



衛生防護中心
Centre for Health Protection

Non-Communicable Diseases Watch

Volume 5 Number 3 March 2012

Health Tips

Injuries
are
NOT accidents

Injuries
are
preventable

Injury ≠ Accident

Injuries have traditionally been regarded as random, unavoidable “accidents”. During the last few decades, however, a better understanding of the nature of injuries changed these old beliefs. Today, injuries are viewed as largely preventable events.¹ Thus, a better understanding of the risk factors of injuries can often help to reduce the likelihood and severity of injuries.² In fact, injuries are multi-causal events which result from a complex interaction of social, economic, environmental, behavioural and biomedical determinants over the life course. Increasing people’s awareness of these factors and adopting appropriate safety measures have been demonstrated to be effective in the prevention and control of the problem.^{3,4}

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Local Situation of Injury

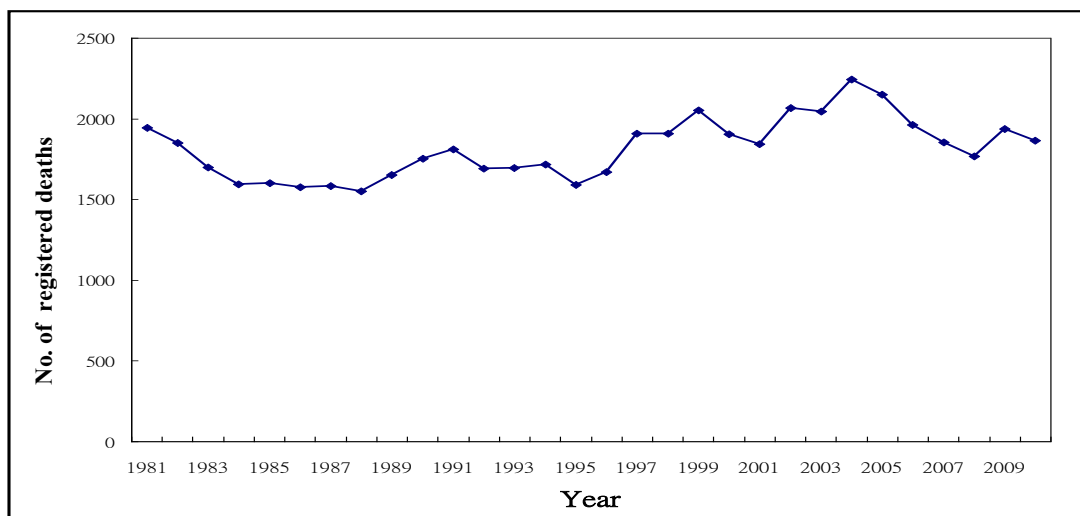
In Hong Kong, injuries have remained one of the leading causes of death, for all age groups, since the 1960s. Injuries accounted for 1 500 to 2 200 deaths annually between 1981 and 2010 (Figure 1). In terms of potential years of life lost at age 75 (PYLL 75, is an indicator of premature mortality), injuries ranked second among the ten leading causes of death in Hong Kong from 2001 to 2010.⁵

This publication is produced by the Surveillance and Epidemiology Branch, Centre for Health Protection of the Department of Health

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Figure 1: Number of registered deaths due to injuries, 1981-2010



Sources: Department of Health and Census and Statistics Department.



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Mortality

In 2010, 1 864 registered deaths were related to injuries. This accounted for 4.4% of total registered deaths of that year. Injuries were the sixth leading cause of death in 2010. The death rates for males and females were 36.6 and 17.6 per 100 000 population of respective sex. Among the 1 864 registered deaths related to injuries in 2010, the major causes of death were intentional self-harm (54.1%), falls (10.6%), accidental poisoning by and exposure to noxious substances (9.0%) and transport accidents (7.9%).⁵

In-patient Discharges and Deaths

Among all in-patient discharges and deaths in all hospitals in 2010, 86 480 episodes were due to injuries, accounting for 4.7% of total in-patient discharges and deaths in that year. Among these 86 480 episodes, falls had the largest share (36 011 episodes or 41.6%).⁶ A summary of statistics on injuries in 2010 is provided in Table 1.

Table 1: Summary of statistics on injuries, 2010

Number of registered deaths	1 864 deaths (the sixth leading cause of death)
Proportion of total registered deaths	4.4%
Age-standardised death rate per 100 000 standard population*	19.7
Potential years of life lost at age 75 (PYLL[75])	40 922 years (16.1% of PYLL[75] of all causes)
Number of in-patient discharges and deaths (All hospitals)	86 480 episodes (4.7% of all in-patient discharges and deaths in all hospitals)

Note: * Based on a new world standard population specified in GPE Discussion Paper Series: No.31, EIP/GPE/EBD, World Health Organization, 2001.

Sources: Department of Health, Census and Statistics Department and Hospital Authority.

Disease Burden

According to the Injury Survey 2008, an estimated 415 200 persons (6.2% of Hong Kong's population) sustained at least one injury episode (i.e. an unintentional injury that was serious enough to limit their normal activities) in the 12 months before enumeration. Of the estimated 309 800 injury episodes requiring medical attention in Hong Kong, 51 900 (16.7%) resulted in hospitalisation. The average medical expenses incurred by an injured person as a result of each injury episode was about HK\$1 900 (median HK\$300). The cost increased with age and was the highest in persons aged 65 and above. The total cost incurred by injured persons as a result of injuries (excluding refusals and unknown/missing cases) in Hong Kong in 2008 was estimated at around HK\$800 million. In employed persons, more than half of the injury episodes (51.3%) sustained caused the victims to be absent from work temporarily. The average duration of absence was 19.8 days (median 7.0 days). In students, 17.1% of the injury episodes sustained caused the victims to take days off from school temporarily for an average of 11.5 days (median 3.0 days). Regarding longer term influence, 36.2% of the injury episodes caused the victims to give up or change their normal daily activities and 1.4% caused residual disabilities for 6 months or longer.⁷

High Risk Groups

Injury occurrence varies among different sub-groups in the population. As revealed by the Injury Survey 2008, people aged 75 years and older had a higher injury rate (8.9%) and a higher hospitalisation rate (48.8%) than other age groups.

In contrast, a higher proportion of children aged 0 to 4 years (41.7%) had repeated injury episodes during the study period as compared to other age groups. Various factors were found to be associated with increased injury rates. People living alone, those with lower educational attainment, those with a habit of regular drinking or binge drinking, and those with increased number of selected chronic health conditions or functional disabilities had a higher risk of sustaining injuries.⁷

Injury Prevention

Overseas experiences have shown that creating and maintaining a safe environment will dramatically reduce the injury occurrence. For instance, using child-resistant containers was found to reduce the risk of poisoning by 40% to 58%.⁸⁻¹⁰ Regrettably, compliance with the use of safety devices by the public is still low in most countries. In Hong Kong, among the 49 safety measures surveyed in the Injury Survey 2008, low adoption was observed in 15 safety measures ('low adoption' here refers to more than half of the population and households adopting a measure for none of the time, a little of the time or some of the time). Thirteen of these 15 safety measures were related to the use of safety devices (e.g., helmets, anti-slip mats, corner protectors or safety gates, etc) (Table 2). Of note, 91.1% of the population reported that they did not wear helmets when riding bicycle.⁷ [For full report of the Injury Survey 2008, please visit the Centre for Health Protection website at http://www.chp.gov.hk/files/pdf/injury_survey_2008_eng_20100913.pdf.]

Table 2: List of safety measures with low adoption rates

Safety measures	Type of injuries concerned	Adoption rate* (%)
Wear a helmet when riding a bicycle	Transport	3.2
Use a raised toilet seat to allow getting on and off the toilet easily [@]	Fall/Domestic	3.8
Carry an alarm device for seeking help in case of fall and failure to get up (such as Personal Emergency Link) [‡]	Fall	12.8
Use handrails to assist movement [@]	Fall/Domestic	15.4
Use corner protectors (in table or other furniture corners) [#]	Domestic	20.8
Use sunblock agents to reduce the chance of sunburn	Sports	25.8
Use safety gates to keep children away from toilets and kitchens [#]	Domestic	29.2
Use door knob covers [#]	Domestic	29.8
Use step-stools to reach high	Fall/Domestic	32.0
Use anti-slip mats [@]	Fall/Domestic	32.6
Use anti-slip mats	Fall/Domestic	33.3
Make daily contact with friends, relatives or neighbours due to living alone	Domestic	46.9
Use a life vest when playing water sports	Sports	47.7
Use child-proof containers for storing medications [#]	Poisoning/Domestic	48.3
Do warm up exercises before participating in sports	Sports	49.4

Notes: * Only individuals and households to which a particular safety measure is applicable were included in the base for calculating an adoption rate.

[@] For households with elderly aged 65 and above.

[‡] For elderly aged 65 and above.

[#] For households with children aged below 11.

Source: Injury Survey 2008.



Injuries can be Avoided

Members of the public should be aware that injuries are preventable. The general public's growing acceptance of injuries as a preventable public health problem is essential to the development and effective implementation of preventive strategies, and consequently a decrease in disease burden due to injuries.

A Working Group on Injuries of the Department of Health was established in February 2012. The Working Group consists of representatives from community organizations, academia, healthcare professions, social services sector, public sector and government departments. The Working Group will advise on the priority actions for health improvement in the area of injury prevention, and make recommendations on the development, implementation and evaluation of action plans for prevention of injuries.

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A US study showed that the number of traffic injuries and deaths among headphone-wearing pedestrians tripled from 2004 to 2011.

Researchers reviewed 116 injury reports involving pedestrians wearing headphones, of which 81 (69.8%) resulted in death of the pedestrian. Results showed that the number of headphone-wearing pedestrian collisions with vehicles rose from 16 in 2004-2005 to 47 in 2010-2011. Of the 116 pedestrian casualties, majority of victims were male (68.1%) and under the age of 35 (57.8%). While close to three-quarters (74.1%) of case reports stated that the victims were wearing headphones at the time of the crash, 29.3% of drivers of vehicles reported sounding a warning before the crash.

This study highlighted the danger of pedestrians in wearing headphones as they could be distracted or unable to hear car horns.

[Source: Lichstein R, Smith DC, Ambrose JL, *et al.* Headphone use and pedestrian injury and death in the United States: 2004-2011. *Inj Prev* 2012; Jan 16. doi:10.1136/injuryprev-2011-040161]



Data Brief

Cycling is a great way to exercise, have fun, get around, and spend time with friends and family. However, negligent behaviours and lack of safety awareness among cyclists or other road users can contribute to cycling injuries. According to the Road Traffic Accident Statistics of the Transport Department [http://www.td.gov.hk/en/road_safety/road_traffic_accident_statistics/index.html], the number of cyclists involved in reported road accidents in Hong Kong increased from 1 576 in 2001 to 2 027 in 2010. Over the same period, there were 93 registered deaths due to pedal cyclist injured in transport accidents, of which 81.7% were males and 53.8% were among people aged 55 and above.

Number of registered deaths due to pedal cyclist injured in transport accidents by sex and age group, 2001-2010

Age group	Male	Female	Overall
14 and below	7	0	7
15-24	4	0	4
25-34	5	1	6
35-44	4	5	9
45-54	13	4	17
55-64	20	6	26
65 and above	23	1	24
Overall	76	17	93

Sources: Department of Health and Census and Statistics Department.

To get the most benefits out of cycling and to reduce the potential risk of injury from cycling, cyclists should wear helmets and protective pads that properly fit the head, elbows and knees, and obey traffic rules. At the same time, they should not wear headphones, and should never use handheld mobile phones or do any other actions that will distract attention whilst cycling. For more cycling safety tips, please refer to the “Cycling Safety” booklet that is available at the Transport Department’s website at http://www.td.gov.hk/en/road_safety/cycling_safety/index.html.

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Non-Communicable Diseases (NCD) WATCH is dedicated to promote public’s awareness of and disseminate health information about non-communicable diseases and related issues, and the importance of their prevention and control. It is also an indication of our commitments in responsive risk communication and to address the growing non-communicable disease threats to the health of our community.

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