

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 in Australian children aged one to fourteen, accounting for nearly half of all deaths in this age group. More children die of injury than die of cancer, asthma and infectious diseases combined. Many of these deaths and injuries can be prevented. Kidsafe WA works in the community to educate and inform parents and children on staying safe at home, at play and on the road.

Princess Margaret Hospital Injury Surveillance System

Princess Margaret Hospital for Children (PMH) is the only paediatric hospital in Western Australia and is the referral centre for paediatric illness and injury for the state. Every year approximately 60,000 children present to the PMH Emergency Department (ED). The PMH ED Injury Surveillance System is designed to capture data related to all children presenting with an injury. This bulletin provides a summary of the Injury Surveillance System data collected at PMH between July 2012 and June 2017 relating to childhood poisoning.

Poisoning

A snapshot of Poisoning Injuries

- Between July 2012 and June 2017, there were a total of **2,301** presentations to the PMH ED for poisoning.
- **Children between 0 and 4 years** represent half (50.3%, n=1,158) of the total injury presentations for poisoning.
- **Toddlers** aged 1 and 2 years recorded the greatest number of poisoning injuries, accounting for 18.2% (n=418) and 16.2% (n=372) of presentations respectively.
- **Females** are at greater risk of poisoning injury in comparison to males (59.5%, n=1,369). In particular females aged 12 to 15 years account for 78.7% (n=755) within those age groups.
- Over half (57.2 %, n=1,317) of poisoning injuries are due to **pharmaceutical substances**.
- The majority of poisoning injuries (69.9%, n=1,608) are **unintentional**.
- A quarter of injuries (24.4%, n=561) occurred in the **home environment**.
- **Aboriginal and Torres Strait Islander** children are over represented in poisoning injuries accounting for 7.6% (n=174) of presentations.
- A total of 42.3% (n=973) of poisoning injuries required **admission to hospital** for further treatment.



Partner:

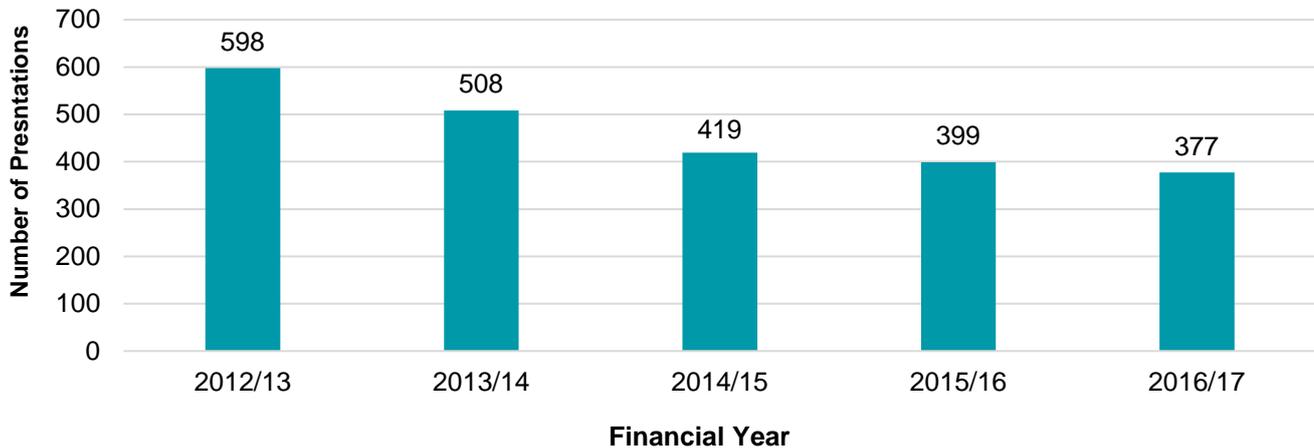


Government of **Western Australia**
Department of **Health**

Introduction

The prevalence of poisoning injuries has steadily decreased over the last five years, accounting for 598 presentations to the PMH ED during the 2012/13 financial year to 377 during 2016/17 (Figure 1). Similarly the proportion of poisoning injuries in comparison to total injuries to the PMH ED has also decreased from 3.1 percent to 2.1 percent during the same time period.

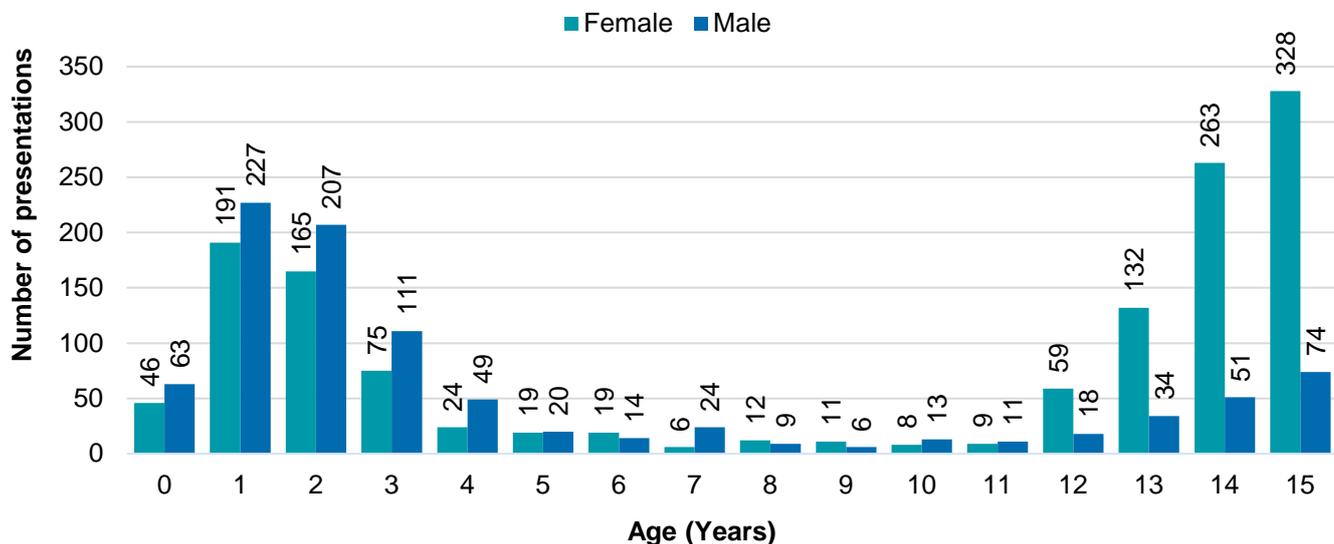
Figure 1: Poisoning by Year



Demographics

Females account for 59.5 percent (n=1,369) of all poisoning injuries in comparison to males, and are especially overrepresented amongst 12 and 15 year olds (78.7%, n= 755) due to intentional self-harm. For children aged 0 to 4 years, males are at great risk of poisoning, accounting for 56.7 percent (n=657) of injuries and is in keeping with general injury patterns (Figure 2).

Figure 2: Poisoning by Age and Gender



Young children aged 0 to 4 years account for half of all poisoning injuries (50.3%, n=1,158). A spike in injuries is seen amongst toddlers aged 1 and 2 years, which accounts for 18.2% (n=418) and 16.2% (n=372) of all poisoning presentations respectively (Figure 2). Toddlers are developing new skills that increase their mobility making previously inaccessible areas and items now within reach. At this stage, children are inquisitive and eager to explore but lack the awareness or understanding to perceive threats appropriately.

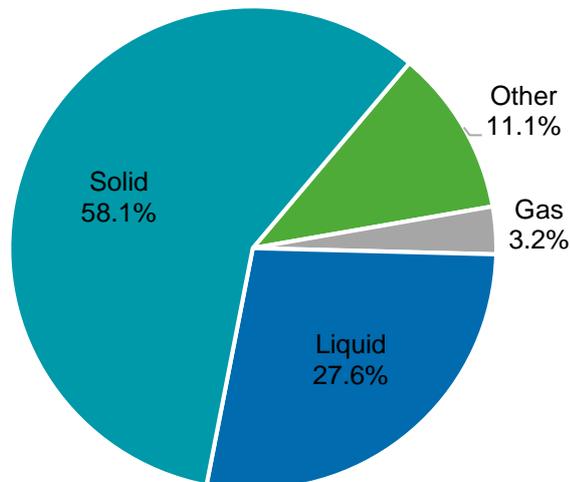
Aboriginal and Torres Strait Islander children are overrepresented in poisoning injuries accounting for 7.6% (n=174) of presentations. As identified in the 2011 Western Australian Census data, children who identify as Aboriginal and/or Torres Strait Islander decent represent 6.8% of the population of Western Australian children under the age of 15 years¹.

Injury

The majority of reported childhood poisoning injuries are due to unintentional circumstances (69.9%, n=1,608), with the remainder due to either intentional self-harm, particularly among adolescents (28.2%, n=648), or unknown circumstances (2.0%, n=45). The proportion of intentional self-harm injuries is a lot higher in comparison to other injury causes, however when looking at children under the age of five years old, almost all of the poisoning injuries were unintentional (99.1%, n=1,148).

Poisoning from pharmaceutical substances like paracetamol, anti-depressants, ibuprofen and other medications accounts for 57.2 percent (n=1,317) of childhood poisonings, while 41.9 percent (n=963) are due non-pharmaceutical substances, such as cleaning and gardening chemicals. The majority of childhood poisonings are from a solid substance (58.1%, n=1,336). This is followed by liquid (27.6%, n=636), gas (3.2%, n=73) and other (11.1%, n=256) (Figure 3).

Figure 3: Injury by Cause



The location of most poisoning injuries was unknown (69.1%, n=1,589). Of the known locations, the home is the most common injury location for poisoning injury to occur (24.4%, n=561) (Figure 4a). Within the home the outdoors, bedroom, kitchen and bathroom are the most common locations (Figure 4b).

Figure 4a: Injury by Location

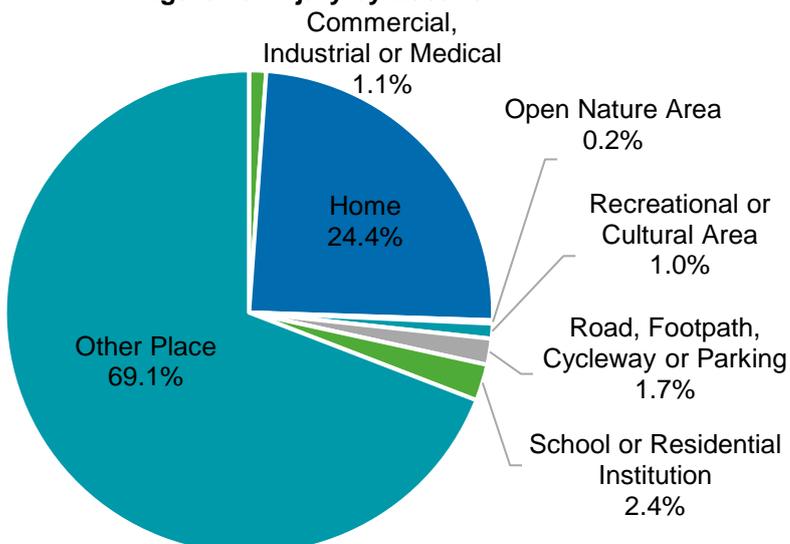
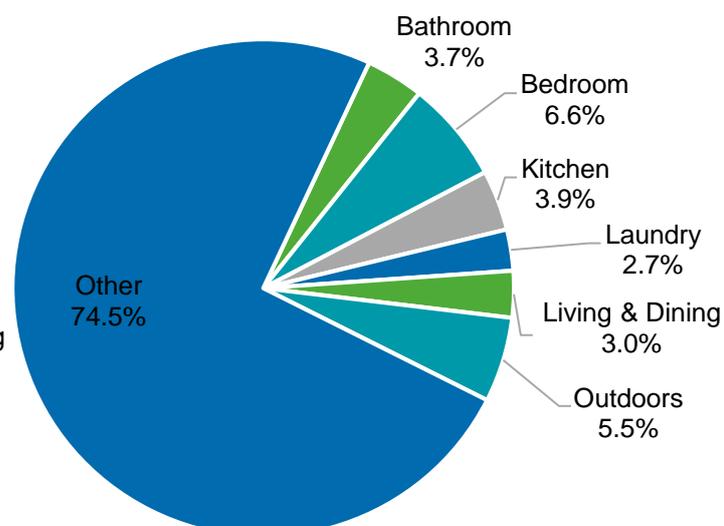


Figure 4b: Injury within the Home



A large proportion of children presenting with suspected poisoning were admitted to hospital for further treatment (42.3%, n=973). This is significantly higher than the overall injury admission rate of 14.1 percent². Poisoning from prescription medication, such as anti-hypertensive and heart medication can be particularly dangerous for young children and can result in fatalities.

Prevention

Every year many children require medical attention for poisoning injuries which are often caused by products found around the home. Most unintentional or accidental poisonings occur in children under five with toddlers at the greatest risk of injury. Children at these young ages are becoming highly mobile, however lack the necessary cognitive development to distinguish between what is safe and unsafe to put in their mouths. The following preventative measures can assist in reducing the risk of an accidental poisoning injury:

Poisoning

- Be aware of where different poisons are used and stored around your home.
- Ensure poisons are kept in a high lockable cupboard or cabinet preferably 1.5 metres above the ground and out of sight of children.
- Medicines should be stored separately from chemicals and cleaning products but ensure both are locked up and away.
- Store all poisons in their original containers that are clearly labelled.
- Do not store poisons in the same area to where food and drink are kept.
- Some medicines may need to be kept in the refrigerator – use a small lockable container to store these safely.
- Do not refer to medications as ‘lollies’ – this can be confusing for a child.
- Always read the label carefully before giving medicines.
- Keep your guests handbags out of reach of children, these may contain medications or other poisons.
- It is important that grandparents and other family members are aware that medications should be kept out of reach of children.
- Return all poisons to their safe storage area immediately after you use or buy them.
- Use products with child resistant containers, however remember child resistant is not child proof.
- Dispose of unwanted and out of date medicines. Contact your local pharmacy for advice.
- Ensure the plants in your garden are not poisonous.
- Always keep the Poisons Information Centre phone number **13 11 26** near your phone.

Learn more at www.kidsafewa.com.au

FIRST AID FOR POISONING

If your child swallows a poison, **do not try to make them vomit**. Take the child and the poisons container to the phone and ring **Poisons Information Centre** on:

13 11 26

Australia-wide / 24 hours a day / 7 days a week

For more information on intentional poisoning visit the Mental Health Commission at www.mhc.wa.gov.au

References

¹ Australian Bureau of Statistics. Estimates of Aboriginal and Torres Strait Islander Australians, June 2011 [Internet]. 2013 [cited 2018 Jan 5]; ABS cat. No. 3238.0.55.001. Available from <http://www.abs.gov.au>.

² McKenna J, Skarin D. Kidsafe WA Childhood Injury Bulletin: Annual Report 2016-2017. Perth (WA): Kidsafe WA (AUS); 2017 Dec.

Suggested Citation:

Udy, C, McKenna, J, Skarin, D. Poisoning. Perth (WA): Kidsafe WA (AU); 2018 March. Report No.: 37.

The Kidsafe WA Childhood Injury Bulletins are produced by Kidsafe WA in consultation with the Princess Margaret Hospital Emergency Department and WA Department of Health.

For further information please contact Kidsafe WA