

**For discussion
on 20 December 2013**

Legislative Council Panel on Transport

**Proposal to Raise the Mandatory Requirement of Using
Child Restraint Device in Private Cars**

Purpose

This paper seeks Members' views on a proposal to further enhance the safety of child passengers in private cars by raising the mandatory requirement for using child restraint device ("CRD").

Background

Existing statutory requirement

2. Under the Road Traffic (Safety Equipment) Regulations (Cap. 374F) ("the Regulations"), all passengers travelling in private cars are required to wear seat belts, if any, provided for the seats. The Regulations further require that a child aged less than 3 must be restrained by an approved CRD when travelling in the front seat of a private car. The requirement for CRDs also applies to a child passenger travelling in the rear seat when a CRD is available for use. However, the Regulations do not require that CRDs must be available in rear seats.

3. While there is no statutory requirement to mandate a child passenger to use a CRD in rear seats, we note that some drivers have nonetheless installed CRDs in rear seats in private cars for better protection of young children.

Types of CRDs

4. There are three common types of CRDs, namely carrycots generally for 1 year old or less, child safety seats generally for 9 months to 4 years old, and booster seats generally for about 4 to 12 years old, as illustrated in **Annex I**. The approved standards for CRDs are stipulated in Schedule 2 of the Regulations.

Review

5. Road safety is accorded primary concern in our community. We have conducted a review of the use of CRDs in private cars. It is noted that the number of private car child passengers killed or seriously injured in traffic accidents has been low in recent years¹. While the Government will continue to promote safety of child passengers through publicity and education, we reckon that there is room to further enhance the statutory requirement of CRDs in private cars for their better protection.

Requirements of other jurisdictions

6. We have reviewed the CRD requirements in private cars of 17 jurisdictions and the findings are at **Annex II**. All of these jurisdictions adopt a more stringent statutory requirement than Hong Kong. Body height and age are the two common factors in determining the mandatory use of CRDs in private cars. Some jurisdictions use one of these two criteria and some use both. Most of these jurisdictions set the age threshold to be within the range of “less than 8” to “less than 12”. For the height threshold, the range of 1.35m to 1.50m are adopted by different jurisdictions. All of the jurisdictions require the use of CRDs in both the front and rear seats.

¹ The numbers of private car child passengers aged less than 12 who were seriously injured in traffic accidents in 2011, 2012 and 2013 (up to 3rd Quarter) were 4, 2 and 3 respectively. One child was killed in 2013.

Views of medical community

7. The Department of Health has drawn our attention to the following three international authorities which use body height or weight as the benchmark for use of adult seat belts without booster seats (a type of CRD) –

- (a) *European Commission (“EC”)* - body height over 1.35m
- (b) *United States Centers for Disease Control and Prevention (“CDC”)* - body height over 1.45m
- (c) *World Health Organization (“WHO”)* - body weight over 36 kg

8. We have also consulted the Hong Kong College of Emergency Medicine (“HKCEM”) and the Hong Kong College of Paediatricians (“HKCP”). The HKCEM advised that in principle, an adult seat belt could be used if a child is tall enough to sit without slouching, and able to keep his or her back against a vehicle seat with the knees naturally bent over the edge of the seat and feet flat on the floor. The HKCEM added that age is just a surrogate to represent body height and weight, and mentioned the threshold of 1.40m and 36kg for the use of CRDs in private cars. The HKCEM supported raising the legal age threshold for the use of CRDs in private cars and proposed a threshold of between 8 to 10 years old. The HKCP also indicated support to tighten up the existing statutory requirement.

Proposal

Height and age thresholds

9. Having taken into account overseas practices and the views of the medical community, we consider it prudent to adopt body height and age as the criteria in mandating the use of CRDs in private cars. We do not propose using body weight as a criterion as it is not commonly used by other jurisdictions and is harder to enforce.

10. In setting the body height threshold, we have made reference to the EC and CDC, while the age threshold is determined by the corresponding height (at the 97th percentile) in the Growth Charts of Boys and Girls in Hong Kong produced by the Department of Health (i.e. 97% of boys/girls at that age will be at or under the height threshold).

11. Based on the above, we have developed the following four options with height and age requirements -

Option 1: Children must use a CRD until they are either 1.35m or 8 years old

Option 2: Children must use a CRD until they are either 1.40m or 9 years old

Option 3: Children must use a CRD until they are either 1.45m or 10 years old

Option 4: Children must use a CRD until they are either 1.50m or 11 years old

To illustrate the working of the requirement, under Option 1, a child with body height shorter than 1.35m and age less than 8 will have to use a CRD. In other words, a child aged less than 8 but with a body height of 1.35m or above will be exempted from the use of CRDs. A child aged 8 and above with height less than 1.35m will also be exempted.

12. Option 1 is set with reference to the body height threshold of 1.35m recommended by the EC. Some overseas jurisdictions such as the Netherlands, Singapore, Spain and United Kingdom are using this threshold.

13. Option 3 is set with reference to the body height threshold of 1.45m recommended by the CDC. It is used by some overseas jurisdictions such as Canada (British Columbia and Ontario).

14. Option 2 is derived from the average of the two height thresholds recommended by the EC and the CDC (i.e. Option 1 and Option 3).

15. Option 4 is set with reference to the body height threshold of 1.50m adopted by some overseas jurisdictions, such as Germany, Italy and Switzerland. It is the most stringent among all options.

Seating position

16. We propose mandating the use of CRDs in both the front and rear seats of private cars for better protection of child passengers. This is also in line with overseas practices.

Enforcement

17. To enforce the height requirement, the Police may need to measure the body height of the child passengers when necessary. As regards the age threshold, the Police may require the private car drivers to submit the proof of age of child passengers as supplementary information² if the height check reveals that the child is below the height threshold. We will further work with the Police to sort out any possible enforcement issues.

Possible impacts

18. Based on the Transport Department (“TD”)’s latest Travel Characteristics Survey (“TCS”) 2011, the number of private car-owning families which have at least one child aged less than the specified threshold is respectively as follows under four options:

Option	Estimated no. of families likely to be affected
1	75 000
2	83 000
3	90 000
4	99 000

19. The number of families which currently own or are using CRDs cannot be ascertained because such information was not covered in the TCS 2011.

² Currently, only a person aged 15 or above is required under the law to carry the Hong Kong Identity Card with him or her at all times.

20. The estimated total cost for purchasing new CRDs for a child from birth until the threshold age (assuming the child's height is within the 97% percentile as explained in para. 10 above) would be in the range of \$4,000 to \$14,200. Details are set out at **Annex III**. For a family with two children, the estimated total cost may be doubled. Nevertheless, there are cost saving possibilities such as a younger child taking over the CRD from his/her elder sibling, instead of buying a new one. There are also some second-hand CRDs available in the market.

21. For a family with two children and three adults or three children and two adults, while one of the CRDs (especially for elder child) may be installed in the front seat, the remaining space in the rear row after installing the CRD(s) may be quite tight³ for an adult. One of the adults may have to travel in slight discomfort or use other modes of transport.

22. The proposed extension of the CRD requirement to the rear seats of private cars may have impact on families not owning private cars. If these families have children falling within the height/age limits, they will not be able to travel in the private cars of their friends or relatives without CRDs. In this regard, we note that a booster seat, which is a type of CRDs generally suitable for children aged 4 and above, is smaller in size and portable.

Education and publicity

23. It is important for parents to choose CRDs which are suitable for their children and strictly follow the manufacturer's instructions. Guidelines and rules on the use of a CRD are set out in the Road Users' Code, TD's website, leaflets and road safety bulletin. TD will continue to work in collaboration with the Police and the Road Safety Council to further enhance the education and publicity on the use of CRDs in private cars. If the proposal is supported and the Regulations are amended accordingly, the Government will launch a publicity campaign to inform the public of the new statutory requirement. TD will also update the guidelines and publicity materials to reflect the new requirement and to advise parents on choosing and using suitable CRDs.

³ The space available will depend on the child's age and the corresponding type of CRD to be used. For example, a booster seat for an older child occupies less space than a carrycot or a child safety seat which is more often used for a younger child.

Way Forward

24. The four options are proposed having regard to the views of the medical community as well as different overseas practice. We have an open mind on all these options. We are consulting the Transport Advisory Committee and the Road Safety Research Committee under the Road Safety Council in parallel. Subject to Members' views, we shall conduct a survey to gauge the views of private car owners in order to take the proposal forward.

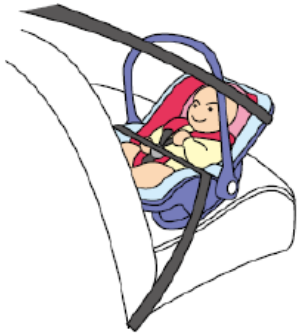
Advice Sought

25. Members are invited to comment on the Government's proposal set out in this paper.

**Transport and Housing Bureau
December 2013**

Types of CRDs

(a) Carrycot (generally for up to 12 months)



(b) Child Safety Seat (generally for about 9 months to 4 years)



(c) Booster Seat (generally for 4 to 12 years)



Summary of statutory requirements of the use of CRDs in other jurisdictions**Asia**

No.	Jurisdictions	Age	Height	Weight	Extracts of statutory requirements
1	Japan	<6			<ul style="list-style-type: none"> Children under 6 years old must be seated in appropriate CRD.
2	Singapore		<1.35m		<ul style="list-style-type: none"> Anyone below the height of 1.35m will be required to be secured with a child restraint appropriate for a person of that height and weight, use a booster seat to supplement the seat belt or an adjustable seat belt.
3	Taiwan	<12		<36kg	<ul style="list-style-type: none"> Children under 1 year of age or with body weight under 10kg should be restrained in a carrycot or child safety seat installed in the rear seats. Children aged above 4 but below 12 or those weighing more than 18kg but under 36kg should use a child safety seat (or booster) in compliance with national standards (CNS) 11497 “child restraint system for vehicles”.

Australia and New Zealand

No.	Jurisdictions	Age	Height	Weight	Extracts of statutory requirements
4	Australia	<7			<ul style="list-style-type: none"> The type of CRD will depend on the child’s size.
5	New Zealand	<7			<ul style="list-style-type: none"> The driver must make sure that any child under 7 years of age is properly restrained by an approved child restraint that is appropriate for the age and size of the child. The vehicle’s safety belt on its own is not an approved child restraint.

Europe

No.	Jurisdictions	Age	Height	Weight	Extracts of statutory requirements
6	France	<10			<ul style="list-style-type: none"> • Children up to the age of 10 must travel in an approved child seat or restraint, adapted to their age and size. • Children under the age of 10 are not allowed to travel on the front seats of vehicles unless there is no rear seat in the vehicle, or the rear seat is already occupied with children under 10, or there are no seat belts.
7	Germany	<12	<1.50m		<ul style="list-style-type: none"> • Children under 12, who are shorter than 1.50m, must be secured by suitable CRDs which satisfy testing standards.
8	Italy		<1.50m		<ul style="list-style-type: none"> • Children under 1.50m must use CRDs suitable to their weight.
9	Netherlands	<18	<1.35m		<ul style="list-style-type: none"> • Children younger than 18 years of age and less than 1.35m tall should use appropriate child restraint system.
10	Spain	<12	<1.35m		<ul style="list-style-type: none"> • Children under 12 years of age must use CRD. As an exception, children under 12 years of age may use adult seat belt when their height is equal or above 1.35m.
11	Switzerland	<12	<1.50m		<ul style="list-style-type: none"> • Children must use an adapted child seat until they are either 1.50m tall or the age of 12.
12	UK	<12	<1.35m		<ul style="list-style-type: none"> • Children aged 3 and above, until they reach either their 12th birthday or 1.35m in height must use CRD.

North America

No.	Jurisdictions	Age	Height	Weight	Extracts of statutory requirements
13	Canada (British Columbia)	<9	<1.45m		<ul style="list-style-type: none"> • A child must be fastened on a CRD until the child reaches a height of 1.45m or more. • A “child” means under the age of 9.
14	Canada (Ontario)	<8	<1.45m	<36kg	<ul style="list-style-type: none"> • Use seatbelt alone once any one of the following criteria is met: Child turns eight years old; or Child weighs 36 kg (80 lb.); or Child is 1.45m (4 feet-9 inches) tall.
15	USA (Florida)	<4			<ul style="list-style-type: none"> • Children under 4 must be secured in a federally approved CRD. • Children 4 through 5 must be secured by either a federally approved CRD or safety belt.
16 & 17	USA (New York and Washington, D.C.)	<8			<ul style="list-style-type: none"> • For New York, CRD is required for all children until their 8th birthday. The use of CRD must meet the size and weight requirements for the child based on the Federal requirements and the recommendations of the manufacturer. • For Washington D.C., children under 8 years of age must be properly seated in an installed infant, convertible (toddler) or booster child seat.

Estimated costs for compliance with the new CRD requirement**Cost of a new CRD**

Type of CRD	Suitable age for a child	Cost* for a new CRD (HK\$)
1	Up to 1 year old	\$3,000
2	Up to 4 years old	\$3,600 to \$6,600
3	9 months to 4 years old	\$2,800 to \$6,200
4	9 months to 12 years old	\$3,600 to \$4,400
5	4 to 12 years old	\$400 to \$5,000

Total estimated costs for acquiring new CRDs for a child from birth until reaching the specified age thresholds

	Child's age at which CRD should be acquired	Type of CRD to be acquired	Estimated Costs* of CRDs for a child
A	i) New born ii) 9 months iii) 4 years old	i) Type 1 ii) Type 3 iii) Type 5	\$3,000 \$2,800 to \$6,200 \$400 to \$5,000 <hr/> Total \$6,200 to \$14,200
B	i) New born ii) 9 months	i) Type 1 ii) Type 4	\$3,000 \$3,600 to \$4,400 <hr/> Total \$6,600 to \$7,400
C	i) New born ii) 4 years old	i) Type 2 ii) Type 5	\$3,600 to \$6,600 \$400 to \$5,000 <hr/> Total \$4,000 to \$11,600

* Data mainly taken from *the Choice Magazine* published by Consumer Council in August 2013.