

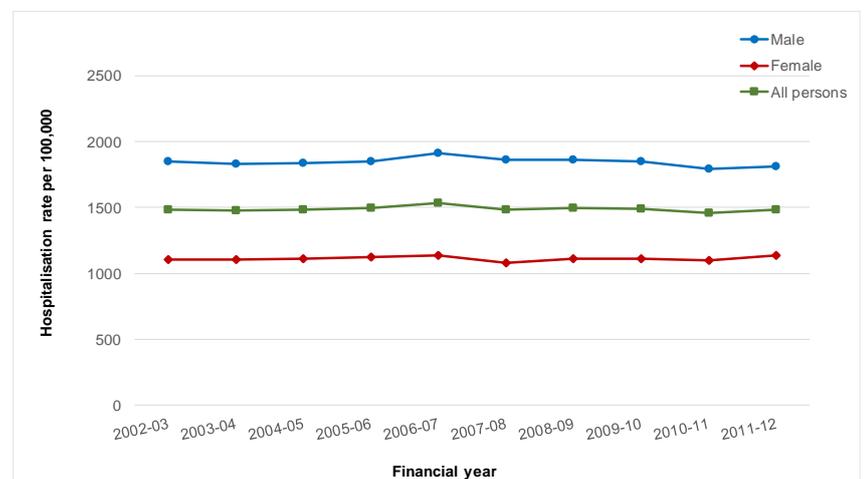
Position statement on reducing the incidence and impact of Childhood injury in Australia

Childhood injury is costly, life changing, and importantly, highly preventable. Injury is the leading cause of death in Australian children and each year results in more than twice the number of hospital admissions due to cancer, diabetes and cardiovascular disease combined¹. For the first time in Australia, we have a comprehensive national profile of all childhood hospitalised injury causes, characteristics, treatment costs and survival. The findings from this 10 year nation-wide study of the 686,409 injury-related hospitalisations of Australian children (aged less than 17 years) commissioned by the Day of Difference Foundation are alarming and require urgent action.

Key findings of the [10-year review of injury-related hospitalisations of children in Australia report](#)

- Child injury hospitalisation rates **have not changed over a ten-year period** (see figure 1)
- Unadjusted child deaths following injury hospitalisation **have increased** (from 108 to 149 deaths/year)
- Children had a higher risk of dying from their injuries if they;
 - lived in regional/remote Australia
 - were aged ≤ 10 years
 - were more severely injured
 - were injured in a transport incident
 - had a drowning incident
 - self-harmed
 - sustained a head injury
- For every severely injured child, there are at least another 13 children hospitalised with minor or moderate injuries
- The total hospital cost of injury hospitalisations of children during the ten-year period was **\$2.1 billion** (\$212 million annually)
- Falls (\$638 million) and transport injuries (\$504 million) were the costliest injury mechanisms
- Pedal cyclists (\$131 million) and car occupants (\$126 million) were the costliest transport incidents
- Over one-third of children were injured as a result of a fall, and most often from playground equipment
- One in five children were injured while engaged in sporting activities
- One in four children were injured at home

Figure 1: Incidence rate for injury-related hospitalisations for children aged ≤ 16 years by year, linked hospitalisation and mortality data, Australia, 1 July 2002 to 30 June 2012² (excludes ACT)



RECOMMENDATIONS TO PROGRESS AND PROTECT AUSTRALIAN CHILDREN FROM INJURY

Childhood cancer survival rates have improved to 80% as a result of significant investment in research and research translation⁴. This same success could be achieved by sustained and targeted investment in childhood injury prevention and management, which will not only reduce the incidence of childhood death, but also improve the long-term physical, emotional and social outcomes of injured children and their families.

1. **URGENT NATIONAL RESPONSE:** Strong federal government leadership of a coordinated evidence-based national response to child injury prevention is required to achieve real reductions in child injury hospitalisation rates, but currently does not exist. The development of a national multi-sectorial evidence-informed childhood injury prevention strategy with defined actions and key performance indicators is [urgently needed](#). This should be led by a national agency to coordinate injury prevention activities. This national agency would drive evidence-based policy and programs and have a commensurate budget to invest. Each State and Territory should be represented and contribute to strategy implementation as required. Commitment to reduce injury in identified areas of priority should be established, and reportable monitoring of progress should form part of the AIHW [National Injury Surveillance Unit](#) (NISU).
2. **IMPROVED QUALITY AND TIMELINESS OF DATA BY IMPLEMENTING NATIONAL INJURY SURVEILLANCE SYSTEMS:** The capacity to nationally monitor the extent of the child injury hospitalisation burden, injury characteristics, treatment costs is required. This is essential to ensure the identification and setting of evidence-based priorities for injury prevention and the evaluation of the impact of injury prevention strategies on injury rates.

Routine, Australia-wide injury surveillance using record linkage of existing administrative data sources should commence as a priority. Injury surveillance should be timely, so that injury prevention strategies can be evidence-informed. To achieve this, the legislation and processes for data release in each State and Territory need to be standardised and appropriately resourced. We urge the strengthening, and long-term commitment to injury surveillance, via [the AIHW National Injury Surveillance Unit](#) and the implementation of an injury surveillance coordinator in each paediatric trauma centre to drive local monitoring and change.

Targets for reduction of child injury mortality and morbidity in identified areas of priority should be established, and regular monitoring of progress against those targets should be undertaken as part of the NISU.

3. **EVIDENCED-BASED SUSTAINABLE INJURY PREVENTION STRATEGIES.** Injury prevention strategies need to be evidence-based, accounting for a child's developmental stage, as injury patterns are closely related to age-related changes in activity as well as perceptual, motor and cognitive skills. Where there is evidence, this needs to be applied when any strategy is planned and implemented. Such evidence and guidelines for its implementation are contained in the recently published Australian edition of the Child Safety Good Practice Guide. Where evidence is lacking, funding for injury prevention and management research is urgently required. Integral to ensuring the effort and funding is going to effective strategies, evaluation of the impact on injury rates should form an essential part of any interventions and research.

4. **STRENGTHEN HEALTH SYSTEMS TO IMPROVE QUALITY OF CARE DELIVERED TO INJURED CHILDREN.**

Child mortality following injury varies across Australia. Monitoring the quality of care delivered for severe injury is essential to ensure that no matter where a child sustains their injury, they have access to the best acute hospital care, rehabilitation care and psychosocial support to ensure the best opportunity for survival and optimised outcome. This could be achieved by enhancing the Australian Trauma Quality Improvement Program and the National Trauma Registry. [The Australian Trauma Quality Improvement Program](#) is a collaboration of Australia's 27 trauma centres, essential to the ongoing monitoring of trauma outcomes and quality of care across Australia. Federal funding for The National Trauma Registry ends in 2020 and data analysis is limited to a minimum data set.

5. **PROVIDE PSYCHOSOCIAL SUPPORT FOR FAMILIES.** Severe childhood injury is catastrophic for families. Almost half of parents of severely injured children develop PTSD³. Parent wellbeing is essential to their capacity to support their child's wellbeing. Introduction of a severe injury family support coordinator role into all paediatric trauma centres, to coordinate physical and psychosocial care for the family from the acute hospital phase to two years post-discharge, would ensure better psychosocial outcomes for families. The need for this role has been highlighted by recent [Australian longitudinal research](#) with parents of injured children, and the [clinicians who provide their care](#).

6. **SPECIFIC AREAS OF FOCUS**

- **VULNERABLE GROUPS:** It is important to focus on the most vulnerable children in society. Children from lower socio economic groups, rural/regional areas in this report were overrepresented. It is clearly reported elsewhere that rates of injury to Aboriginal and Torres Strait Islander children are consistently higher than those of non-Aboriginal children. Data on injuries specific to children from culturally and linguistically diverse backgrounds are scant, in planning to reduce the burden of injuries to children we need to recognise these groups do not have the same access to safety information which is primarily developed in English. It is essential to acknowledge and understand the unique and complex factors at play when addressing injury prevention in vulnerable communities and to consult within these groups as part of the planning and delivery.
- **ROAD TRAUMA:** Paediatric road-related injuries (including pedal cycle injuries) should be part of a broader Federal and State Government injury prevention strategy as part of the National Road Safety Strategy which aimed for a 30% reduction in deaths and severe injuries from road trauma from 2011-2020. In view of the fact that serious injuries, as a result of motor transport crashes, have actually increased in the last 12 months and the death rate has decreased by less than 4% since 2011, current strategies are clearly not working. Commitment to safe active transport is required, including modifications to urban design, such as traffic calming measures and public transport strategies. There should be a reconfiguration of the National Road Safety Advisory Board to consist of clinicians and representatives from Road Safety Organisations. This body should be able to advise both Federal and State Governments on strategies that are proven to work, based on international evidence and data from the National Trauma Registry.

This position statement on reducing the incidence and impact of Childhood injury in Australia was prepared and endorsed by the following clinical, injury prevention, epidemiology and research experts

Professor Kate Curtis, Sydney Nursing School, University of Sydney

Associate Professor Rebecca Mitchell, Australian Institute of Health Innovation, Macquarie University

Mr John Melluish, Chairman, Day of Difference Foundation

Professor Kim Foster North Western Mental Health & School of Nursing, Midwifery & Paramedicine, Australian Catholic University

Associate Professor Warwick Teague, Director of Trauma, The Royal Children's Hospital Melbourne

Associate Professor Tony Joseph, Director of Trauma, Royal North Shore Hospital Sydney

Dr Kate Martin, Trauma Surgeon, President of the Australasian Trauma Society

Dr S Soundappan, Director of Trauma, The Children's Hospital at Westmead

Professor Emeritus Les White AM, Australian Institute of Health Innovation, Macquarie University

Dr Julie Brown, Neuroscience Research Australia and University of NSW

Professor Rebecca Ivers, Director, Injury Division, The George Institute for Global Health, President, Australian Injury Prevention Network

Professor James Harrison, Director, Research Centre for Injury Studies, Flinders University, South Australia

Dr Susan Adams, Paediatric Surgeon, Sydney Children's Hospital, Randwick

Mr Martin Botros, National President, Kidsafe Australia

Dr John Crozier, Chair National Trauma Committee, Royal Australasian College of Surgeons

Professor Roy Kimble, Director of burns, trauma and paediatric surgery, Lady Cilento Children's Hospital Brisbane.

Professor Belinda Gabbe, Head of the Pre-Hospital, Emergency and Trauma Research Unit in the Department of Epidemiology and Preventive Medicine, Monash University

Professor Peter Cameron, Academic Director of The Alfred Emergency and Trauma Centre and Professor of Emergency and Divisional Head of Health Services Research at Monash University's School of Public Health and Preventive Medicine

Professor Mark Fitzgerald, Director, National Trauma Research Institute, Director of Trauma Services at The Alfred Hospital, Melbourne

References

1. Australian Institute of Health and Welfare. Australian hospital statistics 2010-11. Canberra: Australian Institute of Health and Welfare;2012. Cat no HSE 117.
2. Figure 3.1 in Mitchell R, Curtis K, Foster K. A 10-year review of the characteristics and health outcomes of injury-related hospitalisations of children in Australia. Day of Difference Foundation. University of Sydney. 5th May 2017.
3. Foster, K., et al., *Experiences and needs of parents of critically injured children during the acute hospital phase: A qualitative investigation*. *Injury*, 2017. **48**(1): p. 114-20
4. <https://childrenscancer.canceraustralia.gov.au/about-childrens-cancer/statistics>