

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.

Perth Children's Hospital Injury Surveillance System

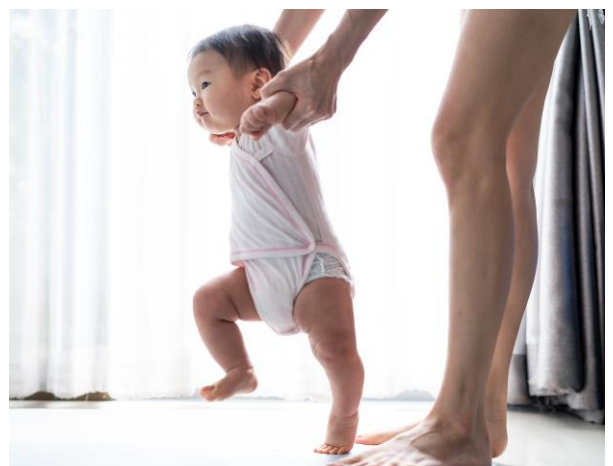
Perth Children's Hospital (PCH) is the only paediatric hospital in Western Australia and is the referral centre for paediatric illness and injury within the state. Each year approximately 64,000 children present to the PCH Emergency Department (ED). The PCH ED Injury Surveillance System is designed to capture data related to all children who present with an injury.

This bulletin provides a summary of fall injury presentations to PCH ED for children aged 0 to 15 years between July 2016 and June 2021.

Falls

A snapshot of fall injuries

- A total of **34,423** fall injury presentations to PCH ED.
- **Males** accounted for 54.5 percent (n=18,751) of presentations.
- Children aged **1 to 2 years** accounted for the highest number of fall injuries (21.3%, n=7,336), followed by children aged **3 to 4 years** (15.9%, n=5,471).
- **Schools and residential institutions** were the most common location for fall injuries (40.6%, n=4,731).
- The most common cause of fall injuries were **falls on the same level** (58.9%, n=20,284).
- **Category 4 - Semi-urgent** (83.0%, n=28,588) was the most commonly allocated triage category for fall injuries.
- The majority of fall injury presentations to PCH ED were **discharged** from hospital with treatment complete (86.9%, n=29,911).



Partner:



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

Introduction

Falls continue to be one of the leading causes of hospitalised injury to Australian children aged 0 to 17 years. In Australia, between 2017 and 2018, 32,606 children aged 0 to 17 were hospitalised for a fall injury¹. Falls are considered a part of childhood development; however, serious injuries from falls can be prevented through simple measures².

Between July 2016 and June 2021, 34,423 children aged between 0 and 15 years presented with a fall injury to the Perth Children's Hospital Emergency Department. This accounts for 36.1 percent of all injury presentations during the five year period (Figure 1). However, a gradual decrease is seen over time from 37.3 percent in 2016/17 to 34.9 percent in 2020/21 when looking at injuries from falls as a proportion of total injury presentations to PCH ED.

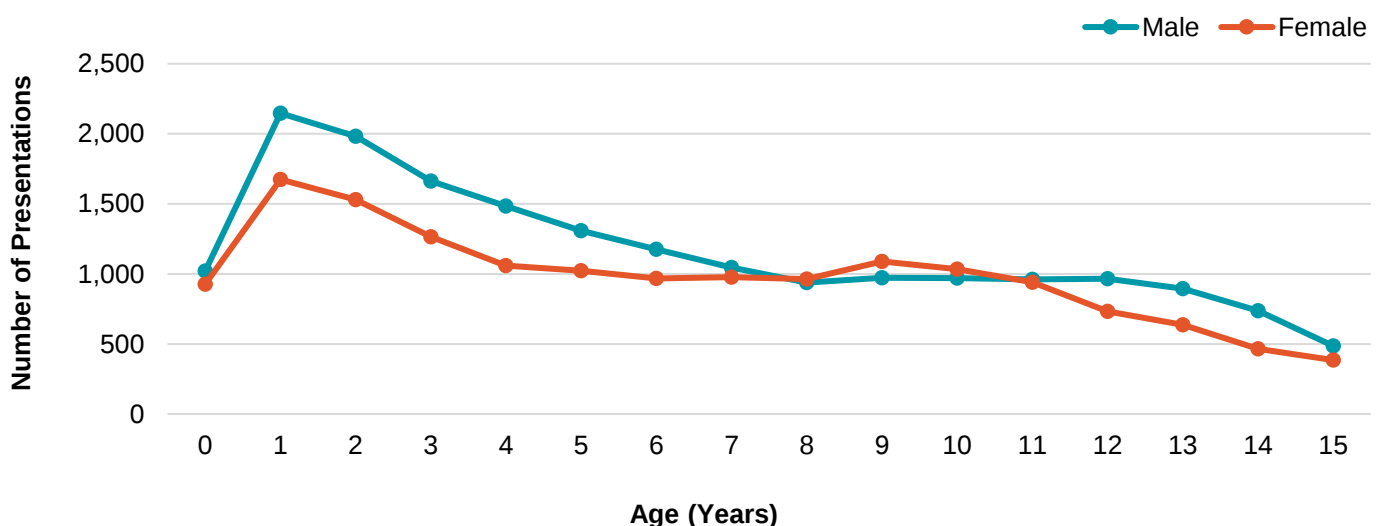
Figure 1: Fall Injuries



Demographics

Fall injuries are slightly more common among males than females accounting for 54.5 percent (n=18,751) of injuries, with females accounting for the remaining 45.5 percent (n=15,671). Overall, males present more with fall injuries than females, however between the ages of 8 and 10 years old there is a slight increase in the number of females presenting with fall injuries compared to males (Figure 2).

Figure 2: Fall Injuries by Age and Gender



Aboriginal and Torres Strait Islander children account for 2.6 percent (n=881) of the fall injury presentations to PCH ED. Most children who presented with a fall injury resided within the Perth Metropolitan Area (94.4%, n=32,485), while 3.2 percent (n=1,090) resided in regional Western Australia.

Injury

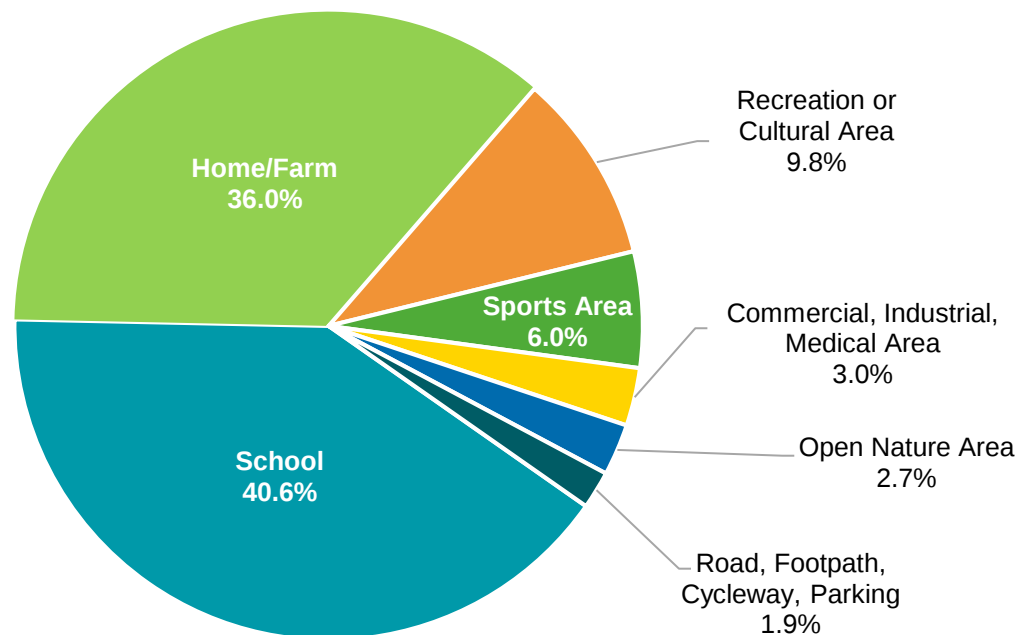
A triage category between one and five is allocated to every child that attends PCH ED. This is based on the urgency of the medical attention required, with one being the most urgent and five being least urgent. Category 4 - Semi-urgent (83.0%, n=28,588) was the most commonly allocated triage category for fall injuries. This was followed by category 3 - Urgent (14.6%, n=5,029), category 2 - Emergency (2.0%, n=684) and category 1 – Resus (0.2%, n=74). Almost all of the fall injury presentations to PCH ED were unintentional (99.8%, n=34,364).

Over half of the fall injuries resulted from the child falling on the same level (58.9%, n=20,284), i.e. tripping or slipping. This was followed by falls from a height of less than one metre (29.0%, n=9,978) and falls from a height greater than one metre (12.1%, n=4,161). This pattern occurs across all age groups with falls on the same level being the most common fall type.

For the majority of presentations the use of safety equipment was not required (84.1%, n=28,937). This was followed by presentations where the use of safety equipment was unknown (15.8%, n=5,425) while it was noted for a small number of presentations that a helmet was used (0.1%, n=40).

The location of most fall injuries was unknown (66.2%, n=22,773). Of the known locations (33.8%, n=11,650), schools were the most common location for fall injuries to occur accounting for 40.6 percent (n=4,731) of the presentations. This was followed by the home (36.0%, n=4,199) and recreational and cultural areas (9.8%, n=1,142) (Figure 3). Of the known areas within the home setting (n=2,045), the outdoors is the most common location for fall injuries to occur (29.5%, n=603), followed by the living and dining area (28.5%, n=582).

Figure 3: Fall Injuries by Location



A large number of fall injuries occurred between Friday and Sunday (46.0%, n=15,826). The most common time of day for fall injuries to occur was between 12 pm and 6 pm (21.3%, n=7,339).

Most children attended the emergency department based on concerns of themselves or a relative (90.4%, n=31,113). This was followed by referrals by a general practitioner (5.1%, n=1,747) and other hospitals (3.0%, n=1,046). The majority of the fall injury presentations to PCH ED were discharged from hospital with treatment complete (86.9%, n=29,911). A further 11.6 percent (n=4,006) of children were admitted to hospital for additional treatment. The remaining children either departed at their own risk, did not wait for treatment or were referred to another department. Looking at hospital admissions for fall injuries, males accounted for over half of the children who were admitted to hospital for further treatment (57.8%, n=2,314).

Prevention

The following preventative measures can assist in reducing the risk of fall injuries and/or protect children from serious injuries from a fall:

- Never leave baby alone on a raised surface. When changing your baby keep one hand on your baby at all times and keep everything you need within reach.
- Always use the harness available on products i.e. prams and highchairs.
- Avoid using baby walkers as they can cause falls that result in serious injuries. Stationary activity centres are recommended instead.
- Even to the most careful adults accidents can still happen whilst carrying baby. When walking around with baby make sure to watch out for any trip hazards and use a baby sling or carrier to reduce the risk of baby wriggling out of your arms. Make sure you also follow the safety guidelines for baby slings and carriers.
- Ensure there are no trip hazards by making sure floor coverings are in good condition and placing grips under rugs.
- Restrict access to stairs by using barriers and teach children how to navigate steps safely under supervision.
- Avoid leaving large climbable items in the cot or playpen.
- Keep furniture away from windows and balcony rails.
- Ensure children use playground equipment suitable for their age and size. In addition, teach children the rules and skills to use the equipment properly.
- Ensure your child always wears a helmet when using a bike or other small wheeled devices.
- Actively supervise your child and stay close when your child is climbing, swinging, or playing on equipment that is above the ground.
- Always wear the correct protective gear during sports and encourage participation in modified sports for younger children.
- Ensure bunk beds have guard rails, a fixed ladder and meet the Australian Standards.

References:

1. AIHW: Pointer SC 2021. Hospitalised injury in children and young people, 2017–18. Injury research and statistics series no. 135. Cat. no. INJCAT 217. Canberra: AIHW.
2. The Royal Children's Hospital Melbourne (2018). Safety: Preventing falls. Retrieved from: https://www.rch.org.au/kidsinfo/fact_sheets/Preventing_Falls/.

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For further information please contact Kidsafe WA