

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. On average, 70,000 children per year present to PMH Emergency Department (ED). The PMH Injury Surveillance System collects data related to all children presenting to the PMH ED with an injury. This bulletin provides a summary of all the injury surveillance data collected at PMH between 2010 and 2015 relating to children between 10 and 15 years of age.

Injuries to Teens and Pre-teens

A snapshot of Injuries to Teens and Pre-teens

- Between 2010 and 2015, there was a total of **32,519** injury presentations to the PMH ED for children between 10 and 15 years of age.
- **Children between 10 and 15 years of age** represent one third (33.7%) of total injury presentations.
- **Teenagers** aged 13 and 14 years of age recorded the greatest number of presentations of the teen and pre-teen age groups, accounting for 17.6% (n=5,732) and 17.8% (n=5,792) of presentations respectively.
- **Males** are at greater risk of injury amongst 10 to 15 year olds, accounting for 60.2% (n=19,570) of presentations.
- The majority of presentations (92.8%, n=30,165) were due to **unintentional** circumstances.
- **Blunt force and falls** recorded the highest numbers of injuries to teens and pre-teens, accounting for 30.1% (n=9,773) and 27.2% (8,848) respectively.
- Just under half of all injuries are related to a **sporting activity** (44.3%, n=14,412).
- **Australian Rules Football** is the most common sporting activity associated injury, accounting for 16.8% (n=2,418) of sports related injuries.
- A total of 15.5% of injuries required **admission to hospital** for further treatment.

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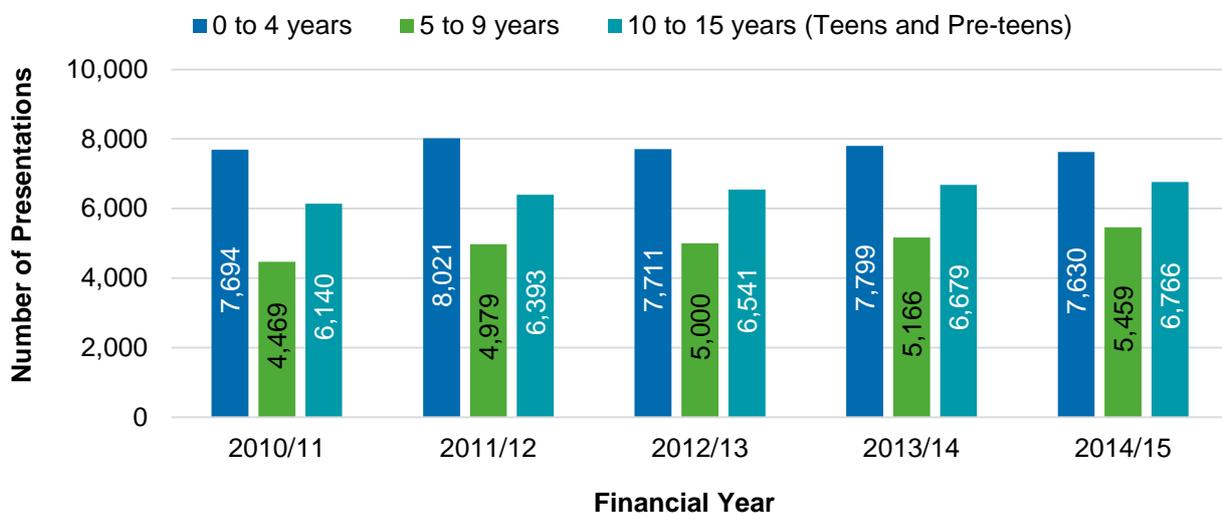


Introduction

As children mature, so do their physical and cognitive abilities. They begin to developed independence and the activities they participate in change substantially with age. It is however important to remember that children, including teens and pre-teens are not just small adults.¹ Learning to make decisions and risk assessing is an important part of growing up, however it is often difficult to find the right balance between allowing children to make their own choices and enforcing rules to keep them safe from serious injury.²

Over the past five years injuries to teens and pre-teens have remained largely stable with a slight increase (Figure 1). In 2010/11 injuries to teens and pre-teens accounted for 33.5 percent (n=6,140) of total injury presentations to the PMH ED, however during 2014/15 they accounted for 34.1 percent (n=6,766). While young children aged 0 to 4 years account for the highest number of injuries, the proportion of injuries to this age group has decreased from 42.0 percent to 38.4 percent over the five year period.

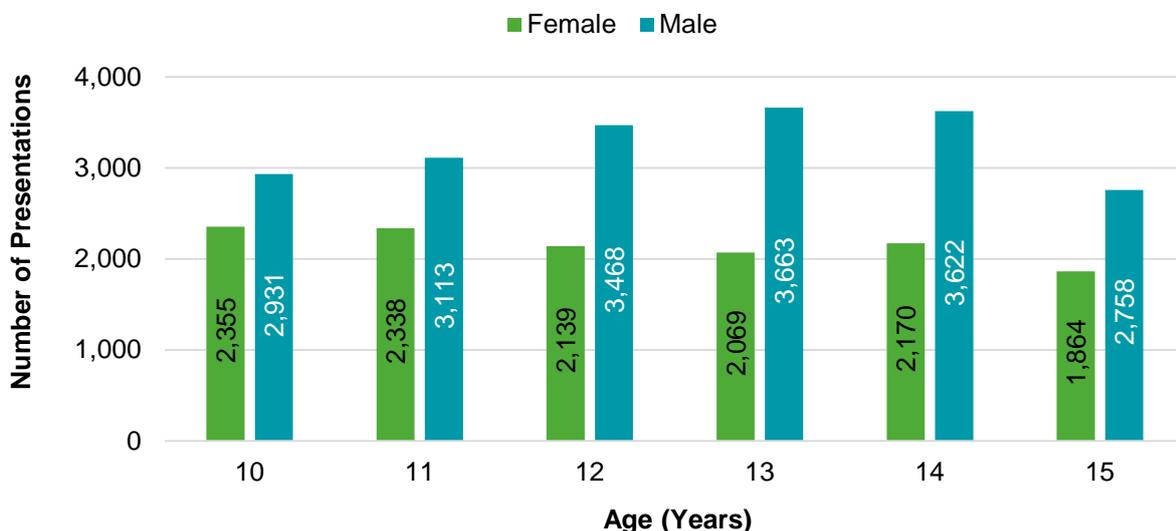
Figure 1: Total Injury Presentations by Age Group and Financial Year



Demographics

Overall males account for 60.2 percent (n=19,570) of injuries to children aged between 10 and 15 years and record consistently higher numbers in comparison to females across all ages (Figure 2). This is particularly evident in males aged 13 and 14 years where they account for 63.9 percent (n=3,663) and 62.5 percent (n=3,622) of injuries respectively. Injury numbers for children aged 15 years and older are generally low as there is a tendency for older adolescents to attend non-paediatric facilities.

Figure 2: Injury by Age and Gender

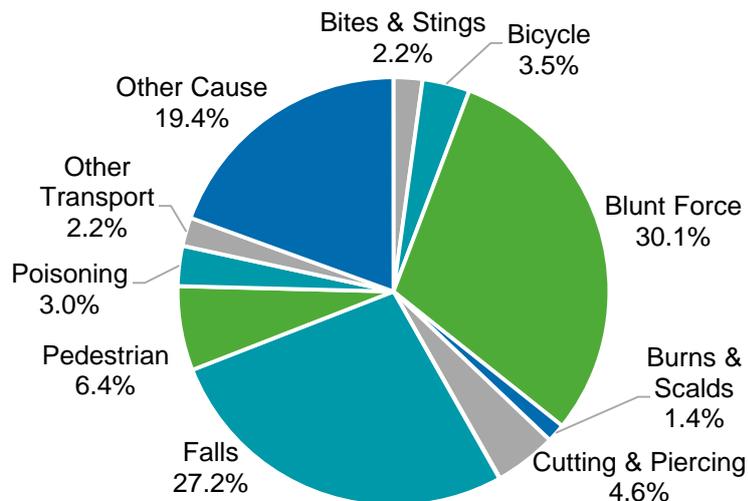


Injury

A large proportion of the injuries to teens and pre-teens are unintentional (92.8%, n=30,165). The remaining injuries are due to intentional self-harm (5.3%, n=1,713), alleged assault (1.1%, n=370) or were undetermined or other (0.8%, n=271). The proportions of self-harm and alleged assault are greater for this age group in comparison to younger children.

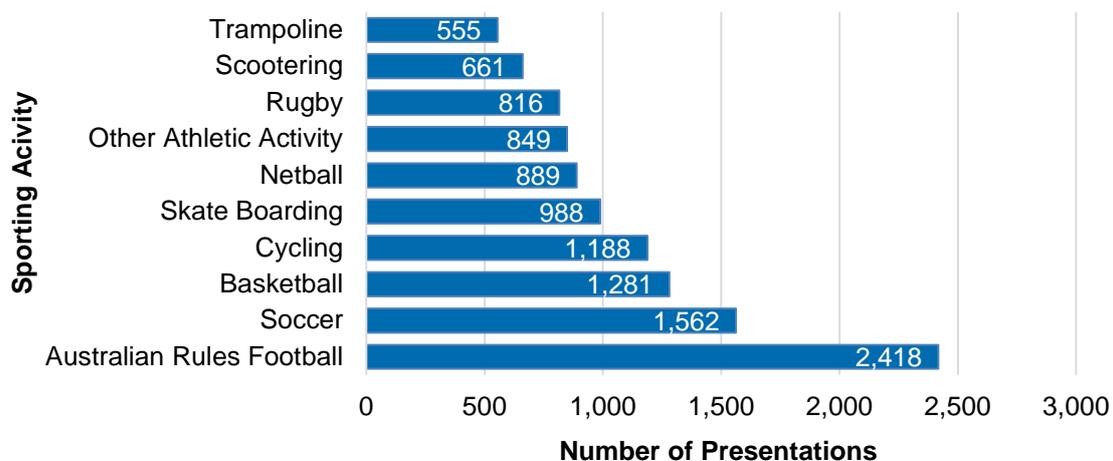
The majority of injuries to teens and pre-teens are caused by blunt force, referring to a collision with a person or object, or a fall (Figure 3). Also of note, in comparison to younger children, teens and pre-teens are at greater risk of injury as a cyclist and as a pedestrian. Pedestrian injuries includes on foot and using small wheeled devices, such as scooters and skateboards.

Figure 3: Injury by Cause



Just under half of all injuries to teens and pre-teens are related to a sporting activity (44.3%, n=14,412). In comparison to all ages, this is significantly high as generally sporting activities account for closer to a quarter of injuries. Australian Rules Football is the most common sporting activity associated injury, followed by soccer, basketball and cycling (Figure 4). For all ages, trampoline related injuries are the top sporting activity resulting in injury, with teens and pre-teens at less risk of injury from a trampoline compared to their younger counterparts.

Figure 4: Injury by Sporting Activity



Some sporting activities such as quad biking, equestrian and motorcycling record a smaller number of injuries, however they are often more severe. For example nearly two thirds (64.2%, n=34) of all quad bike related injuries are triaged as either urgent, emergency or requiring resuscitation. This is similar for injuries due to both equestrian and motorcycling, with 52.3% (n=78) and 55.3% (n=173) of injuries triaged in the more severe categories respectively.

The majority of teens and pre-teens who present to the PMH ED with an injury are able to depart with their treatment complete (83.1%, n=27,033). A further 15.5 percent are admitted to hospital for further treatment. The remaining are either referred to another hospital, clinic or department of PMH or do not wait for treatment.

Prevention

On the Road

Teens and pre-teens commonly use active transport to get to and from school or as a recreational activity. It is important that they are taught the safe road practices from a young age, so when they do go out on their own or with friends, they can navigate the roads safely. The following preventative measures can help to reduce the risk of an injury on the road as a cyclist or pedestrian either on foot or when using small wheeled devices such as skateboards and scooters:

- All cyclists must wear an approved helmet that meets Australian Standards and fits correctly. Helmets should be worn when using any device with wheels.
- For young cyclists, a footpath or shared path is the best place to cycle. The Road Traffic code 2000 allows children under the age of 12 to ride on footpaths.
- Cyclists should always give way to pedestrians.
- Scooters and skateboards should not be ridden on the road because of their inadequate braking mechanisms and increased risk of injury from vehicles. When using footpaths and shared paths keep left and give-way to those on foot.
- Always wear brightly coloured clothing to increase visibility to other road users.
- Avoid listening to loud music. It is important to be able to hear what is going on around you.
- If using a mobile phone, always stop walking or riding and find a safe place to talk or text.
- Avoid using scooters and skateboards at night or during dawn and dusk.

At Play

Teens and pre-teens are at greater risk of sustaining a sporting injury. This is possibly due to a decrease in rule modification as children get older and a higher number of older children participating in competitive sports in comparison to younger children. While sport and physical activity are a vital part of childhood development, injury risks are often perceived as a barrier to participation. The following preventative measures can help to reduce the risk of an injury during sport:

- Ensure appropriate protective equipment is worn for your chosen sport. This may include mouthguards, eyewear, helmets, protective padding, footwear and gloves.
- Stay well hydrated while participating in sporting activities, particularly during warmer months.
- Always warm up and cool down before and after exercise
- Ensure coaches are adhering to modifications appropriate to the team's development.
- Ensure your team is entered in the right level of competition appropriate to age, size and skill level.
- Do not play sport while tired, ill or injured. Ensure that appropriate recovery time is allocated.
- Ensure your coach is aware of any existing medical conditions that may affect your child during sporting activities.

Learn more at: www.kidsafewa.com.au

References

¹ Peden M, et al. World Report on Child Injury Prevention. Geneva: World Health Organisation; 2008.

² Safe Kids Worldwide. Pre-teens [Internet]. United States: Safe Kids Worldwide; 2016 [cited 2016 Dec 6]. Available from: https://www.safekids.org/safetytips/field_age/pre-teens-10-14

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For further information please contact Kidsafe WA