

# WA Consumer Product Advocacy Network

## Product Injuries Research Report



Partner:



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

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



**ACCC**  
AUSTRALIAN COMPETITION  
& CONSUMER COMMISSION



Department of **Energy, Mines,  
Industry Regulation and Safety**



THE UNIVERSITY OF  
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## Contents

|                                                                                            |    |
|--------------------------------------------------------------------------------------------|----|
| About the WA Consumer Product Advocacy Network.....                                        | 3  |
| Perth Children's Hospital Injury Surveillance System.....                                  | 3  |
| Childhood Injuries in Western Australia .....                                              | 4  |
| Product Safety in Australia.....                                                           | 5  |
| Product Related Injuries to Children in Western Australia.....                             | 7  |
| Presentations to Perth Children's Hospital Emergency Department in Western Australia ..... | 7  |
| Methods .....                                                                              | 7  |
| Results .....                                                                              | 7  |
| Discussion .....                                                                           | 11 |
| Recommendations .....                                                                      | 12 |
| Limitations .....                                                                          | 13 |
| WA Consumer Product Advocacy Network's Role .....                                          | 13 |
| References .....                                                                           | 14 |

## About the WA Consumer Product Advocacy Network

The WA Consumer Product Advocacy Network (WA CPAN) was established in October 2014 in partnership with the Department of Health Western Australia. WA CPAN provides leadership to ensure ongoing and emerging injury issues associated with unsafe products are identified and minimised, with a focus on products used by children. The network consists of representatives from organisations who are involved in the regulation, safe use, injury prevention, treatment and sale of products for use by consumers. These organisations include:

- Department of Health Western Australia, Public and Aboriginal Health Division
- Perth Children's Hospital Emergency Department
- WA Poisons Information Centre
- Australian Competition and Consumer Commission
- Burn Injury Research Unit - School of Surgery, University of Western Australia
- Department of Energy, Mines, Industry Regulation and Safety – Consumer Protection
- Goodstart Early Learning
- Kidsafe Western Australia

Products identified through the network are prioritised according to the level of risk posed or safety concerns raised by WA CPAN members. A documented action plan then supports the ability to advocate for change. The network aims to explore solutions for identified unsafe products and ultimately reduce the number and severity of childhood injuries related to consumer products.

WA CPAN members meet every two months, with approximately six meetings per year. The members are also in regular email contact between meetings so that emerging issues can be dealt with in a timely manner. Once a product safety issue is identified, appropriate actions are taken and typically led by the member with the biggest potential impact/reach. Actions can include:

- Advocating for changes.
- Delivering workshops to provide injury prevention information.
- Monitoring products through injury surveillance and safety checks.
- Providing safety messages in media releases and newsletters.
- Providing resources such as brochures, fact sheets, tools and videos which are made available through websites and social media channels; and
- Enforcement of appropriate regulations or consumer law.

## Perth Children's Hospital Injury Surveillance System

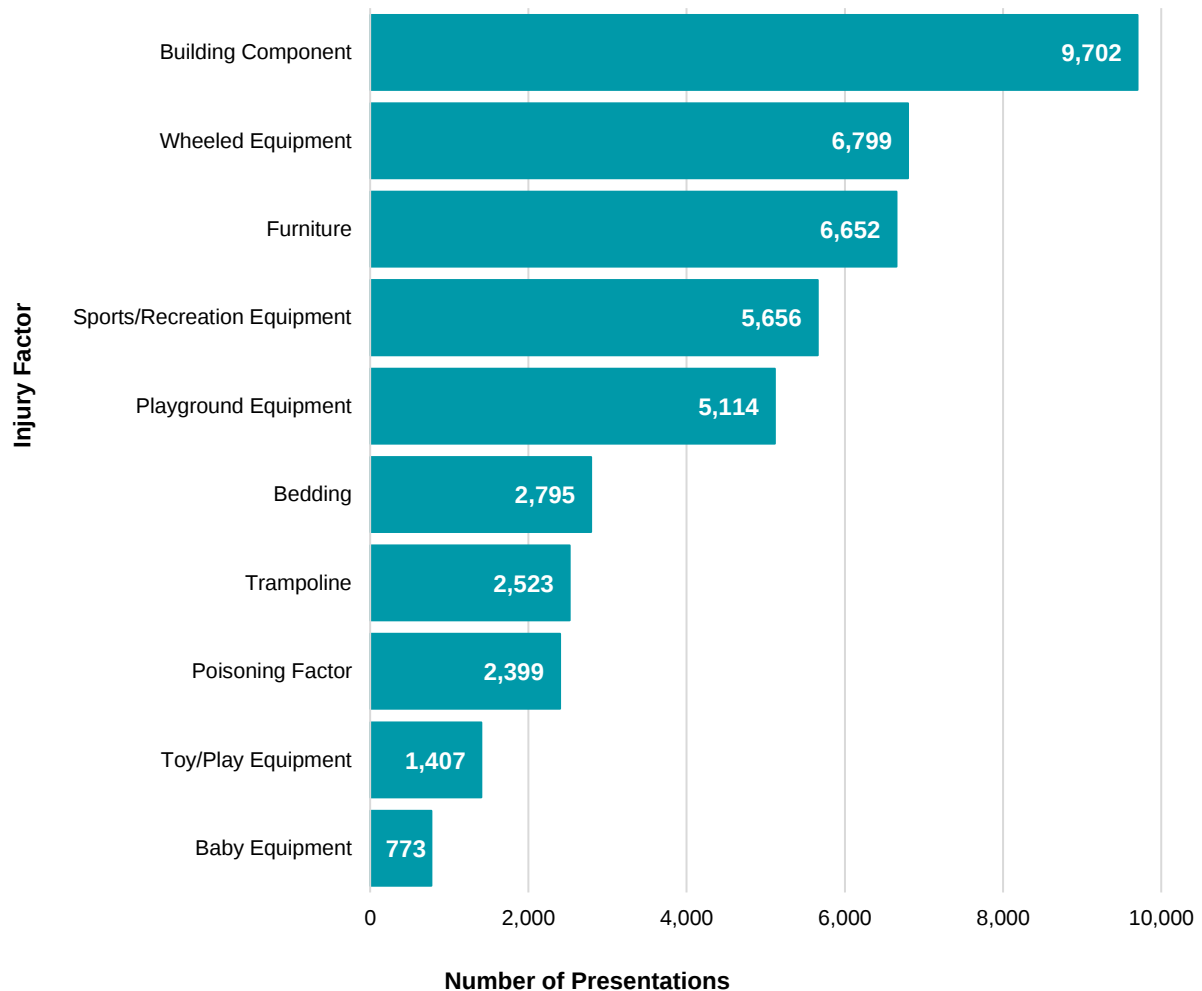
This report provides an overview of product-related injuries in Western Australian children between January 2018 and December 2022. The data used in this report was provided by the Perth Children's Hospital Emergency Department (PCH ED). PCH is the sole tertiary paediatric hospital in Western Australia, acting as a key referral source for childhood injury and disease within the state. The PCH Injury Surveillance System is an electronic database that involves the systematic collection of all injury presentations to PCH ED. Injury data is collected by triage nurses who initially assess the child presenting to ED. All clinical information and basic demographic details are recorded, together with the child's triage score, indicating the level of urgency based on the presentation reason. This data is then coded and validated by a dedicated Injury Surveillance Officer on a daily basis.

## Childhood Injuries in Western Australia

On average, 23 Western Australian children die each year as a result of injury, with a further 8,000 children hospitalised<sup>1</sup>. Between January 2018 and December 2022 there were more than 98,491 injury presentations to the PCH ED for children aged under 16 years. Of these presentations, approximately 44 percent (n=43,820) involved an injury factor. An injury factor is a product or a structure that contributed to the cause of injury.

The most common injury factors were house structures/building components such as doors, walls, and windows accounting for 22.1 percent (n=9,702) of the presentations. This was followed by wheeled equipment including items such as scooters, skateboards etc (15.5%, n=6,799) and furniture including items such as chairs, sofas, tables and cupboards (15.2%, n=6,652) (Figure 1).

**Figure 1: Presentations by Injury Factor; 2018 - 2022**



## Product Safety in Australia

In Australia there are mandatory standards to ensure the safety of consumer products, these standards aim to regulate product design to reduce the risk of injury to vulnerable users such as children<sup>2</sup>. Not all products on the market are subject to mandatory safety standards, and therefore may be unsafe<sup>3</sup>. For example, items such as high chairs and change tables are not subject to mandatory standards.

There are currently 49 mandatory standards in Australia with many of them relating to hazards for children<sup>4</sup>. Below is a list of the current standards:

- Aquatic toys
- Baby bath aids
- Baby dummies and dummy chains
- Baby walkers
- Balloon blowing kits
- Basketball rings & backboards
- Bean bags
- Bicycle helmets
- Bicycles
- Blinds, curtains and window fittings
- Bunk beds
- Button and coin batteries
- Care labelling for clothing & textiles
- Child restraints for use in motor vehicles
- Cosmetics ingredients labelling
- Decorative alcohol fuelled devices
- Disposable cigarette lighters
- Elastic luggage straps
- Exercise cycles
- Folding cots
- Hot water bottles
- Household cots
- Infant sleep products
- Miniature motorbikes
- Moveable soccer goals
- Nightwear for children
- Non-refillable helium cannister
- Portable aerosol fire extinguishers
- Portable non-aerosol fire extinguishers
- Portable ramps for vehicles
- Portable swimming pools
- Prams & strollers
- Products containing button and coin batteries
- Projectile toys
- Quad bikes
- Recovery straps for motor vehicles
- Reduced fire risk cigarettes
- Self-balancing scooters
- Sunglasses & fashion spectacles
- Swimming & flotation aids
- Tobacco health warnings
- Toppling furniture
- Toys containing lead & other elements
- Toys containing magnets
- Toys for children up to & including 36 months of age
- Treadmills
- Trolley jacks
- Vehicle jacks
- Vehicle support stands

Visit <https://www.productsafety.gov.au/product-safety-laws/safety-standards-bans/mandatory-standards> for more details on these standards.

In Western Australia there are two governing bodies which regulate product safety:

- **The Australian and Competition Consumer Commission (ACCC)**  
Aims to protect consumers from unsafe products by administering and enforcing a range of product safety provisions under the Competition and Consumer Act 2010. The Product Safety Group manages this role through a variety of functions including monitoring of product recall notifications, development and review of product standards and bans, as well as identifying emerging hazards and appropriate safety strategies.
- **The Department of Energy, Mines, Industry Regulation and Safety (DEMIRS)**  
Conducts over 10,000 inspections across Western Australia each year to monitor trader compliance with product safety standards and product bans. Consumer Protection undertakes compliance and enforcement action where non-compliance is identified. In addition, they engage in education and media awareness campaigns and liaise with key agencies regarding product safety issues, particularly those with a risk of serious injury or death.

In addition to these governing bodies, WA CPAN also plays an important role in product safety and reducing the risk of product injury to Western Australian children as outlined on page three.

Although there are measures in place to improve product safety, there are still a large number of product related injuries occurring in Australia<sup>2</sup>. In order to prevent these injuries in the future, it is important to identify the mechanism of injury to assist with an action plan. Product related injury presentations in Western Australia to PCH ED have been identified, analysed and summarised in this report to assist with improving product safety.

## Product Related Injuries to Children in Western Australia

### Presentations to Perth Children's Hospital Emergency Department in Western Australia

#### Methods

Using Crystal Reports (v14) a custom search query was set up to identify potential injuries resulting from products in the PCH ED injury surveillance database between January 2018 and December 2022. The following inclusion criteria were used:

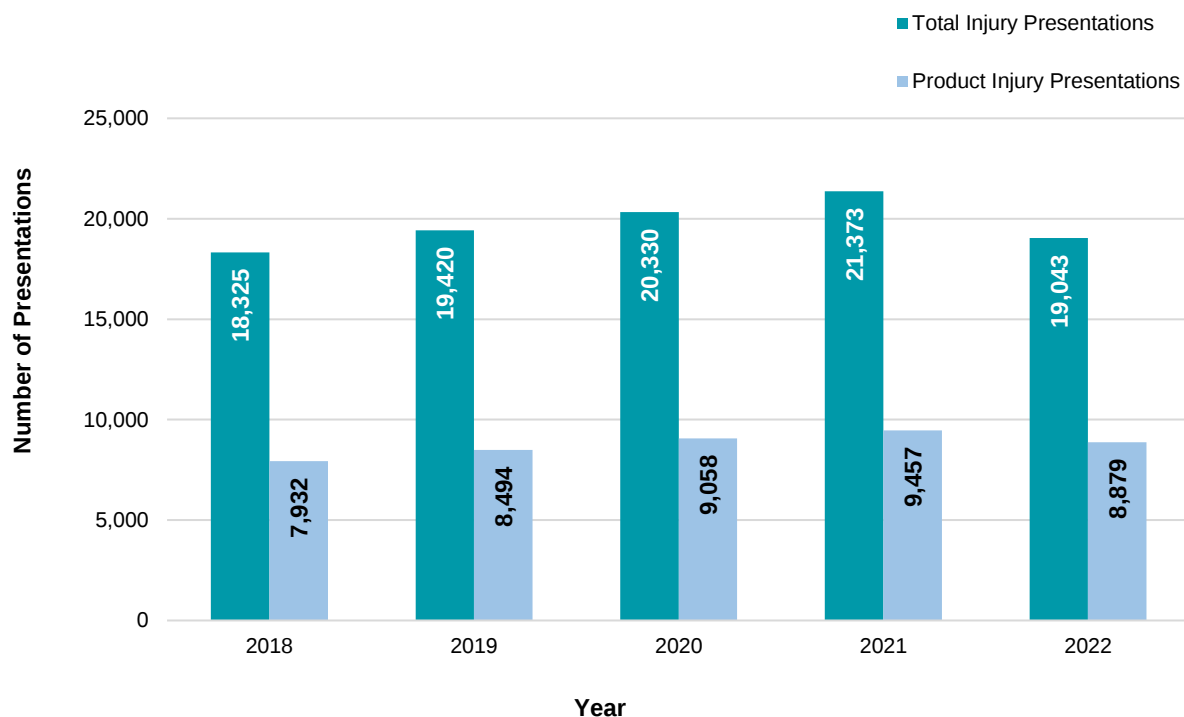
- Injury cause: *All*
- Location: *All*
- Intent: *All*
- Injury factor: *All*

For the purpose of this report, structures/building components have also been included as a product. Presentations which were removed during this process were those that did not have an injury factor coded.

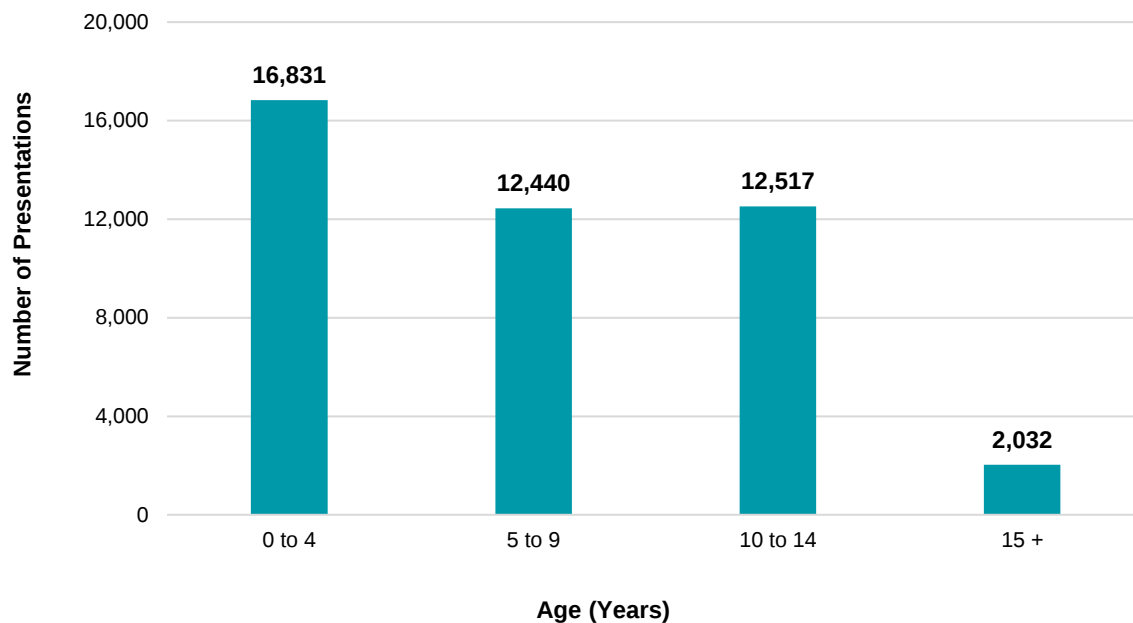
#### Results

Between January 2018 and December 2022, there were 43,820 product related injury presentations to PCH ED, with the highest number of presentations seen in 2021 (26.2%, n=11,478). This was followed by 2020 accounting for 25.3 percent (n=11,078). Product related injuries as a proportion of total injury presentations to PCH ED increases from 43.3 percent (n=7,932) in 2018 to 46.6 percent (n=8,879) in 2022 (Figure 2).

**Figure 2: Total Injury Presentations and Product Related Injuries to PCH ED by Year; 2018 - 2022**

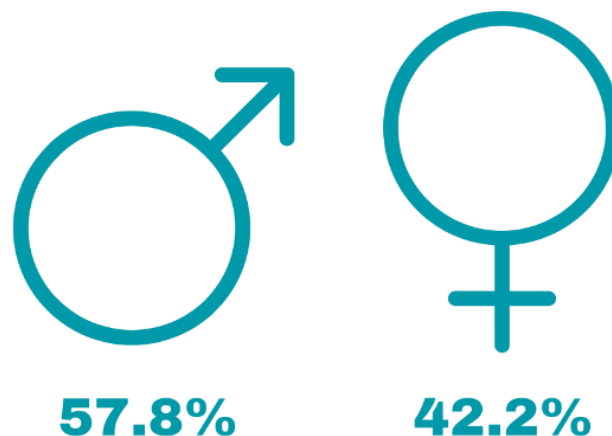


Over one third of the children presenting with a product related injury were between zero and four years old (38.4%, n=16,831), with one year olds presenting most often (9.6%, n=4,210). This is followed by children aged between 10 and 14 years (28.6%, n=12,517) (Figure 3). This is similar to the pattern seen for all injuries to children where zero to four year olds are most at risk.

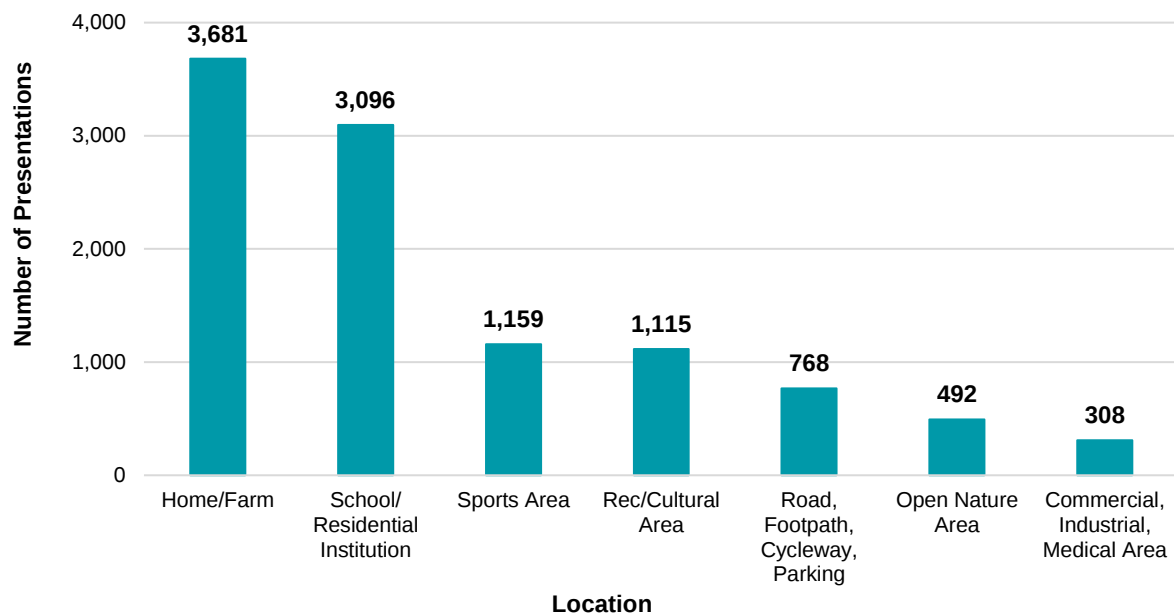
**Figure 3: Product Related Injuries by Age; 2018 - 2022**

The majority of the children presenting with product related injuries lived in the metropolitan area (94.3%, n=41,315). The remaining children resided in regional Western Australia (3.3%, n=1,462), overseas or interstate (1.7%, n=765) and a small portion was unknown (0.6%, n=278). Aboriginal and Torres Strait Islander (ATSI) children account for 3.1 percent (n=1,378) of product related injury presentations to PCH ED.

Like other injury presentations, males account for a higher proportion of the product related injuries (57.8%, n=25,320) than females (42.2%, n=18,498) (Figure 4).

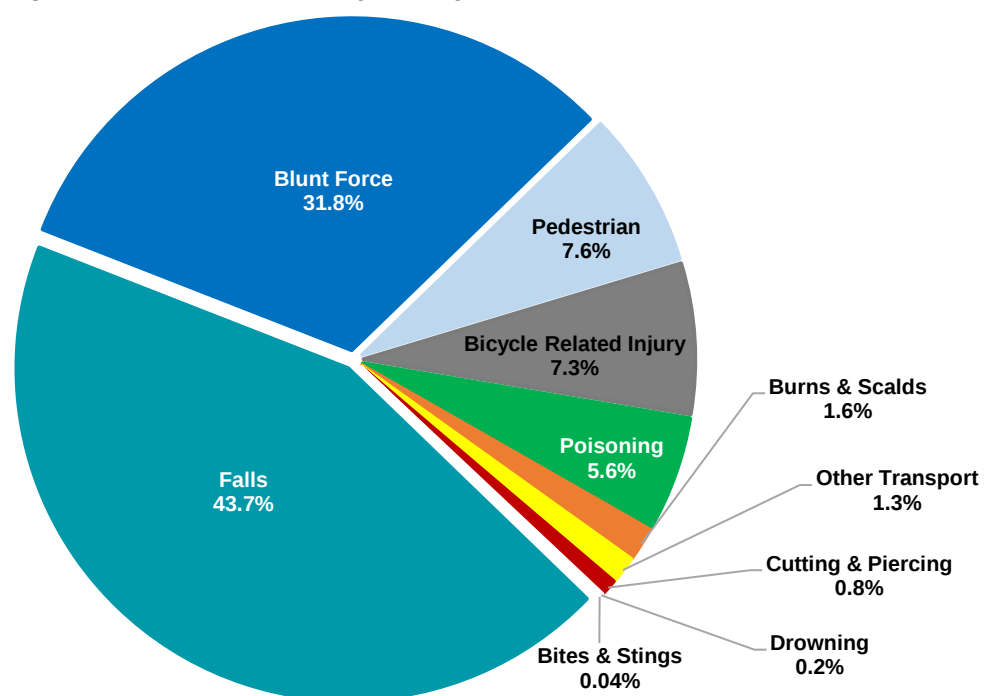
**Figure 4: Product Related Injuries by Sex; 2018 to 2022**

The injury location for many of the presentations was recorded as unknown (75.8%, n=33,201). Of the known locations, 34.7 percent (n=3,681) of the injuries occurred at home, followed by school or residential institutions (29.2%, n=3,096), sports areas (10.9%, n=1,159), recreational or cultural areas (10.5%, n=1,115), road/footpath/cycleway/parking (7.2%, n=768), open nature areas (4.6%, n=492) and commercial/industrial/medical areas (2.9%, n=308) (Figure 5).

**Figure 5: Product Related Injuries by Location; 2018 - 2022**

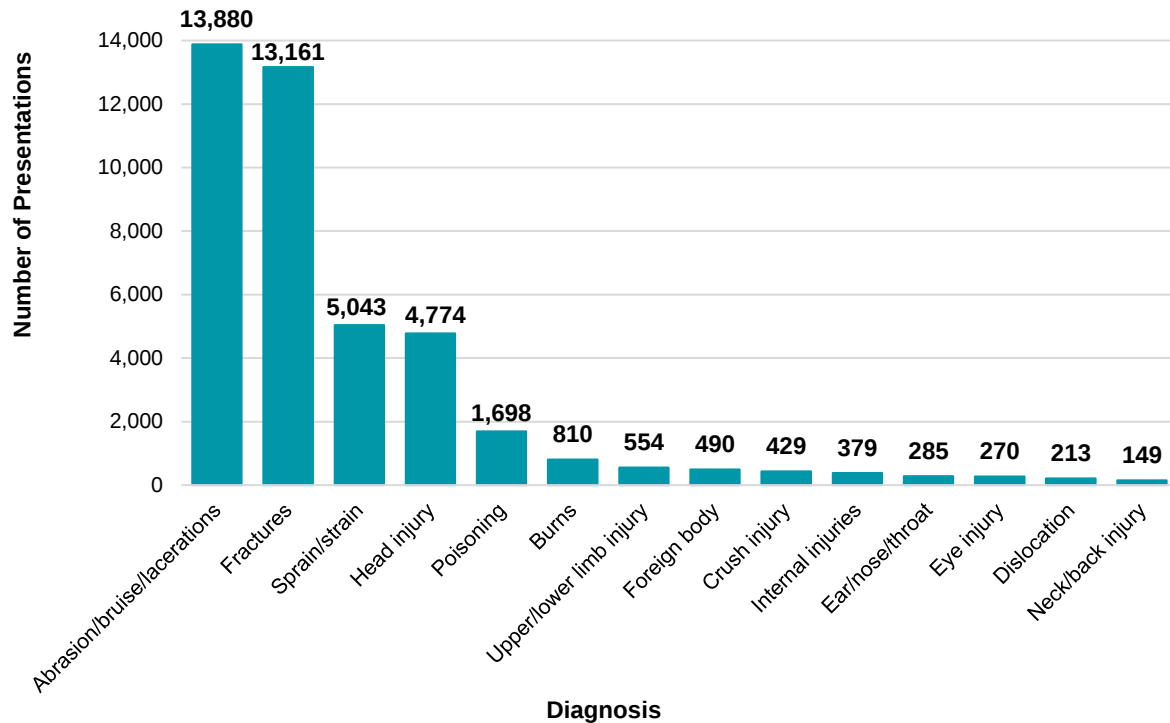
Building components were the most common products associated with injury presentations. This includes items such as doors, walls, and windows accounting for 22.1 percent (n=9,702) of the presentations. This was followed by wheeled equipment (15.5%, n=6,799) and furniture which includes items such as chairs, sofas, tables and cupboards (15.2%, n=6,652).

Of the known causes for product related injury presentations, falls were the most common cause (43.7%, n=18,383) with the main injury factors being building components (10.7%, n=4,671) and playground equipment (9.6%, n=4,225). The second leading cause was blunt force injuries accounting for 31.8 percent of the presentations (n=13,384). Blunt force injuries result from a child colliding with an object, for example a child running into a wall or being hit by a ball. Of the injuries caused by a blunt force, building components were the most common injury factor accounting for 34.1 percent (n=4,568), followed by sport and recreation equipment (34.1%, n=4,564) and furniture (15.3%, n=2,050). See figure 7 for product related injuries by cause.

**Figure 7: Product Related Injuries by Cause; 2018 - 2022**

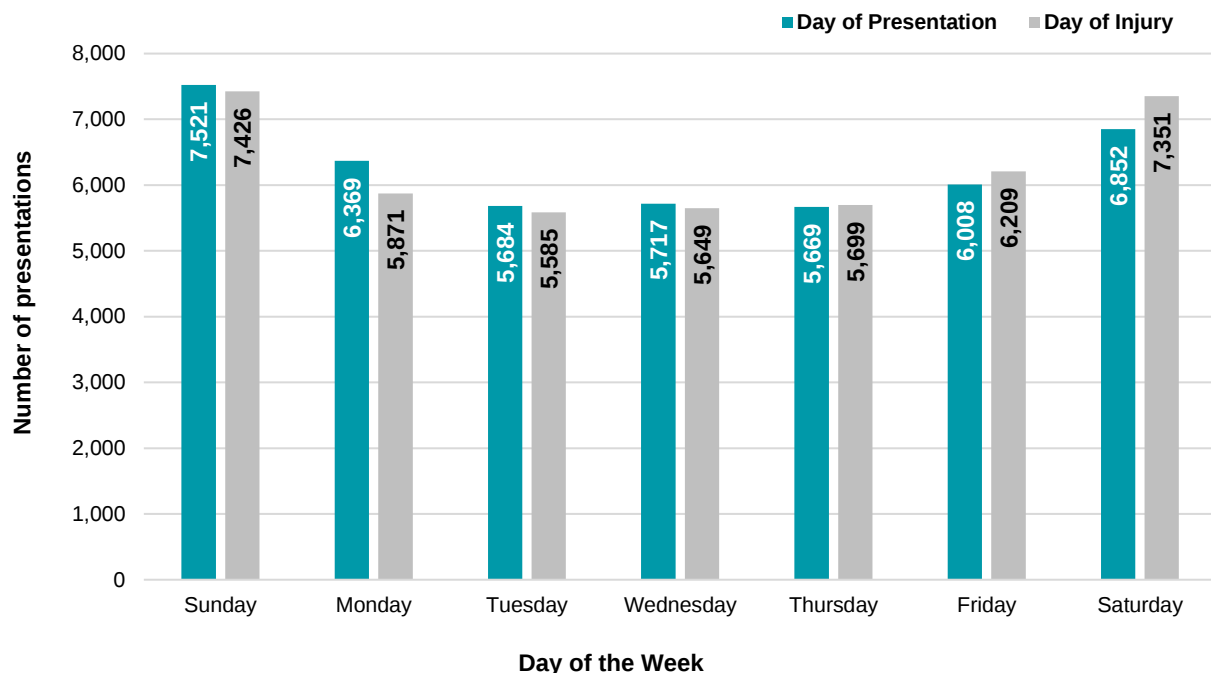
Of the product related injury presentations where the diagnosis was known, abrasions/bruises/lacerations were the most common (32.9%, n=13,880). This was followed by fractures (31.2%, n=13,161) and sprains/strains (12.0%, n=5,043). See figure 8 for the remaining diagnoses.

**Figure 8: Product Related Injuries; 2018 - 2022**



The greatest number of product related injury presentations occurred on Sunday, accounting for 17.2 percent (n=7,521), followed by Saturday which accounted for 15.6 percent (n=6,852). A similar pattern is seen when looking at the day the product related injury occurred, where both Sunday and Saturday saw the most presentations accounting for 16.9 percent (n=7,426) and 16.8 percent (n=7,351) respectively (Figure 9).

**Figure 9: Product Related Injuries by Day of Presentation and Day of Injury; 2018 - 2022**



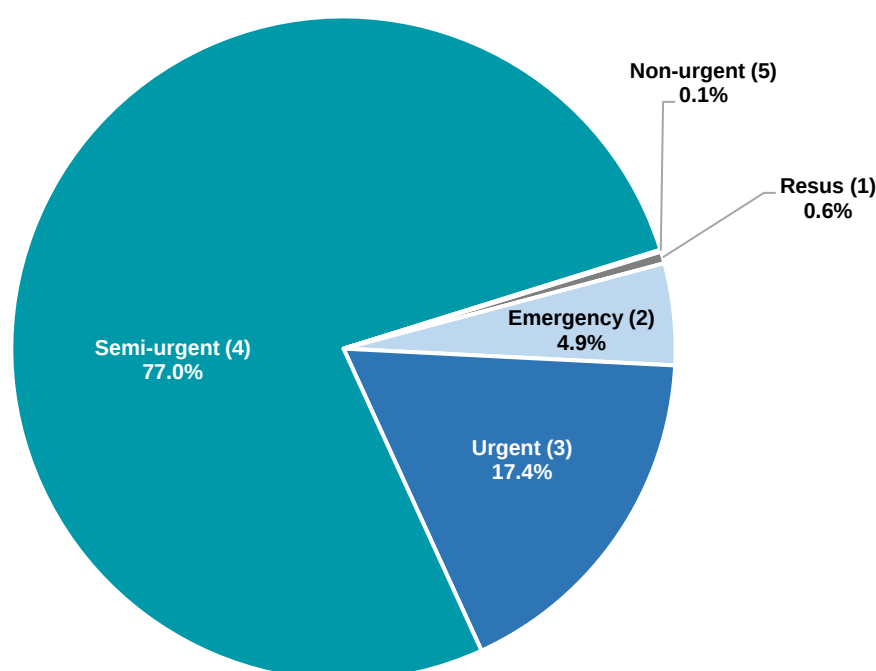
A triage category is assigned to each child presenting to the ED, which is based on the level of urgency (Table 1).

**Table 1: Triage Category**

| Category        | Seen within (mins) |
|-----------------|--------------------|
| (1) Resus       | 0                  |
| (2) Emergency   | 10                 |
| (3) Urgent      | 30                 |
| (4) Semi-Urgent | 60                 |
| (5) Non-Urgent  | 120                |

Most of the product related injury presentations were recorded as semi-urgent, accounting for 77 percent of the presentations (n=33,747). This was followed by urgent (17.4%, n=7,611), emergency (4.9%, n=2,168), resus (0.6%, n=255) and non-urgent (0.1%, n=39) (Figure 10).

**Figure 10: Product Injuries by Triage Category; 2018 - 2022**



In most cases (85.7%, n=37,560) the child was discharged with treatment complete. A further 12.8 percent (n=5,691) were admitted to hospital and the outcome for attendance for the remaining were categorised as other (1.5%, n=641).

### Discussion

Product safety is a complex area which involves a number of bodies with diverse priorities and needs<sup>3</sup>. In Australia, approximately 49 consumer products are subject to mandatory standards, that aim at reducing the risk of injury to users. However these standards do not apply to all products and some available products on the market may be unsafe<sup>2,3</sup>. In addition to this, Western Australia also has two governing bodies that regulate product safety to reduce injury risks.

This report analyses the product related injuries presenting to PCH ED between January 2018 and December 2022. During the five-year period there were 43,820 product related injury presentations to PCH ED. This accounts for almost half the injury presentations to PCH ED.

Similar to observations in other studies, zero to four year olds present most often with product related injuries<sup>5</sup>. Children at this age are learning by exploring their world, however they do not have the

knowledge or cognitive skills to explore safely all of the time<sup>6</sup>. This increases the likelihood of products being used incorrectly, which increases the risk of injury. Like other injuries, males also present more than females for product related injuries.

The majority of the children presenting with a product related injury to PCH ED reside in metropolitan areas (94.3%, n=41,315), while the remainder reside in regional areas. This is similar for all injury presentations and may be due to children from regional areas presenting to facilities closer to home. This could also reflect that most of Western Australia's children reside in or around the metropolitan area.

Of the known locations, the home was the most common location for product related injuries accounting for approximately one third of the presentations to PCH ED. This is similar to other injuries and is most likely due to young children spending the majority of their time at home, where they are exposed to many potentially harmful products.

The most common products associated with injury presentations to PCH ED were building components, wheeled equipment and furniture. This aligns with similar studies where these types of products have been identified as one of the top five causes of product related injuries<sup>6</sup>. The least common products causing injuries were toys/play equipment. This could be due to these items being more regulated as many of these products are required to comply with mandatory standards<sup>4</sup>.

In conclusion, product related injuries continue to occur even though safety measures have been put in place. As there are a large number of products on the market with unique designs, product safety can be difficult to regulate. The mandatory standards along with the education and awareness around product safety are likely reducing the number of product related injuries to children in Western Australia, however data suggests that more work can be done. As online purchasing has become increasingly popular, more work is needed in this area to ensure online sellers comply with Australian product safety laws. It is also important to increase Western Australians knowledge and awareness of online selling platforms and made aware of the risks that international sellers may not comply with Australian product safety standards.

### *Recommendations*

To reduce the risk of product injuries to children the following safety steps should be taken:

- Before purchasing products check to see if they meet any applicable mandatory Australian standards and ensure it has not been recalled by checking this website [www.productsafety.gov.au](http://www.productsafety.gov.au).
- Be aware of products purchased online and choose products that meet any applicable mandatory Australian standards.
- Follow the manufacturer's recommendations when using products - keeping in mind the safety information provided.
- Take note of the age recommendation for products.
- Always supervise children when using products.
- Be aware of the products around you and where possible keep products that are not suitable for children out of reach and out of sight.
- Teach children how to use products safely and ensure they know which products are restricted to them.
- Regularly check products for wear and tear and replace those which are worn or defective.
- Use the safety features provided on products.
- If you think a product is unsafe, report it to the ACCC and the seller.

## Limitations

There are some limitations to the data used in this report. Many child injuries in Western Australia may go unreported, as many children do not present to a healthcare facility. Children who do present to a healthcare facility may also present to general practitioners or other local hospitals and therefore may not be captured in the data in this report.

The accuracy of this report's data is also heavily dependent on patient/parental recall of the injury under stressful circumstances or after a significant delay, good triage recording and data validation by the Injury Surveillance Officer.

## WA Consumer Product Advocacy Network's Role

It is important WA CPAN raise community awareness around product safety and how to reduce the risk of these injuries. This includes promoting safety messages and recommendations within the WA community through education, data dissemination, advocacy, digital media and regulation. Members of the network may also have influence on relevant Australian Standards Committees.

WA CPAN will continue to identify unsafe products and advocate for change in order to reduce the number and severity of child injuries associated with consumer products. WA CPAN will use its network to:

- Identify emerging child product safety issues through data collection and research;
- Continue to monitor existing child product safety issues;
- Advocate for appropriate product safety measures in children's products;
- Raise public awareness of child product safety concerns; and
- Collaborate to achieve the best outcome for Western Australian children.

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