

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), previously known as Princess Margaret Hospital for Children, is the only paediatric hospital in Western Australia and is the referral centre for paediatric illness and injury within the state. Each year approximately 60,000 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 Injury Surveillance System data collected at PCH between 2013 and 2018, specifically relating to nursery equipment injuries among children between 0 and 14 years of age.

Nursery Equipment Injuries

A snapshot of Injuries to Children Involving Nursery Equipment

- Between 2013 and 2018, there was a total of **1,058** nursery equipment related injury presentations to PCH ED.
- **Children between 0 and 4 years of age** represent the majority (96.5%, n=1,021) of nursery equipment injury presentations.
- Children **under 1 year of age** recorded the greatest number of nursery equipment related injuries, accounting for 48 percent (n=508) of presentations.
- Almost all injuries (99.7%, n=1,055) were due to **unintentional** circumstances.
- **Falls** are the most common injury cause involving nursery equipment, accounting for 67.5 percent (n=714) of injuries.
- Over a quarter of injuries are related to **use of a pram** (26.5%, n=280).
- A total of 12.7 percent (n=134) of injuries involving nursery equipment were **admitted to hospital**.



Partner:



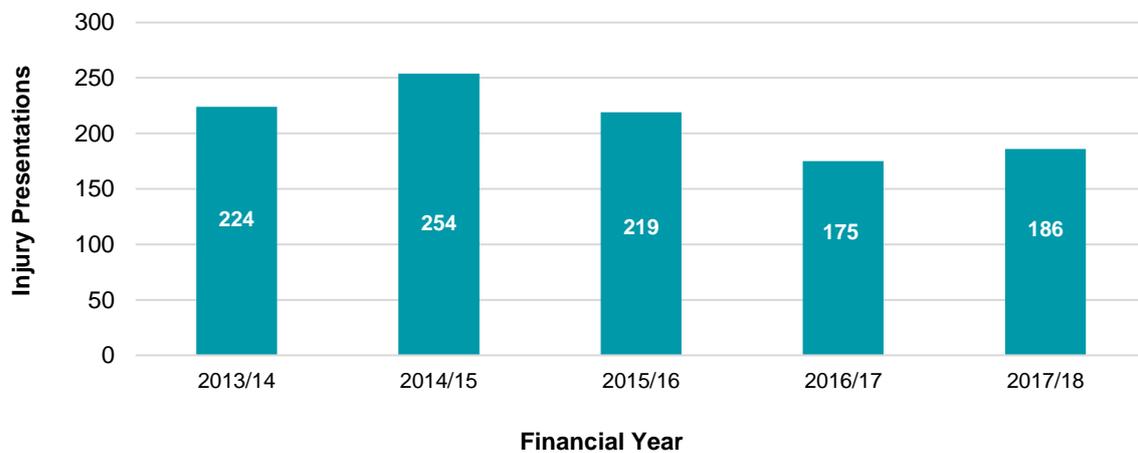
Government of **Western Australia**
Department of **Health**

Introduction

Infants and young children spend a lot of time in and around nursery equipment, which can have a large impact on their susceptibility to injury from it. Young children are always eager to explore their environment and with rapidly developing motor skills and coordination, their chances of injury increase.¹ If a piece of nursery equipment is incorrectly used, faulty or not combined with appropriate supervision, a child's risk of injury significantly increases.^{1,2} Based on the data collected from PCH, nursery equipment includes products such as a baby barrier/play pen, baby bath, baby bouncer, baby carrier, baby walker, change table, cot, high chair, potty chair and pram.

Between July 2013 and June 2018, 1,058 injury presentations to PCH ED involved nursery equipment. Figure 1 demonstrates the number of injuries involving nursery equipment between 2013 and 2018. Proportional to total injuries, there has been a decline from 1.1 percent in 2013/14 to 1.0 percent in 2017/18, with a slight increase in 2014/15.

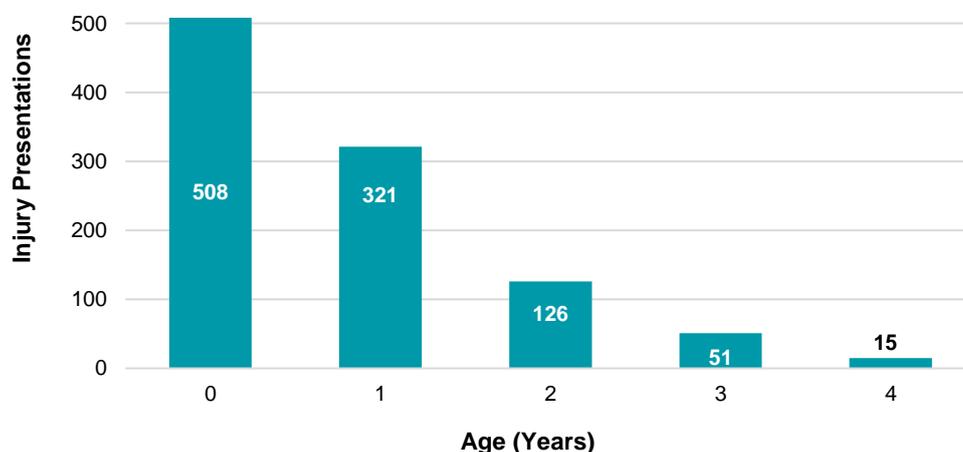
Figure 1: Nursery Equipment Injury by Financial Year



Demographics

Males record higher rates of nursery equipment injury presentations, representing 52.6 percent (n=556) in comparison to females who represent 47.4 percent (n=502). Injury prevalence was highest among children below one year of age for both genders and lowest among older children. Figure 2 shows the number of injuries to children in the 0 to 4 age group where nursery equipment injuries are more common.

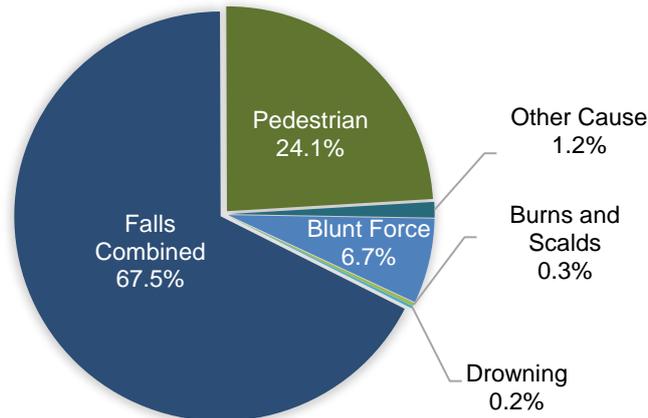
Figure 2: Injury by Age



Injury

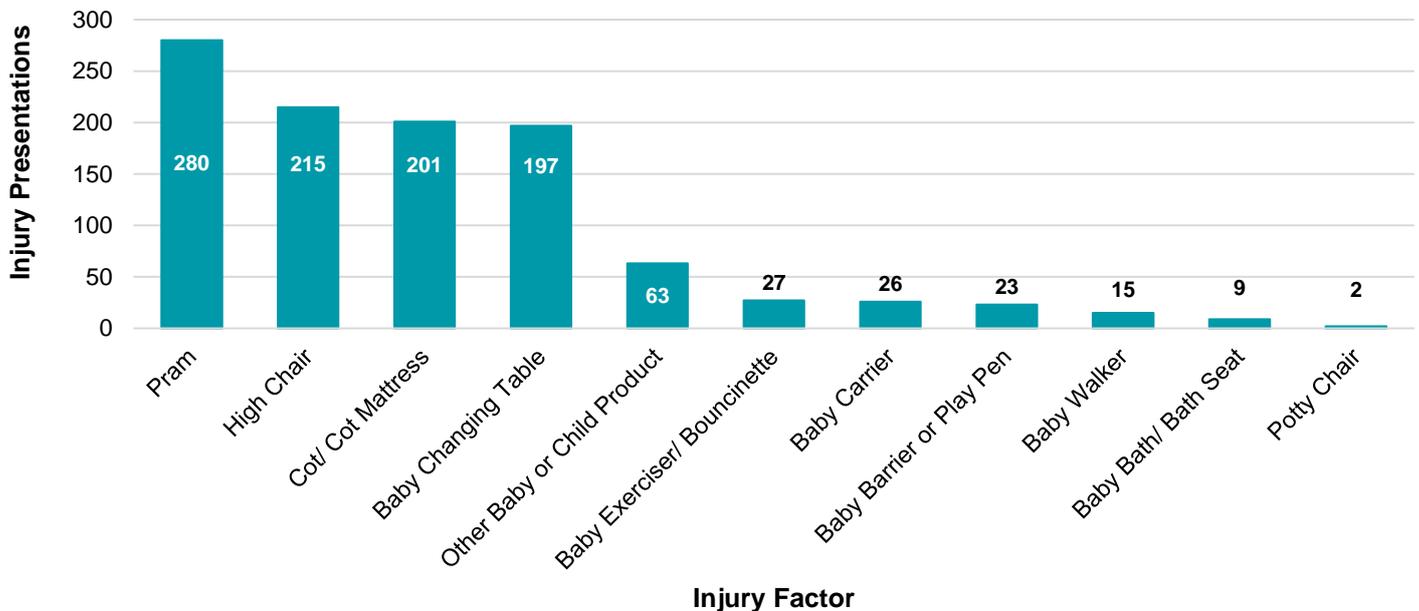
The majority of nursery equipment injuries to children are unintentional (99.7%, n=1,055). The few remaining injuries were classified as undetermined or other. The most common cause of injury involving nursery equipment is falls, accounting for over half of nursery equipment related injuries (67.5%, n=714). This is followed by pedestrian injuries (24.1%, n=255) and blunt force injuries (6.7%, n=71) (Figure 3). Pedestrian injuries are most commonly associated with prams and blunt force injuries with cots.

Figure 3: Nursery Equipment Injury by Cause



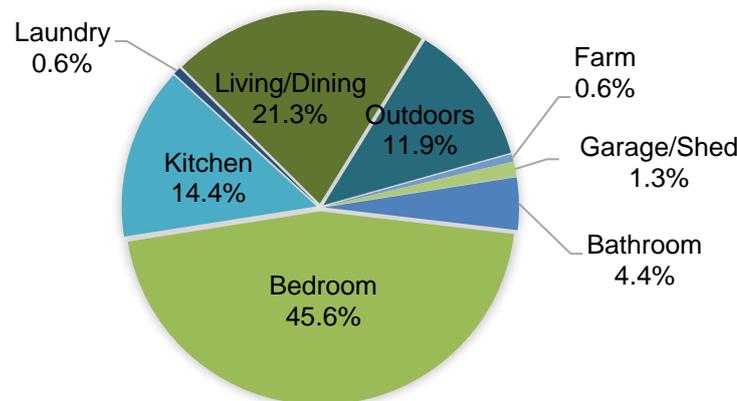
The most common type of nursery equipment associated with injuries is the pram (26.5%, n=280). This is closely followed by the high chair (20.3%, n=215), cot/cot mattress (19.0%, n=201) and baby changing table (18.6%, n=197) (Figure 4).

Figure 4: Nursery Equipment Injury by Injury Factor



Injury location is recorded as home/farm for over half of all nursery equipment injury presentations (55.4%, n=586) (Figure 5). This is followed by other place (31.8%, n=336), which refers to an unknown location or one that does not fit into an existing category. Other common locations of injury include commercial, industrial and medical areas (4.0%, n=42), road, footpath, cycleway or parking area (3.7%, n=39) and recreational/cultural area (3.0%, n=32). Of the known home locations, the bedroom is the most common (45.6%, n=73), followed by the living/dining room (21.3%, n=34), and the kitchen (14.4%, n=23) (Figure 5).

Figure 5: Nursery Equipment Injury by Home Location



Every child that attends the PCH ED is allocated a triage category based on the urgency of medical attention required. The most commonly allocated triage category for nursery equipment injuries was semi-urgent (76.7%, n=812), followed by urgent (20.3%, n= 215). The remaining injuries were classified as either emergency, resus or non-urgent.

The majority of nursery equipment injury cases departed PCH ED with treatment complete (85.3%, n=902). A number of children were admitted to hospital (12.7%, n=134) or departed without waiting for treatment (1.3%, n=14). The remaining children were either referred to another PCH department, discharged to clinic, or their departure status was unknown.

Prevention

Nursery equipment injuries can occur for a number of reasons including incorrect use of the equipment, inadequate parent/carer supervision whilst using the equipment, poor design and/or maintenance. There are simple steps that can be taken to prevent nursery equipment injuries:

- Always choose products that comply with mandatory safety standards and have a strong, sturdy design.
- Make sure the equipment is properly maintained and in good condition.
- Always use the provided safety locks, straps and five point harness mechanisms.
- Ensure appropriate supervision of children at all times when using nursery equipment.
- Always keep nursery equipment away from hazardous items such as heaters, dangling electrical cords, and curtain cords.
- Be aware that baby walkers allow infants from about 6 or 7 months of age to move more quickly around the house, enabling them to access things normally out of their reach.
- When choosing a change table, look for designs that will stop baby from rolling off. Always keep items you need close to the change table and if you need to turn away, always keep one hand on baby. If a change table is not available, change baby on a towel on the floor.
- A cot mattress should be firm, clean and should fit snugly all the way around the cot.
- Avoid having objects like pillows, toys or loose fitting sheets within the cot.
- Ensure the pram or stroller has simple steering and at least one parking brake.
- Avoid hooking heavy bags over the handles of prams and strollers. Place items under the compartment to avoid tipping the pram or stroller.

References

- ¹ Yeh, E., Rochette, L., McKenzie, L., Smith, G. Injuries associated with cribs, playpens, and bassinets among young children in the us, 1990–2008. *Pediatr* [internet]. 2011 [cited 2019 Jan 30];127(3): 479-486. doi:10.1542/peds.2010-1537
- ² Peden M, et al. *World Report on Child Injury Prevention*. Geneva: World Health Organisation; 2008.

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For further information please contact Kidsafe WA