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Factsheet

Childhood Fall Injury

Falls are the leading cause of unintentional child injury resulting in hospital admission for children aged 0 – 14 years across all age groups, ethnicities and in all regions of New Zealand.¹

Key facts

Deaths:

- An average of two children a year died from a fall-related injury in the five year period 1997 – 2001.²
- Causes of these deaths included falling from a cliff, falling out of a building, from one level to another, falling from playground equipment, and down stairs and steps.¹
- Boys comprised 90% of the children who died of a fall.¹

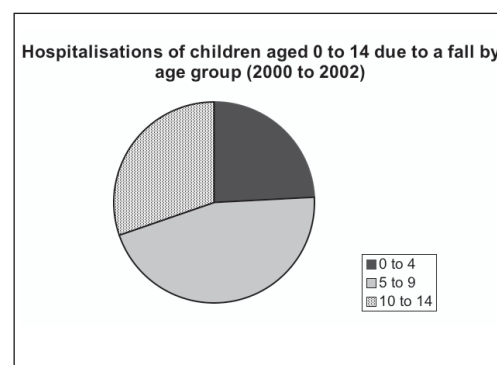
Hospitalisations:

- Falls account for more than half of all injury related hospital admissions for children 0 – 14 years.¹
- Annually 4854 children were hospitalised with fall-related injuries in the three years 2000 – 2002. This equates to an average of **405** hospital admissions **each month**.²
- More boys (**60%**) than girls (**40%**) were hospitalised with fall-related injuries.²
- Different age groups experience falls in different settings. For example, children under five years are predominantly injured from a fall in and around the home. For older children, fall injuries are more likely to be related to playground equipment and sporting/recreational activities.^{1,2}
- **Playground equipment** is associated with nearly **one third** of falls to children requiring hospital admission.²

Age

Between 2000 and 2002 the highest percentage of children hospitalised with a fall injury were aged 5 to 9 years (45.5%). Children 10 to 14 years were next (30.4%) while preschoolers had the lowest percentage (24.1%) of admissions (figure one).²

Figure One

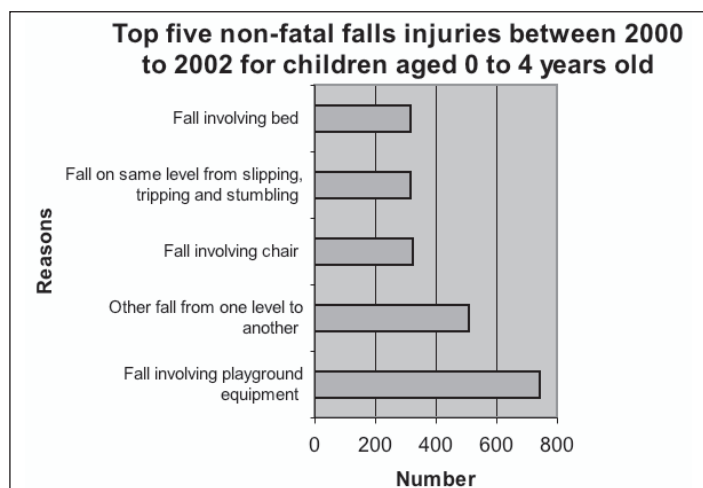


Source: NZHIS data from the Injury Prevention Research Unit – Otago University 2004

Children Aged 0 to 4 years

An average 1169 preschoolers each year were injured severely enough to be admitted to hospital with a fall-related injury for more than 24 hours (2000–2002). For this age group, the majority of falls (56%) occurred in the home.¹ Children were most commonly hospitalised for injuries after falling from one level to another e.g. down stairs, off furniture, out of windows, off balconies and while using playground equipment. Children falling while being carried by someone was also a cause of hospitalisation.¹⁻³

Figure Two

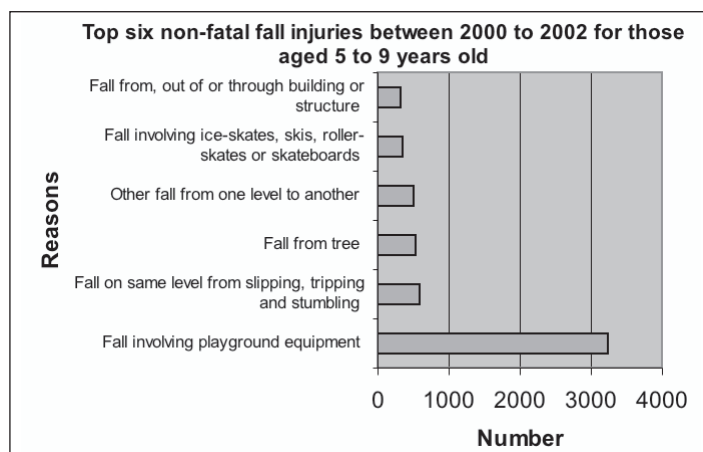


Source: NZHIS data from the Injury Prevention Research Unit – Otago University 2004

Children Aged 5 to 9 Years

On average 2,208 children in this age group were admitted to hospital with a fall-related injury each year (2000 and 2002). Falls from playground equipment were the most common cause of injury, accounting for 49% of hospitalisations. Children aged 5 to 9 were also injured severely enough to be admitted to hospital from falls out of windows, off decks and balconies, from trees and while using ice-skates, rollerblades, skis and skateboards.¹⁻³

Figure Three



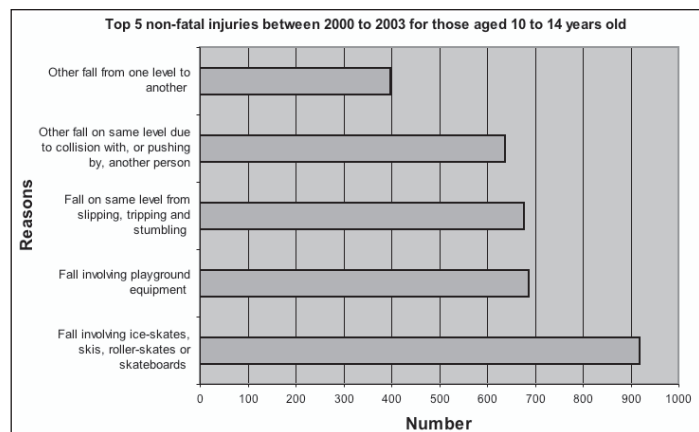
Source: NZHIS data from the Injury Prevention Research Unit – Otago University 2004

Children Aged 10 to 14 Years

Each year, on average, 1,476 children aged 10 and 14 years were admitted to hospitals following a fall (2000 to 2002). Playground equipment related fall injuries tended to feature less amongst this group while sports injuries and

injuries received from activities with ice-skates, skis, rollerblades or skateboards featured more.²

Figure Four



Source: NZHIS data from the Injury Prevention Research Unit – Otago University 2004

Fall Height

While playground equipment offers an opportunity for children to learn climbing skills, such equipment also contributes significantly to fall injury incidents. Falls from heights greater than 1.5 metres increase the risk of injury to 4.1 times that of falls from 1.5 metre heights or lower. It has been estimated that if the fall height of play equipment was lowered to 1.5 metres, a 49% reduction in children attending emergency departments following falls from playground equipment could be achieved.⁴

Developmentally, many young children may not understand the dangers of climbing onto high objects. Experts working with young children stress the importance of adult supervision in playgrounds.

Conclusion

While falls are often viewed as ‘part’ of growing up, they can cause serious injury and, in some cases children can require long term medical treatment. When it comes to undertaking prevention strategies to reduce child falls; children’s age and the setting in which they live and play must be considered. Safety education with caregivers of younger children is important as is the correct use of equipment such as stair gates, and restraints on high chairs.

Supervision by caregivers and understanding of children’s development and ability, as well as design of equipment are important factors in reducing playground equipment related injury. In terms of prevention of fall injuries from sports and recreation activities, the use of safety gear, e.g. helmets and pads, as well as safety and skill-based education can help reduce the severity of injury.

References:

1. Coggan C Lee M Bennett S, *Falls in New Zealand: A study of mortality & morbidity data for all age groups*. Injury Prevention Research Centre Te Puu Taki Aukati Whara Report Series No 78, 2003.
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4. Chalmers D Marshall S Langley J Evans J Brunton C Kelly A-M Pickering A, *Height and surfacing as risk factors for injury in falls from playground equipment: a case-control study*. Injury Prevention, 1996. 2: p. 98-104.
5. Injury Prevention Research Centre Te Puu Taki Aukati Whara, *Results from the Preventing Falls Among Pre-school Children /Tamariki Study, 2001-2002, in Fact Sheet 47*. 2002, The University of Auckland.