Jersey Child Unintentional Injury Statistics 2012

Data collation: Child Accident Prevention Jersey
Data source: Jersey's Emergency Department

www.cap.je

Data source

The source of the child unintentional injury data is the Jersey's Emergency Department attendances.

The data includes every child's first attendance, aged up to 16 years, due to an unintentional injury and is checked for inconsistencies at source to ensure it is as accurate as possible.

Since June 2011 the way of recording Emergency Data was changed and TrakCare was introduced producing an altered data set. Follow up attendances are not identified and are included as new attendance numbers. All children have their follow up wound dressings undertaken in the emergency department and this data has been excluded from these statistics.

Rationale

Recommendations for injury surveillance have been made by the National Institute of Clinical Excellence as 'Preventing unintentional injuries to children among under 15s', public health guidance 29. Surveillance of any health issue is defined as the: 'systematic, ongoing collection, collation and analysis of health-related information that is communicated in a timely manner to all who need to know which health problems require action in their community' (Last JM (2007) A dictionary of public health. Oxford: Oxford University Press).

Injury 'surveillance' is needed to monitor unintentional injuries among children and young people locally, regionally and nationwide. The data gathered could be used as the basis to plan preventive initiatives. Such initiatives may need to take a particular type of injury into account locally or regionally – even though it may not be a major problem nationwide.

The importance of accurate emergency department statistics has been highlighted with hospital admissions caused by unintentional and deliberate injuries in under 18s being confirmed as one of the public health indicators as part of the new Public Health Outcomes Framework for England, 2013 – 2016.

The framework focuses on two high level outcomes for the public health system:

- Increased healthy life expectancy
- Reduced differences in life expectancy and healthy life expectancy between communities.

The hospital admissions indicator for under 18s is one of the key health improvement outcome measures. It aims to help people to live healthy lifestyles, make healthy choices and reduce health inequalities.

"Injuries are a leading cause of hospitalisation and represent a major cause of premature mortality for children and young people. They are also a source of long-term health issues, including mental health related to experience(s). The inclusion of this indicator is key for cross-sectoral and partnership working to reduce injuries, including child safeguarding."

Summary

With the change in data collection in June 2011 and last years report using two types of data set, this is the first report created using a complete set over 12 months of the current data.

Over 10% of all Emergency Department attendances are child unintentional injuries, the lowest since 2004. Falls continue to be the main reason for Emergency Department attendance and hospital admission.

Identified mechanisms of unintentional injuries identified trampoline injuries resulting in the greatest number of hospital admissions, followed by micro scooters, bicycles and skateboard incidents. Looking more closely at all bicycle related injuries, injuries to the head was seen as the lowest recorded over the past 3 years. A continuing trend of increasing micro scooter related injuries was seen.

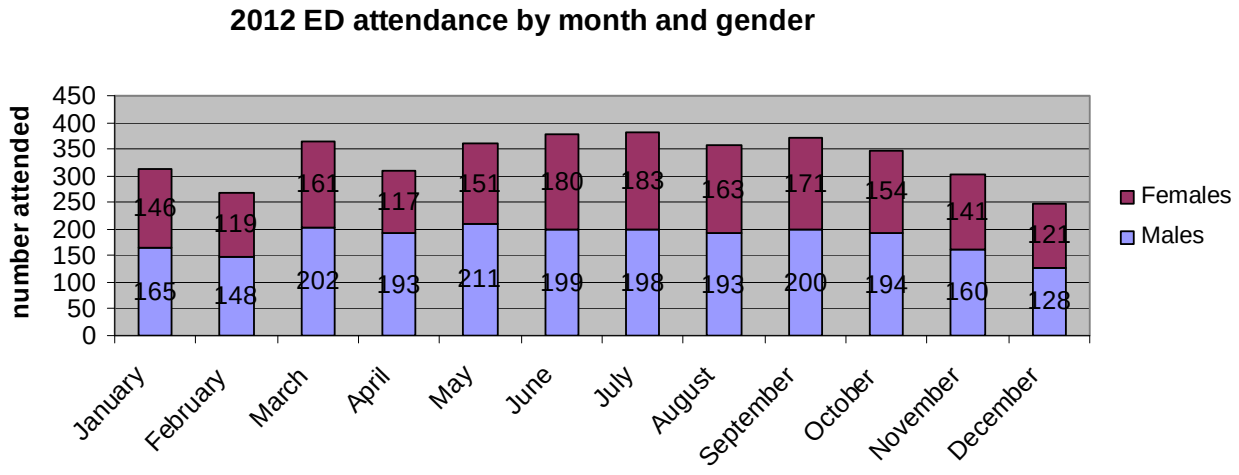
There was 77 road traffic collisions in 2012, the lowest number recorded since 2004 and with an average of 105 children attending per year since that date. The reduction was seen in car and bicycle related collisions.

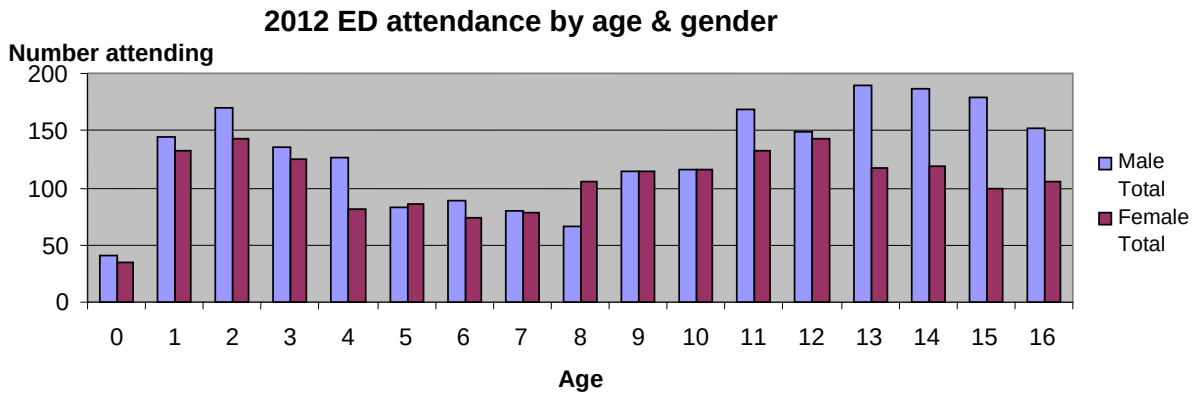
One quarter of children attending the Emergency Department with an unintentional injury required further treatment, follow up or hospital admission after their initial attendance. 3% of attending children were admitted into hospital because of their unintentional injury.

Index

1.	Attendance as per month, age and gender	page 4
2.	Leading types of unintentional injuries	page 5
3.	Cause description of unintentional injuries	page 6
4.	Falls in under ones	page 7
5.	Burns	page 7
6.	Poisoning	page 8
7.	Near drowning	page 9
8.	Door crush injuries	page 9
9.	Dog bites	page 10
10.	Foreign bodies	page 10
11.	Identified mechanisms of injury	page 11
11.1	Bicycle unintentional injuries	page 12
11.2	Trampoline unintentional injuries	Page 13
11.3	Skateboarding unintentional injuries	page 14
11.4	Rollerblades/Heely unintentional injuries	page 15
11.5	Micro scooter unintentional injuries	page 15
12.	Road Traffic Collisions	page 16
13.	Severity of unintentional injury	page 18

1. Attendance as per month, age and gender





Island population (estimate excluding seasonal workers <1yr)	Total 04	Total 05	Total 06	Total 07	Total 08	Total 09	Total 10	Total 11	Total 12
	87,700	88,400	89,400	90,900	91,800	92,500		census 97,857	

Total ED attendance (all ages/genders)	Total 04	Total 05	Total 06	Total 07	Total 08	Total 09	Total 10	Total 11	Total 12
	32,427	33,260	33,389	33,729	33,627	32,751	33,222	38,333	38,493

0-16 yrs unintentional injury ED attendance	Total 04	Total 05	Total 06	Total 07	Total 08	Total 09	Total 10	Total 11	Total 12
	4431	4253	4034	4039	3752	4225	4069	4253	3998

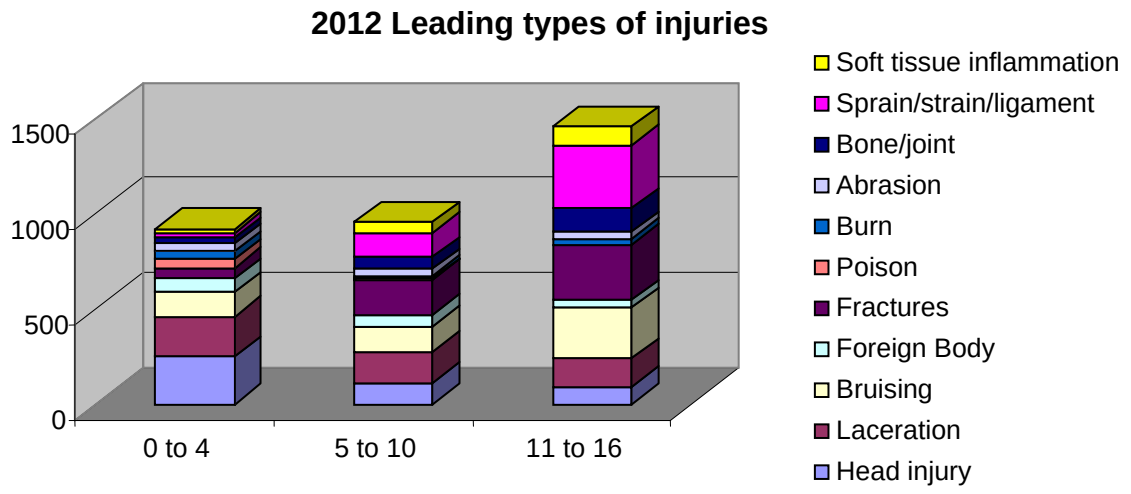
0-16 unintentional injury attendance related to population	2004	2005	2006	2007	2008	2009	2010	2011	2012
	5.05%	4.81%	4.51%	4.44%	4.09%	4.57%		4.35%	

0-16 unintentional injury attendance related to total attendance .	2004	2005	2006	2007	2008	2009	2010	2011	2012
	13.66%	12.79%	12.08%	11.97%	11.16%	12.90%	12.25%	11.09%	10.39%

- Total Emergency Department attendances have increased by 160 from the previous year.
- The way attendances were recorded changed from June 2011 onwards. Patients who return with a problem relating to their original ED attendance and have no booked appointment are booked in as new attendances for their repeat visit. (Represented as 2 or more ED attendances). Prior to June 2011, unannounced returns were recorded as follow ups related to the original attendance (Represented as one attendance on the data).
- Out of the above number there were 3,998 child unintentional injury attendances in 2011, a decrease of 255.
- The average yearly attendance since 2004 is 4,117.
- 10.39% of all ED attendances were child unintentional injuries.
- As in previous years boys had more accidents than girls (2191:1807)
- Gender and age hot spots were seen in boys aged over 12 years.
- June and July were the highest attendance month for boys and girls.

2. Leading types of injuries

Due to the type of data available it was not possible to identify the cause of every injury. However, looking at the type of injury sustained could give insight into possible causes and identify hot spots.

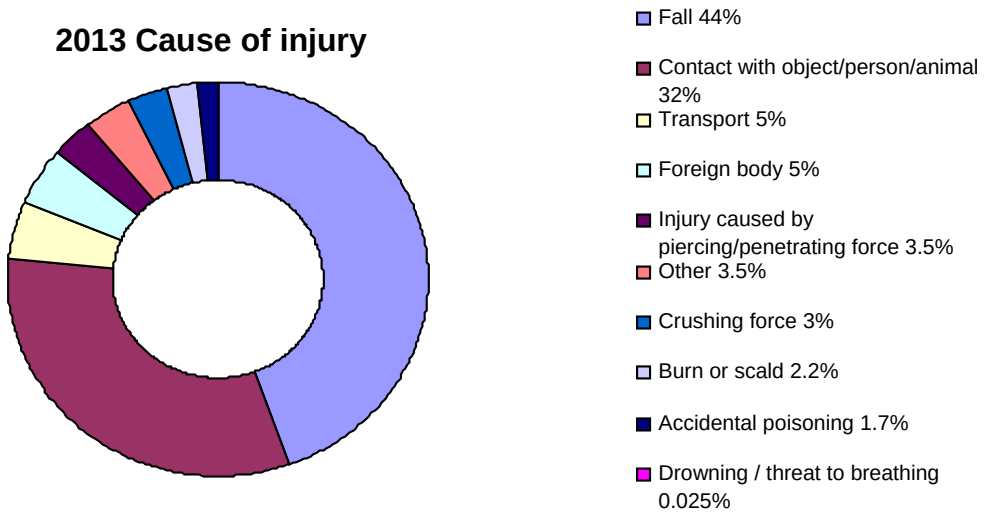


- In under fives, the most common unintentional injury was lacerations and head injuries, as seen in the previous 2 years.

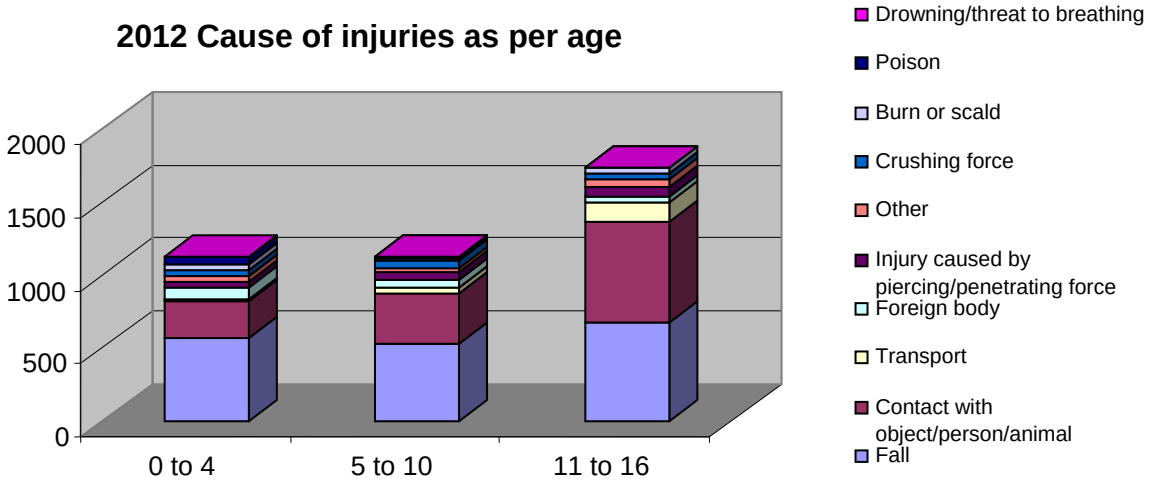
- A child was more likely to sustain a head injury, burn, or poisoning if they were aged under five.

- Children aged over 5 were more likely to sustain a fracture, bruising, sprain or local soft tissue injury.

3. Cause description of injuries



- The most common cause of injury was falls, followed by contact with an object or animal.



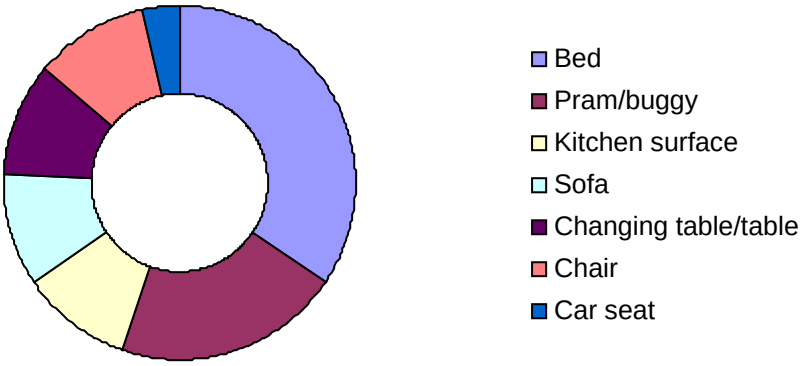
- Under fives highest causes of injury were falls. This age group had the highest number of injuries caused by foreign bodies, burns or scalds and poisons.
- Five to ten's leading causes of injury were falls and contact with an object, person or animal.
- Over eleven's lead cause of injury were contact with an object, person or animal and had the highest cause of transport related injuries.

4. Falls in under ones

	Under ones seen in ED	Injury caused by a fall	Dropped whilst carried	Fall from standing/sitting	Fall from raised surface
2012	75	43	7	7	29
2011	93	66		34	32
2010	112	60		30	30
2009	127	87		53	34
2008	124	94		48	46

The most common location for an infant to fall from when left alone is identified in the chart below;

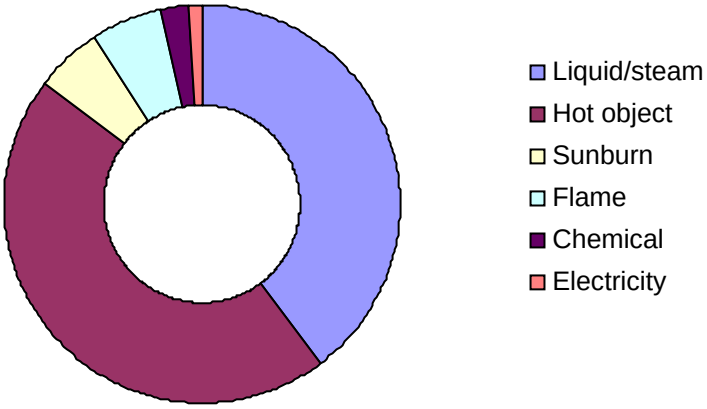
2013 Location of raised surface fall

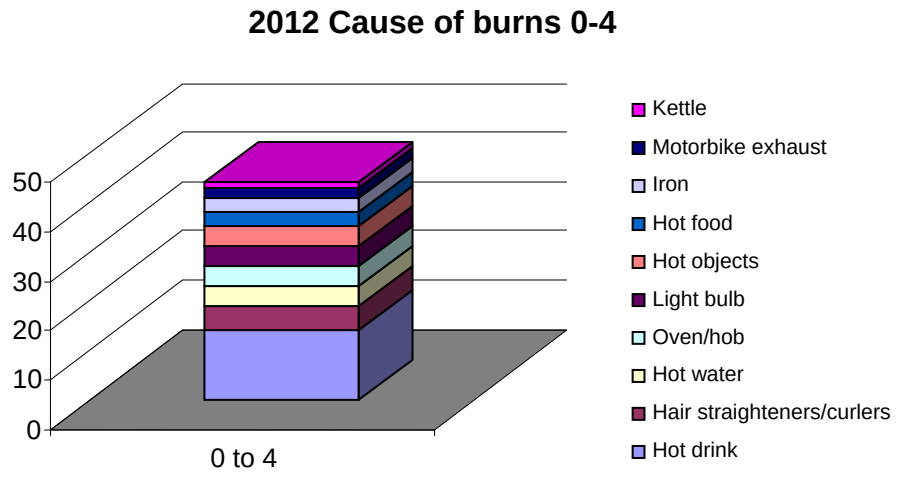


3% (1) of children attending the emergency department because of a fall from a raised surface were admitted into hospital.

5. Burns

2012 Cause of burns





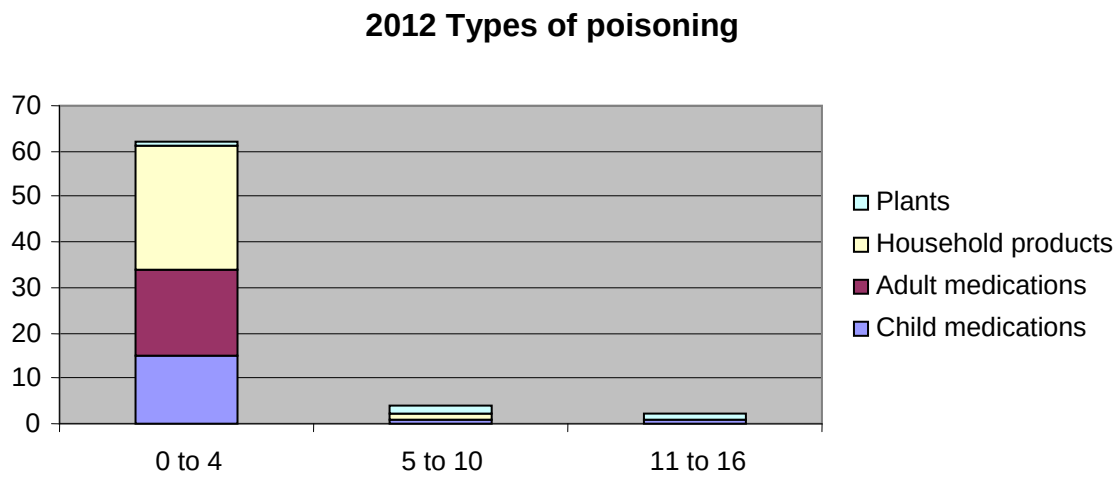
- 50% of burns occurred in children aged between 0 and 4 years
- Spilt hot drinks remained the most common cause of a burn.

- 15 children aged between 5 and 10 sustained a burn
- 29 children aged between 11 and 16 sustained a burn

- The most common cause of burns in children aged five and over was sunburn, flame (including bonfire, smoke inhalation and lighters) and during school science classes.

- 88 children attended because of a burn – an increase of 5 since 2011.
- 2% (2) of children attending the emergency department because of a burn were admitted into hospital.

6. Poisoning



- 68 children ingested potentially harmful substances
- 62 were under the age of 5 years

- Household products included; laundry detergent pods x 7, toilet cleaner x 3, fluid from toilet brush holder, bleach x 2, plant food x 2, glow stick x 2, silica gel, nail glue, rat poison, spray air freshener, solvent, essential reed oil, body cream, hand sanitizer, nail varnish remover, mercury, glue.

- Child medications included; Calpol, Ibuprofen, antibiotics, Karvol drops, Olbas oil, child prescriptive medicines, menthol and eucalyptus inhaler, traveleez.

- Plants included; daffodils, mushrooms, deadly night shade.

- 10% (7) of children who attended the emergency department with poisoning were admitted into hospital, 6 of these children were aged under 5 years; 4 due to adult medications, 2 child medications and 1 plant ingestion.

Year	Number admitted due to poisoning
2012	7
2011	3
2010	5
2009	6
2008	0
2007	0

7. Near drowning

- There were no children admitted because of near drowning from 2012 to 2010.
- 4 children were admitted into hospital for near drowning in 2009.

8. Door crush injuries

Year	Number of admissions due to digit door crush injuries
2012	2
2011	2
2010	2
2009	2
2008	5
2007	10

2 children were admitted because of a digit door crush injury in 2012.

9. Bites

Year	Number of children attending due to a dog bite
2012	20
2011	22
2010	15
2009	29

	Site of injury on child			
	Upper limb	**Lower limb**	**Face**	**Total**
0-4	2	1	4	7
5-10	2	2	4	8
11-16	5	0	0	5

- The average age for children to be bitten by a dog was 7 years.
- 12 children were bitten on their arms and legs, 8 to the face.
- 5 %(1) of children attending the emergency department with a dog bite were admitted into hospital.

10. Foreign bodies

- 36 children attended due to ingesting a foreign body, 61% aged under 5 years.

– Objects ingested included; coins x 9, button battery x 4, fish bone x 2, food x 2, marble x 2, toy x 2, plum stone, screws, monopoly house, plastic x 2, metal ball, drawing pin, Clingfilm, can top, hairgrip, magnets, pen top.

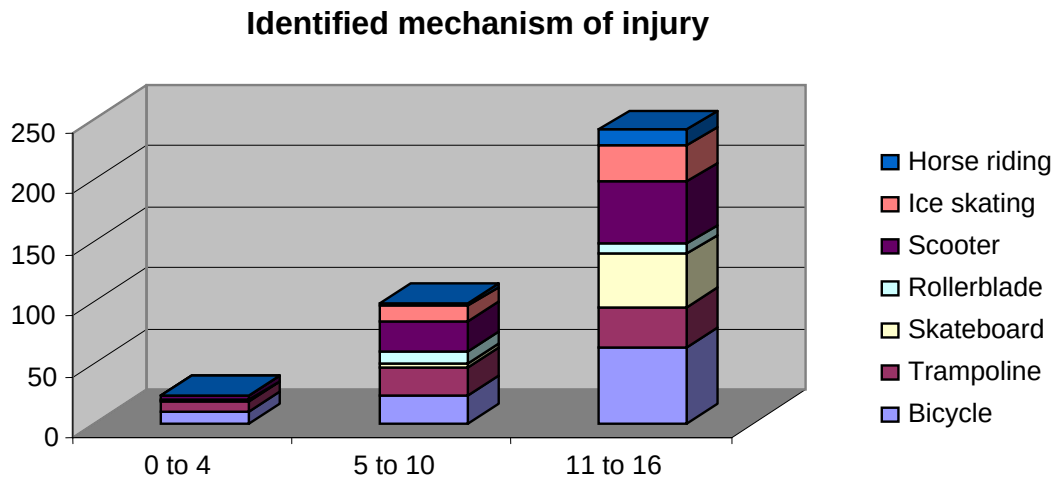
- 40 children inserted objects into their nose, 85% under the age of 5 years.

– Objects inserted included; beads x 9, toys x 6 (including 4 Lego), food x 12 (sweets x 4, raisins x 3, peas x 3, apple, bread), foam/polystyrene x 3, paper x 2, stone, sequin, Clingfilm, button, plastic.

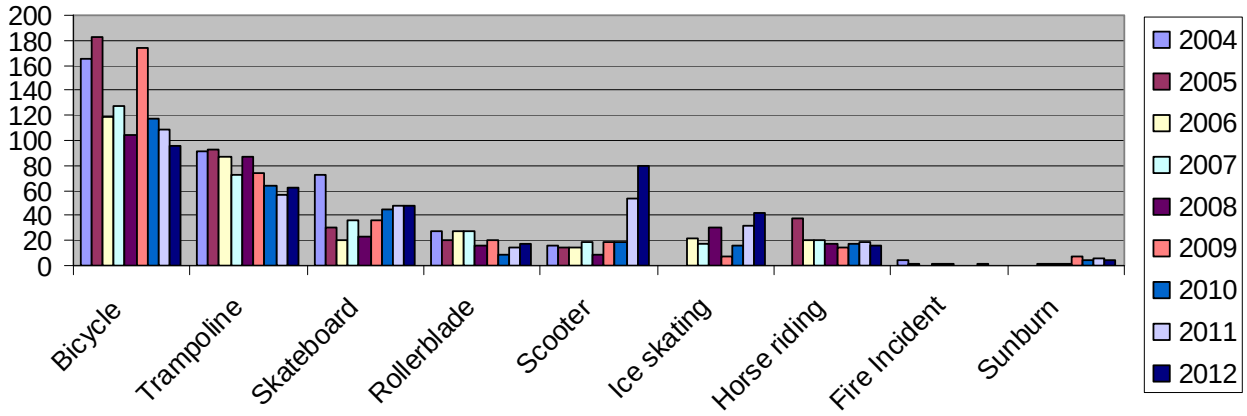
- 15 children inserted objects into their ears, 33% were aged 15 years caused by cotton buds or music earphone parts.

– Objects inserted included; ear phone covers x 3, stone x 2, cotton bud x 2, food x 2, earring, magnet, toy, seed, stone, tissue.

11. Identified mechanism of injury



Identified mechanisims of injury trends

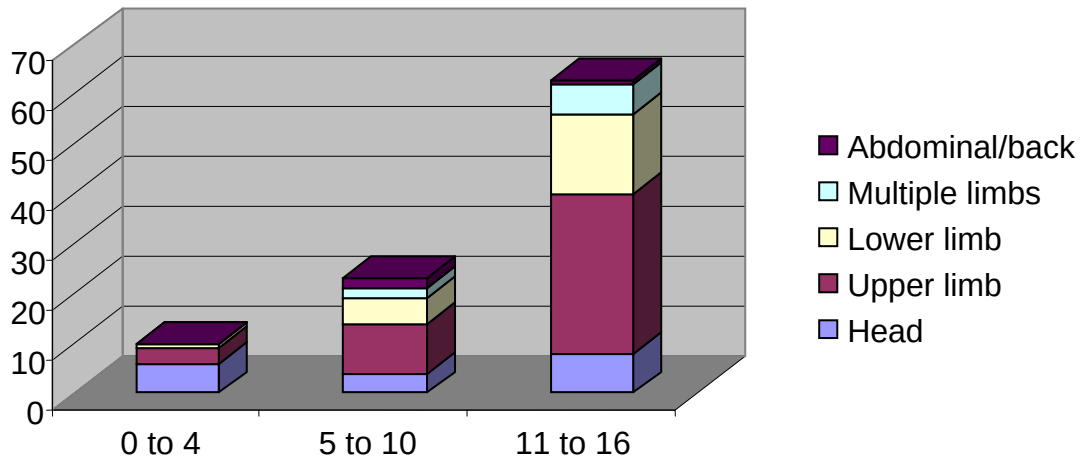


- A downwards trend in bicycle related injuries continues
- Trampoline and skateboard related injuries have been relatively consistent over the last 3 years
- Scooter related injuries continue to increase

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Bicycle	165	183	119	128	105	174	117	108	96
Trampoline	91	93	87	73	87	74	64	57	63
Skateboard	73	31	20	36	23	36	45	48	48
Rollerblade	28	20	27	28	16	21	8	15	18
Scooter	16	15	15	19	8	19	19	53	80
Ice skating	0	0	22	18	31	7	16	32	42
Horse riding	-	38	20	21	18	14	18	19	16
Fire Incident	5	1	0	1	1	0	0	1	1
Sunburn	-	-	2	2	2	7	5	6	5

11.1 Bicycle unintentional injuries

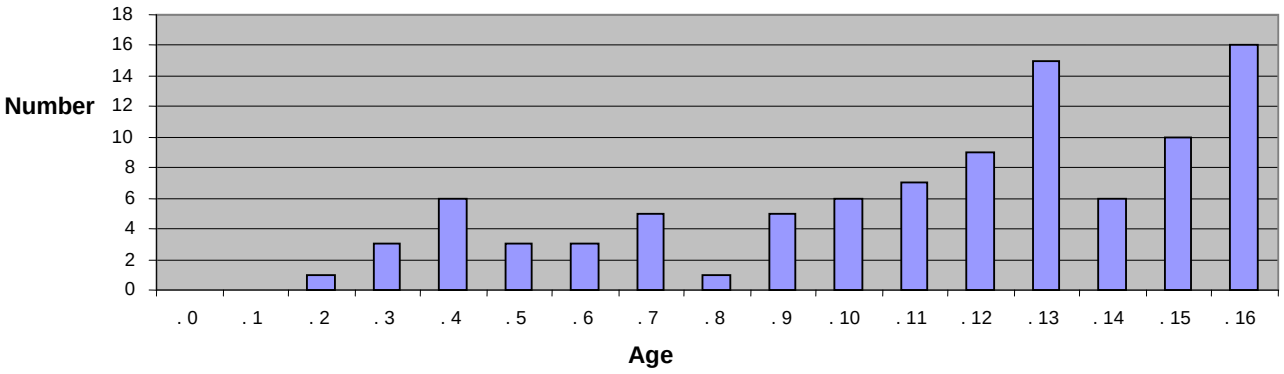
2012 Bicycle related incidents



- There were 96 bicycle related unintentional injuries, the annual average since 2004 being 133.
- The most common injury location was to the upper limb in 5 to 16 year olds and the head in under fives.
- Injuries to the head were seen more in children aged between 11 and 16 years (44%).
- A reduction in children attending because of a bicycle related injury to their head has been seen over the past 2 years.

Injury Site	2012	2011	2010
head injury	19%	21%	31%
upper limb	47%	43%	43%
lower limb	23%	24%	20%
abdominal/back	3%	4%	0%
multiple injury excluding head	8%	8%	6%

2012 Bicycle incidents related to age

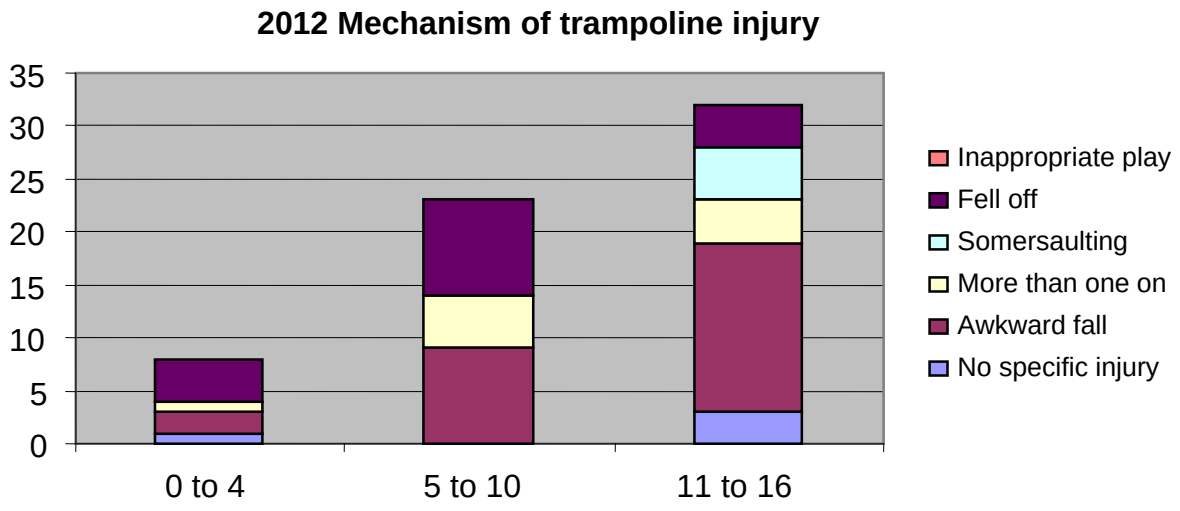


- Children attending the ED with a bicycle related injury were more likely to be aged between 11 and 16 years.
- Boys attended more than girls (73:23).

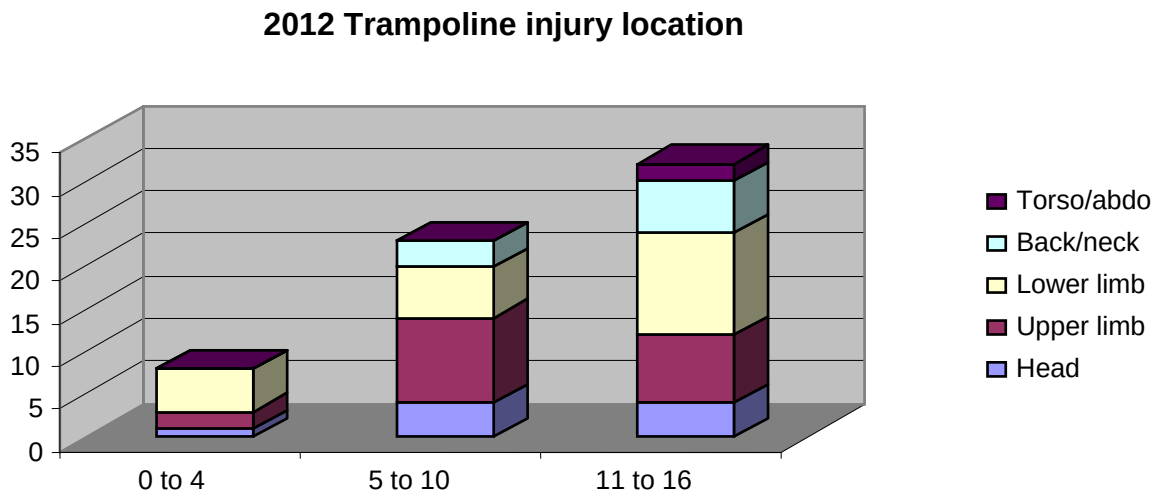
- 29% of children seen because of a bicycle related unintentional injury required further hospital treatment after their first ED attendance.
- Of the 96 children attending because of a bicycle related unintentional injury;
    - 47% (45/96) did not have their helmet wearing status recorded.
    - 23% (22/96) stated they had worn a helmet
    - 30% (29/96) stated they were not wearing a helmet.

- 5% (5) of children attending with a bicycle related unintentional injury were admitted into hospital; 2 limb injuries, 2 head injuries and 1 abdominal/back injury.

11.2 Trampoline unintentional injuries

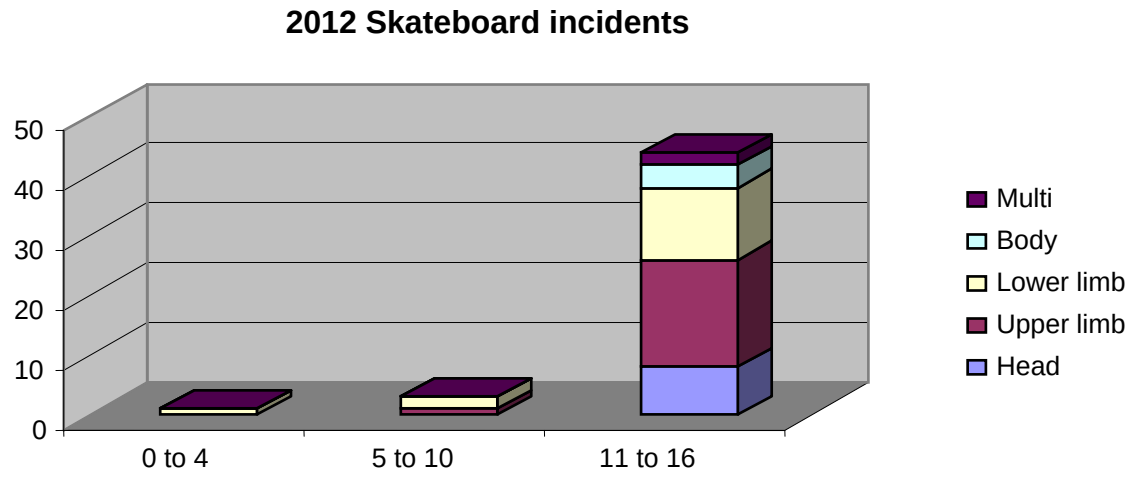


- There were 63 trampoline unintentional injuries, an increase of 6 from the previous year.
- The rate trend over the last 9 years has shown a reduction of 30.77% since 2004 recordings.
- The most common month for injury was July.
- There were marginally more boys attending due to trampoline unintentional injuries than girls (33:30).
- The average age for a trampoline unintentional injury was 9 years.



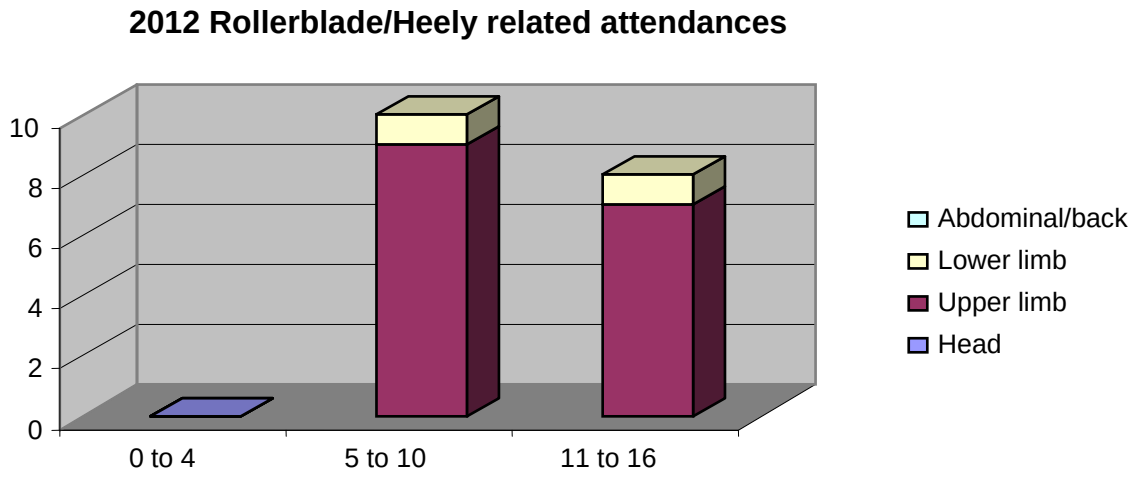
- The most common injury location was lower limbs in under fives, upper limbs in 5 to 10's and lower limbs in 11 and over.
- 24% of children required further hospital treatment.
- 8% (5) of children with a trampoline related injury were admitted into hospital, all for falling from the trampoline.

11.3 Skateboarding unintentional injuries



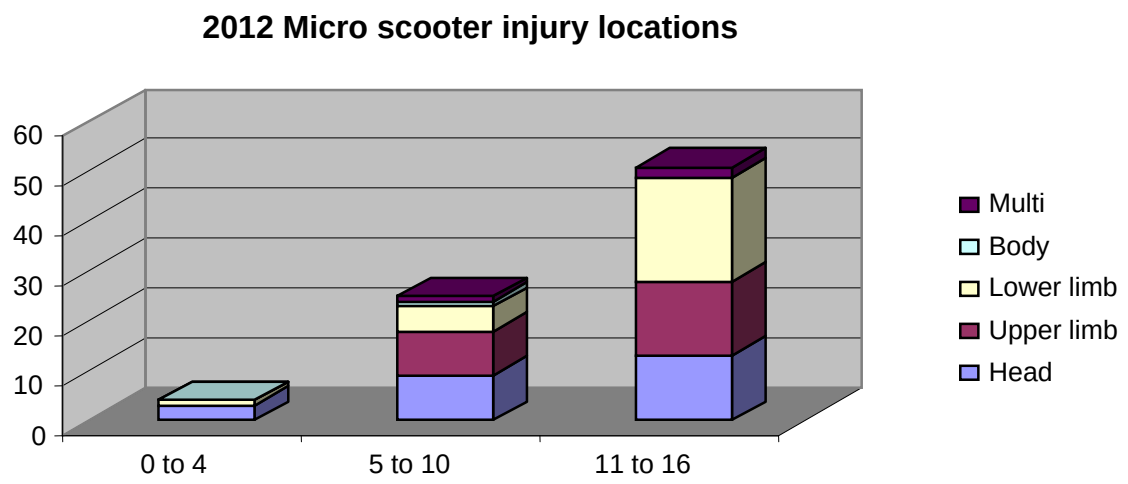
- There were 48 skateboarding related unintentional injuries, a fairly constant figure over the past 3 years.
- Predominately boys attended with skateboarding related unintentional injuries (44:4).
- The average age for a skateboard related unintentional injury was 13 years.
- The most common type of injury was to the; upper limb (19/48), lower limb (15/48), head (8/48), torso (4/48), multi (2/48).
- 33% of children required further hospital treatment.
- 4% (2) of children with a skateboarding unintentional injury were admitted into hospital, both upper limb injuries.

11.4 Rollerblading / heelys unintentional injuries



- There were 18 related accidents in 2012, an increase of 3 from the previous year.
- No children were admitted into hospital following a rollerblade/heelys accident.

11.5 Micro scooter unintentional injuries



- There were 80 micro scooter related unintentional injuries, an increase of 27 from the previous year and a total increase of 64 since 2010.
- There were more boys than girl's attendances (69:11).
- The average age for an incident was 10 years.
- The most common type of injury was to the; lower limbs (32.5%), head (32.5%), upper limbs (30%), multiple (4%) and body (1%).
- One child was involved in a road traffic collision whilst on a scooter.
- 6% (5) of children with a micro scooter related attendances were admitted into hospital; 2 head injuries, 2 lower limbs and I upper limb injury.

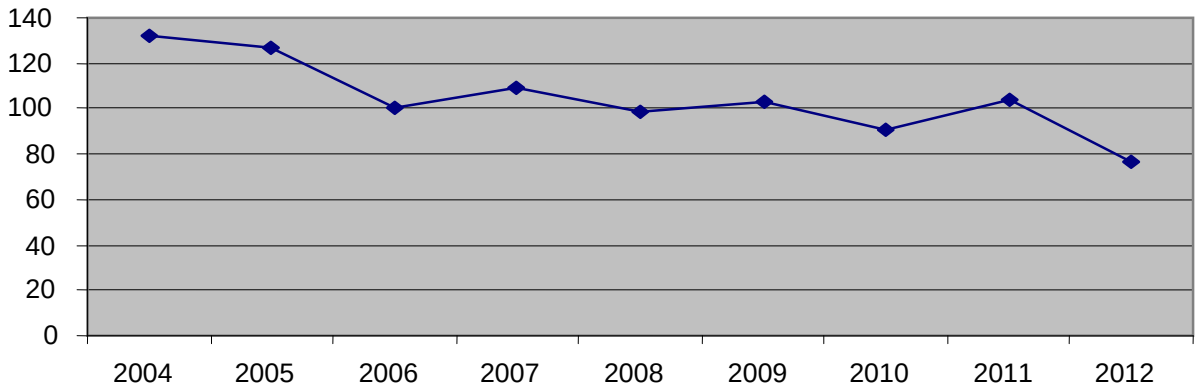
12. Road Traffic Collisions (RTC's)

The law defines a reportable road traffic collision as an accident involving a mechanically-propelled vehicle on a road or other public area which causes:

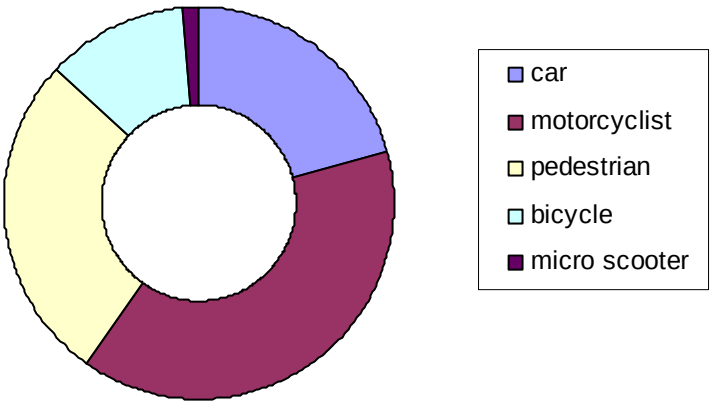
- Injury or damage to anybody - other than the driver of that vehicle,
- Injury or damage to an animal- other than one being carried on that vehicle (an animal is classes as a horse, cattle, ass, mule, sheep, pig, goat or dog).
- Damage to a vehicle - other than the vehicle which caused the accident.
- Damage to property constructed on, affixed to, growing in, or otherwise forming part of the land where the road is.

RTC	2004	2005	2006	2007	2008	2009	2010	2011	2012
car front	10	13	16	5	5	11	9	12	3
car rear	12	16	20	5	13	20	23	19	12
car driver/ unknown							1	1	1
motorcycle	43	38	40	39	46	36	24	35	30
pillion	0	0	4	1	3	0	2	0	0
pedestrian	25	34	19	31	21	21	16	21	21
bus passenger	2	2	1	1	1	0	0	1	0
bicycle			8	17	13	15	15	15	9
micro scooter									1

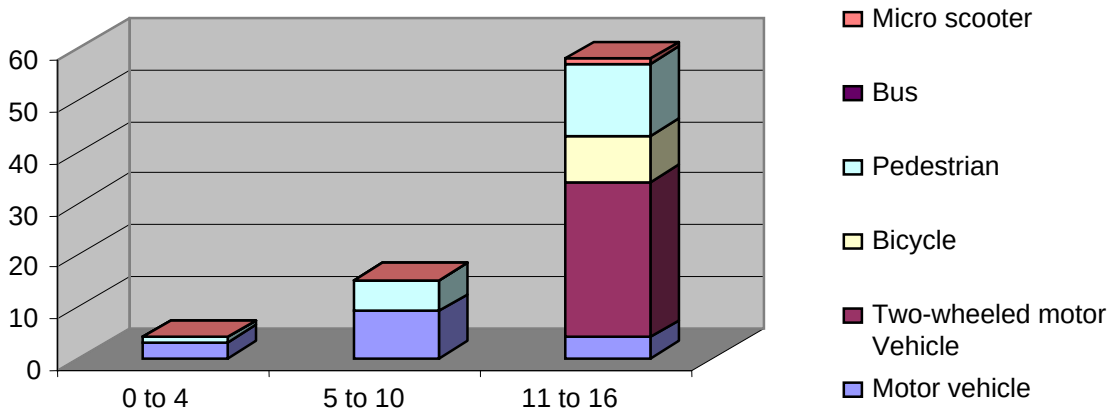
Road Traffic Collisions



2012 Road traffic collision (RTC)



2012 Road injuries by age & road user



- There were 77 RTC's, a decrease of 27 on the previous year.
- Since 2004 the yearly average is 105 incidences.
- The ratio between male and females was 66:38

- There were 21 **pedestrian** related unintentional injuries with an annual average since 2004 of 23.
- A child was more likely injured as a pedestrian if they were aged 10 or above.

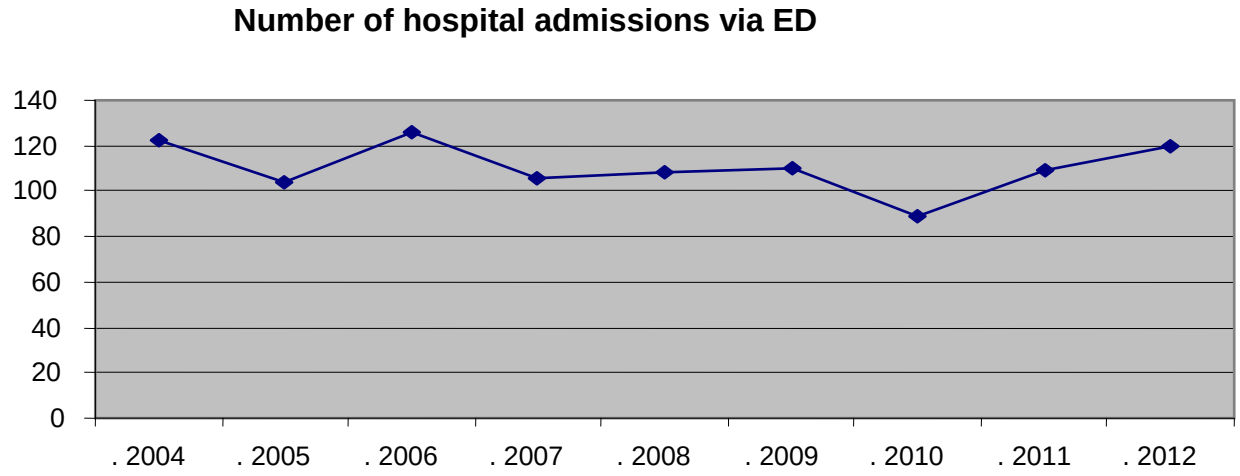
- There were 15 **car passenger** related unintentional injuries, a reduction of 16 from the previous year and with an annual average since 2004 of 25.

- There were 30 **motorcycle** related unintentional injuries, a decrease of 5 from the previous year. The annual average since 2004 is 36.7.

- There were 9 **bicycle** related unintentional injuries classed as road traffic collisions, a decrease of 6 from the previous year. The annual average since 2004 is 13.14.

- 27% of RTC attendees required further treatment or follow up after their initial emergency department attendance.
- There were 13 hospital admissions related to RTC's, an increase of 4 from the previous year.
    - 4 **pedestrian** (19% of pedestrian related attendances)
    - 4 **motorcycle** (13% of motorcycle related attendances)
    - 3 **car** passenger's (20% of car passenger related attendances)
    - 2 **bicycle** RTC's (22% of bicycle road traffic collision related attendances)

13. Severity of unintentional injury



- There were 120 inpatient admissions into hospital via ED because of an unintentional injury at their first ED attendance, 11 more than in 2011.

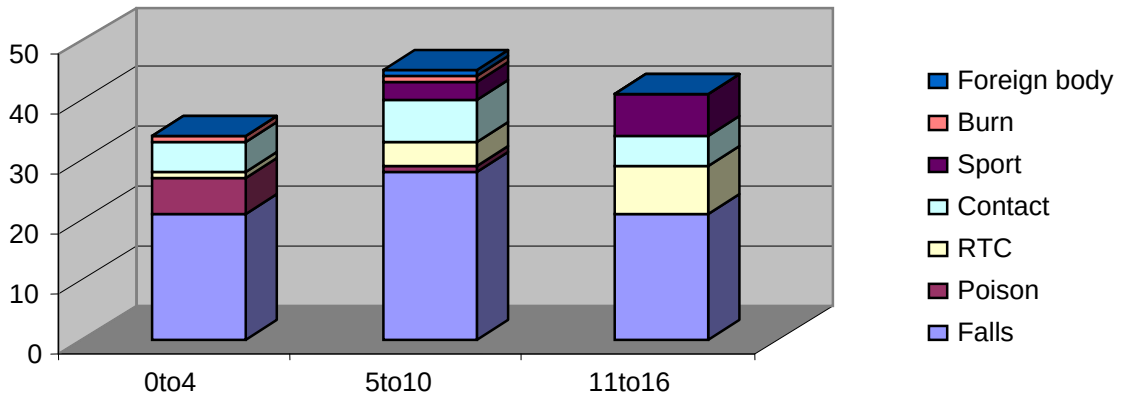
- The 120 admissions equal 3% of child unintentional injury ED attendances.

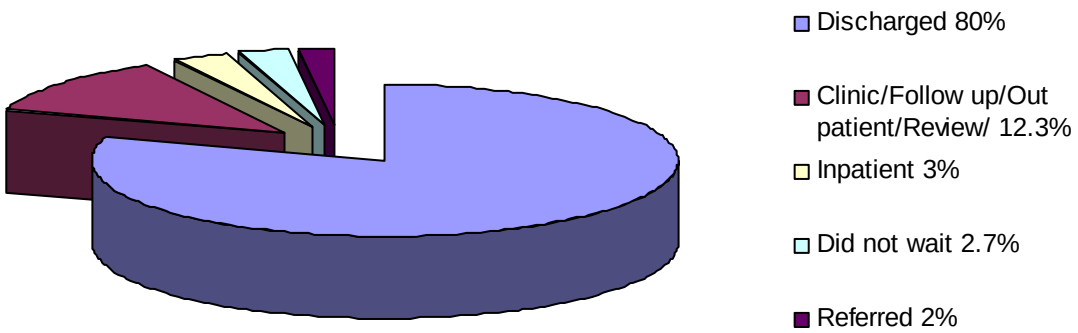
- September had the most hospital admissions.

- More boys than girls were admitted into hospital because of their injuries (63:57).

- The most common age for an ED unintentional injury related admission was 6 years old.

2012 Cause of hospital admissions



- 58% of children were admitted into hospital because of a fall.
- There were 4 admissions related to sport including; rugby (4), football (2), motocross (3), athletics (1).
- There were no unintentional injury child fatalities between 2009 and 2012, 2 in 2008.
- 25% of children attended ED with an unintentional injury that required further hospital treatment or follow up after their initial attendance and treatment.

2012 Discharge summary