Kidsafe WA
Childhood Injury Bulletin

Child Accident Prevention Foundation of Australia
Western Australia

July 2026

Kidsafe WA
Kidsafe WA is the leading independent not-for-profit organisation dedicated to promoting safety and preventing childhood injuries and accidents in Western Australia. Injuries are the leading cause of death among Australian children and young people aged zero to seventeen, and many of these deaths and injuries can be prevented. Kidsafe WA works to educate and inform parents and children on staying safe at home, at play and on the road.

Partnership with ECU
Kidsafe WA partnered with researchers at Edith Cowan University to examine the key causes of head injuries amongst children in Western Australia. The report utilised emergency department data from the Perth Children's Hospital (PCH), covering head injury presentations from July 2012 to June 2022. As Western Australia's only dedicated paediatric hospital, PCH provides specialist emergency care for children with serious illness and injury, receiving referrals from across the state. As children may also present to other hospitals and health services, these findings represent a snapshot of head injuries amongst children in WA. This bulletin summarises key findings from the report, including common causes of head injury, how injury patterns differ by age, and opportunities for prevention.

Head Injuries

A snapshot of injuries

- A total of **51,715** children presented to the PCH ED with a head injury between July 2012 and June 2022.
- **Males** accounted for two-thirds of all head injury presentations (63%, n=32,313).
- Over half of all head injury presentations were children aged **0 to 4 years** (51%, n=26,413).
- **Falls** were the leading cause of head injury in younger children, while **blunt trauma** became more common with age.
- The most common types of head injury were **open wounds**, **superficial injuries** and **fractures**.
- Amongst head injuries with a known location, over half occurred at **home** (52%, n=10,547).
- Most head injury presentations were deemed **semi-urgent** (81%, n=41,629) or **urgent** (16%, n=8,469).
- The majority of children were **discharged home** following treatment (86%, n=44,474).

Partner:

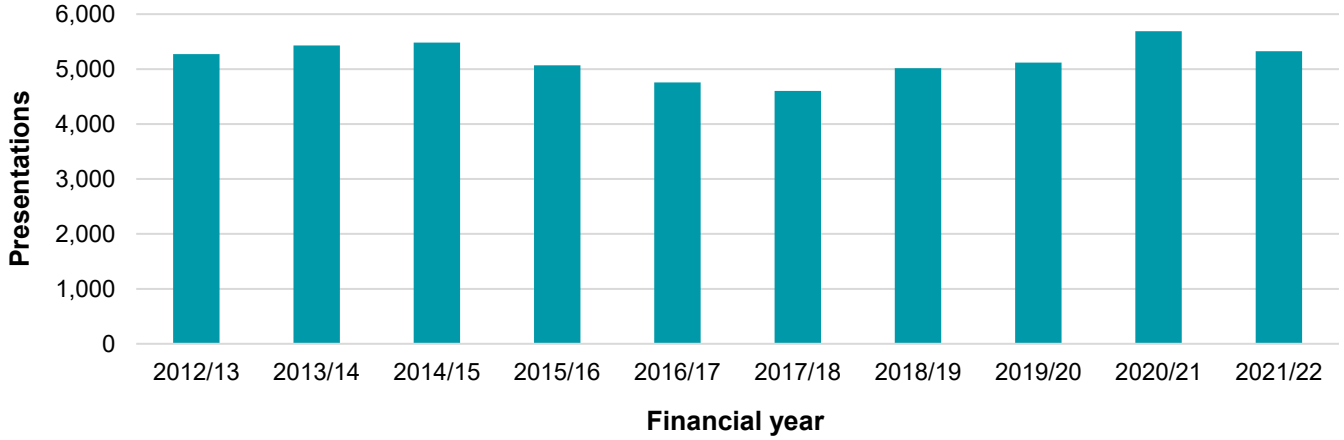
Government of **Western Australia**
Department of **Health**

Introduction

Head injuries are a significant cause of injury amongst Australian children and can range from minor wounds to serious traumatic brain injuries with life-threatening consequences. In 2020/21, more than 400,000 Australians presented to emergency departments with a head injury, with children aged 0 to 4 years having the highest rates of presentation[1]. Children under five are particularly vulnerable to head injuries due to their developmental stage, natural curiosity and limited physical coordination. As children grow older and become more independent, head injuries are more commonly associated with sport, outdoor play, cycling and other recreational activities[1].

Between July 2012 and June 2022, a total of 51,715 children presented with a head injury to the Perth Children's Hospital Emergency Department (PCH ED). The proportion of head injury presentations remained relatively stable across the 10-year period, representing approximately ten percent of cases each year (Figure 1). Reporting from 2017 to 2018 may be influenced by the relocation of services and transition from Princess Margaret Hospital to Perth Children's Hospital, which may have affected presentation patterns during this period.

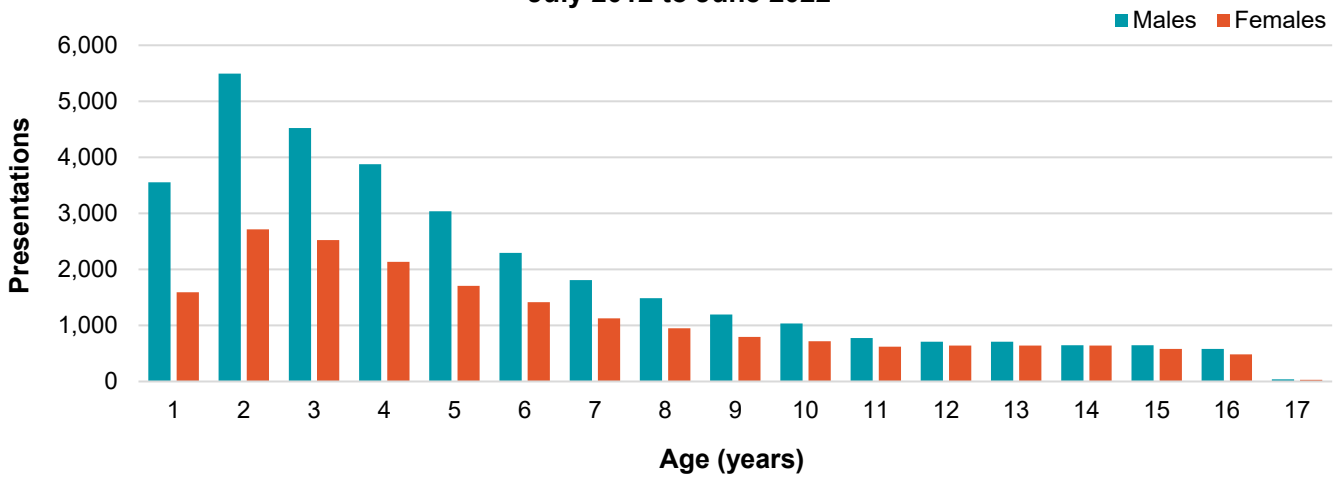
Figure 1: Head Injury Presentations at PCH ED by Financial Year; July 2012 to June 2022



Demographics

Males accounted for two-thirds of all head injury presentations to PCH ED (62.5%, n=32,313), with females and other categories accounting for 37.5 percent (n=19,402). This pattern was consistent across the 10-year period, with higher presentation numbers in males across all ages, most notable in children under the age of five. Head injuries were most common in younger children, particularly those aged zero to four years (51.1%, n=26,413), with the highest proportions seen in children aged one to two years, followed by a steady decline in older age groups (Figure 2).

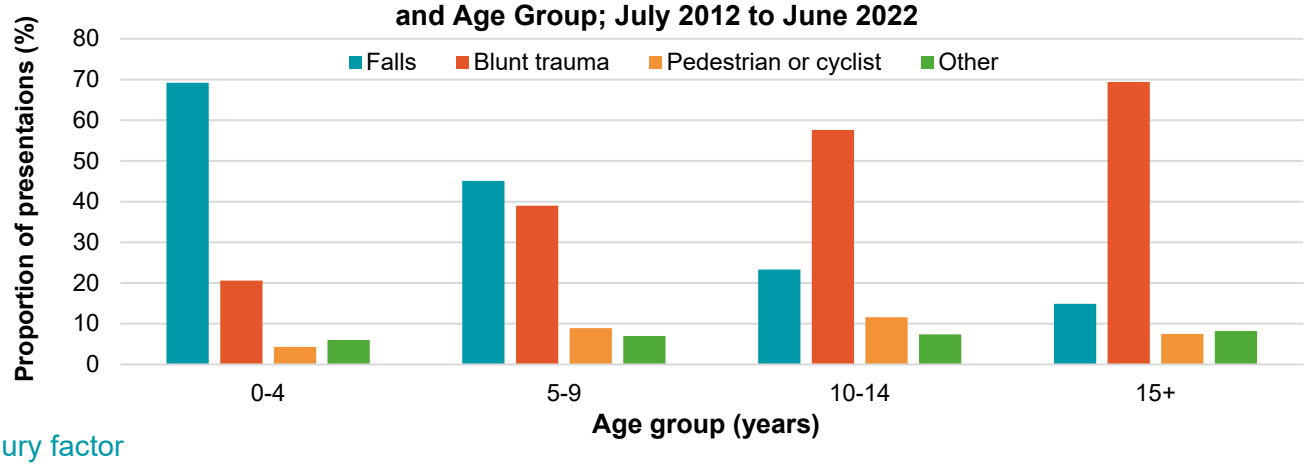
Figure 2: Head Injury Presentations at PCH ED by Age and Sex; July 2012 to June 2022



Injury cause

Falls accounted for a greater proportion of head injuries in younger children, while blunt trauma became more common with age (Figure 3). In children aged 0 to 4 years, falls accounted for 69.2 percent of head injuries (n=20,329), with smaller proportions due to blunt trauma and other causes. Falls remained the most common cause of head injury amongst children aged 5 to 9 years, although the proportion of blunt trauma injuries increased. In children aged 10 years and over, blunt trauma accounted for a greater proportion of head injuries than falls. Overall, this shift in injury patterns likely reflects developmental changes in mobility, supervision, independence, and increasing exposure to higher risk activities with age.

Figure 3: Proportion of Head Injury Presentations at PCH ED by Cause and Age Group; July 2012 to June 2022



Injury factor

Injury factors refer to specific objects, structures or environmental elements involved in the circumstance of the injury. Excluding cases where no injury factor was applicable (40.5%, n=20,951), the most frequently involved factors were household furniture (35.1%, n=10,791), structural or building elements such as floors and walls (28.4%, n=8,724), play equipment and toys (24.7%, n=7,591), baby or child-related equipment (5.1%, n=1,582) and sports-related equipment (4.6%, n=1,423).

Amongst children under 12 months presenting after a fall incident, the most common injury factors were beds (29.7%, n=1,058), chairs or sofas (10.5%, n=374) and baby change tables (6.2%, n=222). For fall injuries in children aged 1 to 4 years, common injury factors included furniture (31.6%, n=5,299), structural or building elements (20.0%, n=3,346) and playground equipment and toys (10.9%, n=1,824). Across all age groups, common injury types included open wounds (40.3%, n=20,766), superficial injuries (13.2%, n=6,790), fractures (10.2%, n=5,246), eye or orbital injuries (5.3%, n=2,707) and intracranial injuries (including concussion) (4.0%, n=2,057).

Injury location

For the majority of head injury presentations, the location of the incident was recorded as ‘other place’ (60.7%, n=31,386). Of cases with a specified location (39.3%, n=20,329), over half occurred at home (51.9%, n=10,547), while 23.0 percent (n=4,681) occurred at school. Injury location also varied by age group. In children under 12 months, 43.1 percent of injuries occurred at home (n=2,074), while in children aged 1 to 4 years, this proportion was 25.4 percent (n=6,450). This is consistent with the amount of time infants and toddlers spend at home during their early years. In children aged 5 to 9 years, 14.1 percent of head injuries occurred at school (n=1,765) and 12.6 percent occurred at home (n=1,595), reflecting increased time spent at school and engaging in recreational activities outside the home.

Injury severity and outcome

Most head injury presentations were classified as semi-urgent on arrival to PCH ED, accounting for 80.5 percent of cases (n=41,629). The remaining presentations were classified as urgent (16.4%, n=8,469) and emergency or resuscitation (3.1%, n=1,555). Following treatment, 86.0 percent of cases were discharged home (n=44,474), with 12.0 percent admitted for further treatment (n=6,205). These findings reflect the main types of injuries reported such as superficial injuries and open wounds. Almost all head injuries were deemed unintentional (98.9%, n=51,147), with the remaining 1.8 percent resulting from intentional or undetermined circumstances (n=906).

Across all head injury presentations to PCH ED, 14.8 percent (n=7,632) were associated with a sporting activity. For further information on head injuries during sports, see *Kidsafe WA Childhood Injury Bulletin: Sport-related Head Injuries*.

Prevention

Many childhood head injuries are preventable. Prevention strategies should reflect a child's stage of development, environment and typical activities, as the causes and circumstances of head injury shift with age. Creating safe environments, encouraging protective behaviours and providing appropriate supervision can help reduce the risk of serious head injury throughout each stage of childhood.

Children aged 0 to 4 years

- Never leave infants unattended on raised surfaces including beds, sofas and change tables.
- Secure furniture such as televisions, bookshelves and drawers to the wall to prevent tipping.
- Install safety gates near stairs and doorways and pad sharp furniture corners where possible.
- Always use the safety harness provided in items such as highchairs, bouncers, prams or strollers and shopping trolleys.
- Avoid wheeled baby walkers as these are often associated with fall injuries.
- Place baby equipment such as seats and rockers on the floor rather than raised surfaces.

Children aged 5 to 9 years

- Ensure children wear a properly fitted helmet when riding bikes, scooters and other wheeled devices.
- Ensure playgrounds have soft fall surfaces such as sand or mulch to protect against falls.
- Teach children road safety skills from a young age, including using pedestrian crossings, following traffic signals and staying alert near roads and vehicles.
- Supervise children during play, including trampoline use and activities involving bats, balls or other sports equipment.

Children aged 10 years and older

- Encourage consistent helmet use when riding bikes, scooters and other wheeled devices.
- Promote safe participation in contact and recreational sports, including the use of appropriate protective equipment.
- Educate children and adolescents about recognising and reporting concussion symptoms.
- Reinforce road and pedestrian safety behaviours as children become more independent.

Recognising and managing concussion

Concussion can occur after a head injury, and symptoms may not appear immediately. Monitor children for symptoms such as headache, dizziness, confusion, nausea or changes in behaviour. If concussion is suspected, stop the child from continuing the activity and seek medical attention.

References:

1. AIHW. *Head Injuries in Australia 2020-21* [Internet]. Canberra (ACT): AIHW; 2023 [cited 2026 May 28]. Available from: www.aihw.gov.au/reports/injury/head-injuries-in-australia-2020-21

Suggested citation:
Jamieson, K, Fortington, L. Yadav, A. Head Injuries. Perth (WA): Kidsafe WA (AU); 2026 July. Report No.: 63.

For further information please contact Kidsafe WA

✉ 140 Railway Parade, West Leederville WA 6007 ☎ (08) 6244 4880 www.kidsafewa.com.au