

# Reducing Avoidable Injuries in Children and Young People: A Strategy for Nottingham and Nottinghamshire 2014-2020

---

Draft

## Contents

---

<b>PLEDGES</b> .....	3
1. Executive Summary.....	4
1.1. Snap shot of the local picture.....	4
1.2. Summary of local actions required.....	5
2. Introduction.....	6
2.1. The Guiding Principles for the Strategy.....	6
2.2. The Aim.....	6
2.3. The Objectives.....	6
3. Background and Context.....	7
3.1. What is the issue?.....	7
3.2. Categories of Injury.....	7
3.3. Who is at increased risk of experiencing an Avoidable Injury?.....	8
3.4. The cost of Avoidable Injury.....	8
3.5. The Human Cost of Avoidable Injury: Aimee's Story.....	9
4. Policy Context: What are the Drivers.....	10
4.1. Local Policy.....	10
5. The Local Picture.....	10
5.1. Data Sources.....	10
5.2. Fatally Injured.....	10
5.3. Injuries resulting in Hospitalisation (Hospital Admissions or inpatients).....	11
5.4. Hospital admissions by age.....	11
5.5. Causes of Injury.....	12
5.6. Injuries Resulting in Emergency Department (ED) Attendances/Treatment.....	14
5.7. Road Traffic Collisions.....	14
5.8. Seasonal variation.....	15
5.9. Areas of Greatest Interest: Deprivation, Disadvantage and Geography.....	15
6. Evidence Base: What works?.....	16
6.1. The 5 E's of action.....	16
7. Meeting local needs.....	16
7.1. Gaps in provision.....	16
7.2. Resources.....	16
8. Informing the strategy to date.....	17
8.1. Stakeholder day.....	17
8.2. Mapping Exercise.....	17
9. Evaluation.....	17
10. Action Plan.....	17
10.1. Sub Groups.....	17
11. References.....	21
Appendix 1: Department for Transport Statistics-Road Casualties.....	23
Appendix 2: Road Safety Data 2012.....	24

**The term 'injury' is preferred to 'accident' as 'most injuries and their preceding events are predictable and preventable.'**

**The term 'accident' implies an unpredictable and therefore unavoidable event [1]**

## PLEDGES

Nottingham City Council and Nottinghamshire County Council and the partners below pledge to work in partnership:

- To achieve the aims and objectives of the strategy
- To share and make best use of local resources
- To influence the agenda and ensure avoidable injuries are afforded the attention they require locally.

In addition to the Logos below, the University of Nottingham, ROSPA, East Midlands Ambulance Service, Notts Fire and Rescue, Home Start, NHS Nottinghamshire County Clinical Commissioning Groups, Nottingham Children's Hospital are all pledged to work in partnership to prevent avoidable injuries in Children and Young People.



## 1. EXECUTIVE SUMMARY

---

Avoidable injuries in children and young people (CYP) are a serious public health issue and a leading cause of death and hospital admission for children in the United Kingdom. Injuries put more children in hospital than any other cause.

The impact and consequences of avoidable injuries are major contributors to health inequalities with children from the most disadvantaged backgrounds at significantly increased risk.

The long term effect of an injury can be significant, both physically and emotionally, for children. They may experience:

- Disability or impairment (short or long term)
- Scarring or disfigurement
- Ongoing appointments and operations.

Avoidable childhood injuries carry significant costs to the economy, the NHS and children and families. Admitting a child to hospital following avoidable injury in the home is estimated to cost £16,900. The same source puts the cost of a road traffic injury at three times this, in excess of £50,000. The NHS spends an estimated £131 m per year on emergency hospital admissions because of childhood injuries.

**There is a body of evidence to show that most injuries are preventable. Strategies to prevent injuries are usually relatively inexpensive to implement and are shown to have a beneficial return on investment.**

### 1.1. SNAP SHOT OF THE LOCAL PICTURE

**Fatalities:** There were **8 fatalities** in Nottingham City and Nottinghamshire County over a 3-year period April 2010 - March 2013.

**Injuries Resulting in Hospitalisation** (also known as admissions or inpatients): There was a total of 5,700 admissions to hospital as a result of avoidable injuries (April 2010 - March 2013).

- There were 44 admissions for burns and scalds and 88.5% of these were in the 0-5yr age group mostly 1-2 years.
- There were 722 falls that resulted in admission to Nottingham and Nottinghamshire in 2012/13, 45.5% of these occurred in the 0-5 age group.

**Injuries Resulting in Treatment/ Attendance at Emergency Departments (ED):** There was a total of 102,354 ED attendances of which 4.2% (4,380) became inpatients during 2010 – 2013.

- 0-5 year olds have the highest incidence of injury in both the City and County as a rate per 100,000 population.
- There were 3,322 ED attendances due to burns and scalds in Nottingham and Nottinghamshire in 2012/13, the equivalent of an average of 9.1 per day or 63.8 per week.

**The major causes of injury** in 0-17 year olds are:

- Falls followed by exposure to inanimate objects
- Poisoning, burns and scalds for the under 5's.
- Road accidents for 6-17 year olds with a sharp increase from age 12.

**Road Traffic Injuries:** (Hospital data only) Data is 0-17 years for both Nottingham and Nottinghamshire during 2010-2013;

- **Pedal cycles:** A total of 361 of which, 275 were to county residents
- **Pedestrians:** A total of 165 of which, 53 were to city residents
- **Car occupants:** A total of 58, of which 48 were to county residents
- **Motorcycles:** A total of 75, of which 8 were to city residents and 67 to County residents.

**Death and casualty rates from road traffic collisions (RTCs) in Nottinghamshire as a whole remain significantly higher than the England average.**

**Deprivation and disadvantage:** There is a clear association between injury and deprivation/disadvantage.

- In Nottingham City, children in the most deprived quintile are 1.23 times more likely to be admitted as inpatients and 1.11 times more likely to attend A&E than those in the least deprived quintile (National Indices of Multiple Deprivation IMD Quintiles).
- In Nottinghamshire County the gap is more pronounced with people in the most deprived quintile being 1.77 times more likely to be an inpatient and 1.74 times more likely to attend A&E than the least deprived quintile.

**Geographies of increased interest:** The rate of hospital admissions in Bassetlaw is very high in comparison with the other districts at 1,301 per 100,000 population. The 2<sup>nd</sup> highest is Newark & Sherwood at 981 per 100,000. [Data from 2010-2013]

The districts with the highest incidence of ED attendance for avoidable injury are Newark & Sherwood followed by Bassetlaw.

Nottingham City ward level data: the highest number of inpatient admissions for City was in Aspley Ward and it ranks 2<sup>nd</sup> by rate per 100,000 population.

**1.2. SUMMARY OF LOCAL ACTIONS REQUIRED**

To establish a Strategic Group for Nottingham and Nottinghamshire to work collaboratively across agencies, districts, boroughs and wards to ensure a coordinated approach to avoidable injuries in CYP.

To identify additional resources and funding to enable the implementation of interventions within the strategy and action plan.

**Actions for 0-17 years**

- To ensure education, enforcement and promotion of appropriate fitting and use of car seats, booster seats and seat belt fitting.

**Actions for 0-5 years**

- To establish consistent, equitable and sustainable home safety education and equipment schemes beginning in the areas of greatest need. This will require partnership working and identification of funding.
- To ensure a consistent multiagency approach to risk assessment in the home, with development of improved referral pathways and communication channels.

**Actions for 5-17 years**

- Speed reduction schemes of maximum 20mph especially in urban areas and locations within proximity to schools.
- Cycle training and education including helmet safety.

A full action plan is available in Section 10.

## 2. INTRODUCTION

---

Injuries are the leading cause of death for children aged 1-4 and 15-19 and are the second leading cause of death for children aged 5-14, second after all forms of tumours grouped together in England and Wales [3].

Avoidable injuries in CYP have been identified as a local priority for Nottinghamshire County and Nottingham City Public Health. This strategy describes how the agenda will be addressed across key local partnerships for the period 2014-2020. The strategy should be reviewed annually and revised in line with the latest evidence, evaluation and progress.

This strategy has been developed by Avoidable Injuries Strategic Partnership for Children & Young People (Nottingham and Nottinghamshire) to:

- Raise the profile of avoidable injuries and highlight the possibilities for avoidable injury reduction in 0-17 year olds in Nottingham and Nottinghamshire.
- Improve coordination of the work of individual agencies to optimise current resources and establish a joint working approach to reducing the number of avoidable injuries.
- Increase stakeholder interest and involvement in reducing avoidable injuries in CYP.

### 2.1. THE GUIDING PRINCIPLES FOR THE STRATEGY

The following are the guiding principles upon which all actions, developments and interventions are based in order to have the greatest impact and ensure resources are directed effectively:

- To target individuals, families and communities in the most disadvantaged groups, with a particular focus on children and families with parents on a low income in the most deprived socio-economic groups and areas.
- To target education, communication and engagement campaigns and avoidable injury prevention programmes in areas of greatest need in conjunction with a universal approach.
- To focus road safety initiatives, especially awareness and education at 10-17 year olds to include the use of social media and its risks, and young driver education [4].
- To focus intervention in the home for families with children in the 0-4 age range in the key demographic target groups but not forgetting other groups.
- To ensure all prevention activity implemented is balanced with fun, physical activity and learning.
- To target areas with the highest incidence/rates of injuries.
- To ensure interventions are evidence-based, effective and value for money.

### 2.2. THE AIM

'To reduce avoidable injuries in children and young people age 0-17 years, to minimise inequalities and create safer environments for children'.

### 2.3. THE OBJECTIVES

- To establish a strategic partnership to develop a coordinated approach to reducing avoidable injuries in children
- To demonstrate a sustainable reduction in the number and severity of avoidable injuries in children and young people
- To reduce the social gradient in avoidable injuries and narrow the inequalities gap. To prioritise resources in line with targets to achieve greatest impact and value for money.
- To produce clear referral pathways and processes for partners to report risks enabling a coordinated approach to implementing preventative actions across Nottingham City and Nottinghamshire County.
- To agree and determine a coordinated approach to surveillance, data collection, sharing and reporting.
- To evaluate each agreed action and development.

### 3. BACKGROUND AND CONTEXT

#### 3.1. WHAT IS THE ISSUE?

Avoidable Injuries in CYP are a serious public health issue and a leading cause of death and hospital admission for children in the United Kingdom aged between 1 and 14 years [2]. Most of these injuries happen in the home, outdoors or on the roads.

There are more deaths from avoidable injury than, for example, leukemia or meningitis and the social class gradient in child injury is steeper than for any other cause of childhood death or long-term disability [5].

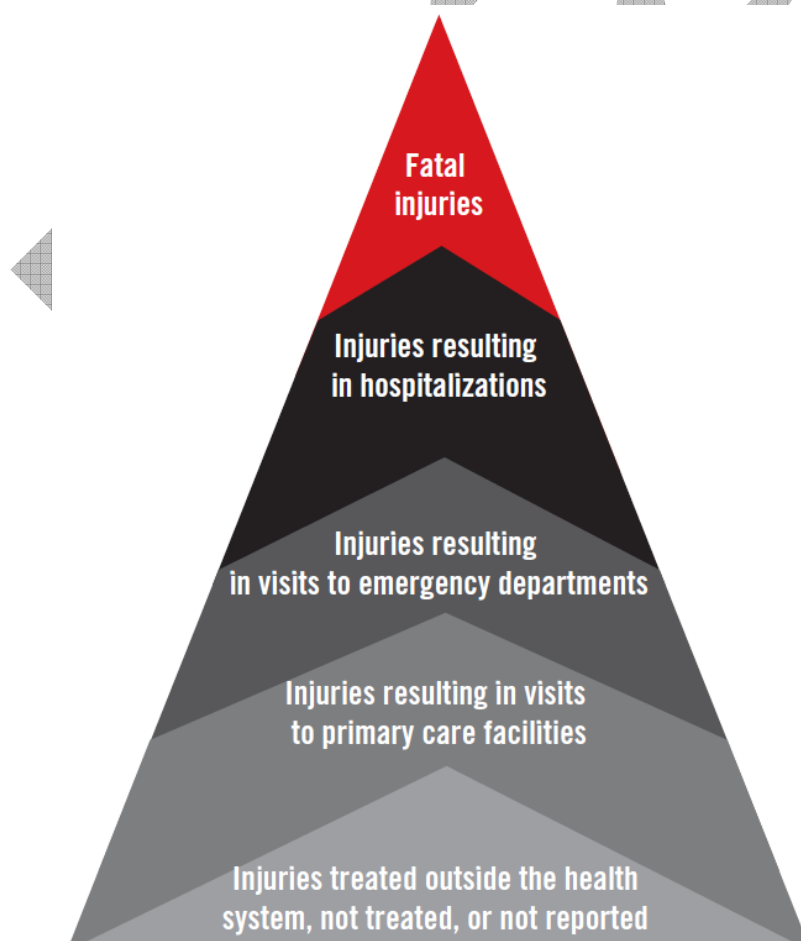
Overall rates of death from injury in children have fallen in England and Wales over the past 20 years. However, rates for children living in disadvantaged social and economic circumstances have not seen the same improvement [16]. The impact and consequences of avoidable injuries are a major contributor to health inequalities with children from the most disadvantaged backgrounds at significantly increased risk of injury.

The long term effect of an injury can be significant both physically and mentally for children (and their families), who may experience;

- Disability or impairment (short or long term).
- Scarring or disfigurement.
- Ongoing medical care.
- Ongoing emotional and psychological impact of sustaining and living with the outcomes of an injury for both the child and wider family.

#### 3.2. CATEGORIES OF INJURY

Avoidable injuries can be categorised according to their severity, treatment type and reporting. **Figure 1: World Health Organisations (WHO) Injury Pyramid** [6].



Fatalities from avoidable injuries are only a small fraction of the total number of children injured and the pyramid highlights the burden of ill health and utilisation of NHS and non-NHS resources as well as an indication of the number of injuries not reported.

Exploration and experiencing risk are a normal part of healthy child development. However all sections of the community have a responsibility to ensure that children are able to grow up in an environment that does not expose them to unreasonable hazards.

### 3.3. WHO IS AT INCREASED RISK OF EXPERIENCING AN AVOIDABLE INJURY?

NICE (2010) recognises that those who are at greater than average risk include; under 5's being more at risk of injuries in the home and over 11's being more vulnerable to road injuries. Other factors are as follows [7]:

- Children who have a disability or impairment (physical or learning).
- Children from some minority ethnic groups.
- Children from low income families.
- Children who live in accommodation which potentially puts them more at increased risk (this includes multiple occupied housing; social and privately rented housing; temporary accommodation and high rise).

### 3.4. THE COST OF AVOIDABLE INJURY

Admitting a child to hospital following avoidable injury in the home is estimated to cost £16,900 [2]. The same source puts the cost of a road traffic injury at three times this, in excess of £50,000 [2]. Avoidable injuries in children and young people follow a life course approach so early interventions and preventative strategies that target individuals, families, communities and society at large are important to stop this ripple effect.

The NHS spends an estimated £131 m per year on emergency hospital admissions because of childhood Injuries.

The approximate lifetime medical, educational and social costs for one child with a severe traumatic brain injury is **£4.89 million**.

Most injuries are preventable and strategies to prevent injuries are usually relatively inexpensive to implement and are shown to have a beneficial return on investment [7].

**Bath water scalds:** Hot bath water is the leading cause of serious scalding injuries among young children and the annual cost of treatment for 0-14 year-olds can be £39.2 million. For a parent who is employed full-time, taking two weeks off work while their child is in hospital costs the economy £7,600.

**Hot drink scalds:** Hot drink scalds are one of the most common childhood injuries and the leading cause of children being admitted to burns services.

The average cost of inpatient treatment for an uncomplicated minor scald from a hot drink is £1,850. Each year the NHS spends around £2.2 m on inpatient treatment for children and young people with hot drink scalds CAPT (Childhood Accident Prevention Trust).



### 3.5. THE HUMAN COST OF AVOIDABLE INJURY: AIMEE'S STORY

Aimee (aged 2) was staying at a relative's house. The relative was running a bath and Aimee was in the bathroom with her. The relative turned around to take a towel off the rail (within the same room) and as she turned Aimee jumped into the bath.

Aimee considers herself lucky in that while growing up she has been surrounded by an amazing group of friends, and never experienced any issues or bullying. The following are her own words:

"At secondary school I missed a lot of the summer breaks with friends and spent the majority recovering from operations and going backwards and forwards to hospital appointments.

In year 8/9 at school I had 2 tissue expands inserted into my stomach which I had to attend hospital for twice a week. I had this done as I had a band of skin across the middle which as I've grown in height got tighter and I was gradually unable to stand up perfectly straight.

After having the balloons in for 6 weeks and having people stare at me out with my family thinking I was pregnant at a young age, they pulled the stretched skin up, grafted some skin from my thigh. I had numerous operations to change the dressings on my stomach and remove staples and had to spend 10 days bed rest lying flat unable to walk around or sit up.

In college I had an operation on my foot due to the skin on the tops of my feet becoming tighter in age which had started to pull my toes up over time gradually fracturing the bones in my foot. The operation included a graft on top of my foot taken from my legs wires in my toes to fix the bones back in my foot. I had the wires in for 6 weeks and had to wear a cast, then had another operation to remove the wires.

Other recent surgeries include grafts and skin releases to arms and shoulder; these are because as I'm growing up skin gets tighter making it uncomfortable to do certain tasks. All operations have been by choice to make things easier. I am still within the outreach clinic at hospital".

**In terms of the effect on Aimee's family she states;** "I have always wondered how it has affected my younger brother with my parents spending a lot of time with me in hospital and running me to the hospital for appointments. Obviously missing out at work and having to have time off for my appointments would have been tough on my parents."

Aimee is now aged 21

[www.cbf-uk.org](http://www.cbf-uk.org) for Aimee's website and further information

*Case study Courtesy of CAPT*

#### Advice to avoid bath time scalds;

- run the bath before bringing the child into the bathroom
- never run the hot water tap first
- where possible get thermostatically controlled water heaters and mixer taps
- Ensure a responsible adult is present in the bath room at all times

## 4. POLICY CONTEXT: WHAT ARE THE DRIVERS

---

**The Chief Medical Officer (CMO) Report: Prevention Pays; Our Children Deserve Better** October 2013 [9] highlights childhood accidents as a leading cause of death and disability.

**The Public Health Outcomes Framework (PHOF)** contains an injury indicator for CYP [10]: 'Hospital admissions caused by unintentional and deliberate injuries in children and young people aged 0-14 and 15-24 years'.

**The Marmot Report**, "Fair society, Healthy Lives [5] highlights the impact of inequalities when looking at accidental deaths among children.

- The single major avoidable cause of death in childhood in England is unintentional injury – death in the home for under-5s and on the roads for 5-17year olds.

**National Casualty Reduction Targets for Road Safety:**

- A 40% reduction in the 2005-2009 average for those Killed or Seriously Injured (KSI) by 2020.
- A 50% reduction in the 2005-2009 average for child KSI by 2020.

**Public Health England:** are currently producing guides for Local Government and CCG regarding Avoidable Injuries these should be published in March 2014.

### 4.1. LOCAL POLICY

**Nottingham City CCG** has a specific target to reduce all hospital admissions in children and young people by 5% in three years.

**Joint Strategic Needs Assessment (JSNA):** Nottingham City and Nottinghamshire County have JSNA chapters dedicated to reducing avoidable injuries in CYP.

## 5. THE LOCAL PICTURE

---

The data presented in this section provides a local context of the impact and effects of avoidable injuries. The data presented follow the course of the Injury Pyramid (Fig 1) starting at fatalities and moving down the tiers as far as attendances/treatment at ED.

The true figure of injuries and resulting morbidities in Nottingham and Nottinghamshire are not reflected in this report as the figures exclude children who are treated at home, in primary care and walk in centres as this data is currently unavailable.

### 5.1. DATA SOURCES

The statistics quoted in this document have been compiled from a variety of sources including mortality statistics from ONS, road traffic accidents from STATS 19 data<sup>1</sup>, hospital admissions data from Hospital Episode Statistics (HES)<sup>2</sup> and A&E attendance statistics.

Hospital data are residence based and are an indication of the population in each area admitted to or attending hospital as a result of being injured, regardless of the location of the event or the hospital.

### 5.2. FATALLY INJURED

There were eight deaths resulting from injuries in CYP living in Nottingham and Nottinghamshire in the period 1st April 2010 to 31st March 2013.

---

<sup>1</sup> In Great Britain information on mortality and morbidity resulting from road traffic accidents, involving vehicles on public highways, is collected by the police and collated by the Department for Transport

<sup>2</sup> The Department of Health collects data on hospital admissions. Diagnosis and external cause are coded using the International Classification of Disease coding, and ICD-10 codes have been in use since 1995.

The incidence of death was slightly higher in boys than girls, which is in line with the national picture.

### 5.3. INJURIES RESULTING IN HOSPITALISATION (HOSPITAL ADMISSIONS OR INPATIENTS)

There were a total of 5,700 admissions to hospital as a result of avoidable injuries between April 2010 - March 2013.

There were 44 admissions for burns and scalds, 88.5% of which were in the 0-5yr age group but mostly 1-2 yrs.

During financial year 2012/13 there were 722 falls in Nottingham City and Nottinghamshire County that were severe enough to require admission to hospital as inpatients. 45.5% of these occurred in the 0-5 age band.

The data in Table 1 shows that the rate of avoidable injury per 100,000 population for Nottinghamshire County is significantly lower than the England average and significantly lower than the average of 8 peer counties (of a similar socio-demographic make-up).

In Nottingham City the rate is comparable with the England average and significantly lower than the average of 10 other similar cities.

**Table 1: Comparative Emergency Hospital Admission Rates for Avoidable Injuries in CYP Aged 0-17yrs in Financial Year 2011-12**

	Rate of admissions per 100,000 population
England	123
East Midlands	112
Nottinghamshire County	106
Nottingham City	122
Average of 8 comparable Counties	124 (range 80-156)
Average of 10 comparable Cities	151 (range 98-181)

*Note all figures rounded*

### 5.4. HOSPITAL ADMISSIONS BY AGE

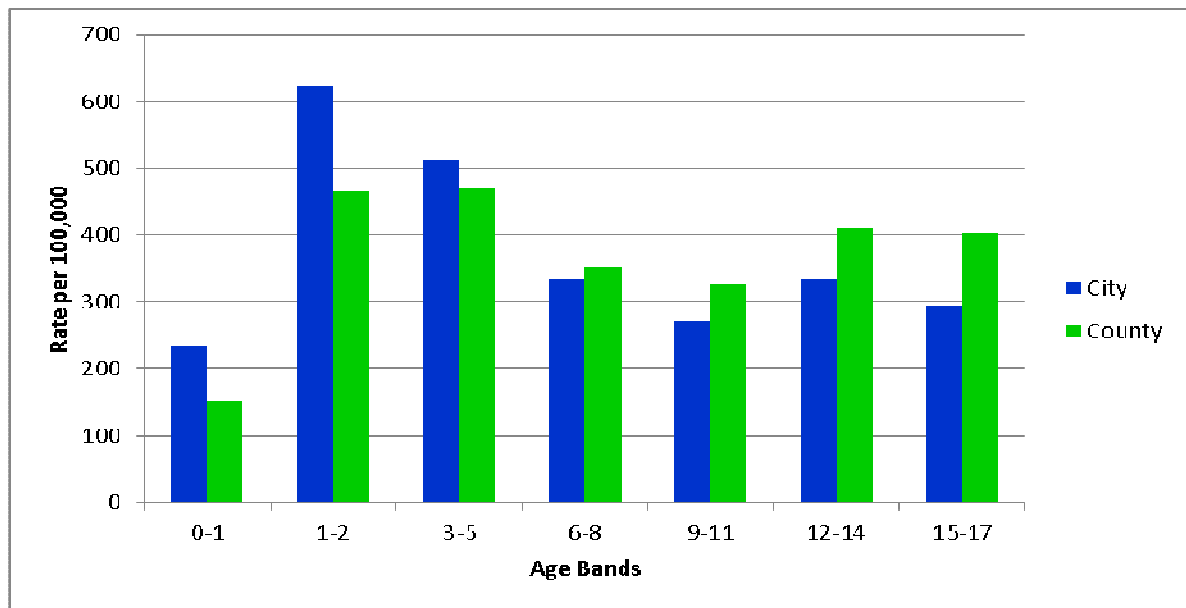
A child's age and stage of development has a bearing on the setting where injuries take place, e.g. under-5s are more likely to have avoidable injuries in the home environment. School-age children are much more likely to have injuries in the road environment [6]. The age group with the highest rate of injury is the under-5s in both city and county see figure 2.

Hospital admissions vary by age group with 0-5 year olds experiencing a higher proportion of all admissions for avoidable injuries: See Table 2 and Figure 2.

**Table 2: Rate of Avoidable Injury per 100,000 by Age Groups in City and County**

Age group	Rate of injury per 100,000 population	
	City	County
0-5	1,371	1,089
6-17	1,235	1,493

**Figure 2: Rate of Injuries per 100,000 Population by Age Band (Data from April 2010 - March 2013)**



### 5.5. CAUSES OF INJURY

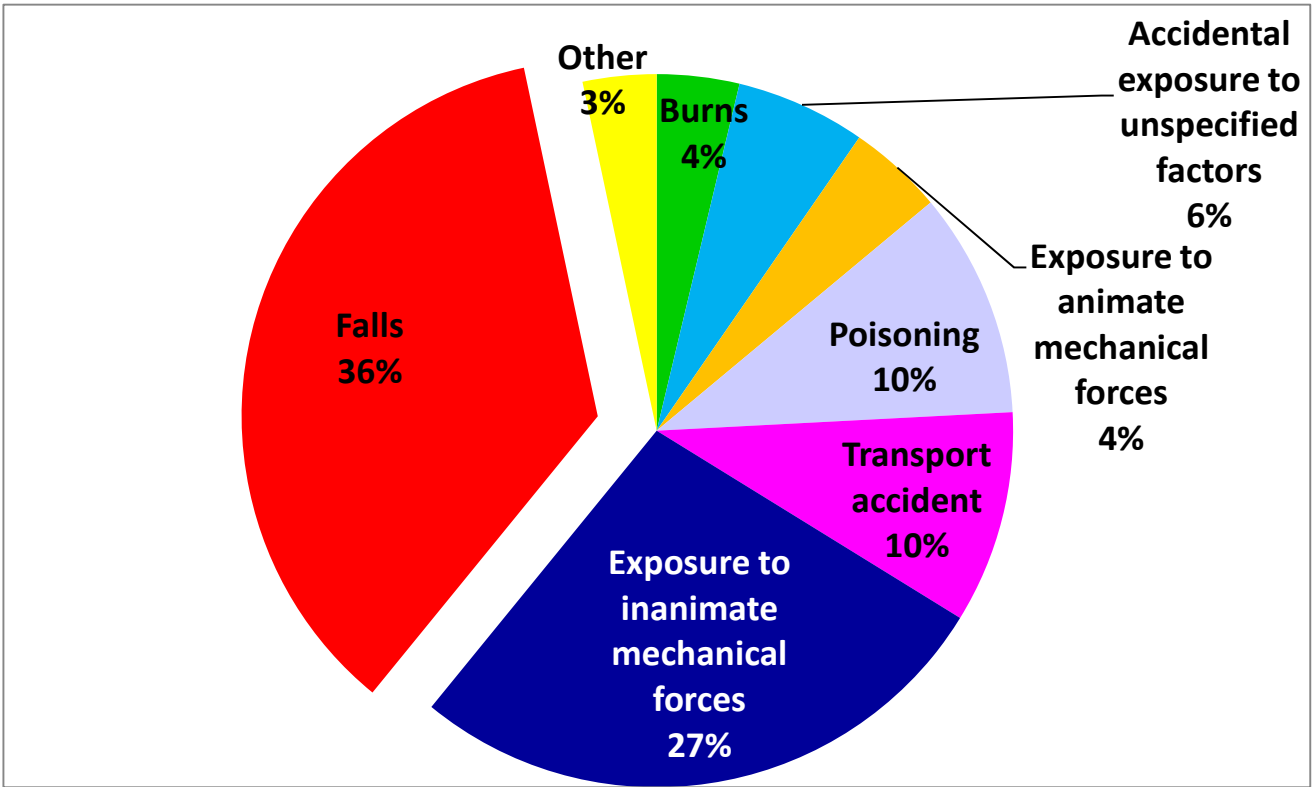
The most common cause of injuries in 0-17yr age groups in both City and County is falls and the second most common cause is contact with non-living objects - such as furniture, sports equipment sharp glass, pins, nails (list not exhaustive) officially termed 'exposure to inanimate mechanical forces'. The causes tend to split by age group after this with poisonings, burns and scalds being more predominant in the 0-5 and transport accidents in the 6-17 age group (See Table 3)

**Table 3: Causes of Injuries by Age and Area in 2012/13.**

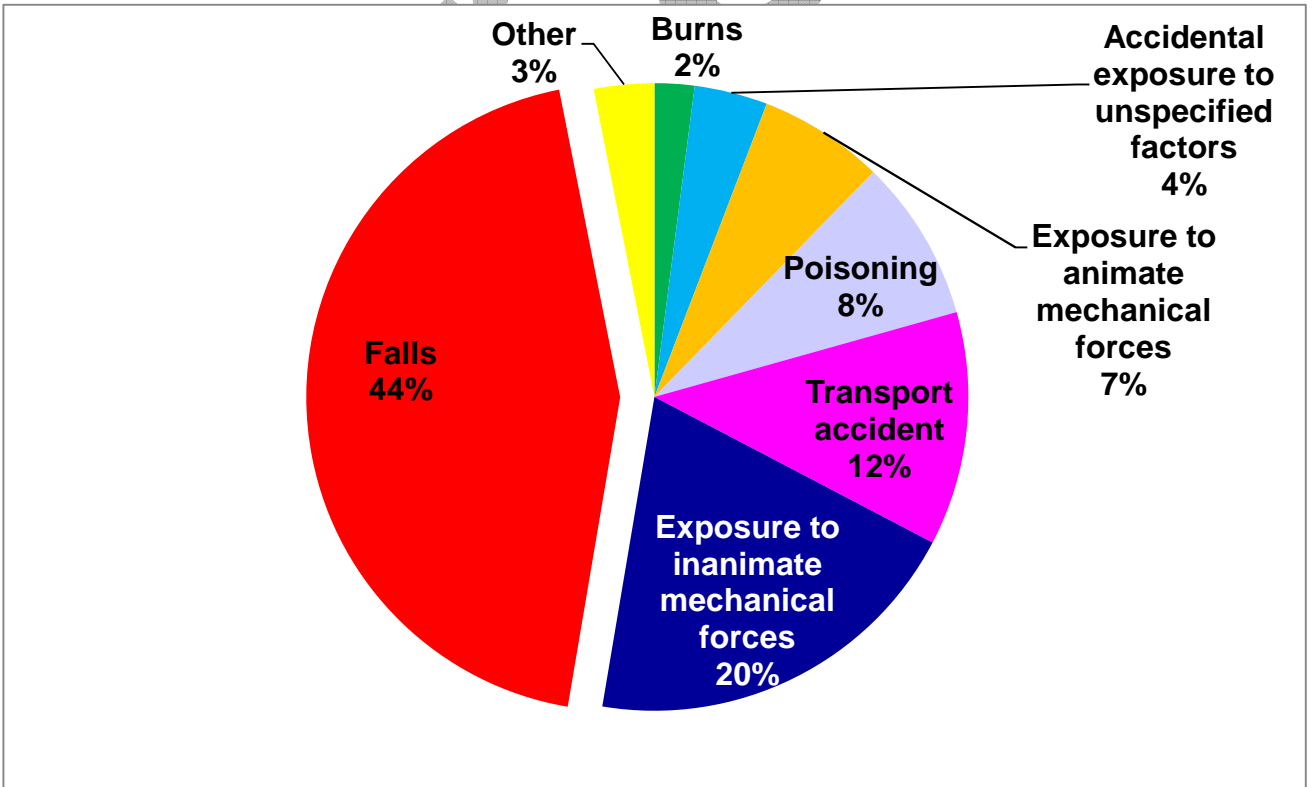
	Nottinghamshire County		Nottingham City	
	0-5 yrs	6-17yrs	0-5 yrs	6-17yrs
Falls	43%	46%	34%	38%
Contact with non-living objects - such as furniture, sports equipment sharp glass, pins, nails (list not exhaustive)	22%	18%	29%	24%
Poisoning	15%	3%	13%	6%
Burns	4%		6%	
Transport	4%	19%	4%	18%
Contact with a living object (official title 'exposure to animate mechanical forces') includes being accidentally hit or struck by a living object such as a person, animal etc.	5%	8%	3%	6%

Figure 3 shows the percentage of injuries by cause for children and young people aged 0-17yrs as rate per 100,000 for Nottinghamshire and Figure 4 shows the same data for Nottingham City.

**Figure 3: Nottingham City: Hospital Admissions by Cause of Injuries City 0-17 years (Rate per 100,000 population)**



**Figure 4: Nottinghamshire County: Hospital Admissions by Cause of Injuries City 0-17 years (Rate per 100,000 population)**



**5.6. INJURIES RESULTING IN EMERGENCY DEPARTMENT (ED) ATTENDANCES/TREATMENT**

There were a total of 102,354 ED attendances for injury of which 4.2% (4,380) became inpatients during 2010 – 2013.

0-5 year olds have the highest incidence of injury in both the City and County as a rate per 100,000 population.

During financial year 2012/13; there were 3,322 ED attendances due to burns and scalds in Nottingham City and Nottinghamshire County which is an average of 9.1 per day or 63.8 per week.

**Table 4: The Number of ED Attendances that became Inpatient Admissions for Avoidable Injuries 0-17years as Whole Numbers and as a Percentage**

	ED attendances	ED inpatient admissions	Other sources of inpatient admission	% of ED attendances that became admissions	Total # of admissions	% of admissions via A&E
City	27,117	1,384	305	5.10	1,689	81.94
County	75,237	2,996	1,015	3.98	4,011	74.69
Total	102,354	4,380	1,320	4.28	5,700	76.84

The overall rate of ED attendances in both City and County is not significantly different from the national average. However, ED attendances for 0-4's in the City are significantly worse than the England average with 588.2 per 100,000 compared with 483.9.

In Nottingham City the majority of attendances to ED are due to bruises and wounds (31.2%). In Nottinghamshire County the majority of ED attendances are due to fractures, dislocation and joint injuries (24.8%).

In Nottingham and Nottinghamshire the four main reasons for attendances to ED are bruising/abrasions, fractures, ligament sprain and cuts.

**5.7. ROAD TRAFFIC COLLISIONS**

**Nationally:** mobile phones and other smart devices have been attributed to increased unintentional injuries. The AXA Roadsafte report [4] states that:

“Texting, tweeting, checking Facebook, surfing the internet and playing games on mobile phones could be responsible for a rise in the number of 11-12 year old children suffering road traffic accidents.

**32% of all pedestrians seriously injured or killed during school run time are 11-12 years old and an 11 year old pedestrian is three times more likely to be killed or seriously injured during the school run than a 10 year old.”**

**Locally:** Data is 0-17 years for both Nottingham and Nottinghamshire during 2010-2013 taken from Hospital Data;

- **Pedal cycles:** A total of 361, 275 of which were to county residents
- **Pedestrians:** A total of 165, 53 of which were to city residents
- **Car occupants:** A total of 58, 48 of which were to county residents
- **Motorcycles:** A total of 75, 8 of which were to city residents.

Road Safety Data for 2012 show that for the 0-15 yr group there were there were 4 fatalities, 52 Serious Injuries and 278 slight injuries. 0-5 yrs pedestrians there were 34 KSI and 102 Slight injuries; More details are in Appendix 2.

Data from the Department for Transport (appendix 1) shows that since 1979 there has been a steady decrease in the rate of children killed and seriously injured (KSI) on the county's roads. However, death and casualty rates from road traffic collisions (RTCs) in Nottinghamshire as a whole remain significantly higher than the England average. The areas with the highest rate of KSI are rural areas with rural road networks and A roads.

## **5.8. SEASONAL VARIATION**

There are seasonal variations for both admissions and attendances to ED in under 18's in both Nottingham City and Nottinghamshire County. ED attendances and admissions are highest throughout the spring and summer months.

## **5.9. AREAS OF GREATEST INTEREST: DEPRIVATION, DISADVANTAGE AND GEOGRAPHY**

There is a clear association between injury and disadvantage.

In Nottingham City, children in the most disadvantaged quintile are 1.23 times more likely to be admitted as inpatients and 1.11 times more likely to attend ED than those in the least deprived quintile (National IMD Quintiles).

In Nottinghamshire County the gap is more pronounced with people in the most deprived quintile being 1.77 times more likely to be an inpatient and 1.74 times more likely to attend ED than the least deprived quintile.

The rate of hospital admissions in Bassetlaw is very high in comparison with the other districts at 1,301 per 100,000 population. The 2<sup>nd</sup> highest is Newark & Sherwood at 981 per 100,000 (Data from 2010-2013).

The districts with the highest incidence of ED attendance for avoidable injury are Newark & Sherwood followed by Bassetlaw.

Nottingham City ward level data: the highest number of inpatient admissions for City was in Aspley Ward and it is ranked 2<sup>nd</sup> by rate per 100,000 population.

## 6. EVIDENCE BASE: WHAT WORKS?

---

**NICE Guidance** recommended the following:

- Coordinating unintentional injury prevention activities:
  - Ensure there is a CYP injury prevention coordinator
- Installation and maintenance of permanent safety equipment in social and rented dwellings
- Incorporating home safety assessments and equipment provision within local plans and strategies for CYP health and wellbeing

There is strong evidence to suggest that reducing speed limits in built up urban areas will have a significant impact on reducing injuries on the roads and outdoors for anyone under the age of 25 [11, 12, 13, 15].

### 6.1. THE 5 E'S OF ACTION

The Centre for Disease Control [14] details 5 actions that need to be addressed to have the greatest impact to reduce and prevent serious unintentional injuries:

- **Environment:** Improvement in planning and design which results in safer homes, routes to school, leisure areas and roads. Adaptations to the environment such as fireguards, stair gates and cupboard locks help to make the home safer. Cycle lanes, speed limits and pedestrian crossings may make roads safer.
- **Education:** Increased awareness of the risk of accidents in a variety of settings for children, parents and carers and providing information on ways of minimising these risks.
- **Empowerment:** Local consultation and community involvement can generate a strong sense of commitment and ownership. Avoidable injury prevention initiatives that involve the community, have been influenced by a community and that are owned by a community have been shown to result in better outcomes and commitment.
- **Enforcement:** There is legislation which relates to child safety e.g. child car seats. These regulations ensure that the products we buy meet a reasonable level of safety performance, that road regulations are adhered to and that new dwellings meet an acceptable level of safety
- **Engineering:** This relates to the design and development of products, housing etc, taking safety into account.

These five approaches should not be considered in isolation. Successful strategies will consider all of them in the planning and development stages. A combination of approaches may be needed.

## 7. MEETING LOCAL NEEDS

---

### 7.1. GAPS IN PROVISION

A range of local interventions delivered by agencies aim to reduce avoidable injuries in children and young people. These interventions are not equitably distributed (do not cover all areas or necessarily areas of greatest need). Many are funding-dependent and not mainstreamed or have sustainability issues. There is a requirement to improve coordination and communication between agencies.

### 7.2. RESOURCES

It should be recognised there is a commitment to reducing avoidable injuries in many agencies across Nottingham and Nottinghamshire. All of these have some resource, mostly staff time.

The coordination of avoidable injuries within City and County is being led by Public Health Consultants and staff in Nottingham City and Nottinghamshire County.



The agencies who have made pledges and others are all participating in delivering this strategy and its resulting actions in a coordinated way. It is recognised that in order to have a substantial impact upon this most important of issues, further financial resources will be required and explored.

## **8. INFORMING THE STRATEGY TO DATE**

---

### **8.1. STAKEHOLDER DAY**

Public Health Nottingham City and Nottinghamshire County hosted a stakeholder day on 13<sup>th</sup> July 2013, to galvanize stakeholder interest in preventing avoidable injuries in children and young people.

### **8.2. MAPPING EXERCISE**

Following the stakeholder day, an avoidable injuries intervention mapping exercise was undertaken (See Appendix 2). The intervention mapping exercise was sent to all the stakeholders who attended the event and other key agencies who were unable to attend the stakeholder day. The results of the mapping indicated:

- There are many avoidable injuries interventions focusing on the under 5's. However, many of the agencies who are delivering them are working in silos.
- There is potential to utilise the statutory agencies more, for example Nottinghamshire Fire & Rescue in the delivery of avoidable injuries interventions.
- Nottingham City Council and Nottinghamshire County Council have excellent road safety partnerships
- The voluntary sector is an important contributor to tackling avoidable injuries within Nottinghamshire County.

## **9. EVALUATION**

---

This strategy will be subjected to regular review in order that progress is assessed and priorities redefined. The first major review will take place one year from launch.

## **10. ACTION PLAN**

---

The partner organisations committed to the strategy are to take forward a programme of activity to reduce avoidable injuries in CYP. It is anticipated that the action plan will be a live plan which will be updated and amended throughout the course of the strategy.

### **10.1. SUB GROUPS**

A series of task and finish groups will be identified or established to lead on the key objectives from this strategy.

It is envisaged that the following will happen;

**Home:** Establish a group to focus on interventions to improve home safety and reduce risks in the home setting

**Road:** Link in with the existing road safety partnership group

**Leisure:** A longer term aim is to establish a group to focus on risk reduction in the leisure setting

Objectives	Actions	Outcomes	Possible Lead/stakeholders	Timescales	Progress
To develop a strategy for avoidable injuries for CYP and strategic partnership to develop and lead the program.	1. Hold stakeholder event, using feedback to inform strategy	1. Multi-agency feedback/expertise included in strategy	Public Health Nottingham City Council/ Nottinghamshire County Council  Nottingham/shire C&YP Avoidable Injuries Strategic Group	July 2013	1.Event held, July 13
	2. Development of a Stakeholder group to develop & lead the strategy	2. Stakeholder group established	As above	November 2013	2. Stakeholder group established November 13 and strategy developed July13-December
	3. Take draft strategy through LA formal arrangement and consultation processes.	3. Full consultation undertaken and formal process of ratification undertaken.	Nottinghamshire County and Nottingham City Public Health leads	Feb - June 2014	
	4. Launch of strategy	4. Strategy developed and launched functioning strategy	Stakeholder group & wider partners	June 2014	4. Date proposed for launch of strategy (to be June 2014)
	5. Development of sub groups to lead and take forward the key themes.	5. Sub groups identified and established to lead sub areas of strategy.			
To coordinate all services who have a role to play in preventing avoidable injuries	1. Undertake multi-agency mapping exercise, followed by gap analysis in line with gaps in services.		Public Health Nottingham City Council/ Nottinghamshire County Council		

Objectives	Actions	Outcomes	Possible Lead/stakeholders	Timescales	Progress
To develop business cases and project/action plans to establish funding or to mainstream key services; ensuring areas/populations of greatest need are prioritised	2. Work with northern district CCGs, voluntary sector and community providers to develop plans for local delivery.	Sustainable provision of interventions to reduce AI		Feb 2014 – Feb 2015	
	3. Communicate services available to all people who work front line <ul style="list-style-type: none"> <li>• Set up sub group</li> <li>• Development of Task and finish groups</li> <li>• focusing on home safety, road safety and outdoor safety</li> <li>• Training for professionals and volunteers</li> <li>• Adopt a standardised checklist for avoidable injuries in the home</li> </ul>		Available communications leads from stakeholder agencies.	July 2014-on going	
To maximise and prioritise resources to achieve the set objectives and outcomes	To identify sources of funding and look for sustainable methods of delivery.	Allocation of funding to appropriate developments for example home safety equipment scheme)	Public Health Nottingham City Council/ Nottinghamshire County Council		
To ensure evaluation is built into all developments at the onset of each project	All sub groups look at evaluation and coordinate and develop regular evaluation reports				

Objectives	Actions	Outcomes	Possible Lead/stakeholders	Timescales	Progress
To develop a communication plan that will engage all relevant partners	Consultation with children and parents through the City Council and the County Council groups Target partners Target population Develop media material Develop subgroup to develop and integrate comms plan Ensure AI pathway is included on Information Prescription website, <i>nottsinfoscript</i>		Public Health Nottingham City Council/ Nottinghamshire County Council		
To develop and implement a coordinated approach to surveillance, data collection, sharing and reporting.	All partners to commit to data sharing and make data available	Avoidable injuries dashboard for the city and the county which includes all relevant avoidable injuries data from all stakeholders	Public Health Nottingham City Council/ Nottinghamshire County Council	July 2013-on going	
To develop evidence-based approach/programme to avoidable injuries	All projects developed to be in line with the best available evidence Development of a home safety equipment scheme			July 2013-on going	

## 11. REFERENCES

---

1. Davis R, P. B. (2001). BMJ bans accident. *BMJ*, 322: 132
2. The Audit Commission. *Better safe than sorry, Preventing unintentional injury to Children*. London : s.n., 2007
3. Office of National Statistics.(2010)
4. Report carried out by AXA and Roadsafesafe  
(<http://www.roadsafesafe.com/news/article.aspx?article=2073>)
5. The Marmot Review. *Fair Society. Healthy Lives: Strategic Review of Health Inequalities in England post-2010*. London : s.n., 2010.
6. WHO. Injury Pyramid. [http://www.who.int/violence\\_injury\\_prevention/key\\_facts/en/](http://www.who.int/violence_injury_prevention/key_facts/en/)  
(Accessed 06-01-2014)
7. NICE. (2010). New NICE guidance to reduce number of child injuries and deaths  
<http://www.nice.org.uk/newsroom/pressreleases/preventingunintentionalinjuriesunder15s.jsp>
8. Elizabeth Towner, Therese Dowswell, Gail Errington, Matthew Burkes, John Towner. *Injuries in children aged 0–14 years and inequalities*. s.l. : Health development Agency, 2005.
9. CMO report October 2013 <https://www.gov.uk/government/news/chief-medical-officer-prevention-pays-our-children-deserve-better>.
10. Department of Health. *Improving outcomes and supporting transparency (a public health outcomes framework for England)*. 2012.
11. Dorling, D. 2014. 20mph Speed Limits for Cars in Residential Areas, by Shops and Schools, in British Academy, "If you could do one thing..." Nine local actions to reduce health inequalities. London: BA.
12. Wang, J., Poulter, D., Purcell, C. 2011 Reduced Sensitivity to Visual Looming Inflates the Risk Posed by Speeding Vehicles When Children Try to Cross the Road, *Psychological Science*, 22, 4, 429-434.
13. LGIU Policy Briefing 2012 Area-wide 20mph neighbourhoods: a win, win, win for local authorities <http://www.lgiu.org.uk/wp-content/uploads/2013/12/Area-wide-20mph-neighbourhoods-a-win-win-win-for-local-authorities.pdf> accessed 13th January 2014.
14. Center for Disease Control and Prevention, National Center for Injury Prevention and Control. National Action Plan for Child Injury Prevention. Atlanta(GA): CDC, NCIPC; 2012.  
[www.cdc.gov/safeschools/pdf/National\\_Action\\_Plan\\_for\\_Child\\_Injury\\_Prevention.pdf](http://www.cdc.gov/safeschools/pdf/National_Action_Plan_for_Child_Injury_Prevention.pdf)  
(Accessed 16-01-2014)
15. Dorn, D. L. *The Young Novice Driver Brain*. s.l. : Cranfield University, 2009.
16. The Royal Society for the prevention of Accidents, PHE. *Delivering Accident Prevention at local level in the new public health system*. 2013.

## 12. SUPPORTING MATERIAL & ADDITIONAL READING

---

UK Government, Making roads safer <https://www.gov.uk/government/policies/making-roads-safer>

The updated Strategic Framework for Road Safety  
<https://www.gov.uk/government/publications/strategic-framework-for-road-safety>

Think Education road safety booklet [http://think.direct.gov.uk/education/early-years-and-primary/docs/booklet\\_senior\\_managers.pdf](http://think.direct.gov.uk/education/early-years-and-primary/docs/booklet_senior_managers.pdf)

European child safety alliance Good practice guide  
<http://www.childsafetyeurope.org/publications/goodpracticeguide/info/good-practice-guide.pdf>

**Walter, R.** *Re-evaluating Home Accidents*. London : TRL, 2012.

Sex differences in child and adolescent mortality in the Nordic countries, 1981–2000.

**Gissler M, Rahkonen O, Mortensen L, et al.** s.l. : Scand J Public Health 37: 340–346, 2009, Scand J Public Health 37, pp. 340–346.

Shakiba Habibula (2013) , Consultant in Public Health, Buckinghamshire County Council:  
**Avoidable Injury in Children**

Draft

## APPENDIX 1: DEPARTMENT FOR TRANSPORT STATISTICS-ROAD CASUALTIES

### Department for Transport statistics

<https://www.gov.uk/government/publications/reported-road-casualties-great-britain-annual-report-2012>

#### RAS30036

Casualties resulting from reported personal injury road accidents, by age and severity, Great Britain, 1979-2012

Number of casualties					
Child (0-15)					
Year	Killed	Seriously Injured	KSI <sup>1</sup>	Slightly Injured	All casualties
1979	636	11,622	12,458	40,029	52,487
1980	533	11,554	12,087	39,083	51,170
1981	571	11,103	11,674	37,977	49,651
1982	536	11,283	11,819	38,097	49,916
1983	605	11,138	11,743	38,913	50,656
1984	588	11,453	12,041	40,627	52,668
1985	515	10,614	11,129	37,649	48,778
1986	450	9,621	10,071	36,472	46,543
1987	466	9,087	9,553	35,399	44,952
1988	462	8,909	9,371	36,541	45,912
1989	440	8,965	9,405	38,502	47,907
1990	417	8,870	9,287	39,353	48,640
1991	377	7,684	8,061	36,349	44,410
1992	310	7,434	7,744	36,443	44,187
1993	306	6,670	6,976	35,617	42,593
1994	299	7,226	7,525	37,627	45,152
1995	270	6,983	7,253	36,536	43,789
1996	270	6,719	6,989	37,848	44,837
1997	255	6,197	6,452	38,094	44,546
1998	206	5,873	6,079	37,366	43,445
1999	221	5,478	5,699	36,352	42,051
2000	191	5,011	5,202	34,513	39,715
2001	219	4,769	4,988	33,281	38,269
2002	179	4,417	4,596	30,093	34,689
2003	171	3,929	4,100	27,888	31,988
2004	166	3,739	3,905	27,095	31,000
2005	141	3,331	3,472	24,654	28,126
2006	169	3,125	3,294	22,229	25,523
2007	121	2,969	3,090	20,717	23,807
2008	124	2,683	2,807	19,189	21,996
2009	81	2,590	2,671	17,984	20,655
2010	55	2,447	2,502	17,067	19,569
2011	60	2,352	2,412	17,062	19,474
2012	61	2,211	2,272	14,979	17,251

<sup>1</sup> KSI = Killed or seriously injured

Telephone: 020 7944 6595  
 Email: [roadacc.stats@dft.gsi.gov.uk](mailto:roadacc.stats@dft.gsi.gov.uk)  
[Notes & Definitions](#)

Source: DfT STATS19  
 Last updated: 26 September 2013  
 Next update: September 2014

The figures in this table are National Statistics

## APPENDIX 2: ROAD SAFETY DATA 2012

### INJURY ACCIDENT AND CASUALTY ANALYSIS - NOTTINGHAMSHIRE POLICE AUTHORITY

From 01 January 2012  
To 31 December 2012

FIGURES AS OF 02/04/2013

	01 Jan - 31 Dec 2005 - 2009 Average	01 Jan - 31 Dec 2011	01 Jan - 31 Dec 2012	Comparison of 2012 with 2011		Comparison of 2012 with 2005 - 2009	
				Change	%Change	Change	%Change
<b>ALL INJURY ACCIDENTS</b>							
Fatal Accidents	51.2	36	32	-4	-11.1%	-19.2	-37.5%
Serious Accidents	564.8	515	484	-31	-6.0%	-80.8	-14.3%
Slight Accidents	2,918.0	2,433	2,337	-96	-3.9%	-581.0	-19.9%
<b>TOTAL ACCIDENTS</b>	<b>3,534.0</b>	<b>2,984</b>	<b>2,853</b>	<b>-131</b>	<b>-4.4%</b>	<b>-681.0</b>	<b>-19.3%</b>
FATAL + SERIOUS ACCIDENTS	616.0	551	516	-35	-6.4%	-100.0	-16.2%
<b>ALL CASUALTIES</b>							
Fatal Casualties	57.0	37	33	-4	-10.8%	-24.0	-42.1%
Serious Casualties	631.6	568	545	-23	-4.0%	-86.6	-13.7%
Slight Casualties	4,122.6	3,413	3,217	-196	-5.7%	-905.6	-22.0%
<b>TOTAL CASUALTIES</b>	<b>4,811.2</b>	<b>4,018</b>	<b>3,795</b>	<b>-223</b>	<b>-5.6%</b>	<b>-1,016.2</b>	<b>-21.1%</b>
KSI Casualties	688.6	605	578	-27	-4.5%	-110.6	-16.1%
<b>CHILD CASUALTIES (0-15 yrs)</b>							
Fatal Casualties	2.2	0	4	4	100.0%	1.8	81.8%
Serious Casualties	72.0	56	52	-4	-7.1%	-20.0	-27.8%
Slight Casualties	405.0	314	278	-36	-11.5%	-127.0	-31.4%
<b>TOTAL CASUALTIES</b>	<b>479.2</b>	<b>370</b>	<b>334</b>	<b>-36</b>	<b>-9.7%</b>	<b>-145.2</b>	<b>-30.3%</b>
KSI Casualties	74.2	56	56	0	0.0%	-18.2	-24.5%
<b>PEDESTRIANS</b>							
KSI Casualties	140.6	126	119	-7	-5.6%	-21.6	-15.4%
Slight Casualties	393.6	363	333	-30	-8.3%	-60.6	-15.4%
<b>TOTAL CASUALTIES</b>	<b>534.2</b>	<b>489</b>	<b>452</b>	<b>-37</b>	<b>-7.6%</b>	<b>-82.2</b>	<b>-15.4%</b>
Child peds (0-15 yrs) KSI Casualties	39.8	36	34	-2	-5.6%	-5.8	-14.6%
Child peds (0-15 yrs) Slight Casualties	140.0	102	102	0	0.0%	-38.0	-27.1%
Elderly peds (60 and over) KSI Casualties	21.0	21	15	-6	-28.6%	-6.0	-28.6%
Elderly peds (60 and over) Slight Casualties	39.0	39	44	5	12.8%	5.0	12.8%
<b>PEDAL CYCLISTS: RIDERS &amp; PASSENGERS</b>							
KSI Casualties	72.6	90	86	-4	-4.4%	13.4	18.5%
Slight Casualties	279.2	293	271	-22	-7.5%	-8.2	-2.9%
<b>TOTAL CASUALTIES</b>	<b>351.8</b>	<b>383</b>	<b>357</b>	<b>-26</b>	<b>-6.8%</b>	<b>5.2</b>	<b>1.5%</b>
<b>MOTOR CYCLISTS: RIDERS &amp; PASSENGERS</b>							
KSI Casualties	163.2	134	115	-19	-14.2%	-48.2	-29.5%
Slight Casualties	308.6	247	213	-34	-13.8%	-95.6	-31.0%
<b>TOTAL CASUALTIES</b>	<b>471.8</b>	<b>381</b>	<b>328</b>	<b>-53</b>	<b>-13.9%</b>	<b>-143.8</b>	<b>-30.5%</b>
<b>CAR/TAXI: DRIVERS &amp; PASSENGERS</b>							
KSI Casualties	275.8	229	223	-6	-2.6%	-52.8	-19.1%
Slight Casualties	2,769.0	2,165	2,104	-61	-2.8%	-665.0	-24.0%
<b>TOTAL CASUALTIES</b>	<b>3,044.8</b>	<b>2,394</b>	<b>2,327</b>	<b>-67</b>	<b>-2.8%</b>	<b>-717.8</b>	<b>-23.6%</b>
<b>ALL CASUALTIES WHERE DRIVER 17-24 yrs INVOLVED</b>							
KSI Casualties	177.0	115	118	3	2.6%	-59.0	-33.3%
Slight Casualties	1,303.2	970	901	-69	-7.1%	-402.2	-30.9%
<b>TOTAL CASUALTIES</b>	<b>1,480.2</b>	<b>1,085</b>	<b>1,019</b>	<b>-66</b>	<b>-6.1%</b>	<b>-461.2</b>	<b>-31.2%</b>