

# UNINTENTIONAL HARM THEMATIC PAPER

## Outdoor Safety



Building Safer Communities

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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:  
 which provides geographical information at a Local Authority level for particular aspects of unintentional harm.

## 2. KEY POINTS

*Hannah to insert key findings from the strategic assessment and point to where more information can be found on each of the points in the full assessment. Include local authority data if relevant and not too lengthy.*

### 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.

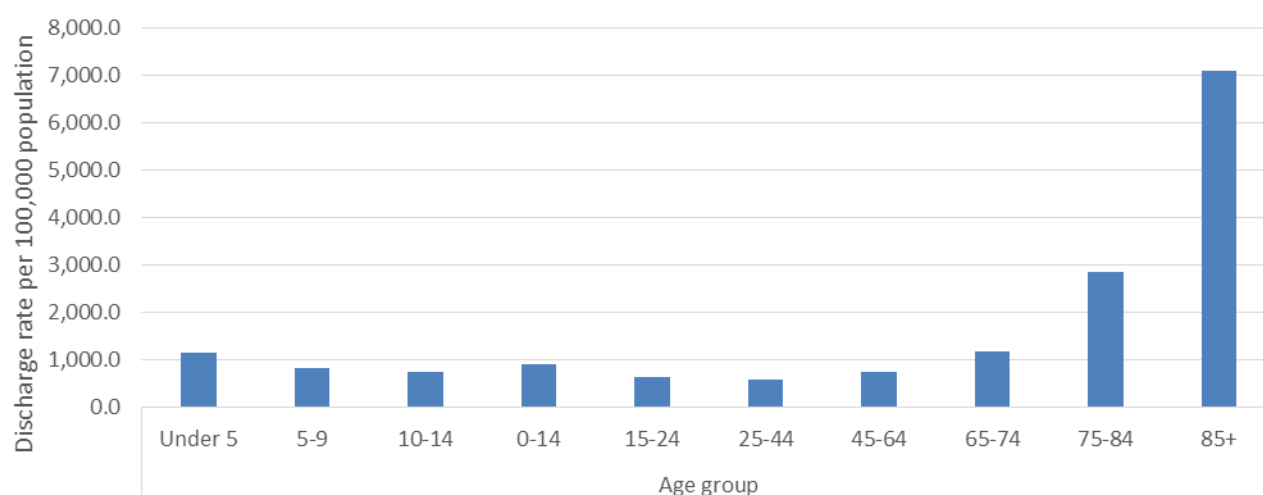


Figure 1 Emergency hospital admissions as a result of an unintentional injury by age group, year ending 31 March 2015 (Source: NHS Information Services Division Unintentional Injuries publication, 2015)

<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

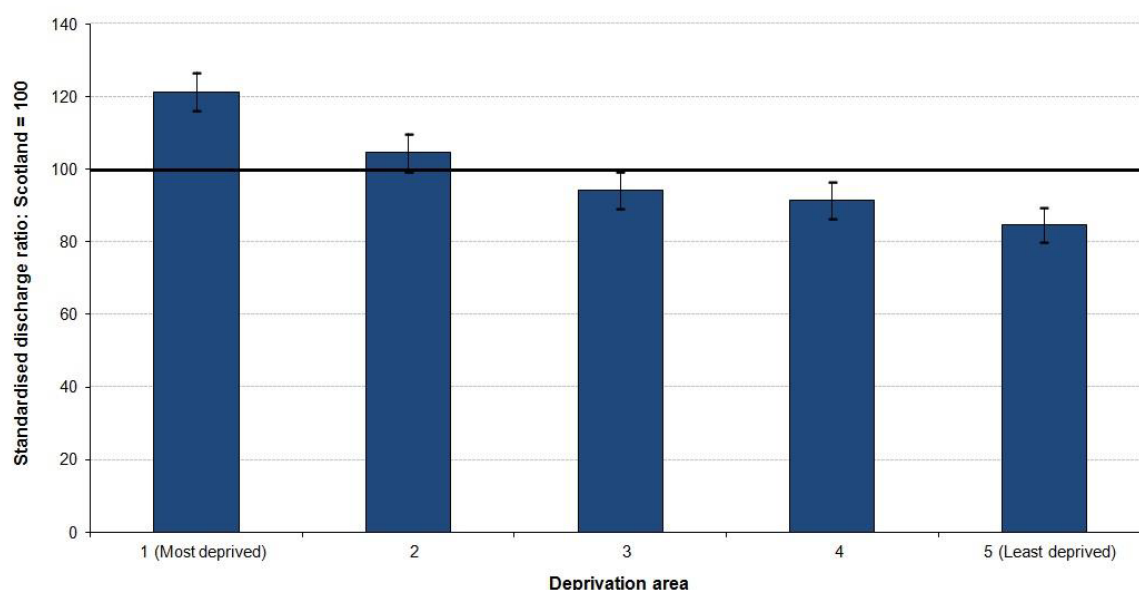


Figure 2 Emergency hospital admissions as a result of an unintentional injury, adults aged 15 and over by deprivation quintile; year ending 31 March 2016 (NHS Information Services Division Unintentional Injuries publication 2017)

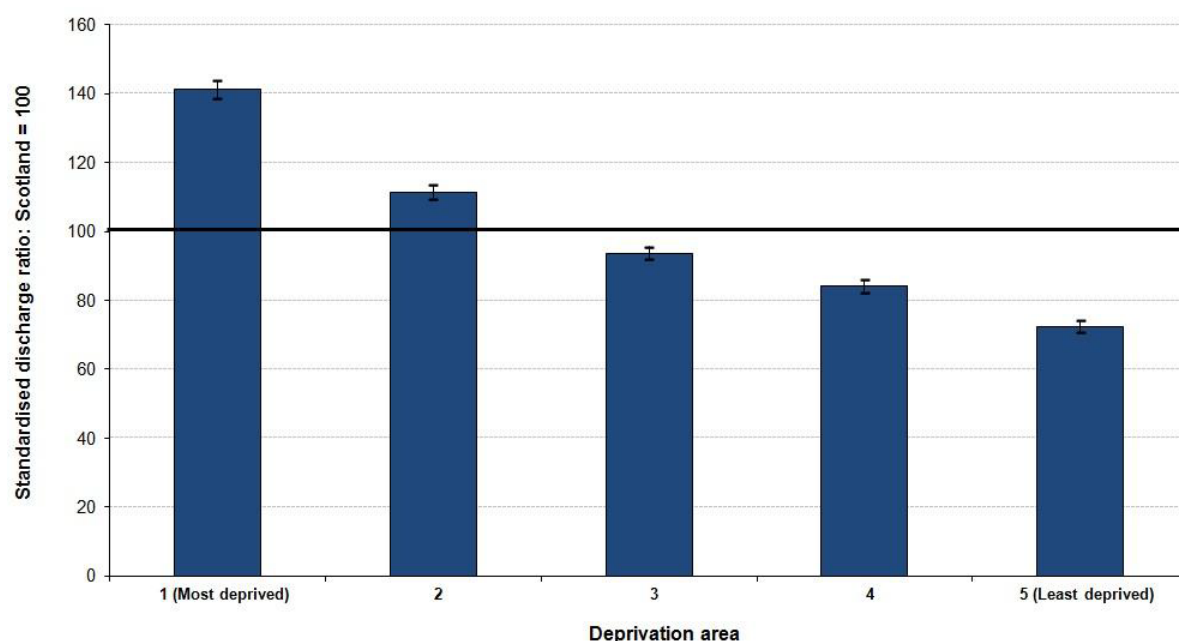


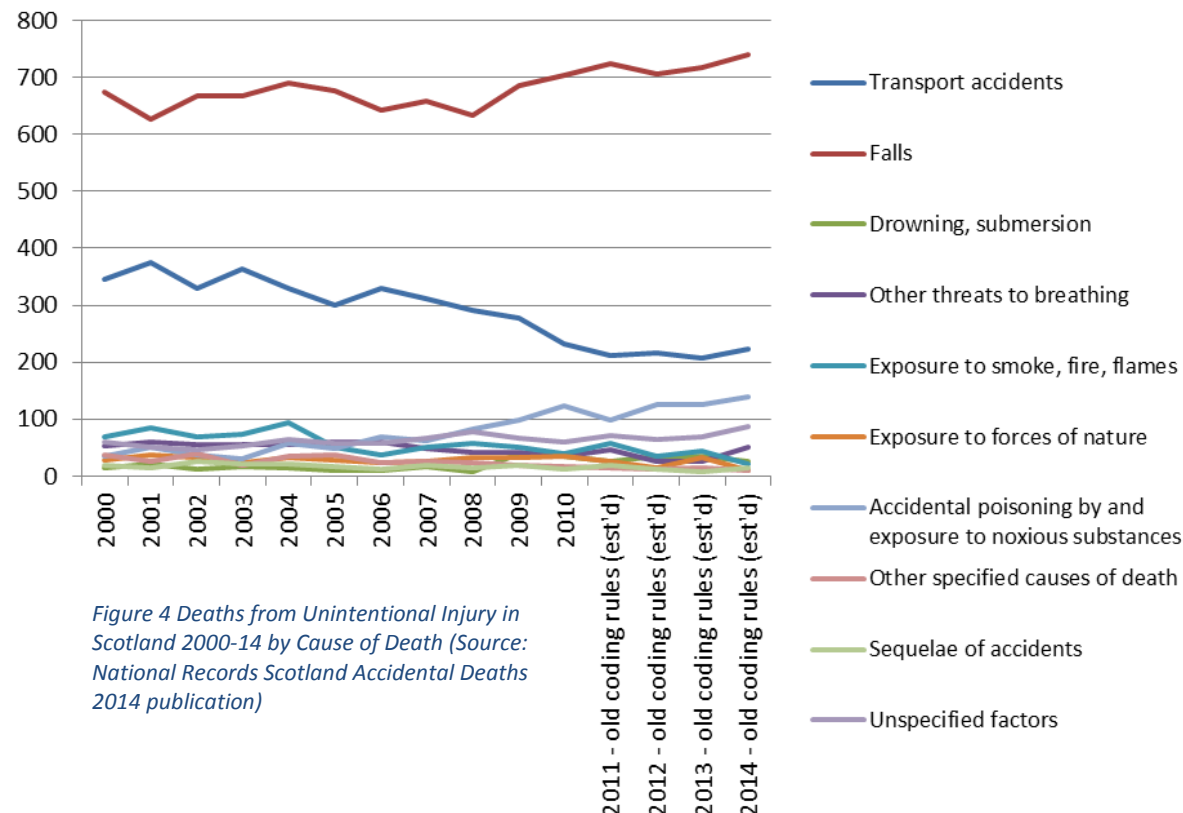
Figure 3 Emergency hospital admissions as a result of an unintentional injury, children aged under 15 by deprivation quintile; year ending 31 March 2016 (NHS Information Services Division Unintentional Injuries publication 2017)

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 Outdoor Safety

### 2.2.1 Introduction

Unfortunately there isn't consistent injury surveillance for unintentional harm in outdoor spaces – certain bodies (e.g. for some activities) must collate information but not all, and as a result the data provided in this section is only the data that is available – there may be much other unintentional harm that occurs within outdoor spaces of which we are unaware or can only be found within the larger data sources e.g. mortality data from NRS, emergency hospital admission data from ISD etc. where detailed analysis for 'outdoor safety' alone cannot be undertaken.

For the purposes of this document outdoor safety includes air safety, injuries on Forestry Commission land, water safety, mountain rescue and safety during sports and play.

Overall, location data for unintentional harm is poorly collected, and there is no information captured during injury surveillance which indicates what the injured party was doing at the time the injury was sustained. From what little data there is available there could be as little as 15% but as much as a third of unintentional harm that takes place in the outside environment (not including the road/transport environment), almost all of which is minor<sup>5</sup>. The proportion that occurs in a public place is lowest in the youngest and oldest age groups<sup>6</sup>.

### 2.2.2 Key Findings

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<sup>5</sup> Scottish Health Survey (2009/2011) *Topic Report - Accidents*

<sup>6</sup> Scottish Health Survey (2009/2011) *Topic Report - Accidents*

- A 2014 report by RoSPA into the management of water safety by Local Authorities<sup>7</sup>, showed managing water safety ranked as being very/quite important in relation to other service demands among 70% of authorities, however less than half had a policy level commitment on the issue. Overall, there is a mixed picture; several authorities were addressing water safety, but there was little in the way of uniformity or issues considered strategically.
- Relative to population, Wales and Scotland both carry a disproportionate burden: compared to the UK, Scotland has 8% of the population but 15% of the deaths by drowning. The reasons for this are likely to be complex, however around 90% of standing freshwater in the UK is in Scotland with more than 27,000 lochs and more than 120,000km of rivers and streams. Mainland Scotland has 6,160 miles (9,910 km) of coastline, and including the numerous islands, this increases to some 10,250 miles (16,500 km) - this is 52% of the UK coastline. The sheer volume of water combined with high levels of coastal tourism in addition to higher levels of non-recreational water use (e.g. fishing) could all impact upon deaths by drowning.
- From NRS there were 34 deaths from drowning/submersion in 2013 – this is one type of cause of death that has increased over time (from 2000-04 average of 16 to 34 2009-13 average) with 21 deaths on average from drowning or submersion per year; albeit it remains a low proportion of all deaths as a result of physical unintentional harm (2.6% for 2009-13 average figure). WAID puts the deaths as a result of drowning figure at 57 for 2013<sup>8</sup>
- Accidental drownings happen throughout every stage of life and the circumstances can often reflect every day activities. The UK Drowning Prevention Strategy has a number of good examples of this:
  - Young children are vulnerable when immobile and reliant on constant supervision to remain safe (e.g. drownings in the bath); this continues when they become mobile and can

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<sup>7</sup> <http://www.rospace.com/rospaweb/docs/advice-services/leisure-safety/approaches-to-managing-water-safety.pdf> Accessed July 2016.

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<sup>8</sup> WAID figures are deaths by accidental/natural causes only – they do not include suicides or crimes. Note that WAID does not cover water fatalities relating to work – this will be included in time. NRS figures are deaths caused by drowning/submersion categorised as 'accidental deaths'.



- stray further away from parental supervision but are unaware to risks to their safety
  - Adolescents are at risk through a combination of thrill-seeking behaviours but also cognitive development (particularly in males) which means risk perception is not as advanced as an adults'.
  - Middle-aged adults are at risk due to increased participation in recreational activities, as a result of more leisure time and available income.
  - Older people are more commonly affected by underlying health conditions which can lead to drowning incidents.
- For all age groups males in Scotland are much more likely to be victim of a drowning than females – almost three times as likely in particular age groups and six times more likely for all age groups taken together – and anecdotal evidence links alcohol consumption with an increased risk of drowning particularly with young men. There are two small peaks for drowning deaths at particular age groups in Scotland: 15-25 years and 40-55 years.
- Coast/shore/beach account for 37% of all drownings, 24% in rivers and 12% at sea in Scotland. Very few occur in a bath/Jacuzzi or other domestic setting or in swimming pools.
  - In almost half of all fatal incidents in the UK (44%) the person had no intention of entering the water and were taking part in everyday activities such as walking.
  - Recreational activity on or near the water accounts for just under half of fatal incidents (45%), but when participation numbers are taken into account most activities present a low risk; although participation in recreational activity in Scotland is increasing and given the amount of bodies of water present may account for an increase in drownings seen in the NRS data.
- The UK Drowning Prevention Strategy notes the following behaviour traits which all increase the risk of drowning or being involved in an incident associated with the water:
  - Lack of knowledge and underestimating risks
  - Lack of competence

- Ill-informed thrill seeking – peer pressure could have a role to play in this
- Poor supervision of children
- Other factors such as alcohol which has been a factor in 103 fatal coastal incidents from 2010-2013 in the UK. In adults of working age, alcohol was a suspected or confirmed factor in about 1 in 3 drownings in the UK
- It is estimated from UK figures that 86 people might have survived (2010-2013) if they had worn a lifejacket or buoyancy aid.
- On average (based on 2010-2014 incidents from MCGA) there are 4142 incidents per

year in Scottish coastal waters which includes recreational and commercial incidents (approximately 70% are incidents involving recreational vessels).

- Although older data, the three year averages for 2004-06 show 2,175 coastguard rescue team callouts assisting a total of 12,608 people every year. 1,130 people were rescued on average each year
- In 2015 the RNLI, rescued 7,973 people and saved 348 lives in 2015.
- On average (2009-10 to 2014-15) SFRS attend 155 water rescues per year.

#### *Forestry Commission*

- According to data provided by the Forestry Commission there were 209 injuries to members of

the public in Scotland (from a total of 9.1 million visitors)

This is likely to be an under-estimate as the Forestry Commission in Scotland have a much more limited

injury surveillance programme than in England and Wales – a study of injuries to mountain bikers between 2007 and 2008 at Glentress in the Scottish Borders recorded 202 injuries alone. To provide a better picture of what unintentional harm of this nature may look like in Scotland a brief analysis of data for the whole UK has been undertaken as a snapshot:

- On average there are 64 reports of injury made to the Forestry Commission per month across the UK (based on a 4 year average 2011/12 to 2014-15) – as expected there is seasonal variation which reflects the variable popularity of outdoor activities from January to December.
- Of those reported, most were injuries to adult males, although 30 children were injured too. Activities being undertaken are either walking, being in the recreational area or biking.
- For members of public two thirds required first aid, and 70% of all injuries were taken to hospital (this is likely to be due to there being no requirement for members of public to report injuries – compared to staff - and so only the most severe will actually come to the attention of the Forestry Commission).
- Most injuries involved slipping/tripping/falling on the same level and some involved being hit by a moving object or hitting something fixed/stationary. Members of the public also had cycling accidents, falls from a height, animal injuries.
- For members of the public cuts/lacerations/grazing are the most prevalent type of injury sustained (Figure 96); there are also a number of fractures.

### *Mountain Rescue*

- Since the mid-2000s there have been around 550-580 incidents per year; with mountaineering accounting for around 400 of these.
- Just over 50% of rescues involve searching for people who are lost or overdue. In most cases the people involved are not injured. Research papers and recent press releases from rescue organisations highlight two particular causes of

preventable incidents, particularly in those less experienced - poor navigation and poor planning<sup>9</sup>.

- In 2012 there were 543 mountain rescues carried in out Scotland – hillwalking and illness account for a large proportion of these; and leg/ankle injuries are most common. For non-mountaineering activities, most are classed as 'other' but missing and self-harm concerns also account for a fair proportion (around ¼ and 10%, respectively). Other sports such as running or mountain biking account for a small proportion.
- Similar to a number of types of unintentional harm, irrespective of age men are more at risk than women – this could be due higher participation in activities which are riskier or perhaps due to a greater tendency to take risks. The age group 21-30 appears to be a higher risk group.
- Almost two thirds (62%) of casualties are considered to be experienced, a finding which goes against the popular belief that people who are rescued are typically inexperienced<sup>10</sup>. This could be due to

experienced people participating in higher risk activities, for example ice-climbing or being more inclined to participate in activities despite poorer conditions that may put less experienced people off.

- The weather variable that accompanies more incidents than any other is wind - nearly half of all incidents take place on windy days which can compromise accurate navigation and cause a loss of balance. Although in almost a quarter of all incidents there is no wind, rain, snow or cloud poor understanding of weather at the top of the highest mountains/hills can be a contributory factor.

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<sup>9</sup> Anderson, 1194 and Sharp, 2001b; 2002

<sup>10</sup> <http://www.mountainrescuescotland.org/wp-content/uploads/2012/04/Scottish-Mountain-Incidents-Report-1996-2005.pdf> accessed 14.09.2015

## Sport and Play

- Scotland's play strategy 2013 highlights that play is an important part of childhood development; but there is a clear balance to be struck

between participating in

0-3	4-7	8-11	12-15	16-24	25-34	35-44	45-54	55-64	Total
2%	6%	21%	24%	21%	17%	16%	17%	13%	14-15%

sporting, outdoor or play activities for the developmental and well-being benefits whilst reducing the risk of serious injury.

- The Scottish Household Survey (SHS) shows that almost nine-in-ten households (88%) with young children have access to some form of play areas within their neighbourhood.
- The majority of young people (53%) take part in sports or sporting activity whether played competitively or not<sup>11</sup>.
- Injury sustained whilst participating in sport is not routinely recorded by ISD or NRS for deaths or emergency admissions, although the A&E attendance data from a health board indicates that it is an issue (albeit sports injuries do not tend to be serious compared to almost all other incident types).

- Injury sustained whilst engaged in sports/play is asked of Scottish Health Survey participants:

- Although attendances as a result of sports injuries account for 24% of all A&E attendances this is only for a narrow age group: 11-24 year olds and to a lesser extent the 25-29 year olds. Sports injuries decrease gradually from 30 years old to 50 years old and are barely perceptible from sixty onwards. More analysis is required into sports injuries but younger people are much more susceptible due to their youth and to a lesser extent due the higher levels of frequent participation and the types and nature of sport played.
- Although attendances as a result of sports injuries account for 24% of all A&E attendances this is

<sup>11</sup> From latest Scottish Household Survey

only for a narrow age group: 11-24 year olds and to a lesser extent the 25-29 year olds. Sports injuries decrease gradually from 30 years old to 50 years old and are barely perceptible from sixty onwards.

- Evidence from a systematic review of 15 studies<sup>12</sup> found that injuries needing medical attention occurred between 27.5 to 129.8 times per 1,000 match hours. The highest incidence of concussion was 3.3 per 1,000 playing hours. The wide variation reflects the variation in data collection and in participation levels.
  - Rugby, football, netball, cycling, basketball, swimming/diving/lifesaving all rank highly but when activity rates are taken into account, rugby is by a long way the most dangerous mass-participation sport. Stick-based sports, such as hockey, also have high injury rates, and eye injuries are more common in racquet sports.

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<sup>12</sup> <http://www.childreninwales.org.uk/wp-content/uploads/2014/05/Sport-related-injury-in-children-and-adolescents-in-the-UK-what-do-we-know.pdf> accessed 21.08.2015

### *Air Safety*

- On average (based on 2011-14 ground and airspace data) there are around 1722 reports made to the Civil Aviation Authority (CAA) – most of these occur within airspace rather than on the ground. 2% (24 per year) are “accidents” with only five 'serious incidents' per year.

*The following section applies to non-public transport operations **in the UK** which includes aircraft not engaged in ambulance, cargo, passenger, police support, or search and rescue operations.*

#### Large Aeroplanes

There were 21 reportable accidents (typically ground collisions) and 12 serious incidents involving large non-public transport aeroplanes in the period 1998-2007.

There were approximately 6,700 occurrences reported to MORS involving large UK non-public transport aeroplanes in the period 1998-2007, 0.5% of which were considered to be high severity. No utilisation data are available for UK non-public transport large aeroplane operations; therefore rates of accident, serious incident and occurrence cannot be calculated.

#### Small Aeroplanes

The overall reportable accident rate for small conventional aeroplane non-public

transport in the period 1998-2007 has been estimated to be 179.0 per million hours and the fatal accident rate has been estimated to be 11.7 per million hours (approximately 1500 reportable accidents and 96 fatal accidents).

The fatal rate is lower than that for small helicopters but the reportable accident rate is higher. Both rates are lower than those for small aeroplanes involved in public transport, though the aircraft may not be directly comparable.

#### Small Helicopters

The overall reportable accident rate between 1998 and 2007 has been estimated to be 127.4 per million hours (213 reportable accidents). The corresponding fatal accident rate has been estimated to be 14.4 per million hours (24 fatal accidents).

The fatal rate is higher than that for small conventional aeroplanes but the reportable accident rate is lower. Both rates are lower than those for small aeroplanes involved in public transport, though the aircraft may not be directly comparable.

#### Airships, balloons, gliders and microlights

The fatal accident rate per million hours for gyroplanes in the period 1998-2007 was some 18 times greater than the combined average for airships, balloons, gliders and microlights.

- Between 1998 and 2007, there was only one reportable accident involving a UK registered airship and there were no injuries. In the same period, there were 21 reportable accidents involving UK non-public transport balloons resulting in 10 serious and 10 minor injuries.
- Between 1st October 1997 and 30th September 2007, there were 436 reportable accidents involving UK gliders, 36 of which resulted in fatalities in addition to two third party injuries.
- In the period 1998-2007, there were 25 reportable accidents involving UK-registered gyroplanes, of which eight were fatal, resulting in nine fatalities.
- During the same period, there were 320 reportable accidents involving UK-registered microlights, 23 of which were fatal, resulting in 31 fatalities.

### 2.2.3 Sub-National Picture

No consistent localised data is available for the whole of Scotland, however local analysts may be able to request data from the Scottish Fire and Rescue Service, water rescue organisations, A&E departments and Mountain rescue or Forestry commission contacts. Alternatively, a local injury surveillance programme could be established or a survey of potential risks (for example bodies of water or other outdoor spaces) if outdoor safety is thought to be a priority for a particular local authority area or community.



### 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. See also the recommendations made within the UK Drowning Prevention Strategy available at <http://www.nationalwatersafety.org.uk/strategy/info/uk-drowning-prevention-strategy.pdf>.

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.	
	The link between protective factors such as a supportive home and school environment and parenting highlights the importance of considering and explicitly mentioning unintentional harm in individual / family care plans or interventions.	
	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.	

Approach / Source	National Role	Local Role
The European Child Safety Alliance report cards published in 2012 <sup>13</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 progress of child injury prevention may be limited due to current levels of legislative powers.	<ul style="list-style-type: none"> <li>Increasing <b>drowning prevention</b> efforts by the introduction of laws requiring fencing around public and private pools and the use of personal floatation devices/life jackets while on the water (not just presence of protective equipment but actual use) and a policy making water safety education (including swimming lessons) a compulsory part of the school curriculum</li> <li>Enhancing <b>fall prevention</b> by increasing enforcement of the national safety standard for playground equipment and banning the marketing and sale of baby walkers</li> <li>Enhancing <b>choking/ strangulation prevention</b> by introducing/enhancing standards and regulations governing product safety for children such as a ban or redesign of specific products such as latex balloons and blind cords</li> </ul>	
The UK drowning prevention strategy	<ul style="list-style-type: none"> <li>Recommends every child should have the opportunity to learn to swim and receive water safety education at primary school and where required at Key Stage 3</li> <li>Recommends every community with water risks should have a community-level risk assessment and water safety plan</li> <li>To better understand water-related self-harm</li> <li>Increase awareness of everyday risks in, on and around the water</li> <li>All recreational activity organisations should have a clear strategic risk assessment and plans that address key risks.</li> </ul>	
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>The main areas of focus should be on parenting, a safe home environment and safe play.</li> <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> <li>Evidence suggests improvements to consumer product safety procedures and extending the use of child-resistant packaging; especially in conjunction with legislation and education could see improvements in injuries to this age group.</li> </ul>	

<sup>13</sup> <http://www.childsafetyeurope.org/reportcards/downloads.html>

Approach / Source	National Role	Local Role
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 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</li> </ul>	Local strategic assessments of unintentional harm would support local prioritisation and activity.

Approach / Source	National Role	Local Role
	<p>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 that opportunities for mitigating risk can be seized.</li> <li>• A discussion on the scope of poisoning within BSC would be beneficial – perhaps the most logical approach, would be to focus on all poisonings in specific age groups – for example all poisonings in children and young people and older people – and poisonings from certain substances only in the other age groups. The latter approach would involve combining information on deaths and injuries from poisoning.</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</li> </ul>	

Approach / Source	National Role	Local Role
	priority issue within the Local Outcome Improvement Plan (LOIP) or community safety strategy.	

## 4. CASE STUDIES

### Accounts from Scottish Councils

#### Glasgow

Community Safety Glasgow (CSG) works in partnership with a broad range of other agencies and services including Glasgow City Council and all other organisations within the Council family, Scottish Fire and Rescue Service, NHS Greater Glasgow and Clyde, as well as a wide range of third sector organisations across the City.

Glasgow City Council, in partnership with a number of key organisations has developed a new and ground breaking resource to teach young children about the hazards and consequences they may face in everyday life and how to make the right choices to stay safe. It was agreed to develop a web based interactive education suite, linking all aspects of child safety within health and well being.

Written by experienced teachers from Glasgow and Fife and overseen by Education Quality Improvement Officers, this new resource will be of significant benefit to teachers in delivering early intervention education and information relating to the learning and teaching of health and wellbeing as part of the curriculum for excellence.

Each of the partners involved, Fife Community Safety Partnership, Police Scotland, SFRS, Scotland Gas Networks, Royal Society for the Prevention of Accidents, Scottish Water, Network Rail and the NHS have provided their key messages which have been transformed into engaging interactive lessons, including short films and e books.

*The Royal College of Paediatrics and Child Health (RCPCH) was founded in 1996. The College comprises over 16,000 members who live in the UK, Ireland and internationally, and plays a major role in postgraduate medical education and professional standards. The RCPCH mission is to transform child health through knowledge, innovation and expertise.*

*Claire Burnett, External Affairs Manager,*

The Royal College for Paediatrics and Child Health have written a call to action; . This report looks at areas of prevention and highlights case studies and best practice which should be utilised by government to prevent accidental loss of life in children.

: Each year approximately 350-450 infants, children and young people die in Scotland. Similar to figures across the UK, the majority of deaths occur in children under one year of age, with the second largest number of deaths occurring in the 15-18 year group. The why children die report highlights how the way we deliver healthcare, funding systems, and emphasis on primary care can all affect the lives and health of infants, children and young people.

The report highlights how a large proportion of preventable deaths during childhood and adolescence occur in the context of children and young people's interactions with their external environment. For younger children, injuries and poisonings are among the leading causes of highly preventable death; therefore safety in the home and in the community is of paramount importance. Parents and carers need to be supported to make safety a priority, ensuring they are equipped with knowledge and skills as well as resources for creating safe physical environments.

Local authorities and health boards should prioritise children's safety, and through utilising resources such as health visitors and home safety equipment schemes, educate and equip parents and carers to keep their children safe, with a focus on water safety, blind cord safety and sleeping safety.

## 6. 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 – water safety</b>	<b>Water Incident Database (WAID) from the Water Safety Forum</b>	Currently drownings only but hope to have rescue incidents too in time. Age and gender, activity being undertaken at the time, location (e.g. coast, river, loch etc) included.	All Scotland and possibly regional.	Bespoke request
	<b>Various: Maritime and Coastguard Agency, SFRS, Police Scotland, RNLI and other rescue boats</b>	Includes temporal information, type of vessel, whether vessel/people involved were commercial or non-commercial	All Scotland and regional. Some incident data will be geo-coded.	Bespoke request
<b>Incident data – mountains</b>	<b>Mountain rescue Scotland</b>	Includes information on type of injury, activity being undertaken (e.g. hill walking, mountaineering etc), whether part of a group, temporal information, gender and age	All Scotland and by mountain rescue team area	Annually
<b>Incident data – air safety</b>	<b>Civil Aviation Authority</b>	Incident data for air safety incidents but not necessarily injuries.	Various	Bespoke request
<b>Incident data – rail safety</b>	<b>Rail Risk Portal</b>	Incident data and injury data in their annual safety report.	Scotland	Annually
<b>Incident data – Forestry commission</b>	<b>Forestry Commission</b>	Incidents involving unintentional injury on Forestry Commission land. Injury surveillance is of variable reliability due to different practises between each area.	Various	Bespoke request

Nature of the data	Source	Nature of the data	Level to which it is available	Frequency published
Population data	Scottish Neighbourhood Statistics (SNS)	Vast array of population data including population data by datazone	Datazones by child, older people and deprivation available on request.	

## 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>
- Electrical Safety First <http://www.electricalsafetyfirst.org.uk/>
- European Child Safety Alliance <http://www.childsafetyeurope.org/>
- Go well Glasgow <http://www.gowellonline.com/>
- Growing Up in Scotland <http://growingupinscotland.org.uk/>
- Health and Safety Executive <http://www.hse.gov.uk/>
- The Royal Society for the Prevention of Accidents (RoSPA) <http://www.rosipa.com/> and <http://www.rosipa.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>
- Visitor Safety in the Countryside <http://vscg.org/>
- Water Safety Scotland <http://www.watersafetyscotland.org.uk/>
- 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.
- Anderson M. et al (2012) *Poisoning in Young Children*. Archives of Disease in Childhood 2012;97:9
- 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
- Joint Improvement Team and NHS Health Scotland (2014) *Active and Healthy Ageing: An Action Plan for Scotland 2014-2016*
- 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"*

- Schmertmann M, et al. (2013) *Risk factors for unintentional poisoning in children aged 1-3 years in NSW Australia: a case-control study*. BMC Paediatrics May 24 2014;13:88
- 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*
- The National Falls Programme in association with WorksOut (2012) *Up and About or Falling Short? A report of the findings of a mapping of services for falls prevention and management and fracture prevention in older people in Scotland*.