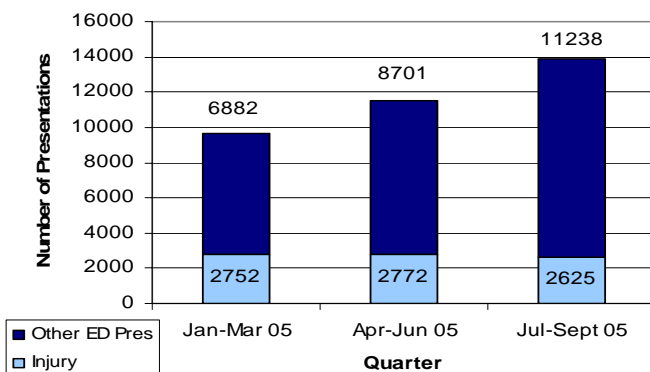


Falls in Focus: How do children fall?

Childhood Injury Presentations: July to September 2005

- There were 13,863 presentations to Princess Margaret Hospital Emergency Department (PMH ED) from July to September 2005.
- Injury presentations accounted for 19% of the total number of PMH ED presentations.
- The leading cause of injury presentations to PMH ED from July to September was Falls (45.4%, n=1,175).
- So far this year (January to September 2005) there have been 8,149 injury presentations to PMH ED (See graph below).

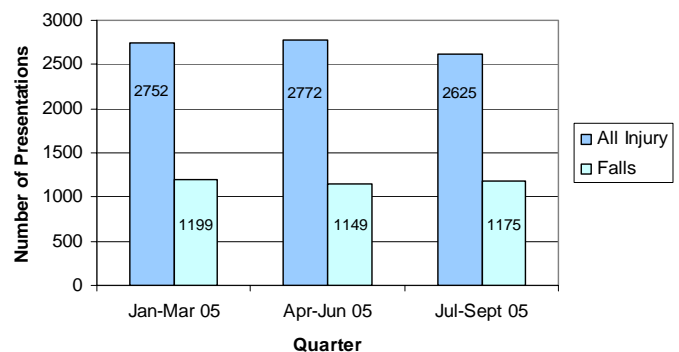
Total PMH ED Presentations Jan to Sept 2005



Introduction - Falls in Focus

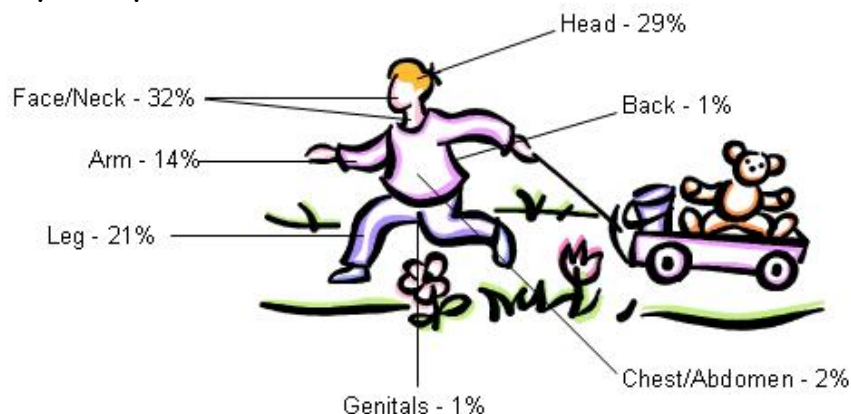
- There were 1,175 fall related injury presentations to PMH ED between July and September 2005.

Comparison of Injury and Fall Presentations, PMH ED Jan to Sept 2005



- Children aged 1 and 2 years of age accounted for the highest number of fall injuries (1: n=130; 2: n=112).
- The majority of falls were falls from less than 1 metre high.
- Falls accounted for 8.6% of the Total Emergency Department Presentations from July to September 2005.
- Aboriginal children accounted for just 3% of all fall-related injury presentations to PMH ED.

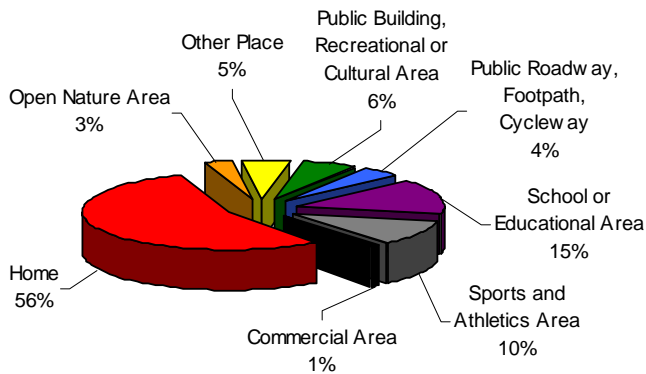
Percentage of Princess Margaret Hospital Emergency Department Fall related Injury Presentations by Body Region, July to September 2005



Results

Falls are the most common cause of Injury Presentation to PMH ED accounting for 1,178 from July to September 2005.

Figure 1: Location of Fall Injury Presentations for children aged 0-14 years, July to September 2005



The most common location for Falls is the Home (56% - See Figure 1) with children aged 1 year (n=130) of age accounting for the highest number.

Males (n=679) had the highest number of injuries compared to Females (n=496), comparable with other injuries.

The most common body regions injured from falls are: (1) head, (2) face/neck, (3) Legs, and (4) Arms.

Of the children aged 0-14 years presenting at PMH ED as a result of Falls, 78% (n=918) were treated and sent home, 18% (n=207) were admitted, 3% (n=36) Did not wait, and 1% (n=14) were referred on.

Only 76% of fall-injuries are matched to an injury factor during coding. Of those recorded, the Top Five Injury Factors for Fall Related Injury Presentations to PMH ED were:

1. Floor (n=224)
2. Sports/Recreational Equipment (n=105)
3. Wheeled Equipment (n=76)
4. Toy, Play Equipment (n=69)
5. Chair/Sofa (n=48)

The following summary of data is broken down by gender, age, aboriginality, location, and cause of injury. To enable a more detailed description on types of falls 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

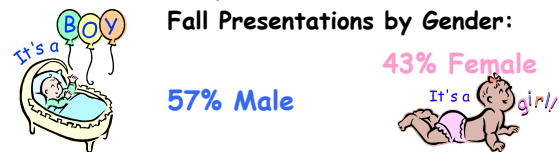
Children Less than 1 year

From July to September 2005, 51 children less than 1 year of age (Approximately 4% of the total fall injuries) presented at PMH ED as a result of a fall.

The majority of falls in this age group were falls of less than 1 metre (n=39); 7 were falls of greater than 1 metre; 4 on same level; and 1 from other blunt force.

More than 84% of children in this age group who presented as a result of a fall injury were able to be treated and sent home, 8% were admitted, 6% Did Not Wait; and 2% were referred on to another PMH department.

Fall Presentations by Gender:

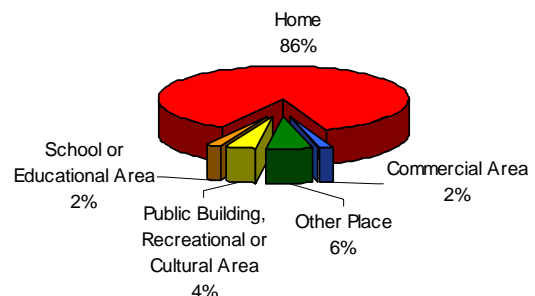


Only 2% (n=1) of children <1 year presenting at PMH ED as a result of a fall were Aboriginal.

The most common activity/factor involved with fall injuries in this age group were falls from:

1. Change Tables (n=11)
2. Other Nursery Equipment (n=6),
3. Bed (n=6)
4. Stairs (n=5).

Figure 2: Location of Fall Injuries, Child <1 year.



The Home is the most common location for fall injuries to occur in children less than one year, accounting for 86% (n=44) of all fall injury presentations to PMH ED (See Figure 2).

Children aged 1 to 4 years

A total of 427 children aged 1 to 4 years presented to PMH ED during this time, the highest number of falls presentations for all age groups.

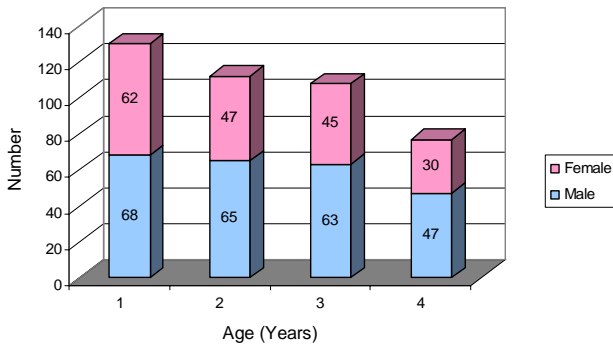
Females accounted for 43% of fall presentations in this age group and 57% were male.

One year old children had the highest number of fall-related presentations to PMH ED of all ages from July to September 2005 (n=130).

Aboriginal children accounted for 2% of fall presentations for children aged 1-4 years (n=11).

The Home remained the most common location for fall injuries in this age group at 79% (n=338).

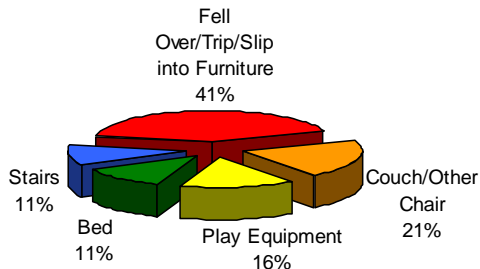
Figure 3: Fall Presentations by Age & Sex, Children 1-4 years of age



More than 82% of children in this age group who presented as a result of a fall injury were treated and sent home while 13% were admitted.

The majority of falls in this age group were falls of less than 1 metre (n=238); 137 on same level; 39 were from more than 1 metre high; and 13 from other blunt force.

Figure 4: Top Five Injury Factors/Activities, Children aged 1-4 years



Children aged 5 to 9 years

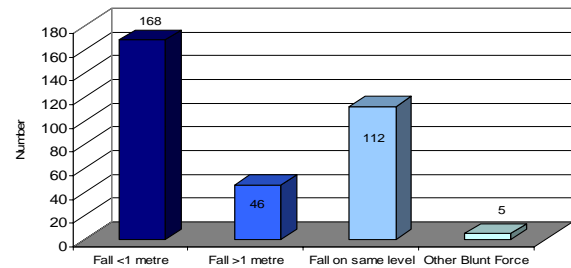
Overall there were 331 Fall Injury Presentations to PMH ED for children aged 5 to 9 years of age between July and September 2005. 3% of these injury presentations were Aboriginal children (n=10).

The gender difference in falls presentations narrowed for children aged 5-9 years. 47% of fall presentations to PMH ED for this age group were females, while 53% were males.

The Home remained the most common location for fall injuries to occur accounting for 46% of injury presentations, closely followed by School/Educational Area (23%).

Falls from less than 1 metre were the most common type of fall-injury for children aged 5-9 years (See Figure 5).

Figure 5: Fall Presentations by Type



The most common Injury Factor or Activity being undertaken when the fall occurred for children aged 5 to 9 years was:

1. Playground (n=70)
2. Sport/Dance (n=36)
3. Fall Over/Slip/Trip (n=30).

Children aged 10 to 14 years

Overall there were 366 Fall Injury Presentations to PMH ED for children aged 10 to 14 years of age between July and September 2005. 3% of these injury presentations were Aboriginal children (n=11).

A higher proportion of injuries to children aged 10 to 14 years required admission to hospital (21%) while 76% were treated and sent home.

Although the Home remains the most common location for fall injuries for children aged 10-14 years, it accounts for less than a 3rd of all fall injury presentations for this age group.

The top three locations for fall related injury presentations to PMH ED in children aged 10-14 years are:

1. Home - 29% (n=105)
2. Sports or Athletics Area - 25% (n=93)
3. School or Educational Area - 22% (n=79)

The location also reflects the most common Injury Factor/Activity being undertaken at the time of fall.

Bicycle, n=35 	Small Wheeled Devices, n=36 	Sport/Dance, n=117
-------------------	---------------------------------	------------------------

Males accounted for almost double the number of female falls presentations for children aged 10 to 14 years (M=63%; F=37%).

Falls on the same level accounted for the highest number of falls for children aged 10-14 years (n=172); followed by falls less than 1 metre (n=156); falls greater than 1 metre (n=27); and Other Blunt Force accounted for 11.

Prevention

Young children are highly focused, very quick and are still learning the skills to identify danger, and to react. They cannot look after themselves near danger.

Together we can help reduce FALLS.

New Babies: Less than 1 year old

Babies learn new skills quickly! They learn to wriggle, roll over, kick, push, and put things in their mouths.

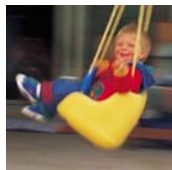
- ⦿ Do not leave babies unattended on Nursery Equipment or other raised surfaces.
- ⦿ Keeping one hand on the baby during nappy changes will keep them from rolling off the bed or change table. Keep nappies and clothing within easy reach of the changing area.
- ⦿ Make sure the sides of cots or playpens are secured properly.
- ⦿ Baby walkers with wheels are dangerous. Do not use them.
- ⦿ Use the harness in the high chair to keep your child from attempting to stand, climb or falling out.



Older Babies & Toddlers: 1 to 4 years old

Babies & Toddlers at this age are on the move. They are also busy, curious and full of energy!

- ⦿ Use safety gates at the top *and* bottom of stairs to stop your baby from falling. Make sure that gates at the top of your stairs are securely attached to the wall or balustrade.
- ⦿ Do not use baby walkers. Falls involving baby walkers can cause serious head injuries. Use a stationary activity centre instead.
- ⦿ Use the harness in the high chair to keep your baby from falling out.
- ⦿ Do not place furniture near windows or balcony rails. Your baby could climb on the furniture and fall out.



- ⦿ Keep large toys and stuffed animals out of the cot or playpen. Your baby could use them to climb over the side.
- ⦿ Use the safety strap to keep your baby safe while in a shopping trolley.

Preschoolers & Older Children: 5 to 14 years old

Mastering & Learning new skills!

From age 3 they can learn about Safety but they do not always understand & still need adult supervision.



- ⦿ Use playground equipment that is suitable for your child's age and stage of development.
- ⦿ Make sure equipment has good handrails, barriers, and railings.
- ⦿ Be with your child when he or she is climbing, riding in a swing, or playing on equipment above the ground. Be close enough to supervise and help them learn new skills.
- ⦿ Remove any clothing that could strangle your child before using playground equipment. This includes strings, drawstrings, & scarves.
- ⦿ Ensure your child always wears a helmet when using a bike or other small wheeled devices.
- ⦿ Choose a tricycle or bicycle that is the right size for your child. He or she should be able to put feet flat on the ground when sitting on the seat.
- ⦿ Supervise young and learner riders at all times. Do not allow your preschooler to ride his or her tricycle on the road.
- ⦿ Always wear the correct protective gear during sports and encourage participation in modified sports for younger children.

For further information on Safety and the child's stage of development download the individual Fact Sheets at: www.kidsafewa.com.au

Suggested Citation:

Leeds, M and Wicks, S. 2005. Falls in Focus: How do children Fall. Kidsafe WA (No.4).

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

For further information please contact:
Kidsafe WA

✉ GPO Box D184, PERTH WA 6840

☎ (08) 9340 8509

💻 kidsafe@kidsafewa.com.au