 23.0%；中等的佔 23.2%；嚴重的佔 18.3%）的百分比比較高。值得注意的是，在嚴重的個案中，交通意外受傷（14.8%）排在第三位。

途徑	嚴重程度	Total 合計	Minor 輕微	Moderate 中等	Serious 嚴重
Traffic injury 交通意外受傷	n	1047	903	40	104
	%		5.3	4.4	14.8
Fall 跌傷	n	7357	6349	610	398
	%		<b>37.5</b>	<b>67.3</b>	<b>56.5</b>
Other blunt force 撞傷	n	4233	3894	210	129
	%		<b>23.0</b>	<b>23.2</b>	<b>18.3</b>
Stab/cut 割傷	n	1369	1355	12	2
	%		8.0	1.3	.3
Fire/heat 燒傷 / 燙傷	n	222	218	3	1
	%		1.3	.3	.1
Lifting 搬重物	n	400	387	5	8
	%		2.3	.6	1.1

★ 4.6.2 Analyzed by place of injury, the percentages of different severity of the injuries were higher for home (32.5% for minor; 37.3% for moderate and 26.0% for serious) and highway/street (16.8% for minor; 20.8% for moderate and 30.4% for serious). It is worth noting that 30.4% of serious cases happened in highway/ street.

★ 4.6.2 按意外發生地點分析，家居意外中，不同程度的嚴重性所佔的百分率較高（32.5% 屬輕微；37.3% 屬中等及 26.0% 屬嚴重）；其次發生在公路 / 街道的意外中（16.8% 屬輕微；20.8% 屬中等及 30.4% 屬嚴重）。值得關注的是當中 30.4% 的嚴重個案發生在公路 / 街道上。

意外發生地點	嚴重程度	Total 合計	Minor 輕微	Moderate 中等	Serious 嚴重
Vehicles 交通工具	n	372	351	3	18
	%		2.1	.3	2.6
Factory/Workshop 工廠 / 工場	n	1425	1348	48	29
	%		8.0	5.3	4.1
Shop 店舖	n	327	293	15	19
	%		1.7	1.7	2.7
Playground 遊樂場	n	1137	1054	40	43
	%		6.2	4.4	6.1
Hospital 醫院	n	297	276	9	12
	%		1.6	1.0	1.7
Airport 機場	n	553	490	36	27
	%		2.9	4.0	3.8
Restaurant 餐廳	n	325	310	8	7
	%		1.8	.9	1.0
Home 家居	n	6017	5496	338	183
	%		<b>32.5</b>	<b>37.3</b>	<b>26.0</b>
School 學校	n	605	547	36	22
	%		3.2	4.0	3.1
Highway/Street 公路 / 街道	n	3245	2842	189	214
	%		<b>16.8</b>	<b>20.8</b>	<b>30.4</b>
Old aged home 安老院	n	645	512	100	33
	%		3.0	11.0	4.7
Office/company 辦公室 / 公司	n	443	414	11	18
	%		2.4	1.2	2.6
Container port/Wharf 貨櫃碼頭 / 碼頭	n	443	416	6	21
	%		2.5	.7	3.0

★ 4.6.3 Analyzed by activities, the percentages of different severity of injuries were higher for work (24.3% for minor; 16.6% for moderate and 22.1% for serious), travel (19.9% for minor, 36.9% for moderate and 30.1% for serious) and vital activity (25.4% for minor; 13.3% for moderate and 15.2% for serious). It is worth noting that 30.1% of serious cases happened during travel.

★ 4.6.3 按意外發生時的活動分析，工作中不同程度的受傷所佔的百分率較其他活動高 (24.3% 屬輕微；16.6% 屬中等及 22.1% 屬嚴重)；在行程途中受傷的 (19.9% 屬輕微；36.9% 屬中等及 30.1% 屬嚴重)；在日常生活中受傷的 (25.4% 屬輕微；13.3% 屬中等及 15.2% 屬嚴重)。值得關注的是當中 30.1% 的嚴重個案是在行程途中發生的。

嚴重程度 活動		Total	Minor	Moderate	Serious
		合計	輕微	中等	嚴重
Work 工作	n	4426	4119	151	156
	%		24.3	16.6	22.1
Sports 運動	n	1524	1435	38	51
	%		8.5	4.2	7.2
Travel 旅遊	n	3921	3374	335	212
	%		19.9	36.9	30.1
Vital activity 日常生活	n	4525	4297	121	107
	%		25.4	13.3	15.2

★ 4.6.4 Analyzed of traumatic types, the percentages of different severity of the injuries were higher for domestics (37.9% for minor; 54.9% for moderate and 34.8% for serious) and industrial (25.0% for minor, 12.9% for moderate and 19.3% for serious) in 2009. It is worth noting that 34.8% of serious cases happened in domestics.

★ 4.6.4 按創傷類型分析，家居意外不同程度的受傷所佔的百分率較其他類型高 (37.9% 屬輕微；54.9% 屬中等及 34.8% 屬嚴重)。在 2009 年，工業意外受傷的 (25.0% 屬輕微；12.9% 屬中等及 19.3% 屬嚴重)。值得關注的是當中 34.8% 的嚴重個案是家居意外。

嚴重程度 創傷類型		Total	Minor	Moderate	Serious
		合計	輕微	中等	嚴重
Common assault 普通襲擊	n	856	753	61	42
	%		5.2	8.7	7.4
Traffic 交通	n	1183	1041	43	99
	%		7.2	6.1	17.4
Industrial 工業	n	3812	3612	90	110
	%		25.0	12.9	19.3
Domestics 家居	n	6074	5492	384	198
	%		37.9	54.9	34.8
Sports 運動	n	1223	1161	18	44
	%		8.0	2.6	7.7

## 4.7 Analysis by time

★ 4.7.1 Analyzed mechanism by time, higher percentages of various injuries that occurred around the clock were related to fall (34.8% - 59.0%) and other blunt force (16.2% - 30.1%).

★ 4.7.2 Analyzed places of occurrence by time, higher percentages of various injuries that occurred around the clock happened at home (25.3% - 45.2%) and on highway/street (12.6% - 29.8%).

★ 4.7.3 Analyzed activities by time, higher percentages of various activities that occurred around the clock were related to work (15.0% - 28.4%), travel (13.2% - 36.1%) and vital activity (8.6% - 36.7%).

★ 4.7.4 Analyzed traumatic types by time, higher percentages of various trauma/traumatic types around the clock were related to domestics (34.2% - 47.5%) and industrial (13.1% - 28.5%).

## 4.8 Analysis by holidays

★ 4.8.1 Analyzed mechanism by holidays, higher percentages of injuries which occurred on holidays were related to fall (42.5%), other blunt force (19.5%) and traffic injury (5.9%).

★ 4.8.2 Analyzed places of occurrence by holidays, higher percentages of injuries which occurred on holidays happened at home (33.8%), on highway/street (18.4%) and in playground (6.5%).

★ 4.8.3 Analyzed activities by holidays, higher percentages of injuries which occurred on holidays were related to vital activity (26.6%), travel (22.1%) and work (19.2%).

★ 4.8.4 Analyzed traumatic types by holidays, higher percentages of injuries which occurred on holidays were related to domestics (41.2%), industrial (18.5%) and traffic (9.4%).

## 4.9 Analysis by seasons

★ 4.9.1 Analyzed mechanism by seasons, higher percentages of injuries which occurred whole year round were related to fall (36.2% - 44.1%) and other blunt force (17.7%-26.1%).

★ 4.9.2 Analyzed places of occurrence by seasons, higher percentages of injuries which occurred whole year round happened at home (26.9% - 37.5%) and on highway/street (14.2% - 19.8%)

## 4.7 時間分析

★ 4.7.1 以時間分析途徑，多種受傷中，經常發生的意外以跌倒 (34.8% - 59.0%) 和其他撞傷 (16.2% - 30.1%) 所佔的百分比比較高。

★ 4.7.2 以時間分析發生事故地點，多種受傷中，經常發生意外的地方以家居 (25.3% - 45.2%) 和公路 / 街道 (12.6% - 29.8%) 所佔的百分比比較高。

★ 4.7.3 以時間分析活動，多項活動中，經常發生的活動與工作 (15.0% - 28.4%)、行程途中 (13.2% - 36.1%) 和日常生活 (8.6% - 36.7%) 有關的佔較高的百分比。

★ 4.7.4 以時間分析創傷類型，在多種創傷中，經常發生意外的時間，與家居意外 (34.2% - 47.5%) 和工業意外 (13.1% - 28.5%) 有關的佔較高的百分比。

## 4.8 假期分析

★ 4.8.1 以假期分析途徑，在假期發生的受傷中，與跌倒 (42.5%)、其他撞傷 (19.5%) 及交通意外 (5.9%) 有關的受傷佔較高的百分比。

★ 4.8.2 以假期分析發生地點，在假期間發生的受傷中，在家中 (33.8%)、公路 / 街道上 (18.4%) 及遊樂場裡 (6.5%) 造成受傷的百分比比較高。

★ 4.8.3 以假期分析活動，在假期間發生的受傷中，與日常生活 (26.6%)、行程途中 (22.1%) 和工作 (19.2%) 所帶來的受傷佔較高的百分比。

★ 4.8.4 以假期分析創傷類型，在假期間發生的受傷中，與家居意外 (41.2%)、工業意外 (18.5%) 和交通意外 (9.4%) 有關的受傷的百分比比較高。

## 4.9 季節分析

★ 4.9.1 以季節分析途徑，全年發生的受傷個案中，與跌倒 (36.2% - 44.1%) 和其他撞傷 (17.7%-26.1%) 所造成的受傷佔較高的百分比。

★ 4.9.2 以季節來分析發生地點，全年發生的受傷個案中，在家中 (26.9% - 37.5%) 和公路 / 街道上 (14.2% - 19.8%) 受傷佔較高的百分比。

★ 4.9.3 Analyzed activities by seasons, higher percentages of injuries which occurred whole year round were related to work (19.6% - 26.4%) and travel (15.7% - 24.8%).

★ 4.9.4 Analyzed traumatic types by seasons, higher percentages of injuries which occurred whole year round were related to domestics (35.1% - 42.1%) and industrial (21.8% - 28.6%)

#### 4.10 Analysis by crude rate

★ 4.10.1 Crude rate is the number of events over the population per year. Analyzed the crude rate by mechanism, the rate for fall was particular high (74.1%) and traffic injury (8.2%) which was much lower came next.

★ 4.10.2 Analyzed by places of injury, the crude rates were higher for home (54.1%), highway/street (15.3%) and old aged home (14.1%).

★ 4.10.3 Analyzed by activities, the crude rates were higher for travel (35.3%) and vital activity (40.0%).

★ 4.10.4 Analyzed by traumatic types, the crude rates were higher for domestics (58.2%) and traffic (10.4%).

#### 4.11 Analysis by YPLL

★ 4.11.1 Years of Potential Life Lost (YPLL) measures for a group of individuals the total number of years these people would have additionally lived up to some point in the future, would they not have died from a particular cause of death.<sup>6</sup>

★ 4.11.2 Measured with mechanism, the YPLL were longer for fall (278.0 years) and traffic injury (171.0 years).

★ 4.11.3 Analyzed by places of injury, YPLL were longer for home (181.0 years) and highway/street (142.0 years).

★ 4.11.4 Analyzed by activities, YPLL were longer for vital activity (194.0 years) and travel (167.0 years).

★ 4.11.5 Analyzed by traumatic type, YPLL were longer for traffic (171.0 years) and domestics (68.0 years).

★ 4.11.6 Among 86 mortality cases out of 18,595 cases, the YPLL was 507 years.

★ 4.9.3 以季節來分析活動，全年發生的受傷個案中，與工作 (19.6% - 26.4%) 和行程途中 (15.7% - 24.8%) 所造成的受傷佔較高的百分比。

★ 4.9.4 以季節來分析創傷類型，全年發生的受傷個案中，家居意外 (35.1% - 42.1%) 和工業意外 (21.8% - 28.6%) 造成的受傷佔較高的百分比。

#### 4.10 Crude Rate 分析

★ 4.10.1 Crude Rate 是每年的事故除以每年人口。以途徑分析 Crude Rate，跌倒的比率特別高 (74.1%)，接著是比率很低的交通意外 (8.2%)。

★ 4.10.2 以受傷地點分析，在家中 (54.1%)、公路 / 街道 (15.3%) 及安老院 (14.1%) 的 Crude Rate 較高。

★ 4.10.3 以活動分析，行程途中 (35.3%) 和日常生活 (40.0%) 的 Crude Rate 較高。

★ 4.10.4 以創傷類型分析，家居意外 (58.2%) 和交通意外 (10.4%) 的 Crude Rate 較高。

#### 4.11 潛在壽命損失年數分析

★ 4.11.1 潛在壽命損失年數是用來量度一群人將來會活到某個時刻的總年數，不是因某些特定原因死亡<sup>6</sup>。

★ 4.11.2 以途徑計算，跌倒 (278.0 年) 和交通意外受傷 (171.0 年) 的潛在壽命年數較長。

★ 4.11.3 以受傷地點計算，在家中 (181.0 年) 和公路 / 街道 (142.0 年) 的潛在壽命年數較長。

★ 4.11.4 以活動計算，日常生活 (194.0 年) 和行程途中 (167.0 年) 的潛在壽命年數較長。

★ 4.11.5 以創傷類型分析，交通意外 (171.0 年) 和家居意外 (68.0 年) 的潛在壽命年數較長。

★ 4.11.6 在 18,585 宗個案中的 86 宗死亡個案，潛在壽命年數為 507 年。

<sup>6</sup> Discounting and mortality adjusting Years of Potential Life Lost (YPLL) - <http://www.quantitativeskills.com/sisa/papers/paper6.htm>

<sup>6</sup> 資扣除及調整死亡潛在壽命年數 (YPLL) - <http://www.quantitativeskills.com/sisa/papers/paper6.htm>

#### Costs for general wards

Among the 28 districts in Kwai Tsing, the average costs for general wards were relatively higher for Cheung Hang (HK\$53428.57), Chung Hong (HK\$46073.08), Shek Lei Extension (HK\$42693.75) and On Yam (HK\$42362.79).<sup>7</sup>

#### 普通病房收費

在葵青的 28 個區中，長亨 (HK\$53428.57)、長康 (HK\$46073.08)、新石籬 (HK\$42693.75) 和安蔭 (HK\$42362.79) 的平均普通病房費用較高。<sup>7</sup>

	Valid N 有效數據	Maximum 最多	Mean 平均值	Median 中位數	Minimum 最少	Standard Deviation 標準差
Cheung Hang 長亨	21	303600.00	53428.57	26400.00	3300.00	73179.83
Cheung Hong 長康	26	178200.00	46073.08	33000.00	3300.00	46682.87
Shek Lei Extension 新石籬	32	257400.00	42693.75	19800.00	3300.00	56109.00
On Yam 安蔭	43	273900.00	42362.79	19800.00	3300.00	54804.47
Cheung On 長安	26	293700.00	36300.00	18150.00	3300.00	58995.29
Wah Lai 華荔	39	306900.00	33000.00	9900.00	3300.00	57452.73
Cheung Ching 長青	33	227700.00	30800.00	13200.00	3300.00	46498.59
Chek Yam 石蔭	68	221100.00	29166.18	14850.00	3300.00	39326.56
Cho Yiu 祖堯	97	369600.00	28543.30	13200.00	3300.00	44621.34
Kwai Hing 葵興	28	128700.00	28050.00	14850.00	3300.00	33575.54
Shek Lei 石籬	66	145200.00	26950.00	13200.00	3300.00	32201.30
Wai Hoi 偉海	21	112200.00	26714.29	19800.00	3300.00	25151.65
Tai Pak Tin 大白田	77	132000.00	26142.86	16500.00	3300.00	29290.79
Lai King 荔景	102	537900.00	25817.65	11550.00	3300.00	56787.52
Lai Wah 荔華	22	99000.00	25650.00	6600.00	3300.00	29690.08
Kwai Shing West Estate 葵盛西邨	68	194700.00	24992.65	9900.00	3300.00	38851.31
Kwai Fong 葵芳	78	194700.00	24961.54	9900.00	3300.00	32631.90
Tsing Yi South 青衣南	114	254100.00	24547.37	9900.00	3300.00	36558.03
Hing Fong 興芳	116	135300.00	24465.52	9900.00	3300.00	31291.63
Shing Hong 盛康	30	99000.00	24310.00	9900.00	3300.00	27765.53
Tsing Yi Estate 青衣邨	44	148500.00	24150.00	9900.00	3300.00	29719.37
Kwai Shing East Estate 葵盛東邨	56	95700.00	21803.57	9900.00	3300.00	22868.95
Ching Fat 青發	37	204600.00	20602.70	9900.00	3300.00	34875.43
Greenfield 翠怡	23	112200.00	19943.48	9900.00	3300.00	26031.39
Kwai Chung Estate 葵涌邨	17	75900.00	16111.76	6600.00	3300.00	19343.83
On Ho* <sup>8</sup> 安浩* <sup>8</sup>	9	46200.00	11733.33	6600.00	3300.00	13914.02

<sup>7</sup> Valid count of 1 or below was not presented in the tables and readers should carefully interpret the findings as the valid count is small

<sup>7</sup> 有效數據是 1 或以下的，並沒有在表中顯示，由於有效數據較少，讀者應小心理解數據結果。

<sup>8</sup> Readers should carefully interpret the findings as the valid count is small.

<sup>8</sup> 有由於有效數據較少，讀者應小心理解數據結果。



## Costs for intensive wards

## 加護病房收費

The average costs for intensive wards were relatively higher for Kwai Fong (HK\$139000.00), Hing Fong (HK\$30580.00) and Lai King (HK\$27800.00).<sup>8</sup>

葵芳 (HK\$139000.00)、興芳 (HK\$30580.00) 和荔景 (HK\$27800.00) 的加護病房平均收費較高。<sup>8</sup>

	Valid N 有效數據	Maximum 最多	Mean 平均值	Median 中位數	Minimum 最少	Standard Deviation 標準差
Kwai Fong* 葵芳*	2	166800.00	139000.00	139000.00	111200.00	39315.14
Hing Fong* 興芳*	5	83400.00	30580.00	13900.00	13900.00	30134.48
Lai King* 荔景*	3	55600.00	27800.00	13900.00	13900.00	24075.51
Shek Lei* 石籬*	2	27800.00	20850.00	20850.00	13900.00	9828.78
Cheung Hong* 長康*	2	27800.00	20850.00	20850.00	13900.00	9828.78

<sup>8</sup> Readers should carefully interpret the findings as the valid count is small. <sup>8</sup> 由於有效數據較少，讀者應小心理解數據結果。

## Total costs

## 總收費

The average total costs for general wards plus intensive wards were relatively higher for On Yam (HK\$12186.96), Cheung Hong (HK\$11669.91), Shek Lei Extension (HK\$11506.20) and Cheung Hang (HK\$10993.58).<sup>9</sup>

安蔭 (HK\$12186.96)、長康 (HK\$11669.91)、新石籬 (HK\$11506.20) 和長亨 (HK\$10993.58) 的普通病房及加護病房的平均總收費較高。<sup>9</sup>

	Valid N 有效數據	Maximum 最多	Mean 平均值	Median 中位數	Minimum 最少	Standard Deviation 標準差
Lower Tai Wo Hau* 下大窩口*	9	235000.00	26733.33	700.00	700.00	78100.00
On Yam 安蔭	161	274600.00	12186.96	700.00	700.00	33889.76
Cheung Hong 長康	113	192800.00	11669.91	700.00	700.00	31322.71
Shek Lei Extension 新石籬	129	285900.00	11506.20	700.00	700.00	34904.27
Cheung Hang 長亨	109	304300.00	10993.58	700.00	700.00	37945.28
Cheung Ching 長青	153	506400.00	9160.13	700.00	700.00	43936.81
Cheung On 長安	113	294400.00	9052.21	700.00	700.00	31818.15
Chek Yam 石蔭	263	221800.00	8241.06	700.00	700.00	23647.36
Shek Lei 石籬	242	173700.00	8222.31	700.00	700.00	21448.10
Tai Pak Tin 大白田	290	132700.00	7641.38	700.00	700.00	18956.95
Kwai Shing East Estate 葵盛東邨	224	238900.00	7081.70	700.00	700.00	21399.58
Wah Lai 華荔	206	307600.00	6947.57	700.00	700.00	27925.11
Shing Hong 盛康	135	99700.00	6102.22	700.00	700.00	16424.01
Kwai Fong 葵芳	449	306600.00	5655.46	700.00	700.00	21289.67
Ching Fat 青發	157	205300.00	5643.95	700.00	700.00	19244.43
Kwai Shing West Estate 葵盛西邨	361	195400.00	5484.76	700.00	700.00	19457.79
Tsing Yi South 青衣南	601	254800.00	5379.37	700.00	700.00	18661.54
Cho Yiu 祖堯	639	370300.00	5119.87	700.00	700.00	20415.58
Tsing Yi Estate 青衣邨	247	149200.00	5002.02	700.00	700.00	15495.85
Hing Fong 興芳	716	137400.00	4877.23	700.00	700.00	16483.64
Kwai Hing 葵興	198	129400.00	4666.67	700.00	700.00	15827.85
Kwai Chung Estate 葵涌邨	74	76600.00	4401.35	700.00	700.00	11339.20
Wai Hoi 偉海	157	112900.00	4361.78	700.00	700.00	12933.22
Lai Wah 荔華	160	99700.00	4226.88	700.00	700.00	13962.12
Lai King 荔景	792	538600.00	4130.30	700.00	700.00	22172.26
Greenfield 翠怡	179	112900.00	3262.57	700.00	700.00	11337.66
Upper Tai Wo Hau 上大窩口	20	27100.00	2020.00	700.00	700.00	5903.22
On Ho 安浩	86	46900.00	1927.91	700.00	700.00	5592.19

<sup>9</sup> Readers should carefully interpret the findings as the valid count is small. <sup>9</sup> 由於有效數據較少，讀者應小心理解數據結果。

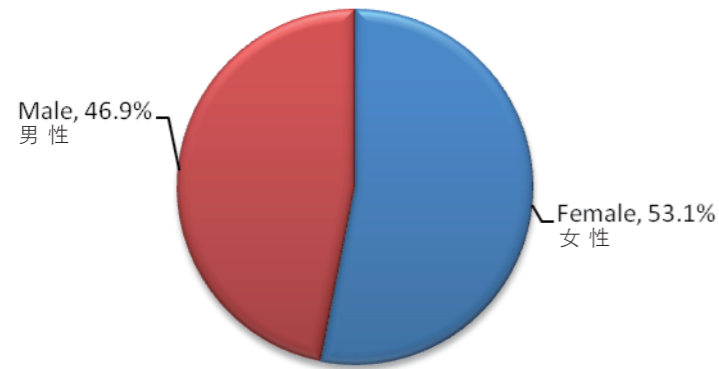
5. Further analyses

★ 5.1 The following discussion focuses on frequently happened or highly concerned injuries, namely, fall injuries, traffic injuries, work injuries, domestic violence<sup>10</sup> and self harm.<sup>11</sup>

Fall injuries

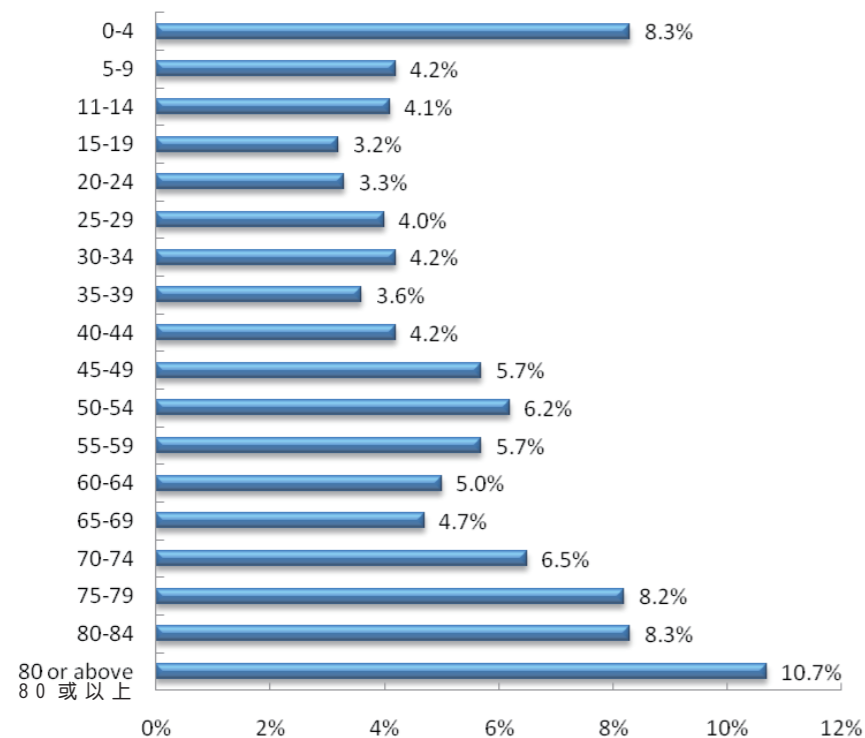
★ 5.2 Over half of the fall injuries were happened to females (53.1%) while 46.9% to their male counterparts.

Percentage distribution of fall injuries by gender  
跌傷的受傷者性別分佈



★ 5.3 The percentages of fall injuries for infants aged below 4 and the elderly aged 75 and above were higher.

Percentage distribution of fall injuries by age  
跌傷個案的年齡分佈



<sup>11</sup> Domestic violence did not include physical injury.

<sup>12</sup> Self harm did not include poisoning

5. 進一步分析

★ 5.1 以下集中討論經常發生或獲高度關注的受傷，即跌倒、交通意外、工作、家庭暴力<sup>10</sup>和自我損傷<sup>11</sup>所造成的傷害。

跌傷

★ 5.2 超過一半跌傷的受傷者是女性 (53.1%)，其餘的 46.9% 是男性。

★ 5.3 跌傷個案中，四歲以下之嬰兒及 75 歲以上的長者佔較多的百分比。

<sup>11</sup> 家庭暴力不包括肉體上的傷害處

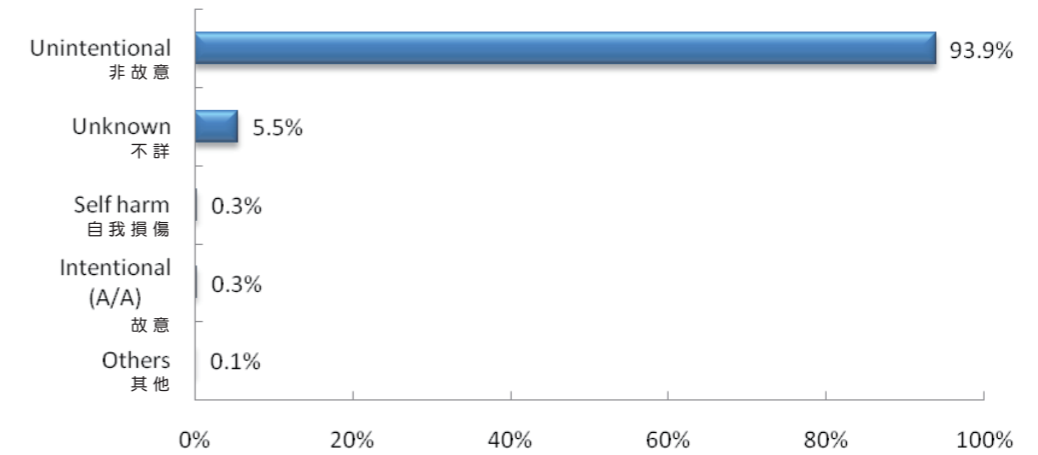
<sup>12</sup> 自我損傷不包括中毒

★ 5.4 The great majority of the fall injuries were unintentional (93.9%).

★ 5.4 絕大部份跌傷的個案都是非故意的 (93.9%)。

Percentage distribution of fall injuries by intention

跌傷個案的意圖分佈

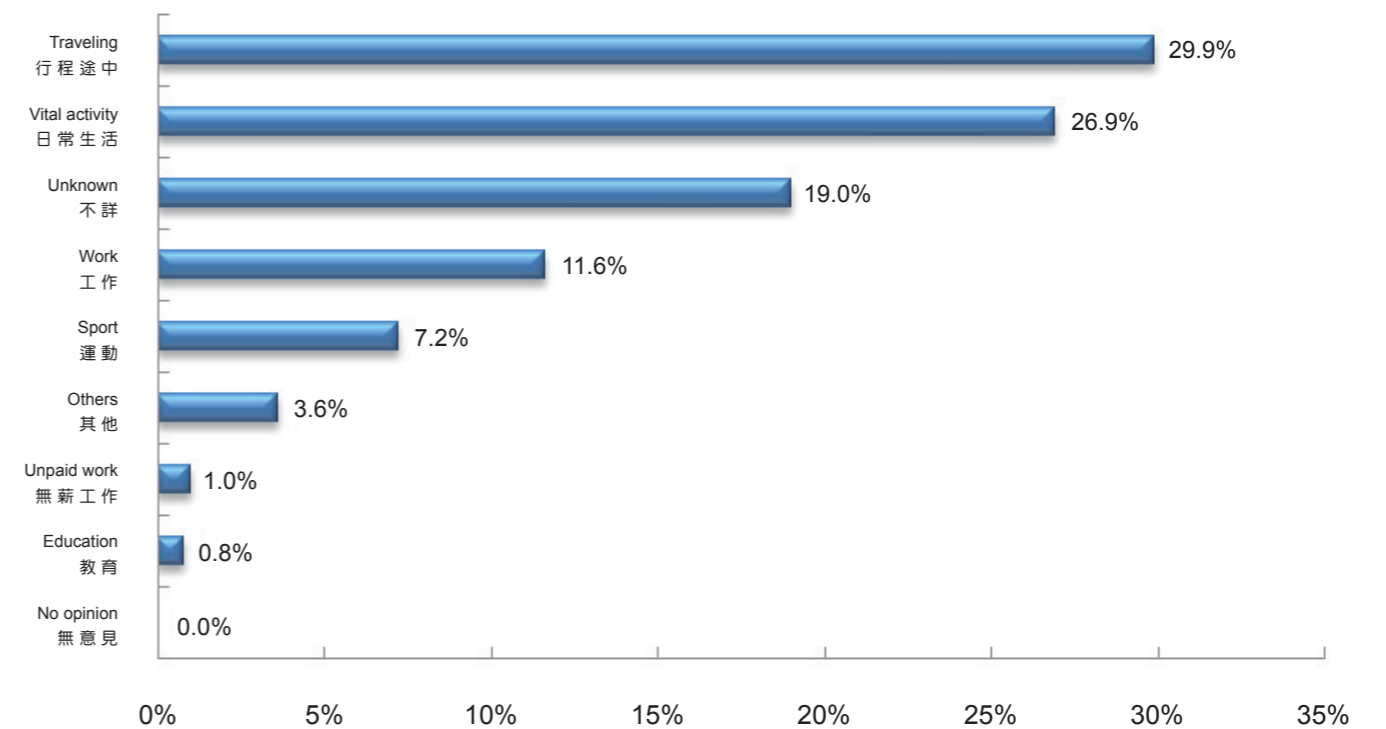


★ 5.5 Over a quarter of fall injuries happened during traveling (29.9%) as well as vital activities (26.9%).

★ 5.5 超過四分一的跌傷個案在行程途中 (29.9%) 及日常生活中 (26.9%) 發生的。

Percentage distribution of fall injuries by activities

跌傷時的活動分佈

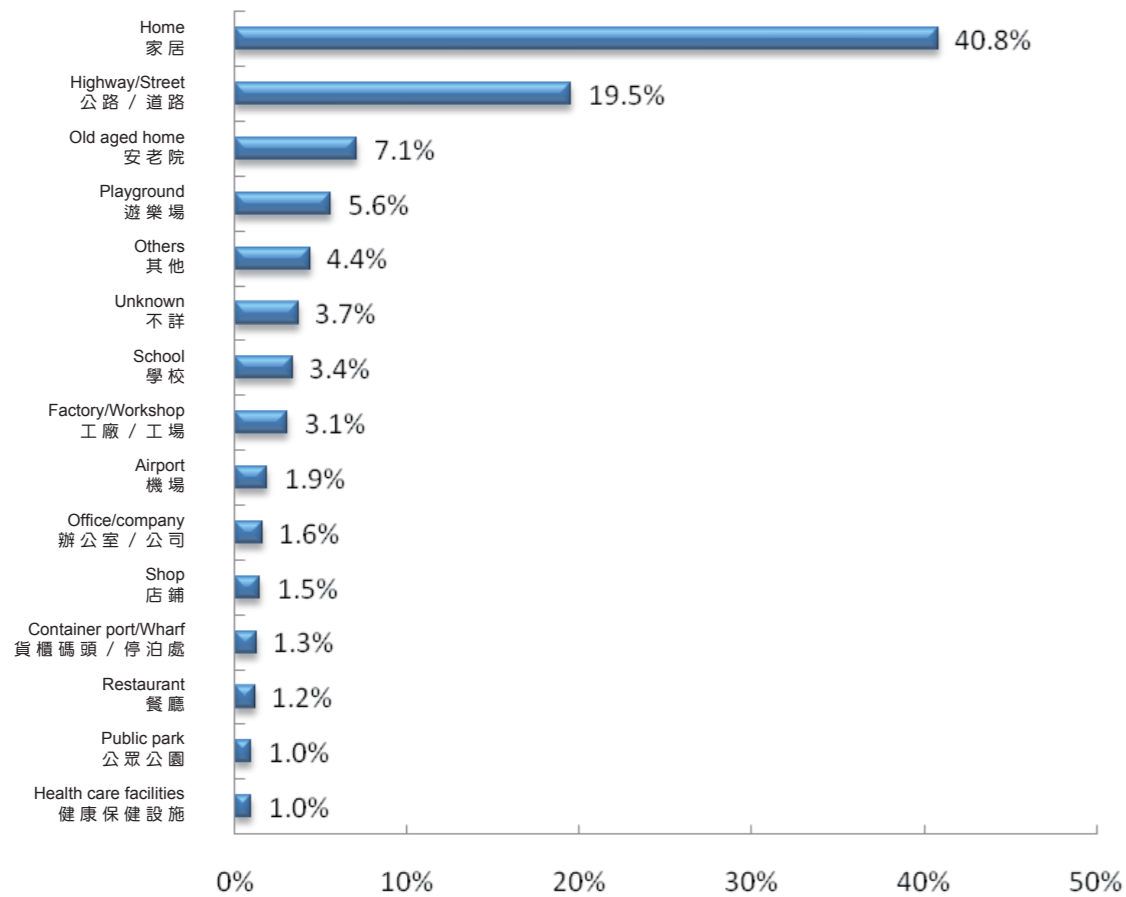


★ 5.6 About 40.8% of injury events occurred at home. About 19.5% happened on highway/street and about 7.1% in old aged home.

★ 5.6 大約有 40.8% 的受傷個案是在家發生的，19.5% 發生在公路 / 街道及 7.1% 發生在安老院。

Percentage distribution of fall injuries by place of occurrence

跌傷發生地點分佈

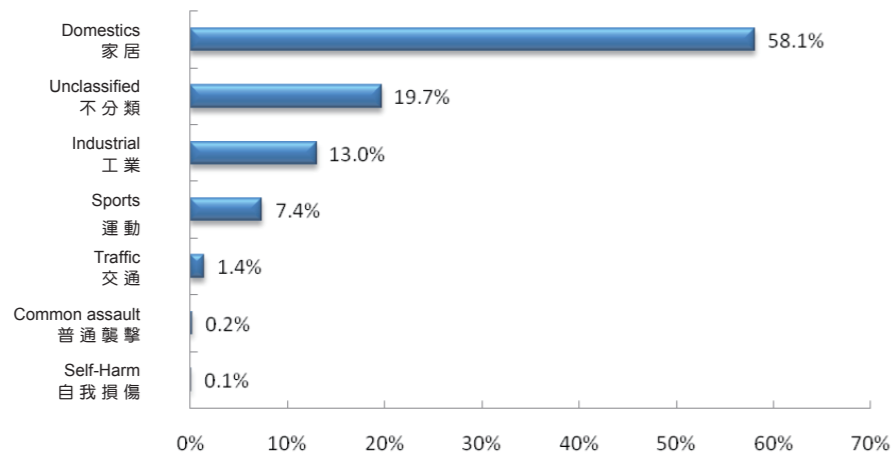


★ 5.7 Over half of fall injuries resulted from domestics (58.1%) and about 13.0% resulted from industrial situation (19.7%).

★ 5.7 超過一半跌傷的個案都是來自家居意外 (58.1%) 及大約 13.0% 來自工業意外。

Percentage distribution of fall injuries by traumatic situations

跌傷的創傷情況分佈



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Traffic injuries

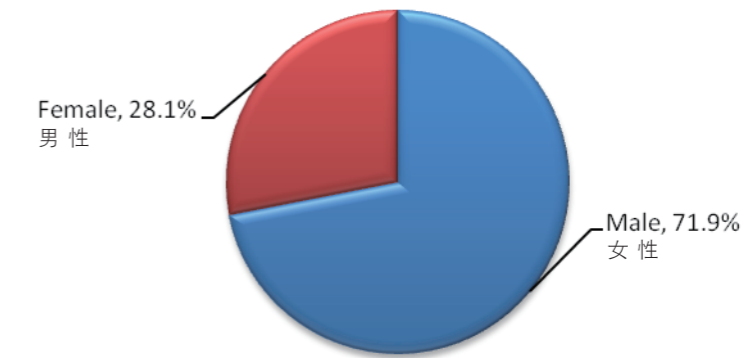
交通意外

★ 5.8 The majority of the traffic injuries were happened to males (71.9%) while 28.1% to their female counterparts.

★ 5.8 交通意外受傷者以男性佔大部分 (71.9%) 而其餘的 28.1% 則是女性。

Percentage distribution of traffic injuries by gender

交通意外傷者的性別分佈

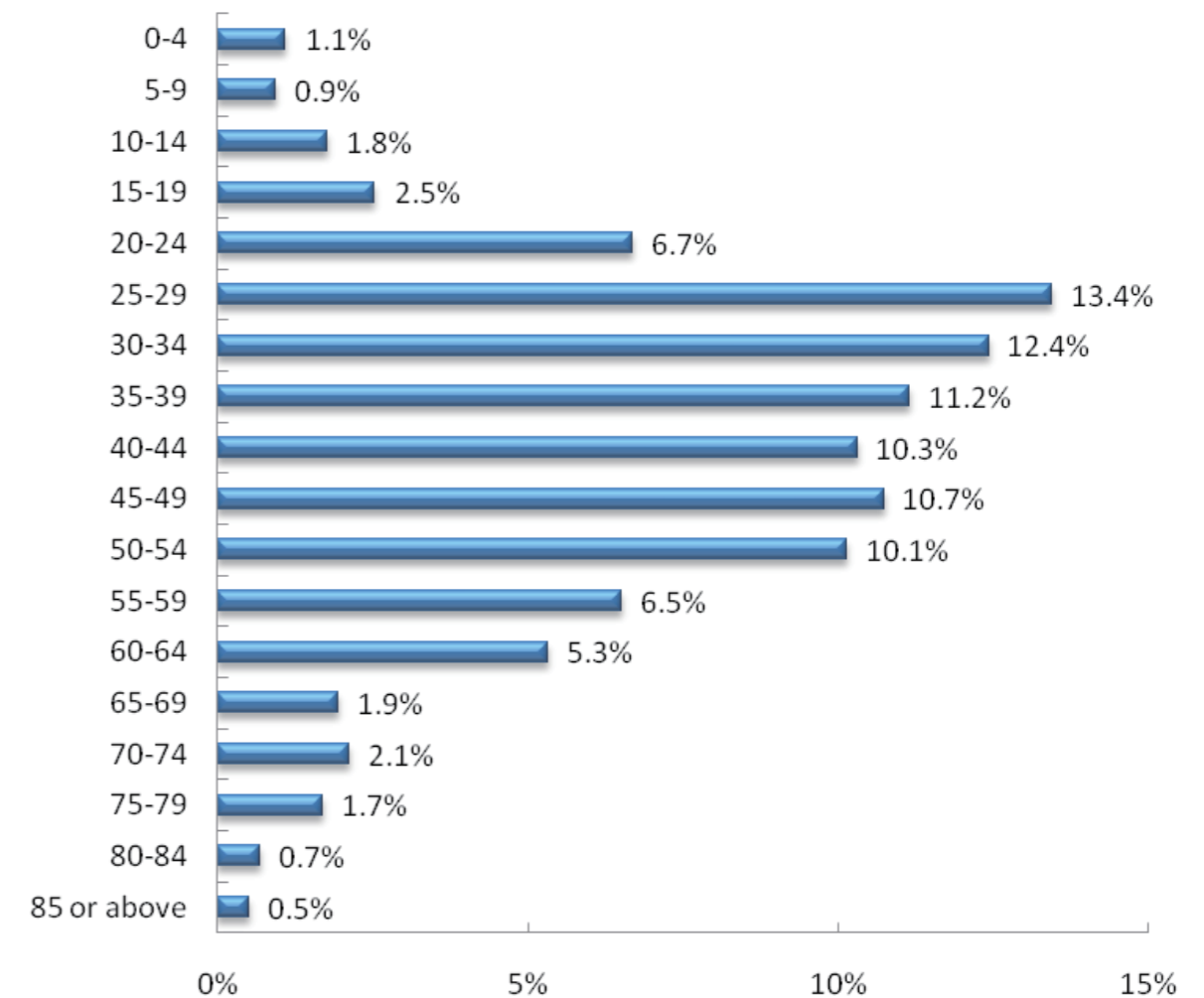


★ 5.9 The percentages of traffic injuries for adults aged between 25 and 54 were higher.

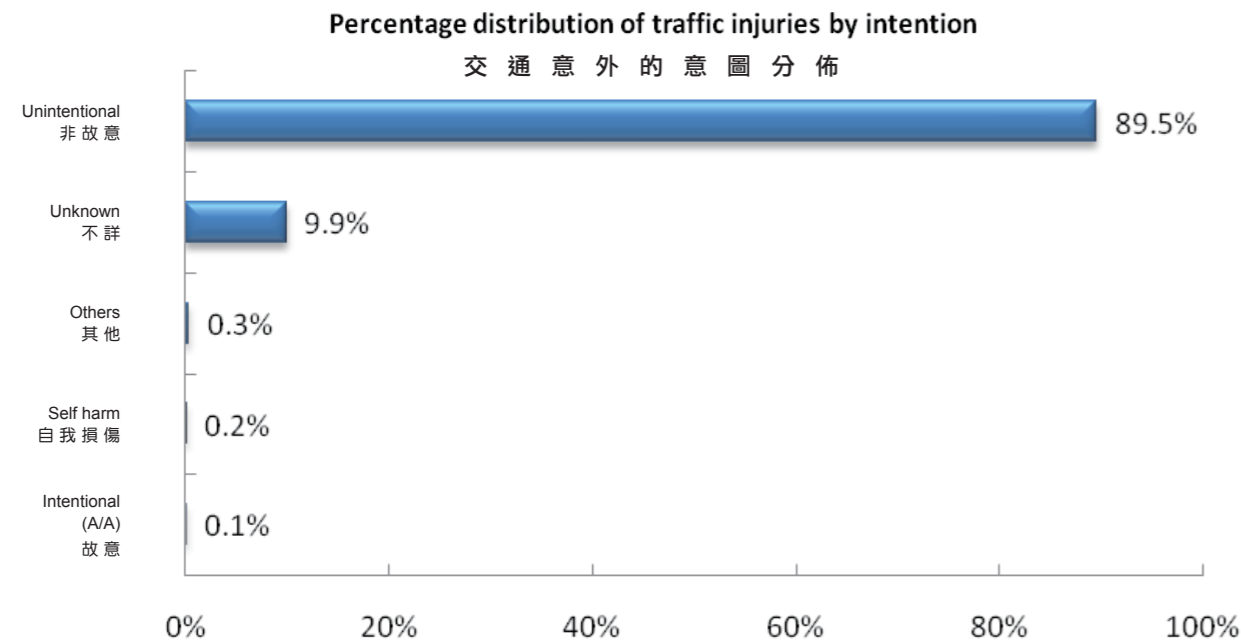
★ 5.9 大部分交通意外的傷者年齡介乎 25 至 54 歲。

Percentage distribution of traffic injuries by by age

交通意外傷者年齡分佈

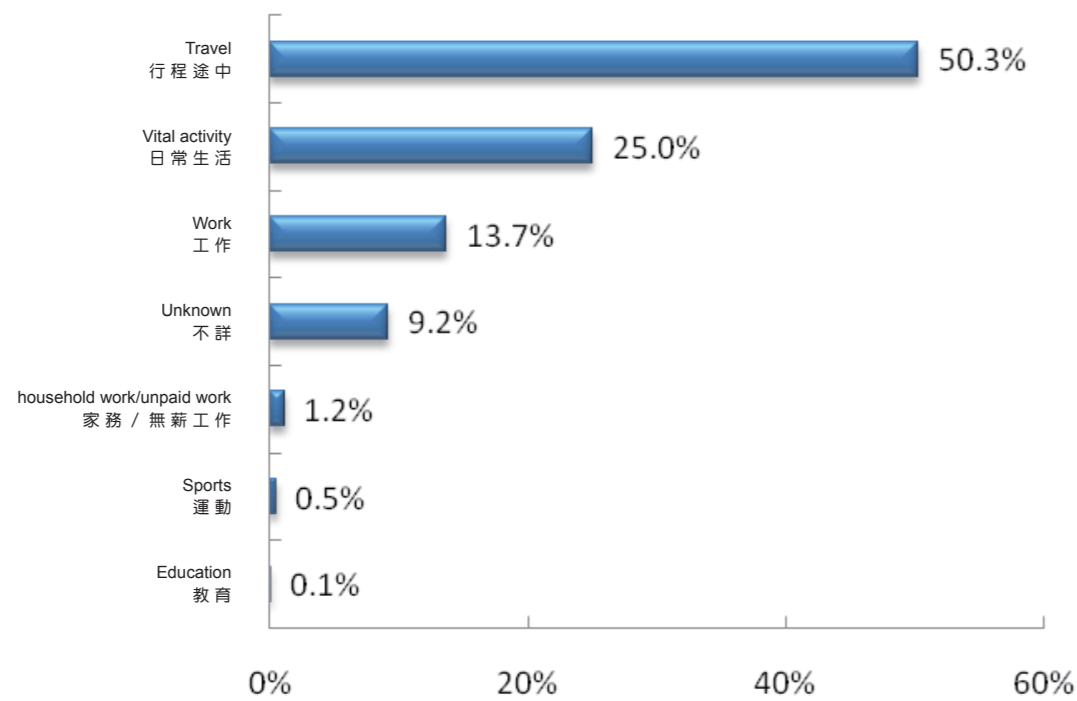


★ 5.10 The great majority of the traffic injuries were unintentional (89.5%).  
 ★ 5.10 絕大多數的交通意外都是非故意的 (89.5%)。



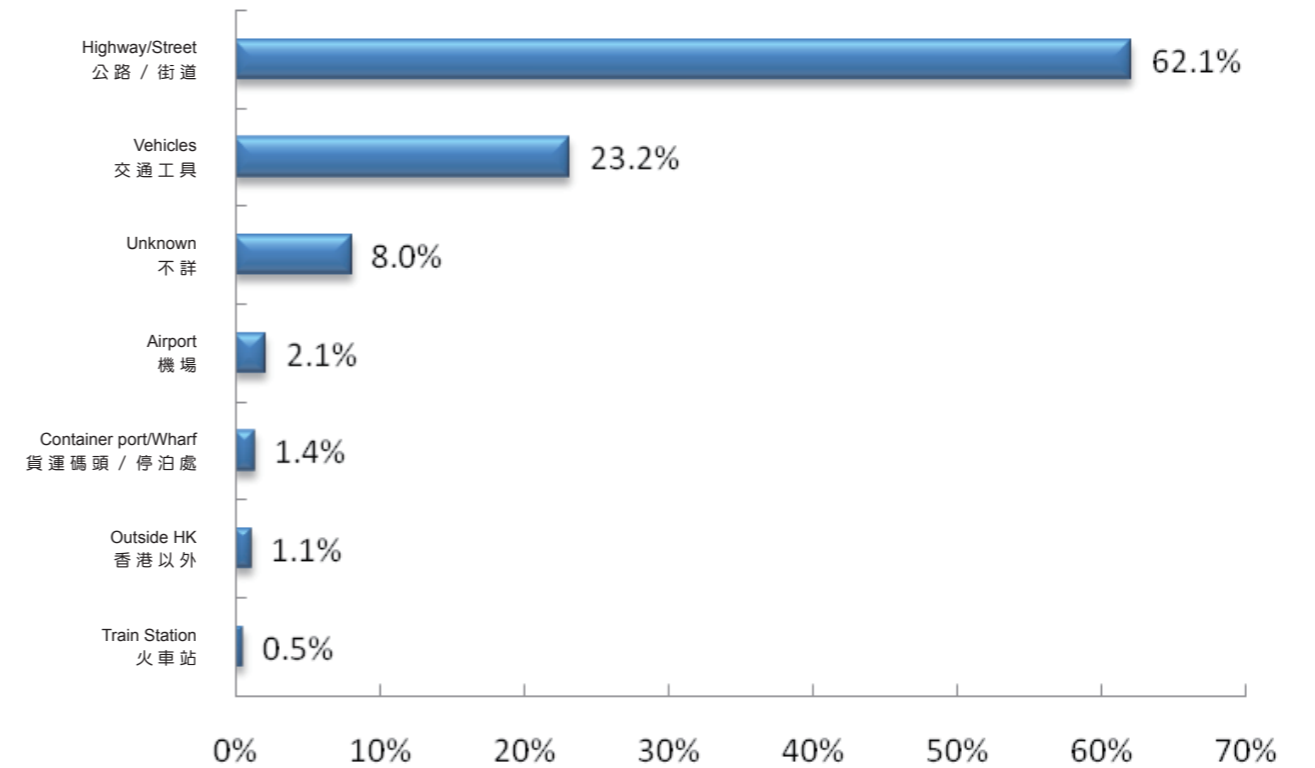
★ 5.11 Over a quarter of traffic injuries happened during traveling (50.3%) as well as vital activities (25.0%).  
 ★ 5.11 超過四分之一的交通意外發生在行程途中 (50.3%) 及日常生活的時候 (25.0%)。

**Percentage distribution of traffic injuries by activities**  
 交通意外受傷時的活動分佈



★ 5.12 About 62.1% of injury events occurred on highway/street. About 23.2% happened at vehicles and about 2.1% On airport.  
 ★ 5.12 受傷個案主要發生在公路 / 街道 (62.1%)，其次大約 23.2% 發生在交通工具或機場 (2.1%)。

**Percentage distribution of traffic injuries by place of occurrence**  
 交通意外發生地點分佈



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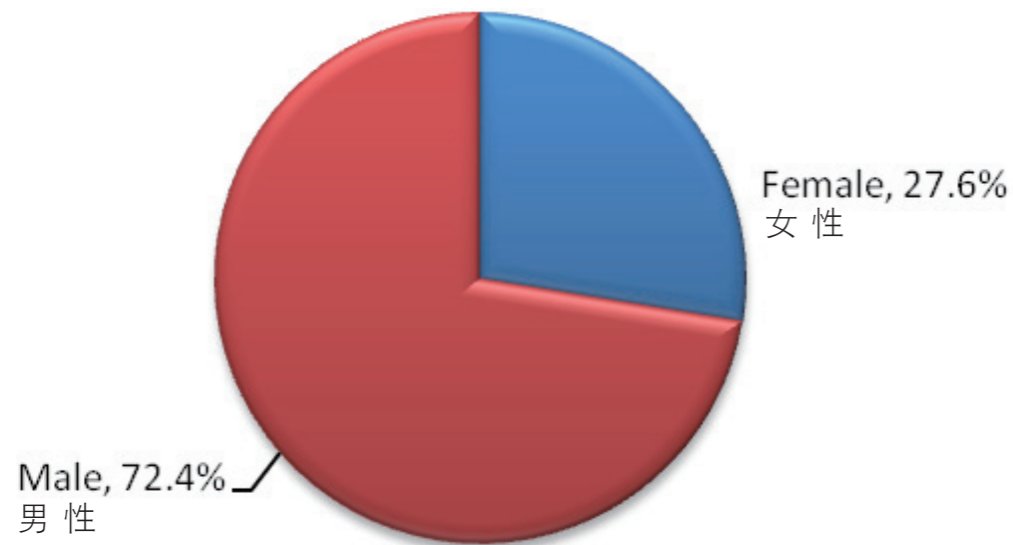
Work injuries

★ 5.13 About a quarter of the work injuries were happened to females (27.6%) while the percentage was large for their male counterparts (72.4%).

工作受傷

★ 5.13 大約四分之一的工業意外受傷者是女性，傷者男性居多 (72.4%)。

Percentage distribution of work injuries by gender  
工作受傷性別分佈

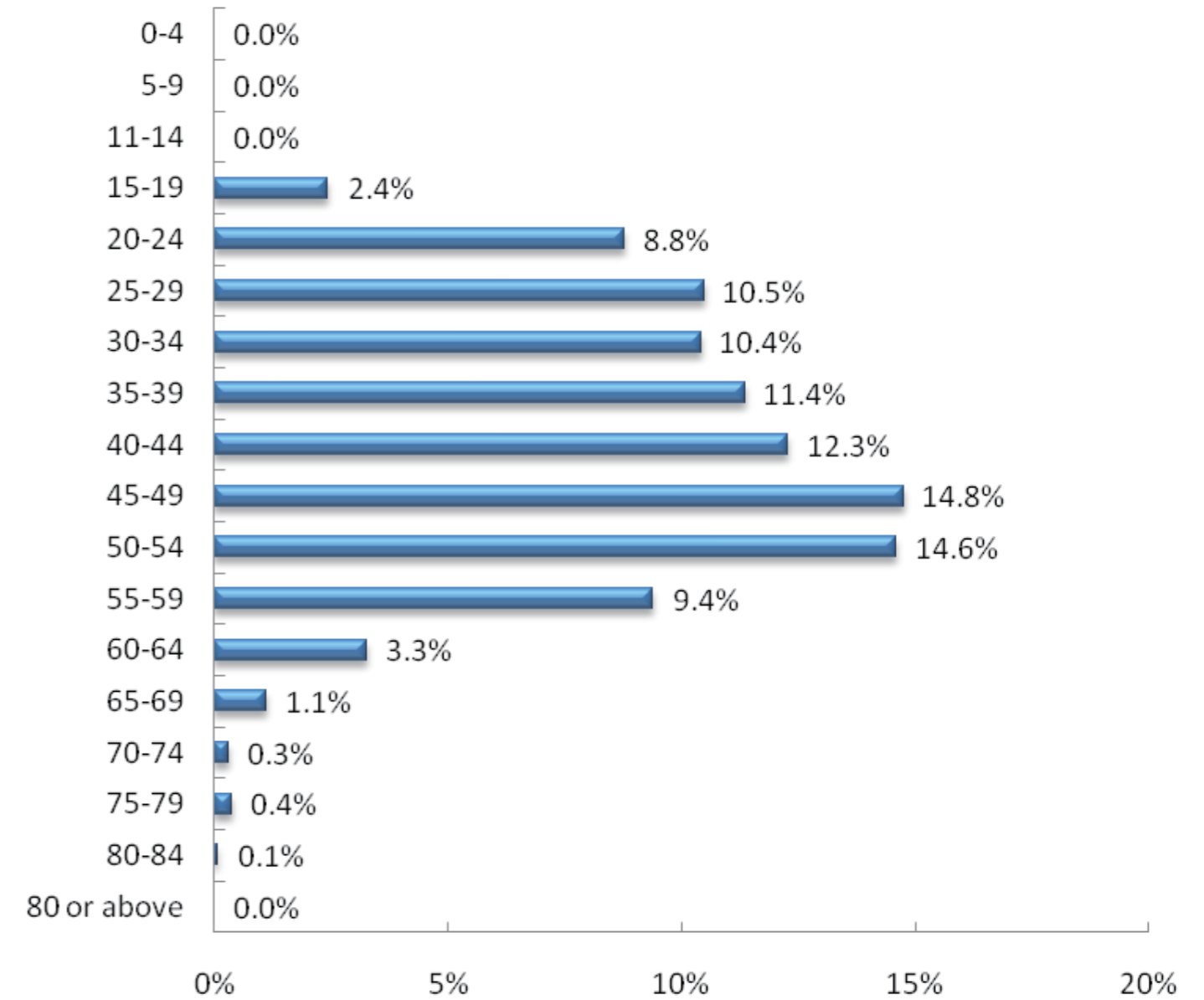


★ 5.14 The percentages of work injuries for adults aged 20 to 59 were higher.

★ 5.14 年齡介乎 20 至 59 歲的成年人工作意外事故率較高。

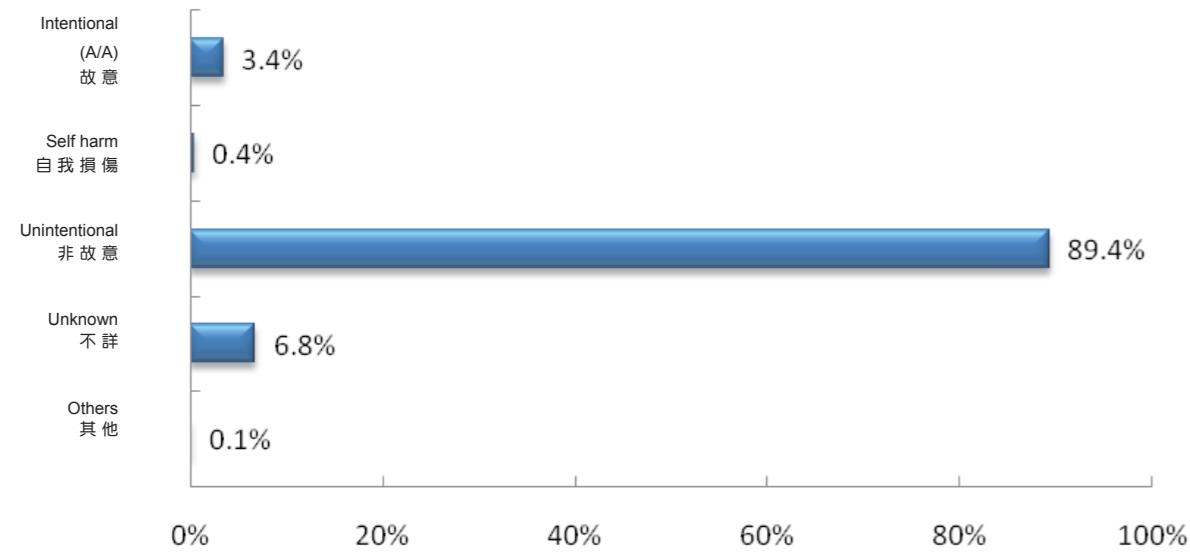
Percentage distribution of work injuries by by age

工作受傷年齡分佈



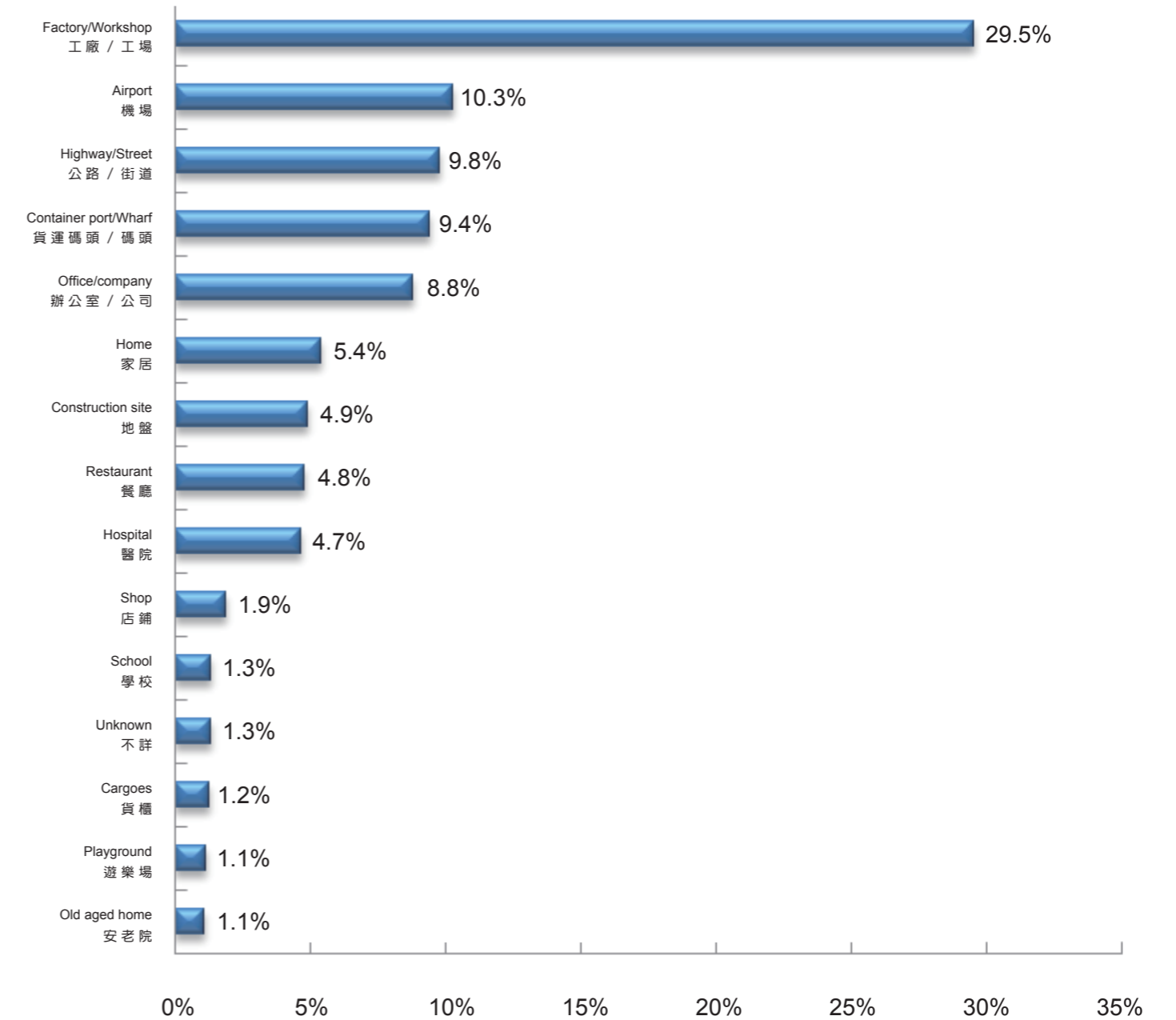
★ 5.15 The great majority of the work injuries were unintentional (89.4%).  
 ★ 5.15 絕大部分的工作受傷事件是非故意的 (89.4%)。

Percentage distribution of work injuries by intention  
 工作受傷的意圖分佈



★ 5.16 About 29.5% of work injury occurred at factory / workshop. About 10% of work injuries occurred in airport (10.3%), highway/street (9.8%) and container port/wharf (9.4%). Further 8.8% of work injuries occurred in office/ company.  
 ★ 5.16 大約 29.5% 的工業意外發生在工廠 / 工場；10% 發生在機場 (10.3%)；公路 / 街道 (9.8%) 及貨櫃港口 / 碼頭 (9.4%)；其次 8.8% 發生在辦公室 / 公司。

Percentage distribution of work injuries by place of occurrence  
 工業意外發生地點分佈

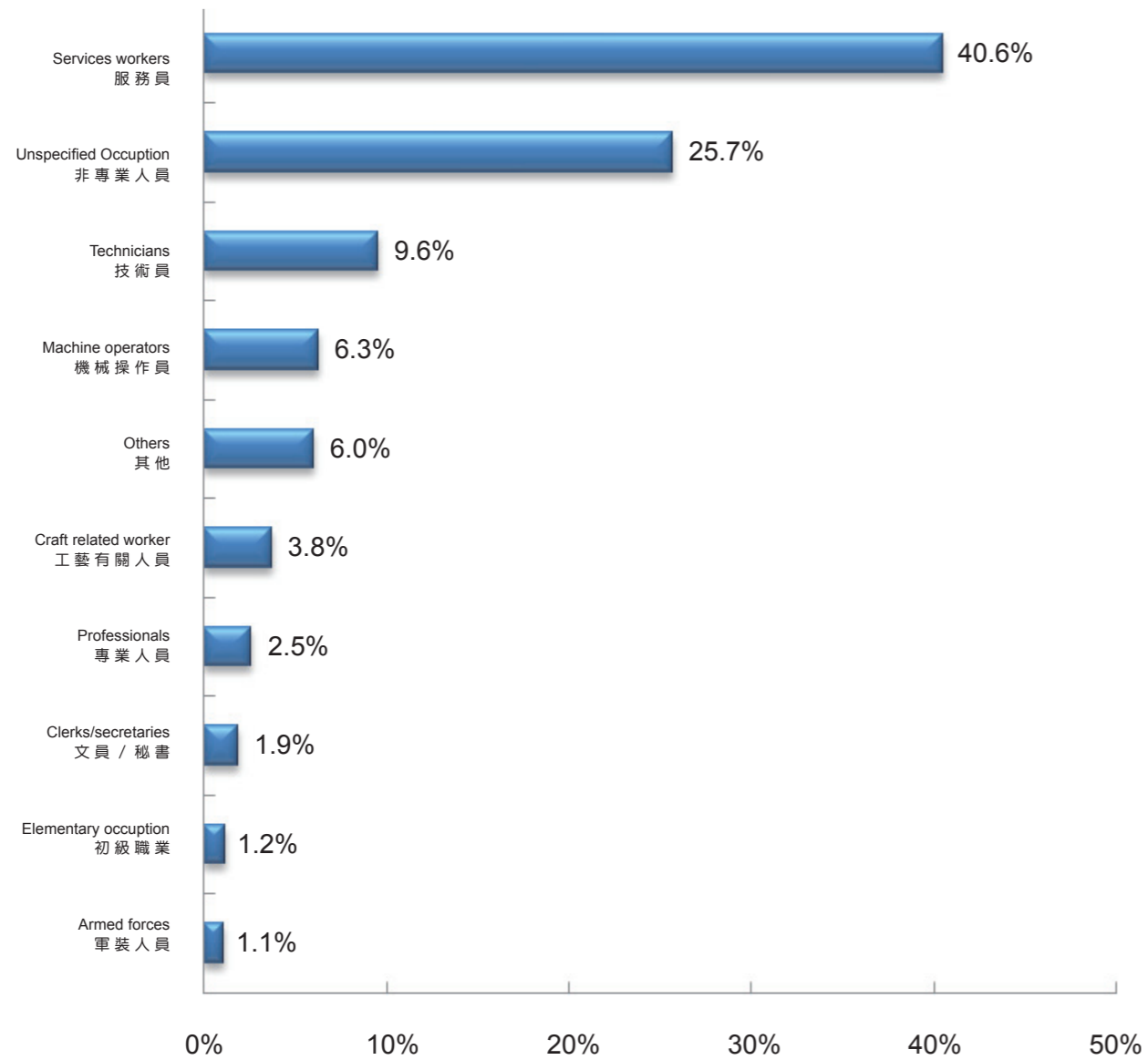


# Items less than 1 percent were deleted. # 少於 1% 的事項已被刪除

★ 5.17 About 40.6% of work injuries were happened to services workers (40.6%), technicians (9.6%) and machine operators (6.3%).

★ 5.17 大約 40.6% 的工作受傷者是服務員 (40.6%)、技術員 (9.6%) 及機械操作員 (6.3%)。

Percentage distribution of work injuries by occupations  
工作受傷職業分佈

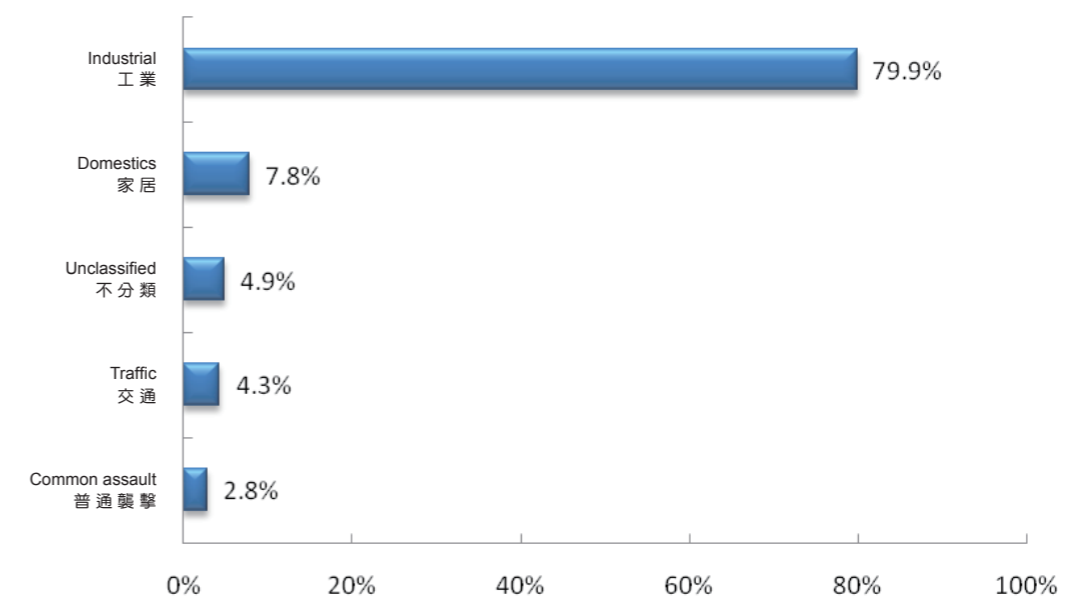


# Items less than 1 percent were deleted. # 少於 1% 的事項已被刪除

★ 5.18 Nearly three quarters of work injuries happened in industrial background (80%).

★ 5.18 接近四分之三的工作受傷發生在工業背景的地方 (80%)。

Percentage distribution of work injuries by traumatic situations  
工作受傷的創傷情況分佈



# Items less than 1 percent were deleted. # 少於 1% 的事項已被刪除

Domestic violence

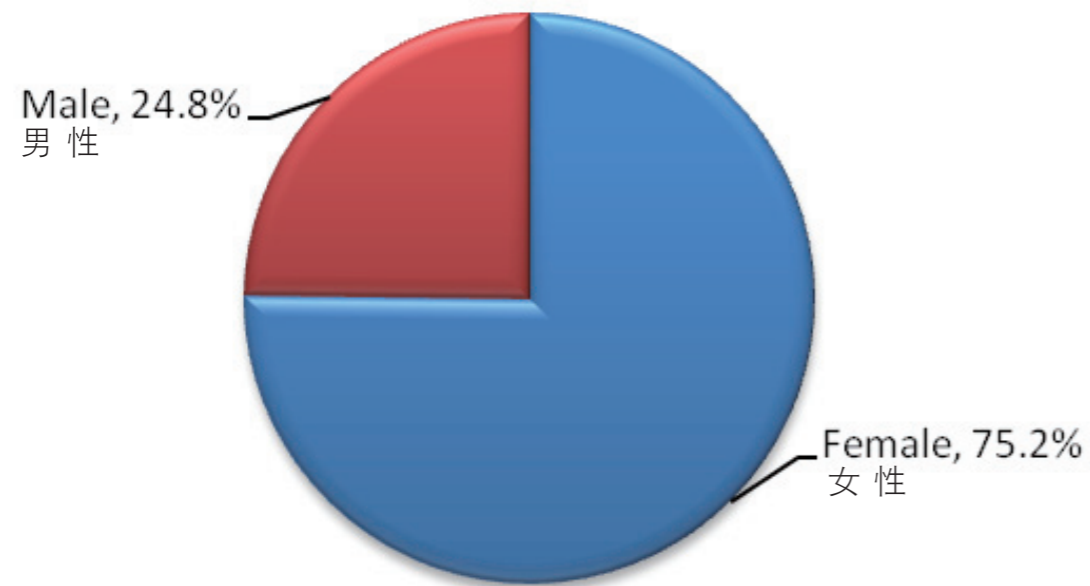
家庭暴力

★ 5.19 The majority of the injuries caused by domestic violence were happened to females (75.2%) while 24.8% to their male counterparts.

★ 5.19 家庭暴力的受害者以女性居多 (75.2%)，男性佔 24.8%。

Percentage distribution of injuries caused by domestic violence by gender

家庭暴力性別分佈

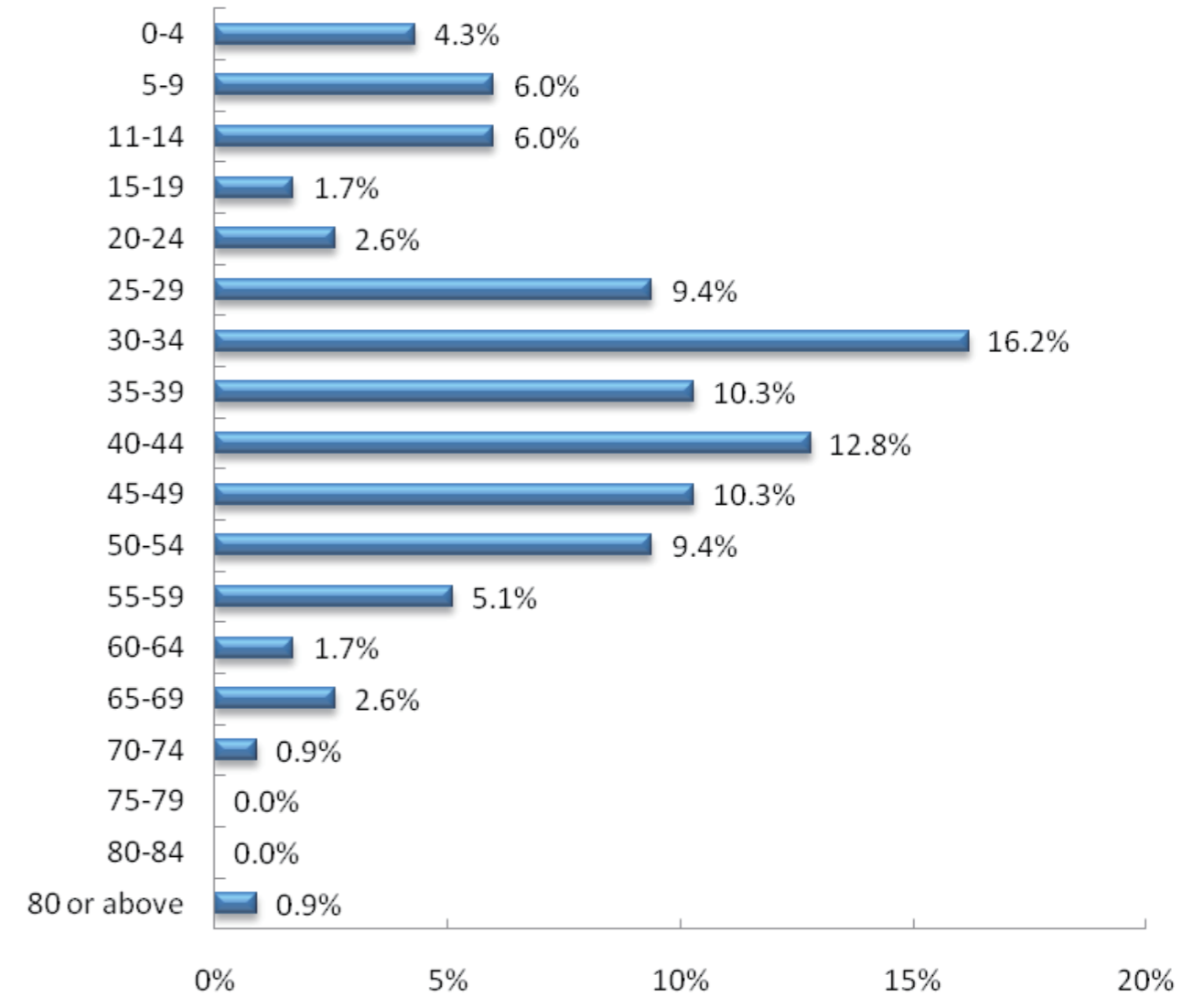


★ 5.20 The percentages of injuries caused by domestic violence for adults aged 30 to 54 were higher.

★ 5.20 家庭暴力中以年齡介乎 30 至 54 歲的人士居多。

Percentage distribution of injuries caused by domestic violence by age

家庭暴力年齡分佈

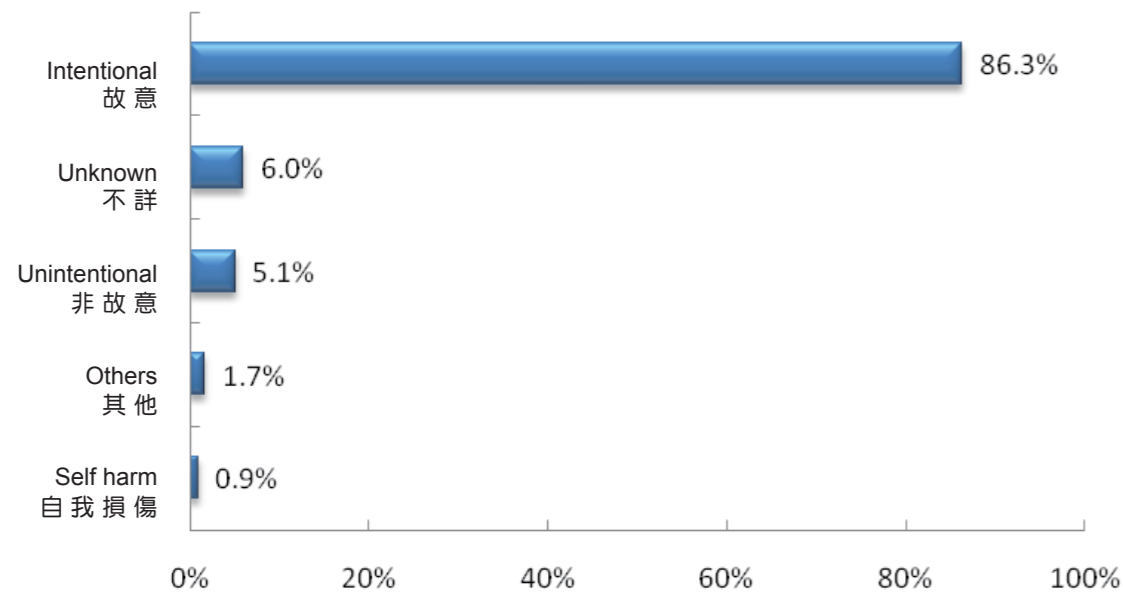




★ 5.21 The great majority of the injuries caused by domestic violence were intentional (86.3%).  
 ★ 5.21 大部分家庭暴力受傷的個案都是故意的 (86.3%)。

Percentage distribution of injuries caused by domestic violence by intention

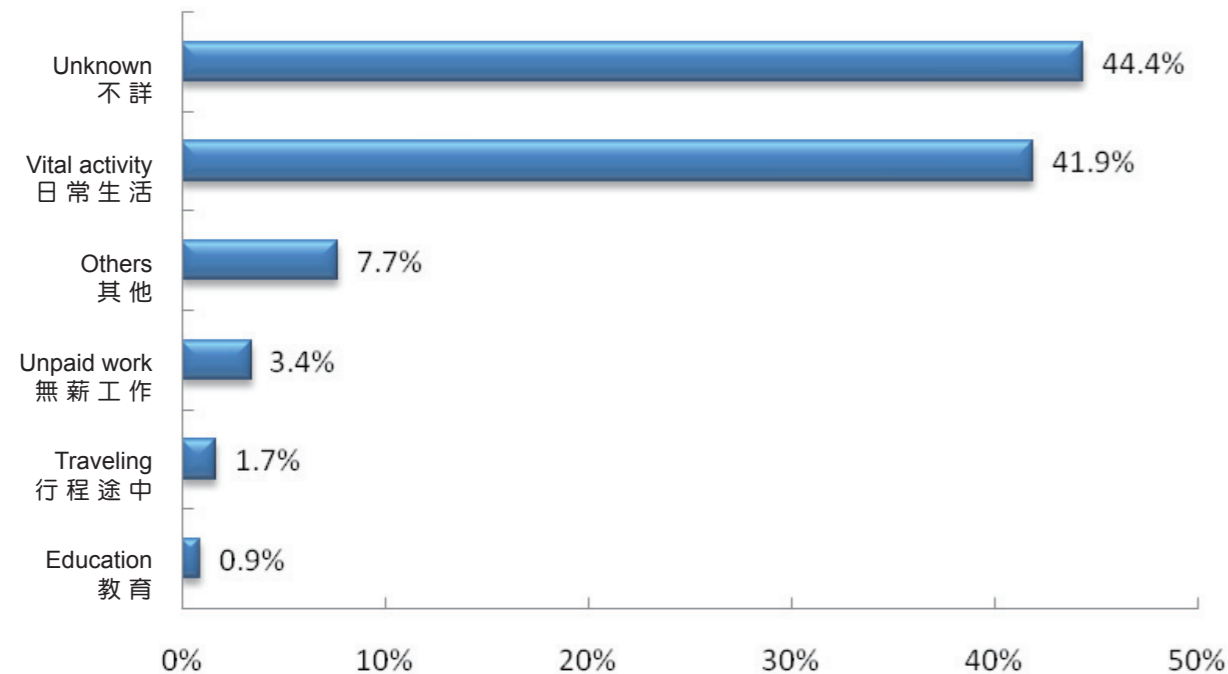
家庭暴力意圖分佈



★ 5.22 About 41.9% of the injuries caused by domestic violence were vital activity.  
 ★ 5.22 家庭暴力事故中大約 41.9% 是在體力勞動工作時受傷的。

Percentage distribution of injuries caused by domestic violence by activities

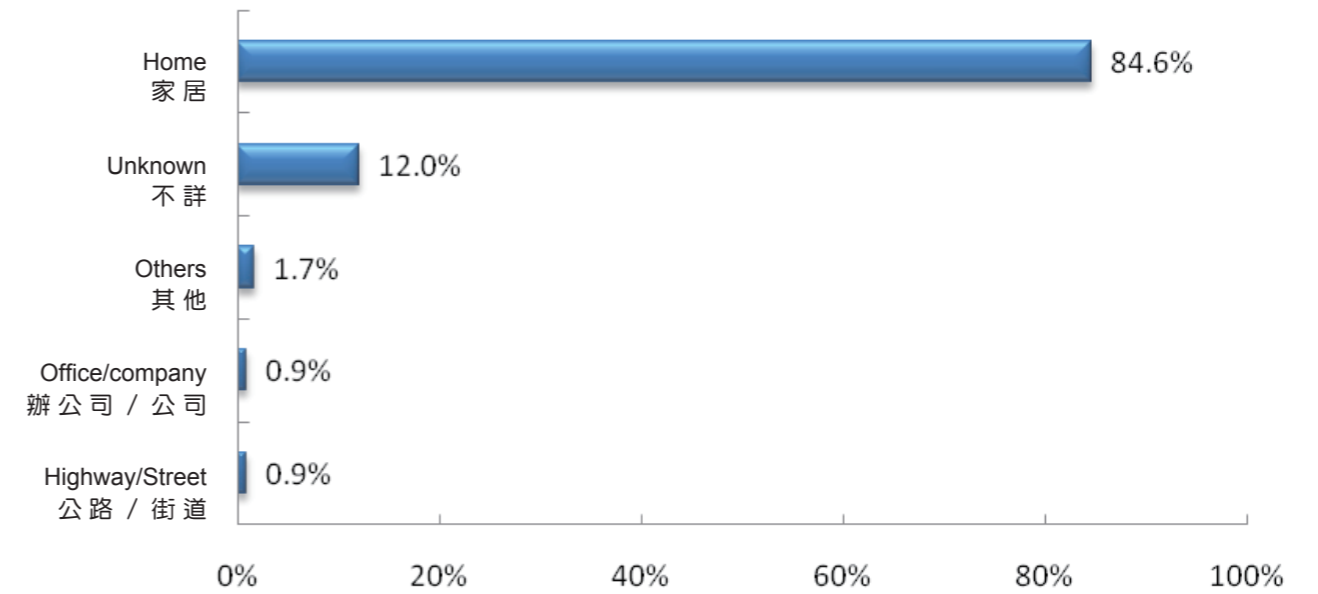
家庭暴力受傷活動分佈



★ 5.23 The great majority of the injuries caused by domestic violence took place at home.  
 ★ 5.23 絕大部份的家庭暴力受傷個案發生在家居。

Percentage distribution of injuries caused by domestic violence by place of occurrence

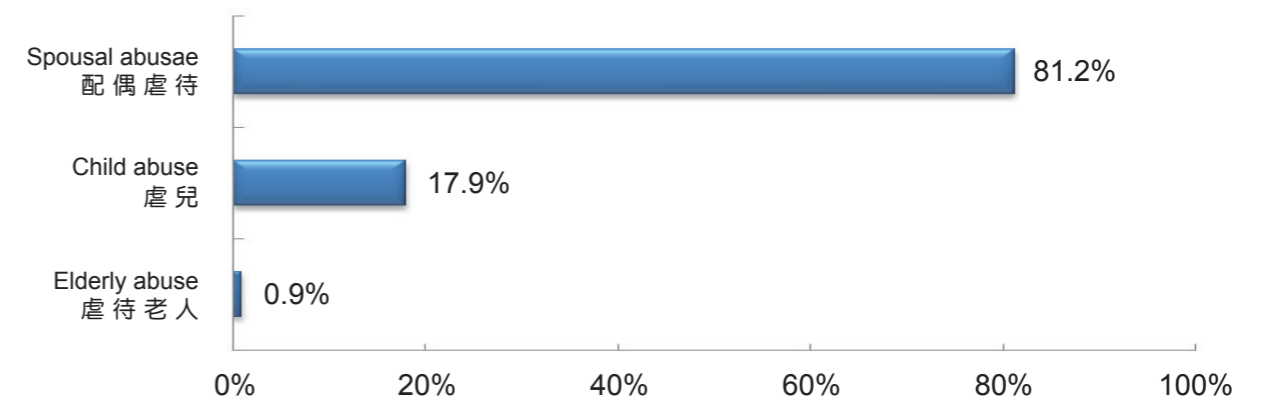
發生家庭暴力的地點分佈



★ 5.24 The great majority of the injuries caused by domestic violence happened as a result of spousal abuse (81.2), and about 17.9% happened as a result of child abuse.  
 ★ 5.24 大部份受傷個案中，由家庭暴力最終演變成配偶虐待 (81.2%)，及 17.9% 演變成虐兒。

Percentage distribution of injuries caused by domestic violence by traumatic situations

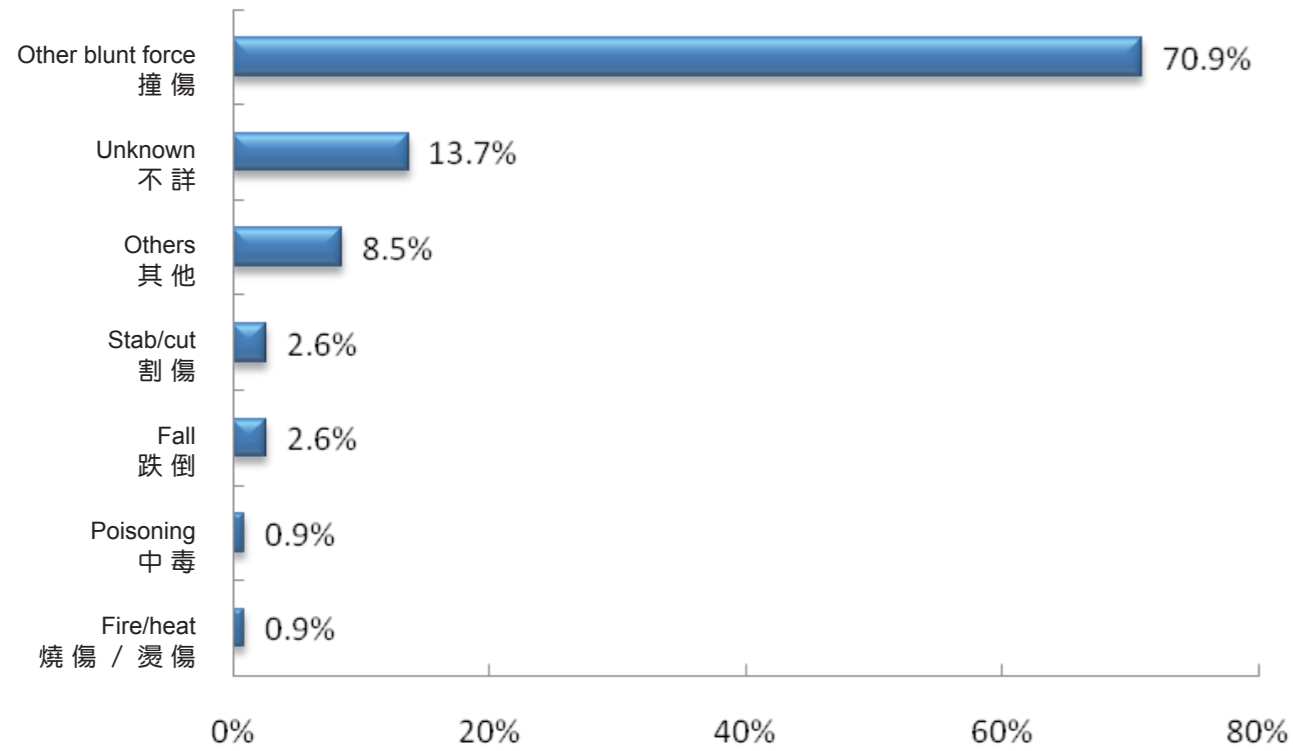
家庭暴力創傷情況分佈



★ 5.25 The majority of injuries in domestic violence were caused by other blunt (70.9%).  
 ★ 5.25 大部分家庭暴力的傷者都是撞傷的 (70.9%)。

Percentage distribution of injuries caused by domestic violence by causes of injury

家庭暴力受傷原因分佈



Self harm

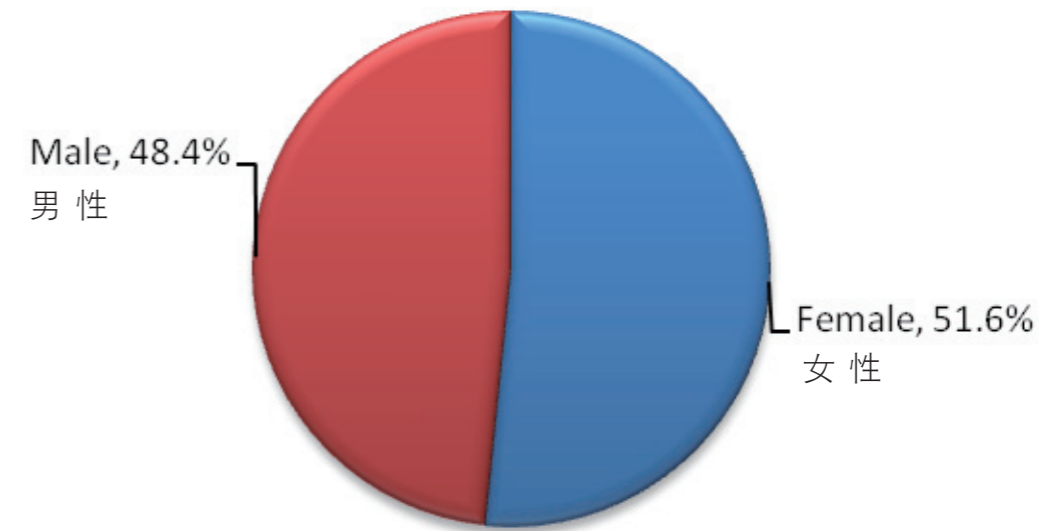
自我損傷

★ 5.26 Over half of the injuries of self harm were committed by females while the percentage for their male counterparts was slightly lower (48.4%).

★ 5.26 超過半數的自我損傷受傷者為女性，而男性只是稍微低於女性 (48.4%)。

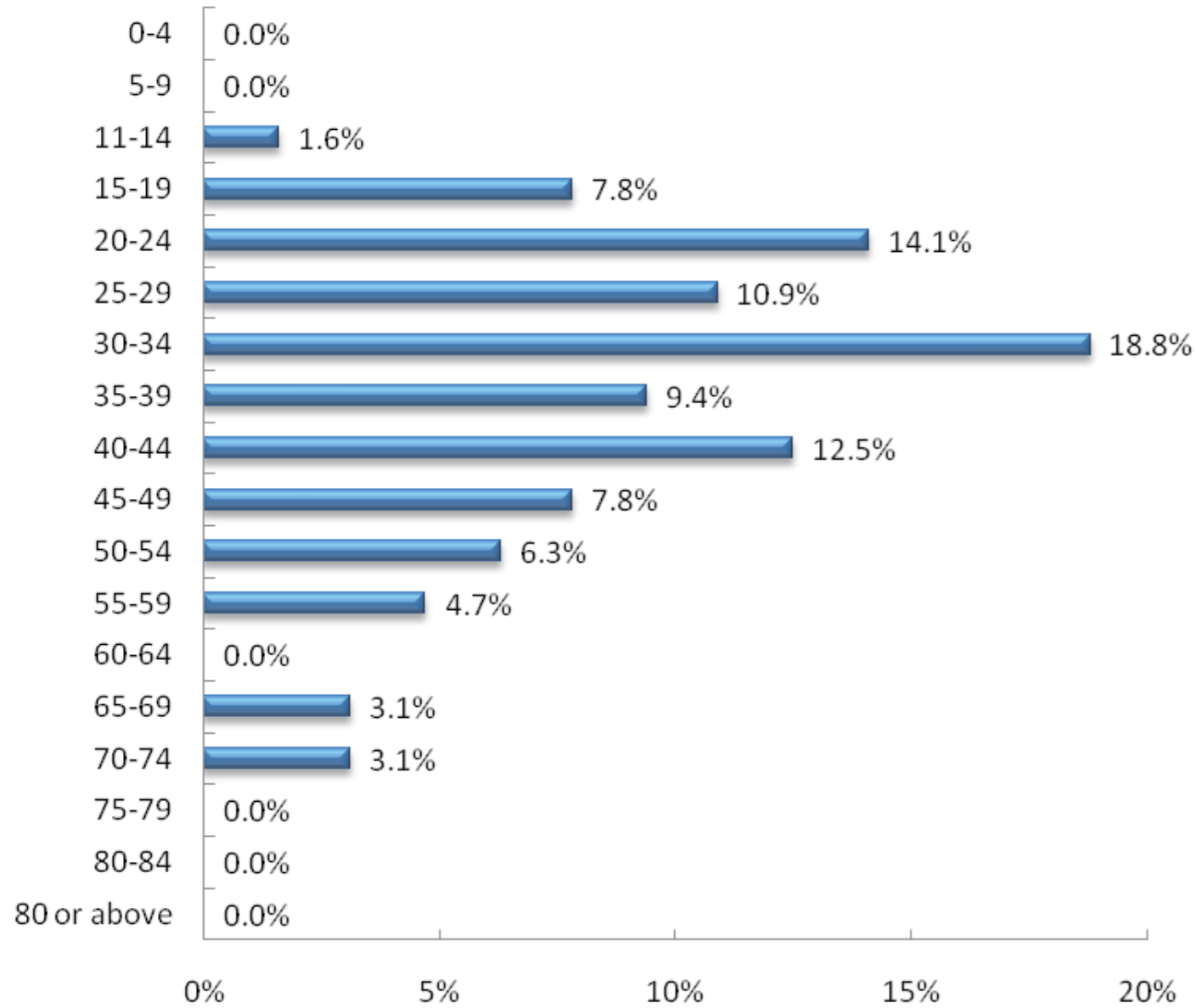
Percentage distribution of injuries caused by self harm by gender

自我損傷性別分佈



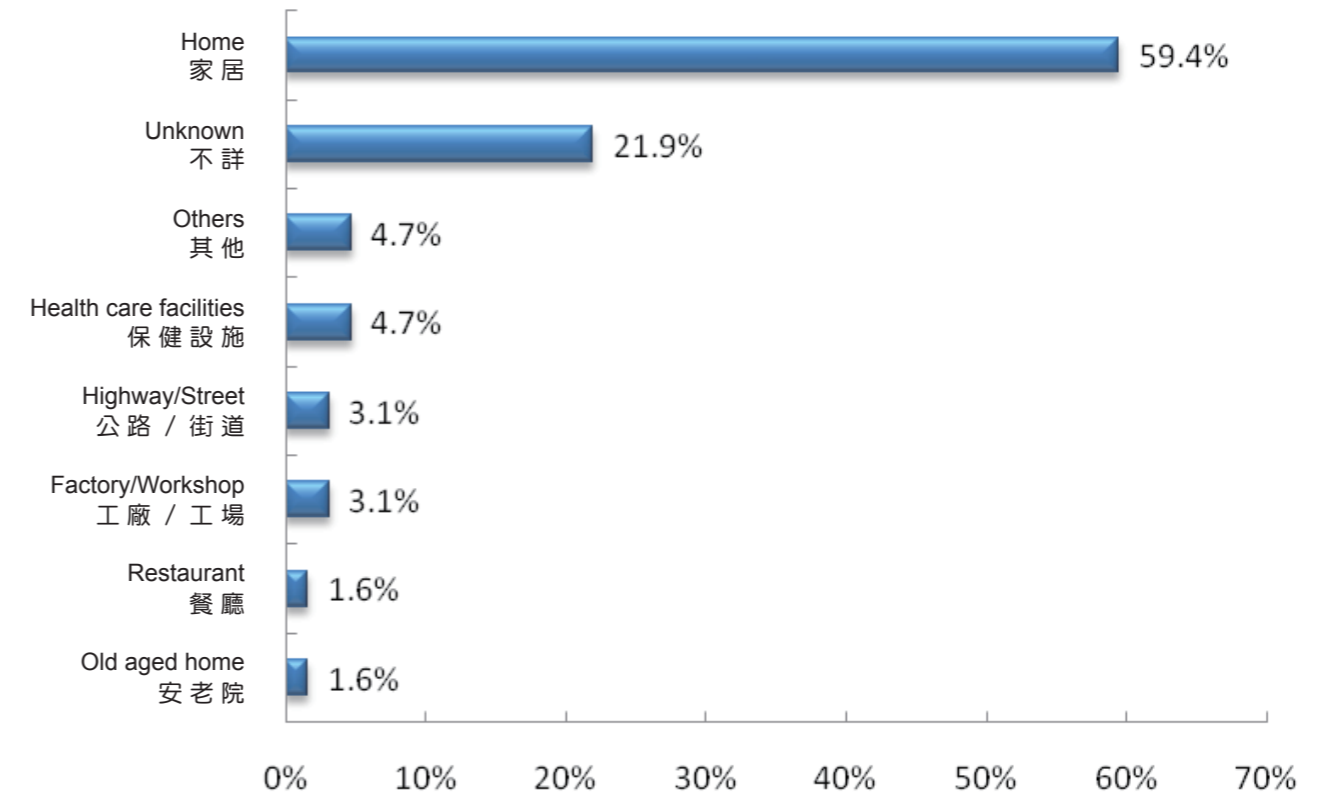
★ 5.27 The percentages for young adults aged 20 to 44 were higher. ★ 5.27 介乎20至44歲的年輕成年人所佔的百分比比較高。

Percentage distribution of injuries caused by self harm by age  
自我損傷年齡分佈



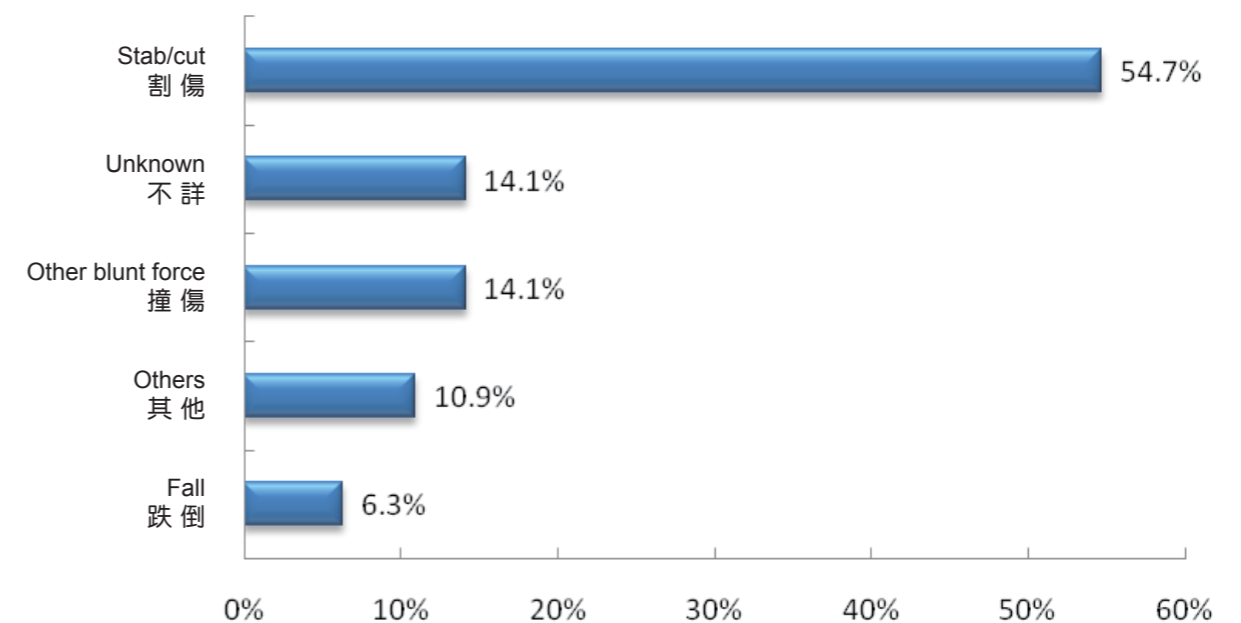
★ 5.28 The great majority of the injuries caused by self harm were intentional (79.7%). ★ 5.28 超過半數的受傷個案發生在家居 (59.3%)。

Percentage distribution of injuries caused by self harm by place of occurrence  
自我損傷發生地點的分佈



★ 5.29 Over half of the injuries in self harm were caused by stab/cut (54.7%) and about 14.1% were caused by other blunt. ★ 5.29 超過一半的傷者以割傷 (54.7%) 及撞傷 (14.1%) 的自我損傷方式而受傷。

Percentage distribution of injuries caused by self harm by causes of injury  
自我損傷方法分佈



## 6. Exploration of risk factors

★ 6.1 After the discussion of above variables, this section would explore the associations and potential contribution of the risk factors to following 7 aspects, A&E to IP Ward, Length of stay longer than 3 days, fall injury, traffic injury, work injury, domestic violence and self harm. In order to identify the contributing factors which may lead to the outcomes, several personal characteristics (gender and age), situation of patients admitted (Triage Category), Quarter of year, date and time.

★ 6.2 By analyzing Crude Odds Ratio (Crude OR) between dependent variables and other factors, the statistical significance.

### A&E to IP Ward

★ 6.3 It was found that the ratio of "female to male" admitted from A&E to IP Ward was 1:0.82 that the chance for male admitted from A&E to IP ward was lower. For age, those aged 80 or above were 5.98 times more and those aged 60-80 were 2.92 times more than those aged below 60 to be admitted from A&E to IP ward. Of course, severe cases and higher urgent cases had higher chances to be admitted. Comparing the different time slots, the chances of admission from midnight to 6am were higher.

	N	Crude OR (95% CI)	Adjusted OR (95% CI)
<b>Gender 性別</b>			
Male 男性	10756	0.82*** (0.756, 0.882)	1.148** (1.045, 1.262)
Female 女性	7787	1	1
<b>Age 年齡</b>			
>80	1540	5.98*** (5.345, 6.696)	2.775*** (2.431, 3.167)
60-80	2821	2.92*** (2.651, 3.216)	1.956*** (1.747, 2.190)
<=60	14182	1	1
<b>Triage Category 分流類別</b>			
Critical 危殆	125	494.67*** (143.394, 1706.448)	448.417*** (129.746, 1548.784)
Emergent 危急	142	483.64*** (142.018, 1647.001)	445.490*** (130.888, 1523.079)
Urgent 緊急	5751	60.22*** (19.274, 188.124)	45.076*** (14.410, 140.007)
Semi-urgent 半緊急	12249	4.55** (1.454, 14.243)	4.218* (1.347, 13.212)
Non-urgent 非緊急	269	1	1
<b>Quarters 季度</b>			
Q1	4855	1.01 (0.909, 1.118)	0.927 (0.822, 1.046)
Q2	4674	0.94 (0.847, 1.046)	0.874* (0.773, 0.989)
Q3	3761	0.99 (0.888, 1.109)	1.020 (0.896, 1.161)
Q4	5253	1	1
<b>Holidays and Sundays 公眾假期及星期日</b>			
Yes 是	3183	1.07 (0.969, 1.183)	-
No 否	15360	1	1
<b>Time 時間</b>			
0600-1159	5757	0.77*** (0.678, 0.884)	0.810** (0.693, 0.947)
1200-1759	6924	0.77*** (0.674, 0.874)	0.811** (0.697, 0.945)
1800-2359	4023	0.77*** (0.668, 0.884)	0.89 (0.755, 1.049)
0000-0559	1839	1	1

## 6. 探討影響因素

★ 6.1 討論過上述變量後，本部分將探討影響因素與以下七個範疇的關係和可能潛在的促成作用，七個範疇包括住院、住院時間超過3天、跌倒受傷、交通意外受傷、工作受傷、家庭暴力和自我損傷。為了找出導致這些結果的促成因素，個人特徵（性別及年齡）、所收病人的情況（分流類別）、季度、日期和時間。

★ 6.2 透過分析個別變數和其他因素的 Crude Odds Ratio (Crude OR)，統計具意義。

### 住院

★ 6.3 結果發現，女性對男性需住院的比率為 1:0.82，即男性需住院的機會率較女性低。至於年齡，與 60 歲以下人士需住院的人士比較，80 歲或以上人士是其 5.98 倍，60 至 80 歲人士也是其 2.92 倍。當然，嚴重個案和較緊急個案需入院的機會較高。若比較不同時段，午夜到早上 6 時入院的機會較高。

★ 6.4 The Hosmer-Lemeshow test is a statistical test for goodness of fit for logistic regression models.<sup>13</sup> For the model with adjusted OR after eliminating the factors which were not statistically significant, the p-value of H&L test was 0.590 which indicated the model predicted values not significantly different from observations. Moreover, Nagelkerke R Square<sup>14</sup> was 0.354 and Cox & Snell R Square was 0.212 that meant the model showed a fair model fitting.

★ 6.4 Hosmer-Lemeshow 測試是羅吉斯迴歸模型配適度的統計測試。<sup>13</sup> 排除混淆因素後，H & L 測試的 p-值<sup>14</sup> 為 0.590，即表示模型預測的數值與觀察所得的結果沒有明顯分別。另外，當 Nagelkerke R<sup>2</sup><sup>15</sup> 是 0.354 及 Cox & Snell R<sup>2</sup> 是 0.212 時，即表示該模型配適欠佳。

<sup>13</sup> The Hosmer-Lemeshow test is used frequently in risk prediction models. The test assesses whether or not the observed event rates match expected event rates in subgroups of the model population. The Hosmer-Lemeshow test specifically identifies subgroups as the deciles of fitted risk values. Models for which expected and observed event rates in subgroups are similar are called well calibrated. ([http://en.wikipedia.org/wiki/Hosmer%E2%80%93Lemeshow\\_test](http://en.wikipedia.org/wiki/Hosmer%E2%80%93Lemeshow_test))

<sup>14</sup> R<sup>2</sup> expresses the improvement of the full model with all variables included over the Block 0 model. Nagelkerke R Square should be between 0 and 1, with 0 denoting that model does not explain any variation and 1 denoting that it perfectly explains the observed variation while Cox & Snell R Square can be larger than 1.

<sup>15</sup> R<sup>2</sup> expresses the improvement of the full model with all variables included over the Block 0 model. Nagelkerke R Square should be between 0 and 1, with 0 denoting that model does not explain any variation and 1 denoting that it perfectly explains the observed variation while Cox & Snell R Square can be larger than 1.

<sup>13</sup> Hosmer-Lemeshow 測試常用於風險預測模型。測試評估在模型總人口的子組別中，觀察所得的發生率與預計的是否吻合。Hosmer-Lemeshow 測試特別找出配適風險值為十分數的子組別。模型在子組別中預測和觀察的發生率相近時，稱為良好校準。([http://en.wikipedia.org/wiki/Hosmer%E2%80%93Lemeshow\\_test](http://en.wikipedia.org/wiki/Hosmer%E2%80%93Lemeshow_test))

<sup>14</sup> 假設虛無假設為真，統計驗試所得及實質統計所得的或然率的 p-值大於 0.05，即表示不能拒絕虛無假設。

<sup>15</sup> R<sup>2</sup> 表示整個模型包含所有的變數，是對 Block 0 model 的改良。Nagelkerke R Square 應介乎 0 至 1，0 意指模型沒有說明任何差別，而 1 意指模型完全說出觀察所得的差別，而 Cox & Snell R Square 可大於 1。

Length of stay longer than 3 days

住院多於三天

★ 6.5 The model found that the crude odds ratio of “female to male” was 0.54 that the chance for male staying longer than 3 days was 0.54 times lower than female. For age, those aged more than 60 were 5.33 times more and those aged 60-80 were 3.89 times more than those aged below 60 to stay longer than 3 days. Severe cases had higher chances.

★ 6.5 模式得出女性對男性的 Crude OR 是 0.54，即男性住院多於三天的機會較女性低 0.54 倍。至於年齡為 60-80 歲人士住院多於三天的比 60 歲或以下人士多 5.34 倍；而 80 歲以上人士則較其多 5.34 倍。較高機會屬嚴重個案。

	N	Crude OR (95% CI)	Adjusted OR (95% CI)
<b>Gender 性別</b>			
Male 男性	10756	0.54*** (0.470, 0.624)	0.83* (0.709, 0.971)
Female 女性	7787	1	
<b>Age 年齡</b>			
>80	1540	5.34*** (4.392, 6.481)	4.971*** (4.058, 6.089)
60-80	2821	3.89*** (3.259, 4.652)	3.739*** (3.12, 4.481)
<=60	14182	1	
<b>Triage Category 分流類別</b>			
Critical 危殆	125	5.57 (0.486, 63.856)	
Emergent 危急	142	2.21 (0.195, 25.035)	
Urgent 緊急	5751	2.12 (0.192, 23.417)	
Semi-urgent 半緊急	12249	0.87 (0.078, 9.634)	
Non-urgent 非緊急	269	1	
<b>Quarters 季度</b>			
Q1	4855	0.99 (0.818, 1.191)	
Q2	4674	0.88 (0.727, 1.070)	
Q3	3761	0.87 (0.724, 1.085)	
Q4	5253	1	
<b>Holidays and Sundays 公眾假期及星期日</b>			
Yes 是	3183	0.89 (0.743, 1.069)	
No 否	15360	1	
<b>Time 時間</b>			
0600-1159	5757	1.14 (0.898, 1.446)	
1200-1759	6924	1.07 (0.849, 1.352)	
1800-2359	4023	0.82 (0.637, 1.058)	
0000-0559	1839	1	

★ 6.6 For the model with adjusted OR after eliminating the factors which were not statistically significant, the p-value of H&L test was 0.160 which indicated the model was not significantly different. Moreover, Nagelkerke R Square was 0.169 and Cox & Snell R Square was 0.126 that meant the model showed a poor model fitting.

★ 6.6 對於附有 Adjusted OR 的模式，排除混淆因素後，其 H&L 測試的 p-值<sup>16</sup>為 0.160，則顯示該模式沒有顯著差異。而且，Nagelkerke R<sup>2</sup><sup>17</sup>值是 0.169 及 Cox & Snell R<sup>2</sup>值是 0.126，即表示該模型配適欠佳。

<sup>16</sup> R<sup>2</sup> expresses the improvement of the full model with all variables i& Snell R Square can be larger than 1.

<sup>16</sup> 假設虛無假設為真，統計驗試所得及實質統計所得的或然率的 p-值大於 0.05，即表示不能拒絕虛無假設。

<sup>17</sup> R<sup>2</sup> expresses the improvement of the full model with all variables i& Snell R Square can be larger than 1.

<sup>17</sup> R<sup>2</sup> 表示整個模型包含所有的變數，是對 Block 0 model 的改良。Nagelkerke R<sup>2</sup> 應介乎 0 至 1，0 意指模型沒有說明任何差別，而 1 意指模型完全說出觀察所得的差別，而 Cox & Snell R<sup>2</sup> 可大於 1。

Fall injuries

跌傷

★ 6.7 The model found that the crude odds ratio of “female to male” was 0.47 that the chance for male suffering from fall injuries was 0.47 times lower than female. For age, those aged 80 or above were 10.3 times more and those aged 60-80 were 4.48 times more than those aged below 60 to have fall injuries. Severe cases had higher chances. Urgent and semi-urgent category had higher chances than non-urgent category. First half of 2009 had higher chances than the fourth quarter of 2009. Holidays and Sundays had higher chances than weekdays. And noon to 6pm had lower chances than midnight.

★ 6.7 模式得出女性對男性的 Crude OR 是 0.47，即男性因跌倒受傷的機會較女性低 0.47 倍。至於年齡為 60-80 歲人士因跌倒受傷的比 60 歲或以下人士多 4.48 倍；而 80 歲以上人士則較其多 10.3 倍。較高機會屬嚴重個案，個案屬緊急及半緊急類別的比非緊急機會高。2009 年度，以第四季相比，跌傷事故較高機會發生在上半年。

	N	Crude OR (95% CI)	Adjusted OR (95% CI)
<b>Gender 性別</b>			
Male 男性	10756	0.47*** (0.442, 0.498)	0.71*** (0.602, 0.846)
Female 女性	7787	1	1
<b>Age 年齡</b>			
>80	1540	10.3*** (9.01, 11.769)	7.42*** (5.718, 9.625)
60-80	2821	4.48*** (4.116, 4.884)	5.13*** (4.147, 6.347)
<=60	14182	1	1
<b>Triage Category 分流類別</b>			
Critical 危殆	125	0.88 (0.523, 1.47)	-
Emergent 危急	142	1.55 (0.984, 2.437)	-
Urgent 緊急	5751	5.18*** (3.878, 6.908)	-
Semi-urgent 半緊急	12249	1.46** (1.097, 1.944)	-
Non-urgent 非緊急	269	1	
<b>Quarters 季度</b>			
Q1	4855	1.31*** (1.213, 1.422)	1.66*** (1.329, 2.066)
Q2	4674	1.13** (1.043, 1.227)	1.43** (1.147, 1.792)
Q3	3761	0.95 (0.866, 1.03)	1.11 (0.881, 1.404)
Q4	5253	1	1
<b>Holidays and Sundays 公眾假期及星期日</b>			
Yes 是	3183	1.16*** (1.07, 1.249)	1.06 (0.853, 1.305)
No 否	15360	1	1
<b>Time 時間</b>			
0600-1159	5757	0.9 (0.809, 1.001)	0.95 (0.718, 1.259)
1200-1759	6924	0.85** (0.761, 0.938)	0.92 (0.704, 1.212)
1800-2359	4023	0.96 (0.857, 1.072)	1.39* (1.033, 1.867)
0000-0559	1839	1	1

★ 6.8 For the model with adjusted OR after eliminating the factors which were not statistically significant, the p-value of H&L test was 0.000 which indicated the model was significantly different at 0.05. Moreover, Nagelkerke R Square was 0.231 and Cox & Snell R Square was 0.17 that meant the model showed a fair model fitting.

★ 6.8 排除混淆因素後，該模式在 H&L 測試中的 Adjusted OR 的 p- 值<sup>18</sup> 為 0.000，顯示該模式預測的值在 0.05 有顯著差異。而且，Nagelkerke R<sup>2</sup><sup>19</sup> 的值是 0.231 及 Cox & Snell R<sup>2</sup> 的值是 0.17，即表示該模型配適佳。

\*\*\* p-value < 0.001  
 \*\* p-value < 0.01  
 \* p-value < 0.05

\*\*\* p- 值 < 0.001  
 \*\* p- 值 < 0.01  
 \* p- 值 < 0.05

<sup>18</sup> P-value less than 0.05 means that null hypothesis has been rejected at the p-value which is the probability of obtaining a test statistic at least as extreme as the one that was actually observed, assuming that the null hypothesis is true.

<sup>18</sup> 假設虛無假設為真，統計驗試所得及實質統計所得的或然率的 p- 值少於 0.05，即表示拒絕虛無假設。

<sup>19</sup> R<sup>2</sup> expresses the improvement of the full model with all variables included over the Block 0 model. Nagelkerke R<sup>2</sup> should be between 0 and 1, with 0 denoting that model does not explain any variation and 1 denoting that it perfectly explains the observed variation while Cox & Snell R<sup>2</sup> can be larger

<sup>19</sup> R<sup>2</sup> 表示整個模型包含所有的變數，是對 Block 0 model 的改良。Nagelkerke R<sup>2</sup> 應介乎 0 至 1，0 意指模型沒有說明任何差別，而 1 意指模型完全說出觀察所得的差別，而 Cox & Snell R<sup>2</sup> 可大於 1。

Traffic injuries

★ 6.9 The model found that the crude odds ratio of “female to male” was 1.93 that the chance for male suffering from traffic injuries was 1.93 times lower than female. For age, those aged 80 or above were 0.1 times more and those aged 60-80 were 0.56 times more than those aged below 60 to have traffic injuries. Severe cases had lower chances. Urgent and semi-urgent category had higher chances than non-urgent category. First half of 2009 had lower chances than the fourth quarter of 2009. Holidays and Sundays had lower chances than weekdays. And afternoon from noon to 6pm had lower chances than midnight.

交通意外受傷

★ 6.9 結果發現，女性對男性的 Crude OR 是 1.93，即男性因交通意外導致受傷的機會較女性低 1.93 倍。比較 60 歲以下人士因交通意外受傷的個案，80 歲或以上的傷者高 0.1 倍；60-80 歲的則高 0.56 倍。發生嚴重個案的機會較低。屬緊急及半緊急類別的個案比非緊急的機會高。2009 年度，以第四季相比，交通意外受傷事故較低機會發生在上半年。交通意外發生在公眾假期及星期日較平日多；而且，由中午十二時至傍晚六時發生交通意外的機會較午夜時少。

	N	Crude OR (95% CI)	Adjusted OR (95% CI)
<b>Gender 性別</b>			
Male 男性	10756	1.93*** (1.693, 2.198)	1.626*** (1.422, 1.858)
Female 女性	7787	1	
<b>Age 年齡</b>			
>80	1540	0.1*** (0.055, 0.174)	0.091*** (0.051, 0.162)
60-80	2821	0.56*** (0.462, 0.68)	0.532*** (0.436, 0.65)
<=60	14182	1	1
<b>Triage Category 分流類別</b>			
Critical 危殆	125	13.41*** (7.039, 25.54)	14.834*** (7.707, 28.553)
Emergent 危急	142	5.09*** (2.605, 9.934)	5.613*** (2.853, 11.044)
Urgent 緊急	5751	1.32 (0.764, 2.285)	1.844* (1.062, 3.204)
Semi-urgent 半緊急	12249	1.1 (0.637, 1.889)	1.146 (0.663, 1.978)
Non-urgent 非緊急	269	1	
<b>Quarters 季度</b>			
Q1	4855	0.73*** (0.62, 0.859)	0.746** (0.632, 0.881)
Q2	4674	0.82* (0.7, 0.964)	0.801** (0.68, 0.943)
Q3	3761	0.98 (0.831, 1.151)	0.953 (0.807, 1.126)
Q4	5253	1	
<b>Holidays and Sundays 公眾假期及星期日</b>			
Yes 是	3183	0.92 (0.783, 1.078)	-
No 否	15360	1	
<b>Time 時間</b>			
0600-1159	5757	0.83 (0.683, 1.013)	0.904 (0.738, 1.108)
1200-1759	6924	0.69*** (0.57, 0.846)	0.709** (0.579, 0.867)
1800-2359	4023	0.78* (0.628, 0.958)	0.791* (0.638, 0.982)
0000-0559	1839	1	1

\*\*\* p-value < 0.001  
 \*\* p-value < 0.01  
 \* p-value < 0.05

\*\*\* p- 值 < 0.001  
 \*\* p- 值 < 0.01  
 \* p- 值 < 0.05

★ 6.10 For the model with adjusted OR after eliminating the factors which were not statistically significant, the p-value<sup>20</sup> of H&L test was 0.069 which indicated the model was not significantly different at 0.05. Moreover, Nagelkerke R<sup>2</sup> was 0.068 and Cox & Snell R<sup>2</sup> was 0.026 that meant the model showed a poor model fitting.

★ 6.10 對於附有 Adjusted OR 的模式，排除混淆因素後，其 H&L 測試的 p- 值<sup>20</sup> 為 0.069，則顯示該模式在 0.05 沒有顯著差異。而且，Nagelkerke R<sup>2</sup><sup>21</sup> 值是 0.068 及 Cox & Snell R<sup>2</sup> 值是 0.026，即表示該模型配適欠佳。

<sup>20</sup> P-value higher than 0.05 means that null hypothesis has not been rejected at the p-value which is the probability of obtaining a test statistic at least as extreme as the one that was actually observed, assuming that the null hypothesis is true.

<sup>21</sup> R<sup>2</sup> expresses the improvement of the full model with all variables included over the Block 0 model. Nagelkerke R<sup>2</sup> should be between 0 and 1, with 0 denoting that model does not explain any variation and 1 denoting that it perfectly explains the observed variation while Cox & Snell R<sup>2</sup> can be larger than 1.

<sup>20</sup> 假設虛無假設為真，統計驗試所得及實質統計所得的或然率的 p- 值大於 0.05，即表示不能拒絕虛無假設。

<sup>21</sup> R<sup>2</sup> 表示整個模型包含所有的變數，是對 Block 0 model 的改良。Nagelkerke R<sup>2</sup> 應介乎 0 至 1，0 意指模型沒有說明任何差別，而 1 意指模型完全說出觀察所得的差別，而 Cox & Snell R<sup>2</sup> 可大於 1。

## Work injuries

★ 6.11 The model found that the crude odds ratio of "female to male" was 2.3 that the chance for male suffering from work injuries was 2.3 times lower than female. For age, those aged 80 or above were 0.1 times more and those aged 60-80 were 0.164 times more than those aged below 60 to have work injuries. Urgent and semi-urgent category had lower chances than non-urgent category. First three quarters of 2009 had higher chances than the fourth quarter of 2009. Holidays and Sundays had lower chances than weekdays. And noon to 6pm had higher chances than midnight while evening (6pm to 12pm) had lower chances than midnight.

## 工作受傷

★ 6.11 結果發現，女性對男性的 Crude OR 是 2.3，即男性因工作導致受傷的機會較女性低 2.3 倍。比較 60 歲以下人士因工作受傷的個案，80 歲或以上的傷者高 0.1 倍；60-80 歲的則高 0.164 倍。屬緊急及半緊急類別的個案比非緊急的機會低。2009 年度，以第四季相比，工作受傷事故較高機會發生在首三季。發生在公眾假期及星期日的工傷較平日少。由中午十二時至傍晚六時發生工傷的機會較午夜時多，而晚上（由六時至十二時）發生意外的機會較午夜低。

	N	Crude OR (95% CI)	Adjusted OR (95% CI)
<b>Gender 性別</b>			
Male 男性	10756	2.30*** (2.134, 2.474)	1.832*** (1.695, 1.98)
Female 女性	7787	1	
<b>Age 年齡</b>			
>80	1540	0.01*** (0.002, 0.016)	0.01*** (0.004, 0.026)
60-80	2821	0.164*** (0.141, 0.192)	0.2*** (0.171, 0.233)
<=60	14182	1	
<b>Triage Category 分流類別</b>			
Critical 危殆	125	0.562* (0.316, 0.997)	0.599 (0.332, 1.08)
Emergent 危急	142	0.857 (0.521, 1.408)	0.991 (0.593, 1.658)
Urgent 緊急	5751	0.495 *** (0.369, 0.665)	0.812 (0.6, 1.099)
Semi-urgent 半緊急	12249	1.37* (1.026, 1.819)	1.533** (1.142, 2.057)
Non-urgent 非緊急	269	1	
<b>Quarters 季度</b>			
Q1	4855	1.30*** (1.186, 1.433)	1.427*** (1.291, 1.577)
Q2	4674	1.47*** (1.334, 1.611)	1.578*** (1.428, 1.743)
Q3	3761	1.45 *** (1.315, 1.605)	1.446*** (1.302, 1.606)
Q4	5253	1	
<b>Holidays and Sundays 公眾假期及星期日</b>			
Yes 是	3183	0.6*** (0.543, 0.663)	0.624*** (0.562, 0.692)
No 否	15360	1	
<b>Time 時間</b>			
0600-1159	5757	1.1 (0.970, 1.243)	1.234** (1.081, 1.407)
1200-1759	6924	1.138* (1.008, 1.285)	1.166* (1.026, 1.326)
1800-2359	4023	0.831** (0.727, 0.949)	0.779*** (0.677, 0.896)
0000-0559	1839	1	1

★ 6.12 For the model with adjusted OR, the p-value<sup>22</sup> of H&L test was 0.000 which indicated the model was significantly different at 0.05, The outputs of H&L did not present 95% level of CI and p-value is about probability of rejecting the model. These are different concepts. Moreover, Nagelkerke R<sup>2</sup><sup>23</sup> was 0.181 and Cox & Snell R<sup>2</sup> was 0.120 that meant the model showed a poor model fitting.

★ 6.12 對於附有 Adjusted OR 的模式，排除混淆因素後，其 H&L 測試的 p- 值<sup>22</sup> 為 0.000，則顯示該模式在 0.05 有顯著差異。而且，Nagelkerke R<sup>2</sup><sup>23</sup> 值是 0.181 及 Cox & Snell R<sup>2</sup> 值是 0.120，即表示該模型配適欠佳。

<sup>22</sup> P-value less than 0.05 means that null hypothesis has been rejected at the p-value which is the probability of obtaining a test statistic at least as extreme as the one that was actually observed, assuming that the null hypothesis is true.

<sup>22</sup> 假設虛無假設為真，統計驗試所得及實質統計所得的或然率的 p- 值少於 0.05，即表示拒絕虛無假設。

<sup>23</sup> R<sup>2</sup> expresses the improvement of the full model with all variables included over the Block 0 model. Nagelkerke R<sup>2</sup> should be between 0 and 1, with 0 denoting that model does not explain any variation and 1 denoting that it perfectly explains the observed variation while Cox & Snell R<sup>2</sup> can be larger than 1.

<sup>23</sup> R<sup>2</sup> 表示整個模型包含所有的變數，是對 Block 0 model 的改良。Nagelkerke R<sup>2</sup> 應介乎 0 至 1，0 意指模型沒有說明任何差別，而 1 意指模型完全說出觀察所得的差別，而 Cox & Snell R<sup>2</sup> 可大於 1。

\*\*\* p-value < 0.001    \*\*\* p- 值 < 0.001  
 \*\* p-value < 0.01    \*\* p- 值 < 0.01  
 \* p-value < 0.05    \* p- 值 < 0.05

Domestic violence

★ 6.13 The model found that the crude odds ratio of “female to male” was 0.24 that the chance for male suffering from domestic violence was 0.24 times lower than female. For age, those aged 80 or above were 0.08 times more and those aged 60-80 were 0.18 times more than those aged below 60 suffering domestic violence. Urgent cases were 0.5 times lower than semi-urgent cases. Second quarter had higher chances than fourth quarter. And morning to night time had lower chances than midnight.

家庭暴力

★ 6.13 結果發現，女性對男性的 Crude OR 是 0.24，即男性因家庭暴力導致受傷的機會較女性低 0.24 倍。比較 60 歲以下人士因家庭暴力受傷的個案，80 歲或以上的傷者高 0.08 倍；60-80 歲的則高 0.18 倍。屬緊急類別的個案比半緊急的低 0.5 倍。以第四季相比，事故較高機會發生在第二季。發生在早上至晚上的家庭暴力事故的機會較午夜發生低。

	N	Crude OR (95% CI)	Adjusted OR (95% CI)
<b>Gender 性別</b>			
Male 男性	10756	0.24*** (0.157, 0.365)	0.185*** (0.121, 0.282)
Female 女性	7787	1	
<b>Age 年齡</b>			
>80	1540	0.08* (0.011, 0.59)	0.052** (.007, 0.371)
60-80	2821	0.18** (0.066, 0.488)	0.138*** (0.051, 0.375)
<=60	14182	1	
<b>Triage Category 分流類別<sup>^</sup></b>			
Urgent 緊急	5751	0.5** (0.312, 0.791)	-
Semi-urgent 半緊急	12249	1	
<b>Quarters 季度</b>			
Q1	4855	0.872 (0.514, 1.479)	-
Q2	4674	1.271 (0.782, 2.064)	-
Q3	3761	1.127 (0.664, 1.912)	-
Q4	5253	1	
<b>Holidays and Sundays 公眾假期及星期日</b>			
Yes 是	819	1.261 (0.803, 1.979)	-
No 否	17724	1	
<b>Time 時間</b>			
0600-1159	5757	0.304*** (0.177, 0.523)	0.283*** (0.164, 0.487)
1200-1759	6924	0.282*** (0.167, 0.478)	0.266*** (0.156, 0.451)
1800-2359	4023	0.572* (0.344, 0.951)	0.496** (0.297, 0.828)
0000-0559	1839	1	

★ 6.14 For the model with adjusted OR after eliminating the factors which were not statistically significant, the p-value<sup>24</sup> of H&L test was 0.244 which indicated the model was not significantly different. However, Nagelkerke R<sup>2</sup><sup>25</sup> was 0.097 and Cox & Snell R<sup>2</sup> was 0.007 that meant the model showed a poor model fitting.

★ 6.14 對於附有 Adjusted OR 的模式，排除混淆因素後，其 H&L 測試的 p- 值<sup>24</sup> 為 0.244，則顯示該模式沒有顯著差異。而且，Nagelkerke R<sup>2</sup><sup>25</sup> 值是 0.097 及 Cox & Snell R<sup>2</sup> 值是 0.007，即表示該模型配適欠佳。

<sup>^</sup> No domestic violence cases were categorized as critical and emergent.

<sup>^</sup> 沒有家庭暴力個案被分流為危殆及危急

<sup>24</sup> P-value higher than 0.05 means that null hypothesis has not been rejected at the p-value which is the probability of obtaining a test statistic at least as extreme as the one that was actually observed, assuming that the null hypothesis is true.

<sup>24</sup> 假設虛無假設為真，統計驗試所得及實質統計所得的或然率的 p- 值大於 0.05，即表示不能拒絕虛無假設。

<sup>25</sup> R<sup>2</sup> expresses the improvement of the full model with all variables included over the Block 0 model. Nagelkerke R<sup>2</sup> should be between 0 and 1, with 0 denoting that model does not explain any variation and 1 denoting that it perfectly explains the observed variation while Cox & Snell R<sup>2</sup> can be larger than 1.

<sup>25</sup> R<sup>2</sup> 表示整個模型包含所有的變數，是對 Block 0 model 的改良。Nagelkerke R<sup>2</sup> 應介乎 0 至 1，0 意指模型沒有說明任何差別，而 1 意指模型完全說出觀察所得的差別，而 Cox & Snell R<sup>2</sup> 可大於 1。



Self harm

★ 6.15 The model found that the crude odds ratio of age, young people were 5.517 times more than those aged 60 to perform self harm behaviors. The chances of critical (308.748 times), emergent (270.154 times), and urgent (53.705 times) were much higher than non-urgent. First quarter of 2009 was 2 times higher than the fourth quarter of 2009. And morning to night had lower chances than midnight.

	N	Crude OR (95% CI)	Adjusted OR (95% CI)
<b>Gender 性別</b>			
Male 男性	10756	0.68 (0.416, 1.11)	0.468** (0.281, 0.78)
Female 女性	7787	1	
<b>Age 年齡</b>			
>80	2475	0.440 (0.049, 3.941)	1.140 (0.126, 10.296)
60-80	11707	5.517** (2.003, 15.198)	15.326*** (5.477, 42.887)
<=60	4361	1	
<b>Triage Category 分流類別</b>			
Critical 危殆	125	308.748*** (61.687, 1545.311)	313.867*** (61.44, 1603.383)
Emergent 危急	142	270.154*** (54.044, 1350.454)	357.087*** (70.381, 1811.729)
Urgent 緊急	5751	53.705*** (13.063, 220.791)	79.729*** (19.353, 328.459)
Semi-urgent 半緊急	12249	1	
<b>Quarters 季度</b>			
Q1	4855	2.002* (1.018, 3.937)	2.059* (1.032, 4.108)
Q2	4674	1.558 (0.763, 3.184)	1.43 (0.691, 2.959)
Q3	3761	0.967 (0.413, 2.264)	0.893 (.0377, 2.115)
Q4	5253	1	
<b>Holidays and Sundays 公眾假期及星期日</b>			
Yes 是	3183	1.231 (0.669, 2.266)	-
No 否	15360	1	
<b>Time 時間</b>			
0600-1159	5757	0.229*** (0.112, 0.468)	0.303** (0.145, 0.63)
1200-1759	6924	0.322*** (0.173, 0.602)	0.404** (0.212, 0.77)
1800-2359	4023	0.277** (0.131, 0.588)	0.331** (0.153, 0.715)
0000-0559	1839	1	

★ 6.16 For the model with adjusted OR after eliminating the factors which were not statistically significant, the p-value<sup>26</sup> of H&L test was 0.881 which indicated the model was not significantly different. However, Nagelkerke R<sup>2</sup><sup>27</sup> was 0.267 and Cox & Snell R<sup>2</sup> was 0.012 that meant the model showed a poor model fitting.

\*\*\* p-value < 0.001  
 \*\* p-value < 0.01  
 \* p-value < 0.05

<sup>26</sup> P-value higher than 0.05 means that null hypothesis has not been rejected at the p-value which is the probability of obtaining a test statistic at least as extreme as the one that was actually observed, assuming that the null hypothesis is true.

<sup>27</sup> R<sup>2</sup> expresses the improvement of the full model with all variables included over the Block 0 model. Nagelkerke R<sup>2</sup> should be between 0 and 1, with 0 denoting that model does not explain any variation and 1 denoting that it perfectly explains the observed variation while Cox & Snell R<sup>2</sup> can be larger than 1.

自我損傷

★ 6.15 結果發現，對於年齡的 Crude OR，年青人進行自我損傷行為較 60 歲或以上的一群高 5.517 倍。以非緊急類別比較，個案屬危殆 (308.748 倍)，危急 (270.154 倍) 及緊急 (53.705 倍)，遠高於非緊急事故。2009 年首季高於第四季兩倍，發生在早上至晚上的機會較午夜低。

★ 6.16 對於附有 Adjusted OR 的模式，排除混淆因素後，其 H&L 測試的 p- 值<sup>26</sup> 為 0.881，則顯示該模式沒有顯著差異。而且，Nagelkerke R<sup>2</sup><sup>27</sup> 值是 0.267 及 Cox & Snell R<sup>2</sup> 值是 0.012，即表示該模型配適欠佳。

\*\*\* p- 值 < 0.001  
 \*\* p- 值 < 0.01  
 \* p- 值 < 0.05

<sup>26</sup> 假設虛無假設為真，統計驗試所得及實質統計所得的或然率的 p- 值大於 0.05，即表示不能拒絕虛無假設。

<sup>27</sup> R<sup>2</sup> 表示整個模型包含所有的變數，是對 Block 0 model 的改良。Nagelkerke R<sup>2</sup> 應介乎 0 至 1，0 意指模型沒有說明任何差別，而 1 意指模型完全說出觀察所得的差別，而 Cox & Snell R<sup>2</sup> 可大於 1。

7. Geospatial Distribution and Analysis

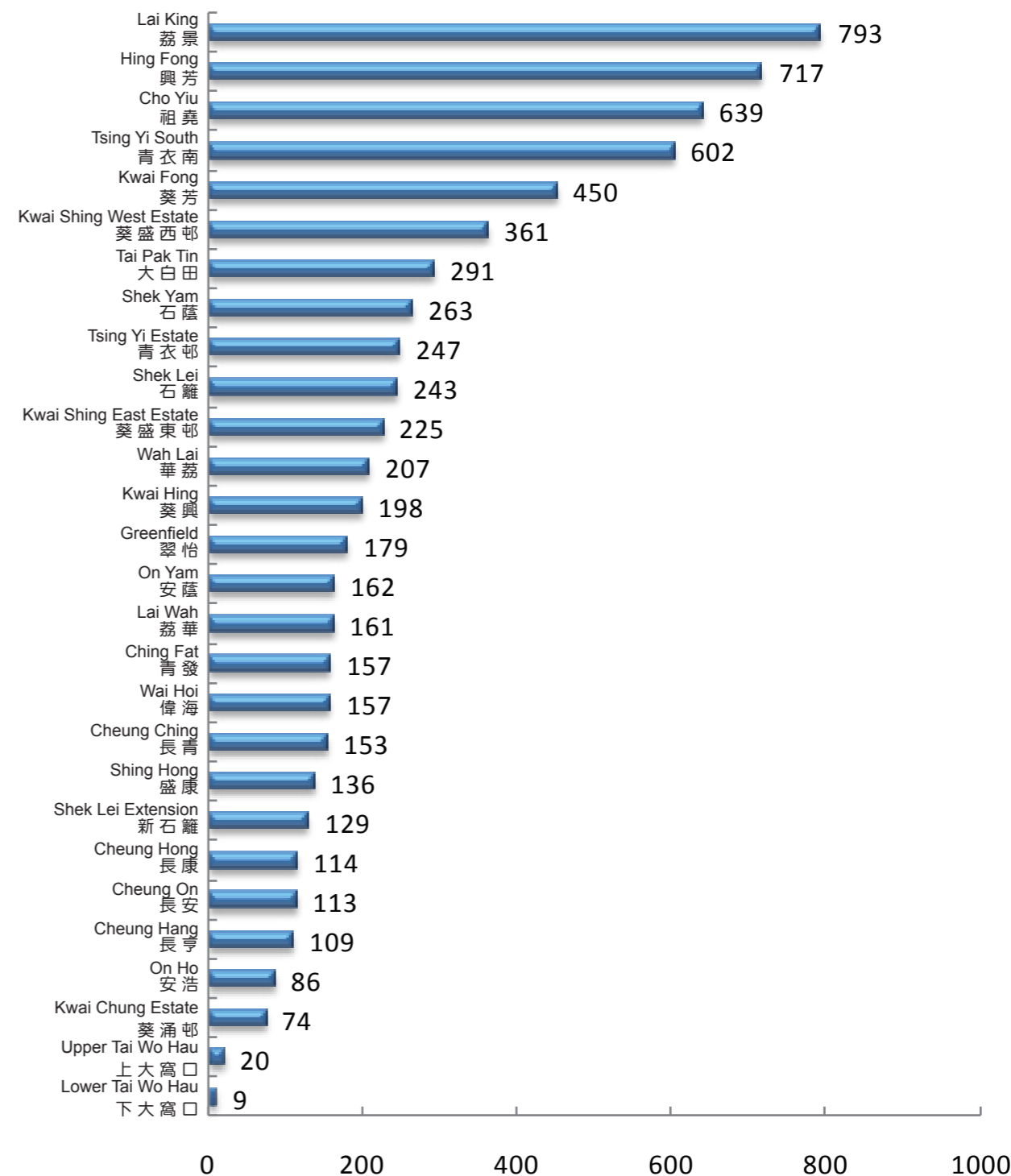
7. 地理空間分佈及分析

★ 7.1 Among the injury cases happened in Kwai Tsing district, higher numbers were reported in Lai King (793), 16 (717), 15 (639) and 26 (602).

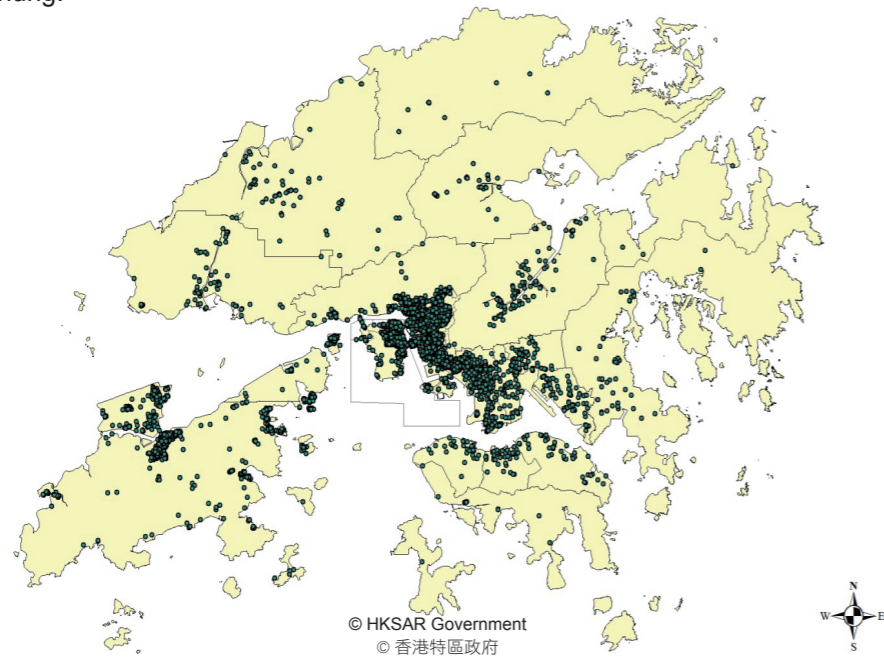
★ 7.1 於葵青區發生的受傷個案中，荔景錄得最多個案 (793)，其次是興芳 (717)、祖堯 (639) 及青衣南 (602)。

Total number of injury cases by areas in Kwai Tsing

葵涌地區受傷個案的整體數字

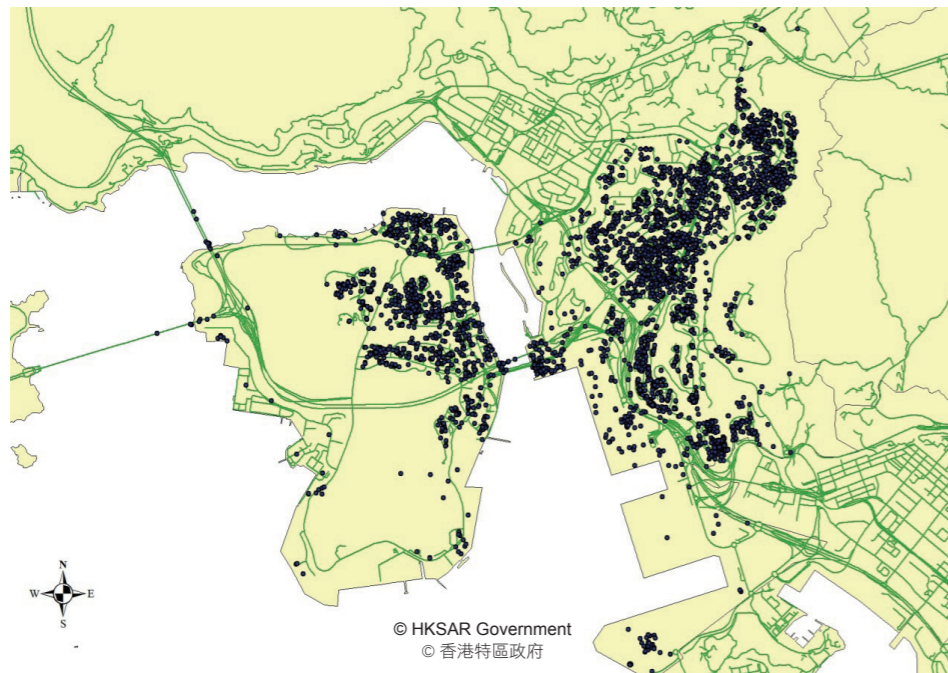


★ 7.2 Total 8,062 cases of Year 2009 were matched geographically. Except cases outside Kwai Tsing, 4,667 cases were identified in Kwai Tsing district. Based on the map shown below, cases admitted in Princess Margaret Hospital with report injuries covered the territory of Hong Kong and were mainly concentrated in western Kowloon, Tsuen Wan and Tung Chung.



★ 7.2 2009 年合共 8,062 宗個案以地區配對，除葵青區以外的個案，該區共錄得 4,667 宗。根據下圖，瑪嘉烈醫院所接收屬受傷的個案中，地區範圍包括香港區，但主要集中在西九龍、荃灣和東涌。

★ 7.3 The following map showed the distribution of 4,667 cases<sup>28</sup> of Kwai Tsing.

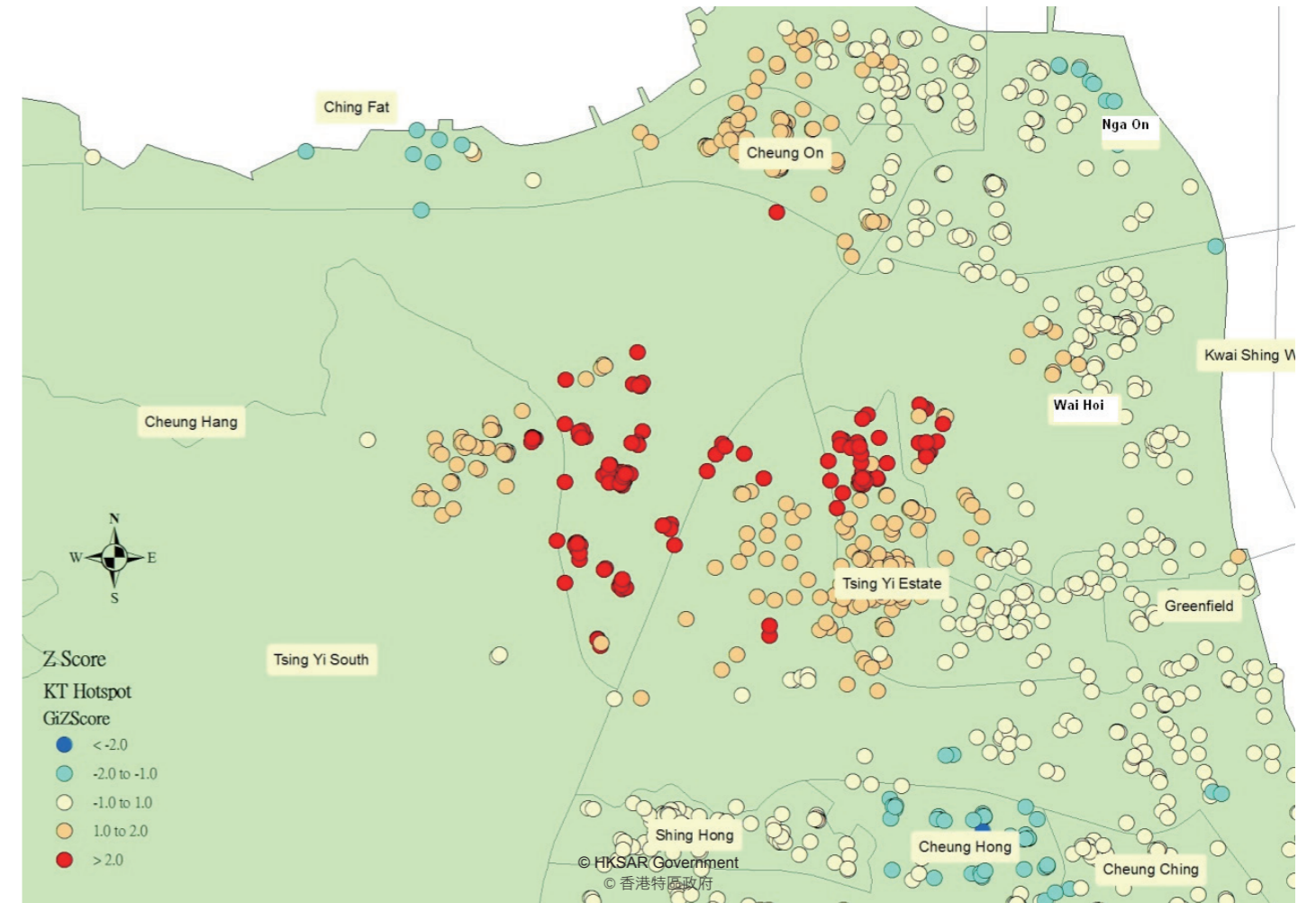


★ 7.3 以下地圖顯示葵青 4,667 宗受傷個案<sup>28</sup> 的分佈。

<sup>28</sup> Included injuries with precise coordinates only.

<sup>28</sup> 只包括有準確坐標的資料。

★ 7.4 By applying rating of severity, hot spots analysis with Z scores<sup>14</sup> on 28 constitutional districts in Kwai Tsing was applied. Clusters of hot spots on Tsing Yi Island were mainly concentrated in eastern Chung Hang, western Greenfield and northern Tsing Yi Estate where most of them were relatively old buildings or estates located.



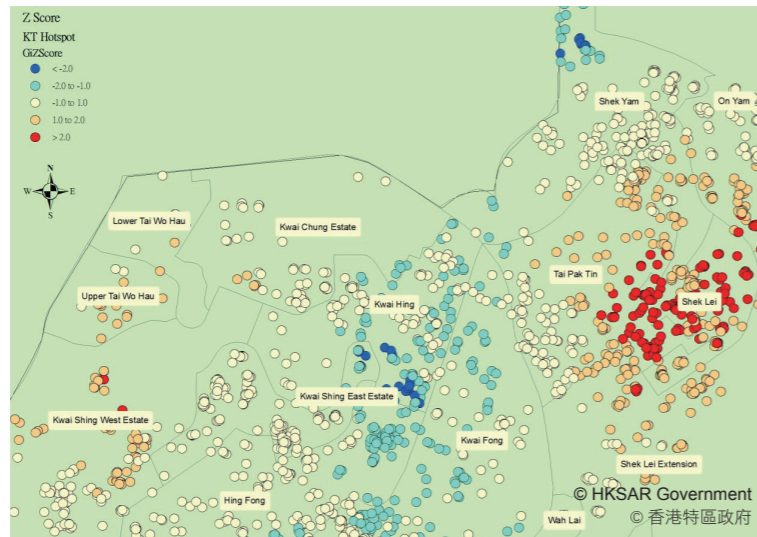
★ 7.4 使用嚴重程度評級，對葵青區的 28 個行政分區採用了 Z scores<sup>14</sup> 黑點分析。青衣的黑點集中主要在長亨邨東、翠怡花園西和青衣村北，這些地方大部分都是較舊的大廈或屋邨所在。

<sup>29</sup> Z scores are measures of standard deviation. A low negative Z score and small p-value indicates a spatial clustering of low values. The higher (or lower) the Z score, the more intense the clustering. A Z score near zero indicates no apparent spatial clustering. The cases with low Z scores do not mean low severity but low clustering score on severe cases. In other words, high severity case can have low Z scores.

<sup>29</sup> Z scores 用來量度標準差。若 Z scores 低且是負值，及 p-值低，指出低數值空間類聚。Z scores 越高（越低），群組越密集。Z scores 接近零指出沒有明顯空間類聚。個案的 Z scores 低並不代表嚴重性低，反而指在嚴重個案中的類聚分低。換句話說，高嚴重性個案的 Z scores 可以很低。

★ 7.5 On territory side, the hot spots which Z scores were higher than 2 mainly concentrated in Shek Lei and eastern Tai Pak Tin although some scattered hot spots in northern Kwai Shing West Estate. On the other hand, the cold spots which Z scores were lower than 2 mainly concentrated in southern Kwai Hing and eastern Kwai Shing East Estate while some scattered cold spots in northern Shek Yam.

★ 7.5 在地區層面，Z scores 高於 2 的黑點主要集中在石籬和大白田東，但也有些黑點零碎分佈在葵盛西邨北。另一方面，Z scores 低於 2 的冷門地點主要集中在葵興和葵盛東邨東，也有些零散分佈在石蔭北。

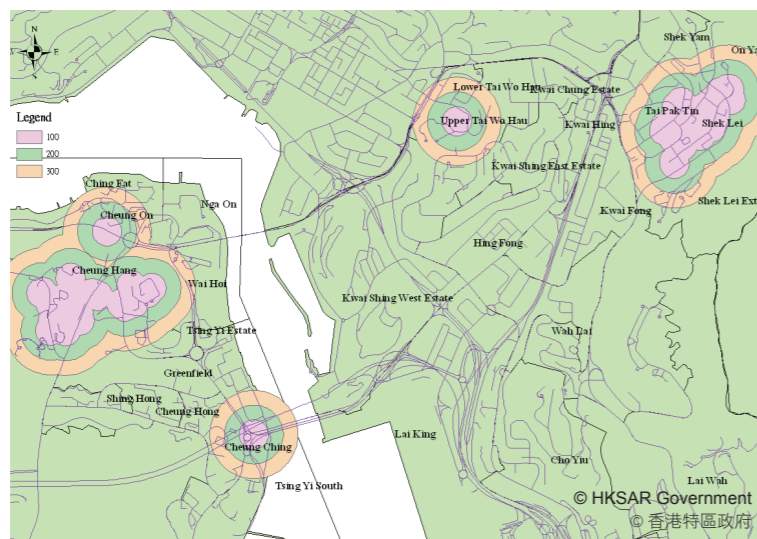


Further Analysis on Traffic Injuries

★ 7.6 Based on the hot spots which have Z scores of 2 or above, the spatial clusters of 100 meters, 200 meters and 300 meters rings were compiled as the map shown below. The large cluster on Tsing Yi Island covered Cheung Hang, Cheung On, Wai Ying and Tsing Yi Estate. It is worth noting that severe cases occurred in the entrance of south bridge. On the other hand, the large clusters on territory covered (1) Shek Lei, Tai Pak Tin and Shek Lei Extension and (2) Upper Tai Wo Hau.

交通意外的進一步分析

★ 7.6 根據 Z scores 是 2 或以上的黑點，100 米、200 米和 300 米圈的空間類聚製成地圖如下。青衣島最大的類聚範圍包括長亨、長安、偉海和青衣邨。值得注意的是，數個嚴重的個案在青衣南橋。另一方面，在地區上大型的類聚包括 (1) 石籬、大白田和新石籬和 (2) 上大窩口。



Further Analysis on Fall Injuries

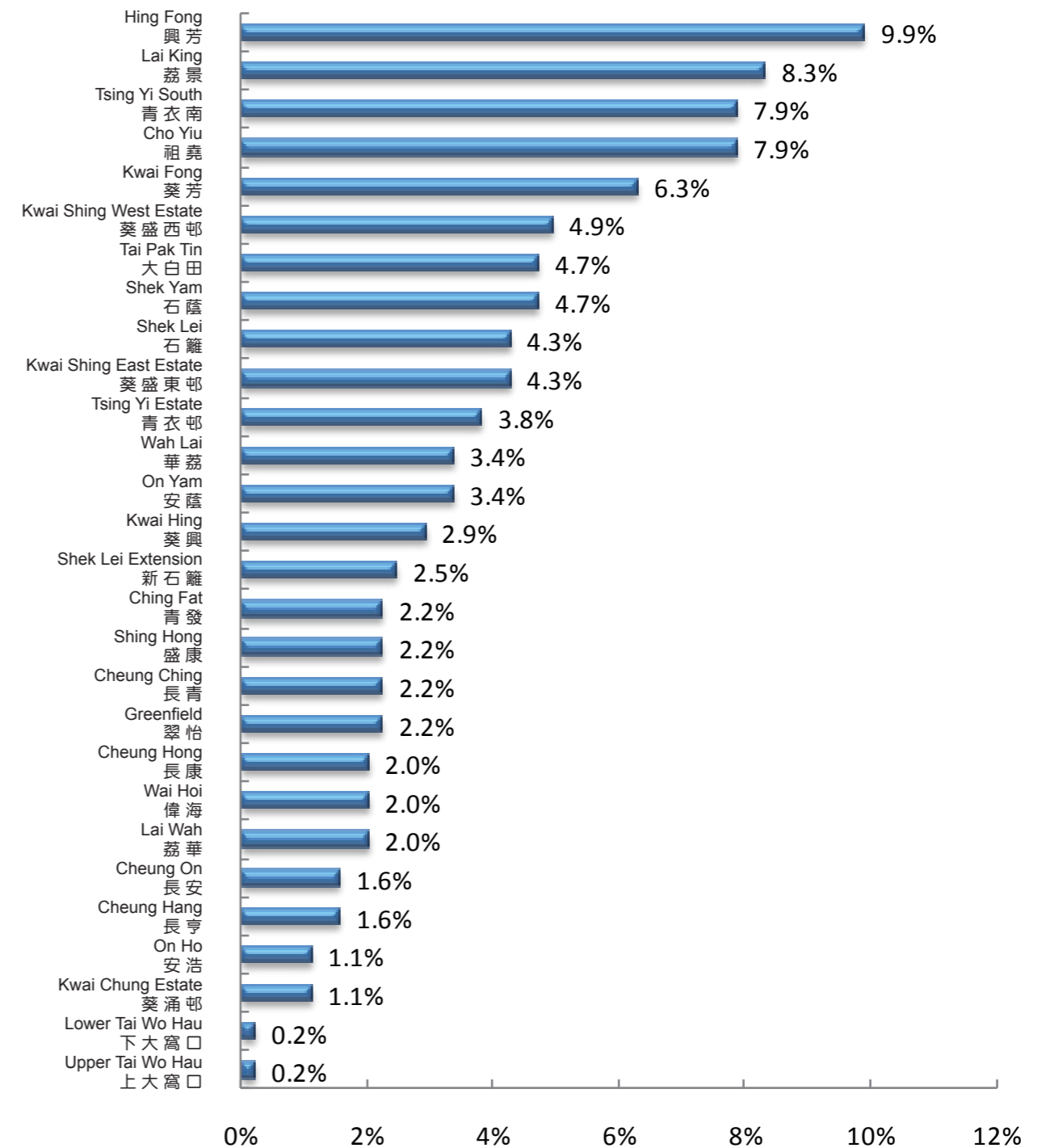
跌倒的進一步分析

★ 7.7 Analyzed injuries caused by fall, the percentages were higher in Hing Fong (9.9%), Lai King (8.3%), Tsing Yi South (7.9%) and Cho Yiu (7.9%).

★ 7.7 按跌倒導致受傷進行分析，發生在興芳 (9.9%)、荔景 (8.3%)、青衣南 (7.9%) 及祖堯 (7.9%) 的百分比比較高。

Percentage distribution of injuries caused by fall by areas

跌傷個案發生地點分佈



★ 7.8 Based on the hot spots which have Z scores of 2 or above, the spatial clusters of 100 meters, 200 meters and 300 meters rings were compiled as the map shown below. The large clusters on Tsing Yi Island covered Cheung Hang, Cheung On, Wai Ying, Tsing Yi Estate and Greenfield. On the other hand, the large clusters on territory covered (1) Shek Lei, Tai Pak Tin, Shek Yam and Shek Lei Extension and (2) Kwai Shing East Estate and Tai Wo Hau.

★ 7.8 根據 Z scores 是 2 或以上的黑點，100 米、200 米和 300 米圈的空間類聚製成地圖如下。青衣島最大的群聚範圍包括長亨、長安、偉海、青衣邨和翠怡。另一方面，地區層面大型的類聚包括 (1) 石籬、大白田和新石籬及 (2) 葵盛東邨和大窩口。

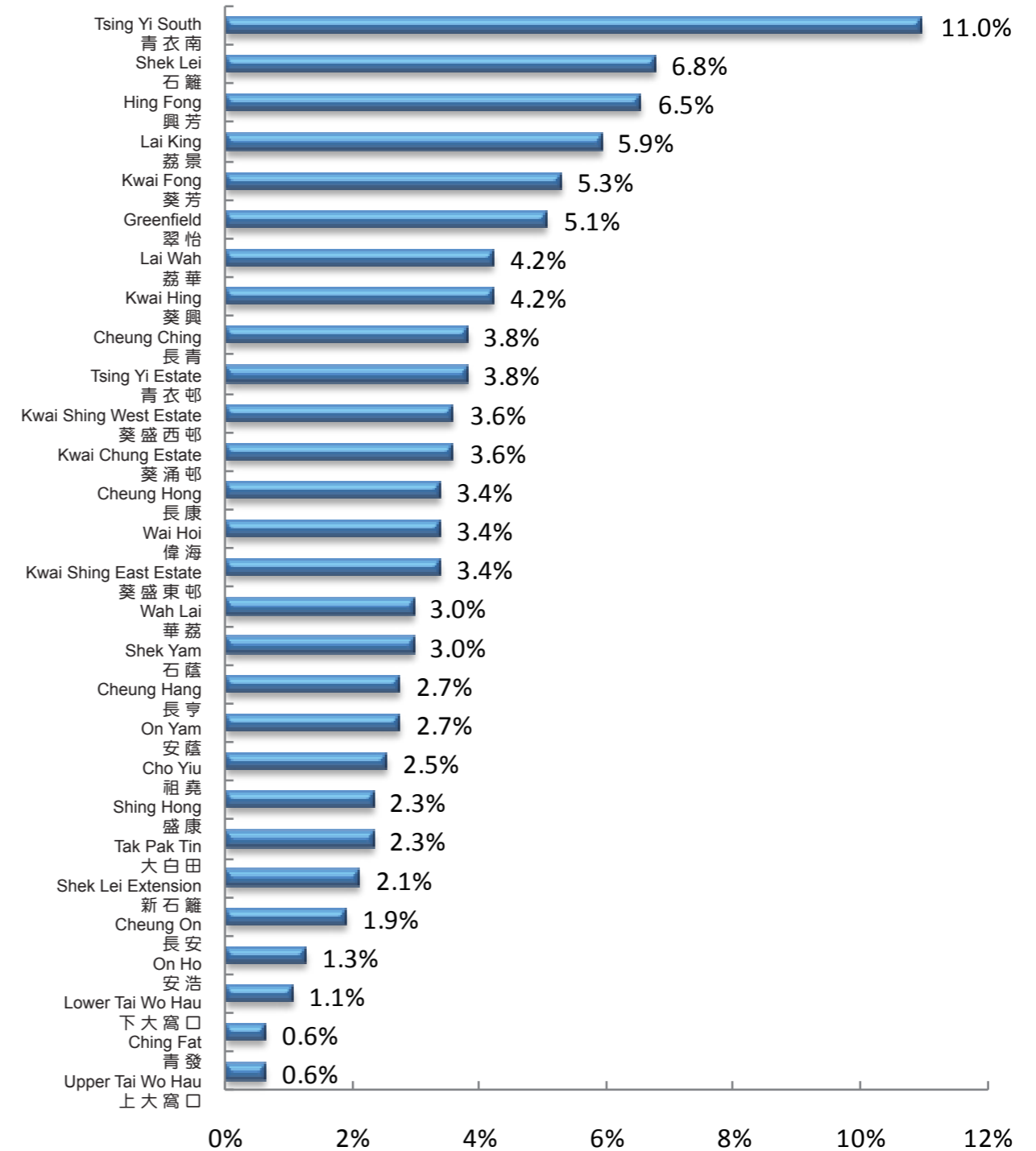


★ 7.9 Analyzed fall injuries by age 65 or above, the percentages were higher in Kwai Hing (9.0%), Cho Yiu (7.6%), Shek Lei Extension (7.2%) and Greenfield (6.6%).

★ 7.9 年齡介乎 65 歲或以上的跌傷個案，發生在葵興 (9.0%)、祖堯 (7.6%)、新石籬 (7.2%) 及翠怡 (6.6%) 的百分比比較高。

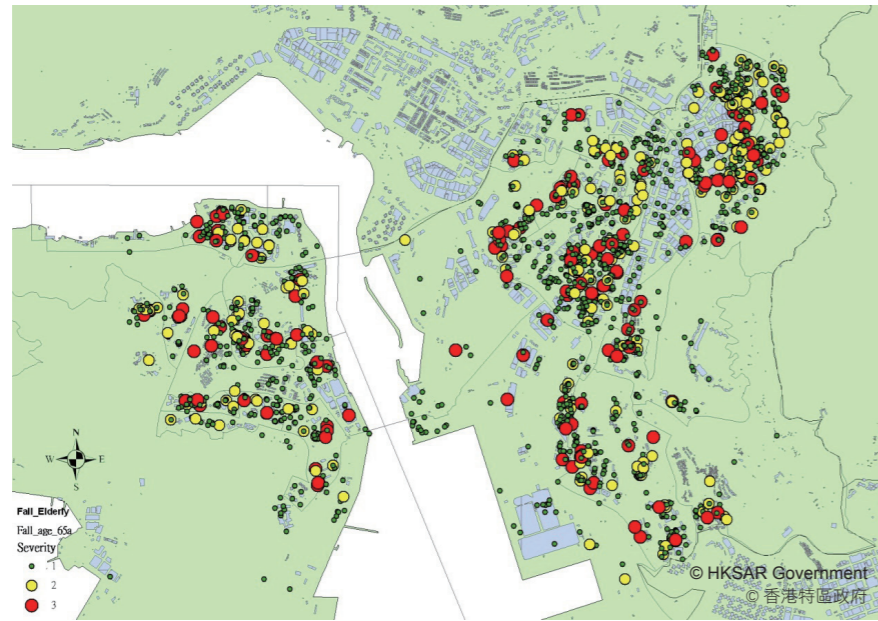
Percentage distribution of fall injuries by age 65 or above

年齡介乎 65 歲或以上跌傷的地點分佈



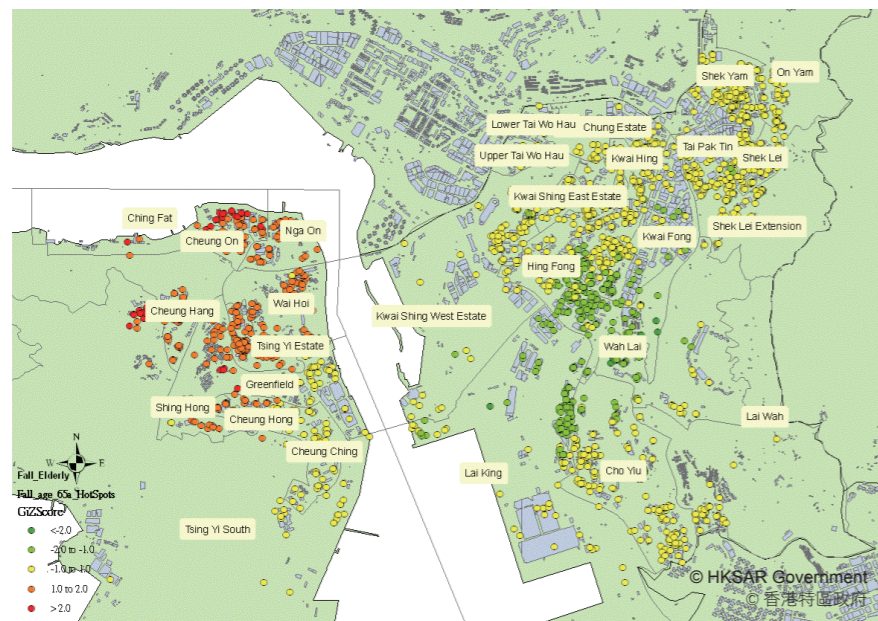
★ 7.10 The map below showed the distribution of cases by levels of severity. It was observed that the severe cases which were red scattered over the Kwai Tsing district.

★ 7.10 下圖按嚴重程度顯示個案分佈，可見到紅色標示的嚴重個案散佈在葵盛區。



★ 7.11 In order to identify the clusters, based on the hot spots which have Z scores for elderly aged 65 or above suffered from fall injuries, the hot spots of higher Z scores concentrated in northern Tsing Yi where severe cases were closer and more common although it does not mean that no severe cases existed in other areas as they were just less concentrated.

★ 7.11 為辨識類聚，根據 65 歲或以上長者跌倒受傷 Z scores 的黑點，得到較高 Z scores 的黑點集中在青衣北，發生嚴重個案的地方較接近和普遍，但亦不表示其他地方沒有嚴重個案，只是並不集中。

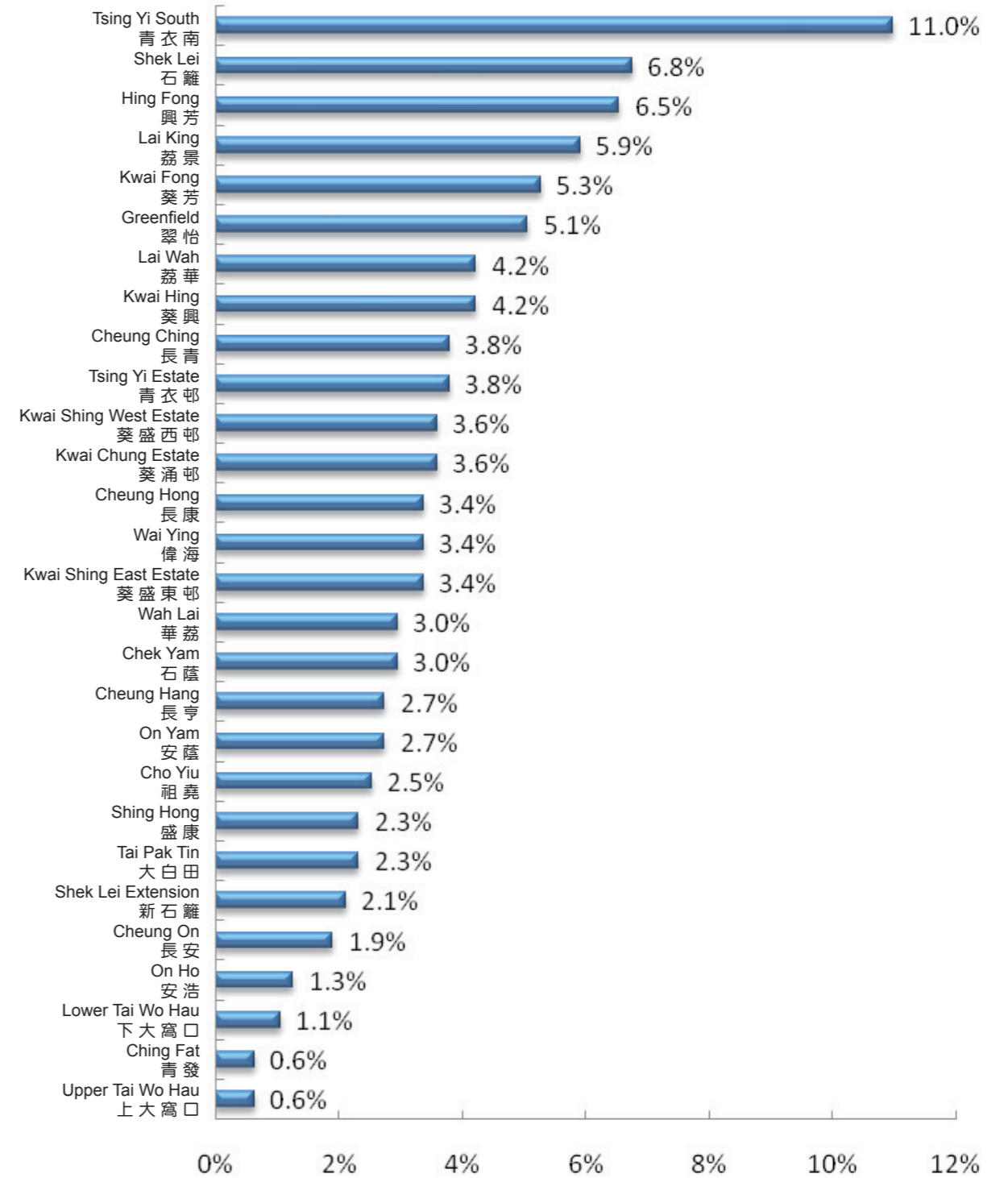


★ 7.12 Analyzed fall injuries by age 4 or below, the percentages were higher in Tsing Yi South (11.0%), Shek Lei (6.8%) and Hing Fong (6.5%).

★ 7.12 分析四歲或以下的跌傷個案，發生在青衣南 (11.0%)、石籬 (6.8%) 及興芳 (6.5%) 的百分比比較高。

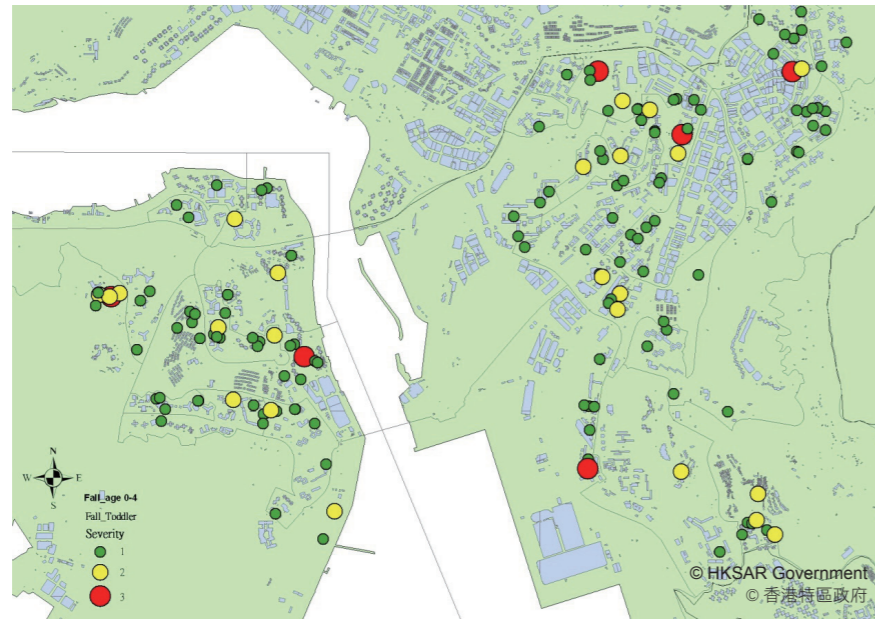
Percentage distribution of fall injuries by age 4 or below

年齡介乎 4 歲或以下跌傷發生地點分佈



★ 7.13 Analyzed the spatial patterns of patients of fall injuries who were aged from 0 to 4, although no obvious spatial cluster was identified, the spatial distribution of toddler fall injuries by severity was also presented below.

★ 7.13 按年齡由 0-4 歲的跌倒受傷病者空間形態分析，雖然沒有明顯空間類聚，但以嚴重程度分析幼兒跌倒受傷的空間形態分析如下。

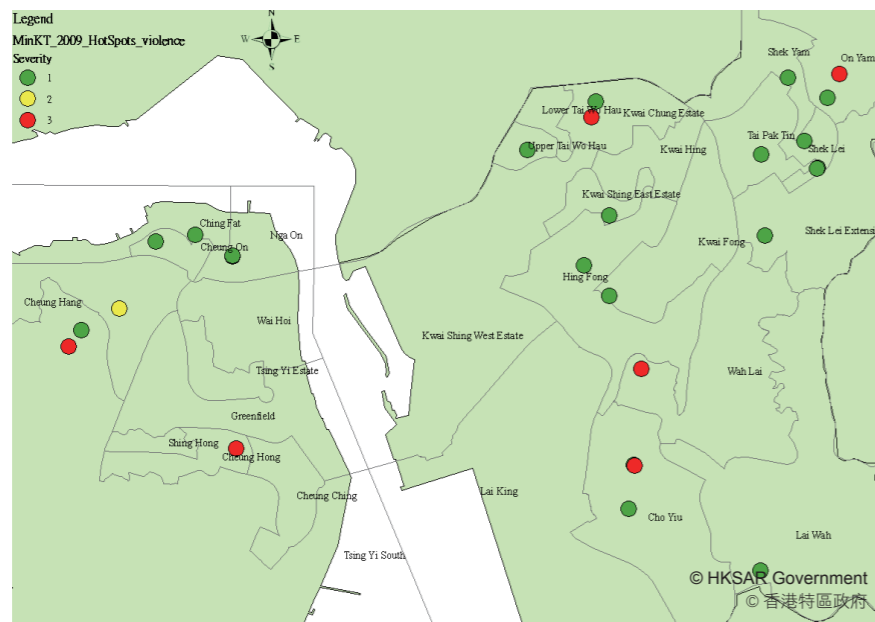


Further Analysis on Domestic Violence

家庭暴力的進一步分析

★ 7.14 Based on the geographically validated dataset, there were 27 violence cases were identified. 3 of them were child abuse and 24 were spousal violence. Analyzed by levels of severity, 17 cases were low level of severity but there were also 6 cases were high level of severity.

★ 7.14 根據地理上確認的數據，共錄得 27 宗暴力個案。其中 3 宗是虐待兒童，24 宗為虐待配偶。按嚴重程度來分析，17 宗屬嚴重程度低的，但亦有 6 宗屬嚴重程度高的個案。

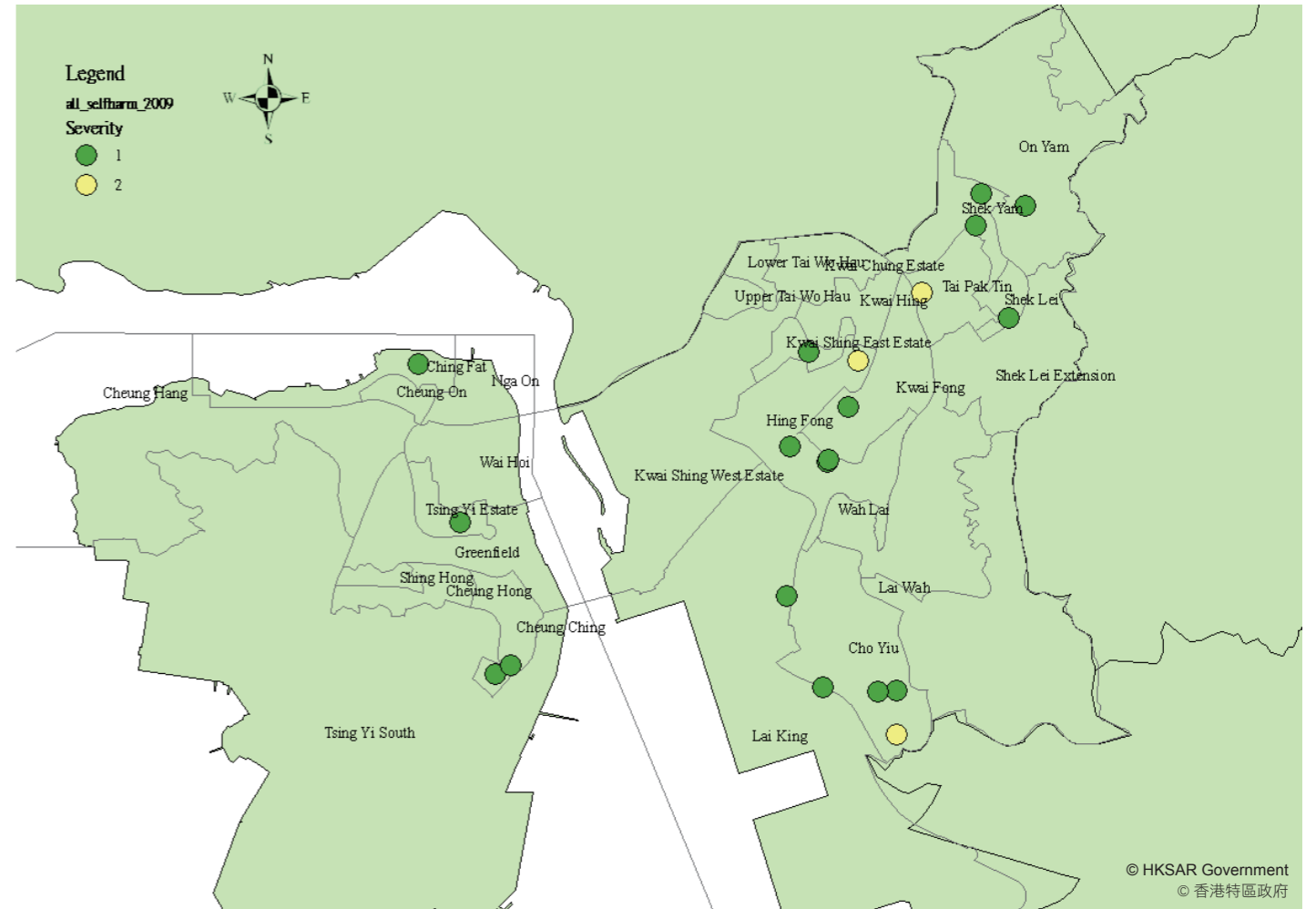


Further Analysis on Self Harm

自我損傷的進一步分析

★ 7.15 Based on the geographically validated dataset, there were 20 self harm cases were identified. Analyzed by levels of severity, 17 cases were low level of severity but there were also 3 cases were mid level of severity and no high level cases were found.

★ 7.15 根據地理上確認的數據，共錄得 20 宗自殘的個案。按嚴重程度來分析，17 宗為嚴重程度低，但亦有 3 宗為嚴重程度中等，並沒有嚴重程度高的個案。



## 8. Summary, Discussions and Recommendations:

★ 8.1 With supports of Community Health Resource Centre by Kwai Tsing Safe Community and Healthy City Association and Princess Margaret Hospital, the development of injury surveillance system captured data on injuries. This report was compiled by making use of injury data collected in 2009. A total of 18,595 cases were captured. Male contributed to over 58.0% while female represented 42.0% of the injury attendance. About 13.3% were aged 14 or below. About 66.4% were aged 15-64. And the percentage for the elderly aged 65 and above was 20.3%. The great majority of the injury cases were unintentional (82.9%) while 5.8% were intentional. Nearly a quarter of injury cases happened during doing vital activities at home such as laundry and mopping (24.4%), work (23.4%) and traveling (21.0%).

★ 8.2 Although the mechanism of injuries could be various and numerous, the major mechanism included fall (39.7%), other blunt force (22.8%) and stab/cut (7.4%). For female respondents, the percentage of fall injuries (50.2%) was highest among all types of injuries. Analyzed by age, about 71.3% of patients aged more than 60 and 49.5% aged less than 15 experienced fall injuries. In fact, the analysis by severity also indicated the similar observation that over half of serious cases (56.5%) and moderate cases (67.3%) were found in fall injury and other blunt force came next (18.3% and 23.2% respectively). It is worth noting that traffic injury (14.8%) was the third largest type in serious cases.

★ 8.3 Analyzed by the place of occurrence of injuries by gender, the percentage of female (42.7%) was higher than their male counterparts (25.1%) at home while vice versa in factory/workshop (4.2% for female; 10.2% for male) whereas the percentages were almost the same for both genders (17.3% for female; 17.6% for male) on highway/street. Besides, analyzed by the place of injuries by activities, over 50% of injuries took place at home.

★ 8.4 By studying the intention of injury among the patients, the percentage of unintentional injury was higher for fall (44.9%) and the percentage of intentional injury (A/A) was higher for other blunt force (78.4%). For self harm, the percentage of using stab/cut (40.5%) was relatively high. Across different kinds of intention, the percentages were higher at home (33.8% for unintentional; 51.9% for self harm and 30.2% for intentional (A/A)) and on highway/street (17.9% for unintentional; 8.4% for self harm and 22.1% for intentional (A/A)). It is worth noting that the frequency of unintentional injury occurred was also high in factory / workshop, playground, old aged home and schools.

## 8. 總結、討論及建議

★ 8.1 在葵青安全社區及健康城市協會轄下的社區健康資源中心和瑪嘉烈醫院資助下建立的傷亡監測系統收集受傷的數據。本報告是在 2009 年所收集的數據編制而成。全年共錄得 18,595 宗個案。求診者中，男性佔了超過 58.0% 而女性佔 42.0%。14 歲或以下佔大約 13.3%，年齡介乎 15-64 歲佔 66.4%，65 歲或以上的長者佔則 20.3%。絕大多數的意外是非故意的 (82.9%)，而只有 5.8% 是故意的。接近四分之一的受傷事故是在家居中進行日常生活活動如洗衣物及拖地 (24.4%)、工作 (23.4%) 和行程途中時 (21.0%) 發生的。

★ 8.2 雖然受傷途徑的種類和數量都很多，但主要途徑包括跌倒 (39.7%)、撞傷 (22.8%) 和割傷 (7.4%)。對於女性受訪者當中，跌傷的百分比 (50.2%) 是眾多受傷類別最高的。如以年齡分析，約 71.3% 的傷者年齡超過 60 歲和 49.5% 是 15 歲以下，事實上，按嚴重程度來分析的話，結果亦顯示相似的數據，超過半數的嚴重 (56.5%) 及中等 (67.3%) 個案都是跌傷及撞傷的 (分別是 18.3% 和 23.2%)。值得注意的是，嚴重個案的第三大種類為意外受傷 (14.8%)。

★ 8.3 按性別分析意外發生地點，女性 (42.7%) 在家中受傷的百分比比較男性 (25.1%) 高，相反，在工廠 / 工場 (4.2% 為女性，10.2% 為男性) 或公路 / 街道發生意外的百分比幾乎相同 (17.3% 為女性，17.6% 為男性)。除此之外，按活動來分析意外發生地點，超過 50% 的受傷個案發生在家居。

★ 8.4 通過研究傷者的受傷意圖，非故意受傷的百分比中，跌倒受傷的較高 (44.9%)，而故意受傷中，撞傷 (78.4%) 的較高。對於自我損傷，割傷 (40.5%) 的百分比相對較高。遍及不同類型的意圖中，在家居受傷的百分比比較高 (33.8% 為非故意，51.9% 為自我損傷及 30.2% 為故意)，其次是在公路 / 街道受傷 (17.9% 為非故意；8.4% 為自我損傷及 22.1% 為故意)。值得注意的是，在工廠 / 工場、遊樂場、安老院和學校發生非故意受傷的頻率亦相當高。

★ 8.5 Temporal analyses by time, holidays and seasons and evaluations on crude rate and YPLL (Years of Potential Life Lost) were performed. The prominent patterns showed that fall and traffic injury caught attention when analyzed by mechanism. The figures were high in home and high/street when analyzed by places of occurrences. And the figures of work and travel were relatively high when analyzed by activities. Domestic, industrial and traffic injuries were frequent when analyzed by traumatic types.

★ 8.6 This study also tried to estimate the cost of staying in wards by districts, the average total costs for general wards plus intensive wards were relatively higher for On Yam (HK\$12186.96), Cheung Hong (HK\$11669.91), Shek Lei Extension (HK\$11506.20) and Cheung Hang (HK\$10993.58).

★ 8.7 In order to depict the picture on specific issues, further analyses on fall injuries, traffic injuries, work injuries, domestic violence<sup>30</sup> and self harm<sup>31</sup>.

★ 8.8 For the analysis on fall injuries, the percentage for females (53.1%) was relatively higher than their male counterparts (46.9%). The fall injuries were prone to infants aged below 4 and elderly aged 70 and above. The great majority of fall injuries were unintentional (93.9%). Over a quarter of fall injuries happened during traveling (29.9%) as well as vital activities (26.9%). Logically, about 40.8% of injury events occurred at home during vital activities. About 19.5% happened on highway/street when the patients were traveling and about 7.1% in old aged home where elderly lived.

★ 8.9 For the analysis on traffic injuries, the majority of the traffic injuries were happened to males (71.9%) while 28.1% to their female counterparts. The percentages of traffic injuries for adults aged between 25 and 54 were higher. The great majority of the traffic injuries were unintentional (89.5%). Over half of traffic injuries happened during traveling (50.3%) as well as vital activities (25.0%). About 62.1% of injury events occurred on highway/street. About 23.2% happened at vehicles and about 2.1% on airport.

★ 8.10 For the analysis on work injuries, about a quarter of the work injuries were happened to females (27.6%) while the percentage was large for their male counterparts (72.4%). The percentages of work injuries for adults aged 20 to 59 were higher. The great majority of the work injuries were unintentional (89.4%). About 29.5% of work injury occurred at factory / workshop. About 10% of work injuries occurred in airport (10.3%), highway/street (9.8%) and container port/wharf (9.4%). Further 8.8% of work injuries occurred in office/company. About 40.6% of work injuries were happened to services workers (40.6%), technicians (9.6%) and machine operators (6.3%). Nearly three quarters of work injuries happened in industrial background (80%).

★ 8.5 就時間、假期和節日、Crude Rate 評估和潛在壽命年數進行了時態比較分析。明顯的形態顯示，若以途徑來分析，跌倒和交通意外受傷最為顯著。若以發生地點來分析，則在家中和公路 / 街道的數字較高。若以活動來分析，工作和行程途中的數據相對較高。若以外傷性類型分析，家庭、工作和交通意外受傷較頻繁。

★ 8.6 這項研究還嘗試以地區層面估計住院的費用，普通病房和加護病房的平均總收費，以安蔭 (HK\$12186.96)、長康 (HK\$11669.91)、新石籬 (HK\$11506.20) 及長亨 (HK\$10993.58) 相對較高。

★ 8.7 為描繪出特定問題的情況，報告對跌倒、家庭暴力<sup>30</sup> 和自我損傷<sup>31</sup> 進行了進一步的分析。

★ 8.8 按跌倒受傷分析，女性 (53.1%) 所佔的百分比相對地高於男性 (46.9%)。四歲以下的幼童及 70 歲或以上的長者比較容易跌倒受傷。大多數的跌傷都屬非故意的 (93.9%)。超過四分一的跌傷個案在行程途中 (29.9%) 及日常生活 (26.9%) 時發生。邏輯上，大約 40.8% 的受傷事件是因為傷者在家中進行日常生活活動。大約 19.5% 的傷者行程途中在公路 / 街道發生意外；及大約 7.1% 發生在安老院。

★ 8.9 按交通受傷分析，男性 (71.9%) 佔大多數，而女性佔 28.1%。年齡介乎 25 至 54 歲的成年人在交通意外中受傷的百分比比較高。絕大多數的交通受傷 (89.5%) 是非故意的，超過一半的交通事故在行程途中 (50.3%) 及日常生活中 (25.0%) 發生。約 62.1% 的受傷事件在公路 / 街道發生，約 23.2% 在交通工具發生及大約 2.1% 在機場發生。

★ 8.10 按工作受傷分析，約四分之一的傷者是女性 (27.6%)，傷者男性 (72.4%) 居多。工作受傷的人士大多數年齡介乎 20 至 59 歲。絕大多數的工傷都是非故意的 (89.4%)。約 29.5% 的工傷事故在工廠 / 工場發生。約 10% 的工傷事故在機場 (10.3%)、公路 / 街道 (9.8%) 和貨櫃碼頭 / 碼頭 (9.4%) 發生，其餘 8.8% 的工傷在辦公室 / 公司發生。約有 40.6% 的傷者是服務人員、技術人員 (9.6%) 和機械操作人員 (6.3%)。近四分之三的工傷都是和工業有關的 (80%)。生。

<sup>30</sup> Domestic violence did not include physical injury.

<sup>31</sup> Self harm did not include poisoning.

<sup>30</sup> 家庭暴力不包括肉體上的受傷

<sup>31</sup> 自我損傷不包括中毒

★ 8.11 For the analysis on domestic violence, the majority of the injuries caused by domestic violence were happened to females (75.2%) while 24.8% to their male counterparts. The percentages of injuries caused by domestic violence for adults aged 30 to 54 were higher and the great proportions of the injuries were intentional and took place at home. The above findings were consistent with the traumatic situations that spousal abuse was the most common (81.2%) although child abuse also caught our attention (17.9%).

★ 8.12 For the analysis on self harm, the distribution of gender was similar (51.6% for females, 48.4% for males). The percentages were mainly concentrated on young adults aged 20 to 44. Over half of injury events occurred at home (59.4%).

★ 8.13 In order to explore the risk factors of injuries, 7 aspects, hospital admission, hospital admission for more than 3 days, fall injury, traffic injury, work injury, domestic violence and self harm, were identified for explorations. Although different factors generating crude odds ratios and adjusted odd ratios with statistical significant difference were compiled to explain the construction of different models, only the model on fall identified with factors including gender, seasons (quarters) of a year, and time was significantly different at 0.05 with Nagelkerke  $R^2$  was 0.231.

★ 8.14 Assisted with GIS applications, hot spots analyzed by levels of severity were identified in eastern Chung Hang, western Greenfield and northern Tsing Yi Estate on Tsing Yi Island. Clusters in Shek Lei and eastern Tai Pak Tin and some scattered hot spots in northern Kwai Shing West Estate were also found. Although analyses of GIS on domestic violence and self harm were performed, the case number might not be large enough for addressing the cluster analysis. However, analyses on traffic accidents and fall should be of attention.

★ 8.11 按家庭暴力的分析，大多數的家庭暴力的受害者是女性 (75.2%)，24.8% 是男性。年齡介乎 30 至 54 歲的佔較高百分比，大比例的受傷都是故意的而且在家中發生。上述研究結果與外傷性類型一致，虐待配偶最常見 (81.2%)，然而虐待兒童也引起我們的注意 (17.9%)。

★ 8.12 按自我損傷分析，兩性分佈相近 (51.6% 為女性，48.4% 為男性)。自我損傷的百分比主要集中在 20 至 44 歲的年輕成人身上。超過半數的受傷事件是在家中發生 (59.4%)。

★ 8.13 為為了探索受傷的風險因素，找出了七個範疇：住院、住院超過 3 天，跌倒、交通意外受傷、工傷，家庭暴力和自我損傷，雖然不同的因素產生會導致 Crude OR 和 Adjusted OR 有著統計上明顯差異，來編制解釋不同模式的建立，只有有關跌傷的模型包括性別、季度和時間等因素在 0.05 的 P- 值<sup>32</sup> 是有顯著分別及其 Nagelkerke  $R^2$ <sup>33</sup> 為 0.231。

★ 8.14 憑著地理信息系統的輔助，以不同的嚴重程度來分析，在青衣的長亨邨東部、翠怡花園西部、青衣邨北部發現了一些受傷黑點。在石籬邨及大白田村東部發現了群集的黑點，葵盛西邨北部亦發現了零星黑點。儘管對家庭暴力及自殘以地理信息系統進行了分析，個案數目未必足夠來進行群集黑點的分析。然而，研究應注重交通意外及跌倒的分析。

<sup>32</sup> P-value less than 0.05 means that null hypothesis has been rejected at the p-value which is the probability of obtaining a test statistic at least as extreme as the one that was actually observed, assuming that the null hypothesis is true.

<sup>33</sup>  $R^2$  expresses the improvement of the full model with all variables included over the Block 0 model. Nagelkerke  $R^2$  should be between 0 and 1, with 0 denoting that model does not explain any variation and 1 denoting that it perfectly explains the observed variation while Cox & Snell  $R^2$  can be larger than 1.

<sup>32</sup> 假設虛無假設為真，統計驗試所得及實質統計所得的或然率的 p- 值少於 0.05，即表示拒絕虛無假設。

<sup>33</sup>  $R^2$  表示整個模型包含所有的變數，是對 Block 0 model 的改良。Nagelkerke  $R^2$  應介乎 0 至 1，0 意指模型沒有說明任何差別，而 1 意指模型完全說出觀察所得的差別，而 Cox & Snell  $R^2$  可大於 1。

★ 8.15 Further analysis on traffic accidents indicated that clusters of traffic accidents were found on Tsing Yi Island around Cheung Hang, Cheung On, Wai Ying and Tsing Yi Estate. It is worth noting that severe cases occurred in the entrance of south bridge. On the other hand, the large clusters on territory covered (1) Shek Lei, Tai Pak Tin and Shek Lei Extension and (2) Upper Tai Wo Hau.

★ 8.16 Further analysis on fall injuries indicated that the percentages were higher in Hing Fong (9.9%), Lai King (8.3), Tsing Yi South (7.9%) and Cho Yiu (7.9%).

## Discussions and Recommendations:

★ 8.17 To understand the nature of injuries and prevent the occurrence of injuries, the performance of above analyses depicted the picture on different kinds of injuries in Kwai Tsing district. Continuous assessments and monitoring are advised to keep track with the changes. Meanwhile, the analyses identified several areas of concern which are worth addressed.

## Fall injuries

★ 8.18 Fall injuries are the most common injuries recorded in the Injury Surveillance System. Risks of fall injuries occur in all setting including home, office, schools, playground, transportation, etc. The statistics in this study attract our attention as elderly (especially aged 70 or above) and toddlers (aged below 4) are prone to fall injuries comparing to younger generation and the probability of fall injuries increases with age. Fall injuries can also be very serious. As addressed by Injury Surveillance Workgroup on Falls (2006)<sup>34</sup>, the populations at high risk for falls need to be clearly identified and targeted by prevention programs. In this regard, the role of intrinsic personal health factors, as well as environmental hazards that increase the likelihood of a fall and a resulting injury, must be well described. Often noted is the high incidence of older adults (65 years and over) who sustain fall-related hip and wrist fractures. On one hand, falling from beds, furniture or playground equipments causes injuries to infants and toddlers<sup>35</sup> while fall injuries of elderly would be associated with home setting, lighting, presence of obstacles, etc. GIS analyses showed that serious fall injury cases happened in "old areas" where elderly are concentrated. Since it was found that elderly often experienced fall injuries at home when they moved or did vital activities, increase of awareness and education about home safety is important and both elderly and their family members should take care of themselves and their seniors respectively.

<sup>34</sup> Injury Surveillance Workgroup on Falls, 2006, Consensus Recommendations for surveillance of falls and fall-related injuries, State and Territorial Injury Prevention Directors Associations.

<sup>35</sup> Wallis A.L., Cody B.E., Mickalide A.D., 2003, Report to the nations: Trends in unintentional childhood injury mortality 1987-2000, National Safe Kids Campaign.

★ 8.15 按交通意外的進一步分析顯示，交通意外集中在青衣的長亨、長安、偉盈，以及青衣邨。值得注意的是南橋發生過一些嚴重事故個案。另一方面，葵涌的大範圍群集黑點覆蓋 (1) 石籬、大白田及新石籬，以及 (2) 上大窩口。

★ 8.16 按跌傷的進一步分析表明，意外發生在興芳 (9.9%)、荔景 (8.3)、青衣南 (7.9%) 和祖堯 (7.9%) 的百分比比較高。

## 討論及建議

★ 8.17 以上分析描繪出葵青區的各種受傷，以了解受傷的性質及防止受傷發生。建議進行持續監察和評估，以不斷記錄變更。同時，分析確認了一些值得關注的範疇。

## 跌倒受傷

★ 8.18 跌倒是傷亡監察系統中記錄最常見的受傷。跌倒受傷的風險發生在所有的地方，包括家中、辦公室、學校、遊樂場、交通工具等。本研究的統計數據讓我們發現長者 (特別是年齡 70 或以上的長者) 和幼兒 (4 歲以下的幼兒) 較年輕一輩容易跌倒，而且跌倒受傷的機會隨年齡增加。跌倒受傷亦可以非常嚴重。根據跌倒傷亡監察工作組 (2006)<sup>34</sup>，需要透過預防計劃清楚找出和對準跌倒風險高危的人口。在這點上，會增加跌倒機會、導致受傷的個人本身健康因素和環境影響必須好好的描述。要經常注意，年長的成人 (65 歲及以上) 遭受與跌倒有關的臀部和腕關節骨節發生率很高。一方面，在床上、傢俱或遊樂場設施對嬰兒和幼兒<sup>35</sup> 導致受傷，而長者跌倒受傷與家中的設備、燈光、防礙物等有關。地理資訊地圖顯示，嚴重跌倒受傷個案發生在「舊區」，是長者集中的地方。由於發現長者經常在家中行動或日常生活中跌倒受傷，多加注意和教育家居安全是非常重要的。此外，長者及其家人均應互相照顧。

<sup>34</sup> 國家及地區傷害預防協會，跌倒及與跌倒有關受傷監察共同建議，跌倒傷害監察工作組。

<sup>35</sup> Wallis A.L., Cody B.E., Mickalide A.D., 2003, Report to the nations: Trends in unintentional childhood injury mortality 1987-2000, National Safe Kids Campaign.



★ 8.19 Further research on fall injuries does not only enhance understanding on cause but also help to prevent the occurrence of the injuries. Several dimensions are of interest in future studies such as detail medical conditions (medical history) and environmental conditions causing fall injuries (indoor or outdoor), circumstances of falls (slippery, falling from furniture, obstacle, etc.), any pattern of repeated falls, etc.

## Traffic injuries

★ 8.20 Addressed by WHO<sup>36</sup>, road traffic injuries are a major but neglected public health problem, requiring concerted efforts for effective and sustainable prevention. Of all the systems that people have to deal with on a daily basis, road transport is the most complex and the most dangerous. One reason for the neglect of traffic injury in public health is the traditional view of accidents and injuries as random events that happen to others. The new understanding of road injury prevention and control inspires road safety paradigm and some highlights are extracted from WHO (2004):

- ★ Road crash injury is largely preventable and predictable; it is a human-made problem amenable to rational analysis and countermeasure.
- ★ Road safety is a multi-sectoral issue and a public health issue – all sectors, including health, need to be fully engaged in responsibility, activity and advocacy for road crash injury prevention.
- ★ Common driving errors and common pedestrian behavior should not lead to death and serious injury – the traffic system should help users to cope with increasingly demanding conditions.
- ★ The vulnerability of the human body should be a limiting design parameter for the traffic system and speed management is central.
- ★ Road crash injury is a social equity issue – equal protection to all road users should be aimed for since non-motor vehicle users bear a disproportionate share of road injury and risk.
- ★ Local knowledge needs to inform the implementation of local solutions.

★ 8.19 跌傷的進一步研究不僅增進了解成因，亦有助於防止受傷發生。有幾個方面有利於未來的研究，如詳細的醫療狀況（病史）、環境條件造成跌倒受傷（室內或室外）、跌倒的環境（濕滑、從傢具墮下、障礙物等）及任何模式的反復跌傷等。

## 交通意外受傷

★ 8.20 世界衛生組織提出<sup>36</sup>，道路交通意外是一個重要但常被忽視的公眾健康問題，需要共同努力制定一套有效和可持續發展的預防措施。在人們每天需要處理的系統中，道路交通是最複雜和最危險的。人們就公眾健康方面忽視交通受傷的其中一個原因，是因為傳統觀念認為，意外和受傷是隨機發生的。但對預防道路受傷和控制的新理解，啟發了道路安全樣式，從世界衛生組織（2004）中抽取部分重點如下：

- ★ 道路上相撞受傷大部分是能預防和預計的，這是人為的問題，受控於理智分析和應對。
- ★ 道路安全是多方面的問題，亦屬公眾健康問題 – 所有方面（包括健康）也需要在責任上、活動中積極參與及提倡道路上相撞受傷的預防。
- ★ 常見駕駛錯誤和行人的行為不應導致死亡和嚴重受傷 – 交通系統應幫助使用者處理需求不斷增加的情況。
- ★ 人身體的弱點應是限制交通系統設計規範，速度管理是重點。
- ★ 道路上相撞受傷是社會公平的問題 – 以往非汽車使用者負上不平等的道路受傷和風險的責任，應對所有道路使用者持平等的保障。
- ★ 本地知識需要通知當地解決方案的實施。

<sup>36</sup> M. Peden, R. Scurfield, D. Sleet, D. Mohan, A.A. Hyder, E. Jarawan and C. Mathers, 2004, World report on road traffic injury prevention, World Health Organization.

<sup>36</sup> M. Peden, R. Scurfield, D. Sleet, D. Mohan, A.A. Hyder, E. Jarawan and C. Mathers, 2004, World report on road traffic injury prevention, World Health Organization.

★ 8.21 In Kwai Tsing district, traffic injuries are concentrated in certain areas identified. Risk factors of traffic injury are explored and the profiles of patients, i.e. male young to middle adults especially those aged 25 to 39, are identified in the dataset. The analysis is just an attempt to explore although the statistical model is not significant.

★ 8.22 However, the statistics in this study are just an overview of the issue instead of detail investigation of the causes of traffic injury related to road design, traffic flow, speed management, road safety devices, etc. It is encouraging that a study of integrated database system that links up traffic injury information from multiple sources (Traffic Accident Data System, the Accident & Emergency Information System, and Geographical Information System) feeds injury prevention advocates with real-time data concerning all facets of traffic incidents and subsequent injury casualties<sup>37</sup>. The study covered demographics of the causalities, characteristics of road environment at traffic incidents sites, and injury mortality and hospitalization. Recommendations are formulated to enhance the safety of pedestrians and to improve the quality of the walking environment. Meanwhile, better management of risk factors on vehicle traffic safety i.e. downhill gradient, broken-down vehicles, roadworks for rear-front crashes on free-flow highways was advised. Possible solutions include retrofit of hard shoulders/lay-bys, sightline improvements, anti-skid surfacing, better warning or directional signs. (Chow, C.B., Kwong, T.H., Leung, M., Lai, A. and Loo, P.Y., 2010)

★ 8.23 Further research is suggested for studying the problems in the identified traffic black spots such that pre-crash prevention, injury prevention during the crash and life sustaining after crash can be planned and implemented. Road injury prevention measures and policy can be very complicated as it involves not only road users but also government and legislative bodies, media, professionals, NGOs and interested groups, police force, and industry.

★ 8.21 在葵青區，交通意外受傷集中在某些地區，亦在資料庫內探究交通意外受傷風險因素和病者的背景，即男性到中年成年人，特別是年齡介乎 25 至 39 歲。雖然統計模型得出的數據並不顯著，但上述作出的分析只是嘗試探討問題。

★ 8.22 但是，本研究的統計數據只是問題的概述，並不是詳細深入調查交通意外受傷的成因與道路設計、交通流量、速度管理、道路安全設備關係等。值得鼓舞的是，綜合資料系統研究連接多個交通意外受傷資料源（交通意外資料系統、急症室資訊系統和地理資訊地圖），為系統提供所有有關交通意外和相關死傷的實時資料作受傷預防<sup>37</sup>。研究包括死傷的人口特徵、交通事故地點的道路環境特性及受傷死亡率和住院。已制訂建議，提高行人的安全和改善行人道路環境的質素。同時，亦建議對汽車交通安全即下山坡度、壞車、在高速公路前後相撞等風險因素作更好的管理。可能的解決方法包括硬路肩 / 路側停車帶翻新、視線改善、路面鋪設防滑物料、更好的警告或指示牌。(Chow, C.B., Kwong, T.H., Leung, M., Lai, A. and Loo, P.Y., 2010 年)

★ 8.23 建議就研究交通黑點問題作進一步調查，例如撞擊預防，亦可計劃和推行在撞車時的受傷預防和撞車後的生命維持。道路受傷預防措施和政策可以非常複雜，因為它不單牽涉道路使用者，亦關乎政府和立法機構、傳媒、專業人士、非政府組織和相關團體、警方和業界。

<sup>37</sup> Chow, C.B., Kwong, T.H., Leung, M., Lai, A. and Loo, P.Y., 2010, Development of an Integrated Traffic Injury Database in Kwai Tsing, Health Care and Promotion Fund.

<sup>37</sup> 世界衛生組織，2002 年，《世界衛生與暴力報告》，第七章〈自我暴力〉。

## Work injuries

★ 8.24 Male adults who were admitted to the hospital for work injuries were dominant. Factory / workshop, airport, highways / streets, container port / wharf and office / company were top five places of occurrence. Service workers, technicians and machine operators topped the list as well as analyzed by the top five places of occurrence. Although the analysis may not be conclusive enough for drafting concrete recommendations, work injuries were common in factory, transportation and office. Awareness of occupational safety should be addressed to services workers, technicians and machine operators.

## Domestic violence and Suicide

★ 8.25 In respect of domestic violence, spouse battering of female victims is the majority. Meanwhile, self-directed violence is not particularly high when compared to other places in the world<sup>38</sup>. But both these issues are of attention as any form of violence is intolerant and socially undesirable. However, the data collected from the surveillance system are not designed to deal with violence issue. The results of the analysis in this study tell something but not a clear picture as the nature and causes of domestic and self-directed violence are very complicated. Further studies should be conducted in order to enhance our understanding and formulate preventive recommendations.

## 工作受傷

★ 8.24 男性成人因工作受傷入院為主。工廠 / 工場、機場、公路 / 街道、貨櫃港口 / 碼頭和辦公室 / 公司是發生意外地點的首五位。服務工作者、技工和機械操作員是受傷和在首五位發生意外地點的主要人士。雖然分析對草擬實際建議並不具說服力，但工作受傷在工場、交通工具和辦公室最為常見。應向服務工作者、技工和機械操作員提倡職業安全意識。

## 家庭暴力和自殺

★ 8.25 在家庭暴力方面，虐待配偶以女性為主。與此同時，相較世界其他地方<sup>38</sup>，對自我暴力的個案並不多。但這些問題亦令人關注，因為任何形式的暴力都是難以忍受和社會並不想看到的。但是，從監察系統收集到的數據並不是設計來處理暴力問題，因此，本研究的分析結果只能提出部分問題，但不能提供清晰的情況，因為家庭和自我暴力行為的性質和起因都非常複雜。應進行進一步的研究，以提高我們的了解和制訂預防的建議。

<sup>38</sup> World Health Organization, 2002, Self-directed violence, World report on violence and health, Ch7.

<sup>38</sup> 世界衛生組織，2002年，《世界衛生與暴力報告》，第七章〈自我暴力〉。



# Injury Surveillance Report

## 傷害事故專題報告書

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