



MAJOR TYPES OF CHILD INJURIES IN THE HOME

Each year about 300 Australian children (aged 0-14 years) are killed and 60,000 hospitalised by unintentional injuries - the kind often referred to as 'accidents'.⁸

Many accidental injuries and deaths are predictable and preventable. Researchers estimate that 90 per cent of unintentional injuries could be prevented by implementing strategies that are known to be effective.⁹ Young children from birth to age five, are among the most vulnerable to injuries in the home. Research shows that education, environment and enforcement all have a role to play in making homes safer for children.⁹ Many researchers advocate that taking advantage of early intervention may provide a foundation for long term application of safety behaviour in preventing injuries.²⁵

In their own homes, young children are most likely to be injured in the living room, bedroom and kitchen. In other people's homes, children are most likely to be injured in the living room or yard. Children are vulnerable in homes because homes are designed for adults. Heights, space and structures are built for adult use and comfort, but these often present hazards to children.⁹

The most common cause of injuries in the home are falls, burns, poisoning, choking, strangulation and drowning. Falls account for more than half of all the injuries and can occur from furniture, down stairs and through windows. Burns are most often caused by hot liquids and tap water that is too hot. Scald burns can lead to longer hospitalisations and lifelong treatment.⁹

Poisoning is most often from medication, household cleaning products and personal care products. Choking is most often from food, while strangulation of toddlers and preschoolers is most often caused by entanglement in window blind cords. Drowning most frequently occurs in bathtubs and home swimming pools.⁹

Each of the injuries included in this resource will have the following sections:

- Introduction
- Current Data

FALLS

A combination of developmental, sociological and behavioural factors influence the nature of falls for each age group.¹¹ The severity of the falls is strongly related to the height of the fall and the nature of the material/surface struck.¹² For children aged less than 4 years fall injuries are customarily related to nursery furniture, benches and stairs; while fall injuries for children aged 5 to 14 years are linked to playgrounds, bicycles & sport.¹¹

Childhood falls are a significant health issue for young children and have therefore been designated a National Injury Prevention Plan Priority for the years 2004 and beyond.¹³

During the 2003-04 there were 24,206 hospital separations due to falls for children aged less than 15 years in Australia.¹⁴ Overall, falls account for 41% of all child injury admissions and 42% of Emergency Department Presentations for children aged 0-14 years in Australia.¹⁵



DROWNING

Drowning is the most common cause of preventable death in Australian children aged between 0-4 years. An international comparison of drowning rates indicates that Australia has the second worst record in the world for toddler drowning.²⁹

Infant and Toddler drowning has been identified as the number one Key Priority Area by the National Water Safety Plan and based on data collected over the past decade, one child under five years drowns every week in Australia.³⁰ In 2005/06, 37 children drowned in Australia, which is a 4% increase on the 5 years average.³¹

Natural bodies of fresh water such as ponds, lakes, dams, creeks, rivers and ditches are the location of drowning for children in rural areas. The location of drowning varies with the age of the child. Swimming pools accounted for 35% of drowning deaths in 0-4 year olds in Australia.¹⁵ ³⁰ Toddlers are particularly vulnerable to domestic swimming pool drownings, however as children get older and gain more independence, public waterways and beaches become the most common drowning location.¹²



Pools figure prominently in drownings of young children. The pool hazard should be completely isolated by child resistant fencing. This is extremely effective in preventing drowning of young children when used correctly.¹² For this reason it is imperative that all pool owners (including domestic) be trained in CPR.¹²

POISONING

Poisoning is a major cause of injury to children under 5 years of age. Children at highest risk are aged 1 to 3 years. For these children poisoning is the second largest cause of hospital admissions after falls. Medications are the most common cause of childhood poisonings and nearly all childhood poisonings take place in the home.¹⁹

The National Injury Prevention Plan prioritised poisoning among children.¹³ Most child poisonings occur in the child's own home, in living and sleeping areas. The kitchen, bathroom, laundry, shed and garage can also be dangerous locations.²⁰

In 2003/04 2,194 children under 5 years in Australia were hospitalised as a result of poisoning. This accounted for 21% of all poisoning hospitalisations for this time. The majority of these occurrences were due to accessing drugs and medication.¹⁴

Calls to the Poisons Information Centre following poisoning ingestions by children under 5 years of age reflect the availability of hazardous substances in children's environments.¹² In 2002, nearly three quarters (70%) of poisoning calls to the Poisons Information Centre involved a child (<18 years); Of which 65% were for children aged between 1-4 years¹⁹.



BURNS AND SCOLDS

Hot food and beverages are the most frequent cause of scalds and are rarely life threatening.²⁴ Hot tap water scalds are however, life threatening.²⁴ They are more severe because body immersion scalds cover a larger body surface area, burns are deeper and frequently require skin grafting.²⁴ A baby or toddler's skin burns more deeply and quickly, and at lower temperatures, than adults' thicker skin. Scalds cause pain, require long-term treatments and result in lifelong scarring.²⁴

Injuries resulting from burn and scald injuries were especially high for young children aged 4 years and under, with 12,159 children hospitalised during the period 1999-00 to 2003-04.²² 63% of burn related hospital admissions for children in this age group occurred as a direct result of scalding, with the majority of these injuries occurring in the home.²²

Within this age group, 84% of the injuries to infants aged under 12 months occurring from 7 months onwards which reflects the increasing mobility and ability to reach and grasp objects characteristic of infants this age.²³



For children aged 5 and under, accidents indoors are extremely common. Burns and scalds are a frequent source of accidental injury in young children.

DOG ATTACKS

Every year children are bitten by dogs - usually their own or one belonging to a friend or neighbour. More often than not, these bites occur on the face, head and neck because of the child's height in relation to the dog and the type of play the child engages in. A lot can be done to minimise the risk of dog bites in the home.³⁵



In Australia, the National Injury Surveillance Unit (NISU) recorded a total of 2,198 cases of dog-related hospitalisation during 2002-03, 1,963 (89.3%) injuries had resulted from being bitten by a dog.²⁶ The highest rates of dog-related injury were in the youngest age group (0-9 years). These children were almost exclusively injured as the result of being bitten.²⁶

DRIVEWAY RUN OVERS

Most driveway accidents occur at the child's home where both the parent and the child may feel that the child is safe. Driveway accidents mainly involve toddlers who are old enough to be mobile but are too small to be easily visible from the driving position when close to the vehicle. Majority of vehicles involved in the driveway accidents are 4WD's, utility vehicles, delivery vans, heavy trucks and even family sedans.⁵³

Sadly one child is run over in the driveway of its own home every week in Australia. More than one third of children under six years of age killed in motor vehicle accidents were killed 'off road' in yards, car parks and driveways.⁵³

Children aged one to two years are the most likely to be killed or injured in home driveways. The vehicle is usually only moved slowly and is often being driven by a parent, relative or friend. A slow moving vehicle reversing down a driveway can trap a child, causing fatal crush injuries. Children who survive are often left with severe long-term injuries.



STRANGULATION, CHOKING & SUFFOCATION

Choking most commonly occurs because of food blocking the airway. However, people and in particular children also choke on a variety of other objects.⁵¹

Hard foods like peanuts, bones, raw carrot and apple are the main cause of choking in young children. While babies are at the stage of putting everything in their mouths, all small objects need to be kept out of reach.⁵¹

Boys are most at risk: two thirds of those who choke on non-food items are boys. It appears there is an equal risk that boys and girls will choke on food.⁵¹



A number of household items are potential suffocation hazards. Thin plastic bags, and plastic wrap are particularly dangerous along with balloons, pillows, mattresses, selected clothing, disused refrigerators and toys boxes.⁵¹

Curtain and blind cords can be a danger to children. Children can get caught in the cords and be strangled. This can happen when the cords are too long or they end in a loop, and when furniture or bedding is too close to windows.⁵²

CRUSH INJURIES BY FURNITURE

Children don't always use furniture in the way that it is intended. Furniture can be used as a ladder to reach something above, for example a bookcase, televisions and drawers. All it takes is the weight of a small child climbing on the furniture and it could easily topple over. Furniture falling onto children can cause serious injuries like fractures, head injuries and in the worst, death.⁵⁴

Falls or collisions involving tables, chairs and stools can cause eye injuries, fractures, cuts and sprains. Most injuries can be avoided by choosing safer furniture, securing unstable furniture, and by simple changes to the environment.⁵⁴