

# UNINTENTIONAL HARM THEMATIC PAPER

## Road Safety



Building Safer Communities

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All documents relating to Building Safer Communities Phase 2: National Strategic Assessment Unintentional Harm are available on the BSC website here: <a href="http://www.bsc.scot/publications.html">http://www.bsc.scot/publications.html</a> .....	
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## 1. EXECUTIVE SUMMARY

### 1.2 Background

This thematic briefing paper is part of a suite of documents produced on unintentional harm in Scotland as part of Building Safer Communities (BSC), part of the justice change programme that contributes to the Justice Strategy. Although managed by Scottish Government, Building Safer Communities works collaboratively with local and national partners to help communities make use of their existing strengths and uses the latest in improvement methodology to drive change. The vision is of a flourishing, optimistic Scotland in which resilient individuals, families and communities live safe from crime, disorder, danger and harm. This is achieved through two distinct phases:

- Phase 1 aims to reduce the victims of crime in Scotland by 250,000 by 2017-18. More information about Phase 1 and the programme as a whole can be found at [www.bsc.scot](http://www.bsc.scot).
- Phase 2 has the aim of “reducing unintentional physical and psychological harm that could have been predicted and prevented”.

The Strategic Assessment for Unintentional Harm was commissioned under Phase 2 of BSC to better understand the prevailing issues, causal factors and epidemiology of unintentional harm in Scotland. The scope of this strategic assessment included home safety, falls, sports injury, outdoor safety (water safety, mountain safety), road safety and workplace safety; mental well-being, loneliness and social isolation.

Through robust analysis of existing data and environmental scanning, areas of focus and priority were recommended:

1. Areas of increased deprivation
2. The under-fives
3. The over 65s
4. Strategic data gathering, analysis and sharing
5. Bridging the gap between strategy and delivery

All documents relating to Building Safer Communities Phase 2: National Strategic Assessment Unintentional Harm are available on the BSC website here: <http://www.bsc.scot/publications.html>

## 1.2 Who is this report for and why?

Six thematic papers have been produced covering Children and Young People, Older People, Deprivation, Home Safety, Road Safety and Outdoor Safety.

These are designed for practitioners with an interest in particular aspects of unintentional harm – the paper aims to provide some key facts about particular issues but also support practitioners to tackle unintentional harm locally using the further reading/support links and case studies.

This report can be supplemented with Sections six and seven in the full strategic assessment which may be found on the BSC website here: [http://www.bsc.scot/publications.html](#) which provides geographical information at a Local Authority level for particular aspects of unintentional harm.

## 2. KEY POINTS

### 2.1 The National Picture

Unintentional harm in Scotland is a large burden on the population in terms of death (around 1,250-1,400 deaths from physical unintentional harm in Scotland per year<sup>1</sup> and one of the top causes of death for young children and the elderly) and serious injury (around 54,500 emergency hospital admissions for physical unintentional harm annually<sup>2</sup>) but also the number of years lost to disability, time off work, not to mention the emotional impact on those injured and their family and friends. For public services it can also be a burden in terms of unscheduled care costs, volunteer time, and reduce the amount of time that can be dedicated to prevention. Various reports including one by the UK's Chief Medical Officer present a powerful economic case for injury prevention. Extrapolating from UK figures, the costs to the NHS in Scotland attributable to physical unintentional harm alone amount to at least £200 million per year (of which £40 million relate to children)<sup>3</sup>.

Children and young people (particularly the under-fives), older people and those living in more deprived areas are all over-represented in unintentional harm data as shown in Figures 1 to 3 – more detail can be found in the summary paper if required.

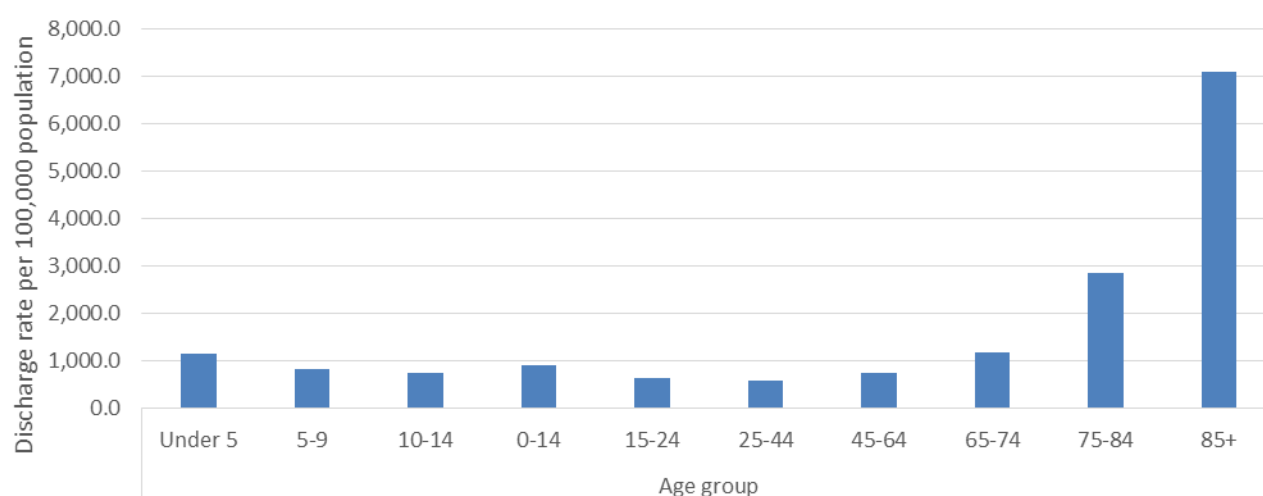


Figure 1 Emergency hospital admissions as a result of an unintentional injury by age group, year ending 31 March 2015  
(Source: NHS Information Services Division Unintentional Injuries publication, 2015)

<sup>1</sup> National Records Scotland (NRS) annual publications on Accidental deaths 2014. The most recent publication is available at <http://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/vital-events/deaths/accidental-deaths>

<sup>2</sup> All information on emergency hospital admissions are sourced from NHS Information Services Division (ISD) annual publication on Unintentional Injuries. The most recent publication is available at <http://www.isdscotland.org/Health-Topics/Emergency-Care/Publications/>

<sup>3</sup> Professor David Stone 2011, Paediatric Epidemiology and Community Health (PEACH) Unit in Yorkhill Hospital, Glasgow; part of the University of Glasgow's School of Medicine

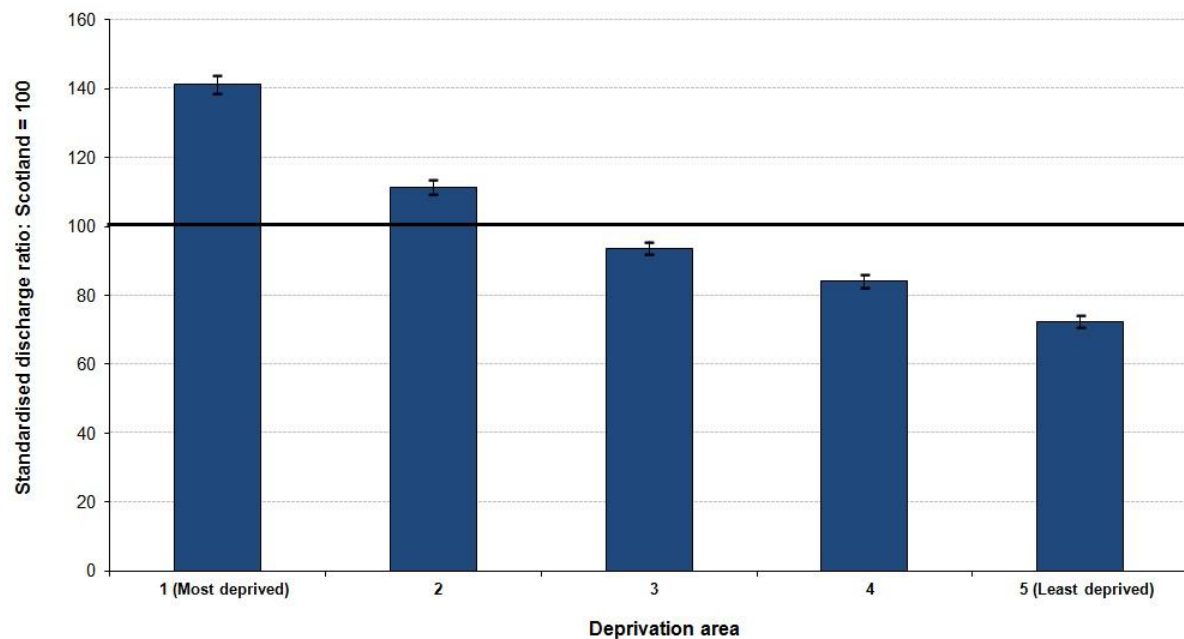


Figure 2 Emergency hospital admissions as a result of an unintentional injury, adults aged 15 and over by deprivation quintile; year ending 31 March 2016 (NHS Information Services Division Unintentional Injuries publication 2017)

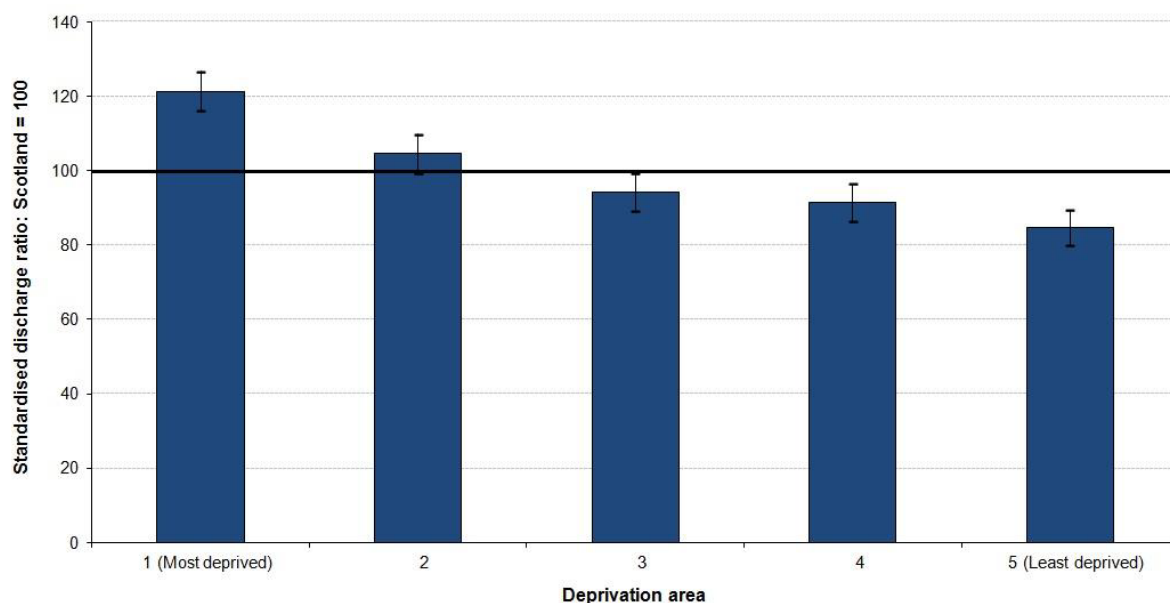


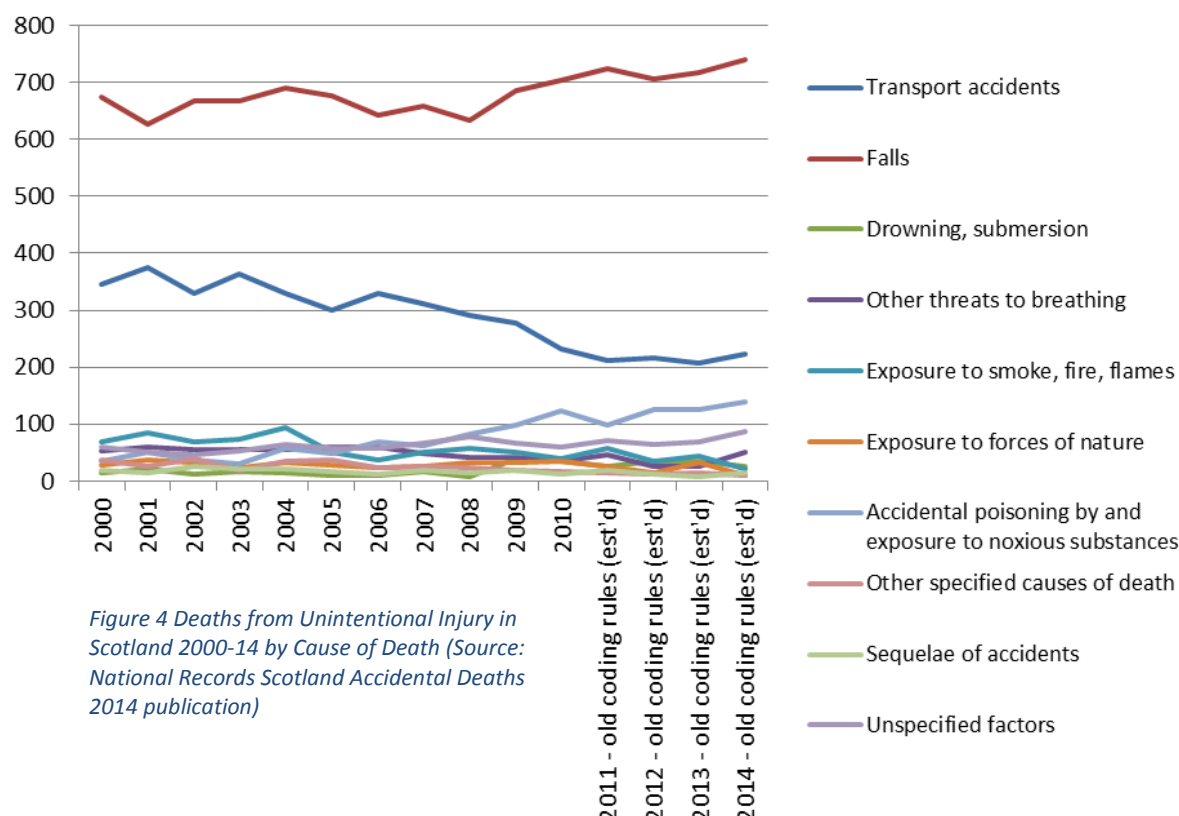
Figure 3 Emergency hospital admissions as a result of an unintentional injury, children aged under 15 by deprivation quintile; year ending 31 March 2016 (NHS Information Services Division Unintentional Injuries publication 2017)

There is also a potential for unintentional harm to become an increasing burden in Scotland due to the over-representation in deaths and injuries of older people from unintentional causes and the projected increase in this age group: the Scottish population projection indicates an 80% increase in the over 75s between 2012 and 2037 (from 1.25 million in 2012 to 1.78 million in 2037)<sup>4</sup>.

<sup>4</sup> National Records Scotland (NRS) Projected Population of Scotland (2014-based) “Estimated and projected population over 70, Scotland, mid-2014, mid-2024 and mid-2039”

Despite this, however, much unintentional harm is preventable through a variety of mechanisms and the limited improvement in death and injury rates since the 1990s present broad scope for improvements.

Reductions in road traffic collision injuries and fire fatalities (see Figure 4) are excellent examples of the potential for improvements through effective legislation, a focus on prevention and partnership working.



## 2.2 Road Safety

Road safety in Scotland is an established and well-developed policy area involving a number of partners - Scotland's Road Safety Framework to 2020 is Scotland's National road safety plan and has a high-level aim of a Vision Zero where there will be:

*"A steady reduction in the numbers of those killed and those seriously injured, with the ultimate vision of a future where no one is killed on Scotland's roads, and the injury rate is much reduced."*

The Framework takes a distinctive approach in setting commitments, priorities and challenging casualty reduction targets to 2020, which will deliver the outcome of safer road travel in Scotland for everyone. The targets cover reductions in fatalities, serious injuries and slight casualties and reductions in fatal child casualties and children seriously injured with the following results (Figure 5):

<sup>5</sup> <http://www.gov.scot/resource/doc/274654/0082190.pdf>

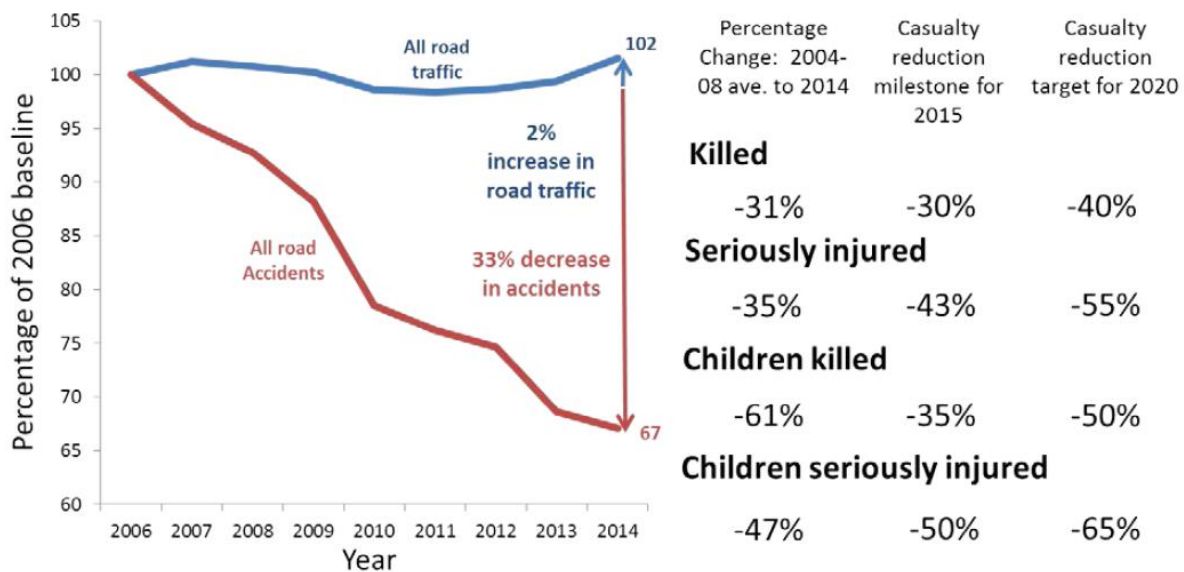


Figure 5 The Change in Traffic on the Roads and Injuries over time in Scotland (Transport Scotland)

A mid-point review (the Review) of Scotland's Road Safety Framework to 2020 (the Framework)<sup>6</sup> was undertaken in 2015 and 2016 to assess the progress that has been made to date, to identify key Priority Focus Areas, and to agree the approach to be taken in order to(2015) ensure continued delivery of road safety outcomes to 2020 and beyond. Three Priority Focus Areas for further consideration were identified - Speed and Motorcyclists; Pre-drivers, Drivers aged 17 to 25 and Older drivers; and, Cyclists and Pedestrians.

### 2.2.1 Introduction<sup>7</sup>

<sup>6</sup> Transport Scotland (2016) *Road Safety Framework Mid-Term Review*  
<http://www.transport.gov.scot/system/files/TS-%20Road%20Safety%20Framework%20-%20mid%20term%20review%20-%20March%202016.pdf>

<sup>7</sup> Taken from Transport Scotland (2015) *Reported road casualties Scotland 2014*. Key reported road casualties for 2015 were published in June 2016 however these are only provisional and will be updated in October 2016 – for this reason the confirmed 2014 data rather than provisional 2015 data have been used in the production of this strategic assessment.  
<http://www.transport.gov.scot/statistics/j397988-004.htm>

In 2014, Scotland's provisional overall road death rate of 37 per million population was the twelfth lowest of the 37 countries surveyed (counting each of Scotland, England, Wales and Northern Ireland as a separate country, but not counting the overall GB and UK figures). In most cases Scotland has one of the lowest rates per capita of fatalities, however the Scottish rate is ninth lowest for casualties aged 0-14. It was the fourteenth lowest for those aged 15-24, fifteenth lowest for those aged 25-64 and sixth lowest for 65+ (out of 34 countries).

In 2013, Scotland's pedestrian fatality rate was 7 per million population. Scotland ranked twelfth of the 37 countries for which figures are available. When the car user fatality rate is calculated on a per capita basis, Scotland has a car user fatality rate of 17 per million population: the ninth lowest of 37 countries.

In 2014, Scotland's casualty rates were 36% higher (killed), 14% lower (serious) and 34% lower (all severities) than in England and Wales. Historically these figures have all been higher in Scotland than in England and Wales.

### 2.2.2 Key Findings

Despite an increasing volume of traffic on Scotland's roads (44.8 billion vehicle kilometres travelled in 2014<sup>8</sup>, and a particular increase in journeys by bike), the overall fatal collision rate has dropped from 0.66 per 100 million vehicle

## DEMOGRAPHICS

Drivers aged 17-19 only make up 1.5% of UK licence holders, but are involved in 12% of fatal and serious crashes. 1 in 4 18-24 year old drivers (23%) crash within two years of passing their test. Casualty rate for 16-22 year old drivers is 3.18 per 1,000 population compared to 0.8-2.4 per 1,000 population in other age groups.

- This age group are also more likely to report undertaking dangerous/risky behaviours (e.g. speeding, using mobile phones) and view risk behaviours as less serious than the driving population as a whole.
- Recent research into cognitive development of young people has shown that their brains are comparably less able to perceive hazards and take evasive action

Children's casualty rates (per 1,000 head of population) increase with age: using the averages for the years 2010-2014 taken together, for the under-fives the rate was 0.62, 1.42 for those aged 5-11 and 1.97 for the 12-15 age group.

By mode of transport:

- For pedestrians injured the 5-9s, 10-16s, and over 65s have a higher discharge rate than the average for all genders and ages. The pedestrian fatality rate is highest for those aged over 70 years. The serious injury rate for boys under five is more than double than the girl's rate.
- For pedal cyclists the 5-9s, 10-16s and 45-64 age groups have a higher discharge rate than the average. Males are over-represented.
- For motorcyclists the 10-16s, 17-24s and 25-44 age groups have a higher discharge rate than the average. Males are over-represented.
- For car occupants the 10-16s, 17-24s and over 75s have a higher discharge rate than the average

<sup>8</sup>

[http://www.transportscotland.gov.uk/sites/default/files/documents/rrd\\_reports/uploaded\\_reports/j389989/j389989.pdf](http://www.transportscotland.gov.uk/sites/default/files/documents/rrd_reports/uploaded_reports/j389989/j389989.pdf) accessed 28.09.2015



kilometres in 2004 to 0.40 in 2014; the serious accident rate fell from 5.46 to 3.32; and the overall accident rate (all severities) reduced from 32.59 per 100 million vehicle kilometres to 19.67.

In 2014 there were 11,268 casualties with the proportions of fatal, serious and slight injuries shown in Figure 6 – although some are slightly increased on 2013 figures (fatalities are 16% higher and seriously injured 2% higher) all figures are lower than the 2004-08 baseline.

## Road Traffic Injuries, Scotland 2014

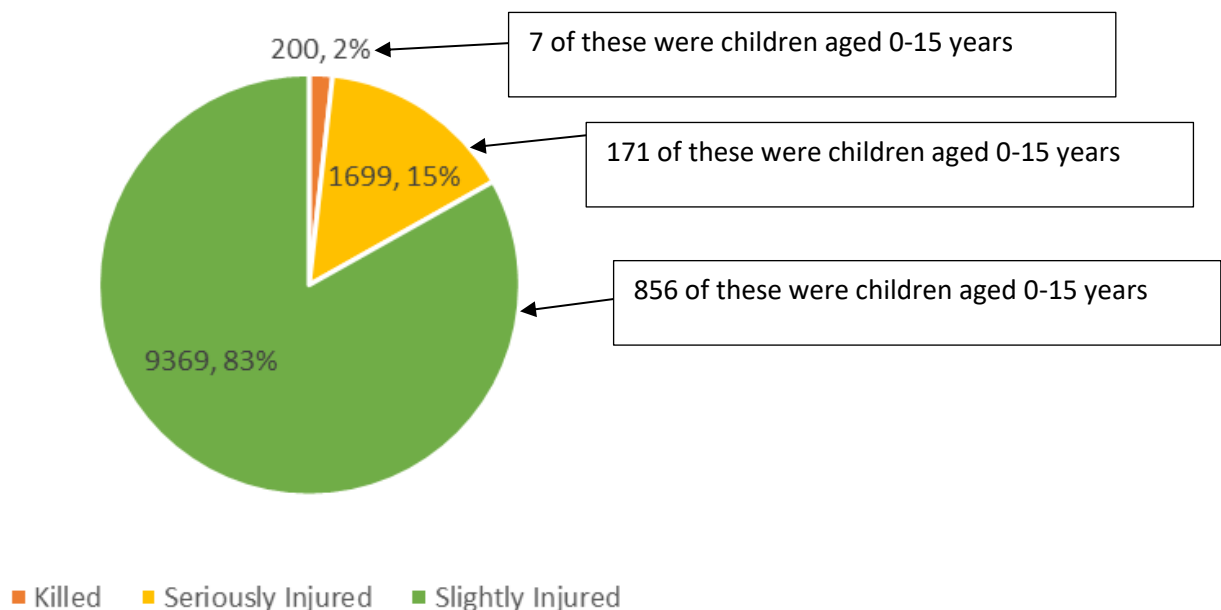


Figure 6 Road Traffic Injuries in Scotland, 2014 by Injury Severity. Using data from Transport Scotland Road Safety Statistics 2014

In 2014 29% of pedestrian casualties were children, 9% of cycle casualties were children and 6% of car user casualties were children.

In 2014-15 there were a total of 2,915 emergency hospital admissions as a result of a Road Traffic Collision (RTC), 4.7% of total admissions: 2,617 in those over 15 years of age and 298 in those aged younger than 15.

By mode of transport in 2014, there were 6,770 car passengers injured (93 fatally), 1,774 pedestrians injured (57 fatally), 888 cyclist injured (eight fatally) and 820 motorcyclists injured (30 fatally). Figure 7 shows the proportions by mode of transport for those injured and fatally – fatalities for motorcyclists and pedestrians are disproportionate to injuries.

# Road Traffic Collision (RTC) Non-Fatal Injuries (outer ring) and Fatal Injuries (inner ring) by Mode of Transport, Scotland (2014)

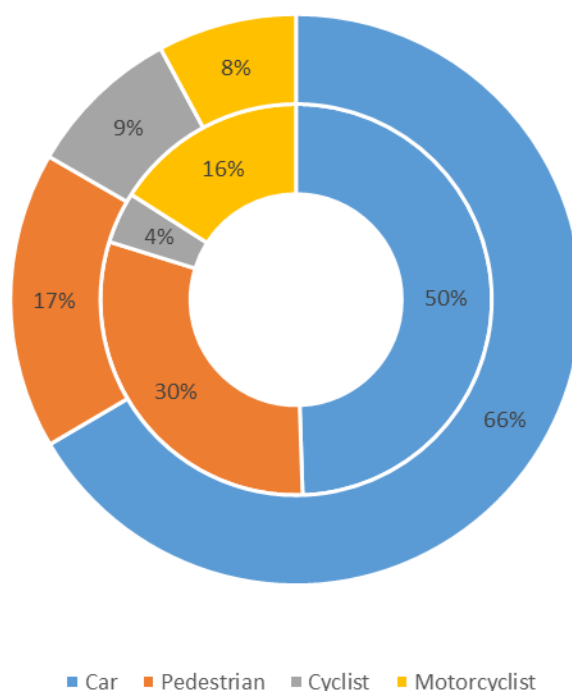


Figure 7 Road Traffic Collision Injuries by Severity and Mode of Transport in Scotland, 2014. Using data from Transport Scotland's Road Safety Statistics 2014

Figure 8 shows the KSI proportions by mode of transport for children which shows that children are most at risk of fatal or serious injury when they are pedestrians or cyclists (most likely as a result of the lack of protection afforded to them compared to being within a vehicle).

## Road Traffic Collision (RTC) by Injury Severity and Mode of Transport in Children, Scotland (2014)

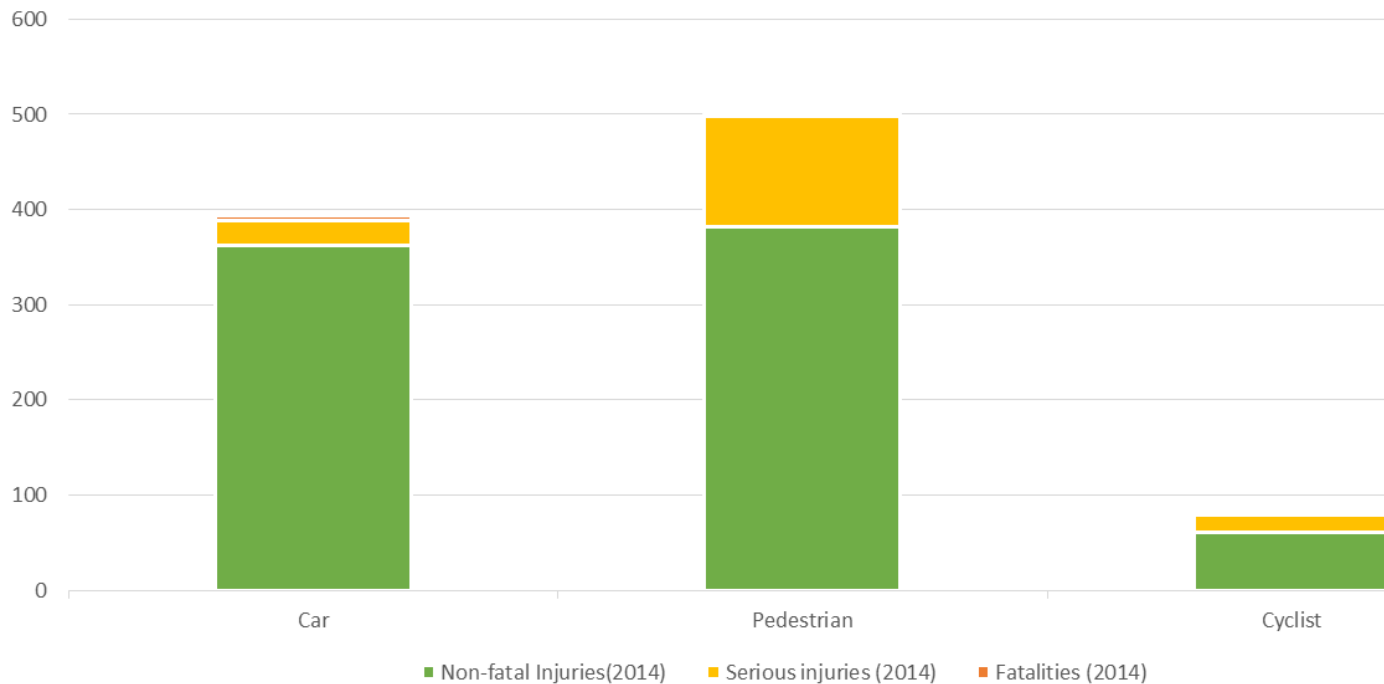


Figure 8 Child Road Traffic Collision Injuries by Injury Severity and Mode of Transport in Scotland, 2014. Using data from Transport Scotland's Road Safety Statistics 2014

Over time by mode of transport (from the 2004-08 baseline to 2014) the number of KSI for children and adults have decreased (Figure 9); however:

- The decrease has been less noticeable in pedestrian fatalities (13% reduction compared to 39% pedestrian KSI reduction)
- There has been an increase in cyclist KSI (17% increase; though this should be weighed against a 46% increase in cycle traffic during the same period).

Mode of Transport	2014 compared to 2004-08 average
Car occupants	<ul style="list-style-type: none"> <li>✓ 36% reduction in KSI</li> <li>✓ 41% child KSI reduction</li> </ul>
Pedestrians	<ul style="list-style-type: none"> <li>✓ 39% KSI reduction</li> <li>✗ 13% fatality reduction</li> <li>✓ 50% child KSI reduction</li> </ul>
Cyclists	<ul style="list-style-type: none"> <li>✗ 17% rise in casualties</li> </ul>
Motorcyclists	<ul style="list-style-type: none"> <li>✓ 22% reduction in casualties</li> <li>✗ Remain over-represented</li> </ul>

- Despite reductions in Scotland from 2004-08 averages) motorcyclists are over-represented in official crash statistics: over 400 motorcyclists (versus under 30 car drivers) are involved in an injury RTC per 100 million vehicle kilometres and motorcyclists account for 8% of all traffic casualties and 16% of all fatalities but just 4% of all registered vehicles.

Figure 9 Change over time of those Killed or Seriously Injured (KSI) in Road Traffic Collisions in Scotland by mode of transport (2014 compared to 2004-08 average). Data from Transport Scotland's Road Safety Statistics 2014

### Trends, Contributory Factors<sup>9</sup> (CFs) and Risk Behaviours and attitudes

- Roads with a speed of more than 40mph ('Non-built-up roads') accounted for two-fifths of the total number of casualties (39%: 4,421 out of 11,268), however, because speeds are higher on non-built-up roads than elsewhere they accounted for almost two thirds of those killed (65%: 129 out of 200) and for just under half of the total number of seriously injured (47%: 793 out of 1,699). There is an exception to this:
  - In 2014, 88% of pedal cycle casualties were on built-up roads but 67% of all fatalities over the last five years were on non-built up roads (usually with higher speeds).
- Driver/rider errors or reactions were reported in 67% of all reported accidents with 'failed to look properly' the most common type (involved in 30%). It is particularly seen in collisions involving older drivers and pedestrians.
  - This was followed by 'failed to judge other person's path/speed' (19%) and 'loss of control' (17% and particularly seen in younger drivers and collisions involving motorcycles). 'Slippery road' and 'careless/reckless', 'in a hurry' (both 12%) and 'poor turn/manoeuvre' (11%), were also in the top five.
  - 'Travelling too fast for the conditions' or 'excessive speed' was reported in 11% of all reported accidents and 18% of fatal accidents.
  - Impaired by alcohol was reported in 10% of collisions involving pedestrians. Anecdotal evidence has also linked alcohol consumption to an increasing number pedestrian collisions.
  - The most frequently-occurring combination of CFs is 'failed to look properly' and 'failed to judge other person's path/speed', which was recorded on 603 occasions.
- On average 73% of respondents have undertaken some kind of risk behaviour on the road<sup>10</sup>:

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<sup>9</sup> From 2005, all police forces across Great Britain reported Contributory Factors (CFs) as part of the Stats19 accident reporting form. These were developed to provide insight into why and how road accidents occur. Care should always be taken when interpreting the factors as they Reflect the reporting officer's opinion at the time of reporting the accident (or the opinion of a person whose duties include deciding which CFs should be recorded based on the officer's report) and Are based on the information which was available at that time, so may not be the result of subsequent extensive investigation (indeed, subsequent enquiries could result in the reporting officer's opinion changing).

Behaviour/Attitude	Details
Speeding	<p>57%. Of all speeding behaviours, driving 35mph in a 30mph zone, 25mph in a 20mph zone and speeding up through an amber light were the most prevalent ranging from 32-46%. Driving at 90mph on the motorway and driving too fast for country road conditions were much less frequent – 12% and 8%, respectively.</p> <p>Varies with age – for instance in 2015, more than four in 10 (44%) 17-24 year old drivers more than half (56%) admitted breaking the 60mph limit on a single carriageway rural road, compared with two in five (37%) of all drivers.</p>
Mobile phone	25% with little improvement over time. Varies with age - for instance in 2013, more than four in 10 (44%) 17-24 year old drivers admitted texting while driving, compared with three in 10 (30%) of all drivers
Seatbelts	19% improved over time. No variation with age.
Alcohol	Fluctuates 3-5%. No variation with age. Risk-taking drivers tend to show more acceptance of drink driving than non-risk takers.
Drugs	Consistently around 1%. No variation with age.

- In adult and child pedestrian casualties, deprivation is a factor for both places of deprivation and people from deprived areas – risk factors for place were high road network density, high traffic volume, A-roads and larger vehicles and for people; exposure to risk (spend more time walking in the high risk areas), young adults and alcohol. One study<sup>11</sup> contributes to the growing evidence base concerning the role of socio-economic deprivation in the occurrence of child pedestrian accidents and finds that these socio-economic factors (such as single parenthood, reliance upon income support and crime) to be of significance as well as environmental factors such as vehicular and pedestrian flows and the number of junctions in an area. The socio-economic factors were of greater note than physical factors.

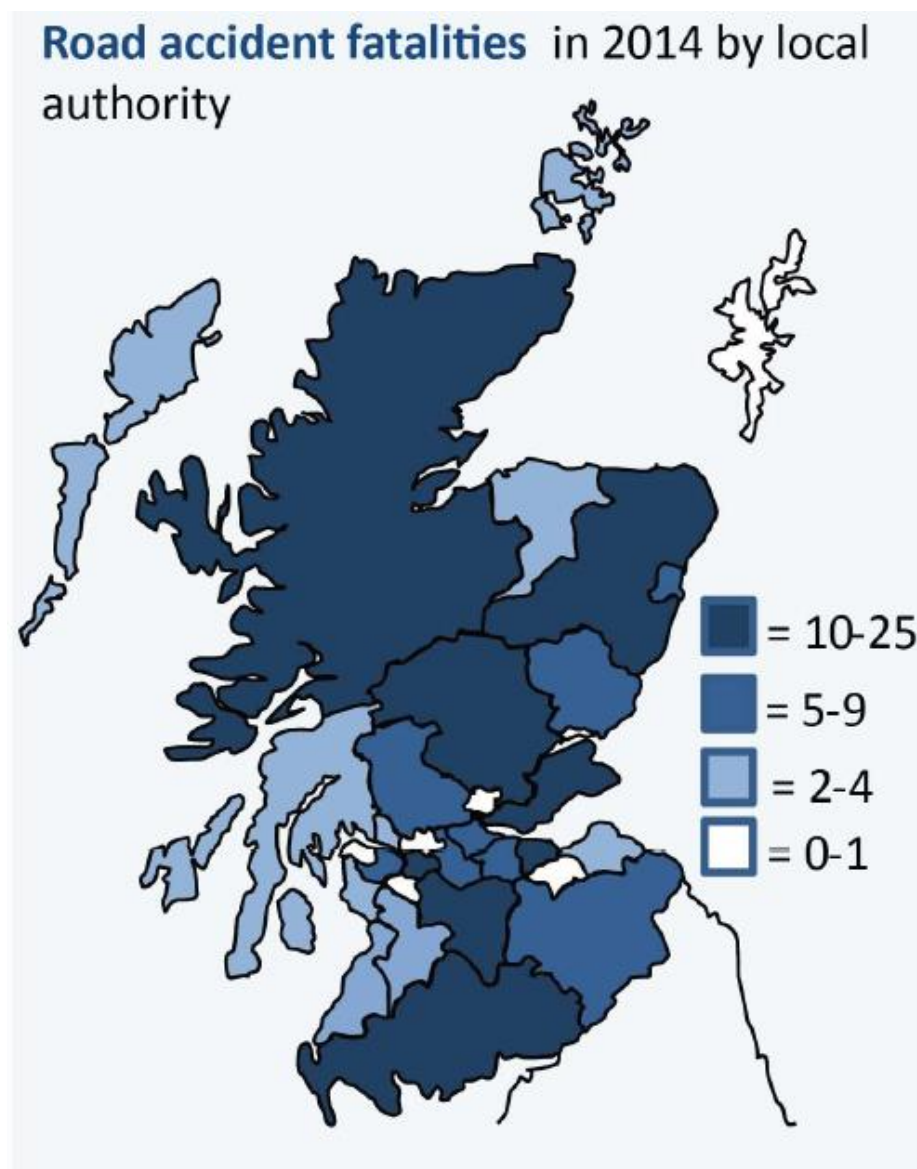
### 2.2.3 Sub-National Picture

There is little consistent localised data published for the whole of Scotland, however analysts will be able to access geo-coded data from the MAST portal operated by

<sup>10</sup> Road Safety Information Tracking Study (RITS) 2014/15 *Risk Behaviours Undertaken by Drivers in Scotland*

<sup>11</sup> Child Pedestrian casualties and deprivation – James Green, Helen Muir and Mike Maher. Accident analysis and prevention 43 (2011)

Road Safety Analysis (<http://www.roadsafetyanalysis.org/portfolio-item/mast-portal/>) or able to request data from Transport Scotland or Police Scotland. Transport Scotland have published the following map which shows road accident fatalities in 2014 by local authority (Figure 10):



*Figure 10 Fatalities As a Result of Road Collisions in 2014 by Scottish Local Authority Area (Transport Scotland)*

### 3. SUGGESTED ACTIONS

The following have been taken from the Summary document and a number of other sources (detailed where appropriate) for national and local action to prevent unintentional harm in Scotland.

Approach / Source	National Role	Local Role
Findings from the strategic assessment should be used to inform approaches to preventing unintentional harm.	The correlation between child developmental stage and nature of injury sustained highlights the importance of designing injury prevention interventions that are appropriate for specific stages of development in children.	
	The link between deprivation and unintentional harm highlights the importance of considering and explicitly mentioning unintentional harm when developing strategies to tackle inequalities and poverty etc.	
	The link between children and young people and unintentional harm highlights the importance of considering and explicitly mentioning unintentional harm when looking at policy and prevention in the areas of child health and well-being, early years etc.	
	The link between older people and unintentional harm highlights the importance of considering and mentioning unintentional harm when looking at policy and prevention in the areas of older people, health and social care integration and ageing well.	
	What we know about how young people view prevention of unintentional injuries highlights the importance of targeting policies and interventions at those most at risk and most resistant to change.	
	What we know about young people with behavioural difficulties being more at risk of unintentional harm should inform policy and prevention around education and support for these children and families.	
The European Child Safety Alliance report cards published in 2012 <sup>12</sup> assessed Scotland as performing well on particular aspects of child and adolescent safety (particularly road safety issues) and poorly on others (home safety including falls, poisonings, burns and scalds, choking/strangulation and drowning are mentioned specifically); though it recognises that	<ul style="list-style-type: none"> <li>Enhancing <b>pedestrian safety</b> by introducing laws placing the burden of proof on the vehicle driver in crashes involving a child pedestrian and supporting efforts to modify European vehicle design standards to reduce risk of injury to children (e.g., pedestrian friendly bumper heights)</li> <li>Enhancing <b>passenger/driver safety</b> by introducing national laws requiring that children remain seated rear facing in cars until age 4 years and that children and adolescents be seated in the back seat of a motorised vehicle until 13 years of age</li> <li>Introducing graduated licensing for newly licensed drivers</li> <li>Enhancing <b>cycling safety</b> by the introduction of a law requiring bicycle helmet use while cycling for all ages</li> </ul>	

<sup>12</sup> <http://www.childsafetyeurope.org/reportcards/downloads.html>

Approach / Source	National Role	Local Role
progress of child injury prevention may be limited due to current levels of legislative powers.		
Strategies to prevent unintentional harm	Evidence shows that having a strategy to prevent unintentional harm can deliver greater improvements in unintentional harm than the absence of such a strategy.	
Children and Young People	<ul style="list-style-type: none"> <li>• There are real opportunities to inform and change individual life experience at early stage through education and awareness raising – this raises important questions about capacity and resources.</li> </ul>	
Data	<ul style="list-style-type: none"> <li>• Further research is required to investigate the mechanism of unintentional harm, its risk factors and protective factors in order that appropriate preventive measures can be put in place. As this kind of data is not yet collected this may require a separate piece of work, for example MSc or PhD student, NHS analysts or local partnership analysts; or other commissioned work.</li> <li>• We need to understand what works and why and adapt these principles.</li> <li>• Data will help to identify people most at risk, build predictive models to scope future demands, benchmark performance and understand costs and benefits of approaches.</li> <li>• Linking data sets at a national level will assist to provide a clear picture.</li> <li>• There is a need for more on understanding the psychological component of unintentional harm.</li> <li>• More exploration of the reasons for differences in unintentional harm between the most and least deprived communities would be a step forward in understanding this issue and aid in the development of preventative interventions.</li> <li>• Discussions with various colleagues with experience in co-production, asset-based and community development work have made it clear</li> </ul>	Local strategic assessments of unintentional harm would support local prioritisation and activity.



Approach / Source	National Role	Local Role
	<p>that there may be some mileage in a) trialling community-based approaches as seen in Phase 1 of BSC as part of Phase 2 and/or b) doing some further research in places where this type of work is already happening (for example place-based projects or Phase 1 Places) to ascertain if there have been / are / could be some unintended positive outcomes around unintentional injury.</p> <ul style="list-style-type: none"> <li>• Organisations need to improve their recording of unintentional harm as it is likely the figures in this document are underreported. Further breakdowns of those unintentional harm incidents classed as 'other' would be valuable.</li> <li>• A horizon scanning exercise assessing longer-term risks and opportunities relating to unintentional harm in Scotland should be undertaken in order than opportunities for mitigating risk can be seized.</li> </ul>	
Engagement	<ul style="list-style-type: none"> <li>• Direct engagement with local Community Safety Partnerships (CSPs) and Community Planning Partnerships (CPPs) and other networks and partners (for example the community planning network, SOLACE and COSLA, Scottish Community Safety Network (SCSN), Royal Society for the Prevention of Accidents (RoSPA), Improvement Service) to support the development of local analysis and seek to influence the adoption of unintentional harm as a priority issue within the Local Outcome Improvement Plan (LOIP) or community safety strategy.</li> </ul>	

## 4. LINKS TO FURTHER READING AND SUPPORT

### 5.1 Data and Intelligence

Below are some of the key sources of data about unintentional harm in Scotland. Additional links can be found in Sections 5.2 and 5.3 and through the references in the summary document and full strategic assessment.

Nature of the data	Source	Nature of the data	Level to which it is available	Frequency published
<b>Mortality data - deaths</b>	<b>National Records for Scotland and Information Services Division (ISD) of NHS</b>	Includes information on the number of deaths, cause of death, gender and age breakdown & location data for some	All Scotland, Health Board and Local Authority (the latter for only some types of the data)	Annually (Autumn by NRS and Spring by ISD)
<b>Emergency hospital admission data</b>	<b>NHS ISD Unintentional Injuries</b>	Includes information on the number of hospitalisations, injury type and cause and deprivation, age and gender breakdowns	All Scotland, Health Board and Local Authority (the latter for only some types of the data). Postcode data available on request	Annually (Spring)
<b>A&amp;E attendance data</b>	<b>Some healthboards</b>	Varies but can include type of injury (e.g. fall/poisoning/road traffic etc), day and time of arrival, age and gender breakdowns	Only for some healthboards - datamart review underway which should ensure this is available across Scotland.	Bespoke request
<b>Incident data – all</b>	<b>Scottish Health Survey</b>	Includes information on the prevalence of incidents, deprivation data, type of injury, gender and age breakdowns and treatment. Also contains information on mental health and wellbeing.	All Scotland. Health board every 4 years	Every two years (September)
<b>Incident data – CYP</b>	<b>Health Behaviour in School-Aged Children</b>	Includes information on the prevalence of incidents, deprivation data, type of injury (most severe injury only), gender and age breakdowns.	All Scotland	Every four years

Nature of the data	Source	Nature of the data	Level to which it is available	Frequency published
<b>Incident data – all</b>	<b>Scottish Ambulance Service</b>	Includes information on the number of calls, temporal data, patient age and gender, type of injury and many other fields	All Scotland, local authority area (and lower as some data is geo-coded)	Bespoke request
<b>Incident data – road traffic</b>	<b>Road Safety Scotland and Transport Scotland</b>	Includes information on the road type, injury type and severity, age and gender of people involved, contributory factors etc. Attitudes and behavioural studies available as part of Road safety Information Tracking Study (RITS).	All Scotland	Annually
	<b>MAST</b>	In addition to hospitalisations and deaths as a result of a transport collision, MAST has data for all transport collisions reported to the Police. This includes information on the road type, injury type and severity, age and gender of people involved, contributory factors etc. Deprivation and MOSAIC codes are also available.	All Scotland and local authority. For some analysts sub-geographies are available as data is geo-coded.	
<b>Incident data – road traffic involving SFRS</b>	<b>Scottish Fire and Rescue Service (SFRS)</b>	Includes road traffic collisions where SFRS have been involved. Temporal data, age, gender, injury and treatment, cause of fire and contributory factors all available	All Scotland and local authority. For some analysts sub-geographies are available as data is geo-coded.	Annually (and bespoke for some analysts and under FOI for more information)
<b>Population data</b>	<b>Scottish Neighbourhood Statistics (SNS)</b>	Vast array of population data including population data by datazone	Datazones by child, older people and deprivation available on request.	

Nature of the data	Source	Nature of the data	Level to which it is available	Frequency published
Psychological Unintentional harm	<b>Scottish Health Survey</b>  <b>NHS Health Scotland</b>  <b>Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS)</b>	Vast array of information on mental health and wellbeing.	Various	SHeS annually  NHS Health Scotland various  SALSUS every two years
Community indicators	<b>Scottish Household Survey</b>  <b>Scottish Social Attitudes survey</b>	Community cohesion and support indicators which could provide valuable context	Various	Annually

## 5.2 Organisations

The organisations listed below are good sources of information for policy and guidance on unintentional harm.

- Building Safer Communities (BSC) Programme <http://www.bsc.scot/>
- Child Accident Prevention Trust (CAPT) <http://www.capt.org.uk/>
- Cross-party group on Accident Prevention and Safety Awareness <http://www.parliament.scot/msps/100957.aspx>
- European Child Safety Alliance <http://www.childsafetyeurope.org/>
- Go well Glasgow <http://www.gowellonline.com/>
- Growing Up in Scotland <http://growingupinscotland.org.uk/>
- Road Safety Scotland <http://www.roadsafetyscotland.org.uk/>
- The Royal Society for the Prevention of Accidents (RoSPA) <http://www.rospace.com/> and <http://www.rospace.com/about/around-the-uk/scotland/>
- Safety policy leads group within Scottish Government (contact Michelle Harriy at the Community Safety Unit for more information)
- Scottish Community Safety Network <http://www.safercommunitiesscotland.org/>
- Scottish Fire and Rescue Service <http://www.firescotland.gov.uk/your-safety.aspx>
- Transport Research Institute (TRI) <http://www.tri.napier.ac.uk/>
- Transport Scotland <http://www.transport.gov.scot/>
- World Health Organisation (WHO) [http://www.who.int/violence\\_injury\\_prevention/en/](http://www.who.int/violence_injury_prevention/en/)

### 5.3 Other reading

This list is not exhaustive, however provides some interesting additional reading to be used in conjunction with products from the organisations mentioned in Section 5.2 and the data sources mentioned in Section 5.1.

- A Khambalia A, et al (2006) *Risk factors for unintentional injuries due to falls in children aged 0–6 years: a systematic review* Journal of Injury Prevention. 2006 Dec; 12(6): 378–381.
- Bradshaw, P. et al (2013) *Growing Up in Scotland: Birth Cohort 2 Results from the first year* Edinburgh: Scottish Government
- Cree C, Kay A, Steward J (2012) *The economic and social cost of illiteracy: a snapshot of illiteracy in a global context*. World Literacy Foundation.
- Currie, C. et al (2015) *Health Behaviour in School-aged Children: World Health Organization Collaborative Cross-National Study (HBSC): findings from the 2014 HBSC survey in Scotland*. Child and Adolescent Health Research Unit (CAHRU), University of St Andrews
- Fauth R, and Ellis A (2010) *Reducing Injuries in Childhood, a research review*. National Children’s Bureau research
- Green J, Muir H, Maher M (2011) *Child Pedestrian casualties and deprivation*. Accident analysis and prevention
- Klassen T P, et al (2010) *Community-Based Injury Prevention Interventions*. The Future of Children
- MacInnes, K and Stone, D H (2008) *Stages of development and injury: An epidemiological survey of young children presenting to an emergency department* BMC Public Health.
- NHS Greater Glasgow and Clyde (2010) *Preventing Unintentional Injuries to Children in the NHS Greater Glasgow & Clyde Area*.
- Pickett, W. et al (2006) *Associations between risk behavior and injury and the protective roles of social environments: an analysis of 7235 Canadian school children* Journal of Injury Prevention
- Royal College of Paediatrics and child health, National Children’s Bureau and British Association for child and adolescent public health (2014) *“Why children die: death in infants, children and young people in the UK”*
- Scottish Government Child Death Review Working Group (2014) *Child Death Review Report*

- Stone, D H and Pearson J, (2009) *Unintentional injury prevention: what can paediatricians do?* British Medical Journal
- The Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI-Centre) (2007) *Accidental injury, risk-taking behaviour and the social circumstances in which young people (aged 12-24) live: a systematic review*