Hong Kong, 22 June 2015

Ms. Lam Yuk-chun, MH, Chairman to the Community Affairs and Tourism Development Committee
G/F & 1/F, Ocean Court, 3 Aberdeen Praya Road, Aberdeen, Hong Kong
By email: fanny_f_tsang@had.gov.hk

Proposed item for the 22nd CATC meeting on 13 July 2015: Child injuries in the Southern District

Dear Chair and Members,

We urge the Southern District Council and relevant Government Departments to take note of the report on ‘A Geographical Study of Child Injury in Hong Kong: Spatial Variation Among 18 Districts’ by the Department of Pediatrics and Adolescent Medicine of The University of Hong Kong, and its Principal Investigator Honorary Clinical Professor Dr Chun-bong Chow. There are some positive statistics regarding the Southern District:

- The Accident & Emergency Department (AED) attendance rates in the Southern District are lower than the mean of 18 districts during 2001-2012 and 2009-2012;
- The AED attendance rates in the Southern District have dropped 18% from 4,784 per 100,000 in 2001 to 3,945 per 100,000 in 2012;
- Annual self-harm AED attendance rate in the Southern District has dropped significantly during the period 2001-2012.

However, there are areas where our Council and relevant government departments should focus on:

- Domestic injuries
- Vulnerable groups in the Southern District are Girls 0-4y/o, Boys 0-4 y/o, 10-14 y/o and 15-19 y/o.
- Sports related injuries with boys 10-14 and 15-19 y/o having higher accidents rate than other groups. We also have a higher sports annual AED attendance rate than the mean of 18 districts.
- The traffic annual AED attendance rates in the Southern District during 2009-2012 are higher than the mean of 18 districts.

I propose that:
1. The Council allows for an introduction of the findings by members of the research team, and to discuss possible follow up with relevant Government departments;
2. To learn from Government including the Department of Health, Social Welfare Department and the Home Affairs Department on the campaigns it has and will undertake to reduce the risk of child injuries;
3. Specifically, I propose the Council and the Home Affairs Department to consider community involvement campaigns focused on reducing the risk of child injuries.

Yours sincerely,

Paul Zimmerman

Encl. A Geographical Study of Child Injury in Hong Kong: Spatial Variation Among 18 Districts’ – March 2015
香港大學兒童及青少年科學系
Department of Paediatrics and Adolescent Medicine
The University of Hong Kong

香港兒童損傷地理性研究
十八區之間的比較
A GEOGRAPHICAL STUDY OF CHILD INJURY IN HONG KONG:
SPATIAL VARIATION AMONG 18 DISTRICTS

南區
Southern District

二零一五年三月
March 2015
香港兒童損傷地理性研究
十八區之間的比較
（由健康護理及促進基金資助）

由香港大學兒童及青少年科學系撰寫：

首席研究人員：
周鎮邦醫生
名譽臨床醫學教授

研究人員：
葉柏強醫生
副教授

黃慶生先生
資訊科技經理及名譽導師

研究團隊：
趙詠詩小姐
高級研究助理

張德強先生
研究助理

何家榮先生
哲學碩士學生
A GEOGRAPHICAL STUDY OF CHILD INJURY IN HONG KONG:
SPATIAL VARIATION AMONG 18 DISTRICTS
(Funded by Health Care and Promotion Fund)

Prepared by Department of Paediatrics and Adolescent Medicine,
The University of Hong Kong:

Principal Investigator:
Dr Chun-bong CHOW
Honorary Clinical Professor

Investigators:
Dr Patrick IP
Associate Professor

Mr Wilfred WONG
IT Manager and Honorary Tutor

Project Staff:
Miss Ivy CHIU
Senior Research Assistant

Mr Michael CHEUNG
Research Assistant

Mr Frederick HO
Master of Philosophy Student
# Table of Contents

## 目錄

<table>
<thead>
<tr>
<th>章節</th>
<th>頁碼</th>
</tr>
</thead>
<tbody>
<tr>
<td>目錄</td>
<td>3</td>
</tr>
<tr>
<td>Table of Contents</td>
<td>3</td>
</tr>
<tr>
<td>圖表目錄</td>
<td>5</td>
</tr>
<tr>
<td>List of Figures</td>
<td>5</td>
</tr>
<tr>
<td>地圖目錄</td>
<td>11</td>
</tr>
<tr>
<td>List of Maps</td>
<td>11</td>
</tr>
<tr>
<td>資料表目錄</td>
<td>12</td>
</tr>
<tr>
<td>List of Tables</td>
<td>12</td>
</tr>
<tr>
<td>1 摘要及視覺資訊圖表</td>
<td>13</td>
</tr>
<tr>
<td>Executive Summary and Infographic</td>
<td>13</td>
</tr>
<tr>
<td>2 背景及編製方法</td>
<td>17</td>
</tr>
<tr>
<td>2.1 背景</td>
<td>17</td>
</tr>
<tr>
<td>2.1 Introduction</td>
<td>17</td>
</tr>
<tr>
<td>2.2 目標</td>
<td>19</td>
</tr>
<tr>
<td>2.2 Aims</td>
<td>19</td>
</tr>
<tr>
<td>2.3 報告範圍</td>
<td>20</td>
</tr>
<tr>
<td>2.3 Scope of Report</td>
<td>20</td>
</tr>
<tr>
<td>2.4 編製方法</td>
<td>23</td>
</tr>
<tr>
<td>2.4 Methodology</td>
<td>23</td>
</tr>
<tr>
<td>2.5 報告結構</td>
<td>27</td>
</tr>
<tr>
<td>2.5 Report Structure</td>
<td>27</td>
</tr>
<tr>
<td>2.6 重要備註</td>
<td>28</td>
</tr>
<tr>
<td>2.6 Important Remarks</td>
<td>28</td>
</tr>
<tr>
<td>3 2001-2012 年香港損傷到急症室求診情況簡介</td>
<td>31</td>
</tr>
<tr>
<td>3.1 2001-2012 年香港按年齡組別劃分損傷到急症室求診數字</td>
<td>31</td>
</tr>
<tr>
<td>3.2 2001-2012 年香港按性別和年齡組別劃分損傷到急症室求診數字</td>
<td>34</td>
</tr>
<tr>
<td>3.3 2001-2012 年香港按損傷種類劃分損傷到急症室求診數字</td>
<td>36</td>
</tr>
<tr>
<td>3.4 2001-2012 年香港按年齡組別和損傷種類劃分損傷到急症室求診數字</td>
<td>38</td>
</tr>
<tr>
<td>3.5 2001-2012 年香港按年齡劃分損傷到急症室求診數字</td>
<td>40</td>
</tr>
<tr>
<td>3.6 2001-2012 年香港按區議會分區劃分損傷到急症室求診數字</td>
<td>42</td>
</tr>
<tr>
<td>3.6 AED attendances due to injury by Year in Hong Kong, 2001-2012</td>
<td>40</td>
</tr>
<tr>
<td>3.6 AED attendances due to injury by District in Hong Kong, 2001-2012</td>
<td>42</td>
</tr>
</tbody>
</table>
4 2001-2012 年南區損傷到急症室求診情況總覽.................................................................45
4 AED ATTENDANCES DUE TO INJURY AT A GLANCE IN SOUTHERN DISTRICT, 2001-2012 ........45
  4.1 熱度圖的簡介............................................................................................................. 45
  4.1 Introduction to Heat-map.......................................................................................... 45
  4.2 2001-2012 年南區每年損傷到急症室求診率熱度圖............................................... 47
  4.2 Heat-map of annual injury AED attendance rates in Southern District, 2001-2012 .......... 47

5 香港損傷到急症室求診情況總覽..............................................................................49
5 OVERVIEW OF AED ATTENDANCES DUE TO INJURY IN HONG KONG..........................49
  5.1 香港按區議會分區劃分損傷到急症室求診的統計數字...........................................51
  5.1 AED attendances due to injury by District in Hong Kong............................................ 51
  5.2 香港按區議會分區劃分蓄意損傷到急症室求診的統計數字.................................... 55
  5.2 Intentional injury AED attendances by District in Hong Kong....................................... 55
  5.3 香港按區議會分區劃分非蓄意損傷到急症室求診的統計數字................................. 58
  5.3 Unintentional injury AED attendances by District in Hong Kong................................. 58

6 香港按區議會分區和損傷種類劃分到急症室求診的統計數字................................. 61
6 AED ATTENDANCES DUE TO INJURY BY DISTRICT AND INJURY TYPE IN HONG KONG .... 61
  6.1 2001-2012年香港按區議會分區和損傷種類劃分到急症室求診的統計數字............... 62
  6.1 AED attendance due to injury by District and Injury Type in Hong Kong, 2001-2012 ...... 62
  6.2 2009-2012年香港按區議會分區和損傷種類劃分到急症室求診的統計數字............... 71
  6.2 AED attendances due to injury by District and Injury Type in Hong Kong, 2009-2012 ...... 71

7 南區損傷到急症室求診的地區報告..........................................................................80
7 DISTRICT PROFILE OF AED ATTENDANCES DUE TO INJURY IN SOUTHERN DISTRICT ....... 80

8 2001-2012年香港各區損傷到急症室求診數字和社會經濟特徵.................................121
8 AED ATTENDANCES DUE TO INJURY AND SOCIO-ECONOMIC CHARACTERISTICS OF DISTRICTS IN
  HONG KONG, 2001-2012 .............................................................................................. 121
  8.1 損傷到急症室求診數字的負二項迴歸分析結果......................................................... 123
  8.1 NEGATIVE BINOMIAL REGRESSION RESULT OF AED ATTENDANCES DUE TO INJURY ...... 123

9 討論及建議................................................................................................................... 129
9 DISCUSSION AND RECOMMENDATIONS...................................................................... 129
  9.1 一般建議.................................................................................................................. 129

10 未來路向..................................................................................................................... 139
10 WAY FORWARD............................................................................................................. 139

鳴謝................................................................................................................................. 144
ACKNOWLEDGEMENT................................................................................................. 144

參考資料....................................................................................................................... 145
REFERENCES.................................................................................................................. 145
List of Figures

Figure 2.3: Classification of AED Injury Type in Public Hospital in Hong Kong ................................................................. 22

Figure 3.1.1: 2001-2012 Year 0-19 Years Children Grouped by Age Group and Injury Type, Hong Kong, 2001-2012 .............. 32

Figure 3.1.2: 2001-2012 Year 0-19 Years Children Grouped by Age Group and Injury Rate, Hong Kong, 2001-2012 ............... 32

Figure 3.1.3: 2001-2012 Year 0-19 Years Children Grouped by Age Group and Injury Type Percentage, Hong Kong, 2001-2012 . 33

Figure 3.2.1: Annual AED Attendance Rates among Children Aged 0 to 19 Years, by Sex, Hong Kong, 2001-2012 ............. 34

Figure 3.2.2: Annual AED Attendance Rates among Children Aged 0 to 19 Years, by Age Group and Sex, Hong Kong, 2001-2012 . 35

Figure 3.3.1: Annual AED Attendance Rates among Children Aged 0 to 19 Years, by Injury Type, Hong Kong, 2001-2012 .... 36

Figure 3.3.2: Annual AED Attendance Rates among Children Aged 0 to 19 Years, by Injury Type, Hong Kong, 2001-2012 .... 37

Figure 3.5.1: Annual AED Attendance Rates among Children Aged 0 to 19 Years, by Year, Hong Kong, 2001-2012 ............. 40

Figure 3.5.2: Annual AED Attendance Rates among Children Aged 0 to 19 Years, by Year, Hong Kong, 2001-2012 ............. 41

Figure 3.6.2: Annual AED Attendance Rates among Children Aged 0 to 19 Years, by District, Hong Kong, 2001-2012 ........... 43

Figure 4.2: Heat-map of Annual AED Attendance Rates, Southern District, 2001-2012 ..................................................... 47

Figure 5.1.1: Annual AED Attendance Rates with Annual Avoidable Injury Numbers due to Injury, by District, Hong Kong, 2001-2012 ......................................................... 51
6.1.6: Figure 6.1.5: Intentional injury annual AED attendance rates with annual avoidable injury numbers, by district, Hong Kong, 2001-2012

6.1.5: Figure 6.1.4: Common assault annual AED attendance rates with annual avoidable injury numbers, by district, Hong Kong, 2001-2012

6.1.4: Figure 6.1.3: Indecent assault annual AED attendance rates with annual avoidable injury numbers, by district, Hong Kong, 2001-2012

6.1.3: Figure 6.1.2: Child abuse annual AED attendance rates with annual avoidable injury numbers, by district, Hong Kong, 2001-2012

6.1.2: Figure 6.1.1: Self-Harm annual AED attendance rates with annual avoidable injury numbers, by district, Hong Kong, 2001-2012

6.1.1: Figure 6.1.0: Traffic annual AED attendance rates with annual avoidable injury numbers, by district, Hong Kong, 2001-2012

5.3.2: Figure 5.3.1: Intentional injury annual AED attendance rates with annual avoidable injury numbers, by district, Hong Kong, 2001-2012

5.3.1: Figure 5.3.0: Unintentional injury annual AED attendance rates with annual avoidable injury numbers, by district, Hong Kong, 2001-2012

5.2.2: Figure 5.2.1: Non-traffic annual AED attendance rates with annual avoidable injury numbers, by district, Hong Kong, 2001-2012

5.2.1: Figure 5.2.0: All other annual AED attendance rates with annual avoidable injury numbers, by district, Hong Kong, 2001-2012

5.1.2: Figure 5.1.1: Yearly avoidable injury numbers by district, Hong Kong 2009-2012

5.1.1: Figure 5.1.0: Yearly avoidable injury numbers by district, Hong Kong 2001-2012

2001-2012: Yearly avoidable injury numbers by district, Hong Kong 2001-2012

2009-2012: Yearly avoidable injury numbers by district, Hong Kong 2009-2012
FIGURE 6.1.6: INDUSTRIAL ANNUAL AED ATTENDANCE RATES WITH ANNUAL AVOIDABLE INJURY NUMBERS, BY DISTRICT, HONG KONG, 2001-2012 ................................................................. 68

图 6.1.7: 2001-2012 年香港按議會分區劃分家居意外損傷到急症室的每年求診率和每年可避免損傷數字 ................................................................. 69

FIGURE 6.1.7: DOMESTIC ANNUAL AED ATTENDANCE RATES WITH ANNUAL AVOIDABLE INJURY NUMBERS, BY DISTRICT, HONG KONG, 2001-2012 ................................................................. 69

图 6.1.8: 2001-2012 年香港按議會分區劃分運動意外損傷到急症室的每年求診率和每年可避免損傷數字 ................................................................. 70

FIGURE 6.1.8: SPORTS ANNUAL AED ATTENDANCE RATES WITH ANNUAL AVOIDABLE INJURY NUMBERS, BY DISTRICT, HONG KONG, 2001-2012 ................................................................. 70

图 6.2.1: 2009-2012 年香港按議會分區劃分毆打損傷到急症室的每年求診率和每年可避免損傷數字 ................................................................. 71

FIGURE 6.2.1: COMMON ASSAULT ANNUAL AED ATTENDANCE RATES WITH ANNUAL AVOIDABLE INJURY NUMBERS, BY DISTRICT, HONG KONG, 2009-2012 ................................................................. 71

图 6.2.2: 2009-2012 年香港按議會分區劃分非禮損傷到急症室的每年求診率和每年可避免損傷數字 ................................................................. 73

FIGURE 6.2.2: INDECENT ASSAULT ANNUAL AED ATTENDANCE RATES WITH ANNUAL AVOIDABLE INJURY NUMBERS, BY DISTRICT, HONG KONG, 2009-2012 ................................................................. 73

图 6.2.3: 2009-2012 年香港按議會分區劃分虐待兒童損傷到急症室的每年求診率和每年可避免損傷數字 ................................................................. 74

FIGURE 6.2.3: CHILD ABUSE ANNUAL AED ATTENDANCE RATES WITH ANNUAL AVOIDABLE INJURY NUMBERS, BY DISTRICT, HONG KONG, 2009-2012 ................................................................. 74

图 6.2.4: 2009-2012 年香港按議會分區劃分自殘損傷到急症室的每年求診率和每年可避免損傷數字 ................................................................. 75

FIGURE 6.2.4: SELF-HARM ANNUAL AED ATTENDANCE RATES WITH ANNUAL AVOIDABLE INJURY NUMBERS, BY DISTRICT, HONG KONG, 2009-2012 ................................................................. 75

图 6.2.5: 2009-2012 年香港按議會分區劃分工業意外損傷到急症室的每年求診率和每年可避免損傷數字 ................................................................. 76

FIGURE 6.2.5: TRAFFIC ANNUAL AED ATTENDANCE RATES WITH ANNUAL AVOIDABLE INJURY NUMBERS, BY DISTRICT, HONG KONG, 2009-2012 ................................................................. 76

图 6.2.6: 2009-2012 年香港按議會分區劃分工業意外損傷到急症室的每年求診率和每年可避免損傷數字 ................................................................. 77

FIGURE 6.2.6: INDUSTRIAL ANNUAL AED ATTENDANCE RATES WITH ANNUAL AVOIDABLE INJURY NUMBERS, BY DISTRICT, HONG KONG, 2009-2012 ................................................................. 77

图 6.2.7: 2009-2012 年香港按議會分區劃分家居意外損傷到急症室的每年求診率和每年可避免損傷數字 ................................................................. 78

FIGURE 6.2.7: DOMESTIC ANNUAL AED ATTENDANCE RATES WITH ANNUAL AVOIDABLE INJURY NUMBERS, BY DISTRICT, HONG KONG, 2009-2012 ................................................................. 78

图 6.2.8: 2009-2012 年香港按議會分區劃分運動意外損傷到急症室的每年求診率和每年可避免損傷數字 ................................................................. 79

FIGURE 6.2.8: SPORTS ANNUAL AED ATTENDANCE RATES WITH ANNUAL AVOIDABLE INJURY NUMBERS, BY DISTRICT, HONG KONG, 2009-2012 ................................................................. 79
Figure 7.1.1: AED Attendance Rates with Avoidable Injury Numbers Due to Injury, by Year,
Southern District, 2001-2012 .............................................................. 83
Figure 7.1.2: Intentional Injury AED Attendance Rates with Avoidable Injury Numbers, by Year,
Southern District, 2001-2012 .............................................................. 85
Figure 7.1.3: Unintentional Injury AED Attendance Rates with Avoidable Injury Numbers, by Year,
Southern District, 2001-2012 .............................................................. 86
Figure 7.1.4: Common Assault AED Attendance Rates with Avoidable Injury Numbers, by Year,
Southern District, 2001-2012 .............................................................. 87
Figure 7.1.5: Indecent Assault AED Attendance Rates with Avoidable Injury Numbers, by Year,
Southern District, 2001-2012 .............................................................. 88
Figure 7.1.6: Child Abuse AED Attendance Rates with Avoidable Injury Numbers, by Year,
Southern District, 2001-2012 .............................................................. 89
Figure 7.1.7: Self-Harm AED Attendance Rates with Avoidable Injury Numbers, by Year,
Southern District, 2001-2012 .............................................................. 90
Figure 7.1.8: Traffic AED Attendance Rates with Avoidable Injury Numbers, by Year,
Southern District, 2001-2012 .............................................................. 91
Figure 7.1.9: Industrial AED Attendance Rates with Avoidable Injury Numbers, by Year,
Southern District, 2001-2012 .............................................................. 92
Figure 7.1.10: Domestic AED Attendance Rates with Avoidable Injury Numbers, by Year,
Southern District, 2001-2012 ............................................................. 93
Figure 7.1.11: Sports AED Attendance Rates with Avoidable Injury Numbers, by Year,
Southern District, 2001-2012 ............................................................. 94
Figure 7.2.1.1: Annual AED Attendance Rates with Annual Avoidable Injury Numbers Due to Injury, by Sex and Age Group, Southern District, 2001-2012 ......................... 97
Figure 7.2.1.2: Intentional Injury Annual AED Attendance Rates with Annual Avoidable Injury Numbers, by Sex and Age Group, Southern District, 2001-2012 ......................... 99
Figure 7.2.1.3: Non-Intentional Injury Annual AED Attendance Rates with Annual Avoidable Injury Numbers, by Sex and Age Group, Southern District, 2001-2012 ......................... 99
Figure 7.2.1.3: Unintentional injury annual AED attendance rates with annual avoidable injury numbers, by sex and age group, Southern District, 2001-2012 .............................................. 100

Figure 7.2.1.4: Common assault annual AED attendance rates with annual avoidable injury numbers, by sex and age group, Southern District, 2001-2012 .............................................. 101

Figure 7.2.1.5: Indecent assault annual AED attendance rates with annual avoidable injury numbers, by sex and age group, Southern District, 2001-2012 .............................................. 102

Figure 7.2.1.6: Child abuse annual AED attendance rates with annual avoidable injury numbers, by sex and age group, Southern District, 2001-2012 .............................................. 103

Figure 7.2.1.7: Self-harm annual AED attendance rates with annual avoidable injury numbers, by sex and age group, Southern District, 2001-2012 .............................................. 104

Figure 7.2.1.8: Traffic annual AED attendance rates with annual avoidable injury numbers, by sex and age group, Southern District, 2001-2012 .............................................. 105

Figure 7.2.1.9: Industrial annual AED attendance rates with annual avoidable injury numbers, by sex and age group, Southern District, 2001-2012 .............................................. 106

Figure 7.2.1.10: Domestic annual AED attendance rates with annual avoidable injury numbers, by sex and age group, Southern District, 2001-2012 .............................................. 107

Figure 7.2.1.11: Sports annual AED attendance rates with annual avoidable injury numbers, by sex and age group, Southern District, 2001-2012 .............................................. 108

Figure 7.2.1.12: 2009-2012 annual AED attendance rates with annual avoidable injury numbers due to injury, by sex and age group, Southern District, 2001-2012 .............................................. 109

Figure 7.2.2.1: Intentional injury annual AED attendance rates with annual avoidable injury numbers, by sex and age group, Southern District, 2001-2012 .............................................. 111
INJURY NUMBERS, BY SEX AND AGE GROUP, SOUTHERN DISTRICT, 2009-2012 ............................. 111

圖 7.2.2.3: 2009-2012 年南區按性別和年齡組別劃分非蓄意損傷到急症室的每年求診率和每年可避免損傷數字 ........................................................................................................... 112

FIGURE 7.2.2.3: UNINTENTIONAL INJURY ANNUAL AED ATTENDANCE RATES WITH ANNUAL AVOIDABLE INJURY NUMBERS, BY SEX AND AGE GROUP, SOUTHERN DISTRICT, 2009-2012 ............................. 112

圖 7.2.2.4: 2009-2012 年南區按性別和年齡組別劃分毆打損傷到急症室的每年求診率和每年可避免損傷數字 ........................................................................................................... 113

FIGURE 7.2.2.4: COMMON ASSAULT ANNUAL AED ATTENDANCE RATES WITH ANNUAL AVOIDABLE INJURY NUMBERS, BY SEX AND AGE GROUP, SOUTHERN DISTRICT, 2009-2012 ............................. 113

圖 7.2.2.5: 2009-2012 年南區按性別和年齡組別劃分非禮損傷到急症室的每年求診率和每年可避免損傷數字 ........................................................................................................... 114

FIGURE 7.2.2.5: INDECENT ASSAULT ANNUAL AED ATTENDANCE RATES WITH ANNUAL AVOIDABLE INJURY NUMBERS, BY SEX AND AGE GROUP, SOUTHERN DISTRICT, 2009-2012 ............................. 114

圖 7.2.2.6: 2009-2012 年南區按性別和年齡組別劃分虐待兒童損傷到急症室的每年求診率和每年可避免損傷數字 ........................................................................................................... 115

FIGURE 7.2.2.6: CHILD ABUSE ANNUAL AED ATTENDANCE RATES WITH ANNUAL AVOIDABLE INJURY NUMBERS, BY SEX AND AGE GROUP, SOUTHERN DISTRICT, 2009-2012 ............................. 115

圖 7.2.2.7: 2009-2012 年南區按性別和年齡組別劃分自殘損傷到急症室的每年求診率和每年可避免損傷數字 ........................................................................................................... 116

FIGURE 7.2.2.7: SELF-HARM ANNUAL AED ATTENDANCE RATES WITH ANNUAL AVOIDABLE INJURY NUMBERS, BY SEX AND AGE GROUP, SOUTHERN DISTRICT, 2009-2012 ............................. 116

圖 7.2.2.8: 2009-2012 年南區按性別和年齡組別劃分交通意外損傷到急症室的每年求診率和每年可避免損傷數字 ........................................................................................................... 117

FIGURE 7.2.2.8: TRAFFIC ANNUAL AED ATTENDANCE RATES WITH ANNUAL AVOIDABLE INJURY NUMBERS, BY SEX AND AGE GROUP, SOUTHERN DISTRICT, 2009-2012 ............................. 117

圖 7.2.2.9: 2009-2012 年南區按性別和年齡組別劃分工業意外損傷到急症室的每年求診率和每年可避免損傷數字 ........................................................................................................... 118

FIGURE 7.2.2.9: INDUSTRIAL ANNUAL AED ATTENDANCE RATES WITH ANNUAL AVOIDABLE INJURY NUMBERS, BY SEX AND AGE GROUP, SOUTHERN DISTRICT, 2009-2012 ............................. 118

圖 7.2.2.10: 2009-2012 年南區按性別和年齡組別劃分家居意外損傷到急症室的每年求診率和每年可避免損傷數字 ........................................................................................................... 119

FIGURE 7.2.2.10: DOMESTIC ANNUAL AED ATTENDANCE RATES WITH ANNUAL AVOIDABLE INJURY NUMBERS, BY SEX AND AGE GROUP, SOUTHERN DISTRICT, 2009-2012 ............................. 119

圖 7.2.2.11: 2009-2012 年南區按性別和年齡組別劃分運動意外損傷到急症室的每年求診率和每年可避免損傷數字 ........................................................................................................... 120

FIGURE 7.2.2.11: SPORTS ANNUAL AED ATTENDANCE RATES WITH ANNUAL AVOIDABLE INJURY NUMBERS, BY SEX AND AGE GROUP, SOUTHERN DISTRICT, 2009-2012 ............................. 120

圖 9.1: 兒童安全行動計劃編制過程 ........................................................................................................... 131

FIGURE 9.1: CHILD SAFETY ACTION PLAN DEVELOPMENT PROCESS ........................................................................................................... 131
地圖 3.6.1：2001-2012 年 0-19 歲兒童按區議會分區的每年損傷到急症室求診率 ..................42
MAP 3.6.1: ANNUAL INJURY AED ATTENDANCE RATES AMONG CHILDREN AGED 0 TO 19 YEARS, BY
DISTRICT, HONG KONG, 2001-2012 ........................................................................................................42
表 3.4.1：2001-2012 年 0-19 歲兒童按年齡組別和損傷種類的損傷到急症室求診數字百分比 .....39
TABLE 3.4.1: PERCENTAGE OF AED ATTENDANCES DUE TO INJURY AMONG CHILDREN AGED 0 TO 19
YEARS, BY AGE GROUP AND INJURY TYPE, HONG KONG, 2001-2012 ........................................ 39
表 8.1: 各損傷種類急症室求診數字的負二項迴歸分析結果 .......................................................... 123
TABLE 8.1: NEGATIVE BINOMIAL REGRESSION RESULT OF AED ATTENDANCES DUE TO INJURY .......... 123
表 10.1: 三管齊下的兒童損傷預防方案 .................................................................................. 141
TABLE 10.1: THE THREE PRONGED CHILD INJURY PREVENTION APPROACH ................................... 142
Child injury is the leading cause of mortality, morbidity and disability for children over 1 years of age in Hong Kong. There are wide variations in rates of injury between Districts and is related to socio-economic gradient among the districts. The Hong Kong injury district profile has allowed comparative assessment of the burden of child injury among districts. It also demonstrated the importance of systematic surveillance for accurate needs assessment among districts. Through the examination of 12-year period child injury related AED attendance data, it revealed significant variations by districts and the most at risk age group and the leading threats for each district. This profile has also provided the foundation for injury data analysis in terms of geo-spatial analysis, which would be useful in health services planning at district level.

In summary, there is great variability in burden of child injury among the 18 Districts in Hong Kong throughout the 12-year study period. If all districts can be supported, strengthened and empowered to implement the best injury prevention strategies as in the safest district in Hong Kong, up to 30% of injuries can be prevented. The profile would help to inform planning by identifying districts’ strengths and weakness in relation to actions to reduce child injuries and to assist district councils in the identification of shortfalls. It would also facilitate policies on child injury prevention.
critical gaps upon which subsequent strategic planning and action planning can take place. It also provides important indicators for benchmarking and evaluation, which help to inform future policies in terms of leadership, infrastructure and capacity to support child injury prevention efforts.
Childhood Injury Profile for Southern District 2001-2012

AED medical cost
$474,010 per year (29.7%)
Avoidable

$1,597,517 per year In Total

Notable injury types
- Improving Self-harm
- Deteriorating Sports
- Need improvement Traffic

Vulnerable groups
- Boys 0-4 years: 6,872 per 100,000
- Boys 10-14 years: 5,595 per 100,000
- Boys 15-19 years: 5,444 per 100,000
- Girls 0-4 years: 5,264 per 100,000

AED attendance rates
- 2001-2004: 4,784 per 100,000
- 2005-2008: 18%
- 2009-2012: 3,945 per 100,000

Avoidable

Department of Paediatrics & Adolescent Medicine
The University of Hong Kong
2 背景及編製方法
2 Background and Methodology

2.1 背景
2.1 Introduction

Injury is one of the major causes of morbidity and mortality among children in Hong Kong. From 2001 to 2012, there are more than 740,000 cases of injury for children aged 0 to 19 in the Accident and Emergency Departments (hereafter AEDs) in all public hospitals in Hong Kong. Apart from direct medical treatment costs, injury represents additional costs to the society for long-term consequences such as physical disability, psychological effects and productive lives lost. Therefore, it is apparent that injury is a significant health problem that requires immediate action and deserves additional resources for prevention.

Hong Kong is one of the most densely populated places in the world with a total population of 7.07 million in 2011 and age 0 to 19 constituted 19.5% of its overall (Census and Statistics Department, 2011). Areas in Hong Kong can be divided into 18 District Council districts which have very different district characteristics, such as demographics, types of housing and geographical location. These differences in geo-spatial and socio-economical characteristics in turn transform into different injury patterns across districts. For example, one would expect more industrial injury in industrial areas than in central business districts. Understanding the injury
characteristics in respective districts is the first step for devising effective prevention programme and resource allocation plan for high-risk injury types with corresponding high risk groups, with an aim to reduce childhood injury.

The purpose of this report is to perform descriptive geo-spatial analysis of injury of children aged 0 to 19 so as to inform residents with the injury characteristics in the district. The Hospital Authority (HA) maintains both Clinical Data Analysis and Report System (CDARS) and Accident and Emergency Information System (AEIS), which contain all AED attendance records in all public hospitals in Hong Kong. Both systems provide readily available sources of information related to childhood injury, and are used in compiling this report. Throughout this report, children refer population aged 0 to 19.

This report is targeted at residents in different districts. To facilitate easy understanding, the report first begins with an executive summary in Part 1. Part 2 concerns with background and methodology. Part 3 and Part 4 serve as overview of AED attendances due to injury in Hong Kong and reporting district respectively. Part 5 and Part 6 describes injury by district for all injury types. Part 7 concerns the detailed injury characteristics of the reporting district. Part 7.1 details the injury characteristics by year, so as to identify trend while Part 7.2 details the injury characteristics by sex and age group, so
as to identify the high-risk group. Part 8 investigates the association between injury with socio-economic indicators. Finally, the report ends with discussion on injury prevention in Part 9 and Part 10.

2.2 目標

2.2 Aims

1) To study the incidence and trend of intentional and unintentional child injury related AED attendance rates in Hong Kong

2) To study the epidemiology and geographical distribution of child injury in HA database by geo-mapping and to explore differences among districts in Hong Kong

3) To study the correlation among districts between child injury cases attended AED and social indicators obtained from Census and Statistics Department

1) 研究本港急症室求診的蓄意和非蓄意兒童損傷率和趨勢

2) 研究醫院管理局數據庫中兒童意外損傷個案的流行病學和地理分怖，並探討各區之間的差異

3) 根據政府統計處的社會指標，研究各區之間損傷數字和社會指標的關聯性
2.3 Scope of Report

This report aims at to study the child injury in Hong Kong. The coverage of this report is children aged 0 to 19 attended AED due to injury related incidents in all public hospitals under HA from 2001 to 2012, which is used as proxy of all injury cases of children in Hong Kong.

The injury classification system in AED in all public hospitals under HA has the following classification: common assault, indecent assault, child abuse, self-harm, traffic, industrial, domestic, sports, unclassified, spousal abuse and elderly abuse. As this report aims at to study injury among children, spousal abuse (74) and elderly abuse (9) are excluded from the scope of this report. The number in the parentheses indicates the number of cases of corresponding injury type. Unclassified injuries are not analysed in the remaining of this report, since it cannot be grouped into intentional and unintentional injuries, while they are included in total injuries for reflecting injury situations in districts.

To sum up, to be included as a case in this report, the following criteria have to be satisfied:
1) The patient attended AED in one of the public hospitals under HA from 2001-2012
2) The patient was aged 0 to 19 at time of AED attendance during 2001 to 2012
3) Based on the professional judgment of doctor, the AED visit was due to

總結來說，此報告所指的損傷個案必需符合下列條件：

1）該病人於2001至2012年間到醫院管理局轄下的公立醫院急症室求診
2）該病人於求診時的年齡為0歲至19歲
3）醫生診斷該求診個案為損傷
4) The injury type is not spousal abuse nor elderly abuse

Figure 2.3 shows the classification of AED injury type in public hospital

4) 該損傷個案並不是虐待配偶和虐待長者

圖 2.3 展示公立醫院急症室的損傷分類。
Figure 2.3: Classification of AED injury type in public hospital in Hong Kong (\(n\) represents the number of attendances of the respective injury type)

<table>
<thead>
<tr>
<th>Injury Type</th>
<th>Attendances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intentional</td>
<td>49,201</td>
</tr>
<tr>
<td>Common Assault</td>
<td>38,502</td>
</tr>
<tr>
<td>Indecent Assault</td>
<td>1,037</td>
</tr>
<tr>
<td>Child Abuse</td>
<td>3,663</td>
</tr>
<tr>
<td>Self-Harm</td>
<td>5,999</td>
</tr>
<tr>
<td>Traffic</td>
<td>30,179</td>
</tr>
<tr>
<td>Industrial</td>
<td>20,055</td>
</tr>
<tr>
<td>Domestic</td>
<td>286,193</td>
</tr>
<tr>
<td>Sports</td>
<td>136,648</td>
</tr>
<tr>
<td>Unclassified</td>
<td>220,276</td>
</tr>
</tbody>
</table>
2.4 Methodology

2.4.1 Data Collection and Source

There are 3 main data categories in this study, namely (1) the AED attendance record, (2) annual population data and (3) social indicators.

For the AED attendance record, a 12-year AED attendance record in all public hospital under HA related to injury from 1\textsuperscript{st} January to 31\textsuperscript{st} December 2012 was retrieved from the CDARS and AEIS. The variables obtained were sex, date of birth, district of residence, date of attendance and the injury type (common assault, indecent assault, child abuse, traffic, industrial, domestic, sports, self-harm and unclassified).

For the annual population data, population by year, sex, district and age group (0-4, 5-9, 10-14 and 15-19) for non-census years from 2001 to 2012 are obtained from the General Household Survey of the Census and Statistics Department. The population data for census and by-census years (2001, 2006 and 2011) are obtained by corresponding census and by-census result.

For the social indicators, namely the average household size, tenure of accommodation, median household income (in thousand) and labour force participation rate are obtained from Population and Household Statistics Analysed by District Council District of 2001 to 2012. Percentage of owner

本報告主要有三個資料種類，分別是：(1) 急症室求診記錄、(2) 每年人口資料和（3）社會指標。

在急症室求診記錄方面，2001年1月1日至2012年12月31日的公立醫院急症室求診記錄是由臨床資料分析系統和急症室資訊系統提取的，當中載有的資料只有性別、出生日期、居住地區、到診日期和損傷種類（毆打、非禮、虐待兒童、交通意外、工業意外、家居意外、運動意外和其他）。

在每年人口數據方面，於非人口普查按年份、性別、區議會分區和年齡組別（0至4歲、5至9歲、10至14歲和15至19歲）的數字是從政府統計處的綜合住戶統計調查中提取的，而於人口普查和中期人口普查年份（2001、2006和2011）的人口數據則直接由相應的人口普查和中期人口普查報告中提取。

在社會指標方面，住戶平均人數、居所租住權、住戶每月入息中位數（每千元）和勞動人口參與率是從2001至2012年各「按區議會分區劃分的人口及住戶統計資料」中提取的。居於自置居所的住戶百分比被用作居所租住權的指標。
occupier household in the district is used as a proxy of tenure of accommodation in the district.

2.4.2 資料處理及分析
2.4.2 Data Processing and Analysis

Step 1: Classification of Age Group
After the retrieval of AED attendance record, the age of the patient at the time of attendance at AED is computed by subtracting the date of attendance from the date of birth, as it cannot be retrieved directly. The age is rounded down to the nearest integer, for example, a child with age 3.9 is assigned with the age of 3. The age is further categorized into 4 age groups of 0 to 4, 5 to 9, 10 to 14 and 15 to 19, which are the finest grouping available for population data.

Step 2: Classification of Year Range
Likewise, the year of the AED attendance record is extracted from the date of attendance, and is further categorized into year ranges of 2001 to 2004, 2005 to 2008 and 2009 to 2012. These year ranges facilitate trend analysis and were extensively used in preparing the heat-map (Part 4.2). Throughout this report, injury characteristics are analysed extensively by year range 2009 to 2012 and 2001 to 2012. Year range 2009 to 2012 aims at presenting the most recent injury patterns while Year range 2001 to 2012 utilizes all the data in the dataset and reveals the long-term situations regarding injury characteristics.

Step 3: Classification of Intentional and Unintentional injury

第 1 步：按年齡組別分類
在提取急症室求診記錄後，由於資料庫並沒有直接提供年齡，病人的年齡是以出生日期和求診日期的差計算，並且向下捨入。舉例來說，3.9 歲會被視作 3 歲。在計算年齡後，年齡會進一步分為 4 個年齡組別，分別是 0 至 4 歲、5 至 9 歲、10 至 14 歲和 15 至 19 歲。這些年齡組別的分類是依照人口數據的組別分類。

第 2 步：按年份區間分類

第 3 步：按蓄意損傷和非蓄意損傷分類
Apart from classifying into age groups and year ranges, the injury type are grouped into intentional injuries (common assault, indecent assault, child abuse and self-harm) and unintentional injuries (traffic, industrial, domestic and sports). Unclassified injuries are not grouped as either intentional or unintentional injuries, but are included in total injuries to reflect situation in districts.

**Step 4: Computation of annual AED attendance rate**

After the above classifications of AED attendance record, the annual AED attendance rate are computed by dividing the total AED attendance number by total population. The said figure is computed differently for Part 5 to 7.

Part 5 and 6 compute by districts, which are targeted at comparison across district. Part 7 aims at comparison within reporting district. Part 7.1 computes by year in the reporting district, while Part 7.2 computes by sex and age group.

**Step 5: Computation of annual avoidable injury number**

The minimum annual AED attendance rate is referred to as the reference rate. The district with the reference rate is known as the reference district. The reference rate is used to compute the annual avoidable injury number.

Annual avoidable injury number is calculated as the injury number that could have been avoided per year if the during the same period.

第 4 步：計算每年損傷到急症室求診率

有了以上的分類後，每年損傷到急症室求診率是按其總求診人次除以總人口計算。上述數字在第 5 部分至第 7 部分中的計算方法有些不同。

第 5 部分和第 6 部分旨在比較不同區的差異，因此總和是按區計算；而第 7 部分旨在比較報告地區內的差異。第 7.1 部分的總和是以區內的數字按年計算，而第 7.2 部分的總和則是按性別和年齡組別計算。

第 5 步：計算每年可避免損傷數字

每年求診率最低的數字稱為參照比率。參照比率對應的地區稱為參照地區。參照比率是用作計算每年可避免損傷的數字。

每年可避免損傷的數字是指若然該區在該年期間的損傷率均能維持於參照比率的水平時，所能避免的每年損傷數字。
district had attained the reference rate throughout the period for all districts.

The rationale behind is that while districts have different demographic characteristics, districts can view the reference district as model and reduce their respective injury rate to the reference rate. During this process, districts will be able to identify high-risk areas through comparison and devise appropriate strategies to tackle with these areas, so as to reduce their injury rate towards the reference rate.

In order to investigate the reasons for each injury type, the annual attendance rate for reporting district has been computed by year and injury type (Part 7.1) and by sex, age group and injury type (Part 7.2). The context of avoidable injury is extended from district (Part 5 to Part 6) to year (Part 7.1) and sex and age group (Part 7.2). The context of reference district is also extended from reference district (Part 5 to Part 6) to reference year (Part 7.1) and reference group (Part 7.2).

Annual avoidable injury in reporting district based on reference year (Part 7.1) reveals the year with particularly high number of injury, which in turn hinted if there was any particular incidents in the period causing high number of injury. On the other hand, annual avoidable injury in reporting district based on reference group (Part 7.2) reveals which groups are particularly vulnerable to different types of injuries.
Step 6: Regression Analysis

For Part 8, the annual AED attendance number for each district, sex and year is first regressed on average household, percentage of owner occupier household, median household income and labour force participation rate of the districts in respective year, together with an indicator variable of sex, using Poisson regression, with the natural logarithm of population as offset. Poisson regression is a commonly adopted tool for modelling count data. Since over-dispersion was found in our preliminary regression result, negative binomial regression is adopted and only the result of negative binomial regression is reported.

2.5 Report Structure

This report consists of 10 parts. An executive summary of report is provided in Part 1. Part 2 mainly concerns the background and methodology of this report. Part 3 aims at introducing injury situation in Hong Kong. Part 4 aims at providing a quick summary of the injury characteristics and pattern across time and injury type using annual AED attendance rate in the reporting district. The purpose is to give the report users the situation as early as possible, while the more detailed characteristics within the district are covered in the remaining of the report.

Part 5 and Part 6 adopts a macroscopic view of viewing injury. In other words, injury is compared across 18 districts in

第6步：迴歸分析

第8部分首先把按地區、性別和年份的每年損傷數字作泊松迴歸分析，其獨立變數分別為各區於各年的住戶平均人數、居於自置居所百分比、住戶每月入息中位數、勞動人口參與率和性別指數，而偏移變數則為人口的自然對數。泊松迴歸常用於計數資料的建模。由於泊松迴歸模型出現了過度離散問題，因此本報告最後採用了負二項迴歸模型，亦只載列負二項迴歸模型的結果。

2.5 報告結構

2.5 Report Structure

此報告分為10個部分。第1部分是摘要部分，而第2部分主要是描述報告的背景和方法。

第3部分旨在介紹香港有關損傷的基本資訊，以便對本港損傷情況有基本認識。第4部分旨在提供以急診室的求診率來概括按年和損傷種類該區的損傷情況。此部分希望令讀者對該區損傷情況有一個初步概念，然後在餘下的部分會更詳細敘述損傷特性。

第5部分和第6部分採用宏觀的角度來檢視損傷。換句話說，損傷數字是在十八區之間作比較。第5部
Hong Kong. Part 5 classified injury as all injury (Part 5.1), intentional injury (Part 5.2) and unintentional injury (Part 5.3) while Part 6 classified injury at finer levels as common assault, indecent assault, child abuse, self-harm, traffic, industrial, domestic, sports and self-harm injury.

Part 7 adopts a microscopic view of viewing the injury. That is, injury is analysed within the reporting district. Part 7.1 analyses each injury type by year in the reporting district. Part 7.2 analyses each injury type by sex and age group in the reporting district.

Part 8 adopts negative binomial regression model to analyse the correlation between AED attendance numbers with social indicators, after adjusting for population.

2.6 重要備註
2.6 Important Remarks
Throughout this report, unless otherwise specified,
1) "Districts" refers to the "District Council Districts".

2) "AED" refers to the "Accident and Emergency Department in public hospitals administered under Hospital Authority".

3) "Children" refers to the "children aged 0 to 19".

4) The classification of each injury cases by district is based on the district where the patient resides, not the district where the AED
situates.

5) "AED attendance" refers to "AED attendance due to injury". Except for Part 7.2, injury refers to injury among children aged 0 to 19.

6) The injury number by different categorization is taken as the corresponding AED attendance number.

7) AED attendance rate and avoidable injury number are on a per-year basis.

8) The results of unclassified injury are not presented as a separate injury type as they cannot be classified as either intentional or unintentional.

However, they are included in the computation of all injuries.

9) Except for Part 8, all the figures are presented to the nearest integer. Figures between 0 and 1 (exclusive) are presented with 2 decimal places. Nil figures are presented as 0.

10) For Part 8, all the results presented are in 4 decimal places. Figure of 0.0000 in the columns of p-value means that the value is below 0.0001 and not necessarily equal to nil figure.

11) Owing to rounding, there may be a slight discrepancy between the sum of individual items and the total as presented.
shown in the report.
3 Introduction of AED attendances due to injury in Hong Kong, 2001-2012

The purpose of Part 3 is to introduce the situation of AED attendances due to injury in Hong Kong. Attendances are analysed by age group (Part 3.1), sex and age group (Part 3.2), injury type (Part 3.3), age group and injury type (Part 3.4), year (Part 3.5) and district (Part 3.6) respectively.

In this part, injury is mainly analysed using annual attendance rate, in order to take into account of different population. Attendance numbers are included in some parts for supplemental purpose only.

3.1 AED attendances due to injury by Age Group in Hong Kong, 2001-2012

During the period of 2001-2012, there were 742,552 AED attendances among children aged 0 to 19 years. This amounted to an average of 61,879 cases per year. The attendances for age group 0 to 4 years, 5 to 9 years, 10 to 14 years and 15 to 19 years are 192706 (25.95%), 160408 (21.60%), 192675 (25.95%) and 196763 (26.50%) respectively. The annual attendance rate per 100,000 population for age group 0 to 4 years, 5 to 9 years, 10 to 14 years and 15 to 19 years are 6799, 4293, 4092 and 3786 respectively, and thus exhibiting a decreasing trend when transiting to higher age group.

In 2001 to 2012年期間，0至19歲儿童的急症室總求診人次為742,552人次。按年平均為61,879人次。0至4歲、5至9歲、10至14歲和15至19歲的求診人次分別為192706（25.95%）、160408（21.60%）、192675（25.95%）和196763（26.50%）人次。由此可見，當年齡組別愈高，每年求診率則愈低。
圖 3.1.1：2001-2012 年 0-19 歲兒童按年齡組別的損傷到急症室求診數字
Figure 3.1.1: AED attendances due to injury among children aged 0 to 19 years, by age group, Hong Kong, 2001-2012

圖 3.1.2：2001-2012 年 0-19 歲兒童按年齡組別的每年損傷到急症室求診率
Figure 3.1.2: Annual injury AED attendance rate among children aged 0 to 19 years, by age group, Hong Kong, 2001-2012
圖 3.1.3：2001-2012 年 0-19 歲兒童按年齡組別的每年損傷到急症室求診數字百分比

Figure: Percentage of AED attendance related to injury among children aged 0 to 19 years, by age group, Hong Kong, 2001-2012
3.2 AED attendances due to injury by Sex and Age Group in Hong Kong, 2001-2012

From 2001 to 2012, males aged 0 to 19 (5,839 per 100,000) had higher annual attendance rates, about 1.89 times of that of females (3,093 per 100,000). The overall rate is 4,507 per 100,000.

In terms of absolute difference, the age groups in descending order of rate difference are 10 to 14 years (3,261 per 100,000), 15 to 19 years (3,212 per 100,000), 5 to 9 years (2,161 per 100,000) and 0 to 4 years (1,705 per 100,000).

From 2001 to 2012, the annual attendance rates were higher in males for all age groups. The highest were observed among in both males and females aged 0 to 4. The lowest annual injury rates were observed among in males 5 to 9 years of age and females 15 to 19 years of age.

In 2001 to 2012 year期间，0至19歳的男性有較高的每年求診率(每十萬人5,839人次)為女性的1.89倍(每十萬人3,093人次)，而整體求診率為每十萬人4,507人次。

以絕對差而言，年齡組別（以損傷率的差由大至小排列）分別是 10至14歳 (每十萬人3,261人次)、15至19歳 (每十萬人3,212人次)、5至9歳 (每十萬人2,161人次)和0至4歳 (每十萬人1,705人次)。
In terms of relative difference, the age groups in descending order of rate difference are 15 to 19 years (2.50 times), 10 to 14 years (2.36 times), 5 to 9 years (1.68 times) and 0 to 4 years (1.29 times).

Both the annual attendance rates for males and females exhibited a strictly decreasing trend when transiting to higher age groups, except for a rebound for males aged 10 to 14.

除了10至14歳的男性外，男性和女性的每年求診率會隨著年齡組別的增長而下降。

图3.2.2：2001-2012年0-19岁儿童按年龄组别和性别的每年损伤到急症室求诊率

Figure 3.2.2: Annual injury AED attendance rates among children aged 0 to 19 years, by age group and sex, Hong Kong, 2001-2012
3.3 2001-2012 AED attendances by Injury Type in Hong Kong, 2001-2012

From 2001 to 2012, both attendances and annual rates differed by injury type, with the highest number and annual rate related to domestic injuries (286,193 at a rate of 1,737 per 100,000), followed by unclassified injuries (220,276 at a rate of 1,337 per 100,000). The lowest number and annual rate were reported for indecent assault (1,037 at a rate of 6 per 100,000). The rankings for each injury type are the same for both attendances and annual rate.

在 2001 至 2012 年期間，不同的損傷種類的求診數字和每年求診率均存在著差異，當中最高求診數字和每年求診率的種類為家居意外（286,193 宗，每十萬人 6,500 人次），而最低的種類為非禮（1,037 宗，每十萬人 6 人次）。求診數字的排名與每年求診率排名相同。

圖 3.3.1：2001-2012 年 0-19 歲兒童按損傷種類的急症室求診數字

Figure 3.3.1: AED attendances among children aged 0 to 19 years, by injury type, Hong Kong, 2001-2012
Figure 3.3.2: Annual injury AED attendance rates among children aged 0 to 19 years, by injury type, Hong Kong, 2001-2012.
3.4 2001-2012 AED attendances due to injury by Age Group and Injury Type in Hong Kong, 2001-2012

This part describes injury for each age group in more detail. The table below shows the injury types by age group, with corresponding rank and percentage within that age group.

For children aged 0 to 4, the leading injury type is domestic injuries (64%), followed by unclassified injuries (30%). For children aged 5 to 9, the leading type is domestic injuries (44%), followed by unclassified injuries (36%) and sports injuries (11%). For children aged 10 to 14, the leading type is unclassified injuries (31%), followed by sports injuries (28%) and domestic injuries (27%). For children aged 15 to 19, the leading type is sports injuries (31%), followed by unclassified injuries (23%) and domestic injuries (19%).
### Table 3.4.1: Percentage of AED attendances due to injury among children aged 0 to 19 years, by Age Group and Injury Type, Hong Kong, 2001-2012

<table>
<thead>
<tr>
<th>Rank</th>
<th>Age Groups in Years</th>
<th>Injury Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0 to 4 (0 to 4 岁)</td>
<td>Domestic</td>
<td>64%</td>
</tr>
<tr>
<td>2</td>
<td>5 to 9 (5 至 9 岁)</td>
<td>Domestic</td>
<td>44%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unclassified</td>
<td>31%</td>
</tr>
<tr>
<td>3</td>
<td>10 to 14 (10 至 14 岁)</td>
<td>Sports</td>
<td>31%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unclassified</td>
<td>31%</td>
</tr>
<tr>
<td>4</td>
<td>15 to 19 (15 至 19 岁)</td>
<td>Sports</td>
<td>28%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unclassified</td>
<td>23%</td>
</tr>
<tr>
<td>5</td>
<td>交通意外 (Traffic)</td>
<td>Sports</td>
<td>11%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Domestic</td>
<td>27%</td>
</tr>
<tr>
<td>6</td>
<td>自殘 (Self-harm)</td>
<td>Common assault</td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Traffic</td>
<td>5%</td>
</tr>
<tr>
<td>7</td>
<td>虐待兒童 (Child abuse)</td>
<td>Common assault</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td>虐待兒童 / Self-harm</td>
<td>Traffic</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>0.69%</td>
<td>0.78%</td>
<td>4%</td>
</tr>
<tr>
<td>8</td>
<td>工業意外 (Industrial)</td>
<td>Common assault</td>
<td>0.64%</td>
</tr>
<tr>
<td></td>
<td>虐待兒童</td>
<td>Traffic</td>
<td>0.16%</td>
</tr>
<tr>
<td></td>
<td>0.12%</td>
<td>0.16%</td>
<td>1%</td>
</tr>
<tr>
<td>9</td>
<td>非禮 (Indecent assault)</td>
<td>N/A*</td>
<td>0.05%</td>
</tr>
<tr>
<td></td>
<td>不適用*</td>
<td>Industrial</td>
<td>0.16%</td>
</tr>
<tr>
<td></td>
<td>0.10%</td>
<td>Indecent assault</td>
<td>0.25%</td>
</tr>
</tbody>
</table>

*虐待兒童和自殘的求診數字相同  *Same attendances in child abuse and self-harm
3.5 2001-2012 年香港按年劃分損傷到急症室求診數字

3.5 AED attendances due to injury by Year in Hong Kong, 2001-2012

From 2001 to 2012, AED attendances have decreased by 44%, from 91,081 in 2001 to 50,754 in 2012. The attendance has become more stable at around 52,000 from 2010 to 2012.

在 2001 至 2012 年期間，急症室求診數字由 2001 年的 91,081 降至 2012 年的 50,754，跌幅為 44%。急症室求診數字在 2010 至 2012 年期間轉趨穩定，其水平大約為 52,000。

圖 3.5.1：2001-2012 年 0-19 歲兒童按年損傷到急症室求診數字

Figure 3.5.1: AED attendances due to injury among children aged 0 to 19 years, by year, Hong Kong, 2001-2012

From 2001 to 2012, the attendance rate has decreased by 29%, from 5,840 in 2001 to 4,126 in 2012. The attendance rate has become more stable at around 4,200 from 2009 to 2012.

Figure 3.5.2: AED attendance rates among children aged 0 to 19 years, by year, Hong Kong, 2001-2012
3.6 2001-2012 年香港按區議會分區劃分損傷到急症室求診數字

3.6 AED attendances due to injury by District in Hong Kong, 2001-2012

From 2001 to 2012, the annual attendance rates differed across districts. The highest was found in Tai Po district (6,500 per 100,000) population while the lowest was found in Central and Western district (3,054 per 100,000).

As depicted in Map 3.6.1, the annual rate was particularly high in Tai Po (6,500 per 100,000), North (5,290 per 100,000), Sai Kung (5,166 per 100,000) and Kwai Tsing (5,159 per 100,000).

如地圖 3.6.1 所示，大埔區、北區、西貢區和葵青區的每年求診率比較顯著，分別為每十萬人 6,500、5,290、5,166 和 5,159 人次。
Figure 3.6.2: Annual injury AED attendance rates among children aged 0 to 19 years, by district, Hong Kong, 2001-2012
4.1 熱度圖的簡介

4.1 Introduction to Heat-map

In order to provide a quick summary of AED attendances in Southern from 2001 to 2012, a heat-map is produced using the ranking across 18 districts of annual AED attendance rate for each year range and each injury type. The number in each cell in the heat-map is the corresponding ranking for that year range and injury type, with 1 being the highest and 18 being the lowest. Apart from comparing among other districts, an added benefit is to know whether the situation is improving or worsening by reading the heat-map vertically.

The 18 ranking is further grouped into 9 rank groups with 2 rankings in each rank group. A different color is assigned for each of the 9 rank groups. The color scale goes from green to blue as it transits from rank group of 17-18 to rank group of 11-12, to represent increasing severity which is below the median rank group 9-10.

Above the median rank group, the color scale goes from brown to red as it transits from rank group of 7-8 to rank group of 1-2, to represent increasing severity which is above the median rank group 9-10.

To conclude, the median rank group serves as a boundary and an alarm for classifying the severity of the cases. Districts should first focus on taking immediate actions for reducing injuries.
in areas with rank groups above the median age group 9-10, and then aim at achieving zero injury in all areas after improving all rank groups to below the median age group. In addition, districts should be vigilant and take actions for worsening areas if necessary.

以達至各方面零損傷為目標。除此以外，各區亦應時刻注意區內的損傷情況，在有需要的時侯立即採取行動防止區內損傷情況惡化。
4.2 2001-2012 年南區每年損傷到急症室求診率熱度圖
4.2 Heat-map of annual injury AED attendance rates in Southern District, 2001-2012

圖 4.2: 2001-2012 年南區每年損傷到急症室求診率熱度圖
Figure 4.2: Heat-map of annual injury AED attendance rates, Southern district, 2001-2012

The first row of the heat-map depicts the ranking of annual injury attendance rate in Southern among 18 districts from 2001 to 2012.

Annual attendance rate was ranked 10th, which was at the median severity. Intentional and unintentional attendance rates were ranked 13th and 8th respectively, which were below and above the median severity respectively.

Among the 4 intentional injuries, child abuse attendance rates had the highest ranking (4th) while indecent assault had the lowest (14th). Among the 4 unintentional injuries, domestic had the highest (4th) while industrial had the lowest (10th).

Similarly, the injury situation in the sub-periods 2001-2004, 2005-2008 and 2009-2012 can be analysed by the heat-map.

熱度圖中的第一行展示了南區在 2001 至 2012 年期間每年損傷求診率在十八區內的排名。

每年求診率的排名是 10，在中度嚴重排名組別。蓄意損傷求診率和非蓄意損傷求診率的排名分別為 13 和 8，前者比中度嚴重排名組別為低，而後者比中度嚴重排名組別為高。

在四個蓄意損傷種類中，以求診率而言，虐待兒童的排名為最高(第 4 位)，而非禮的排名為最低(第 14 位)；在四個非蓄意損傷種類中，家居意外的排名為最高(第 4 位)，而工業意外的排名為最低(第 10 位)。

remaining rows of the heat-map.

The heat-map can be analysed vertically for each injury type to examine the trend. For example, the ranking of attendance rate in Southern has deteriorated from 12\textsuperscript{th} in 2001-2004 to 10\textsuperscript{th} in 2009-2012.
5 Overview of AED attendances due to injury in Hong Kong

The purpose of Part 5 is to provide comparison of AED injuries across 18 districts in Hong Kong. To provide an overview, injury types are classified into total (Part 5.1), intentional (Part 5.2) and unintentional (Part 5.3).

For each injury type, both the annual avoidable AED injury numbers and annual AED attendance rate per 100,000 population for that injury type for year range 2001-2012 and 2009-2012 are plotted on the same graph. Injury statistics for year range 2001-2012 aims at providing long-term injury pattern in each district while injury statistics for year range 2009-2012 aims at providing recent information of injury in districts for proper actions. District with the lowest annual AED attendance rate for each injury type and year range is known as reference district, and is always plotted in the bottom of the graph.

The annual AED attendance rate per 100,000 population depicts the risks for the residents in a particular district attending AED for a particular injury type and is plotted on the left side of the graph. The higher the rate, the more likely the district resident suffers from that injury type. The minimum annual AED attendance rate, or the annual AED attendance rate for the reference district, is known as the reference rate and is depicted as the red portion of the graph. For other districts, the excess of the annual attendance rate over this rate is depicted in green portion of the graph.

In year range 2001-2012 and 2009-2012, the avoidable AED injury numbers and annual AED attendance rate per 100,000 population for each district are plotted on the same graph. Injury statistics for year range 2001-2012 aims at providing long-term injury pattern in each district while injury statistics for year range 2009-2012 aims at providing recent information of injury in districts for proper actions. District with the lowest annual AED attendance rate for each injury type and year range is known as reference district, and is always plotted in the bottom of the graph.

The annual AED attendance rate per 100,000 population depicts the risks for the residents in a particular district attending AED for a particular injury type and is plotted on the left side of the graph. The higher the rate, the more likely the district resident suffers from that injury type. The minimum annual AED attendance rate, or the annual AED attendance rate for the reference district, is known as the reference rate and is depicted as the red portion of the graph. For other districts, the excess of the annual attendance rate over this rate is depicted in green portion of the graph.

In year range 2001-2012 and 2009-2012, the avoidable AED injury numbers and annual AED attendance rate per 100,000 population for each district are plotted on the same graph. Injury statistics for year range 2001-2012 aims at providing long-term injury pattern in each district while injury statistics for year range 2009-2012 aims at providing recent information of injury in districts for proper actions. District with the lowest annual AED attendance rate for each injury type and year range is known as reference district, and is always plotted in the bottom of the graph.

The annual AED attendance rate per 100,000 population depicts the risks for the residents in a particular district attending AED for a particular injury type and is plotted on the left side of the graph. The higher the rate, the more likely the district resident suffers from that injury type. The minimum annual AED attendance rate, or the annual AED attendance rate for the reference district, is known as the reference rate and is depicted as the red portion of the graph. For other districts, the excess of the annual attendance rate over this rate is depicted in green portion of the graph.
reference rate is known as annual avoidable injury rate and is depicted as the green portion in the graph.

The annual avoidable AED attendance number depicts the annual AED attendance number that could have been avoided if the district had attained the reference rate and is plotted on the right side of the graph. Equivalently, it is equal to the product of annual avoidable injury rate and annual population in respective district. Therefore, a district having a higher annual avoidable injury rate may have a lower annual avoidable AED injury number because of lower annual population in the district.

Districts should first aim at reducing the annual AED attendance rates to the reference rate, or equivalently reducing the annual avoidable AED attendance number to 0. The ultimate goal is to achieve zero injury in the district.

每年可避免損傷數字是假設各區的損傷情況維持在參照比率的水平，每年所能避免因損傷到急症室的求診數字。每年可避免損傷數字亦等於每年可避免損傷率乘以各地區每年人口。因此，有較高每年可避免損傷率地區可能有較低的每年可避免損傷數字，原因是該區的每年人口較低。

各地區應以降低每年可避免損傷率至參照比率為首要目標，亦即是降低每年可避免損傷數字至 0，而終極目標是達到各區零損傷。
5.1 香港按區議會分區劃分損傷到急症室求診的統計數字
5.1 AED attendances due to injury by District in Hong Kong

Part 5.1 aims at providing comparison of AED attendances due to injury in Hong Kong among districts for both 2001-2012 and 2009-2012. Please refer to Part 5 for explanation of graphs.

5.1.1 2001-2012 年香港按區議會分區劃分損傷到急症室求診數字
5.1.1 AED attendances due to injury by District in Hong Kong, 2001-2012

From 2001 to 2012, Tai Po had the highest annual attendance rate (6,500 per 100,000) while Central and Western (reference district) had the lowest (3,054 per 100,000). The average rate across districts was 4,439 per 100,000.

The annual injury number for the reference district was 1,355. By preventing the injury for all other districts to the rate level of the reference district (reference rate), a total of 19,488 injury could be avoided per year, an equivalent medical cost of HKD 13,641,600.

在 2001 至 2012 年期間，大埔區是每年損傷求診率最高的地區，每十萬人有 6,500 人次；而中西區（參照地區）則是最低的地區，每十萬人有 3,054 人次。十八區的平均求診率為每十萬人 4,439 人次。

參照地區的每年損傷數字為 1,355。當其他地區的損傷率減低至參照地區的水平（參照比率）後，每年便可避免 19,488 宗損傷並且節省港幣 13,641,600 元的醫療開支。
The excess of annual attendance rate over the reference rate is known as the annual avoidable injury rate. The annual avoidable injury number in each district is obtained by multiplying the annual avoidable injury rate with the annual population of the respective district. Among all districts, Tai Po had the highest annual avoidable injury number (2,164).
5.1.2 AED attendances due to injury by District in Hong Kong, 2009-2012

From 2009 to 2012, Tai Po had the highest annual attendance rate (6,267 per 100,000) while Central and Western (reference district) had the lowest (2,607 per 100,000). The average rate across districts was 4,069 per 100,000.

The annual injury number for the reference district was 1,091. By preventing the injury for all other districts to the rate level of the reference district (reference rate), a total of 19,133 injury could be avoided per year, an equivalent medical cost of HKD 13,393,100.

The excess of annual attendance rate over the reference rate is known as the annual avoidable injury rate. The annual avoidable injury number in each district is obtained by multiplying the annual avoidable injury rate with the annual population of the respective
district. Among all districts, Yuen Long had the highest annual avoidable injury number (2,582).
5.2 香港按區議會分區劃分蓄意損傷到急症室求診的統計數字

5.2 Intentional injury AED attendances by District in Hong Kong

Part 5.2 aims at providing comparison of intentional injury AED attendances in Hong Kong among districts for both 2001-2012 and 2009-2012. Please refer to Part 5 for explanation of graphs.

5.2.1 2001-2012 香港按區議會分區劃分蓄意損傷到急症室求診數字

5.2.1 Intentional injury AED attendances by District in Hong Kong, 2001-2012

From 2001 to 2012, Tai Po had the highest annual intentional injury attendance rate (414 per 100,000) while Central and Western (reference district) had the lowest (147 per 100,000). The average rate across districts was 282 per 100,000.

The annual injury number for the reference district was 65. By preventing the injury for all other districts to the rate level of the reference district (reference rate), a total of 2,050 injury could be avoided per year, an equivalent medical cost of HKD 1,435,000.

In 2001 to 2012 period, Tai Po was the highest annual intentional injury attendance rate (414 per 100,000) while Central and Western (reference district) had the lowest (147 per 100,000). The average rate across districts was 282 per 100,000.

The annual injury number for the reference district was 65. By preventing the injury for all other districts to the rate level of the reference district (reference rate), a total of 2,050 injury could be avoided per year, an equivalent medical cost of HKD 1,435,000.
1,435,000.

Among all districts, Yuen Long had the highest annual avoidable injury number (277).
5.2.2 2009-2012 年香港按區議會分區劃分蓄意損傷到急症室求診數字
5.2.2 Intentional injury AED attendances by District in Hong Kong, 2009-2012

From 2009 to 2012, Yuen Long had the highest annual intentional injury attendance rate (308 per 100,000) while Central and Western (reference district) had the lowest (97 per 100,000). The average rate across districts was 218 per 100,000.

The annual injury number for the reference district was 40. By preventing the injury for all other districts to the rate level of the reference district (reference rate), a total of 1,651 injury could be avoided per year, an equivalent medical cost of HKD 1,155,700.

Among all districts, Yuen Long had the highest annual avoidable injury number (261).

在 2009 至 2012 年期間，元朗區是每年蓄意損傷求診率最高的地區，每十萬人有 308 人次；而中西區 (參照地區) 則是最低的地區，每十萬人有 97 人次。十八區的平均求診率為每十萬人 218 人次。

參照地區的每年損傷數字為 40。當其他地區的損傷率減低至參照地區(參照比率) 後，每年便可避免 1,651 宗損傷並且節省港幣 1,155,700 元的醫療開支。

元朗區是每年可避免損傷數字最高的地區(261)。
5.3 Unintentional injury AED attendances by District in Hong Kong

Part 5.3 aims at providing comparison of unintentional injury AED attendances in Hong Kong among districts for both 2001-2012 and 2009-2012. Please refer to Part 5 for explanation of graphs.

5.3.1 2001-2012 Unintentional injury AED attendances by District in Hong Kong

From 2001 to 2012, Tai Po had the highest annual unintentional injury attendance rate (4,069 per 100,000) while Sha Tin (reference district) had the lowest (1,914 per 100,000). The average rate across districts was 2,895 per 100,000.

The annual injury number for the reference district was 2,335. By preventing the injury for all other districts to the rate level of the reference district (reference rate), a total of 12,839 injury could be avoided.
per year, an equivalent medical cost of HKD 8,987,300.

Among all districts, Kwai Tsing had the highest annual avoidable injury number (1,879).
From 2009 to 2012, Kwai Tsing had the highest annual unintentional injury attendance rate (3,654 per 100,000) while Sha Tin (reference district) had the lowest (1,587 per 100,000). The average rate across districts was 2,573 per 100,000.

The annual injury number for the reference district was 1,702. By preventing the injury for all other districts to the rate level of the reference district (reference rate), a total of 12,880 injury could be avoided per year, an equivalent medical cost of HKD 9,016,000.

Among all districts, Kwai Tsing had the highest annual avoidable injury number (1,864).
The purpose of Part 6 is to provide comparison of AED attendances across 18 districts in Hong Kong. This is a continuation of Part 5. In this part, injury types are classified by the injury types adopted by AED in public hospitals in Hong Kong, namely common assault, indecent assault, child abuse, self-harm, traffic, industrial, domestic and sports.

The structure of Part 6 is to present the injury characteristics of each of the 8 injury types in year range 2001-2012 (Part 6.1), followed by those in year range 2009-2012 (Part 6.2). The former details the long-term injury patterns in districts while the latter details the recent injury patterns in districts.

The graphs for presentation are the same as that in Part 5. Please refer to Part 5 for detailed explanation of the graphs.
6.1 2001-2012 AED attendance due to injury by District and Injury Type in Hong Kong, 2001-2012

Part 6.1 aims at providing comparison of AED attendances for each injury type in Hong Kong among districts for 2001-2012. Please refer to Part 6 for explanation of graphs.

6.1.1 2001-2012 AED attendances by District in Hong Kong, 2001-2012

From 2001 to 2012, Tai Po had the highest annual common assault attendance rate (337 per 100,000) while Central and Western (reference district) had the lowest (112 per 100,000). The average rate across districts was 222 per 100,000.

The annual injury number for the reference district was 50. By preventing the injury for all other districts to the rate level of the reference district (reference rate), a total of 1,645 injury could be avoided per year, an
equivalent medical cost of HKD 1,151,500.

Among all districts, Yuen Long had the highest annual avoidable injury number (226).
From 2001 to 2012, Wong Tai Sin had the highest annual indecent assault attendance rate (10 per 100,000) while Tsuen Wan (reference district) had the lowest (2 per 100,000). The average rate across districts was 6 per 100,000.

The annual injury number for the reference district was 1. By preventing the injury for all other districts to the rate level of the reference district (reference rate), a total of 54 injury could be avoided per year, an equivalent medical cost of HKD 37,800.

Among all districts, Yuen Long had the highest annual avoidable injury number (8).
From 2001 to 2012, Yuen Long had the highest annual child abuse attendance rate (43 per 100,000) while Sha Tin (reference district) had the lowest (14 per 100,000). The average rate across districts was 21 per 100,000.

The annual injury number for the reference district was 17. By preventing the injury for all other districts to the rate level of the reference district (reference rate), a total of 108 injury could be avoided per year, an equivalent medical cost of HKD 75,600.

Among all districts, Yuen Long had the highest annual avoidable injury number (38).
From 2001 to 2012, Sha Tin had the highest annual self-harm attendance rate (101 per 100,000) while Tsuen Wan (reference district) had the lowest (8 per 100,000). The average rate across districts was 34 per 100,000. The annual injury number for the reference district was 4. By preventing the injury for all other districts to the rate level of the reference district (reference rate), a total of 388 injury could be avoided per year, an equivalent medical cost of HKD 271,600.

Among all districts, Sha Tin had the highest annual avoidable injury number (113).
From 2001 to 2012, Tai Po had the highest annual traffic attendance rate (266 per 100,000) while Tsuen Wan (reference district) had the lowest (122 per 100,000). The average rate across districts was 174 per 100,000.

The annual injury number for the reference district was 70. By preventing the injury for all other districts to the rate level of the reference district (reference rate), a total of 755 injury could be avoided per year, an equivalent medical cost of HKD 528,500.

Among all districts, Yuen Long had the highest annual avoidable injury number (149).

在2001至2012年期間，大埔區是每年交通意外損傷求診率最高的地區，每十萬人有266人次；而荃灣區（參照地區）則是最低的地區，每十萬人有122人次。十八區的平均求診率為每十萬人174人次。

參照地區的每年損傷數字為70。當其他地區的損傷率減低至參照地區的水平（參照比率）後，每年便可避免755宗損傷並且節省港幣528,500元的醫療開支。

元朗區是每年可避免損傷數字最高的地區(149)。
From 2001 to 2012, Tai Po had the highest annual industrial attendance rate (218 per 100,000) while Central and Western (reference district) had the lowest (48 per 100,000). The average rate across districts was 116 per 100,000.

The annual injury number for the reference district was 22. By preventing the injury for all other districts to the rate level of the reference district (reference rate), a total of 997 injury could be avoided per year, an equivalent medical cost of HKD 697,900.

Among all districts, Tuen Mun had the highest annual avoidable injury number (137).
From 2001 to 2012, Sham Shui Po had the highest annual domestic attendance rate (2,615 per 100,000) while Sha Tin (reference district) had the lowest (1,047 per 100,000). The average rate across districts was 1,777 per 100,000.

The annual injury number for the reference district was 1,277. By preventing the injury for all other districts to the rate level of the reference district (reference rate), a total of 9,339 injury could be avoided per year, an equivalent medical cost of HKD 6,537,300.

Among all districts, Kwai Tsing had the highest annual avoidable injury number (1,405).
From 2001 to 2012, Tai Po had the highest annual sports attendance rate (1,397 per 100,000) while Kowloon City (reference district) had the lowest (583 per 100,000). The average rate across districts was 828 per 100,000.

The annual injury number for the reference district was 390. By preventing the injury for all other districts to the rate level of the reference district (reference rate), a total of 3,316 injury could be avoided per year, an equivalent medical cost of HKD 2,321,200.

Among all districts, Tai Po had the highest annual avoidable injury number (511).

In 2001 to 2012, Tai Po had the highest annual sports attendance rate (1,397 per 100,000) while Kowloon City (reference district) had the lowest (583 per 100,000). The average rate across districts was 828 per 100,000.

The annual injury number for the reference district was 390. By preventing the injury for all other districts to the rate level of the reference district (reference rate), a total of 3,316 injury could be avoided per year, an equivalent medical cost of HKD 2,321,200.

Among all districts, Tai Po had the highest annual avoidable injury number (511).
6.2 2009-2012 年香港按區議會分區和損傷種類劃分到急症室求診的統計數字
6.2 AED attendances due to injury by District and Injury Type in Hong Kong, 2009-2012

Part 6.2 aims at providing comparison of AED attendances for each injury type in Hong Kong among districts for 2009-2012. Please refer to Part 6 for explanation of graphs.

6.2.1 2009-2012 年香港按區議會分區劃分毆打損傷到急症室求診數字
6.2.1 Common assault AED attendances by District in Hong Kong, 2009-2012

From 2009 to 2012, Yuen Long had the highest annual common assault attendance rate (230 per 100,000) while Central and Western (reference district) had the lowest (73 per 100,000). The average rate across districts was 171 per 100,000.

The annual injury number for the reference district was 31. By preventing the injury for all other districts to the rate level of the reference district (reference rate), a total of 1,331 injury could be avoided per year, an

在 2009 至 2012 年期間，元朗區是每年毆打損傷求診率最高的地區，每十萬人有 230 人次; 而中西區（參照地區）則是最低的地區，每十萬人有 73 人次。十八區的平均求診率為每十萬人 171 人次。

参照地區的每年損傷數字為 31。當其他地區的損傷率減低至参照地區的水平（参照比率）後，每年便可避免 1,331 宗損傷並且節省港幣 931,700 元的醫療開支。
equivalent medical cost of HKD 931,700.

Among all districts, Yuen Long had the highest annual avoidable injury number (194).
From 2009 to 2012, Yuen Long had the highest annual indecent assault attendance rate (10 per 100,000) while Tai Po (reference district) had the lowest (2 per 100,000). The average rate across districts was 5 per 100,000.

The annual injury number for the reference district was 1. By preventing the injury for all other districts to the rate level of the reference district (reference rate), a total of 43 injury could be avoided per year, an equivalent medical cost of HKD 30,100.

Among all districts, Yuen Long had the highest annual avoidable injury number (10).
From 2009 to 2012, Yuen Long had the highest annual child abuse attendance rate (47 per 100,000) while Central and Western (reference district) had the lowest (13 per 100,000). The average rate across districts was 23 per 100,000.

The annual injury number for the reference district was 6. By preventing the injury for all other districts to the rate level of the reference district (reference rate), a total of 143 injury could be avoided per year, an equivalent medical cost of HKD 100,100.

Among all districts, Yuen Long had the highest annual avoidable injury number (41).
6.2.4 2009-2012 年香港按區議會分區劃分自殘損傷到急症室求診數字

6.2.4 Self-harm AED attendances by District in Hong Kong, 2009-2012

圖 6.2.4: 2009-2012 年香港按區議會分區劃分自殘損傷到急症室的每年求診率和每年可避免損傷數字

Figure 6.2.4: Self-Harm annual AED attendance rates with annual avoidable injury numbers, by district, Hong Kong, 2009-2012

From 2009 to 2012, Yau Tsim Mong had the highest annual self-harm attendance rate (49 per 100,000) while Central and Western (reference district) had the lowest (5 per 100,000). The average rate across districts was 18 per 100,000.

The annual injury number for the reference district was 2. By preventing the injury for all other districts to the rate level of the reference district (reference rate), a total of 168 injury could be avoided per year, an equivalent medical cost of HKD 117,600.

Among all districts, Yau Tsim Mong had the highest annual avoidable injury number (23). In 2009 至 2012 年期間，油尖旺區是每年自殘損傷求診率最高的地區，每十萬人有 49 人次; 而中西區（參照地區）則是最低的地區，每十萬人有 5 人次。十八區的平均求診率為每十萬人 18 人次。

參照地區的每年損傷數字為 2。當其他地區的損傷率減低至参照地區的水平（參照比率）後，每年便可避免 168 宗損傷並且節省港幣 117,600 元的醫療開支。

油尖旺是每年可避免損傷數字最高的地區(23)。
6.2.5 2009-2012 Traffic AED attendances by District in Hong Kong, 2009-2012

Figure 6.2.5: Traffic annual AED attendance rates with annual avoidable injury numbers, by district, Hong Kong, 2009-2012

From 2009 to 2012, Tai Po had the highest annual traffic attendance rate (319 per 100,000) while Central and Western (reference district) had the lowest (102 per 100,000). The average rate across districts was 160 per 100,000.

The annual injury number for the reference district was 42. By preventing the injury for all other districts to the rate level of the reference district (reference rate), a total of 778 injury could be avoided per year, an equivalent medical cost of HKD 544,600.

Among all districts, Yuen Long had the highest annual avoidable injury number (171).

In 2009 至 2012 年期間，大埔區是每年交通意外損傷求診率最高的地區，每十萬人有 319 人次；而中西區（參照地區）則是最低的地區，每十萬人有 102 人次。十八區的平均求診率為每十萬人 160 人次。

參照地區的每年損傷數字為 42。當其他地區的損傷率減低至參照地區的水平（參照比率）後，每年便可避免 778 宗損傷並且節省港幣 544,600 元的醫療開支。

元朗區是每年可避免損傷數字最高的地區 (171)。
6.2.6 2009-2012 年香港按區議會分區劃分工業意外損傷到急症室求診數字

6.2.6 Industrial AED attendances by District in Hong Kong, 2009-2012

從2009年到2012年，葵青區是每年工業意外損傷求診率最高的地區，每十萬人有147人次；而中西區（參照地區）則是最低的地區，每十萬人有38人次。十八區的平均求診率為每十萬人88人次。

The annual injury number for the reference district was 16. By preventing the injury for all other districts to the rate level of the reference district (reference rate), a total of 668 injury could be avoided per year, an equivalent medical cost of HKD 467,600.

參照地區的每年損傷數字為16。當其他地區的損傷率減低至參照地區的水平（參照比率）後，每年便可避免668宗損傷並且節省港幣467,600元的醫療開支。

Among all districts, Yuen Long had the highest annual avoidable injury number (115).

元朗區是每年可避免損傷數字最高的地區(115)。
6.2.7 Domestic AED attendances by District in Hong Kong, 2009-2012

From 2009 to 2012, Kwai Tsing had the highest annual domestic attendance rate (2,361 per 100,000) while Sha Tin (reference district) had the lowest (910 per 100,000). The average rate across districts was 1,557 per 100,000.

The annual injury number for the reference district was 975. By preventing the injury for all other districts to the rate level of the reference district (reference rate), a total of 8,467 injury could be avoided per year, an equivalent medical cost of HKD 5,926,900.

Among all districts, Kwai Tsing had the highest annual avoidable injury number (1,309).

在2009至2012年期間，葵青區是每年家居意外損傷求診率最高的地區，每十萬人有2,361人次；而沙田區（參照地區）則是最低的地區，每十萬人有910人次。十八區的平均求診率為每十萬人1,557人次。

參照地區的每年損傷數字為975。當其他地區的損傷率減低至參照地區的水平（參照比率）後，每年便可避免8,467宗損傷並且節省港幣5,926,900元的醫療開支。

葵青區是每年可避免損傷數字最高的地區(1,309)。
From 2009 to 2012, Tai Po had the highest annual sports attendance rate (1,356 per 100,000) while Tsuen Wan (reference district) had the lowest (465 per 100,000). The average rate across districts was 768 per 100,000.

The annual injury number for the reference district was 263. By preventing the injury for all other districts to the rate level of the reference district (reference rate), a total of 3,888 injury could be avoided per year, an equivalent medical cost of HKD 2,721,600.

Among all districts, Kwai Tsing had the highest annual avoidable injury number (472).
7 District Profile of AED attendances due to injury in Southern District

The purpose of Part 7 is to provide detailed information of AED attendances in Southern District.

Part 7.1 details about the annual avoidable injury number and annual attendance rate of each injury type (Total, Intentional, Unintentional, Common assault, Indecent assault, Child abuse, Self-harm, Traffic, Industrial, Domestic and Sports) by year from 2001 to 2012, so as to provide information of the injury trend for each injury type in the district.

Part 7.2 details about the annual avoidable injury number and annual attendance rate of each injury type (Total, Intentional, Unintentional, Common assault, Indecent assault, Child abuse, Self-harm, Traffic, Industrial, Domestic and Sports) by sex and age group from 2001 to 2012, so as to provide information of the injury pattern in each group.
7.1 2001-2012 年南區按年和損傷種類劃分損傷到急症室求診的統計數字

7.1 AED attendances due to injury by Year and Injury Types of Southern District, 2001-2012

Part 7.1.1 details about the annual avoidable injury number and annual attendance rate of each injury type (Total, Intentional, Unintentional, Common assault, Indecent assault, Child abuse, Self-harm, Traffic, Industrial, Domestic and Sports) by year from 2001 to 2012, so as to provide information of the injury trend in every year.

Similar to Part 5 and 6, both annual avoidable injury number and annual attendance rate are plotted in the same graph. Annual attendance rate informs which year in Southern is more susceptible to different injury types and is plotted on the left side of the graph. Year with the lowest annual AED attendance rate for each injury type in Southern is known as reference year. Unlike Part 5 and 6, the reference year is not plotted in the bottom of the graph.

Annual avoidable injury number depicts the annual AED attendance number that could have been avoided if the district had attained the reference rate and is plotted on the right side of the graph. Therefore, annual avoidable injury number of the reference year is always zero. While annual AED attendance rate assumes the same population in each year from 2001 to 2012, namely 100,000, the annual avoidable injury number uses the actual total population of children aged 0 to 19, and thus accounts for difference in

與第 5 和 6 部分類同，每年可避免損傷數字和每年求診率將會在同一張圖表示。每年求診率描述各損傷種類於那一年的損傷的風險較高，並在圖中左邊展示。當中各損傷種類最低每年求診率的年份，稱為參照年份。與第 5 和 6 部分不同的是：參照年份並不是展示在圖的下方。

每年可避免損傷數字是假設各區的損傷情況維持在參照比率的水平，每年所能避免的求診數字，並在圖中右邊展示。因此，在參照年份的每年可避免損傷數字必定是 0。每年求診率假設了 2001 至 2012 年期間每年的人口相同（維持在 100,000），而每年可避免損傷數字則是用了 2001 至 2012 年期間每年 0 至 19 歲的人口的數字計算。這亦說明了為何每年可避免損傷數字和每年求診率的排名不一定相同的原因。
rankings between annual avoidable injury number and annual attendance rate.
From 2001 to 2012, the annual attendance rate in Southern decreased from 4,784 to 3,945 per 100,000. The trend was statistically significant at 5% significance level. The highest (5,249 per 100,000) was found in 2002 while the lowest (3,932 per 100,000) was found in 2009 (reference year). The average rate across the 12-year period was 4,313 per 100,000.

The number for the reference year was 1,954. By preventing injury to the reference rate level of the reference year (reference rate), a total of 2,593 injury could have been avoided in Southern per year, an equivalent of HKD 1,815,100.

The excess of annual attendance rate over the reference rate is known as annual avoidable injury rate. The annual avoidable injury number in each year is obtained by multiplying the annual avoidable injury rate with the reference year's injury number. In 2002, the annual avoidable injury rate was 1,954, thus the avoidable injury number in 2002 was 778.

In 2001 to 2012, the annual attendance rate in Southern decreased from 4,784 to 3,945 per 100,000. The trend was statistically significant at 5% significance level. The highest (5,249 per 100,000) was found in 2002 while the lowest (3,932 per 100,000) was found in 2009 (reference year). The average rate across the 12-year period was 4,313 per 100,000.

The number for the reference year was 1,954. By preventing injury to the reference rate level of the reference year (reference rate), a total of 2,593 injury could have been avoided in Southern per year, an equivalent of HKD 1,815,100.

The excess of annual attendance rate over the reference rate is known as annual avoidable injury rate. The annual avoidable injury number in each year is obtained by multiplying the annual avoidable injury rate with the reference year's injury number. In 2002, the annual avoidable injury rate was 1,954, thus the avoidable injury number in 2002 was 778.
annual population of the respective year. Throughout the 12-year period, the highest (778) was found in 2002.
7.1.2 2001-2012 年南區按年劃分蓄意損傷到急症室求診數字
7.1.2 Intentional injury AED attendances by Year in Southern District, 2001-2012

From 2001 to 2012, the annual intentional injury attendance rate in Southern decreased from 410 to 155 per 100,000. The trend was statistically significant at 5% significance level. The highest (410 per 100,000) was found in 2001 while the lowest (155 per 100,000) was found in 2012 (reference year). The average rate across the 12-year period was 254 per 100,000.

The intentional injury number for the reference year was 70. By preventing injury to the rate level of the reference year (reference rate), a total of 667 injury could have been avoided in Southern per year, an equivalent of HKD 466,900.

Throughout the 12-year period, the highest (166) was found in 2001.
7.1.3 2001-2012 年南區按年劃分非蓄意損傷到急症室求診數字
7.1.3 Unintentional injury AED attendances by Year in Southern District, 2001-2012

图 7.1.3: 2001-2012 年南區按年劃分非蓄意損傷到急症室的求診率和可避免損傷數字

Figure 7.1.3: Unintentional injury AED attendance rates with avoidable injury numbers, by year, Southern district, 2001-2012

From 2001 to 2012, the annual unintentional injury attendance rate in Southern decreased from 3,616 to 2,870 per 100,000. The trend was statistically significant at 5% significance level. The highest (4,091 per 100,000) was found in 2002 while the lowest (2,640 per 100,000) was found in 2010 (reference year). The average rate across the 12-year period was 3,180 per 100,000.

The unintentional injury number for the reference year was 1,283. By preventing injury to the rate level of the reference year (reference rate), a total of 3,629 injury could have been avoided in Southern per year, an equivalent of HKD 2,540,300.

Throughout the 12-year period, the highest (858) was found in 2002.

在 2001 至 2012 年期間，南區的每年非蓄意損傷求診率由每十萬人 3,616 人次降至 2,870 人次，趨勢在統計學上顯著（顯著水平 α 為 5%）。當中最高的年份為 2002（每十萬人 4,091 人次），而最低的年份（參照年份）為 2010（每十萬人 2,640 人次）。求診率在十二年期間的平均數為每十萬人 3,180 人次。

參照年份的損傷數字為 1,283。當其他年份的損傷率減低至參照年份的水平（參照比率）後，南區每年便可避免 3,629 宗損傷並且節省港幣 2,540,300 元的醫療開支。

2002 年是每年可避免損傷數字最高的年份(858)。
7.1.4 2001-2012 年南區毆打損傷到急症室求診數字

7.1.4 Common assault AED attendances by Year in Southern District, 2001-2012

From 2001 to 2012, the annual common assault attendance rate in Southern decreased from 238 to 121 per 100,000. The trend was statistically significant at 5% significance level. The highest (254 per 100,000) was found in 2003 while the lowest (121 per 100,000) was found in 2012 (reference year). The average rate across the 12-year period was 198 per 100,000.

The common assault number for the reference year was 55. By preventing injury to the rate level of the reference year (reference rate), a total of 498 injury could have been avoided in Southern per year, an equivalent of HKD 348,600.

Throughout the 12-year period, the highest (76) was found in 2001.

In 2001 至 2012 年期間，南區的毆打損傷求診率由每十萬人 238 人次降至 121 人次，趨勢在統計學上顯著（顯著水平 α 為 5%）。當中最高的年份為 2003（每十萬人 254 人次），而最低的年份（參照年份）為 2012（每十萬人 121 人次）。求診率在十二年期間的平均數為每十萬人 198 人次。

參照年份的損傷數字為 55。當其他年份的損傷率減低至參照年份的水平（參照比率）後，南區每年便可避免 498 宗損傷並且節省港幣 348,600 元的醫療開支。

2001 年是每年可避免損傷數字最高的年份(76)。
From 2001 to 2012, the annual indecent assault attendance rate in Southern decreased from 9 to 4 per 100,000. The trend was not statistically significant at 5% significance level. The highest (9 per 100,000) was found in 2001 while the lowest (0 per 100,000) was found in 2009 (reference year). The average rate across the 12-year period was 4 per 100,000.

The indecent assault number for the reference year was 0. By preventing injury to the rate level of the reference year (reference rate), a total of 27 injury could have been avoided in Southern per year, an equivalent of HKD 18,900.

Throughout the 12-year period, the highest (6) was found in 2001.

In 2001 to 2012 年期間，南區的每年非禮損傷求診率由每十萬人 9 人次降至 4 人次，趨勢在統計學上不顯著（顯著水平 α 為 5%）。當中最高的年份為 2001（每十萬人 9 人次），而最低的年份（參照年份）為 2009（每十萬人 0 人次）。求診率在十二年期間的平均數為每十萬人 4 人次。

參照年份的損傷數字為 0。當其他年份的損傷率減低至參照年份的水平（參照比率）後，南區每年便可避免 27 宗損傷並且節省港幣 18,900 元的醫療開支。

2001 年是每年可避免損傷數字最高的年份(6)。
From 2001 to 2012, the annual child abuse attendance rate in Southern increased from 11 to 15 per 100,000. The trend was not statistically significant at 5% significance level. The highest (37 per 100,000) was found in 2008 while the lowest (10 per 100,000) was found in 2002 (reference year). The average rate across the 12-year period was 22 per 100,000.

The child abuse number for the reference year was 6. By preventing injury to the rate level of the reference year (reference rate), a total of 75 injury could have been avoided in Southern per year, an equivalent of HKD 52,500.

Throughout the 12-year period, the highest (14) was found in 2008.

In 2001 to 2012 years, the annual child abuse attendance rate in Southern increased from 11 to 15 per 100,000. The trend was not statistically significant at 5% significance level. The highest (37 per 100,000) was found in 2008 while the lowest (10 per 100,000) was found in 2002 (reference year). The average rate across the 12-year period was 22 per 100,000.

The child abuse number for the reference year was 6. By preventing injury to the rate level of the reference year (reference rate), a total of 75 injury could have been avoided in Southern per year, an equivalent of HKD 52,500.

Throughout the 12-year period, the highest (14) was found in 2008.
From 2001 to 2012, the annual self-harm attendance rate in Southern decreased from 152 to 13 per 100,000. The trend was statistically significant at 5% significance level. The highest (152 per 100,000) was found in 2001 while the lowest (8 per 100,000) was found in 2007 (reference year). The average rate across the 12-year period was 30 per 100,000.

The self-harm number for the reference year was 4. By preventing injury to the rate level of the reference year (reference rate), a total of 162 injury could have been avoided in Southern per year, an equivalent of HKD 113,400.

Throughout the 12-year period, the highest (94) was found in 2001. In 2001 to 2012, the annual self-harm attendance rate in Southern decreased from 152 to 13 per 100,000. The trend was statistically significant at 5% significance level. The highest (152 per 100,000) was found in 2001 while the lowest (8 per 100,000) was found in 2007 (reference year). The average rate across the 12-year period was 30 per 100,000.

The self-harm number for the reference year was 4. By preventing injury to the rate level of the reference year (reference rate), a total of 162 injury could have been avoided in Southern per year, an equivalent of HKD 113,400.

Throughout the 12-year period, the highest (94) was found in 2001.
7.1.8 2001-2012 年南區按年劃分交通意外損傷到急症室求診數字

7.1.8 Traffic AED attendances by Year in Southern District, 2001-2012

From 2001 to 2012, the annual traffic attendance rate in Southern decreased from 231 to 128 per 100,000. The trend was statistically significant at 5% significance level. The highest (231 per 100,000) was found in 2001 while the lowest (128 per 100,000) was found in 2012 (reference year). The average rate across the 12-year period was 186 per 100,000.

The traffic number for the reference year was 58. By preventing injury to the rate level of the reference year (reference rate), a total of 380 injury could have been avoided in Southern per year, an equivalent of HKD 266,000.

Throughout the 12-year period, the highest (67) was found in 2001.

In 2001 to 2012 年期間，南區的每年交通意外損傷求診率由每十萬人231人次降至128人次，趨勢在統計學上顯著（顯著水平 α 為 5%）。當中最高的年份為 2001（每十萬人 231 人次），而最低的年份（參照年份）為 2012（每十萬人 128 人次）。求診率在十二年期間的平均數為每十萬人 186 人次。

參照年份的損傷數字為 58。當其他年份的損傷率減低至參照年份的水平（參照比率）後，南區每年便可避免 380 宗損傷並且節省港幣 266,000 元的醫療開支。

2001 年是每年可避免損傷數字最高的年份(67)。
From 2001 to 2012, the annual industrial attendance rate in Southern decreased from 146 to 64 per 100,000. The trend was statistically significant at 5% significance level. The highest (147 per 100,000) was found in 2002 while the lowest (63 per 100,000) was found in 2011 (reference year). The average rate across the 12-year period was 96 per 100,000.

The industrial number for the reference year was 29. By preventing injury to the rate level of the reference year (reference rate), a total of 227 injury could have been avoided in Southern per year, an equivalent of HKD 158,900.

Throughout the 12-year period, the highest (54) was found in 2001.
From 2001 to 2012, the annual domestic attendance rate in Southern decreased from 2,396 to 1,859 per 100,000. The trend was statistically significant at 5% significance level. The highest (2,753 per 100,000) was found in 2002 while the lowest (1,535 per 100,000) was found in 2010 (reference year). The average rate across the 12-year period was 2,027 per 100,000.

The domestic number for the reference year was 746. By preventing injury to the rate level of the reference year (reference rate), a total of 3,279 injury could have been avoided in Southern per year, an equivalent of HKD 2,295,300.

Throughout the 12-year period, the highest (720) was found in 2002.

In 2001 to 2012 年期間，南區的家居意外求診率由每十萬人 2,396 人次降至 1,859 人次，趨勢在統計學上顯著（顯著水平 α 為 5%）。當中最高的年份為 2002（每十萬人 2,753 人次）, 而最低的年份為 2010（參照年份）為 2010（每十萬人 1,535 人次）。求診率在十二年期間的平均數為每十萬人 2,027 人次。

參照年份的損傷數字為共 746。當其他年份的損傷率減低至參照年份的水平（參照比率）後，南區每年便可避免 3,279 宗損傷並且節省港幣 2,295,300 元的醫療開支。

2002 年是每年可避免損傷數字最高的年份(720)。
From 2001 to 2012, the annual sports attendance rate in Southern decreased from 844 to 819 per 100,000. The trend was statistically significant at 5% significance level. The highest (1,024 per 100,000) was found in 2002 while the lowest (804 per 100,000) was found in 2008 (reference year). The average rate across the 12-year period was 871 per 100,000.

The sports number for the reference year was 413. By preventing injury to the rate level of the reference year (reference rate), a total of 442 injury could have been avoided in Southern per year, an equivalent of HKD 309,400.

Throughout the 12-year period, the highest (130) was found in 2002.
7.2 南區按性別、年齡組別和損傷種類劃分損傷到急症室求診的統計數字

7.2 AED Attendances due to injury by Sex, Age Group and Injury Type of Southern district

Part 7.2 details about the annual avoidable injury number and annual attendance rate of each injury type (Total, Intentional, Unintentional, Common assault, Indecent assault, Child abuse, Self-harm, Traffic, Industrial, Domestic and Sports) by sex and age group in Southern, so as to provide information of the injury pattern in each group. Part 7.2.1 is prepared using the AED attendance data for year range 2001-2012 while Part 7.2.2 is prepared using the AED attendance data for year range 2009-2012. The former aims at providing long-term injury pattern while the latter aims at providing recent injury pattern.

Similar to Part 7.1, both annual avoidable injury number and annual AED attendance rate are plotted in the same graph. Annual attendance rate informs which sex and age group in Southern is more susceptible to different injury types and is plotted on the left side of the graph. The sex and age group with the lowest annual AED attendance rate for each injury type in Southern is known as reference group. There are 8 groups which are shown in the following order: males aged 0 to 4, females aged 0 to 4, males aged 5 to 9, females aged 5 to 9, males aged 10 to 14, females aged 10 to 14, males aged 15 to 19 and females aged 15 to 19.

Annual avoidable injury number depicts the annual AED attendance with 7.2 部分主要是詳列南區各損傷種類（所有、蓄意、非蓄意、毆打、非禮、虐待兒童、交通意外、工業意外、家居意外、運動意外和自殘）按性別和年齡組別的每年可避免損傷數字和每年求診率，以便了解南區不同性別和年齡組別的青少年各損傷種類的特性。第 7.2.1 部分所載列的是 2001-2012 年的急症室求診數字，而第 7.2.2 部分所載列的是 2009-2012 年的急症室求診數字。前者是用作表達長期損傷的情況，而後者是用作表達近期損傷的情況。

與第 7.1 部分相同，每年可避免損傷數字和每年求診率將會在同一張圖表示。每年求診率描述南區各損傷種類較高風險的組別，並在圖中左邊展示。當中各損傷種類最低每年求診率的性別和年齡組別，稱為參照組別。八個性別和年齡組別將會於圖上以下列次序於圖中標示：0 至 4 歲的男性、0 至 4 歲的女性、5 至 9 歲的男性、5 至 9 歲的女性、10 至 14 歲的男性、10 至 14 歲的女性、15 至 19 歲的男性和 15 至 19 歲的女性。

每年可避免損傷數字是假設區內各性別和年齡組別的損傷情況維持在
number that could have been avoided if the district had attained the reference rate and is plotted on the right side of the graph. Therefore, annual avoidable injury number of the reference group is always zero. While annual AED attendance rate assumes the same population in each of the 8 group, namely 100,000, the annual avoidable injury number uses the actual total population of each of the 8 groups, and thus accounts for difference in rankings between annual avoidable injury number and annual AED attendance rate.
7.2.1 2001-2012 年南區按性別, 年齡組別和損傷種類劃分損傷到急症室求診的統計數字

7.2.1 AED attendances due to injury by Sex, Age Group and Injury Type of Southern district, 2001-2012

Part 7.2.1 aims at providing comparison of AED attendances for each injury type in Southern among sex and age group for 2001-2012. Please refer to Part 7.2 for explanation of graphs.

7.2.1.1 2001-2012 年南區按性別和年齡組別劃分損傷到急症室求診數字

7.2.1.1 AED attendances due to injury by Sex and Age Group of Southern district, 2001-2012

圖 7.2.1.1: 2001-2012 年南區按性別和年齡組別劃分損傷到急症室的每年求診率和每年可避免損傷數字

Figure 7.2.1.1: Annual AED attendance rates with annual avoidable injury numbers due to injury, by sex and age group, Southern district, 2001-2012

From 2001 to 2012, males aged 0 to 4 had the highest annual attendance rate (6,872 per 100,000) while females aged 15 to 19 (reference group) had the lowest (2,257 per 100,000). The average rate across the 8 groups was 4,480 per 100,000.

By preventing the injury for all other groups to the rate level as the reference group (reference rate), a total of 1,096 injury could be avoided in Southern.
district per year, an equivalent of HKD 767,200.

The excess of annual attendance rate over the reference rate is known as the annual avoidable injury rate. The annual avoidable injury number in each group is obtained by multiplying the annual avoidable injury rate with the annual population of the respective group. Among all groups, males aged 15 to 19 had the highest annual avoidable injury number (260).
From 2001 to 2012, males aged 15 to 19 had the highest annual intentional injury attendance rate (639 per 100,000) while females aged 0 to 4 (reference group) had the lowest (67 per 100,000). The average rate across the 8 groups was 231 per 100,000.

By preventing the injury for all other groups to the rate level as the reference group (reference rate), a total of 101 injury could be avoided in Southern district per year, an equivalent of HKD 70,700.

Among all groups, males aged 15 to 19 had the highest annual avoidable injury number (47).

In 2001 to 2012, males aged 15 to 19 had the highest annual intentional injury attendance rate (639 per 100,000) while females aged 0 to 4 (reference group) had the lowest (67 per 100,000). The average rate across the 8 groups was 231 per 100,000.

By preventing the injury for all other groups to the rate level as the reference group (reference rate), a total of 101 injury could be avoided in Southern district per year, an equivalent of HKD 70,700.

Among all groups, males aged 15 to 19 had the highest annual avoidable injury number (47).
7.2.1.3 2001-2012 年南區按性別和年齡組別劃分非蓄意損傷到急症室求診數字

7.2.1.3 Unintentional injury AED attendances by Sex and Age Group of Southern district, 2001-2012

![Chart showing the annual attendances of AED for accidental injuries by sex and age group, Southern district, 2001-2012.]

From 2001 to 2012, males aged 0 to 4 had the highest annual unintentional injury attendance rate (5,536 per 100,000) while females aged 15 to 19 (reference group) had the lowest (1,548 per 100,000). The average rate across the 8 groups was 3,353 per 100,000.

By preventing the injury for all other groups to the rate level as the reference group (reference rate), a total of 876 injury could be avoided in Southern district per year, an equivalent of HKD 613,200.

Among all groups, males aged 15 to 19 had the highest annual avoidable injury number (200).

在 2001 至 2012 年期間，0 至 4 歲的男性是每年非蓄意損傷求診率最高的組別，每十萬人有 5,536 人次；而 15 至 19 歲的女性（參照組別）則是最低，每十萬人有 1,548 人次。求診率在八個組別的平均數為每十萬人 3,353 人次。

當其他組別的損傷率減低至參照組別的水平（參照比率）後，南區每年便可避免 876 宗損傷並且節省港幣 613,200 元的醫療開支。

15 至 19 歲的男性是每年可避免損傷數字最高的組別(200)。
7.2.1.4 2001-2012 年南區按性別和年齡組別劃分毆打損傷到急症室求診數字
7.2.1.4 Common assault AED attendances by Sex and Age Group of Southern district, 2001-2012

图 7.2.1.4: 2001-2012 年南區按性別和年齡組別劃分毆打損傷到急症室的每年求診率和每年可避免損傷數字

Figure 7.2.1.4: Common assault annual AED attendance rates with annual avoidable injury numbers, by sex and age group, Southern district, 2001-2012

From 2001 to 2012, males aged 15 to 19 had the highest annual common assault attendance rate (594 per 100,000) while females aged 0 to 4 (reference group) had the lowest (15 per 100,000). The average rate across the 8 groups was 172 per 100,000.

By preventing the injury for all other groups to the rate level as the reference group (reference rate), a total of 97 injury could be avoided in Southern district per year, an equivalent of HKD 67,900.

Among all groups, males aged 15 to 19 had the highest annual avoidable injury number (47).
From 2001 to 2012, females aged 15 to 19 had the highest annual indecent assault attendance rate (13 per 100,000) while males aged 0 to 4 and females aged 0 to 4 (reference groups) had the lowest (0 per 100,000). The average rate across the 8 groups was 4 per 100,000.

By preventing the injury for all other groups to the rate level as the reference group (reference rate), a total of 2 injury could be avoided in Southern district per year, an equivalent of HKD 1,400.

Among all groups, females aged 15 to 19 had the highest annual avoidable injury number (1).

在 2001 至 2012 年期間，15 至 19 歲的女性是每年非禮損傷求診率最高的組別，每十萬人有 13 人次；而 0 至 4 歲的男性和 0 至 4 歲的女性（參照組別）則是最低，每十萬人有 0 人次。求診率在八個組別的平均數為每十萬人 4 人次。

當其他組別的損傷率減低至參照組別的水平（參照比率）後，南區每年便可避免 2 宗損傷並且節省港幣 1,400 元的醫療開支。

15 至 19 歲的女性是每年可避免損傷數字最高的組別(1)。
From 2001 to 2012, males aged 5 to 9 had the highest annual child abuse attendance rate (36 per 100,000) while males aged 15 to 19 (reference group) had the lowest (7 per 100,000). The average rate across the 8 groups was 23 per 100,000.

By preventing the injury for all other groups to the rate level as the reference group (reference rate), a total of 8 injury could be avoided in Southern district per year, an equivalent of HKD 5,600.

Among all groups, females aged 10 to 14 had the highest annual avoidable injury number (2).

在2001至2012年期間，5至9歲的男性是每年虐待兒童損傷求診率最高的組別，每十萬人有36人次；而15至19歲的男性（參照組別）則是最低，每十萬人有7人次。求診率在八個組別的平均數為每十萬人23人次。

當其他組別的損傷率減低至參照組別的水平（參照比率）後，南區每年便可避免8宗損傷並且節省港幣5,600元的醫療開支。

在2001至2012年期間，5至9歲的男性是每年虐待兒童損傷求診率最高的組別，每十萬人有36人次；而15至19歲的男性（參照組別）則是最低，每十萬人有7人次。求診率在八個組別的平均數為每十萬人23人次。

10至14歲的女性是每年可避免損傷數字最高的組別(2)。
From 2001 to 2012, females aged 15 to 19 had the highest annual self-harm attendance rate (44 per 100,000) while females aged 5 to 9 (reference group) had the lowest (20 per 100,000). The average rate across the 8 groups was 33 per 100,000.

By preventing the injury for all other groups to the rate level as the reference group (reference rate), a total of 7 injury could be avoided in Southern district per year, an equivalent of HKD 4,900.

Among all groups, females aged 15 to 19 had the highest annual avoidable injury number (2).
7.2.1.8 Traffic AED attendances by Sex and Age Group of Southern district, 2001-2012

From 2001 to 2012, males aged 10 to 14 had the highest annual traffic attendance rate (266 per 100,000) while females aged 0 to 4 (reference group) had the lowest (124 per 100,000). The average rate across the 8 groups was 186 per 100,000.

By preventing the injury for all other groups to the rate level as the reference group (reference rate), a total of 34 injury could be avoided in Southern district per year, an equivalent of HKD 23,800.

Among all groups, males aged 10 to 14 had the highest annual avoidable injury number (11).

In 2001至2012年期間，10至14歲的男性是每年交通意外損傷求診率最高的組別，每十萬人有266人次；而0至4歲的女性（參照組別）則是最低，每十萬人有124人次。求診率在八個組別的平均數為每十萬人186人次。

當其他組別的損傷率減低至參照組別的水平（參照比率）後，南區每年便可避免34宗損傷並且節省港幣23,800元的醫療開支。

10至14歲的男性是每年可避免損傷數字最高的組別(11)。
7.2.1.9 Industrial AED attendances by Sex and Age Group of Southern district, 2001-2012

From 2001 to 2012, males aged 15 to 19 had the highest annual industrial attendance rate (474 per 100,000) while females aged 5 to 9 (reference group) had the lowest (1 per 100,000). The average rate across the 8 groups was 81 per 100,000.

By preventing the injury for all other groups to the rate level as the reference group (reference rate), a total of 51 injury could be avoided in Southern district per year, an equivalent of HKD 35,700.

Among all groups, males aged 15 to 19 had the highest annual avoidable injury number (39).

在2001至2012年期間，15至19歲的男性是每年工業意外損傷求診率最高的組別，每十萬人有474人次，而5至9歲的女性（參照組別）則是最低，每十萬人有1人次。求診率在八個組別的平均數為每十萬人81人次。當其他組別的損傷率減低至參照組別的水平（參照比率）後，南區每年便可避免51宗損傷並且節省港幣35,700元的醫療開支。

15至19歲的男性是每年可避免損傷數字最高的組別(39)。
7.2.1.10 Domestic AED attendances by Sex and Age Group of Southern district, 2001-2012

Figure 7.2.1.10: Domestic annual AED attendance rates with annual avoidable injury numbers, by sex and age group, Southern district, 2001-2012

From 2001 to 2012, males aged 0 to 4 had the highest annual domestic attendance rate (5,193 per 100,000) while females aged 15 to 19 (reference group) had the lowest (837 per 100,000). The average rate across the 8 groups was 2,324 per 100,000.

By preventing the injury for all other groups to the rate level as the reference group (reference rate), a total of 640 injury could be avoided in Southern district per year, an equivalent of HKD 448,000.

Among all groups, males aged 0 to 4 had the highest annual avoidable injury number (206).

在2001至2012年期間，0至4歲的男性是每年家居意外損傷求診率最高的組別，每十萬人有5,193人次；而15至19歲的女性（參照組別）則是最低，每十萬人有837人次。求診率在八個組別的平均數為每十萬人2,324人次。

當其他組別的損傷率減低至參照組別的水平（參照比率）後，南區每年便可避免640宗損傷並且節省港幣448,000元的醫療開支。

0至4歲的男性是每年可避免損傷數字最高的組別(206)。
7.2.1.11 2001-2012 年南區按性別和年齡組別劃分運動意外損傷到急症室求診數字

7.2.1.11 Sports AED attendances by Sex and Age Group of Southern district, 2001-2012

From 2001 to 2012, males aged 15 to 19 had the highest annual sports attendance rate (2,161 per 100,000) while females aged 0 to 4 (reference group) had the lowest (73 per 100,000). The average rate across the 8 groups was 762 per 100,000.

By preventing the injury for all other groups to the rate level as the reference group (reference rate), a total of 421 injury could be avoided in Southern district per year, an equivalent of HKD 294,700.

Among all groups, males aged 15 to 19 had the highest annual avoidable injury number (171).
7.2.2 2009-2012 年南區按性別、年齡組別和損傷種類劃分損傷到急症室求診的統計數字

7.2.2 AED attendances due to injury by Sex, Age Group and Injury Type of Southern district, 2009-2012

Part 7.2.2 aims at providing comparison of AED attendances for each injury type in Southern among sex and age group for 2001-2012. Please refer to Part 7.2 for explanation of graphs.

7.2.2.1 2009-2012 年南區按性別和年齡組別劃分損傷到急症室求診數字

7.2.2.1 AED attendances due to injury by Sex and Age Group of Southern district, 2009-2012

图 7.2.2.1: 2009-2012 年南區按性別和年齡組別劃分損傷到急症室的每年求診率和每年可避免損傷數字

Figure 7.2.2.1: Annual AED attendance rates with annual avoidable injury numbers due to injury, by sex and age group, Southern district, 2009-2012

From 2009 to 2012, males aged 0 to 4 had the highest annual attendance rate (6,677 per 100,000) while females aged 15 to 19 (reference group) had the lowest (2,061 per 100,000). The average rate across the 8 groups was 4,203 per 100,000.

By preventing the injury for all other groups to the rate level as the reference group (reference rate), a total of 938 injury could be avoided in Southern.
district per year, an equivalent of HKD 656,600.

The excess of annual attendance rate over the reference rate is known as the annual avoidable injury rate. The annual avoidable injury number in each group is obtained by multiplying the annual avoidable injury rate with the annual population of the respective group. Among all groups, males aged 10 to 14 had the highest annual avoidable injury number (220).
From 2009 to 2012, males aged 15 to 19 had the highest annual intentional injury attendance rate (447 per 100,000) while females aged 0 to 4 (reference group) had the lowest (23 per 100,000). The average rate across the 8 groups was 161 per 100,000.

By preventing the injury for all other groups to the rate level as the reference group (reference rate), a total of 77 injury could be avoided in Southern district per year, an equivalent of HKD 53,900.

Among all groups, males aged 15 to 19 had the highest annual avoidable injury number (33).

15 至 19 歲的男性是每年可避免損傷數字最高的組別(33)。

在 2009 至 2012 年期間，15 至 19 歲的男性是每年蓄意損傷求診率最高的組別，每十萬人有 447 人次；而 0 至 4 歲的女性（參照組別）則是最低，每十萬人有 23 人次。求診率在八個組別的平均數為每十萬人 161 人次。

當其他組別的損傷率減低至參照組別的水平（參照比率）後，南區每年便可避免 77 宗損傷並且節省港幣 53,900 元的醫療開支。
From 2009 to 2012, males aged 0 to 4 had the highest annual unintentional injury attendance rate (5,008 per 100,000) while females aged 15 to 19 (reference group) had the lowest (1,352 per 100,000). The average rate across the 8 groups was 2,887 per 100,000.

By preventing the injury for all other groups to the rate level as the reference group (reference rate), a total of 668 injury could be avoided in Southern district per year, an equivalent of HKD 467,600.

Among all groups, males aged 0 to 4 had the highest annual avoidable injury number (164).
From 2009 to 2012, males aged 15 to 19 had the highest annual common assault attendance rate (431 per 100,000) while females aged 0 to 4 (reference group) had the lowest (6 per 100,000). The average rate across the 8 groups was 125 per 100,000.

By preventing the injury for all other groups to the rate level as the reference group (reference rate), a total of 68 injury could be avoided in Southern district per year, an equivalent of HKD 47,600.

Among all groups, males aged 15 to 19 had the highest annual avoidable injury number (33).
7.2.2.5 2009-2012 年南區按性別和年齡組別劃分非禮損傷到急症室求診數字
7.2.2.5 Indecent assault AED attendances by Sex and Age Group of Southern district, 2009-2012

From 2009 to 2012, females aged 15 to 19 had the highest annual indecent assault attendance rate (16 per 100,000) while males aged 0 to 4, females aged 0 to 4, males aged 5 to 9, males aged 10 to 14 and males aged 15 to 19 (reference groups) had the lowest (0 per 100,000). The average rate across the 8 groups was 3 per 100,000.

By preventing the injury for all other groups to the rate level as the reference group (reference rate), a total of 2 injury could be avoided in Southern district per year, an equivalent of HKD 1,400.

Among all groups, females aged 15 to 19 had the highest annual avoidable injury number (1).

在 2009 至 2012 年期間，15 至 19 歲的女性是每年非禮損傷求診率最高的組別，每十萬人有 16 人次；而 0 至 4 歲的男性、0 至 4 歲的女性、5 至 9 歲的男性、10 至 14 歲的男性和 15 至 19 歲的男性（參照組別）則是最低，每十萬人有 0 人次。求診率在八個組別的平均數為每十萬人 3 人次。

當其他組別的損傷率減低至參照組別的水平（參照比率）後，南區每年便可避免 2 宗損傷並且節省港幣 1,400 元的醫療開支。

15 至 19 歲的女性是每年可避免損傷數字最高的組別(1)。
From 2009 to 2012, males aged 5 to 9 had the highest annual child abuse attendance rate (45 per 100,000) while males aged 15 to 19 (reference group) had the lowest (3 per 100,000). The average rate across the 8 groups was 23 per 100,000.

By preventing the injury for all other groups to the rate level as the reference group (reference rate), a total of 9 injury could be avoided in Southern district per year, an equivalent of HKD 6,300.

Among all groups, females aged 10 to 14 had the highest annual avoidable injury number (3).

在2009至2012年期間，5至9歲的男性是每年虐待兒童損傷求診率最高的組別，每十萬人有45人次；而15至19歲的男性（參照組別）則是最低，每十萬人有3人次。求診率在八個組別的平均數為每十萬人23人次。

當其他組別的損傷率減低至參照組別的水平（參照比率）後，南區每年便可避免9宗損傷並且節省港幣6,300元的醫療開支。

10至14歲的女性是每年可避免損傷數字最高的組別(3)。

From 2009 to 2012, males aged 5 to 9 had the highest annual child abuse attendance rate (45 per 100,000) while males aged 15 to 19 (reference group) had the lowest (3 per 100,000). The average rate across the 8 groups was 23 per 100,000.

By preventing the injury for all other groups to the rate level as the reference group (reference rate), a total of 9 injury could be avoided in Southern district per year, an equivalent of HKD 6,300.

Among all groups, females aged 10 to 14 had the highest annual avoidable injury number (3).
From 2009 to 2012, females aged 15 to 19 had the highest annual self-harm attendance rate (23 per 100,000) while males aged 0 to 4, males aged 5 to 9 and females aged 5 to 9 (reference groups) had the lowest (0 per 100,000). The average rate across the 8 groups was 10 per 100,000.

By preventing the injury for all other groups to the rate level as the reference group (reference rate), a total of 6 injury could be avoided in Southern district per year, an equivalent of HKD 4,200.

Among all groups, females aged 15 to 19 had the highest annual avoidable injury number (2).

在2009至2012年期間，15至19歲的女性是每年自殘損傷求診率最高的組別，每十萬人有23人次；而0至4歲的男性、5至9歲的男性和5至9歲的女性（參照組別）則是最低，每十萬人有0人次。求診率在八個組別的平均數為每十萬人10人次。

當其他組別的損傷率減低至參照組別的水平（參照比率）後，南區每年便可避免6宗損傷並且節省港幣4,200元的醫療開支。

15至19歲的女性是每年可避免損傷數字最高的組別(2)。
From 2009 to 2012, males aged 10 to 14 had the highest annual traffic attendance rate (236 per 100,000) while males aged 15 to 19 (reference group) had the lowest (97 per 100,000). The average rate across the 8 groups was 165 per 100,000.

By preventing the injury for all other groups to the rate level as the reference group (reference rate), a total of 31 injury could be avoided in Southern district per year, an equivalent of HKD 21,700.

Among all groups, males aged 10 to 14 had the highest annual avoidable injury number (10).

在 2009 至 2012 年期間，10 至 14 歲的男性是每年交通意外損傷求診率最高的組別，每十萬人有 236 人次；而 15 至 19 歲的男性（參照組別）則是最低，每十萬人有 97 人次。求診率在八個組別的平均數為每十萬人 165 人次。

當其他組別的損傷率減低至參照組別的水平（參照比率）後，南區每年便可避免 31 宗損傷並且節省港幣 21,700 元的醫療開支。

10 至 14 歲的男性是每年可避免損傷數字最高的組別(10)。
From 2009 to 2012, males aged 15 to 19 had the highest annual industrial attendance rate (293 per 100,000) while males aged 0 to 4 and females aged 5 to 9 (reference groups) had the lowest (0 per 100,000). The average rate across the 8 groups was 55 per 100,000.

By preventing the injury for all other groups to the rate level as the reference group (reference rate), a total of 33 injury could be avoided in Southern district per year, an equivalent of HKD 23,100.

Among all groups, males aged 15 to 19 had the highest annual avoidable injury number (23).
7.2.2.10 2009-2012 年南區按性別和年齡組別劃分家居意外損傷到急症室求診數字

7.2.2.10 Domestic AED attendances by Sex and Age Group of Southern district, 2009-2012

Figure 7.2.2.10: Domestic annual AED attendance rates with annual avoidable injury numbers, by sex and age group, Southern district, 2009-2012

From 2009 to 2012, males aged 0 to 4 had the highest annual domestic attendance rate (4,735 per 100,000) while females aged 15 to 19 (reference group) had the lowest (692 per 100,000). The average rate across the 8 groups was 1,952 per 100,000.

By preventing the injury for all other groups to the rate level as the reference group (reference rate), a total of 479 injury could be avoided in Southern district per year, an equivalent of HKD 335,300.

Among all groups, males aged 0 to 4 had the highest annual avoidable injury number (182).

在 2009 至 2012 年期間，0 至 4 歲的男性是每年家居意外損傷求診率最高的組別，每十萬人有 4,735 人次；而 15 至 19 歲的女性（參照組別）則是最低，每十萬人有 692 人次。求診率在八個組別的平均數為每十萬 1,952 人次。

當其他組別的損傷率減低至參照組別的水平（參照比率）後，南區每年便可避免 479 宗損傷並且節省港幣 335,300 元的醫療開支。

0 至 4 歲的男性是每年可避免損傷數字最高的組別(182)。
From 2009 to 2012, males aged 10 to 14 had the highest annual sports attendance rate (1,852 per 100,000) while females aged 0 to 4 (reference group) had the lowest (53 per 100,000). The average rate across the 8 groups was 716 per 100,000.

By preventing the injury for all other groups to the rate level as the reference group (reference rate), a total of 367 injury could be avoided in Southern district per year, an equivalent of HKD 256,900.

Among all groups, males aged 15 to 19 had the highest annual avoidable injury number (139).
The purpose of Part 8 is to analyse AED attendance data and socio-economical characteristics of the districts from 2001 to 2012. Negative binomial regression model was adopted.

Four indicators are selected from the "Population and Household Statistics Analysed by District Council district of 2001 to 2012". The four indicators, which are used as independent variables, are explained below:

1. Average household size: number of household members in a domestic household.

2. Tenure of accommodation: the terms or conditions under which the accommodation is held by a domestic household. It is proxied by percentage of owner-occupied household, which refers to the number of owner-occupied households per 100 domestic household.

3. Median household income: Total income received by all members of a household so calculated that 50% of the total income received by all members of a household are above this number and the other are below it.

4. Labour force participation rate: the proportion of labour force in the total land-based non-institutional
population aged 15 and over.

An additional independent variable, namely the sex indicator (0 means male, 1 means female), is introduced to investigate the gender difference.

To account for difference in population across districts and years, the dependent variable (attendance number) has already adjusted by population.

The regression result will be analysed and summarized in Part 8.1.
### 8.1 Negative Binomial Regression Result of AED attendances due to injury

Table 8.1: Negative Binomial Regression Result of AED attendances due to injury

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>All (95% CI)</th>
<th>Intentional (95% CI)</th>
<th>Unintentional (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex (0=M, 1=F)</td>
<td>0.5372 0.0000***</td>
<td>0.3633 0.0000***</td>
<td>0.5252 0.0000***</td>
</tr>
<tr>
<td>Average household size</td>
<td>1.6345 0.0000***</td>
<td>2.2571 0.0000***</td>
<td>1.4502 0.0000***</td>
</tr>
<tr>
<td>Percentage of owner occ. household (%)</td>
<td>0.9993 0.6093</td>
<td>1.003 0.0502</td>
<td>0.994 0.0003***</td>
</tr>
<tr>
<td>Labour Force participation rate (%)</td>
<td>1.0168 0.0015**</td>
<td>1.0193 0.0011**</td>
<td>1.0241 0.0001***</td>
</tr>
</tbody>
</table>

Remark: The intercept is not shown here. 備註：此部分並未列載截距。

Figure of 0.0000 in the columns of p-value means that the value is below 0.0001 and not necessarily equal to nil figure. p-值 0.0000 指該項數字是在 0.0001 以下，並不一定等於零的數字。

* p-value<0.05 ** p-value<0.01 *** p-value<0.001 * p-值<0.05 ** p-值<0.01 *** p-值<0.001
Table 8.1: Negative Binomial Regression Result of AED attendances for each injury type (continued)

<table>
<thead>
<tr>
<th>Injury Type</th>
<th>Common assault</th>
<th>Indecent assault</th>
<th>Child abuse</th>
<th>Self-harm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative risk</td>
<td>Relative risk</td>
<td>Relative risk</td>
<td>Relative risk</td>
<td>Relative risk</td>
</tr>
<tr>
<td>(95% CI)</td>
<td>(95% CI)</td>
<td>(95% CI)</td>
<td>(95% CI)</td>
<td>(95% CI)</td>
</tr>
<tr>
<td>Relative risk</td>
<td>p-value (95% CI)</td>
<td>p-value (95% CI)</td>
<td>p-value (95% CI)</td>
<td>p-value (95% CI)</td>
</tr>
<tr>
<td>0.2447</td>
<td>0.0000 ***</td>
<td>1.6751</td>
<td>0.0000 ***</td>
<td>1.0731</td>
</tr>
<tr>
<td>(0.2335,0.2565)</td>
<td>(1.4067,1.9964)</td>
<td>(0.9656,1.1926)</td>
<td>(0.9835,0.8435)</td>
<td></td>
</tr>
<tr>
<td>2.1269</td>
<td>0.0000 ***</td>
<td>1.2697</td>
<td>0.3969</td>
<td>0.7043</td>
</tr>
<tr>
<td>(1.8547,2.4397)</td>
<td>(0.7279,2.2725)</td>
<td>(0.5008,0.9914)</td>
<td>(1.2697,6.2011)</td>
<td></td>
</tr>
<tr>
<td>1.0013</td>
<td>0.3897</td>
<td>0.9948</td>
<td>0.3829</td>
<td>0.9955</td>
</tr>
<tr>
<td>(0.9983,1.0044)</td>
<td>(0.9828,1.0069)</td>
<td>(0.9881,1.0029)</td>
<td>(0.9955,1.0247)</td>
<td></td>
</tr>
<tr>
<td>0.9334</td>
<td>0.0000 ***</td>
<td>0.9578</td>
<td>0.0060 **</td>
<td>0.9584</td>
</tr>
<tr>
<td>(0.926,0.9407)</td>
<td>(0.9286,0.9874)</td>
<td>(0.9417,0.9753)</td>
<td>(0.9584,0.948)</td>
<td></td>
</tr>
<tr>
<td>1.0231</td>
<td>0.0001 ***</td>
<td>0.9893</td>
<td>0.6424</td>
<td>1.03</td>
</tr>
<tr>
<td>(1.0112,1.0351)</td>
<td>(0.9459,1.0346)</td>
<td>(1.0025,1.0582)</td>
<td>(1.03,0.9925)</td>
<td></td>
</tr>
</tbody>
</table>

Remark: The intercept is not shown here.

備註：此部分並沒有載列截距。

Figure of 0.0000 in the columns of p-value means that the value is below 0.0001 and not necessarily equal to nil figure.

* p-value<0.05  ** p-value<0.01  *** p-value<0.001  * p-value<0.05  ** p-value<0.01  *** p-value<0.001
<table>
<thead>
<tr>
<th>Traffic</th>
<th>Industrial</th>
<th>Domestic</th>
<th>Sports</th>
</tr>
</thead>
<tbody>
<tr>
<td>相對風險</td>
<td>相對風險</td>
<td>相對風險</td>
<td>相對風險</td>
</tr>
<tr>
<td>(95% CI)</td>
<td>(95% CI)</td>
<td>(95% CI)</td>
<td>(95% CI)</td>
</tr>
<tr>
<td>p-value</td>
<td>p-value</td>
<td>p-value</td>
<td>p-value</td>
</tr>
<tr>
<td>(95% 置信區間)</td>
<td>(95% 置信區間)</td>
<td>(95% 置信區間)</td>
<td>(95% 置信區間)</td>
</tr>
<tr>
<td>0.7104</td>
<td>0.2483</td>
<td>0.6744</td>
<td>0.2845</td>
</tr>
<tr>
<td>(0.6758,0.7468)</td>
<td>(0.231,0.267)</td>
<td>(0.6382,0.7126)</td>
<td>(0.2709,0.2987)</td>
</tr>
<tr>
<td>1.8612</td>
<td>3.6248</td>
<td>1.2686</td>
<td>1.7208</td>
</tr>
<tr>
<td>(1.6038,2.1605)</td>
<td>(2.9373,4.4764)</td>
<td>(1.0857,1.4822)</td>
<td>(1.4905,1.9869)</td>
</tr>
<tr>
<td>1.0084</td>
<td>0.9995</td>
<td>0.9911</td>
<td>0.9972</td>
</tr>
<tr>
<td>(1.0051,1.0117)</td>
<td>(0.9951,1.0041)</td>
<td>(0.9876,0.9946)</td>
<td>(0.9941,1.0004)</td>
</tr>
<tr>
<td>0.9833</td>
<td>0.9416</td>
<td>0.9894</td>
<td>0.9941</td>
</tr>
<tr>
<td>(0.9753,0.9913)</td>
<td>(0.9302,0.953)</td>
<td>(0.9807,0.9983)</td>
<td>(0.9863,1.002)</td>
</tr>
<tr>
<td>1.002</td>
<td>1.0252</td>
<td>1.028</td>
<td>1.0177</td>
</tr>
<tr>
<td>(0.9892,1.0149)</td>
<td>(1.0067,1.0441)</td>
<td>(1.0138,1.0424)</td>
<td>(1.0052,1.0304)</td>
</tr>
</tbody>
</table>

Remark: The intercept is not shown here. 備註：此部分並沒有載列截距。

Figure of 0.0000 in the columns of p-value means that the value is below 0.0001 and not necessarily equal to nil figure. p-值 0.0000 指該項數字是在 0.0001 以下，並不一定等於零的數字。

* p-value<0.05 ** p-value<0.01 *** p-value<0.001 * p-值<0.05 ** p-值<0.01 *** p-值<0.001
(Remark: Throughout the discussion in this part, p-value of less than 0.05 (marked as * in Table 8.1) is regarded as statistically significant.)

**Explanation of Relative Risk**

The coefficient of 0.5372 in the relative risk of sex in the "all" column means that after adjusting for the remaining independent variables, the expected risk of female having AED attendance due to injury is 0.5372 times of males. In other words, the expected risk of females is less than that of males.

Likewise, the coefficient of 1.6345 in the relative risk of average household size means that after adjusting for the remaining independent variables, the risk of having AED attendance due to injury is expected to increase by 1.6345 times, for every unit increase in average household size.

The remaining variables can be interpreted similarly.

**Explanation of Protective/Risk Factor**

The magnitude of relative risk is useful in identifying potential protective and risk factors. A relative risk greater than 1 indicates the factor is associated with increased risk. If statistically significance is found, the factor is called risk factor.

On the other hand, a relative risk less than 1 indicates decreased risk. If statistically significance is found, the factor is called protective factor.
Explanation of Confidence Interval
The precision of a sample estimate can be reflected by its “Confidence Interval”. Given the same confidence level, the larger the confidence interval, the less precise is the estimate. The meaning of the confidence interval is as follows: "If similar confidence intervals were constructed for each of the 100 different samples of the same size selected using the same sampling method, one would expect that 95 of them would cover the population parameter."

Explanation of p-value
The column of p-value is to test whether the coefficient of independent variable is statistically different from 1. The smaller the p-value, the stronger the evidence that it is statistically different from 1. In this part, p-value of less than 0.05 is regarded as statistically significant.

Analysis of Result
For all types of injury except indecent assault, child abuse and self-harm, there is strong statistical evidence that male is more susceptible of injury than female, after holding other independent variables constant. Female is more susceptible of indecent assault injury than male.

Except for indecent assault and child abuse, increasing average household size is found to be a risk factor for all injury types, while it is a protective factor for child abuse.

Increasing percentage of...
owner-occupied household is a risk factor for unintentional and domestic injury, while it is a protective factor for self-harm and traffic injury.

Higher median household income is a protective factor for all injury types except for sports injury.

Higher labour force participation rate is a risk factor for all injury types except for indecent assault, self-harm and traffic injury.

意和家居意外損傷的風險因素；但
在自殘和交通意外損傷方面，則是
防禦因素。

除了運動意外損傷外，較高的住戶
人息中位數是所有損傷種類的防禦
因素。

除了非禮、自殘和交通意外損傷
外，較高的勞動人口參與率是所有
損傷種類的風險因素。
9.1 General Recommendations

The incidence of unintentional childhood injury and mortality continue to fall, but it still contributes significantly to the overall disease burden in Hong Kong. The incidence of intentional injury, namely common assault, child abuse and self-harm, however have been increasing. Over the years, some districts have reduction in their child injury rates reflecting an increase in uptake of and implementation of preventive policies, other districts have not been performing so well and further actions and preventative strategies should be encouraged.

Despite its significant public health impact and that child injury are largely predictable and preventable; it has not been accorded high priority in the local health agenda. In order to strive for reducing avoidable injury to the children and adolescents of Hong Kong, we thereby identified three key aspects of recommendations to District Councils, including assessment, strategic planning and action planning. They are made with reference to the findings of the injury profile and the child safety action plan proposed by the European Child Safety Alliance. Further, the child safety action plan process has been modified to address local needs and its feasibility for implementation. Figure 9.1 illustrates the Child Safety Action Plan.

儘管損傷對公眾健康有著重大的影響，以及兒童損傷在很大程度上是可預測和可預防的，然而它在本地衛生議程當中並沒有被給予高度的重視。為了爭取減少香港兒童和青少年可避免的損傷，我們因此擬定了三方面的主要建議給區議會，包括評估，策略規劃和行動計劃。這些建議參照了損傷地區報告結果及歐洲兒童安全聯盟提出的兒童安全行動計劃。另外，兒童安全行動計劃的進程對切合本地需要和其實施的可行性已作修改。圖 9.1 說明了兒童安全行動計劃的發展過程，可以循序漸進，從評估到策略規劃和最終到達行動計劃。這三方面，也可以根據地區需要和資源作獨立經營和管理。
Development Process, which can be carried out stepwise from assessment proceeds into strategic planning and finally reaches action planning. These three aspects can also be operated and managed separately according to district needs and resources.
圖 9.1 兒童安全行動計劃編制過程
Figure 9.1: Child Safety Action Plan Development Process

社區參與

政府認可程序

實施良好的實踐

社區參與

相關持份者的參與

狀況分析

地區關注

優先考慮預防性活動

策略規劃
Assessment
Assessment involves engaging relevant stakeholders in local communities in the planning process, gathering data and information, and conducting situation analyses to identify and explore strengths, weakness, opportunities and threats. In the injury profile, pattern of unintentional injury were found to vary among different districts and age groups. It is thus necessary to tackle such a complex issue by conscripting support from various stakeholders in the government and the community so that each party can contribute their expertise and resources to make injury prevention effective.

A geo-spatial injury surveillance system will be developed with standardised data collection methods. Such data and information will be used as baseline measures and indicators for the burden of injury at 18 districts and sub-district level. Moreover, it serves as useful information to explore the effect of health and social inequalities on child injury rate and effectiveness of injury prevention strategies in addressing inequalities. District profiles will be developed using the indicator data and served to inform planning by identifying strengths and weakness at district level in relation to child safety. The profile will also assist districts in the identification of critical issues which can be tackled through strategic planning and action planning. They will be also useful as well as important for future benchmarking and evaluation.

評估
評估包括在規劃過程中加入本地社區持份者，收集數據和資料，並進行情況分析，以鑑定和探索優勢、劣勢、機會和威脅。在損傷地區報告中，非蓄意兒童損傷在不同地區及不同年齡層而有所差異。有見及此，建議必須要吸納在政府裡和社會各界不同的持份者的支持，使各方都可以貢獻自己的專長和資源，以達至有效地預防損傷並解決這複雜的問題。

建議將開發一個地理損傷監測系統用作數據收集的統一化。這些數據和資料將被用作十八區及其分區的損傷負擔基準衡量標準和指標。同時，亦可作為有用的資訊，以探索就健康和社會不平等對兒童損傷率的影響和有效性的預防策略。已收集的指標數據將製作成損傷地區報告及鑑定有關兒童安全地區性的優勢和弱點。此損傷地區報告亦有助各區鑑定危急的問題，就解決方案計劃策略行動。它們作為基準評價和評估將會是不可或缺的一環。
Strategic Planning

Strategic planning involved the promotion of safe community in all district councils of Hong Kong. To foster the development of a safe community, resources should be mobilized across sectors to implement effective injury prevention programmes at local community levels. The alliance for healthy cities plays an active role in this area. Districts in this alliance would help to plan and organize a variety of large scale activities, including roving exhibitions, publicity programmes and home safety training, etc., to promote safety within the community. This can form a good platform for injury intervention and safety promotion.

Parallel with the promotion of safe community among districts, it would be equally important to identify individual district concerns and peculiarities in relation to injury and safety. Decisions and designs of future endeavours and programmes of districts must focus on and utilize the demographic, geographic and social characteristics of the local situations. Community based diagnoses will provide districts with evidence based data and information for exhaustive considerations and actions for the improvements of the health and safe environments. Continuity and sustainability of district based programs are essential for the prudent and best use of limited community resources and the realization interventions efficacy.

Plan and prioritize intervention campaigns with emphasize on the cross cutting nature of child injury prevention campaigns with emphasize on the cross cutting nature of child injury prevention programmes at local community levels. The alliance for healthy cities plays an active role in this area. Districts in this alliance would help to plan and organize a variety of large scale activities, including roving exhibitions, publicity programmes and home safety training, etc., to promote safety within the community. This can form a good platform for injury intervention and safety promotion.

Parallel with the promotion of safe community among districts, it would be equally important to identify individual district concerns and peculiarities in relation to injury and safety. Decisions and designs of future endeavours and programmes of districts must focus on and utilize the demographic, geographic and social characteristics of the local situations. Community based diagnoses will provide districts with evidence based data and information for exhaustive considerations and actions for the improvements of the health and safe environments. Continuity and sustainability of district based programs are essential for the prudent and best use of limited community resources and the realization interventions efficacy.

Plan and prioritize intervention campaigns with emphasize on the cross cutting nature of child injury prevention programmes at local community levels. The alliance for healthy cities plays an active role in this area. Districts in this alliance would help to plan and organize a variety of large scale activities, including roving exhibitions, publicity programmes and home safety training, etc., to promote safety within the community. This can form a good platform for injury intervention and safety promotion.

Parallel with the promotion of safe community among districts, it would be equally important to identify individual district concerns and peculiarities in relation to injury and safety. Decisions and designs of future endeavours and programmes of districts must focus on and utilize the demographic, geographic and social characteristics of the local situations. Community based diagnoses will provide districts with evidence based data and information for exhaustive considerations and actions for the improvements of the health and safe environments. Continuity and sustainability of district based programs are essential for the prudent and best use of limited community resources and the realization interventions efficacy.

Plan and prioritize intervention campaigns with emphasize on the cross cutting nature of child injury prevention programmes at local community levels. The alliance for healthy cities plays an active role in this area. Districts in this alliance would help to plan and organize a variety of large scale activities, including roving exhibitions, publicity programmes and home safety training, etc., to promote safety within the community. This can form a good platform for injury intervention and safety promotion.

Parallel with the promotion of safe community among districts, it would be equally important to identify individual district concerns and peculiarities in relation to injury and safety. Decisions and designs of future endeavours and programmes of districts must focus on and utilize the demographic, geographic and social characteristics of the local situations. Community based diagnoses will provide districts with evidence based data and information for exhaustive considerations and actions for the improvements of the health and safe environments. Continuity and sustainability of district based programs are essential for the prudent and best use of limited community resources and the realization interventions efficacy.

Plan and prioritize intervention campaigns with emphasize on the cross cutting nature of child injury prevention programmes at local community levels. The alliance for healthy cities plays an active role in this area. Districts in this alliance would help to plan and organize a variety of large scale activities, including roving exhibitions, publicity programmes and home safety training, etc., to promote safety within the community. This can form a good platform for injury intervention and safety promotion.

Parallel with the promotion of safe community among districts, it would be equally important to identify individual district concerns and peculiarities in relation to injury and safety. Decisions and designs of future endeavours and programmes of districts must focus on and utilize the demographic, geographic and social characteristics of the local situations. Community based diagnoses will provide districts with evidence based data and information for exhaustive considerations and actions for the improvements of the health and safe environments. Continuity and sustainability of district based programs are essential for the prudent and best use of limited community resources and the realization interventions efficacy.

Plan and prioritize intervention campaigns with emphasize on the cross cutting nature of child injury prevention programmes at local community levels. The alliance for healthy cities plays an active role in this area. Districts in this alliance would help to plan and organize a variety of large scale activities, including roving exhibitions, publicity programmes and home safety training, etc., to promote safety within the community. This can form a good platform for injury intervention and safety promotion.

Parallel with the promotion of safe community among districts, it would be equally important to identify individual district concerns and peculiarities in relation to injury and safety. Decisions and designs of future endeavours and programmes of districts must focus on and utilize the demographic, geographic and social characteristics of the local situations. Community based diagnoses will provide districts with evidence based data and information for exhaustive considerations and actions for the improvements of the health and safe environments. Continuity and sustainability of district based programs are essential for the prudent and best use of limited community resources and the realization interventions efficacy.

Plan and prioritize intervention campaigns with emphasize on the cross cutting nature of child injury prevention programmes at local community levels. The alliance for healthy cities plays an active role in this area. Districts in this alliance would help to plan and organize a variety of large scale activities, including roving exhibitions, publicity programmes and home safety training, etc., to promote safety within the community. This can form a good platform for injury intervention and safety promotion.

Parallel with the promotion of safe community among districts, it would be equally important to identify individual district concerns and peculiarities in relation to injury and safety. Decisions and designs of future endeavours and programmes of districts must focus on and utilize the demographic, geographic and social characteristics of the local situations. Community based diagnoses will provide districts with evidence based data and information for exhaustive considerations and actions for the improvements of the health and safe environments. Continuity and sustainability of district based programs are essential for the prudent and best use of limited community resources and the realization interventions efficacy.

Plan and prioritize intervention campaigns with emphasize on the cross cutting nature of child injury prevention programmes at local community levels. The alliance for healthy cities plays an active role in this area. Districts in this alliance would help to plan and organize a variety of large scale activities, including roving exhibitions, publicity programmes and home safety training, etc., to promote safety within the community. This can form a good platform for injury intervention and safety promotion.
involving different sectors like health, environment, education, justice, transport and housing etc. to encourage greater investment in child injury prevention and integration of prevention policy across multiple sectors. In particular, to make use of injury data, credible sources of information and evidence-based practices to develop injury prevention programmes in such form that appeal to varying audiences and to support health promotion activities.

**Action Implementation**

Action implementation involves the execution of priority actions for health improvement in the area of injury prevention, and to make recommendations on the development, implementation and evaluation of action plans for the prevention of injury. Relevant stakeholders and partners will be actively engaged for effective implementation of the action plan. For actions to be effective there is a need for concerted efforts across communities, requiring intra-sectorial and inter-sectorial collaborations. District Councils to take initiation and act as the leader by bringing together non-government organizations and community groups that have been implementing health promotion programmes targeting at risk population subgroups and individuals to promote safety awareness and injury prevention. Capacity building strengthens the community’s ability to prevent and tackle health problems by increasing people’s knowledge and skills. Increased safety literacy can help expand the reach and scale of injury prevention efforts.

**行動的執行**

執行行動涉及實施有關預防損傷的行動，以改善健康意識行動的順序為首，並就有關發展，執行和評估行動提出建議，以達至預防損傷的目標。持份者和合作夥伴將積極參與，令計劃執行能有效地實施。要讓行動有效，務必要令整個社區發揮共同努力，亦需要內部部門與部門間緊密的合作。區議會需擔當發起人並作為領導者角色，匯集康健推廣方案的非政府組織和社區組別，提升高危群組及人士的預防損傷之安全意識。能力建設有助加強社區的能力，並通過增加群眾的知識和技能去預防和解決健康問題。提高社區和公眾的安全意識必然有助延長和維持預防損傷的效果。
extend and sustain the effect of injury prevention.

Regular collection of injury data becomes a pre-requisite of an effective injury prevention programme. Therefore, programme outcome should be continuously monitored and evaluated to ensure that district and population needs are addressed. The public health system under the Hong Kong Hospital Authority where most of the AED and in-patient information are electronically captured can be served as the key platform for trend monitoring and evaluation. The system also acts as a useful foundation for the development of robust injury surveillance. It can be further enhanced in capturing the International Classification of External Causes of Injury (ICECI) and geo-spatial data. For evaluation purpose, this system will help to identify high risk groups and areas, and benchmark and monitor child injury pattern in different districts.

In order to ensure public awareness and most importantly commitment to action and programme implementation, District Councils should communicate with the government that to take the lead to develop and endorse a set of policy priorities, which to improve the safety of children within communities based on the district child injury profile.

定期收集損傷數據是籌組有效預防損傷計劃的一個先決條件。因此，計劃成果應被持續監測和評估，以確保隨著地區和人口的需求轉變而得以優化改善。香港醫院管理局轄下的公共衛生體系，其中大部分的急症和住院資料已用電子系統記錄儲存，可作為對趨勢的監測和評估的重要平台，此系統還可以作為損傷監測的一個基礎並可以以損傷外部原因國際分類和地理數據作進一步分析。就評估的目的，該系統將有助於鑑定高危組別和地區，作為基準和監測不同地區兒童損傷的模式。

為了確保提高公眾的意識，對行動和方案實施的承諾至為重要，區議會應與政府緊密溝通並以帶頭方式制定並批准一系列的重點政策，以地區報告為主促進社區兒童的安
全。
9.2 District-based Recommendations

Major Injury Concerns

For the period of 2001 to 2012, the overall injury ranking of Southern District was deteriorated from 12th to 10th. Injuries caused by traffic, child abuse, sports and domestic were found severe in recent period.

**ACTION:** District Councils to take initiation and act as the leader by bringing together non-government organizations and community groups to implement injury prevention and education programmes.

Data Capturing System of the Hospital Authority Database

In terms of geographical distribution of child injuries in Hong Kong, residential districts of injured patients were based on the last known address recorded in Hospital Authority system as it could provide complete valid address for most of the patients. However, the last known residential address may differ from location where the incident of injury occurred. This might affect the interpretation of geographical association.

**ACTION:** District Councils to act as the advocator to seek for Hospital Authority’s support and endorsement to collect additional injury data in existing hospital data capture system.

Additional Data Sources

If the concern of protection of personal data could be addressed, to interlink data from various authorities through multi-sectorial collaboration among the
Department of Health, Police, Transport Department, Social Welfare Department and the Hospital Authority. This would help to map the responsibility for child injury prevention such as education, transport, social service, justice, environment, sports and leisure.

**ACTION:** District Councils to conscript support from various stakeholders in the government to explore the possibility of accessing additional sources of injury data to enrich hospital-based injury surveillance system.

**On-Going Evaluation**

This profile used accident and emergency attendance data to measure the nature and extent of child injury burden in Hong Kong. In long-term, such evaluation is targeted to be conducted regularly to reveal trends and needs of services, and to facilitate the allocation of resources where the burden of injuries is high but lacking of effective interventions. It is also intended to stimulate policy makers and health professionals to devise cost-effective programmes and improvements in needed services, such as hospital care and rehabilitation.

**ACTION:** District Councils to provide yearly funding to conduct evaluation and thematic research.

映射各範疇如教育、交通、社會服務、司法、環境、體育及休閒與預防兒童損傷責任的關係。

**行動:** 各區議會以吸納政府裡不同的利益相關者的支持，以探索使用更多損傷數據來源的可能性，從而強化以醫院為基礎的損傷監測系統。

**持續評估**

此報告就往急症室求診的損傷個案數據作為損傷性質和程度，以分析有關香港兒童損傷對社會的負擔。長遠而言，這樣的評估將會定期並針對性地進行以揭示趨勢和服務需要，並促進資源的分配，尤其於損傷負擔高，但缺乏有效預防措施的地區。它亦旨在激發決策者和衛生專業人員制定符合成本效益的方案，並改善服務需要，如醫院護理和康復治療。

**行動:** 各區議會每年提供資金進行評估和專題研究。
此頁為空白
THIS IS A BLANK PAGE
**10 未來路向**

**10 Way Forward**

Based on experiences in other countries and the established system in Hong Kong, a three pronged approach would be the way forward:

1. **To establish a lead agency in development of HKSAR child safety plans** and in coordination and implementation the plan of actions.
2. **To develop a geo-spatial injury surveillance system** for collection of data and relevant information, including:
   a. Burden of injury at 18 districts and sub-district level
   b. The effect of health and social inequities on child injury rate and effectiveness of injury prevention strategies in addressing inequities
   c. Mapping of the responsibility for child injury prevention such as education, transport, social service, justice, environment, sports and leisure
3. **To monitor the progress in child safety action through HKSAR child safety report cards** and injury profiles in 18 districts
4. **To develop and pilot an easy-to-use Child Safety Index and tool kit** to allow sub-district localities to assess their safety performance against HKSAR and

根據其他國家的經驗和香港現有的系統，一個三管齊下的方案是未來的路向：

1. **在香港特別行政區建立領導性機構發展兒童安全計劃及協調和實施行動計劃**
2. **開發一個地理損傷監測系統收集數據及相關信息，包括：**
   a. 十八區及其分區的損傷負擔
   b. 因應衛生情況和社會不平等等因素對兒童損傷率的影響和預防損傷策略效益發表報告
   c. 在各範疇如教育、交通、社會服務、司法、環境、體育及休閒等映射與預防兒童損傷責任的關係
3. **通過香港特別行政區兒童安全報告卡和損傷地區報告監控兒童安全行動的進展情況**
4. **制定並試行一個易於使用的兒童安全指標和工具，使地區分區得以評估它們的安全表現對比香港特區及地區情況，並優先考慮所需行動**
district picture, and prioritize their actions.

5. To promote researches for the development of evidence-based good safety practices and intervention programmes for Hong Kong.

6. To establish a Child Safety Centre to advocate for the adoption, implementation and enforcement of child injury evidence-based good safety practices and legislations for home, sport, traffic, water, burn/scald, fall, drug/poison and product related injury; to educate and train children and child carers on safety practices.

7. To establish a safe community platform in 18 districts to enhance multi-sectoral responses and actions using collaboration multiplier toolkit.

8. To set up Community Child Safety coordinator in each District in which to explore facilitators and barriers to multi-sectoral actions at district and sub-district levels, and to communicate results in order to support development and/or implementation of HKSAR child safety plans.

5. 提倡研究作為香港發展以實證為本的良好安全實踐和預防方案

6. 建立一個兒童安全中心，實施和執行以實證為本的良好安全實踐並立法以應對兒童損傷，於家庭、體育、交通、水、燒／燙傷、跌倒、藥物／毒物及產品有關的損傷；教育和培訓兒童和兒童照顧者有關安全準則的實踐

7. 在十八區內建立一個安全社區平台，運用多層構架加速多部門的反應和行動

8. 在每區設立社區兒童安全協調員，以探索地區和分區的促進因素和障礙，以傳達結果支持發展或推行香港特區兒童安全計劃
表 10.1: 三管齊下的兒童損傷預防方案

<table>
<thead>
<tr>
<th>鑑定</th>
<th>推行</th>
<th>促進</th>
</tr>
</thead>
<tbody>
<tr>
<td>以活動去鑑定高危組別和高風險地區，並作參考基準和監測預防兒童損傷行動</td>
<td>以活動去支撐和推行以實證為本的兒童損傷預防措施</td>
<td>採用衛生教育診斷評價模式和多層協作方式的活動，以促進損傷預防行動於普及化和多元化的推行</td>
</tr>
</tbody>
</table>

### 政策層面：領導機構和香港特區兒童安全行動計劃 2015-2020

<table>
<thead>
<tr>
<th>開發地理損傷監測系統，收集資料作計劃行動：</th>
<th>兒童安全和損傷研究中心與學術機構和非政府組織合作，以及所有地區合作夥伴的參與</th>
<th>在十八區中成立安全社區，包括正式結構和資金支持及：</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 以兒童安全報告卡和報告作為標準化的指標</td>
<td>- 兒童安全中心推廣良好的實踐，教育和培訓。傳播機制，包括基於網絡和其他方式：</td>
<td>- 安全協調員</td>
</tr>
<tr>
<td>- 利用組織運作圖為映射工具，探討不平等問題，推行兒童安全政策的責任和結;並收集和量度認為和實際接觸到的危害和防護措施</td>
<td>- 實用工具和資源，以促進3個階段的兒童發展的和特定的安全部</td>
<td>- 協調規劃和預防</td>
</tr>
<tr>
<td></td>
<td>- 案例分析</td>
<td></td>
</tr>
</tbody>
</table>

### 地區層面

<table>
<thead>
<tr>
<th>兒童安全指標和工具</th>
<th>兒童安全週</th>
<th>兒童安全社區計劃</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 供地區/分區了解表現及優先行動安排</td>
<td>- 報告損傷狀態和行動計劃</td>
<td>- 根據世界衛生組織的6項指標</td>
</tr>
<tr>
<td>- 發展地區化的兒童安全行動計劃</td>
<td></td>
<td>學校安全</td>
</tr>
<tr>
<td></td>
<td></td>
<td>計劃實施以國際/香港區兒童安全行動為根據</td>
</tr>
</tbody>
</table>

### 分區層面

<table>
<thead>
<tr>
<th>地理損傷監測系統以鑑定高危屋邨，道路，遊樂場等</th>
<th>社區安全平台以宣傳並執行多層式合作模式</th>
<th>計劃落實執行包括家訪，遊樂場檢視及教育培訓，辨識交通黑點</th>
</tr>
</thead>
<tbody>
<tr>
<td>於香港特區及地區／分區中增加以實證作支持的行動</td>
<td>增強社區間的合作及保障意識／健康</td>
<td>從而減少損傷發生</td>
</tr>
</tbody>
</table>

141
Table 10.1: The three pronged child injury prevention approach

<table>
<thead>
<tr>
<th>Identification</th>
<th>Implementation</th>
<th>Promotion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities to identify high risk groups and high risk areas, and to benchmark and monitor child injury and intervention actions</td>
<td>Activities to support the uptake and implementation of evidence-based child injury prevention practices</td>
<td>Activities to promote universal and targeted multi-sectoral actions on injury intervention using PRECED-PROCEED model and collaboration multiplier model</td>
</tr>
</tbody>
</table>

### Policy level: Lead Agency and HKSAR Child Safety Action Plans for 2015-2020

**Development of Geo-spatial Injury Surveillance system** to collect information for planning of actions:
- Child Safety Report Cards and Profiles based on standardised set of indicators
- Organigraphs as a mapping tool to address inequalities, responsibilities and structures of the implementation of child safety policies; and to collect and measure perceived and actual exposure to hazards and protective interventions.

**Child Safety and Injury Research Centre** in collaboration with a group of academic institutions, NGOs and participation of partners in all districts

**Quinquennial household injury survey** to collect snap-shot data on the population

**Child Safety Centre** for promotion of good practices, education and training. Dissemination mechanisms include web-based and other means:
- Practical tools and resources for 3 stages of child development and on specific safety areas
- Case studies

**Establishment of Safe Community in 18 districts** with formal structure and funding support:
- Safety Coordinator
- Collaboration Multiplier
- Coordinate planning and intervention

### District Level

**Child Safety Index and Tool Kit**
- For District/Sub-district to access performance and prioritize actions
- Development of district based child Safety Action Plans

**Child Safety Weeks**
- Reporting on injury status and action plan

**Child Safe Community Initiative**
- 6 indicators according to the World Health Organization

**Safe Schools**
- International/HKSAR Implementation of District based Child Safety Action Plans

### Sub-District Level

**Geo-spatial Injury Surveillance system** to identify high risk estates, roads, playgrounds etc.

**Safe community platform** for dissemination and implementation using collaborative multiplier model

**Programme implementation**, including: home visitation, playground inspection and education, traffic hot zone identification and ratification

**Increased uptake of evidence-based actions at HKSAR and District/sub-district levels**

**Enhanced community coalition and sense of security/well-being**

**Reduction in Injury**
This is a blank page
The research team would like to thank the Health Care and Promotion Fund for supporting this research project and the District Councils for the tremendous support and valuable comments. We also wish to acknowledge the Census and Statistics Department and the Hospital Authority for their assistance in data retrieval.
References


--全報告完--

--END OF REPORT--
Childhood Injury Profile for Southern District 2001-2012

AED medical cost
$474,010 per year (29.7%) Avoidable

$1,597,517 per year In Total

Notable injury types
Improving Self-harm
Deteriorating Sports
Need improvement Traffic

Vulnerable groups
Boys 0-4 years 6,872 per 100,000
Boys 10-14 years 5,595 per 100,000
Boys 15-19 years 5,444 per 100,000
Girls 0-4 years 5,264 per 100,000

AED attendance rates

2001-2004
2005-2008
2009-2012

Avoidable

Department of Paediatrics & Adolescent Medicine
The University of Hong Kong
1 Executive Summary and Infographic

Child injury is the leading cause of mortality, morbidity and disability for children over 1 years of age in Hong Kong. There are wide variations in rates of injury between Districts and is related to socio-economic gradient among the districts. The Hong Kong injury district profile has allowed comparative assessment of the burden of child injury among districts. It also demonstrated the importance of systematic surveillance for accurate needs assessment among districts. Through the examination of 12-year period child injury related AED attendance data, it revealed significant variations by districts and the most at risk age group and the leading threats for each district. This profile has also provided the foundation for injury data analysis in terms of geo-spatial analysis, which would be useful in health services planning at district level.

In summary, there is great variability in burden of child injury among the 18 Districts in Hong Kong throughout the 12-year study period. If all districts can be supported, strengthened and empowered to implement the best injury prevention strategies as in the safest district in Hong Kong, up to 30% of injuries can be prevented. The profile would help to inform planning by identifying districts’ strengths and weakness in relation to actions to reduce child injuries and to assist district councils in the identification of...

總括而言於12年研究期中，兒童損傷的影響和負擔在十八區中有很大的差異。據估計，如果所有地區都以香港最低兒童損傷率地區作目標，在各區加強和實施以實證為基礎的策略，有高達30%的損傷是可以預防的。這報告將有助以地區的優勢和弱點作鑑定，規劃有關活動從而減少兒童損傷，並協助區議會鑑定關鍵性的差別繼而作策略性和行動性的規劃。它還提供了重要...
critical gaps upon which subsequent strategic planning and action planning can take place. It also provides important indicators for benchmarking and evaluation, which help to inform future polices in terms of leadership, infrastructure and capacity to support child injury prevention efforts.