

Unintentional Injuries to Aboriginal and Torres Strait Islander Children

Childhood Injury Presentations: October to December 2005

- There were a total of 10,990 presentations for all causes to Princess Margaret Hospital Emergency Department (PMH ED) from October to December 2005 (See graph below).
- Injury presentations accounted for 26% (n=2,828) of the total number of all PMH ED presentations.
- The leading cause of injury presentations to PMH ED from October to December continued to be Falls (41.1%, n=1,163).
- Children of Aboriginal or Torres Strait Islander descent accounted for 4.7% of all injury presentations from October to December 2005.
- Unintentional injury presentations accounted for 96% of all injury presentations with intentional/assault injuries (4%) more prominent in the older age groups.
- The home remains the most common location for injuries to occur (63%) and this quarter (Oct-Dec 2005) had the highest percentage of injuries occurring in the home.
- For the calendar year 2005, injuries accounted for 24% (n=10,977) of the total number of all PMH ED presentations.

Total PMH ED Presentations Jan to Dec 2005

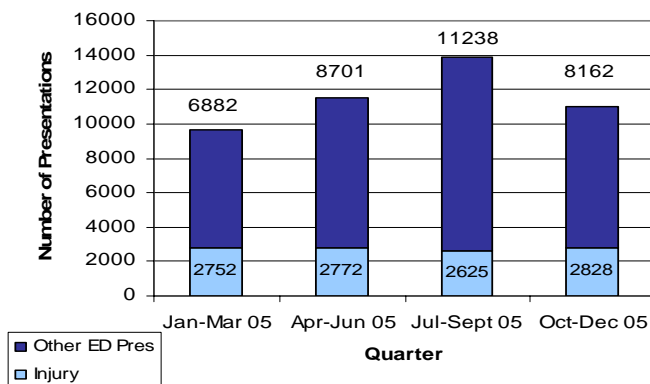


Photo from www.virgina.edu

Summer Injury Snapshot - Drowning

- There were 93 drowning/immersion presentations to Princess Margaret Hospital ED from 2001 to 2005.
- 6.4% of these Immersions were dead on arrival or died in the ED.
- 79% of Immersion cases occurred in the Home. Of those injuries where a particular location was specified the top 3 locations were:
 - Home Swimming Pool: n=41
 - Home Bathroom: n=15
 - Home Yard/Garden: n=11
- Over the past five years the number of drowning presentations was lowest in 2005 (n=10).

Introduction - Indigenous Children

- 512 Aboriginal and Torres Strait Islander (ATSI) children presented at PMH ED in 2005 for injuries.
- ATSI children aged 1 (n=52), 2 (n=57) & 14 (n=41) years of age accounted for the highest number of injury presentation.
- The most common injury was from "Other Blunt force (n=104) closely followed by falls from less than 1 metre high (n=88).
- ATSI children accounted for 4.6% of the total Emergency Department Injury Presentations in 2005.

Results

In 2005, a total of 512 Aboriginal and Torres Strait Islander children presented at PMH ED as a result of injury.

The data collected at PMH indicates an overrepresentation of Indigenous children presenting at PMH ED as they represent less than 3% of the population but accounted for almost 5% of the injury presentations to PMH ED in 2005.

Of these presentations unintentional injuries accounted for 88.3% (n=452) and the remaining 11.7% (n=60) were as a result of intentional self harm, alleged assault or undetermined intent.

Males (n=295) had the highest number of injuries compared to females (n=217), comparable with other population groups.

Of the ATSI children aged 0-16 years presenting at PMH ED, 67% (n=343) were treated and sent home, 30% (n=153) were admitted, 1% (n=7) Did not wait, 1% (n=7) were referred on and the remainder either died in ED or left at own risk (n=2).

The top five causes of injury to Aboriginal and Torres Strait islander children who presented at Princess Margaret Hospital were:

1. Other Blunt Force (n=104)
2. Fall <1 metre (n=88)
3. Other Cause (n=62)
4. Cut, Pierced, Stabbed (n=59)
5. Fall on Same Level (n=41)

Of these top five injuries 6% were of undetermined intent and 7% were intentionally caused injuries (ie alleged assault or intentional self harm), while 87% were unintentional.



Photo from: www.photoduck.com

The following summary of data is broken down by gender, age, location, and cause of injury. To enable a more detailed description on types of injuries and stage of development the data will be summarised as:

- Children under 1 year old
- Children aged 1 to 4 years old
- Children aged 5 to 9 years old
- Children aged 10 to 14 years old

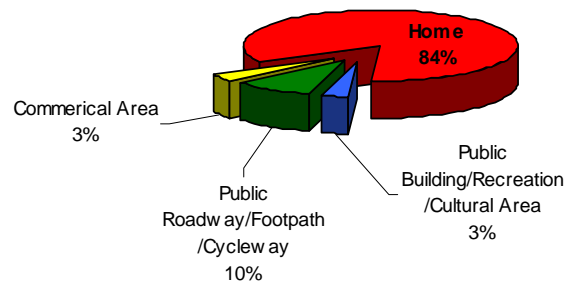
ATSI Children Less than 1 year

In 2005, 31 ATSI children less than 1 year of age presented at PMH ED as a result of an injury.

There were more female (55%) presentations than male (45%) which differs from the usual observation of males being overrepresented.

The Home is the most common location for ATSI children less than one year to be injured, accounting for 84% (n=26) of all ATSI injury presentations to PMH ED (See Figure 2).

Figure 2: Location of Injuries for Children <1year, 2005



More than 90% of injuries to children in this age group were unintentional, a further 10% were intentional/undetermined intent, eg. Baby being shaken or caught in a parental altercation.

The Top five causes of injury to ATSI children less than 1 year of age are:

1. Other Blunt Force (32%)
2. Fall <1 metre (26%)
3. Motor Vehicle Occupant (6%); Contact with Hot Object (6%); Fall >1 metre (6%)

Falls were from common household equipment such as chairs, bed, lounge, strollers, kitchen bench and shopping trolleys; and all Motor vehicle occupants who presented were unrestrained; a Baby walker gave access to a heater resulting in contact with a hot object.

ATSI Children aged 1 to 4 years

A total of 182 children aged 1 to 4 years presented to PMH ED during this time, the highest number of ATSI injury presentations for all age groups.

Females accounted for 46% of fall presentations in this age group and 54% were male.

Two year old children had the highest number of injury-related presentations to PMH ED for all ages of ATSI children in 2005 (n=57).

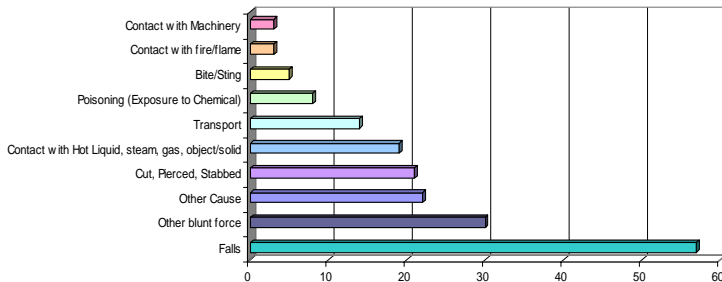
The Home remained the most common location for injuries in this age group at 77% (n=140).

More than 93% of injuries to children in this age group were unintentional.

Children aged 1 to 4 went against the trend for main cause of injury with Falls from less than 1 metre (17.6%) being more common than other blunt force (15.9%).

The top five injuries for children 1 to 4 years of age still matched those that affected all ATSI children. (See Figure 3)

Figure 3: Number of Injury by combined cause 1 to 4 years, 2005



ATSI Children aged 5 to 9 years

Overall there were 133 Injury Presentations to PMH ED for ATSI children aged 5 to 9 years.

Males accounted for 64% of fall presentations in this age group and 36% were female.

The Home remained the most common location for ATSI child injuries for children aged 5 to 9 years accounting for 63%, followed by Public Roadway/Footpath/Cycleway (7.5%) then Sports/Athletics Area (7%).

Only 6% of injury presentations were intentional and included 1% Intentional Self Harm; 1.5% Alleged Assault and 3.5% Undetermined intent.

Falls from less than 1 metre (n=28) were the most common type of injury for ATSI children aged 5-9 years. Overall the Top Three causes of injury presentation were:

1. Falls <1m (21%)
2. Other blunt force
3. Cut/Pierced/Stabbed (12%); Other Cause (12%)

Most fall related injuries occurred using play equipment such as trampoline, climbing frame, monkey bars or swings. While Cut, Pierced, stabbed injuries involved glass, knife, dogs, stick, swimming pool and injuries occurring to the feet.

Injuries occurring at a Public Roadway, Footpath, or Cycleway included 20% unrestrained motor vehicle passengers, 20% motorbike, 10% bicycle, 30% pedestrian collisions with a car and 20% fall from walls.

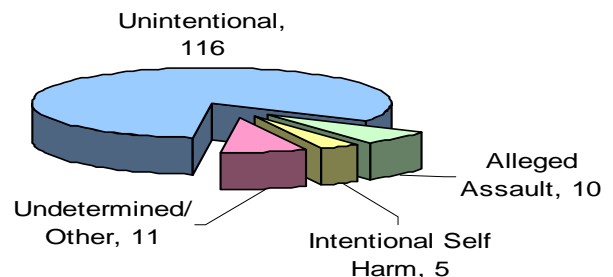
ATSI Children aged 10 to 14 years

Overall there were 142 injury presentations to PMH ED for ATSI children aged 10 to 14 years in 2005. 81% of these injury presentations were unintentional injuries (see figure 4).

The gender difference in ATSI child injury presentations narrowed for children aged 10-14 years. 42% of fall presentations to PMH ED for this age group were females, while 58% were males.

The home remains the most common location for injuries to indigenous children aged 10-14 years, accounting for 64 presentations. Sports or Athletics Area (n=17) and Public Roadway, Footpath, or Cycleway (n=16) ranking 2nd and 3rd respectively.

Figure 4: Number of Injuries by Intent 10 to 14 years of age, 2005



The five most common causes of injury for indigenous children aged 10 to 14 years were:

1. Other blunt force (n=35)
2. Cut, Pierced, Stabbed (n=18)
3. Falls <1 metre (n=17)
4. Falls on Same Level (n=16)
5. Other Cause (n=16)

Each of the top five causes a large number of injuries occurred while participating in sports such as football, basketball, badminton, skateboarding, tee-ball and cricket. Many cut/pierced/stabbed injuries still involved glass.

Other Blunt force injuries included reference to alleged assaults eg. mobbed/attacked/assaulted, with most assaults perpetrated by someone unknown to the victim. Other Cause made reference to injuries caused intentionally such as sniffing paint/petrol or being intoxicated.

In this age group intentional injuries become more common with more than 19% of all injury presentations occurring as a result of some intent. This is a higher proportion of intentional injuries than in the Non-ATSI populations.

Discussion

Aboriginal and Torres Strait islander children are one of the most vulnerable population groups in Western Australia, regularly overrepresented in hospital injury data¹.

Although there is Australia-wide recognition of the extent of injury in Aboriginal and Torres Strait Islander populations there are still few programs that directly address Aboriginal and Torres Strait Islander childhood injuries.

A number of best practice principles for promoting safety to Aboriginal and Torres Strait Islander (ATSI) peoples and communities have been outlined in the recently released "Aboriginal and Torres Strait Islander Safety Promotion Strategy".

These include:

- Acknowledge ATSI cultural influences and the historical, social and cultural context of communities.
- Ensure ongoing community involvement and consultation.
- Adhere to the holistic definition of health.
- The practical application of self-determination principles is fundamental in all ATSI health promotion planning.
- The establishment of effective partnerships is required to address many of the determinants of health.
- Build the capacities of the community, government, service systems, organisations and the workforce, ensuring equitable resource allocation, cultural security and respect in the workplace.
- Practice should be based on available evidence
- Programs that are multi-faceted and include effective evaluation and sustainability strategies will also improve the design of future programs.

- Programs should aim to be sustainable and transferable.
- Demonstrate transparency of operations and accountability.




Source: National Public Health Partnership (NPHP). 2004. The National Aboriginal and Torres Strait Islander Safety Promotion Strategy. Canberra: NPHP. Available at:

http://www.nphp.gov.au/publications/a_z.htm

Some indigenous communities are already making a difference. One particularly successful program was managed by the Royal Life Saving Society of Australia (RLSSAWA).

The Remote Aboriginal Swimming Pools Project was part of a Department of Housing and Works environmental health intervention which saw swimming pools installed in 3 remote Aboriginal communities (Burringurrah, Jigalong and Yandeyarra).

The project included:

-  Learn to swim programs for school children
-  Training and education programs for all community members, and
-  A video to educate Indigenous parents and carers of the dangers in and around aquatic environments developed by RLSSA.

Programs were designed to encourage active community participation with the pool facility providing safe and healthy environments. There is also greater opportunity for physical activity in hot climates, and boredom has also been alleviated. Health care providers have noted a marked decrease in skin conditions and ear infections (glue ear). Each school has adopted a 'no school, no pool' policy to encourage attendance.

For further information visit:

www.lifesavingwa.com.au


Author: Melita Leeds and Sue Wicks; Kidsafe WA

¹ Gillam C, Legge M, Stevenson M, Gavin A. 2003. Injury in Western Australia: An Epidemiology of Injury 1989-2000. Injury Research Centre, Western Australia

The WA Childhood Injury Surveillance Bulletins are developed by Kidsafe WA in consultation with the Princess Margaret Hospital Emergency Department Injury Surveillance Officer; and Department of Health (Clinical Network Development Team - Injury)

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