

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 aged zero to fourteen, accounting for nearly half of all deaths in this age group. More children die of injury than of cancer, asthma and infectious diseases combined. 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 70,000 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 the injuries occurring in the backyard during the five year period between July 2018 and June 2023.

Backyard Injuries

A snapshot of backyard injuries

- Between June 2018 and June 2022, there were a total of **1,139** backyard-related injury presentations to PCH ED.
- Males** represent the greatest number of backyard-related injuries, accounting for 61.1 percent (n=696) of presentations.
- Children aged **5 to 9 years** of age accounted for the highest number of backyard-related injuries (37.2%, n=424) closely followed by children aged **0 to 4 years** 37.1 percent (n=422).
- Falls** were the most common backyard-related injury to occur accounting for 43.6 percent (n=497) of injuries.
- Of backyard injuries, 36.5 percent (n=416) were related to **sporting and recreational activities**. With **trampolining** (45.4%, n=189) and **cycling** (17.1%, n=71) the most common.
- The most commonly allocated triage category for backyard-related injury was **category 4 - Semi-urgent**, accounting for 75.8 percent (n=863) of presentations.
- Backyard injuries occurred most commonly **on the weekend** accounting for 39.4 percent (n=449) of injuries.
- Many children presenting with a backyard injury did so based on the **concerns of themselves or a relative** (91.8%, n=863).
- Of all backyard-related injury presentations to PCH ED, 82.6 percent (n=941) were **discharged** from hospital with treatment complete.

Partner:



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

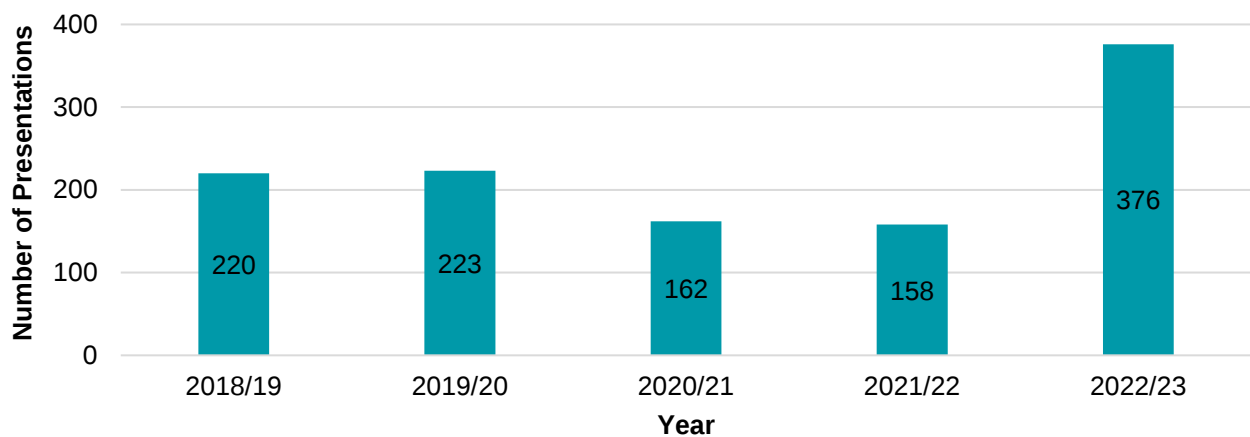


Introduction

Play is an essential part of childhood that provides children with a range of physical and cognitive benefits. Providing a creative outdoor play environment in your backyard allows children to grow and develop new skills in a safe and secure environment. While it's great to get children outdoors, it's important to think about their safety and how you can reduce the risk of serious injuries. Many childhood injuries happen in the home environment, with the backyard the most common location for injury to occur¹. In 2021-22 15 percent of all childhood injuries within the home environment causing hospitalisation occurred in outside environments¹. These injuries can have severe consequences for childhood development with lifelong physical and cognitive damage². Backyard Injuries can occur due to many factors including falls, poisons, burns and scalds, choking, biting, drowning or near-drowning².

Between July 2018 and June 2023 there were 1,139 presentations to the PCH ED due to injuries occurring in the home outdoor or garage/shed environment. For the purpose of this report they will be referred to as backyard injuries. Backyard injuries account for 18.9 percent of injuries that occur in or around the home making it the most commonly specified home location for injury. Following backyard injuries are those that occur in the Living or Dining Area (12.3%, n=740) and the Bedroom (10.0%, n=605). Backyard injury numbers remained fairly consistent over the five-year period, with a slight increase during 2022/23 (Figure 1).

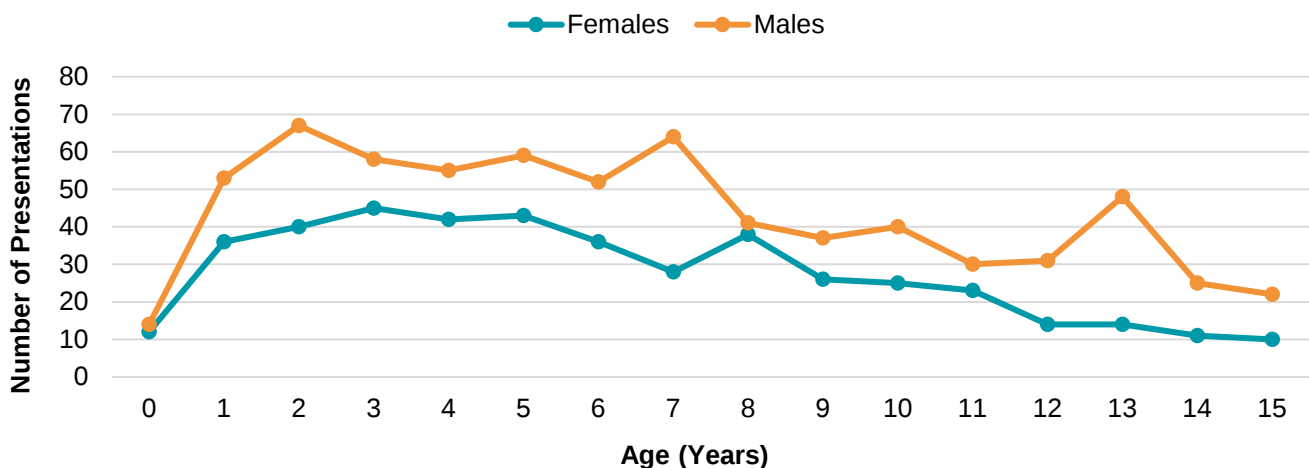
Figure 1: Backyard Injuries by Financial Year



Demographics

Males accounted for 61.1 percent (n=696) of backyard-related injuries, with females the remaining 38.9 percent (n=443). Children between the ages of 5 and 9 years of age accounted for the highest number of backyard-related injuries (37.2%, n=424) closely followed by children aged 0 to 4 years at 37.1 percent (n=422). For most ages there is a reasonable gap between injuries in males and females (figure 2).

Figure 2: Backyard Injuries by Age and Sex

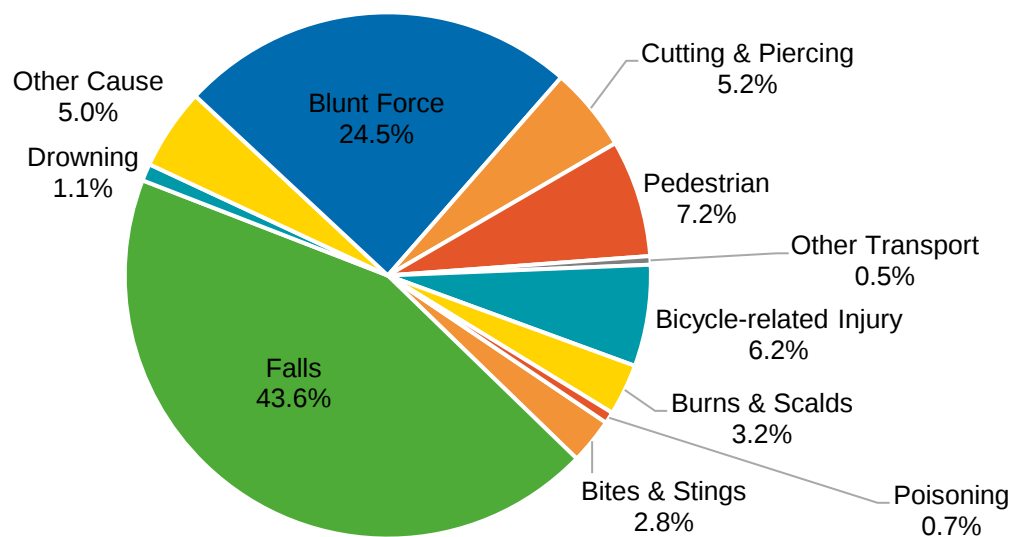


Children that identify as Aboriginal and/or Torres Strait Islander accounted for 5.4 percent (n=62) of backyard injuries. And the majority of presentations to PCH ED were from children living in the Perth Metropolitan Area 93.7 percent (n=1067). A small proportion of presentations lived in Rural Western Australia 4.4 percent (n=50).

Injury

Falls are the main cause of backyard injury accounting for 43.6 percent (n=497). This is followed by Blunt Force injuries (or collision based injuries) at 24.5 percent (n=279), Pedestrian injuries at 7.2 percent (n=82) and Bicycle-related injury (6.2%, n=71). Pedestrian injuries include scooters, skateboards and other small-wheeled devices (Figure 3).

Figure 3: Backyard Injuries by Cause



Building components such as walls, doors, floors and fittings were an associated injury factor with 18.3 percent (n=208) of injuries. Similarly, trampolines were an injury factor in 17.0 percent (n=194) of injuries and wheeled equipment for 12.5 percent (n=142). Other injury factors include sport and recreational equipment (4.4%, n=50) and toys or play equipment (4.8%, n=55).

Similarly when looking at children that were participating in sporting and recreational activities (36.5%, n=416), the most commonly associated were Trampolining (45.4%, n=189) and cycling (17.1%, n=71).

Of children injured in the backyard only 2.4 percent (n=48) were recorded as using any safety equipment. The most common being Helmets and Sports-related Guards. Most injuries occurring in the backyard were deemed as due to unintentional circumstances (99.0%, n=1,128).

Of backyard injuries 4.2 percent (n=48) occurred in a garage, shed or workshop environment, with the remaining classified as general outdoors (95.8%, n=1091).

Backyard injuries occurred most on the weekend with Saturday and Sunday accounting for 20.9 percent (n=238) and 18.5 percent (n=211) respectively. Injuries in the backyard often occurred between 12:00 and 17:59 (37.1%, n=423) in the afternoon, a time commonly linked with after school recreation at home.

The most commonly allocated triage category for backyard injury was category 4 - Semi-urgent, accounting for 75.8 percent (n=1139) of presentations and reflecting a low level of medical urgency required. Many children presenting with a backyard injury did so based on the concerns of themselves or a relative (91.8%, n=863). And 82.6 percent (n=941) were discharged from the Emergency Department with treatment complete. A further 16.2 percent (n=185) of presentations were admitted to hospital for treatment.

Prevention

Many childhood injuries happen in and around the home environment. The backyard is the most common location within the home for childhood injuries to occur. Most injuries that happen in the backyard are from falls, often from play equipment onto hard surfaces. Other risk factors include broken equipment, lack of backyard maintenance, minimal supervision and other hazards such as water, poisons and backyard sheds. The following steps can help reduce the risk of injury in the backyard:

Play Equipment

- Backyard play equipment should be well maintained and appropriate for the age of children using it.
- There is currently an Australian Standard for toys and playground equipment used in domestic settings (AS/NZS 8124.6). Ensure backyard play equipment meets this standard, is installed correctly and well maintained.
- Providing suitable impact-absorbing surfacing underneath and around play equipment can cushion a child during a fall and reduce the risk and severity of head and other injuries.

Trampolines

- Ensure your trampoline meets the Australian Standard AS 4989. Look for the 'tick' logo on the product.
- Choose a trampoline with a safety net and soft padding that covers the frame and spring system.
- Trampolines should be placed on a flat surface and away from fences and other play equipment. Avoid setting up a trampoline on concrete or bricks.
- Always provide active supervision when children are using the trampoline.
- Only allow one child to use the trampoline at a time to avoid collision injuries.
- Regularly check the trampoline for any damage. Ensure there are no tears or holes in the mat, springs are attached, and leg braces are securely locked in place.

Water Safety

- Always actively supervise children around any depth of water and stay within 'arm's reach' of children.
- Restrict access to water where possible. Ensure pool and spa fences are self-closing, self-latching and well maintained.
- Familiarise children with water and enrol them in swimming lessons. Teach children safety rules for the pool at home.
- Be prepared for an emergency and learn how to perform CPR.

Bikes, Scooters and Skateboards

- Always provide protective gear such as helmets and knee pads.
- Ensure bikes and devices are an appropriate size and that children are taught to ride them safely.

There are many more ways to reduce the risk of childhood injury in the backyard. For more information see Kidsafe WA's 'A Parent's Guide to Backyard Play' available at <https://www.kidsafewa.com.au/latest-news/a-parents-guide-to-backyard-play/>.

References:

1. *Injuries in children and adolescents 2021–22, causes of injury*. Australian Institute of Health and Welfare. (2024). <https://www.aihw.gov.au/reports/injury/injuries-in-children-and-adolescents-2021-22/contents/causes-of-injury>
2. AIHW. "Australia's Children, Injuries." Australian Institute of Health and Welfare, 2022. <https://www.aihw.gov.au/reports/children-youth/australias-children/contents/health/injuries>.

Suggested citation:

Thompson, C, McKenna, J, Skarin, D. Backyard Injuries. Perth (WA): Kidsafe WA (AU); 2024 July. Report No.: 57.

The Kidsafe WA Childhood Injury Bulletins are produced by Kidsafe WA in consultation with the Perth Children's Hospital Emergency Department and WA Department of Health.

For further information please contact Kidsafe WA