

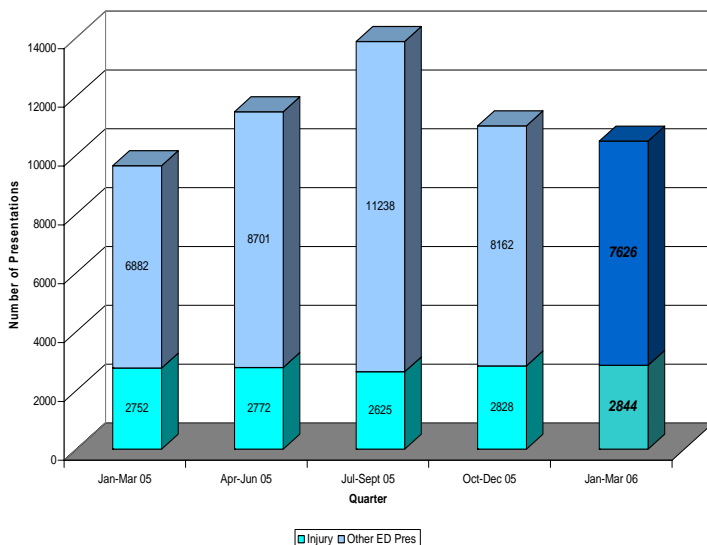
Poisoning: Medicines can be poisons too

Quarterly Summary: Jan to Mar 2006

- There were 10,470 presentations to Princess Margaret Hospital Emergency Department (PMH ED) from January to March 2006.
- Injury presentations accounted for 27% (n=2,844) of the total number of PMH ED presentations.
- Injury presentations for January to March 2006 (27%) were higher than the long-term average of 25% of total presentations and 3% higher than the first quarter last year.
- The pre-school age group (those under 5 years of age) remained the dominant group representing 42% (n=1,189) of total injury presentations to PMH.
- Falls remained the leading cause (39.9%) of injury presentations to PMH ED in January to March 2006.
- In the past 12 months (April 2005 to March 2006) there have been 11,072 injury presentations to PMH ED (See graph below).



Total PMH ED Presentations Jan 2005 to March 2006 (Current Quarter Bold)



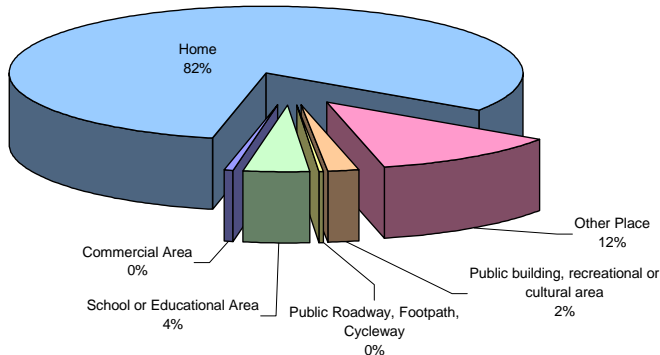
Introduction - Childhood Poisoning (January to March 2006)

- There were 92 poisoning related injury presentations to PMH ED between January and March 2006. This is almost half the total number of poisoning presentations to PMH ED in all of 2005 (n=219).
- For all PMH ED poisoning presentations (children under 15 years of age) 55% occur in children under 5 years of age.
- Children aged 1 and 2 years of age accounted for the highest number of poisoning injuries (1: n=18; 2: n=20).
- More females (n=58) presented at PMH ED for poisoning in January to March 2006 than males (n=34).
- The majority of poisoning presentations were poisonings from pharmaceutical substances (Jan to March 2006 - 49%).
- Poisoning presentations accounted for 0.8% of the Total PMH ED Presentations and 3% of the Injury PMH ED Presentations for January to March 2006.
- Aboriginal children accounted for 8% of all poisoning-related injury presentations to PMH ED in Jan-March 2006.

Results (January to December 2005)

In 2005 there were 219 childhood poisoning presentations to PMH ED, accounting for 2% of all injury presentations.

Figure 1: Location of Poisoning Injury Presentations for children aged 0-14 years, 2005



The most common location for poisoning cases presenting to PMH ED to occur is the home (82% - See Figure1).

Children less than 5 years of age accounted for 54% of all poisoning presentations with children aged 1 (n=42) and 2 (n=42) years of age accounting for the highest numbers overall.

Contrary to other injury causes, Females (n=123) accounted for the highest number of poisoning presentations compared to Males (n=96).

Of the children aged 0-16 years presenting at PMH ED as a result of poisoning, 57% (n=125) were treated and sent home, and 41% (n=89) were admitted. The remaining 2% (n=5) either Did not wait or were transferred to another hospital (the children transferred were age 16).

In 2005 poisoning presentations were grouped into 5 different categories (See Table 1). The most common cause for Poisoning presentation was Poisoning by Chemical as Solid Substance (n=95) with 78 of these being from Pharmaceutical substances.

Table 1: Cause of Poisoning Presentation at PMH ED for Children aged 0-16 years, 2005

Cause of Poisoning	No.	%
Exposure to Chemical	5	2.3%
Other Exposure to Chemical	81	37.0%
Poisoning by chemical as a Gaseous substance	3	1.4%
Poisoning by Chemical as a Liquid	35	16.0%
Poisoning by Chemical as Solid substance	95	43.4%
TOTAL	219	100%

All poisoning presentations were linked to an injury factor during coding. The three injury factors used for poisoning presentations are:

1. Non-Pharmaceutical chemicals (n=90)
2. Pharmaceutical Substance (n=113)
3. Not Applicable (n=16)

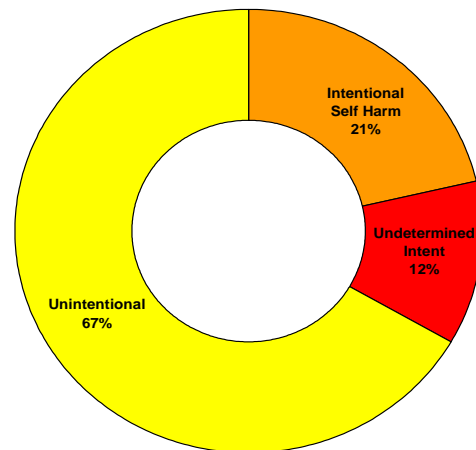
From the triage description more detailed information about the substances featuring in poisoning presentations is shown in Table 2.

Table 2: Cause of Poisoning Presentation at PMH ED for Children aged 0-16 years, 2005

Cause of Poisoning	No.
Pharmaceuticals	113
Household Chemicals or Products	37
Alcohol, Cigarettes and Recreational Drugs	17
Personal Hygiene Products	12
Foreign Objects: Batteries, Magnets, Toys etc	9
Unkown/Other Non-pharmaceutical chemicals (ie. Plants, Petrol, Adhesives, etc)	31
TOTAL	219

More than 67% of poisoning presentations at PMH ED were unintentional (See Figure 2). Of the injuries identified as Intentional Self Harm, 97% (n=45) occurred to children between the ages of 11 to 16 years. All presentations for children less than 10 years old were identified as being unintentional (n=129) or of undetermined intent (n=11).

Figure 2: Intent of Poisoning presentations to PMH ED, 2005.



Approximately 12% of poisoning presentations for Aboriginal children were classified as intentional self harm or undetermined intent.

Aboriginal children accounted for 7% of all poisoning presentations in 2005. At least 56% of all Aboriginal children presenting at PMH ED for poisoning were under 5 years of age; 25% were aged 10 to 13 years; and 19% were more than 13 years of age.

Poisoning Priority – The most at risk
(A focus on children under five years)

Children under five years of age are the most at risk of poisoning (n=118), accounting for more than 54% of all PMH ED poisoning presentations with children aged 1 (n=42) and 2 (n=42) years of age accounting for the highest number overall (See Figure 3).

Between 1 to 3 years of age children develop skills that make them more mobile. This means potentially toxic products are more easily reached.

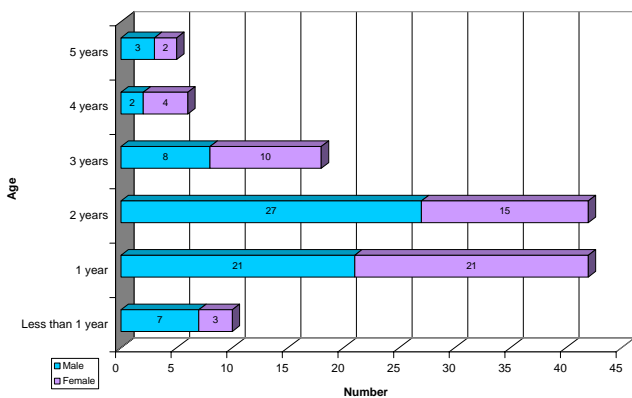
Young children are exploring their world and will put anything they can get into their hands into their mouths.

At this age they are curious, but lack judgement and are unable to read.

They also like to imitate what others do, including taking medications.

In the under 5 age group, Males (n=68) accounted for the highest number of poisoning presentations compared to Females (n=55), contrary to poisoning presentations overall, where females accounted for more poisoning cases than males.

Figure 3: Age and Gender of Poisoning Presentations for children aged 0-5 years, 2005.



Of the children aged 0-5 years presenting at PMH ED as a result of poisoning, 62% (n=73) were treated and sent home; and 38% (n=45) were admitted.

All children who presented at PMH ED for poisoning aged less than 1 year were treated and sent home; while more than half of all children aged 1 and 2 years of age presenting at PMH ED for poisoning required admittance for further treatment.

In 2005 poisoning presentations were grouped into 5 different categories (See Table 3). The most common cause for Poisoning presentation was Poisoning by Chemical as Solid Substance (n=49) with 78% of these being from Pharmaceutical substances.

Table 3: Cause of Poisoning Presentation at PMH ED for Children aged 0-5 years, 2005

Cause of Poisoning	No.	%
Exposure to Chemical	4	3.3%
Other Exposure to Chemical	39	33.0%
Poisoning by chemical as a Gaseous substance	1	0.8%
Poisoning by Chemical as a Liquid	25	21.2%
Poisoning by Chemical as Solid substance	49	41.7%
TOTAL	118	100%

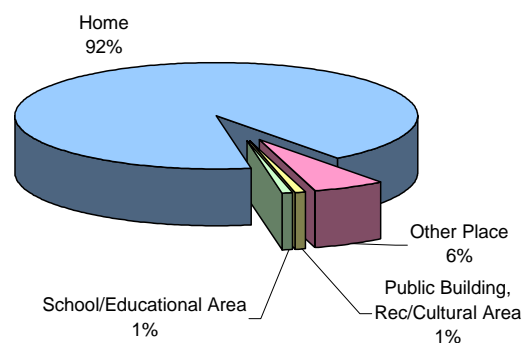
The majority of poisoning presentations coded with an injury factor were identified as poisonings from pharmaceutical substances (46%), while 29% were Non-pharmaceutical chemicals and the remaining 25% were Not-applicable.

Aboriginal children accounted for 15% of all poisoning presentations to children less than 5 years of age in 2005. At least 56% of all Aboriginal children presenting at PMH ED for poisoning were under 5 years of age.

Of the total 118 PMH ED poisoning presentations, 107 were classified as unintentional. Surprisingly two children aged 2 were classified as Intentional Self Harm but this was later reviewed and classified as undetermined intent with a total of 11 presentations for children less than 5 years in this category.

The home remains the primary location for poisonings to occur in children less than 5 years of age with 109 of the total 118 poisonings occurring in the home (See Figure 4).

Figure 4: Location of Poisoning Injury Presentations for children aged 0-5 years, 2005



Prevention

Child poisoning can occur at anytime! but especially when normal routines change. For example medicine may be more accessible when someone is sick or when grandparents are visiting who take medicines regularly.

Extra care is also required when on holidays, moving house, having visitors and during family problems.

HOW TO PREVENT POISONING:

Check every room in your home for poisonous products - "it only takes a few minutes to check if you are inviting trouble":

- Store poisons in a locked cupboard preferably 1.5 metres above the ground (out of sight, out of reach - locked up and away).
- Store medicines separately from chemicals and cleaners but ensure both are locked away.
- Use child resistant locks on cupboards or cabinets that store medicines and poisons. You can buy these at many hardware stores, or call Kidsafe WA on (08) 9340 8509 for more information.
- Don't store poisons near foods. Some children's medicines need to be kept in the refrigerator - use a small portable lockable container to enable these medicines to be stored safely.
- Return all poisons to their safe storage area **immediately** after you use or buy them. If you are using household products when the doorbell or phone rings take the product with you.
- Ask for and use products in child resistant containers and make sure the lids are on properly after use. However remember child resistant is **not** child proof - many two year olds can open them.

- Store all medicines, cleaners and chemicals in their **original** containers that are clearly labelled.
- Dispose of unwanted and out of date medicines. Contact your local pharmacy for advice.
- **Never** refer to medicines or vitamins as "lollies".
- Before giving medicines always read the label.
- Keep your guests handbag out of reach of your child.
- Check that the plants in your garden are not poisonous. Ask your local nursery or visit www.kidsafewa.com.au for a fact sheet.
- Always keep the Poisons Information Centre phone number 13 11 26 near your phone.



In an emergency

If a child swallows a poison do not try to make them vomit or give them anything to drink. Pick up the poison's container, the child and ring the Poisons Information Centre on 13 11 26 (Australia-wide, 24 hours a day).

For further information on Poisoning Prevention contact the Poisons Information Centre on 13 11 26 or download the resources on the Kidsafe WA website at www.kidsafewa.com.au/poisons

Suggested Citation: Leeds, M and Wicks, S. 2006. Poisoning: Medicines can be poisons too Kidsafe WA (No.6).

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