

‘A child restraint for every child on every trip’

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Abstract

Child passenger injury from road traffic crashes is a leading contributor to New Zealand’s paediatric trauma-related mortality and morbidity. New Zealand has significantly higher rates of child passenger injury than internationally comparable countries. Correctly used child restraints can prevent death and severe injury of child passengers. Despite huge efforts by individuals and Non-Government Organisations to promote up-to-date height-based legislation and to distribute child restraints, the New Zealand Government has a tepid commitment to promoting child passenger safety. Further change is needed, in both our child restraint legislation and practice. This paper highlights the recommendations from a Paediatric Society of New Zealand Position Statement for the correct use of child restraints. This information should be used by all health professionals to advocate for and implement this important injury prevention initiative.

Child passenger injury from road traffic crashes is a leading contributor to New Zealand’s paediatric trauma-related mortality and morbidity.¹ The average annualised fatality rate for child passengers under the age of 5 years is 2.1 per 100,000, second to drowning (3.0 per 100,000) (Table 1).¹ New Zealand compares unfavourably to other OECD countries for child traffic crash-related trauma.²

Table 1. Incidence of child injury deaths and hospital discharges among 0-4 year olds for common causes of child injury

Mechanism of injury	Deaths (2000–2009)		Number of hospital discharges* (2002–2011)	
	Total for the 10-year period	Crude average annualised rate per 100,000 for the 10-year period	Total for the 10-year period	Crude average annualised rate per 100,000 for the 10-year period
All motor vehicle transport	89	3.1	749	25.5
<i>Motor vehicle occupant</i>	61	2.1	451	15.3
Drowning	87	3.0	209	7.1
Falls	10	0.3	10,548	358.5
Burns	27	0.9	2178	74.0
Poisoning	2	+	2790	94.8

Key: * Includes primary admission only, principal diagnosis of injury, and hospital stay >24 hours; + rates not calculated for fewer than 5 deaths.

Source: <http://ipru3.otago.ac.nz/njqs/>¹

Correctly used child car restraints can prevent death and severe injury of child passengers.^{3,4} The most effective way of ensuring all children are provided with a child restraint when they are travelling in a vehicle is to have legislation that reflects

current evidence, is appropriately enforced, and is coupled with widespread education and car seat distribution programmes.⁵⁻⁹

'A child restraint on every trip for every child' is the key message New Zealand's Paediatric Society members emphasise in their Child Passenger Safety Position Statement adopted at the Society's 2012 Annual General Meeting.¹⁰

The position statement was developed in consultation with Plunket and is a synopsis of evidence for the safe transport of children in vehicles. It is targeted towards child health professionals, and includes a list of recommendations (Table 2).

Topics include information on the safest seating position for children; the dangers of lap belts; when children can safely use adult seat belts; the age at which infants may be seated in forward-facing restraints and child restraint related hypoxia.

The statement also urges health practitioners to engage New Zealand Qualifications Authority (NZQA) certificated child restraint technicians to provide child restraint advice.

Table 2. The Paediatric Society of New Zealand recommendations for the correct use of child car restraints

The Paediatric Society of New Zealand recommends:

1. A child restraint is used on every trip for every child. Child passengers travelling in motorised vehicles should at all times be seated in a restraint that is correctly fitted into the vehicle, meets accepted Standards, and is suitable for the child's age, height, weight and development.
2. Child Health Services and Well Child Service providers work with Certificated Child Restraint Technicians to ensure health professionals; families/whānau and caregivers receive expert technical advice and have access to information and products that promote and ensure the safe transport of children.
3. The transfer and transportation of children by child health services should at all times be carried out in a manner consistent with best practice child restraint advice and families, whānau and caregivers are provided with every opportunity to access and use child restraints when travelling to and from hospital and/or child health services.
4. Families, whānau and care givers of children with special health needs receive expert advice on the safe transportation of their child from Certificated Child Restraint Technicians who are working in collaboration with their Child Health Service Provider. This includes situations where the use of a usual child restraint is not achievable or may compromise the child's health, for example, children with hip spicas, cardiopulmonary conditions and/or behavioural issues.
5. Child restraints that are semi-reclining are used only for travel in the first months of life and travel time spent in a child restraint should be minimised.
6. Child Health Services and Well Child Service providers routinely advise New Zealand families to:
 - 6.1 Seek advice from a Certificated Child Car Restraint Technician when purchasing and installing child car restraints
 - 6.2 Seat children rearward facing up until the age of two years, and then continue to seat them rearward facing for as long as practicable
 - 6.3 Ensure young infants are not left unattended to sleep in semi-reclining child restraints.
 - 6.4 Use head positioning inserts to ensure infants are correctly positioned and able to maintain a clear airway at all times they are in the child restraint.
 - 6.5 Ensure children younger than the age of fourteen always travel seated in the back seat, for their safety.
 - 6.6 Ensure children are never placed in a restraint in the front seat of a vehicle where an airbag might be activated. This is critical with respect to rear-facing child restraints.
 - 6.7 Only use lap belts when there is no safer alternative.
 - 6.8 Continue to use a child restraint or booster seat until the child reaches 148 cm in height.

Despite the overwhelming scientific evidence of the effectiveness of child restraints and long-standing recommendations that they be used, the New Zealand Government has a tepid commitment to promoting child passenger safety.¹¹ Change is needed, in both our child restraint legislation and practice.

New Zealand's child restraint legislation was introduced in 1994 as a first step towards achieving better passenger safety for children.¹² It languished unattended for over 15 years. A crucial issue for paediatricians has been the law's failure to mandate that older children remain in child restraints (i.e. booster seats) until it is safe for them to use adult seat belts.⁴ In 2010 a Road Safety strategy *Safer Journeys 2020* recommended updating the law.¹³

In 2011, a New Zealand Cabinet paper confirmed to the Executive that children are being injured and killed after prematurely graduating from child restraints into adult seat belts.^{14,15} The Cabinet paper acknowledged that New Zealand child restraint law has lagged behind other international jurisdictions, and noted an extensive public education campaign promoting the voluntary use of booster seats had not resulted in any improvement and recommended a law change.

The law change, which was enacted in November 2013, includes a Rule that children must be seated in a child restraint until their seventh birthday, two years longer than previously required (Table 3). This Rule brings New Zealand into line with recently enacted Australian Federal law,^{14,15} but falls short of recommendations in many other parts of the world including the UK, Europe and Canada.²

Table 3. November 2013 New Zealand child restraint law change

The law says you must:	What's changing?	
	Until 31 October 2013	From 1 November 2013
Correctly secure your child in an approved child restraint	Until their 5 th birthday	Until their 7 th birthday
Correctly secure your child in an approved child restraint if one is available in the vehicle (and if not, in any child restraint or safety belt that is available)	From their 5 th birthday until their 8 th birthday	From their 7 th birthday until their 8 th birthday

Source: <http://www.nzta.govt.nz/about/media/releases/2669/news.html>¹⁶

These changes have been greeted coolly by paediatricians as 'a step in the right direction'.¹⁷ The paediatrician's lack of enthusiasm for this recent update is explained within the Paediatric Society's Statement, which says best practice is to keep children in child restraints until they reach a minimum height of 148 cm. That height is usually not reached until approximately a child's 11th birthday.¹⁸ For this reason many overseas child restraint laws encode minimum height requirements along with age; for example the United Kingdom, European Union and Canada.²

The most recent published car restraint use surveys in New Zealand found that between 45% and 65% of child passengers were in incorrectly fitted restraints.¹³ Lack of information and resources have been cited as factors contributing to the incorrect

use of child restraints.^{19,20} In addition to the law change, greater effort is needed on methods shown to be effective within at risk communities, which is the distribution of child restraints through multifaceted campaigns within community settings.²¹

New Zealand health services do not need to look far to find gaps and limitations in the distribution of child restraint information and resources. The New Zealand Road Rules do not require an infant or child of any age to be seated in a child restraint when they are travelling in a registered passenger vehicle including minivans, taxis, or buses.²² Infants and children travelling between health services or home from hospital in taxis can legally be completely unrestrained, held in someone's arms, or restrained only with an adult seat belt.²⁰

This exemption, disappointingly, has resulted in occasions where rather than being viewed as an opportunity to provide child restraints for at-risk families using their services, health professionals have turned a blind eye to families engaging in obviously unsafe behaviour.

The Paediatric Society's endorsement of Plunket's message 'A child restraint for every child on every trip', and their call for health services to work more directly with community-based child restraint rental and loan agencies, are prompts aimed directly at challenging and changing this practice.¹⁰

The adoption of this position Statement by Paediatric Society members represents a refreshed focus by child health professionals on the promotion of child passenger safety. This information should be used by all health professionals to advocate for and implement this important injury prevention initiative.

The full version of the Paediatric Society's Position Statement is available online at: <http://www.paediatrics.org.nz/index.asp?pageID=2145878337>

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