

# 2013

## East District, Hsinchu City

# Safe Community Application Report



East District, Hsinchu City  
Safe Community, Taiwan



**Application to Become a Member of  
the International Safe Community Network**  
for International Designation as a Safe Community by the  
WHO Collaborating Centre on Community Safety Promotion

**East District, Hsinchu City,  
TAIWAN**

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## Preface

The East District in Hsinchu City is developed earlier than the rest of the area; therefore, the cultural and commercial activity is very prosperous. With the development of high technology industry, it is called “Taiwan Silicon Valley”. However, the issue of rapid growth of immigrants and traffic come along. In order to provide a safer living environment for local residents, Hsinchu Cathy General Hospital started to promote safe community program since 2009. The project aims to initially develop 3 neighborhoods as models, and then gradually develop into the whole district and city. The program was supported and subsidized by Hsinchu City Government.

### Community Overview

- Brief description & demographic structure

### A. Geographical Location

Hsinchu City is located in the northwestern part of Taiwan, and is divided into 3 administrative districts, namely East District, North District and Siangshan District (Fig. 1). East District has a total area of 33.5206 square kilometers. Geographically, it is located in the transitional area of plain and hill, and there is Toucian River flowing through the northern part of Hsinchu. The climate here is subtropical costal type with an average temperature of 22.2°C; the coldest month is in January with average

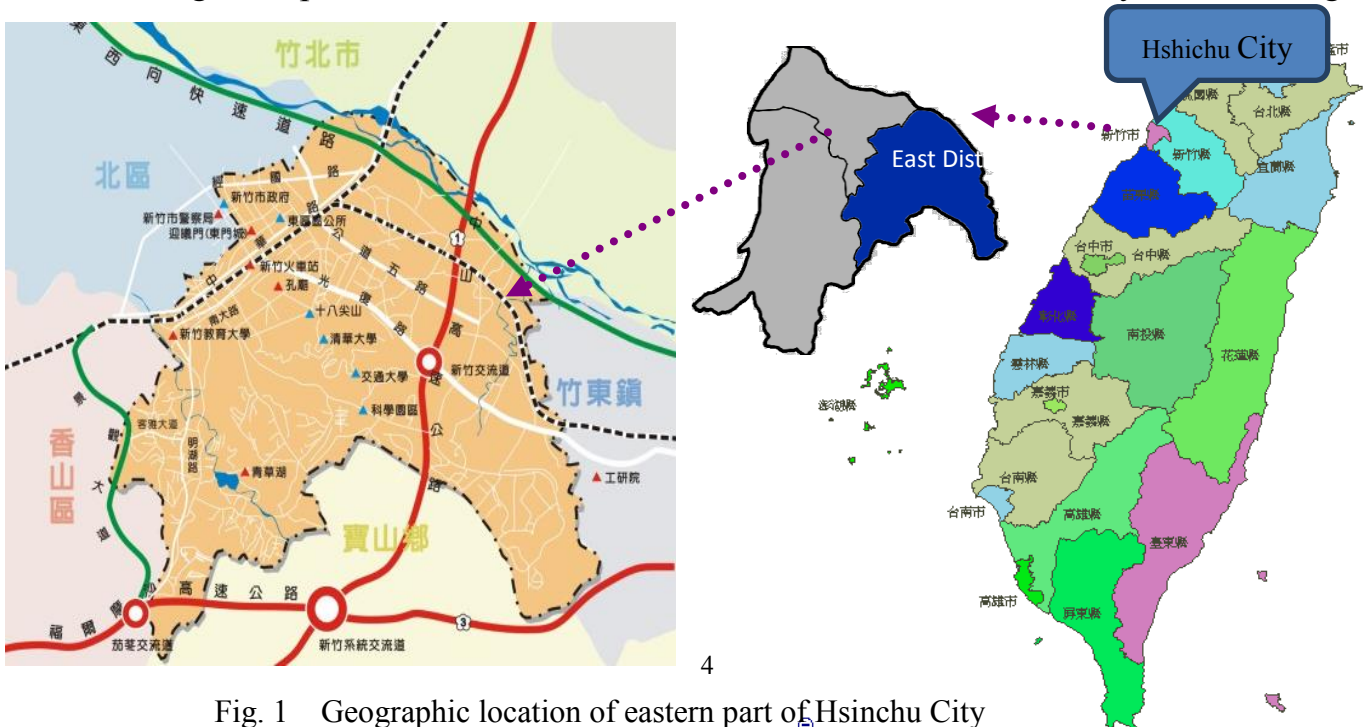


Fig. 1 Geographic location of eastern part of Hsinchu City

temperature of 15.3°C and the hottest month is July at 28.7°C. The moist southwest monsoon blow in summer time while in autumn and winter, it blows dry northeast monsoon. One of the major climate features in Hsinchu is the strong wind; the wind force in the winter season is the strongest in Taiwan; therefore, Hsinchu is also called as “Wind City”.

## B. Community Features

The East District of Hsinchu is a fast developed urban community, having numerous characteristics including science and technology industry, academic, cultural and educational resources, historic sites and natural landscapes as described below:



Hsinchu East Gate

### (a) Economic and Industry

The most well-known feature in the district is Hsinchu Science Park; at the end of January 2013 there were over 500 enterprises with over 150,000 employees. The average annual revenue in the past 3 years was more than trillion New Taiwanese Dollars. In addition, there are several national R&D institutes. These features make it the high-tech center of Taiwan. Apart from that, the production output of glass industry, a traditional local industry, is the top of the world.

There are abundant sightseeing spots, including City God Temple, 18 Peaks Mountain, Hsinchu Metropolitan Park, Image Museum, Glass Museum, Chu-Qian City Tower, city moat, Chi-Lian Temple, City Zoo, Taiwan Pavilion Expo 2010. As for food, crystal meatballs, pork ball and vermicelli are called three treasures of Hsinchu. Large department stores and big supermarkets are good leisure and attractions for citizens. These are all the reasons that Hsinchu attract numbers of tourists.



18 Peaks Mountain

### **(b)Transportation**

There are railways, highways passing through East District; the Hsinchu High Speed Rail Station and light rail to Nei-Wan are in service since 2011; these fulfill the transportation demand for Hsinchu Metropolitan area, the Science Park and Hsinchu HSR to the external link. As for the transportation within the district, it deserves attention on the safety issues due to rectangular grid system, narrow road width (6~15 meters), insufficient width and broken pedestrian sidewalk.



Hsinchu Railway

### **(c) Educational Resources**

It is the district that has the highest numbers of schools in Hsinchu, including 17 elementary schools, 11 high schools, 9 senior high schools and 3 universities, namely National Tsing Hua University, National Chiao Tung University and National Hsinchu University of Education. The academic spirit here is prosperous and provides abundant human resources for the Science Park.



National Hsinchu University of Education

### **(d) Medical Resources**

The medical resource in the district is abundant as well; there are 3 hospitals, 149 medical clinics, 40 Chinese medical clinics, 85 dental clinics and 81 pharmacies, providing convenient support to local citizens. Among them, Hsinchu Cathay General Hospital is in charge of injury surveillance for the safe community program.



### C. Demographic Features

According to the Household Registration of Hsinchu Government, the population of the city is growing; among all the administrative regions, East District has the most population, accounting for 47% and the number is growing annually (Table 1).

Table 1 Population of Hsinchu City and East District in 2009-2012

Year \ District	2009	2010	2011	2012
Hsinchu City	411,587	415,344	420,052	425,071
East District	194,927	197,254	200,092	203,119

(Source: National Statistics, Household Registration Office of East District)

Till the end of 2012, the total population of East District is 203,119, including 100,181 males and 102,938 females (the ratio of male to female is 1:1.03). The distribution of age groups in the East District is similar compared to the whole Hsinchu City (see Table 2):

Table 2 The age distribution of population in East District and the whole Hsinchu City

Age/Location	Taiwan		Hsinchu City		East District, Hsinchu City	
	Population	Percentage	Population	Percentage	Population	Percentage
Infants 【0-4y】	983,683	4.2%	25,655	6.0%	12,730	6.3%
Children 【5-14y】	2,427,994	10.4%	52,901	12.5%	29,643	14.6%
Teenagers 【15-24y】	3,231,104	13.9%	56,524	13.3%	26,054	12.8%
Young & Middle 【25-64y】	14,072,889	60.4%	249,223	58.6%	115,754	57.0%
Senior 【65y+】	2,600,152	11.1%	40,768	9.6%	18,938	9.3%
Total	23,315,822	100.0%	425,071	100.0%	203,119	100.0%

(Source: National Statistics, Household Registration Office of East District; 2012)

Based on the information provided, young and middle aged population is the majority in the district, reflecting great numbers of studying and working

populations. They are exposing to injury risk while commuting between the community, schools, workplace and public area; in addition, children and senior citizens are vulnerable groups that always need special attention. Therefore, the first step to promote safety program is to evaluate the priority of work within this community. In the following paragraphs, we will further discuss the injury risks and issues and then establish response scheme based on the seven indicators of International Safe Community to promote safety for local citizens.

**Community Overview**

• **Injury risk-panorama**

**D. Injury Issues within the Community**

According to the Vital Statistics of Ministry of Health & Welfare (MOHW) on the Top 10 leading causes of death, “injury” is a comparatively major cause in East District compared to data of the nationwide. Although the ranking is decreasing, it is still within the top 10 causes; among which, “suicide” was ranked as top 6 in 2009. These indicate the severe issues that the safe community program shall be focused on (Table 3).

Table 3 Ranking of injury and suicide cases among top 10 leading causes of death in East District, Hsinchu City and Taiwan in 2007-2009

Item	Injury Rankings			Mortality Rate Unit: 100,000 ppl			Suicide Rankings			Mortality Rate Unit: 100,000 ppl		
	TW	Hsinchu	East Dist.	TW	Hsinchu	East Dist.	TW	Hsinchu	East Dist.	TW	Hsinchu	East Dist.
2007	5	6	4	31.1	23.9	22.7	9	9	9	17.2	12.3	11.1
2008	6	5	6	30.8	25.1	16.7	9	10	-	17.9	17.2	11.5
2009	6	5	7	31.9	19.8	16.5	9	7	6	17.6	17.1	16.5

(Source: Vital Statistics of MOHW)



### (a) Overview of Injury Death in East District, Hsinchu City

According to the vital statistic data provided by Public Health Bureau, Hsinchu City Government, traffic injury was the leading cause of death in East District during 2007 to 2009. Analyzing on age group, population above 25 exposed to greater risk and transportation safety should be strengthened. As for senior citizens above 65, prevention on fall injury shall be promoted (Table 4).

Table 4 Mortal injury data in East District, Hsinchu City in 2007-2009 analyzed by age group

Year/Injury Type Age	2007					2008					2009				
	Traffic	Fall	Poison	Drowning	Others	Traffic	Fall	Poison	Drowning	Others	Traffic	Fall	Poison	Drowning	Others
0-4	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0
5-14	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0
15-24	4	0	0	0	0	3	0	0	0	0	2	0	0	0	0
25-44	12	1	2	1	0	3	0	1	0	2	2	1	1	0	0
45-64	2	3	0	1	0	5	0	2	0	0	6	0	1	0	0
65+	7	4	0	1	0	5	8	0	0	3	4	0	0	0	2

Remark: "Others" refer to accidents and post-effect of collision, smash, press, fold, cut, twist and stab  
(Source: Public Health Bureau, Hsinchu City Government)

### (b) Cases of Carbon Monoxide Poisoning and Fire Disaster within the Community

The strong wind in Hsinchu City often forced local citizens to close their windows and doors tightly, which potentially increase the risk of fire disaster and monoxide accident, especially in winter time. According to the statistic data of Hsinchu Fire Department, there were 78 monoxide poisoning accidents, leading 152 injured and 10 death between 2007 to 2009 and there were 184 fire accidents, causing 17 injured (Table 5). Therefore, fire and monoxide poisoning prevention has become an important issue in the community.

Table 5 Injured and death statistics of fire and monoxide poisoning in Hsinchu, 2007-2009

Year \ Type	Monoxide Poisoning			Fire		
	Case	Injured	Death	Case	Injured	Death
2007	10	16	1	80	4	0
2008	29	57	2	54	7	0
2009	39	79	7	50	6	0
Total	78	152	10	184	17	0

(Source: Hsinchu Fire Department)

### (c) Overview of Suicide Cases in East District, Hsinchu City

“Suicide” has always been ranked in top 10 causes of death in Hsinchu City (Chart 3). According to the data of Taiwan Suicide Prevention Center, the mortality rate of population above 65 years old is higher than other age groups in Hsinchu (Fig. 2)

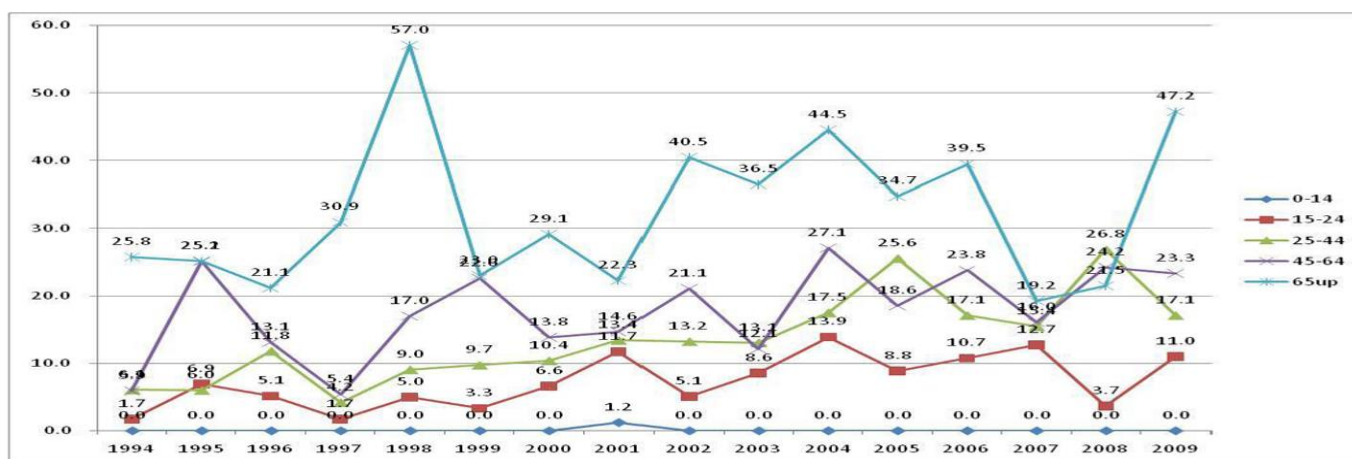


Fig. 2 Suicide mortality rate of all age groups in Hsinchu, 1994-2009

(Source : Taiwan Suicide Prevention Center)

There are approximate 40,000 senior citizens in Hsinchu; among them, 551 live alone, accounting for 1.43%, which is the highest among all metropolitan cities in Taiwan. Those who live alone are mostly veterans; a survey shows that senior citizens living alone are prone to suicide due to emotional factor or financial difficulty.

In 2009, the suicide in Hsinchu City has soared up to top 6 cause of death (Table 3) and the death roll increased by 10 people year on year; from Table 6, it is showed that the increase was more significant among senior citizens above 65 years old. As a result,

suicide prevention among senior citizens has become an important agenda for the safe community promotion in the district.

Table 6 Suicide death toll of different age groups in East district in 2007-2009

Age	2007	2008	2009
15-24y	1	1	2
25-44y	12	10	7
45-64y	5	9	12
65y+	3	2	11
Total	21	22	32

(Source: Public Health Bureau, Hsinchu City Government)

Community  
Overview

## • Community Safety Objectives

### E. Community Safety Goals

East District, Hsinchu City is moving toward a densely populated community. It is the common vision to enable the district a safer living environment and let residents enjoy peace and comfortable life. Since 2009, we combined the public and private sectors and community members, following the criteria of the international safe community, formulated by the World Health Organization Collaborating Centre on Community Safety Promotion (referred WHO CC CSP), to promote safety and prevent injury. Through examining injury data, we planned and implemented safety promotion projects. We hope to join the International Safe Communities Network, through experience exchanges with national and international safe communities, so that the safety works of the East District will be more effectively fulfilled, and gradually extended to other districts.

**Indicator I: An Infrastructure based on partnership and collaborations governed by a cross-sectional group that is responsible for safety promotion in their community.**

### **A. Cross-sectional Promotional Organization**

The safe community project of the East District was initiated by Hsinchu Cathay General Hospital in 2009. In the beginning, 3 boroughs with abundant community construction project as partnerships; later on, representatives of different sections are invited to participate in the projects. The current partners include public units, schools, private units, enterprises, medical units and academic units. Based on the injury analysis result of the district, Home Safety, School Safety, Traffic Safety, Public Place Safety and Intentional Injury Prevention were targeted as the 5 major issues to be tackled. It is hoped that safety cultural will be established in the local community through the autonomous power and the collaboration of public and private sectors.

In order to sustainably run the safe community program in the East District of Hsinchu City, the collaborated partners reached a consensus to form the civil association- Safety and Health Promotional Association, East District of Hsinchu City. The association was officially established on March 3<sup>rd</sup>, 2013 and Ms. Mei-Hong Chang, the manager of Cathy Life Insurance Company, was elected as the 1<sup>st</sup> president to help promote safe community program in the district (organization map as Fig. 3).

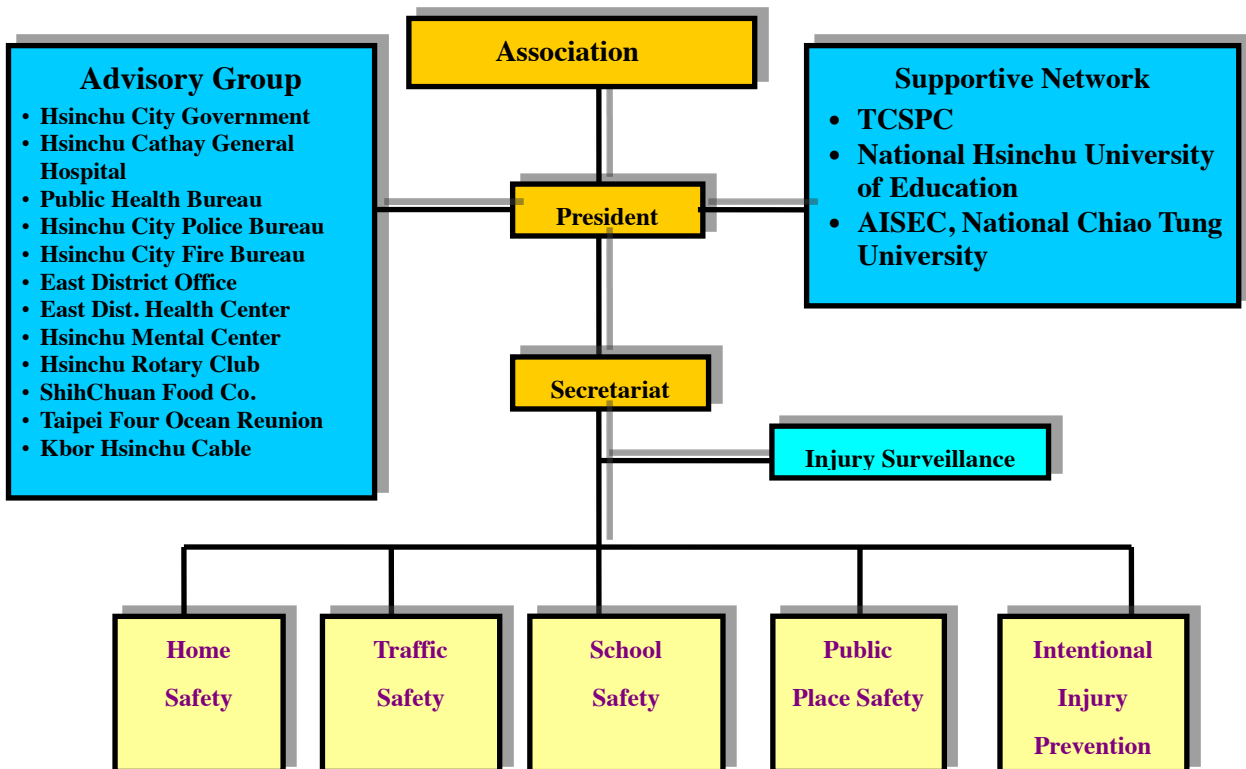


Fig. 3 Organization of Safety & Health Promotion Association, East District of Hsinchu City

## B. Meetings

Meetings are organized on regular basis to discuss the progress and result of safety promotion measurements. The participating sectors, both public and private unit, integrate the resources to make the safety promotion work more comprehensive, including applying for governmental subsidy or searching for new partnership.

Meetings of the association can be categorized as following:

### 1. Core Meetings:

Core meeting is held once in every 1 to 2 months, the participants are board of directors and working groups. The purpose is to effectively examine project performance and the content includes report from all working groups, discussion of obstacles and resource integration.



## 2. Working Group Meetings:

Working group meeting is convened at least once a month and within the 5 working groups and injury surveillance group; the group leader hosts the internal group discussion to examine the performance and progress of on-going projects. Professionals are invited for guidance when necessary.



## C. Association Members and Responsibilities

Group/ Position	Convenor/ Full-time Job	Responsibility	Members
President	Mei-Hong Chang/ Manager, in Cathay Life Insurance Co.	Manage community resource for the implementation of safe community project	1
Secretariat/ Executive Secretary	Yi-Huei Zhou/ Nursing Division, Hsinchu Cathay General Hospital	Integrate project data and relevant record; coordinate between all groups; being the contact window for all dangerous issues in the community	1
Injury Surveillance Group/Leader	Hong-Chuan Xin/ Director of Nursing Division, Hsinchu Cathay General Hospital	Analyze the injury surveillance data to find out the priority work for injury prevention project	4
Home Safety Group/ Leader	Xian-Hui Lu/ Director General, Hsinchu Zhengxin Community Development Association, Hsinchu East District	Executive home safety promotion project	5
Campus Safety Group/ Leader	Chi-Chieh Chang/ Leader of Student Affairs, Sunshine Elementary School in Hsinchu East District	Executive campus safety promotion project	4
Traffic Safety Group/ Leader	Yi-Jiao Hsu/ Chairman, Palace Travel Agency in Hsinchu	Executive traffic safety promotion project	5
Public Place Safety Group/Leader	Qiong-Lin Liu/ Chairman, Hsinchu East District Science Park Development Association	Executive public field safety promotion project	5
Intentional Injury Prevention Group/ Leader	Chiu-Yu Chen/ Director-General Hsinchu LiGang Community Development Association	Executive intentional injury prevention project	5
Advisory Group	Shih-Chi Hong/Director of Public Health Bureau, Hsinchu City Government	Provide support and subsidy for promoting community program	8

## D. Financial Resource

- Members fee of “Hsinchu East District Association on Safety & Health Promotion”
- Subsidiary project, Health Promotion Administration, Ministry of Health and Welfare
- Subsidiary project, Hsinchu City Government
- Sponsorship or donation from other institutes

## E. Community Resources and Partnership

The East District has integrated resources from public and private sectors to promote safe community project. All the partners help, trust and care for each other for the mutual goal- a safe community. The resources, safety issues and related partners are listed as Table 7.

Table 7 Community Resources and Partnership of East District

Content		Injury Surveillance	Home Safety	Traffic Safety	School Safety	Public Place Safety	Intentional Injury Prevention	Resources Provided
Public Sectors	MOHW	●						Subsidy Injury data
	Hsinchu City Government		●	●	●	●	●	Subsidy Strategy support
	City Marketing Dept., Hsinchu City Government					●	●	Assistance on project execution
	Hsinchu City Police Bureau	●		●			●	Assistance on project execution Injury data
	Hsinchu City Fire Bureau	●	●					Assistance on project execution Injury data
	Hsinchu City Public Health Bureau	●	●		●	●	●	Assistance on project execution Injury data
	Hsinchu East District Office		●	●		●	●	Assistance on project execution
	Sunshine Elementary School	●			●			Execute school safety project
	AIESEC, Chiao Tung University		●			●		Assistance on project execution



Unit		Content	Injury Surveillance	Home Safety	Traffic Safety	School Safety	Public Place Safety	Intentional Injury Prevention	Resources Provided
Public	Dept. of Environmental and Cultural Resources, National Hsinchu University of Education		●						Assistance on project execution
	Hsinchu Cathay General Hospital		●	●			●	●	Subsidy Manpower to the Secretariat Injury issue surveillance
Private Sectors	Hsinchu Community Mental Health Center					●	●	●	Assistance on project execution
	Shih-Chuan Food Co., Ltd.			●					Subsidy
	Taipei Four Ocean Reunion			●			●		Subsidy
	Shin-Kuwan Borough Office					●			Assistance on campus safety execution
	Hu-Bing Borough Office					●			Assistance on campus safety execution
	Hsinchu Zhengxin Community Development Association			●	●				Execute home safety project and traffic safety project
	Hsinchu LiGang Community Development Association			●	●		●	●	Execute home safety, traffic safety project, public field safety project and intentional injury prevention project
	Hsinchu East District Science Park Development Association			●	●		●	●	Execute home safety, traffic safety project, public field safety project and intentional injury prevention project

**Indicator II: Long-term, sustainable programs covering both genders and all ages, environment, and situations**

The safety promotion program for East District, Hsinchu is planned based on a long-term and sustainable perspective; different projects are designed for different age group, genders, environment and scenarios. When the community safety project was started in 2009, the main issues were home safety, school safety and traffic safety; public place safety and intentional injury prevention issues were later brought into the project in 2011.

Table 8 Safety Promotion Projects and Action Plans in East District, Hsinchu

Issues	Action Plan	Target Age Group (both genders)					
		0-4	5-14	15-24	25-44	45-64	65↑
Home Safety	Home environment examination and improvement	•	•	•	•	•	•
	Prevent carbon monoxide poisoning and promote fire safety	•	•	•	•	•	•
	Safe use of medicine					•	•
	Household flood prevention	•	•	•	•	•	•
	Fall prevention training for senior citizens						•
School Safety	Young campus safety fighters		•				
	Caring Store		•	•	•	•	
	Safe route to school		•	•	•	•	
	Safety educational training and propaganda		•	•	•	•	
	Safe bike riding training for children		•				
Traffic Safety	Road safety check	•	•	•	•	•	•
	Improvement on accident prone road sections			•	•	•	•
	Traffic safety propaganda	•	•	•	•	•	•
	Enhancement on public transport use			•	•	•	•
Public Place Safety	Environment evaluation and improvement in neighborhood parks and public places in the community	•	•	•	•	•	•

	Idle space transformation project	•	•	•	•	•	•
	Environment safety education		•	•	•	•	•
Intentional Injury Prevention	Gatekeeper training			•	•	•	•
	Home visit to high-risk family and provide referral service if needed					•	•
	Emergency medical rescue					•	•
	Mental health education and psychological counseling					•	•
	Suicide prevention project “Say Hi to Sunshine”					•	•

## A. Home Safety Project

Project Name	Target Group	Content	Start Time	Partnership
Home environment evaluation and improvement	All community citizens	Conduct home visit, find out potential risk and provide improvement advice; assist some priority family for the improvement	March, 2009	Hsinchu Cathay General Hospital
Prevent carbon monoxide poisoning and promote fire safety	All community citizens	Conduct safety evaluation on fire, electricity, water heater etc. and offer suggestion	March, 2009	
Safe use of medicine	Citizens above 45 years old	Health care professionals accompany the home visit and investigate the medicine taking condition; provide counseling and guidance to avoid medication discomfort and injury	March, 2009	LiGang Borough Office LiGang Community Development Association
Household flood prevention	Households along the Keya riverside	Community residents installed water gate to prevent the flood, and establish the Rainfall Monitoring Bulletin	March, 2009	Hsinchu Women Propaganda Team for Fire Prevention
Fall prevention training for senior citizens	Citizens above 65 years old	Organize "Fall Prevention Class" to increase their self-protection ability and reduce fall injury	March, 2009	



## B. School Safety Project

Project Name	Target Group	Content	Start Time	Partnership
Young campus safety fighters	Students, school staff and parents	Recruit and train high grade students as young campus safety fighters and regularly patrol the campus, record dangerous point and advice students not to do dangerous behaviors	March, 2010	Sunshine E. School Shin-Kuwan Borough Office Hu-Bing Borough Office Stores around school Hsinchu Education Department Hsinchu Police Bureau Hsinchu Fire Bureau
Caring Store		Sign MOU with stores around the school to assist students when necessary		
Safe route to school		Invite parents to the orientation and issue map of the campus and surrounding area for both parents and students to be familiar with the route to school and location of traffic guidance teacher and caring stores		
Safety educational training and propaganda		Provide safety training with different topics such as traffic, disaster, water and fire; write down the safety knowledge to parents on school contact book		
Safe bike riding training	Elementary school students	Invite the police and bike business runner to school and teach students how to ride a bike safely	September, 2010	Sunshine E. School, bicycle business runner, Hsinchu Police Bureau





### C. Traffic Safety Project

Project Name	Target Group	Content	Start Time	Partnership
Road safety check	All community citizens	Recruit traffic safety volunteers to patrol and record road use condition; the secretary collect and file all the data and report to relevant division and follow up the improvement status	February, 2009	Hsinchu Zhengxin Community Development Association Hsinchu Rear Station Development Association
Improvement on accident prone road	Users of dangerous road sections	Cooperation of Traffic Division, Hsinchu Police Bureau and community patrols to enhance guidance and night inspection at dangerous road sections to reduce traffic accident	February, 2009	LiGang Borough Office LiGang Community Development Association Hsinchu East District Science Park Development Association
Traffic safety propaganda	All community citizens	Invite the traffic division to provide traffic safety lectures in schools and community events to promote traffic safety; promote through community newspaper and conduct traffic safety painting contest	February, 2009	Community Patrols Restaurants at Nan-Da Road Traffic Division of Hsinchu Police Bureau
Enhancement on public transport use	All community citizens	Deliver the free public transport routes messages to the community and encourage people to take	February, 2009	Public Works Bureau of Hsinchu City East District Office



## D. Public Place Safety Project

Project Name	Target Group	Content	Start Time	Partnership
Environment evaluation and improvement in park and public filed in the community	Citizens and visitors	Recruit and train safety volunteers to regularly patrol parks and public field to find out dangerous issues and report to Head of Neighborhood to collect and file data; the secretary report to relevant division and follow up the improvement status	March, 2011	Hsinchu Zhengxin Community Development Association  LiGang Community Development Association
Idle space transformation project	All community citizens	Transform the idle space into an education/training center (Plant Hospital) or leisure venues to improve hazards of snakes, uncovered ditches, or discarded syringes	May, 2011	Hsinchu East District Science Park Development Association  East District Office
Environment safe education	All community citizens	Conduct environment safety education in Plant Hospital—the toxic plants publication was edited to let people know and not to touch; and gardening safety teaching is also conducted	May, 2011	Hsinchu Public Works Bureau  Hsinchu Traffic Division  Hsinchu City Marketing Department





## E. Intentional Injury Prevention Project

Project Name	Target Group	Content	Start Time	Partnership
Gatekeeper training	Head of Neighborhoods and volunteers	Organize emergency management workshop for Head of Neighborhoods and volunteers to help quickly identify suicidal intention and behavior, and be familiar with report procedures	April, 2011	LiGang Borough Office
Home visit in high-risk family and provide referral service if needed	Suicidal family and high risk group	Community CEO propose visit list and medical professionals conduct basic evaluation of the list; health care professionals and Head of Neighborhood persuade and convince individual or family to participate in community activities; help those emotional instable and suicidal people to seek for referral resources		LiGang Community Development Association
Emergency medical rescue		“Life Alliance” is established to offer 24-hour rescue service		Hsinchu Cathay General Hospital
Mental health education and psychological counseling		Provide mental health lectures and counseling services for the elderly		Hsinchu Community Mental Health Center, Hsinchu Public Health Bureau
Suicide prevention project “Say Hi to Sunshine”		Design courses to encourage normal and depressed senior citizens to go outdoors and gradually establish positive thought and emotions		Hsinchu Veterans Service Center Hsinchu Police Bureau



To keep the project sustainable, all working groups have the mechanism of recruiting and training the volunteers.

### **Indicator III: Programs that target high-risk groups and environments, and programs that promote safety for vulnerable groups.**

According to the vital statistics of Hsinchu Public Health Bureau, suicide was ranked up to 6<sup>th</sup> death cause in the East District in 2009 (as Table 3) and the most vulnerable group is citizens above 65 years old (as Table 6). The fire department reports from 2007 to 2009 (Table 5) showed many deaths and injuries due to carbon monoxide poisoning and fire accidents. Considering the above, “elderly suicide prevention”, “home fire safety” and “carbon monoxide poisoning prevention” have become the priority work for safety promotion in the East District.

#### **A. Elderly Suicide Prevention Program**

Assessment: There are around 152 senior citizens in LiGang Community; among them, 8 living alone, 18 low-income and 33 disabled. Elderly citizens were defrauded or beaten, resulting in frequent incidents of attempted suicide.

Objectives: Encourage senior citizens to go outdoors and interact with the community through mental assessment and home visit to reduce suicide rate.

Target Group: Vulnerable groups with suicide family history or disabled groups.

Start Time: Since April, 2011.

Partnership: Hsinchu Police Bureau, Hsinchu Public Health Bureau, Hsinchu Community Mental Health Center, Hsinchu Veterans Service Center, Hsinchu Cathay General Hospital, LiGang Boroug Office, LiGang Community Development Association.

## **(A) Home Visit and Mental Assessment**

- Strategies:
1. Design “Community Caring Visit Record Sheet”, “Suicidal Patients Caring Visit Record Sheet” and “Suicidal Risk Assessment Sheet” as assessment tools to prevent suicide cases in the community.
  2. The community director-general arranges the visit list and conducts visits.
  3. Nurses of Hsinchu Cathay General Hospital prepare assessment sheet and relevant tools, and go on home visit with PGY residents, neighborhood heads or volunteers.
  4. Doctors conduct basic assessment, such as blood pressure, body temperature, pulse, mental status, medical history and present status; and then nurses and neighborhood heads care and encourage patients or their family to participate in community activities and provide referral service to those mentally unstable who attempt suicide.
  5. Organize crisis management workshop for heads of neighborhood and volunteers to identify suicidal intent and behavior. Adopt doorkeeper system that heads and volunteers of neighborhood pay frequent visits and accompany to reduce those self-harm behavior.

- Results:
1. Assess the depression index during home visit in 43 households. Most of them are mildly depressed.
  2. Visited 29 high risk families until end of 2012 and assisted elderly citizens to improve unsafe home environment, such as installing anti-slippery mat and handrail.
  3. Provide the meal delivery service to elderly citizens living alone or the handicapped, in the meantime, regularly visited and cared for their daily life and living environment. There were 11 households receiving this service.

4. Installed “emergency bell” in 6 households with the help of social resources.
5. Conducted risk management workshops for neighborhood heads and volunteers. They learn how to assess high risk households and link referral resources.



Fig. 4 Medical staff and social workers visiting high risk families



Fig. 5 Gatekeeper training program

### **(B) Say Hi to Sunshine Program**

- Strategies:
1. Design community courses and encourage elderly citizens to go outdoors and establish positive feeling through interacting with others.
  2. Perform the play of “Story of Time” for community citizens to understand the meaning of intentional injury prevention and the measurement.

Results: The following courses were conducted:



- ★Painting Course: 12 courses with 30 participants.
- ★Mental counseling: 3 courses with 15 participants; through interview, it showed 98% satisfaction of the courses.
- ★Sports: Every Saturday with 25 participants.
- ★Vegetable Planting: Make use of the idle space for the elderly to grow vegetables, and community kitchen workers harvested and cooked the vegetable to provide meals for senior citizens living alone and the handicapped.



Fig. 6 Photos of “Say Hi to Sunshine”

## **B. Home Fire Safety and Carbon Monoxide Poisoning Prevention Program**

**Assessment:** There were 78 carbon monoxide poisoning cases in 2007 to 2009, causing 152 injured and 10 death. On January 25<sup>th</sup> in 2009, it was during Chinese New Year, a family in NanDa Road was poisoned and 5 family members were all dead because the water heater was installed indoors. It was a hot headline. There were also records of 8 carbon monoxide poisoning cases in a day. It shows the importance of how to prevent repeated tragedy.

**Objective:** Strengthen public attention on fire safety, such as installing water heater in safe location to protect their own lives.

**Target group:** All citizens.

Start Time: Since March 2009

Partnership: Hsinchu Fire Bureau, Hsinchu Women Propaganda Team for Fire Prevention, Zhengxin Community Development Association

Strategy: 1. Take “Home Fire Safety Evaluation Checklist” as visiting tool.

2. Take each building as a unit, and the community Director-general and director of the residential building arranged visiting route.
3. Issue “Mayor Caring Card” to households where no one at home or to who refused the visit to assist them on self-evaluation of household fire safety.
4. Strengthen the propaganda of carbon monoxide poisoning prevention through the media, the press, website, TV wall, marquee, propaganda, poster, banner, home visit or other activities.

Result: 1. “Household Fire Safety Visit” was conducted in 67,516 households from March 2009 to December 2010, involving 5,075 firefighters, volunteer firefighters and volunteers. In total, 5,656 households had immediate need of improvement and 2,326 of them self-improved after advocacy. The improvement rate reached 41%. Furthermore, 749 households had obtained subsidy to relocate or change gas water heater.

2. Conducted 1,147 fire prevention and carbon monoxide poisoning prevention seminars.

Table 9. Statistics of CO poisoning cases in Hsinchu City, 2007-2012

Year	2007	2008	2009	2010	2011	2012
Case	10	29	39	47	62	35
Injured	16	57	79	60	63	45
Death	1	2	7	2	3	1

(Source: Hsinchu Fire Bureau)



▲ Firefighters visited households for fire safety inspection



Before



After

Install a pipe on water heater to prevent carbon monoxide poisoning



### Indicator IV: Programs that are based on all available evidence

All the safety promotion projects of the community is conducted based on the analysis of injury data; the key points of injury prevention are categorized as followed:

According to 2012 East District community survey (Fig. 8), the main causes of injury for different age groups were:

- 0-4y:fall and striking/cutting/caught
- 5-14y:traffic and striking/cutting/caught
- 15-24y:traffic
- 25-44y:traffic and striking/cutting/caught
- 45-64y:traffic and fall
- 65y and above: fall

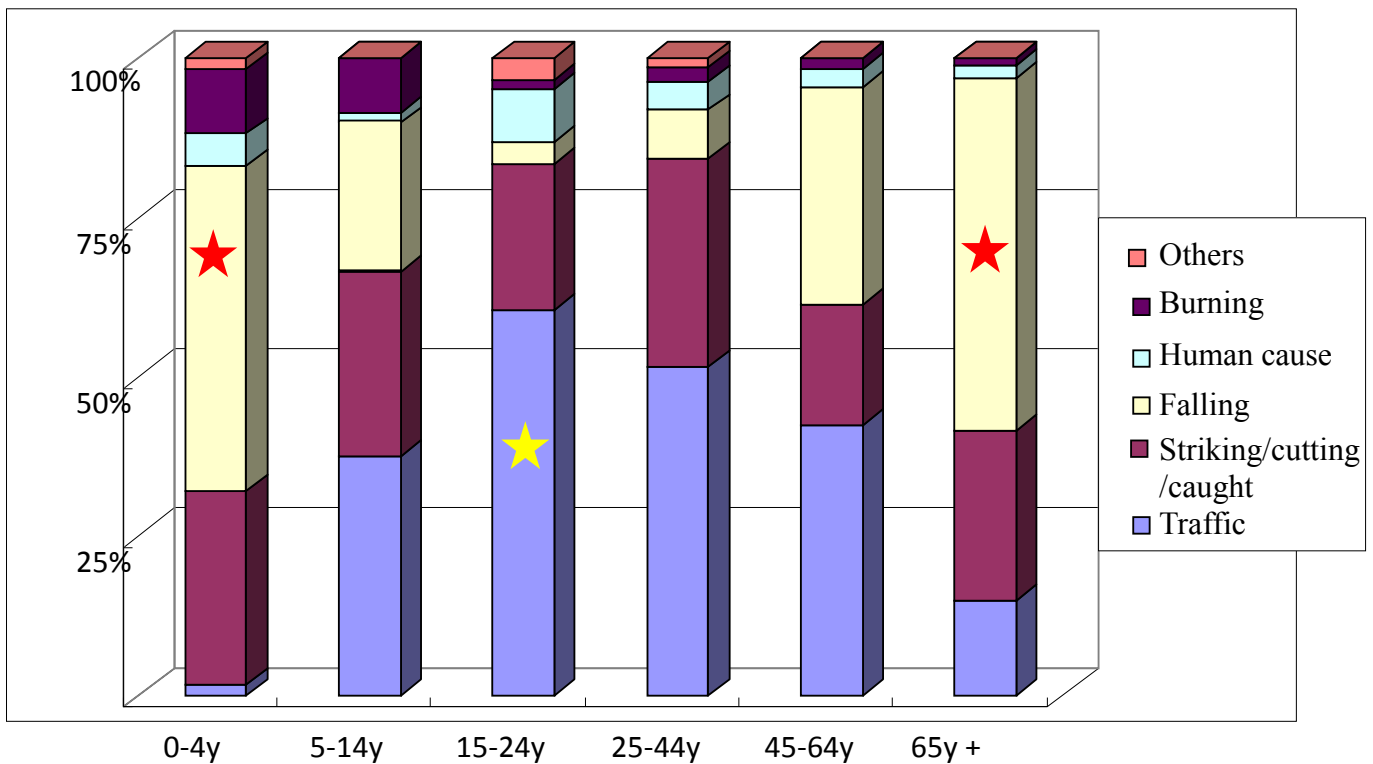


Fig. 8 Injury type of all age group in East District, 2012 (Source: East District Community Survey)

Therefore, prevention on traffic, fall and striking/cutting/caught injuries are the focus points for safety promotion projects.

The data of Hsinchu Fire Bureau showed that the main cause of fire in the district is electronic equipment (Fig. 9) and the most happening place is living room (Fig. 10). Therefore, home visit is conducted with the community resource and fire department to promote safe use of electricity and fire safety.

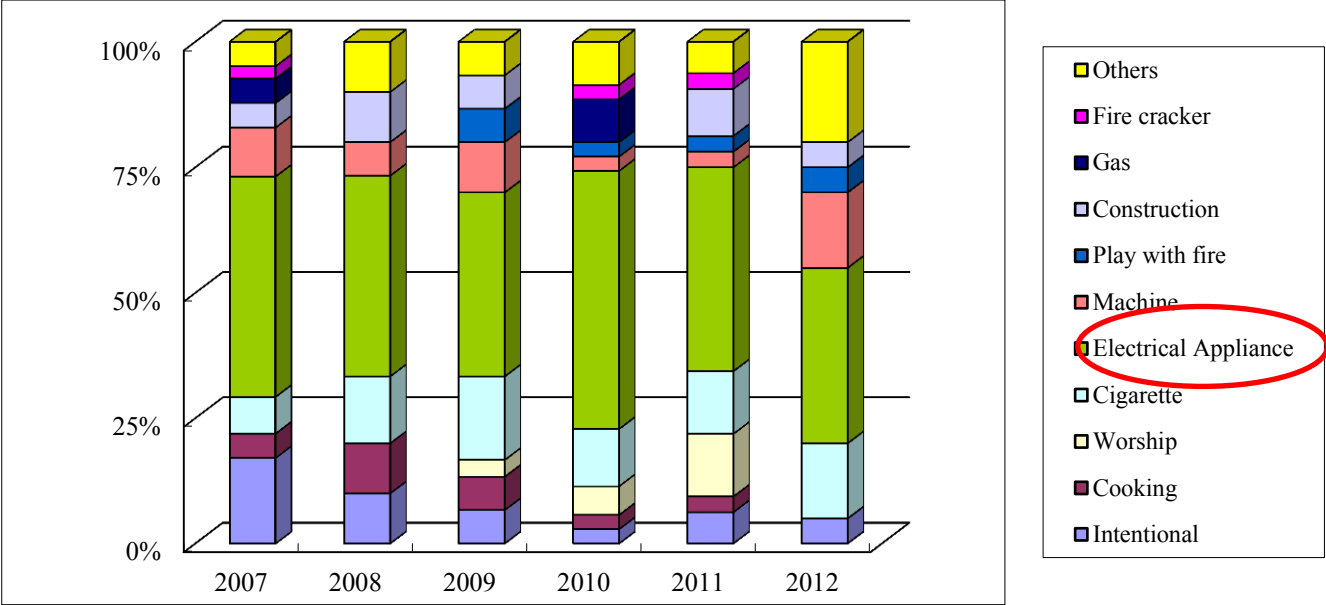


Fig. 9 Fire causes of Hsinchu East District in 2007 to 2012 (Source: Hsinchu Fire Bureau)

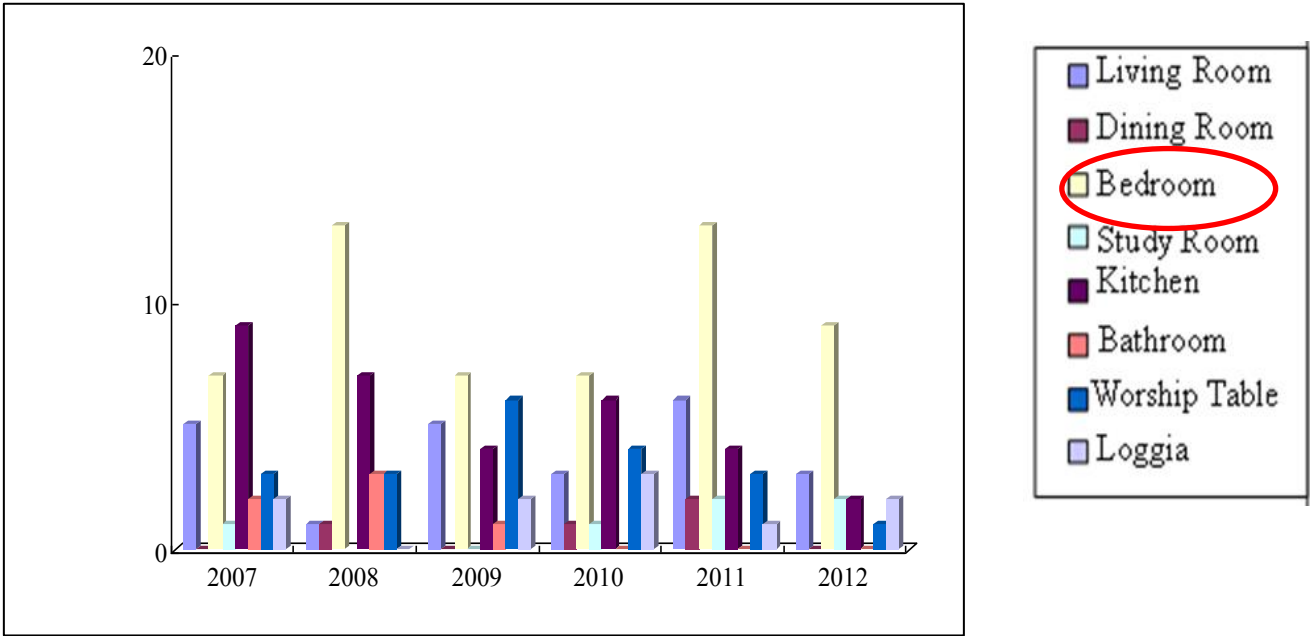


Fig. 10 Places of fire incidents in Hsinchu East District from 2007 to 2012 (Source: Hsinchu Fire Bureau)

According to the data of Hsinchu Police Bureau, the average number of fatal traffic incident in Hsinchu East District in 2008 to 2011 was 20 cases per year and the average death toll was 21 people (Fig. 11). The accident prone sections were in downtown with heavy traffic. The main reasons of traffic incidents were drivers failed to give way, not paying attention to the traffic condition in front and illegal left turn (Fig. 12). The main cause of traffic death was crash on the head and chest. Therefore, the focus of traffic injury prevention is to improve the accident prone sections and strengthen public education on traffic rules.

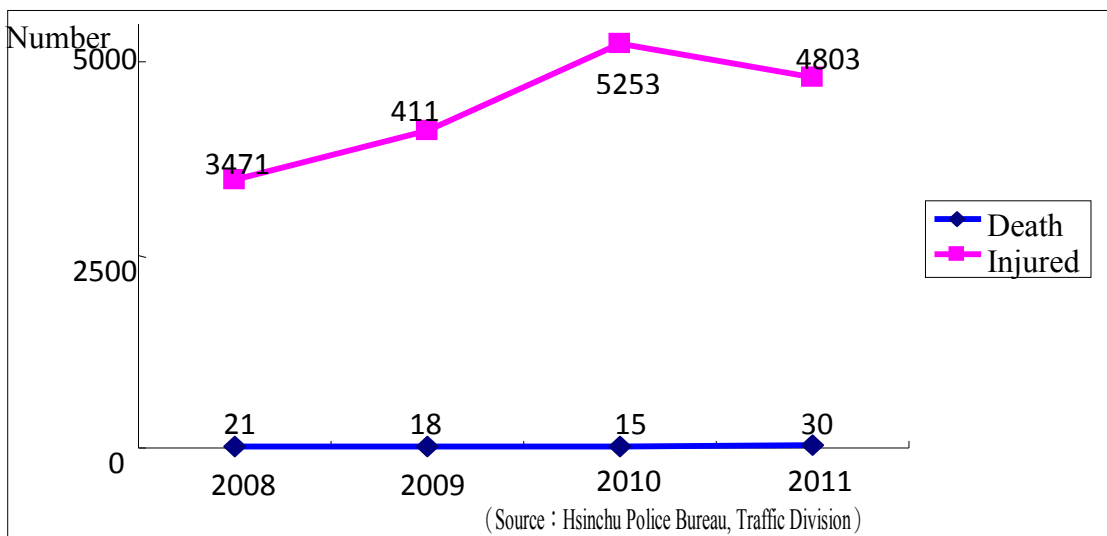


Fig. 11 Number of traffic injured and death in Hsinchu East District, 2008-2011

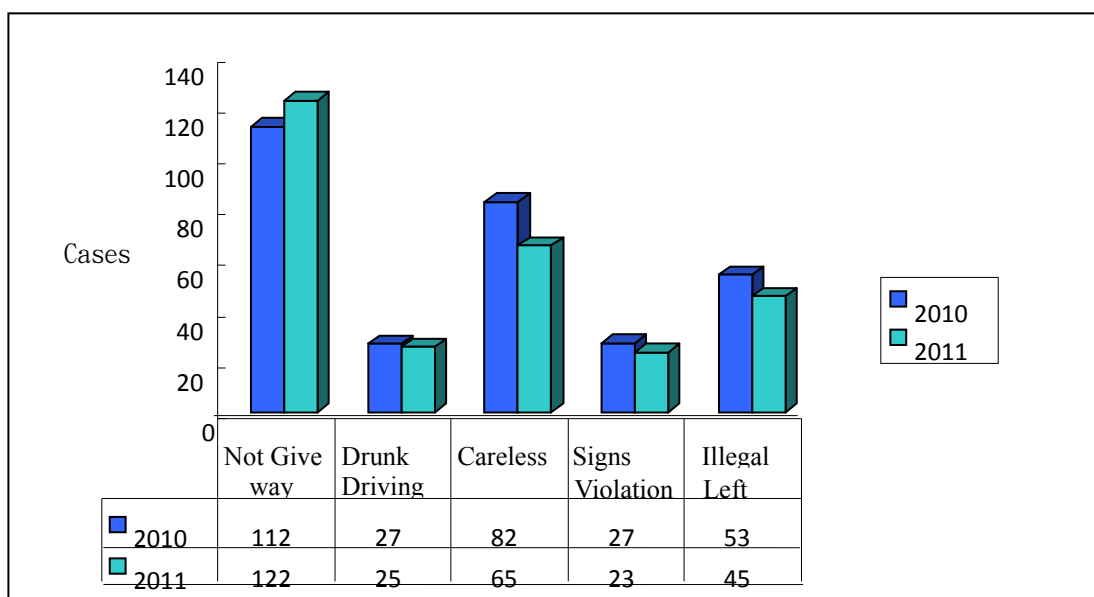


Fig. 12 Causes of traffic incident in East District, 2010- 2011 (Source : Hsinchu Traffic Division)

## **Indicator V: Programs that document the frequency and causes of injuries**

Injury surveillance is one of the most important works for the promotion of a safe community. In the East District, injury data from Emergency Ward of Hsinchu Cathay General Hospital, Hsinchu Traffic Division of Police Bureau, Fire Bureau, elementary schools and neighborhoods are regularly collected and analyzed.

### **A. Injury Data Sources**

1. Community Survey: Conduct survey through neighborhood office or District Development Association (Fig. 8).
2. Traffic injury data collected by Traffic Division of Police Bureau (Fig. 11 & 12).
3. Fire incident and carbon monoxide poisoning record (Chart 5, 9 and Fig 9 & 10).
4. Injury data of Health Center, Sunshine Elementary School.
5. Injury data collected from hospital emergency wards.
6. Injury data collected from public unit (Chart 3, 4, 6 and Fig. 2).

### **B. Injury Surveillance Mechanism**

The injury surveillance mechanism is organized by Hsinchu Cathay General Hospital through monthly emails of injury data collected from all units, and then pass the data to Injury Surveillance Group. The group will file up and analyze the data, and give feedback to all working groups.

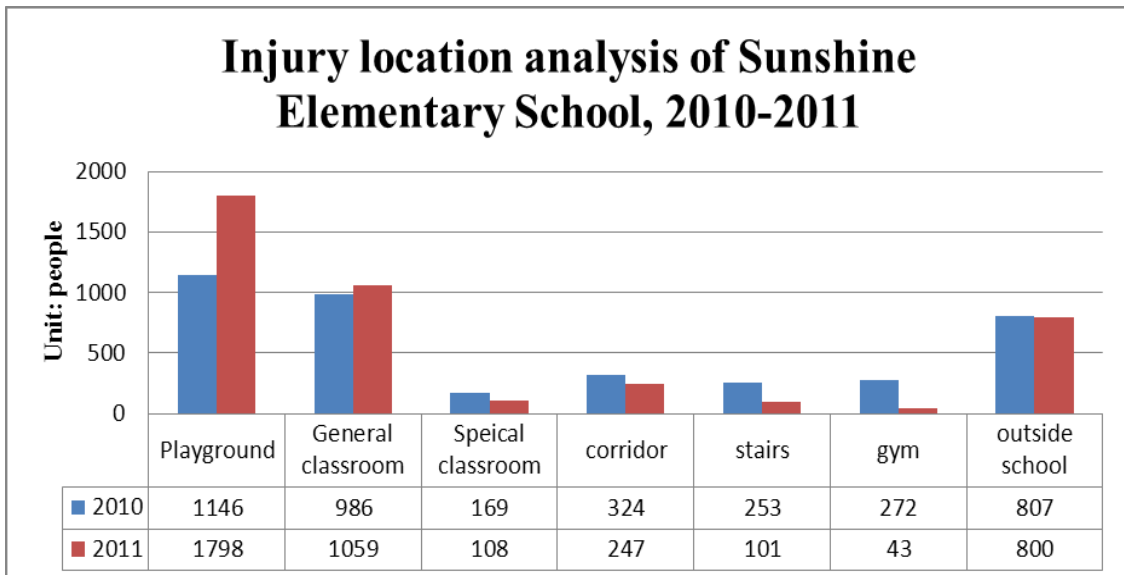
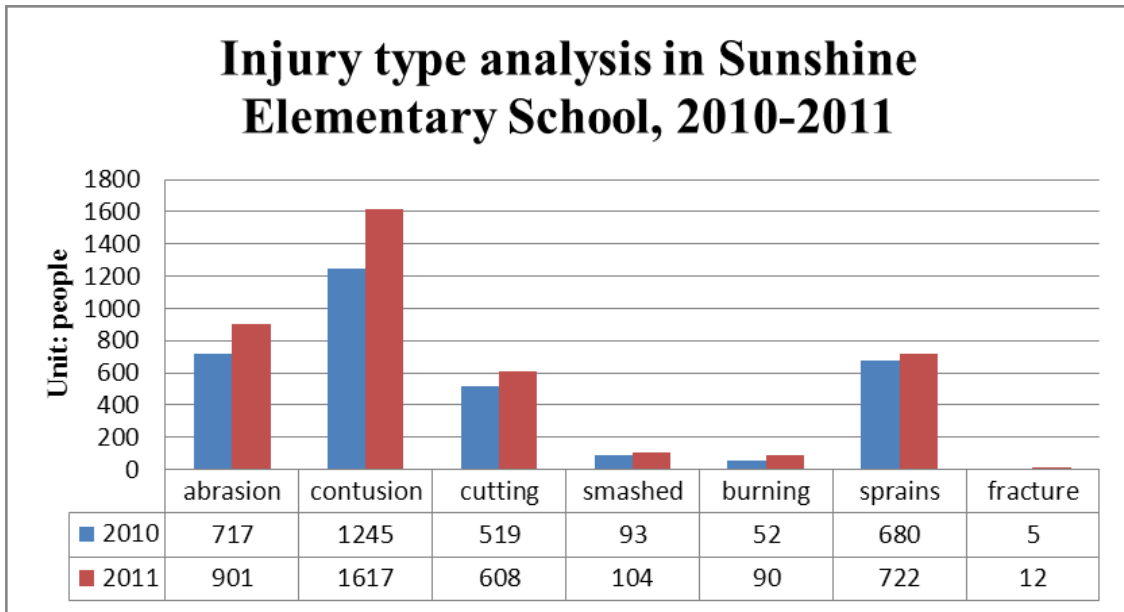
Injury Surveillance Group organizes quarterly meetings to discuss the injury analysis result, and then submit the result to core meeting of the community for all working groups for reference to initiate or improve projects. All working groups will provide feedback of the project implementation to Injury Surveillance Group for further assessment and reference.

### **C. Injury Analysis**

#### **(A). School Injury Data:**

The injury data of Sunshine Elementary School in 2010 to 2011 collected by the school health center showed that the top three injury types were contusion (37%),

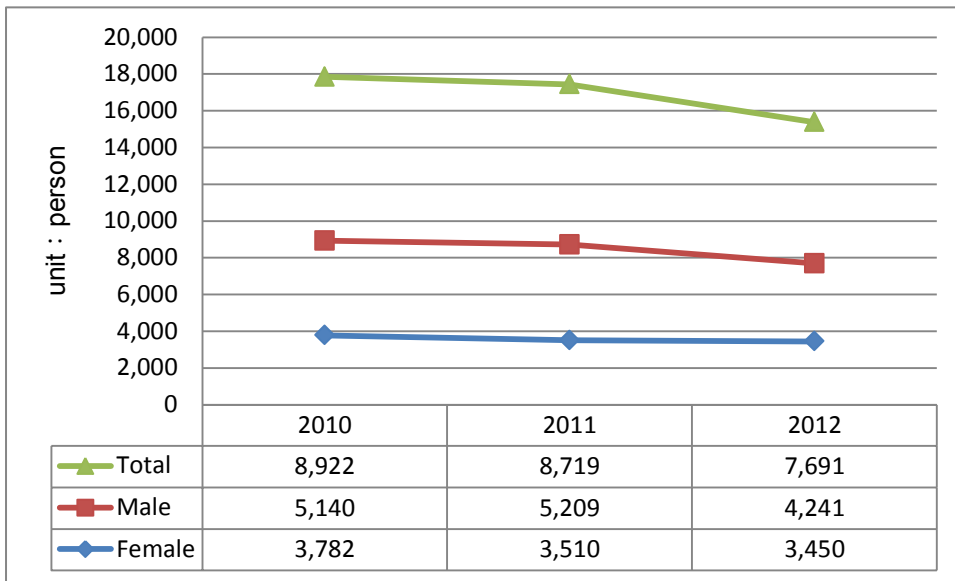
abrasion (21%) and sprains (16%); the top three injury locations were playground (41%), outside of campus (28%) and corridors (11%). Based on these injury statistics, school initiatives to improve unsafe environment, and design injury prevention knowledge into the curriculum so that students, through discussion, identify methods of prevention.



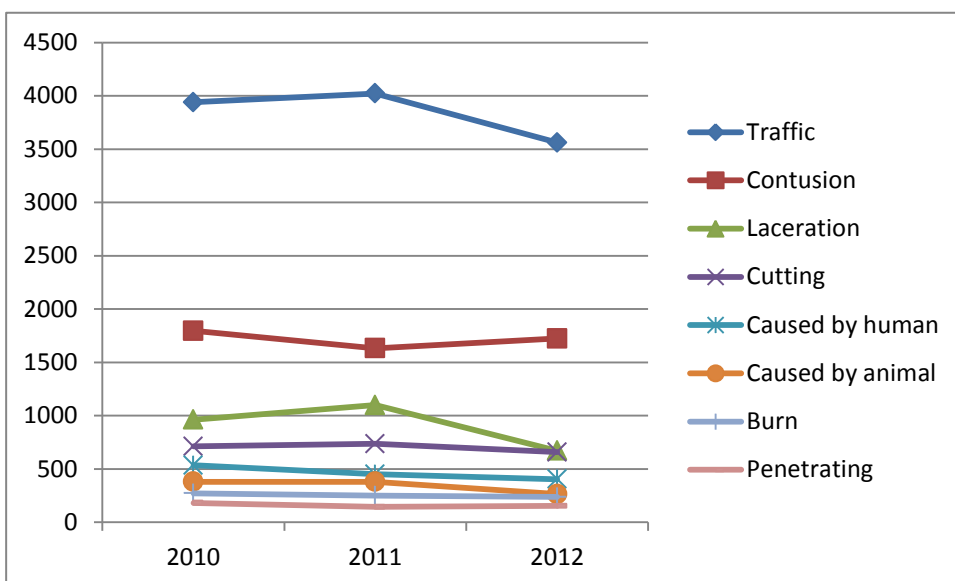
**(B). ER Injury Data**

Injury Surveillance Group had analyzed the injury data of emergency wards of Hsinchu Cathay General Hospital from 2010 to 2012 as below. But the information is insufficient to figure out the real causes of injury.

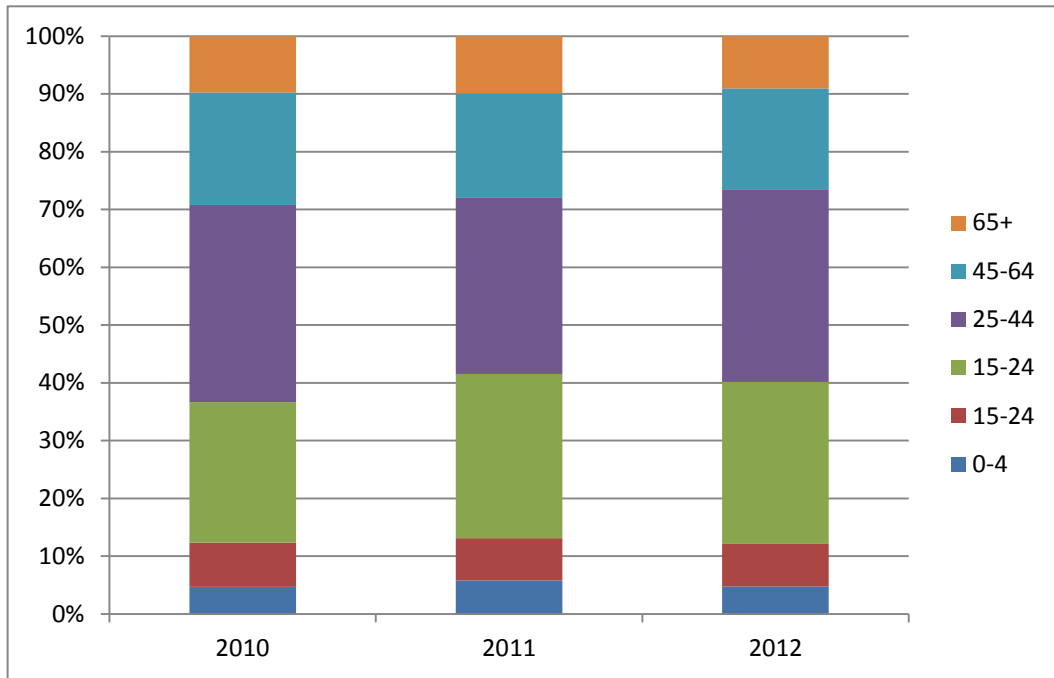
- By gender: The injured case to hospital has declined, and the male got hurt more, about 1.4 times the female.



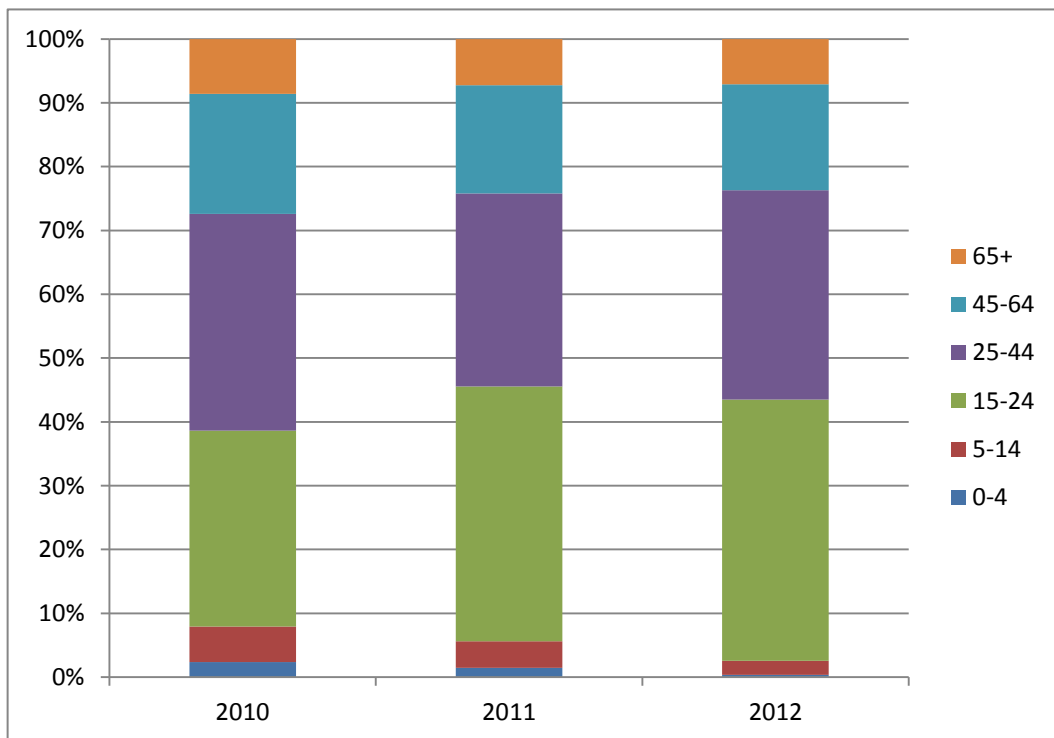
- By injury type: Traffic injury mainly



■ By age group: 15-24 occurred more.

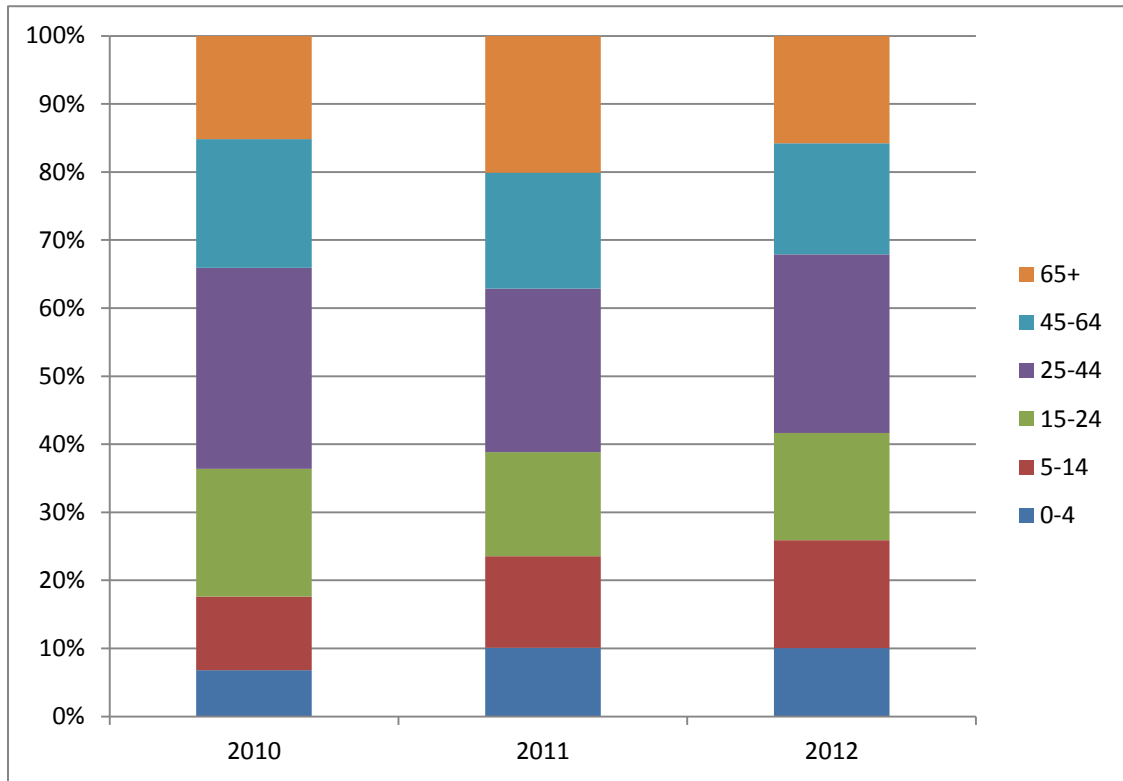


➤ Traffic injury analysis by age group

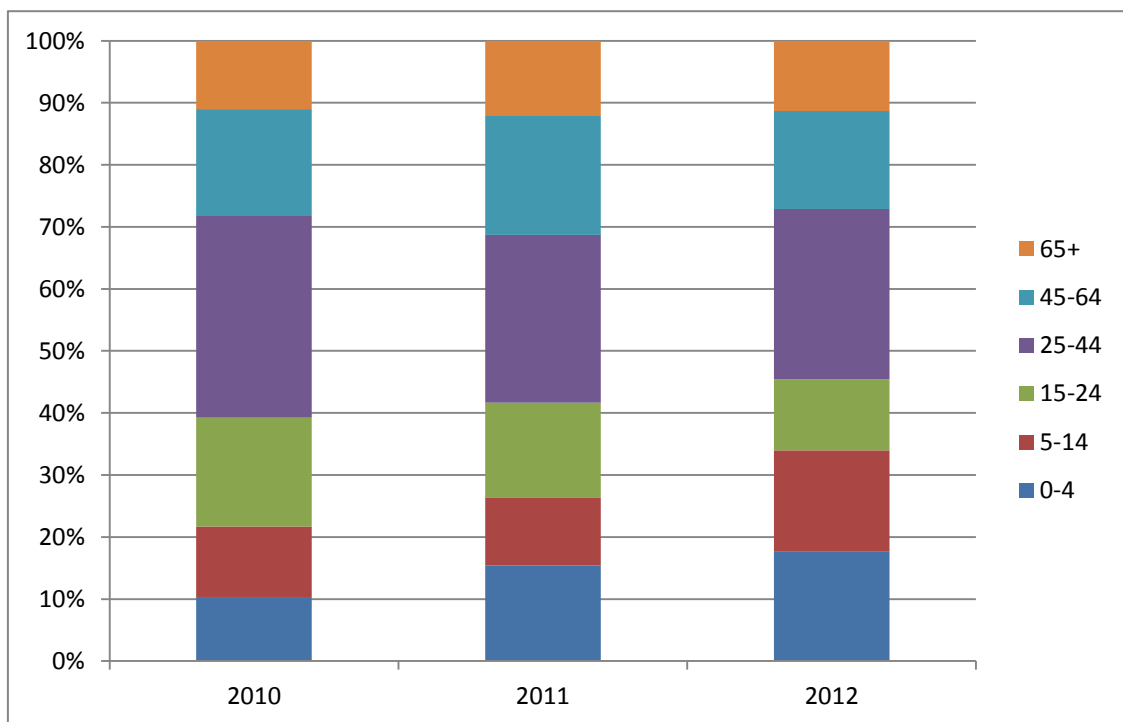




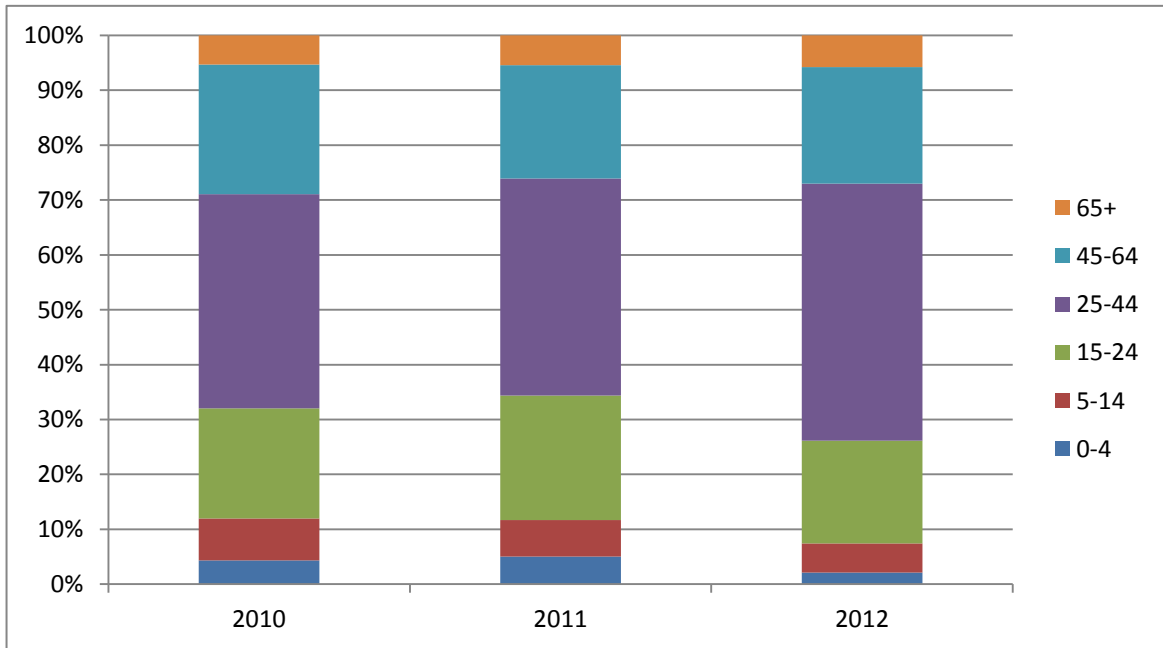
➤ Contusion injury analysis by age group



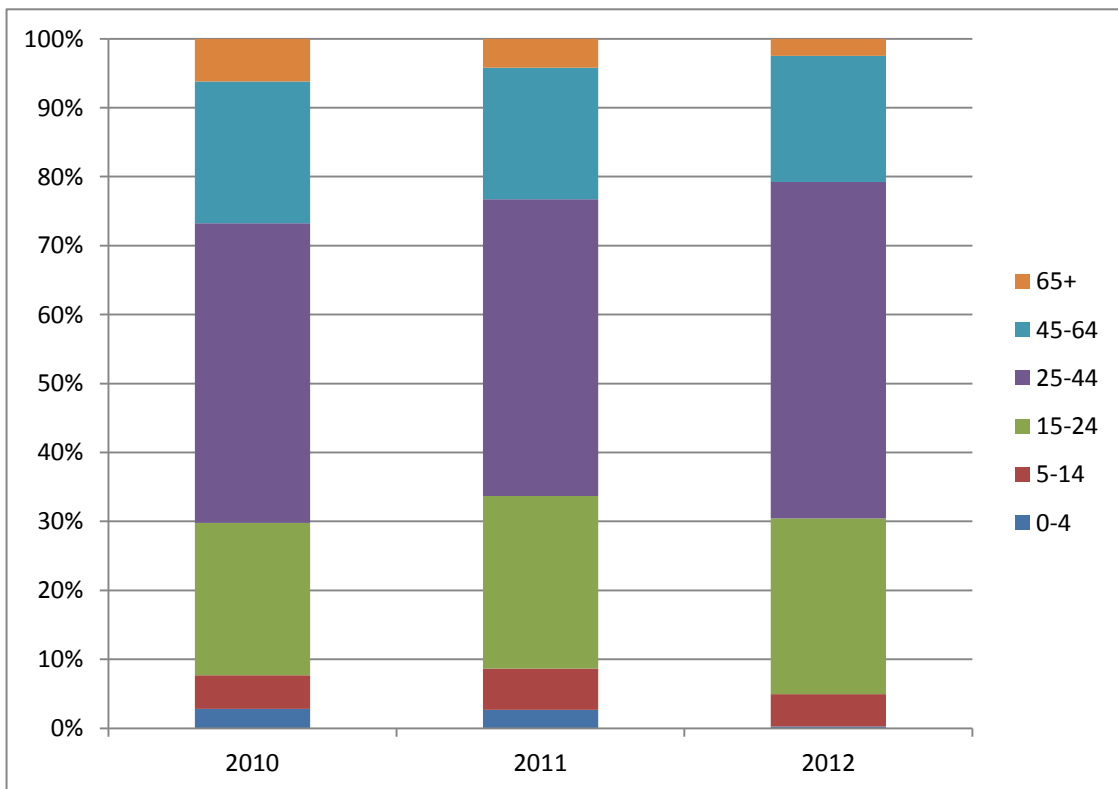
➤ Laceration injury analysis by age group



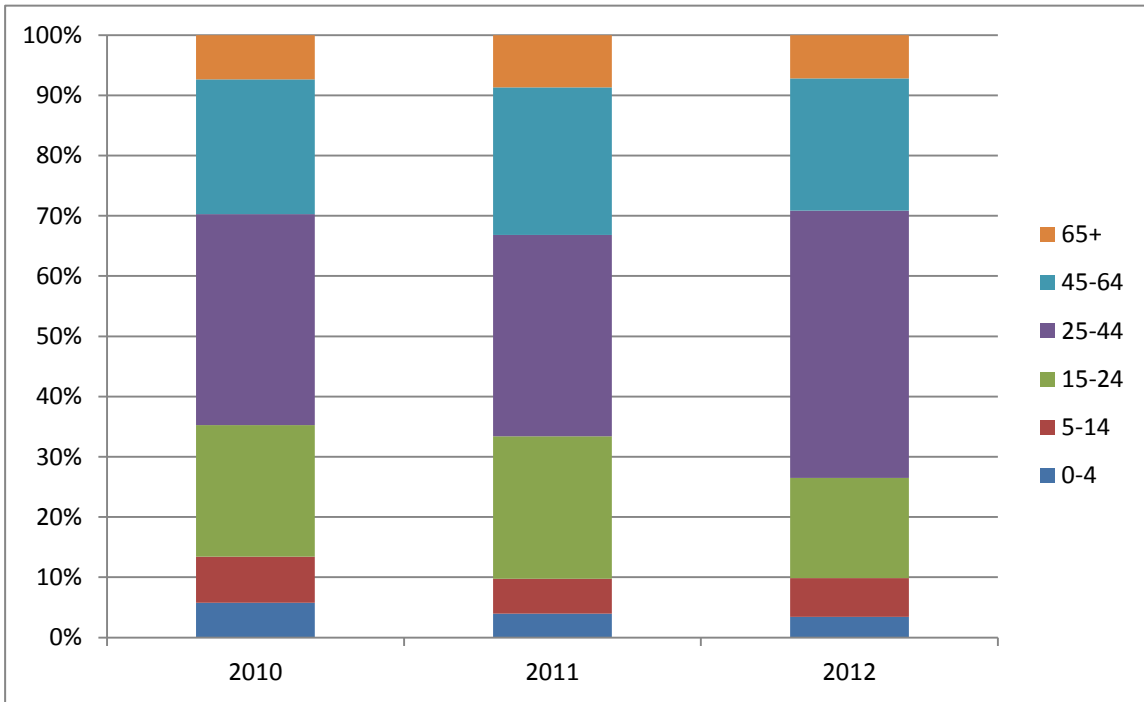
➤ Cutting injury analysis by age group



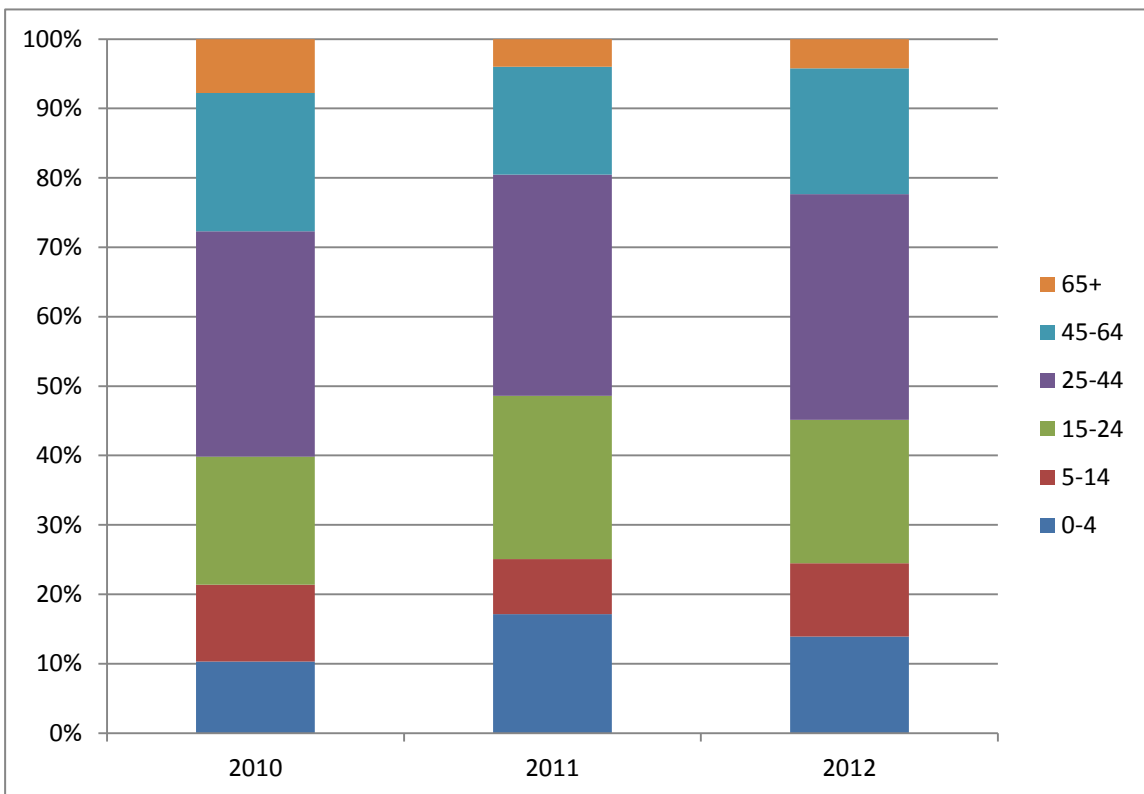
➤ The injury caused by human analysis by age group



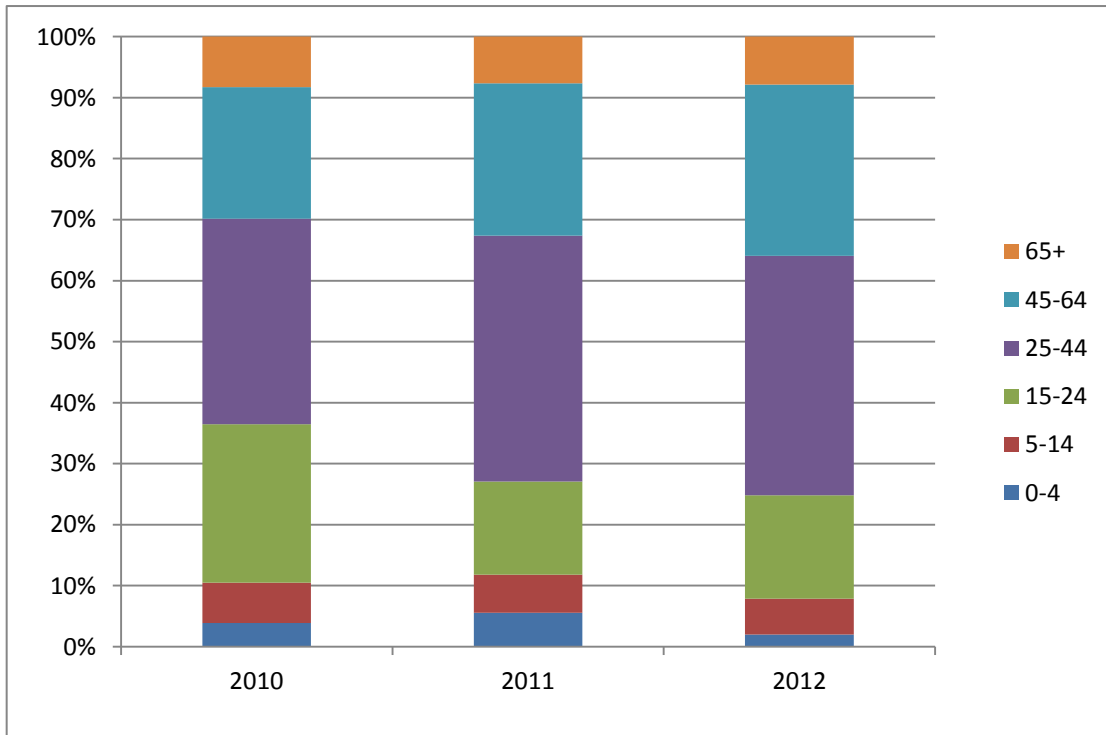
➤ The injury caused by animal analysis by age group



➤ The burn injury analysis by age group



➤ The penetrating injury analysis by age group



**(C). Injured Experience Survey in East District of Hsinchu City:** The survey was conducted on 2,925 households in 2011 and 2012 to understand their injured experience and the safety needs. The findings are summarized as follows:

■ Case number of different injury types

Injury Type	Case Number	Percentage
Traffic Injury	201	6.9%
Fall Injury	189	6.5%
Striking/Cutting/Caught Injury	125	4.3%
Burn Injury	121	4.1%
Injury by Human	44	1.5%
Obstruction Injury	43	1.5%
Injury by Animal	38	1.3%

➤ **Fall injury**

• **By Location**

Location	Home				Outdoors			Total
	Bathroom	Kitchen	Stairs	Others	Roads	Recreational place/ Park	Other public places	
Case Number (%)	29 (15.3%)	12 (6.4%)	13 (6.9%)	45 (23.8%)	39 (20.6%)	15 (7.9%)	36 (19.1%)	189 (100.0%)

➤ **Striking/cutting/caught injury**

• **By Equipment**

Equipment	Handcraft tool	Furniture	Sharp things	Stationary	Door, Window	Rolling Door	Wall	Others	Total
Case Number (%)	28 (22.4%)	21 (16.8%)	20 (16.0%)	14 (11.2%)	16 (12.8%)	7 (5.6%)	5 (4.0%)	14 (11.2%)	125 (100.0%)

➤ **Burn injury**

• **By Material**

Material	Motorcycle pipe	Steam	Hot Liquid	Hot Food	Hot Object	Others	Total
Case Number (%)	47 (38.8%)	20 (16.5%)	19 (15.7%)	18 (14.9%)	10 (8.3%)	7 (5.8%)	121 (100.0%)

➤ **Injury caused by Animal**

Cause	Dog bites	Bee stings	Snake bites	Others	Total
Case Number (%)	28 (65.1%)	10 (23.3%)	2 (4.7%)	3 (6.9%)	43 (100.0%)

➤ **Injury caused by Human**

Cause	Direct hurt	Indirect hurt	Others	Total
Case Number (%)	23 (52.3%)	18 (40.9%)	3 (6.8%)	44 (100.0%)

➤ **Obstruction injury**

Cause	Fishbone	Minced Food	Solid Food	Total
Case Number (%)	25 (65.8%)	10 (26.3%)	3 (7.9%)	38 (100.0%)

➤ **Traffic injury**

• **By Age group**

Age	14 and under	15-24y	25-44y	45-64y	65y+	Total
Case Number (%)	4 (2.0%)	17 (8.5%)	85 (42.7%)	67 (33.7%)	26 (13.1%)	199 (100.0%)

• **By Identity**

Identity	Drivers				Passenger	Pedestrian	Total
	Motor	Cars	Bicycle	Others			
Case Number (%)	103 (51.5%)	23 (11.5%)	19 (9.5%)	5 (2.5%)	33 (16.5%)	17 (8.5%)	200 (100.0%)

• **With Safety device**

	Yes	No	Total
Case Number (%)	161 (80.1%)	40 (19.9%)	201 (100.0%)

### (D). Injury Hotspot Map

In the past, the vital statistics were recorded based on the registered living place of individuals, which could be inconsistent with the actual citizens living in the area. Since this year, we cooperated with National Chiao Tung University to adopt Open Data and Google Map to present major injury distribution and dangerous area for local citizens and administrative units to explore those hot spot through a more instinct and convenient way, and to further seek for the most effective solution. This mechanism has been an important decision-making factor for the international society. Below is the map we depict on Google Map of the locations of carbon monoxide poisoning locations.



Numerous data uploading channels will be established in the community for local citizens to quickly report dangerous cases; those channels include sending incident information at the scene through cellphone APP to Google Cloud Server, or reporting the details to Injury Surveillance Group through email and then the Group will upload the data to Google Cloud Server.

In order to encourage citizens without smart phone or computer access, we have designed a paper report sheet which could pass the information to Injury Surveillance Group through faxing; all the data will also be presented through Google Map.

## **Indicator VI: Evaluation measures to assess their programs, processes and the effects of change**

To ensure the safety promotion projects of the community can be carried out sustainably, the strategies, implementation process and results are assessed internally, and relevant experts are irregularly invited to conduct external assessment.

### **A. Internal Assessment**

#### (A). Evaluators:

1. Head of all working groups in “Hsinchu East District Association on Safety & Health Promotion”
2. Collaborating units and partners of all working groups
3. Injury surveillance group
4. Experts on Community Construction

#### (B). Way of evaluation:

1. Regular Meetings: Core meetings and group meetings are conducted every one to two months for the report of all working group progress and difficulties; if necessary, experts are invited to provide suggestions or resource referral.
2. Result Presentation: Result presentation is conducted at the end of the year by all working groups to report their annual performance; in addition, the public units will help organize the presentation and all local citizens are invited to participate and offer suggestions.

### **B. Ways of External Assessment**

- (A). Public Health Bureau of Hsinchu City Government to evaluate the community.
- (B). Taiwanese Community Safety Promotion Center to evaluate and assist in the community.
- (C). Health Promotion Administration evaluates and assesses the annual implementation outcome.
- (D). WHO CC CSP experts visit and assist the community.



(E). Teaching team from Department of Environment and Cultural Resources, Hsinchu Normal University visit the community and offer suggestion.

### **Indicator VII: Ongoing participation in national and international Safe Communities networks**

Hsinchu East District continuously participates in domestic and international safe community network for experience exchange and activities; the details are listed as Tables 10 and 11:

Table 10 Domestic Activity

No.	Date	Location	Activity	Content
1	2009/04/21	Hsinchu	Safe Community Exchange Seminar	Exchange experience with Neihu International Safe Community for the operation and process
2	2009/08/18	Taipei	Experience exchange on safe community implementation	Experience sharing with other communities to develop the operation of a safe community
3	2009/08/21	Taipei	Practical work on children safety	Discuss and practical training on the safety issues of the playing equipment of children
4	2010/05/24	Taipei	Visit Neihu International Safe Community in Taipei	Explore the operation of Neihu International Safe Community and International Safe School
5	2010/06/28-29	Taipei	How to execute international safe community project	Evaluate the strategy of international safe community through practical experience and courses
6	2010/07/01	Hsinchu	Safe Community Seminar	All local safe community promotes were participated and people from International Safe Community were invited to share their practical experience
7	2010/10/02	Taipei	Seminar on the Injury Prevention and Safety Promotion for the Elderly	Assess the condition of home and traffic environment of the elderly citizens and strengthen safety for the vulnerable group
8	2010/11/08	Taipei	International Seminar on Community Safety and Health	Presented Home Safety Poster and Certificate awarding
9	2011/07/30	Taipei	Visit Wenshan International Safe Community in Taipei	Explore the operation of Wenshan International Safe Community
10	2011/09/17	New Taipei City	Onsite Assessment of “Xizhi Sioufong Safe Community, New Taipei City” by WHO CC CSP	Observation of the evaluation process of a safe community

11	2011/09/19	Hsinchu	Experts of International Safe Community visited Hsinchu East District	Experts visited the community and offer suggestion of improvement to obtain the certificate
12	2011/10/16	Taipei	Seminar on Taiwan Safety Promotion, Public Health and Epidemic Disease	The community is invited to do opening performance and observe certificate awarding ceremony
13	2011/11/07	Taipei	Seminar on Injury Surveillance Data Collection and Usage	Explore the data surveillance content and analysis
14	2012/08/25	Taipei	Seminar on Traffic Accident Prevention	Collaboration discussion on drunk driving prevention and traffic safety promotion
15	2012/11/06	Tainan	Visit Jinhwa International Safe Community in Tainan	Explore the operation of Jinhwa International Safe Community
16	2012/11/25	Taipei	Seminar on Taiwan Safe Community Development	Learn and exchange safe community experience with other communities
17	2012/12/18	Taipei	Seminar on Future of Taiwan Safe Community Development	Discuss the future prospect of international safe community and relevant issues

Table 11 International Activity

No.	Date	Location	Activity	Content
1	2011/09/06-09	Falun, Dalarna, Sweden	20 <sup>th</sup> International Safe Community Conference	Participated in oral and poster presentations, the topics were “Improved Effects of Safety Check, East District, Hsinchu City” & “Improved Effects of Hsinchu Elementary School Campus Safety” respectively
2	2012/11/28-12/02	Toshima, Tokyo, Japan	6 <sup>th</sup> Asian Regional Conference on Safe Communities	Participated in poster presentation on the topic of “Effects of Anti-suicide Propagation among Community Elders in Hsinchu City, Taiwan”



Fig.13 Photos of domestic activities



Fig. 14 Photos of International Safe Communities Exchange





Fig. 15 Photos of International Safe Community Network

## Commitment and Future Prospect

Hsinchu East District will sustainably carry out the safety promotion work, and further share our experience and expand the project into the whole Hsinchu City. We hope to be a member of International Safe Communities designated by WHO CCCSP and participate in Taiwan and Asian Safe Community Network in the future in the hope to learn and exchange experiences with more safe community partners nationally and internationally.