

The Children's Hospital at Westmead

*Working Party for the Prevention of Children
Falling from Residential Buildings*

Outcomes Report

(Executive Summary)
February 2011



the
children's
hospital at Westmead





This report was produced by *The Children's Hospital at Westmead Working Party for the Prevention of Children Falling from Residential Buildings*

A full copy of the report can be downloaded from:
http://www.chw.edu.au/parents/kidshealth/building_falls/

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Preface

The Children's Hospital at Westmead has seen an alarming increase in the number of children accidentally falling from windows and balconies. Most of these children suffer serious injuries and, sadly, many of them never recover.

Recognising that these tragic accidents are preventable, staff at The Children's Hospital at Westmead formed a working party in 2009 to address this important issue. Representatives from government and non-government organisations have produced this report, outlining the key issues and recommendations to curb this growing problem.

Nowhere is the old adage that prevention is better than cure more relevant than across the Sydney Children's Hospitals Network (Randwick and Westmead). Staff are committed to recognising trends in preventable illness and injury and working with the community to keep children safe and well.

The Working Party for the Prevention of Children Falling from Residential Buildings hopes to see a dramatic reduction in the number of children admitted to hospital as a direct result of initiatives outlined in this report. These initiatives focus on education, awareness and regulatory measures for existing buildings, and design standards for new buildings.

Successful implementation of the recommendations in this report will require support and co-operation at all levels of government, the private sector, professionals and the community. We look forward to moving forward to protect the health and well-being of children and families in NSW and beyond.



Elizabeth Koff
Chief Executive
Sydney Children's Hospitals Network (Randwick and Westmead)



1.0 Executive Summary

In 2008, The Children's Hospital at Westmead (CHW) identified falls by children from residential buildings as an increasing cause of injury, often associated with serious and fatal outcomes. Further to this, the number of injuries with a high Injury Severity Score¹ was also a factor in identifying the significance of the issue.

As a result, the CHW brought together a number of key people and organisations and established the '*Working Party for the Prevention of Children Falling from Residential Buildings*'. The Working Party met first in June 2009. The Working Party identified several key issues and established a number of ways forward to address the problem. These included the different safety issues associated with the design of new buildings and the more complex and problematic aspects presented by existing buildings, that met minimum safety requirements at the time of construction but cannot match the current and higher standards of the today's building code and standards.

Accordingly, it may be necessary to develop different strategies for addressing this issue in both new and existing buildings, recognising that existing buildings present the predominant risk. A 'package' of approaches may need to be developed to address the different strategies and measures in common.

Through the work and experiences of public health authorities and building regulators in other countries, in particular the USA, the Working Party determined that effective and comprehensive education and safety awareness initiatives would form a key part of the Working Party's investigations and considerations to establish the most effective solutions to reduce the incidence of child falls and injuries.

The Working Party identified a number of key areas of concern and causes associated with building falls. There were however some areas where the causes of falls and ways to deal with the problem were less clear and further work will be necessary to deal effectively with these particular aspects.

In addition to safety issues associated with the design of new buildings and the complexities of dealing with existing residential building stock, the Working Party also considered the increases in building falls likely to result from urban consolidation policies which will house a greater proportion of the population, including families, in multi-unit residential buildings in the future than at present.²

A symposium was held in November 2009 to obtain a broad perspective of the problem and an overview of the issues, views and opinions from key government agencies, non-government organisations and industry groups. The information presented at the symposium and the feedback received assisted the Working Party in identifying the key issues and concerns, the development of potential solutions and, in part, the identification of matters for future research and direction.

¹ Injury Severity Score is a score assessing anatomical injuries and rating them according to the probability of death and long-term use of resources. A score greater than 12 will mean a significant use of resources such as a hospital stay in intensive care.

² NSW Metropolitan Strategy aims to contain 70% of new development up to the year 2031 within Sydney's existing footprint. This will inevitably mean more high-rise strata title development.



A broad analysis of the issues has allowed the development of a number of recommendations dealing with a range of issues and areas. From these recommendations the Working Party has identified several key areas where it is practical and feasible to allow prompt preventative action to be implemented to address the problem in the short-term, particularly for action in the spring/summer period when fall incidents peak due to windows being open and greater outdoor activity. Other recommendations will require further more detailed consideration and strategies for safety improvements and implementation.

The CHW will pursue implementation of the recommendations through the various government agencies and industry organisations including ensuring that effective and on-going education and awareness campaigns are undertaken.

Recommendations:

Education and awareness

1. Implement, as a high priority, an education and awareness program focusing on a whole of community endeavour with particular strategies aimed at specific areas of the community. Programs and campaigns should be adequately funded to ensure on-going education and awareness addressing the following areas:
 - (a) *Parents and carers, culturally and linguistically diverse communities, grandparents:*
 - Education should focus on window and balcony falls exclusively;
 - Public-awareness raising should occur around the spring and summer months, when falls from windows and balconies are at their peak;
 - Key messages should address the false sense of security often attributed to insect screens. This has been a key message of other similar education campaigns;
 - Any educational approach should be grounded in behaviour change theory;
 - If a certain type of intervention is promoted, that intervention must be available and appropriate. For example, if limiting window openings is promoted, there must be an easy and cost-effective solution for renters, as well as home-owners;
 - Educational material should be disseminated through social services and media that families with young children access, for example, baby health centres, community centres, childcare centres, parenting magazines and non-English speaking newspapers.
 - (b) *Industry*
 - Provide educational and awareness services on child safety issues and window safety products to window manufacturers through the Australian Window Association;



- Provide educational and awareness services on child safety issues and window safety to the Real Estate Institute of Australia and the Institute of Strata Title Management;
- Seek support from key building-related associations such as:
 - Master Builders Association;
 - Housing Industry Association;
 - Building Institute of Australia;
 - Australian Institute of Architects;
 - Building Designers Association of NSW;
 - Stair and Balustrade Association of Australia; and
 - Australian Institute of Building Surveyors,

to encourage and promote industry-based safety enhancements in residential buildings particularly in regard to the design of windows and balustrades.

(c) *Government Agencies*

- Education and awareness regarding window and balcony falls should be part of an adequately funded, ongoing and dedicated campaign; and
 - The Sydney Children's Hospitals Networks to have a leadership role in education and awareness.
2. Seek the support of the Australian Window Association to promote window safety to their membership and to ensure a range of pre and retrofit window barrier devices such as window guards, durable and sturdy insect screens, locking or other safety devices are available to window manufacturers including encouraging manufacturers to incorporate these devices on all windows as standard features.

Regulatory considerations (existing buildings)

3. The *Residential Tenancies Act 2010* should be amended to require landlords to provide safety devices (window guards, durable and sturdy mesh screens, locks, window opening limiters) or other permanently affixed devices on openable windows located above the ground floor (i.e. window sills more than 3 metres above an external surface below) to allow occupants to limit openings to a maximum of 100mm.
4. The *Strata Schemes Management Act 1996* should be amended to require owners corporations in residential buildings to have all common property openable windows fitted with safety devices (window guards, durable and sturdy mesh screens, locks, window opening limiters) or other permanently affixed devices on windows located above the ground floor (i.e. window sills more than 3 metres above an external surface below) to allow occupants to limit openings to a maximum of 100mm.

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5. That a review of relevant planning and building laws be undertaken to determine whether to require safety upgrading of windows and balustrades in existing residential buildings, including residential buildings undergoing alterations or upgrading works to minimise the risk of child falls, in parallel with seeking amendments to the Building Code of Australia (Recommendation 7).

New buildings

6. Monitor the outcomes of the review of the Building Code of Australia (BCA) regarding the fall safety provisions currently being undertaken by the Australian Building Codes Board (ABCB) including the '*Slips, Trips and Falls*' report produced by Monash University for the ABCB.
7. Seek the support of the Australian Building Codes Board to undertake a review of the BCA to specifically consider the issues associated with child falls with a particular focus on window and balcony falls. The review should consider whether:
 - (a) windows in residential buildings should be required to be fitted with appropriate barrier systems such as window guards or window opening limiting devices to allow occupants to restrict openings to a maximum of 100mm; and
 - (b) the current balustrade provisions should require a greater minimum height and openings be restricted to a maximum of 100mm.

General

8. Seek support from Standards Australia to review *AS 2047 – 'Windows in buildings – selection and installation'* to consider incorporating provisions within this Standard to require barrier systems such as window opening limiting devices and locks to be fitted to windows as standard features.
9. Encourage the building design and construction sectors through respective industry institutes and associations to incorporate standard child safety features (window and balustrade designs) in all residential buildings.
10. Seek the assistance of the Commonwealth government to require all State and Territory governments to collect comprehensive incident and injury data, particularly where children are involved, to track national trends regarding building falls and design elements which may have contributed to falls and injuries.
11. Develop a comprehensive hospital-based system for the reporting of building-related fall incidents and injuries involving children to State and Territory building regulators including the national administrator of the Building Code of Australia, the Australian Building Codes Board, to allow for better tracking of fall trends in the built environment.
12. Undertake further research focusing on fall incidents involving balconies and decks including establishing the key causes for such falls. The research should determine the most appropriate and cost-effective methods and systems available to improve safety of existing balustrades in older buildings that do not meet today's building standards.
13. Undertake a detailed review of the '*Slips, Trips and Falls*' Report prepared by the Accident Research Centre - Monash University, to determine if its findings and recommendations can further benefit safety enhancements in buildings particularly window and balustrade designs to minimise child falls.

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14. Give consideration to the potential impacts (increased child falls) from multi-unit residential buildings as a direct outcome of more families with young children residing in this form of housing as a result of increased housing densities in urban areas.
 15. That consideration be given to developing a comprehensive web-based home (child) safety audit assessment system which should include a section on fall risks and ways to improve safety.
 16. Seek the assistance of the Local Government and Shires Association of NSW to promote to their members (local councils and shires) the importance of safety awareness relating to child fall risks in residential buildings and disseminate safety information to local communities.

