Kidsafe WA
Childhood Injury Bulletin

Child Accident Prevention Foundation of Australia
Western Australia

October 2021

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. However, 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 summarises pedestrian-related injuries occurring during the five year period between July 2015 and June 2020.

Pedestrian-related Injuries

A snapshot of Pedestrian-related injuries

- Between July 2015 and June 2020, there were 91,702 injury-related presentations to PCH ED, of which 537 were pedestrian-related.
- **Males** represent the greatest number of pedestrian-related injuries, accounting for 56.9 percent (n=306) of presentations.
- Children aged 0-2 years of age accounted for the highest number of pedestrian-related injuries (43.0%, n=231), followed by children aged 12-13 years (11.5%, n=62).
- The **road, footpath, cycleway, and related areas** were the most common location for pedestrian-related injury to occur, accounting for 72.6 percent (n=390) of injuries.
- The most common day for child pedestrian-related injuries was Thursday and Friday, with 89 each (16.6%), acccounting for a third of all pedestrian related injuries.
- 94.2 percent (n=506) of child pedestrian-related injuries were deemed unintentional.
- The most commonly allocated triage category for pedestrian-related injury was **category 4 - Semi-urgent**, accounting for 44.8 percent (n=241) of presentations.
- Of all pedestrian-related injury presentations to PCH ED, 67.5 percent (n=363) were **discharged** from hospital with treatment complete, with 32.0 percent (n=172) needing additional treatment.

Partner:

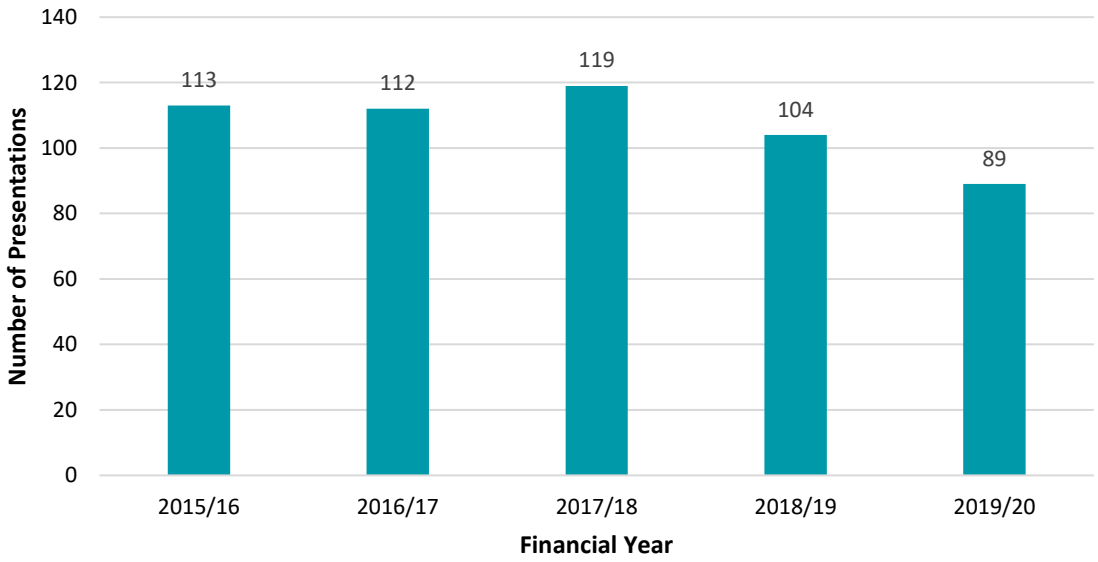
Government of **Western Australia**
Department of **Health**

Introduction

Walking is an important part of children's lives and plays a vital role in their overall health, fitness, and ability to get around their community independently[3]. However, being a pedestrian can be dangerous, especially for children who have not yet developed the skills to navigate the road safely[3]. In 2018, 29 percent of children who died in Australia due to a road transport accident were pedestrians.[2]. Children are at greater risk of pedestrian-related injuries due to 3 main factors; child's height, brain development and experience with traffic[3]. As children are small, it can be difficult for drivers to see them over objects that may block their view of moving traffic[3]. Child pedestrian injuries are most likely to occur in residential areas, particularly on the same street or close to the child's home[5]. Teaching children about safe road behaviours and ensuring children are supervised at all times are the most effective ways to reduce the risk of pedestrian-related injury[3].

Between July 2015 and June 2020, there were 537 pedestrian-related injury presentations to the PCH ED, averaging 107 presentations per year (Figure 1). The proportion of pedestrian-related injuries in relation to all injury presentations across the five-year period was 0.6 percent (n=537). A slight decrease was seen in 2019/2020, with pedestrian-related injuries accounting for 16.5 percent (n=89) of total pedestrian-related injuries across the five-year period, which could be accounted for by the COVID-19 pandemic[4].

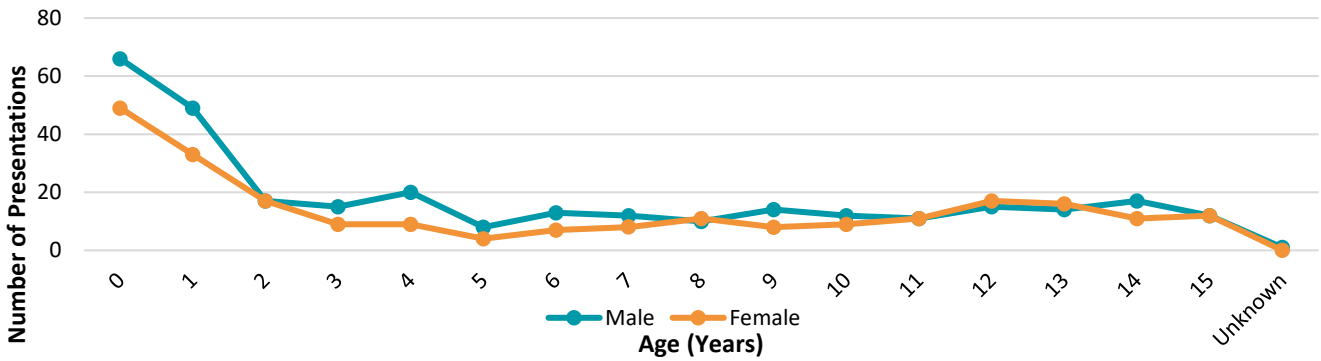
Figure 1: Pedestrian-related Injuries



Demographics

Males record higher rates of pedestrian-related injury presentations compared to females between 0 to 15 yrs, with males accounting for 57.0 percent (n=306) of injuries, with females the remaining 43.0 percent (n=231).

Figure 2: Pedestrian-related injury by age and gender



In particular, males present with more pedestrian-related injuries <2 years old (24.5%, n = 132)(Figure 2). Young children are unable to correctly assess the risks involved with new activities and avoid any dangers, which is reflected in Figure 2[1]. As children get older, they are more likely to partake in risk-taking behaviours, in addition to their changing social and physical environment, which results in subsequent injuries[1].

Children that identified as Aboriginal accounted for 7.4 percent (n=40) of pedestrian-related injuries between July 2015 and June 2020. While most children who presented to PCH ED with a bicycle-related injury resided within the Perth Metropolitan Area (90.5%, n=486), just over 7.6 percent (n=41) resided in regional Western Australia, and 1.9 percent (n=10) have an unknown place of residence. The Wheatbelt saw the highest admission of pedestrian-related injury with 28.5 percent (n=10) of total rural hospital admissions (n= 35).

Injury

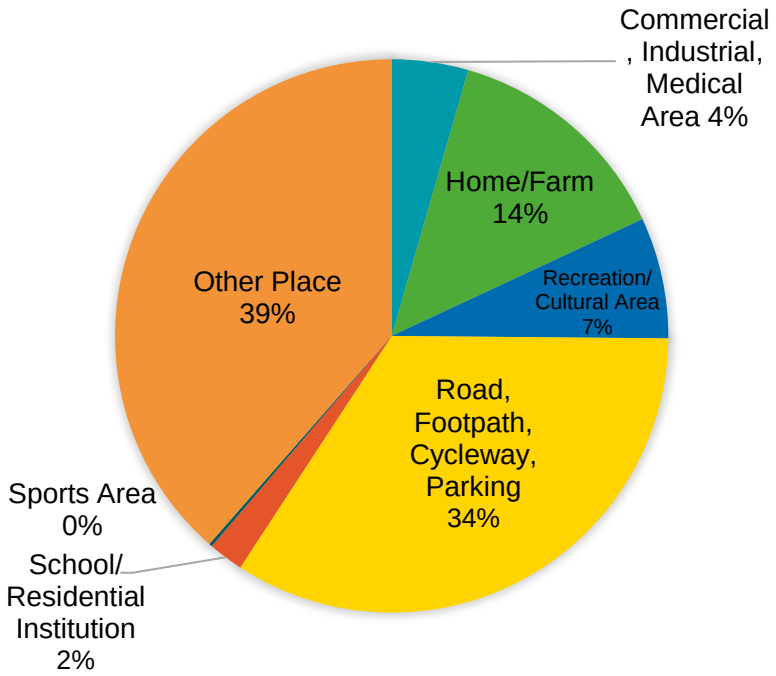
Every child that attends PCH ED is allocated a triage category between one and five based on the urgency of the medical attention required, with one being the most urgent and five being least urgent. The most commonly allocated triage category for pedestrian-related injury was category 4-Semi-urgent (44.9%, n=241), followed by category 3-Urgent (30.9%, n=166). Most pedestrian-related injuries in children were deemed unintentional (94.2%, n=506).

Prams (42.3%, n=227) and wheeled equipment (1.7%, n=9) were the most common injury factors involved in pedestrian-related injuries, whilst 55.7 percent of total injury factors (n=299) were not applicable. 55.4 percent (n=298) of all pedestrian-related injuries were caused by pedestrians, with 44.5 percent (n=239) accounting for other pedestrian conveyance.

Sporting activities only accounted for 0.4 percent (n=2) of all pedestrian-related injuries admitted to PCH ED between July 2015 and June 2020 and were identified as rollerblading and scootering. The remaining presentations were coded as children engaged in other specified activities (99.6%, n=535).

The location of a large portion of pedestrian-related injuries was unknown, as seen in Figure 3 (38.5%, n=207). Of the **known** locations (n=330), road, footpath, cycleway, and parking were the most common known location for pedestrian-related injury to occur (55.4%, n=183)., followed by home (22.1%, n=73). In addition, a third of all pedestrian-related injuries occurred on Thursday and Friday (33.1%, n= 178). Most of the injury times were unknown (53.4%, n=287), of the known injury times (n=250) between 12 pm and 6 pm was the most common time of day for injury to occur (22.9%, n=123).

Figure 3: Pedestrian-related injury by injury location group



Most children attended the emergency department based on the concerns of themselves or a relative (84.9%, n=456), were referred by another hospital (7.8%, n=42), or a general practitioner (2.8%, n=15). Of all pedestrian-related injury presentations to PCH ED, 41.3% were discharged after treatment (n=222), and 28.3% were admitted to a ward for further treatment (n=152). The remaining children were admitted for a short stay, referred/transferred to another hospital, or did not wait for treatment (30.3%, n=163).

Prevention

Being a pedestrian can be a risky business, especially for children in busy cities. Roads are designed with adults in mind, but children are not 'little adults'. As a child's brain is still developing, they may not fully understand the dangers around them and make safe decisions[3]. There are a few simple steps that can be taken to decrease the risk of pedestrian-related injuries.

- **Separate play areas from cars**: If possible, fence your child's play area off from driveways and the street. If this is not possible, help children choose safe places to play away from cars and driveways and supervise them closely.
- **Set a good example**: Explain what you are doing when you cross the road together. Teach children to *stop* before entering the road, *look* in all directions, *listen* and *think* when it is safe to cross the road.
- **Ensure children are supervised at all times**: Always supervise your child near traffic, particularly when crossing roads. Most children do not have the skills to cross safely without supervision. This includes holding your child's hand when near traffic, especially when crossing the road.
- **Arrange for your child to be supervised on the way to and from school:** Children should always be supervised on the walk to and from school and during or after school activities even if you are unable to be there. Ask if your school has a walking bus program or ask another parent to help.
- **Pick a safe meeting spot for after school pick up:** Picking a safe meeting spot for your child to wait when being picked up from school is a great strategy to ensure pedestrian safety. Never call them over from the opposite side of the street. Instead, cross the street with them.
- **Explain road rules to your children:** Teach children to obey the rules of the road and know what each traffic sign means and where it is safe to cross. Point out dangerous places and where to not cross (near curves and where things might hide children from view, e.g., bushes or bus stops).
- **Use the footpath and know the dangers of the driveway:** A footpath or shared path is the safest place for children to walk, but make sure they know how to watch out for cars when passing or crossing a driveway.
- **Avoid listening to loud music when walking and/or crossing the road**: It is important that the pedestrian can hear what is going on around them, e.g., a car reversing or a motorcycle turning a corner.
- **Wear bright coloured clothing**: Make sure your child wears clothing that is easy to see when out and about.

References:

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Suggested citation:
Christmas, O., Pawlowski, A., Skarin, D. Pedestrian-related Injuries. Perth (WA): Kidsafe WA (AU); 2021 October. Report No.: 44.

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