# STRATEGIC ASSESSMENT OF UNINTENTIONAL HARM SUMMARY REPORT



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#### EXECUTIVE SUMMARY

This Summary Report for the National Strategic Assessment on Unintentional Harm is the first document of its kind to bring together data and information on a range of areas which are classed as incidents of 'unintentional harm' which for the purposes of this report are defined as "unintentional physical and psychological harm that could have been predicted and prevented". Whilst individual areas, for example, road safety, falls, fire safety and water safety are well documented, the incident data has never been analysed collectively in order to understand the scale of unintentional harm in Scotland and the resulting impact it has upon individuals, families and public services.

This document provides a summary overview for the comprehensive Strategic Assessment. It is intended to highlight the importance of unintentional injuries and the significant impact they have upon our communities, not only in terms of death and serious injury, but time lost to disability and time off work for recovery. This work is part of Phase 2 of Building Safer Communities (BSC), one strand of the Justice Strategy for Scotland, and is a collaborative programme which seeks to help national and local partners and communities work together to make Scotland safer and stronger. Phase 2 of BSC focuses on unintentional harm.

The majority of incidents of unintentional harm are preventable and, when looking at the scale of the problem in relation to associated costs and sheer numbers, there is a strong argument that this should be focussed in a more coordinated and strategic manner. The document is therefore intended to be of use to a range of partners by outlining the context of the problem through statistical analysis, highlight areas of improvement, and illustrate a number of short case studies where effective existing work is underway across Scotland. The document also includes a number of key recommendations intended to drive forward a collaborative approach to tackling unintentional harm in Scotland.

All documents relating to Building Safer Communities Phase 2: National Strategic Assessment Unintentional Harm are available on the BSC website here:

#### 1.1 Unintentional Harm in Scotland

Unintentional harm in Scotland is a large burden on the population in terms of death and serious injury, but can also be a burden for public services with various reports presenting a powerful economic case for preventing this kind of harm.

Unintentional harm in the home (falls in particular), unintentional harm to the **very young** and the **very old** and to people living in more **deprived communities** are prominent issues that emerged during the strategic assessment process, and currently have limited coordinated focus in Scotland. It is for these reasons that they were selected as the priority areas of focus for Phase 2 of Building Safer Communities, in addition to data gathering, analysis and sharing and bridging the gap between strategy and delivery. The latter two were the essential next steps identified by a Phase 2 advisory group in order to effect change in unintentional harm in Scotland.

With the exception of road traffic collisions and fire fatalities there has been limited improvement in deaths and injuries in Scotland (and the UK) as a result of unintentional harm since the 1990s with around 1,250-1,400 deaths, 54,500 emergency hospital admissions in 2016 and almost 200,000 incidents each year.

There is also the potential for unintentional harm to become an increasing burden due to the over-representation in deaths and injuries of older people from unintentional causes and the projected increase in this population in Scotland.

Despite this, however, much unintentional harm is preventable through a variety of mechanisms. The limited improvement in death and injury rates present broad scope for improvements through effective legislation, a focus on prevention and education, targeted interventions and partnership working. Making unintentional injury a core theme of a prominent Scottish Government programme on top of the commitment to the creation of the strategic assessment are commendable first steps to tacking the issue of unintentional injury in Scotland. In time this will hopefully be supported by national and local preventative activity with resources devoted to this important community safety and public health issue.

#### 1.2 Priority Areas and Recommendations

In order to identify a range of priorities and recommendations to support a coordinated approach to tackling unintentional harm in Scotland, following the development of the Strategic Assessment an event was held in November 2015 with a range of key stakeholders representing both the public and third sectors. As part of the workshop participants were asked to think about the evidence in the presentation which summarised the strategic assessment, as we as their own experience, and suggest the three main priorities for BSC Phase 2. Although participants expressed their ideas in different ways, five main priorities emerged:

- 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

Recommendations are covered in more depth in Section 7 but encompass the following broad themes. An executive group of strategic leads from partners including, but not exclusively, Public Health, Health and Social Care Partnerships, Health Improvement, Early Years, Child and Maternal health, Education, Housing, third sector organisations, Scottish and Local Government, Scottish Fire and Rescue Service will be convened in the future to determine specific actions and use the following points to shape the approach(es) they take.

1. Clear leadership, improved ownership and better coordination of activity for unintentional harm prevention. This applies particularly within the public health sector of statutory agencies but also includes other national networks/partners such as the Scottish Government, local partnerships including Community Planning Partnerships

and those with a stake in the identified priority areas such as deprivation, older people and children and their parents/carers.

- 2. A national prevention strategy for unintentional harm or at least for the identified priority areas should be developed there is some evidence that those countries and agencies adopting these strategies have achieved greater progress in promoting safety; this has certainly been evidenced by the improvements Scotland's road safety framework has contributed to. Seeking to influence the adoption of unintentional harm as a priority issue within the Local Outcome Improvement Plan (LOIP) or community safety strategy by supporting the development of local analysis should be considered.
- 3. Enhancing capacity and infrastructure and improved joint working. Specialist skills and training are required and Phase 2 is taking place in the current climate of reductions in home safety and road safety officers and other specialist roles in unintentional injury prevention which provides challenges. The importance of improving joined-up working and learning from existing good practise cannot be overstated; however consideration should also be given to enhancing the resources available nationally and locally for unintentional harm prevention.
- 4. **More evidence,** principally in the form of injury surveillance incorporating information about the injury mechanism, where it occurred and what the individual was doing at the time of the incident, can all be used to develop and target approaches to prevent unintentional injuries.
- 5. Targeted and more general tangible actions and interventions including community-led work which focuses on altering behaviour through education; as well as passing and enforcing legislation are likely to be most effective at preventing unintentional injury<sup>1</sup>. An advisory group of experts, in addition to a literature review, would be the most likely source of guidance on what these actions and interventions might be.

#### 2. INTRODUCTION

The Strategic Assessment for Unintentional Harm was commissioned under Phase 2 of the Scottish Government led BSC programme; 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

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<sup>&</sup>lt;sup>1</sup> There is a lot of information on what works in injury prevention within Appendices 1 and 2 that accompany the strategic assessment. These are available at

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.
- Phase 2 has the aim of "reducing unintentional physical and psychological harm that could have been predicted and prevented".

To better understand the prevailing issues, causal factors and epidemiology of unintentional harm in Scotland a strategic assessment was commissioned for Phase 2 which recommended through robust analysis of existing data, environmental scanning and prioritisation areas of focus and priority. As such, a dedicated analyst was seconded to the programme to produce the Strategic Assessment of Unintentional Harm for 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. The scope however excluded areas that could, by some, be considered unintentional harm such as mental health issues, suicide and self-harm, substance misuse (including drug, alcohol and tobacco use), medical conditions such as obesity, and diabetes and intentional injury such as assaults. The exclusion of the latter was largely because they are all well-established policy areas and/or receive high profile partnership focus and/or could be considered both unintentional and intentional harm. Therefore it was assessed that the other aspects of unintentional injury which receive comparatively less focus and are not (all) well-established policy areas despite arguably deserving to be so would be a more valuable focus for Phase 2 and the strategic assessment.

#### 2.1 Method and Background

Over a ten month period (split between 2015 and 2016) key partners were involved in the data collection and analysis process including Scottish Ambulance Service (SAS), National Records for Scotland (NRS), NHS Information Services Division (ISD) and NHS Accident and Emergency (A&E) (where available) about mortality, hospitalisations, emergency admissions and incidents.

Surveys including Scottish Health Survey (SHS), Scottish Household Survey (SHS) and Health Behaviour in School-aged Children (HBSC) Survey, and transport surveys were all utilised. Data was sourced from Transport Scotland, Scottish Fire and Rescue Service (SFRS), Forestry Commission, Maritime and Coastguard Agency (MCGA), Health and Safety Executive (HSE), and Mountain Rescue Scotland (MRS).

Other sources of information included academic research papers and discussions with key partners including the Royal Society for the Prevention of Accidents (RoSPA), Transport Research Institute (TRI), Emeritus professors and doctors with specific interest in this field

and Local Authorities who focus on unintentional harm. Case studies and research into 'what works' has been conducted in addition to identifying some of the key issues.

There are some limitations to this process – collecting data on unintentional harm can be challenging as many incidents will be self-treated at home and not have the opportunity to be recorded by any 'systems'. Collection of certain data fields by some partners is not mandatory and therefore results in gaps in the data, and some partners record very little data at all. However by using data from a vast range of partners in addition to academic research papers, it is hoped that some of these limitations can be overcome and provide a reasonably accurate and holistic picture of unintentional harm in Scotland and use this to facilitate the development and coordination of evidence-based preventative approaches for tackling unintentional harm.

Following the strategic analysis, in order to identify a range of priorities and recommendations to support a coordinated approach to tackling unintentional harm in Scotland, an event was held with a range of key stakeholders representing both the public and third sectors. As part of the workshop participants were asked to think about the summarised evidence from the strategic assessment, and their own experience, and suggest the three main priorities for BSC Phase 2. Although participants expressed their ideas in different ways, five main priorities emerged. Participants were then asked to identify the essential next steps that would make a real impact on unintentional harm in Scotland which informed the recommendations in Sections 1.2 and 7.

#### 2.2 Injury Prevention in Scotland

It is recognised that there is already a great deal of existing good work underway in Scotland to tackle unintentional harm (see Figure 1), including policy development, dedicated programmes and local initiatives. Gaps identified by the strategic assessment process were a lack of overarching policy; strategy or governance arrangements for any of unintentional injury; home safety; child safety; primary prevention for falls that is linked to community safety, and the positioning of unintentional injury as a priority nationally and locally (with a few exceptions).

The findings from the evidence base developed for Phase 2 do not seek to detract from the work of other partnerships and individual organisations, or replicate it. It aims to create the first evidence base of its kind for unintentional harm in Scotland and from this develop and coordinate evidence-based preventative approaches for tackling unintentional harm, encourage local partnerships to prioritise this area of work, and seek to influence the embedding of unintentional harm as a consideration across a number of policy areas.

#### Locally

- A priority for some Community Planning Partnerships (CPPs) and Community Safety Partnerships (CSPs)
- Work undertaken locally in joint safety training and referrals processes
- Projects such as peer-led safety advice for older people, care and repair schemes, community intelligence-led work on water safety, community rescue resources, home safety checks, home safety equipment scheme all exist currently

#### National organisations

- Child safety work by Child Accident Prevention Trust (CAPT) and Royal Society for the Prevention of Accidents (RoSPA)
- RoSPA's work on home safety, road safety, occupational safety and other aspects of unintentional harm prevention
- Scottish Fire and Rescue Service's Strategic Plan
- Home Safety Scotland
- Electrical Safety First Scotland
- Safety policy leads group within Scottish Government
- Health and Safety Executive

## Existing National Partnership Work

- NHS Scotland's Prevention and Management of Falls in the Community
- Scotland's Road Safety Framework
- Visitor safety in countryside working group
- Drowning prevention strategy through Water Safety Scotland (WSS)
- The Joint Improvement Team's Active & Healthy Ageing Strategy
- Cross-party group on accident prevention and safety awareness
- Equal opportunities committee inquiry into loneliness and isolation

Figure 1: Existing Injury Prevention Work in Scotland

Although there has been work to tackle unintentional harm, and some focus on this issue historically, it hasn't received sustained momentum or been given a consistently prominent position across partners or within central or local government as a whole. There has been a welcome focus on particular issues such as road safety and falls prevention and some positive partnership work, but nothing similar in terms of the drive and focus for all aspects of unintentional harm from the late 1990s up until the launch of BSC in 2013. On a number of occasions unintentional injures – or aspects thereof – have been championed as a priority issue but never translated into activity in the way many campaigners hoped. The opportunity for BSC is to turn the focus on unintentional injuries into activity, complete with performance measures to assess progress.

#### 2.3 Who is this report for and why?

This document will be of interest to any practitioners working in community safety or those who have an interest in unintentional harm and its consequences. It provides statistical information around a number of key areas and a recommendations to drive this area of work forward. More detailed statistical information can be found in the Strategic Assessment for Unintentional Harm.

The purpose of this document is to present the key findings from the Strategic Assessment; providing the reader with an overview of unintentional harm in Scotland. This is intended to

raise the profile of unintentional harm, for the first time bringing a range of data sources together. Through presenting this information it is hoped that a range of partners from across the public and third sectors will gain an appreciation of the scale of the problem and identify ways that, through working in partnership, they can collaboratively reduce incident figures and help people to remain safe across a range of environments. Although supported by the Scottish Government BSC is a vehicle to support a range of stakeholders to collectively tackle the issue of unintentional harm and everyone has a part to play in driving progress in the next stage of Phase 2.

This document has been structured to include some of the key statistical findings from the Strategic Assessment. It incorporates a range of priority areas and recommendations which set out a potential way forward, both at national and local levels, to address unintentional harm. The information here, and within the Strategic Assessment, will also be of use to local partnership to shape strategy and focus resources. It is recommended that any local Strategic Assessments and Local Outcome Improvement Plan (LOIP) processes incorporate unintentional harm to ensure it is a consideration when identifying local priorities and to identify how existing resources can be greater utilised - many of the individuals and areas which experience high rates of unintentional injuries will also be known and in receipt of existing services.

In addition to this document and the Strategic Assessment, there are 6 thematic papers which provide more detail around their subject matter and may be of use to practitioners with an interest in a particular topic. They also include some case studies from existing work on preventing unintentional harm in Scotland and links to key documentation.

#### 3. OVERVIEW OF UNINTENTIONAL HARM IN SCOTLAND

The full strategic assessment and complementary thematic briefing papers are comprehensive documents which contain all the detail and thematic summaries relating to unintentional harm. This summary document aims to highlight the main issues and focusses on a number of key priority areas.

Unintentional harm in Scotland is a large burden on the population in terms of death and serious injury 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>2</sup>.

There is 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>3</sup>. In the coming years this means demographics are not favourable for unintentional injury rates, falls in particular.

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 are excellent examples of the potential for improvements through effective legislation, a focus on prevention and partnership working. Making unintentional injury a core theme of a prominent Scottish Government-led programme on top of the commitment to the creation of the strategic assessment are commendable first steps to tacking the issue of unintentional injury in Scotland and in time will hopefully be supported by national and local activity with resources devoted to this important community safety and public health issue.

#### 3.1 Deaths and Injuries

3.1.1 Death as a result of unintentional harm4

• There are 1,250-1,400 deaths from physical unintentional harm in Scotland per year (16 to 18 times the number of homicide victims annually).

<sup>&</sup>lt;sup>2</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

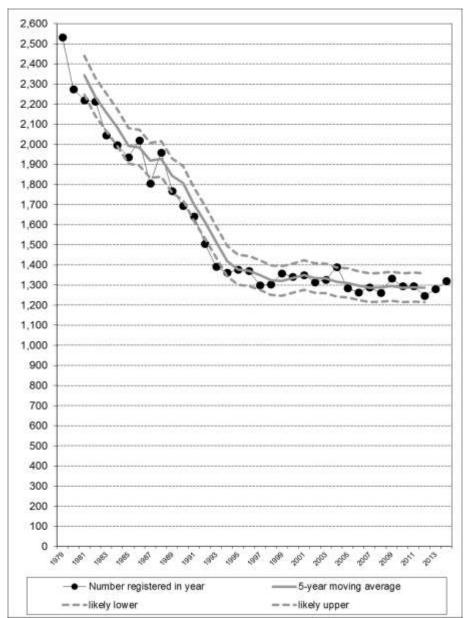
<sup>&</sup>lt;sup>3</sup> National Records Scotland (NRS) Projected Population of Scotland (2014-based) "Estimated and projected population over 70, Scotland, mid-2014, mid-2024 and mid-2039"

<sup>&</sup>lt;sup>4</sup> National Records Scotland (NRS) annual publications on Accidental deaths 2014. The most recent publication is available at <a href="http://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/vital-events/deaths/accidental-deaths">http://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/vital-events/deaths/accidental-deaths</a>

- It is one of the leading causes of death for children.
- Falls are the most significant cause of death through unintentional harm accounting for 42% of all deaths.
- Deaths are a particular issue for older people 46% of deaths as a result of physical unintentional harm in 2014 were in those over the age of 85 and the death

rate (deaths per 100,000 population) is four times higher in the over 75s than in the over 15s overall.

The number deaths attributable to unintentional harm in Scotland fell steadily until the mid-1990s. Since then. the overall total has not changed much: the figures for 1995 to 2014 (using the 'old basis'5 estimates for 2011 onwards ensure continuity). been have all between roughly 1.250 1.400. and Throughout that period, the five-year moving annual average has not varied much, remaining between 1,286 and 1,360, and



almost all the year-to-year fluctuations in the numbers have been within the likely range of

Figure 2: Accidental deaths registered in Scotland, 1979 to 2014, with five-year moving annual average and showing the likely range of values around the moving annual average

<sup>&</sup>lt;sup>5</sup> A change in coding for 'accidental deaths' occurred in 2011 in line with the World Health Organisation's changes: deaths which were previously classed as 'mental and behavioural disorders' ("acute intoxication" and "alcohol intoxication") were re-classified as 'accidental deaths' from 2011 onwards. For the purposes of this report we will use figures on the old basis – the new figures are predominantly deaths from controlled substance intoxication for known drug misusers and alcohol intoxication and already captured within the drug-related and alcohol-related death statistics and policy areas.

statistical variability (see Figure 2).

Although the annual total number of deaths as a result of unintentional harm has not varied much since the mid-1990s, there have been marked changes in the numbers of deaths from some causes.

Using five-year moving annual averages:

- Deaths from transport accidents have fallen in recent years (from an annual average of 348 in 2000-2004 to an annual average of 218 in 2010-2014).
- Deaths from exposure to smoke, fire and flames have declined (from an annual average of 78 in 2000-2004 to an annual average of 39 in 2010-2014).

However there has been a marked increase in accidental poisoning deaths (from an annual average of 42 in 2000-2004 to an annual average of 123 in 2010-2014, using the 'old basis' figures for 2011 onwards for continuity).

The most common cause of deaths attributable to unintentional harm in 2014 were falls (739 deaths, or 42% of the total number of accidental deaths).

The rate of falls is noticeably higher in the under-fives and the over 75s, with the death rate from falls in the latter age group 8.6 times higher than that for the wider population<sup>6</sup>.

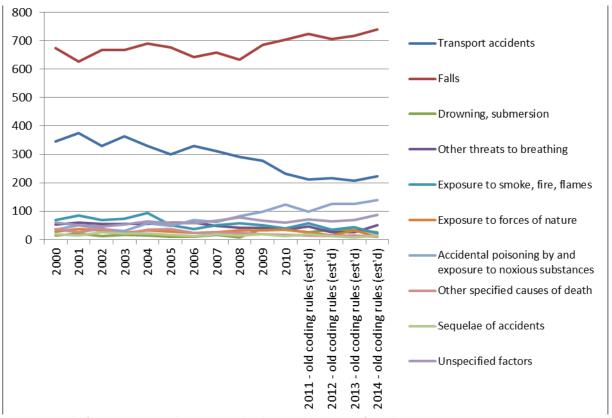


Figure 3: Deaths from Unintentional Injury in Scotland 2000-14 by Cause of Death

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<sup>&</sup>lt;sup>6</sup> National Records Scotland (NRS) 2014 publication on Accidental deaths. The most recent publication is available at <a href="http://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/vital-events/deaths/accidental-deaths">http://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/vital-events/deaths/accidental-deaths</a> and archived publications are available on request.

#### 3.1.2 Injury through unintentional harm<sup>7</sup>

- Based on Scottish Health Survey (SHeS) responses from 1998 onwards, on average 12% of Scotland's households report having had an unintentional injury in the last 12 months – this equates to around 550,000 unintentional injuries each year in adults alone. The same survey estimates around 140,000 incidents to children under the age of 15 each year.
- Unintentional harm accounts for 1 in 11 adult emergency hospital admissions and 1 in 8 child emergency hospital admissions with around 54,500 emergency hospital admissions for physical unintentional harm annually about 18 times the admissions for injury through violence.
- Falls are a significant component of injuries through unintentional harm for children aged under 15 years, nearly half (47%) of the emergency admissions to hospital for an unintentional injury in 2014/15 were the result of a fall. For adults this figure is 64%, rising to 84% in the over 65s group.
- Children under the age of five have a higher rate of hospital admissions than other
  child age groups and there is a clear correlation between the developmental stage of
  children and the injuries they sustain: most injuries to pre-school children occur at
  home (e.g. falls; particularly when they are learning to walk, burns and scalds), while
  school-age children are injured on the roads or at play.
- People living in areas of higher deprivation have higher rates of unintentional harm. In 2014/15 children in the most deprived areas had a standardised discharge ratio approximately 19% higher than the Scottish average. For adults, this was nearly 40% higher than the Scottish average.
- Evidence from surveys shows that adults, and children from a certain age, have more sophisticated views of injury prevention than they are usually credited with: 50-60% adults in the Scottish Health Survey stating the incident was preventable (by them or others) and high proportion of children and young people surveyed by Children in Scotland in 2007 either think they already know all they need to know to stay safe, or reject the whole idea that accidents can be prevented. A significant percentage of them also admitted engaging in behaviours that they knew could result in a serious injury.

#### Causes

Falls were the most common cause of emergency hospital admissions for unintentional harm in adults, accounting for 64% of unintentional injury admissions to hospitals. This varied across age groups accounting for just over 28% of relevant admissions in the 15-24 age group compared to just under 87% in the 75 and over age group. They are also the most

<sup>&</sup>lt;sup>7</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/

prevalent cause of unintentional harm from A&E attendance data and reported by the Scottish Health Survey.

Falls aside there are some clear points of note in relation to the injury profiles for the different age groups (see Figure 4) from emergency hospital admissions. This is covered in more detail in Sections 4.2 (Children and Young People) and 5.2 (Older people).

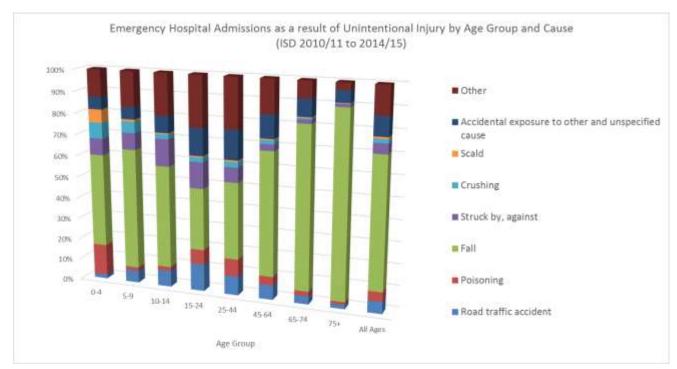


Figure 4: Emergency Hospital Admissions as a Result of Physical Unintentional Harm 2010/11-2014/15 by Cause of Injury and Age Group (Information Services Division)

#### Location

According to **emergency hospital admission data**<sup>8</sup> in terms of the location of the incident in 2014-15 there were 17,814 emergency hospital admissions for unintentional harm that occurred in the home – this is at least<sup>9</sup> a third of all admissions for unintentional harm.

<sup>&</sup>lt;sup>8</sup> NHS Information Services Division (ISD) annual publication on Unintentional Injuries. The most recent publication is available at <a href="http://www.isdscotland.org/Health-Topics/Emergency-Care/Publications/">http://www.isdscotland.org/Health-Topics/Emergency-Care/Publications/</a>

<sup>&</sup>lt;sup>9</sup> A further 33% has an unknown location so in reality the total proportion occurring in the home may be greater than 33%.

#### Location of accident- 2009/2011



Figure 5: Location of Accident 2009/11 from Scottish Health Survey (SHeS)

According to **Scottish Health Survey data** (Figure 5) homes and gardens are typically where unintentional harm incidents occur – almost one in three events (this rises to more than one in two for the +65 age group). For all children injuries were most likely to arise in the home/garden (42%) or sport/recreation locations (24%) but the profile was different for different age groups: up until the age of seven 70% happened in the home/garden compared to 26% for those over seven where sports/play and school become more frequent.

#### Cost of Unintentional Harm

Notwithstanding the sometimes devastating impact on people's lives – social, emotional and physical – unintentional harm can be extremely costly<sup>10</sup> (see Figure 6).



Figure 6: Costs of Unintentional Harm in the UK (from Scottish Community Safety Network's Cost-Benefit Preventative Spend tool)

In addition to the costs shown in Figure 6<sup>11</sup>, many unintentional injuries are treated by pharmacists or self-treated. These are not always factored into routine data collection, therefore the financial burden due to unintentional harm is likely to be much more significant. Costs also extend much further than treating the original injury, including rehabilitation services and long-term care and support when resulting in life-long disability.

<sup>&</sup>lt;sup>10</sup> These figures include the costs to public services e.g. NHS, Local Authority, Police and Fire & Rescue Service but also to the economy in terms of lost working hours/days/years.

<sup>&</sup>lt;sup>11</sup> Scottish Community Safety Network's Cost Benefit Preventative Spend toolkit http://www.safercommunitiesscotland.org/wp-content/uploads/community-safety-costs-in-scotland.pdf

#### Children and Young People 4.

#### 4.1 Key Findings

Children and young people, particularly the under-fives in Scotland are disproportionately affected by unintentional harm. Some of the key facts include:

- Unintentional harm is one of the leading causes of death (second only to cancers) and accounts for one in eight emergency hospital admissions (around 7,700 admissions per year) in children aged under 15 in Scotland<sup>12</sup>.
- The child death rate from unintentional injuries in Scotland is 30% higher than in England and Wales<sup>13</sup>.
- Every year in Scotland, one child in five attends A&E departments following an unintentional injury – approximately 200,000 visits annually.<sup>14</sup>
- 60% of children had at least one accident or injury during their first 5 years, for which their parent had consulted a medical specialist (doctor, dentist, health centre or hospital)<sup>15</sup>.
- Most injuries to pre-school children occur at home (e.g. falls, burns and scalds), while school age children are injured on the roads or at play. After infancy, boys are at a higher risk than girls. There is a strong correlation between injury risk and social deprivation in general and with dysfunctional parenting in particular, possibly mediated through child behavioural problems.
- Risk-taking behaviour has been identified as a leading determinant of injury among adolescents<sup>16</sup> (less so in younger children). Supportive social climates are thought to protect adolescents from engaging in certain risk-taking behaviours (e.g. drunkenness, non-use of seatbelt, drug use), and hence the occurrence of some

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"

Edinburgh: Scottish Government

<sup>&</sup>lt;sup>12</sup> 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>&</sup>lt;sup>14</sup> NHS Greater Glasgow and Clyde (2010) Preventing Unintentional Injuries to Children in the NHS Greater Glasgow & Clyde Area. <sup>15</sup> Bradshaw, P et al (2013) Growing Up in Scotland: Birth Cohort 2 Results from the first year

<sup>&</sup>lt;sup>16</sup> W Pickett 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 and Currie C et (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

forms of injury. However, once risky behaviours have been adopted, this protective effect no longer exists<sup>17</sup>.

- Unintentional injury in children is costly and they have more years to lose to disability or mortality than adults. Every year in Scotland, unintentional harm to children cost the NHS an estimated £40 million and society generally around £400 million with the wider costs of a serious home accident for a child aged under five estimated at £33,200<sup>18</sup>. Many of these events are not life-threatening but they consume considerable health service resources, cause distress for parents and children and have consequences for families through time off work and school.
- Despite the supporting evidence and the significant social and economic cost of unintentional harm to children and young people, Scotland does not have a coordinated child unintentional harm prevention strategy despite evidence that having such a strategy can deliver greater improvements in unintentional harm than the absence of such a strategy.

Despite improvements in injury deaths rates over the last 20 years, child and adolescent unintentional injury death rates for males and females still remain higher than rates in the Netherlands, one of the safest countries in Europe<sup>19</sup> (see Figure 7).

	Netherlands (2010)			Scotland (2009)		
	Male	Female	Total	Male	Female	Total
Age standardised unintentional death rate per 100,000 0-19 year olds	4.19	1.888	3.06	7.96	2.33	5.21
Contribution of unintentional injuries to all child and adolescent mortality (%)	12.02	6.98	9.88	17.63	7.37	13.61

Figure 7: Contribution of Unintentional Injury to Child and Adolescent Mortality - Scotland compared to the Netherlands

From the same report Scotland was assessed 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.

under five vears June 2014

<sup>&</sup>lt;sup>17</sup> W Pickett 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 <sup>18</sup> Public Health England *Reducing unintentional injuries in and around the home among children* 

https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/322210/Reducing\_unint entional injuries in and around the home among children under five years.pdf

19 European Child Safety alliance report cards published in 2012

#### 4.2 Deaths and Injuries

Although there are low *numbers* of deaths from unintentional injury in children and young people compared to adults; as a *proportion of all child deaths* that happen, unintentional injury is a significant cause (see Figure 8<sup>20</sup>).

## Child deaths over one year, by age and cause, Scotland, 2011

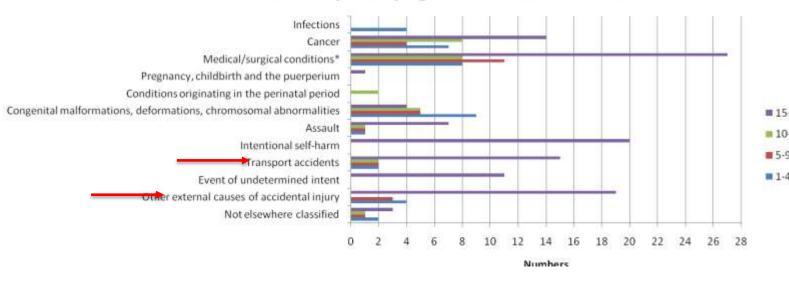


Figure 8: Child Deaths over One Year by Age and Cause, Scotland 2011

In Scotland, for children aged under 15 years, nearly half (47%) of the emergency admissions to hospital for an unintentional injury in 2014/15 were the result of a fall.

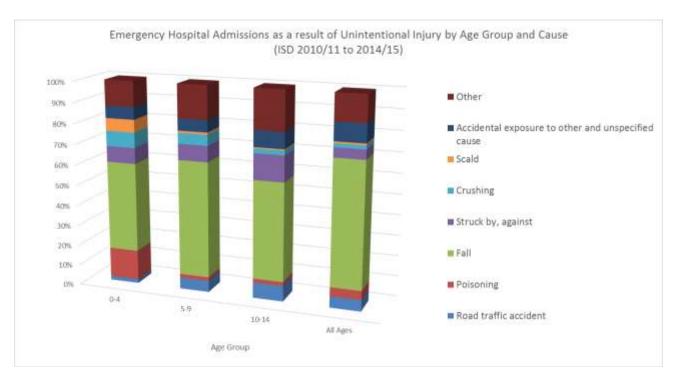


Figure 9: Emergency Hospital Admissions 2010/11-2014/15 in Under 15s by Cause (Information Services Division)

<sup>&</sup>lt;sup>20</sup> Child Death Review Report, Scottish Government Child Death Review Working Group April 2014 <a href="http://www.gov.scot/Publications/2014/04/5599/14">http://www.gov.scot/Publications/2014/04/5599/14</a>

Falls aside, points of note in relation to the injury profiles for the different age groups (see Figure 9) are that:

- Poisonings feature prevalently in the under 5s and barely at all in the other age groups (19% of all unintentional injuries in the under 5s compared to 2% for all age groups when taken together). In pre-schoolers poisoning tends to be as a result of them consuming prescribed drugs – methadone gets particular mention publications<sup>21</sup>; but tranquilizers or sleeping and anti-anxiety medication noted  $too^{22}$ . are Household products, specifically liquitabs and liquid nicotine have all risen in prominence in the media but appear infrequently in UK literature and statistics.
- Road traffic collisions and struck against or crush become more prevalent as children grow up.
- Scalds only really feature in the under-five age group to any notable degree with a discharge rate of 65 per 100k population compared to 25.8 per 100k for all children.

#### 4.3 Under 5s

Injury prevention for all children and young people is important, however the underfives were singled out as injury rates in this group are higher than in the other children – emergency hospital admission discharge rate of 1,274/100,000 population compared to 951/1000,000 for 5-9s and 10-14s – and it is the top cause of death after the neo-natal period.

#### CHILD DEVELOPMENT

The Growing Up in Scotland survey demonstrates that over the first four years of children's lives, the peak time for unintentional injury is between the age of one year and two years, when 23% of children experienced one or more unintentional injury requiring treatment.

Drops and falls are the most common causes of injury and peak in the first year. This is unsurprising as during this time children become mobile (falteringly to begin with) and increasingly curious about their environment. Ingestions and foreign body injuries are also a fairly common cause of injury and most numerous in the 12–35 month age category and may be explained by the developmental progress that occurs during this period of a child's life.

Strains, grazes/lacerations become progressively more frequent with increasing age, as do foreign body injuries (peak in frequency at 36–59 months).

Almost two-thirds of injuries happen when children are engaged in play. This proportion tends to be lowest in the 0–11 month age category and highest in the 12–35 month category and thereafter levels off.

The most common type of injury is a blow to the head and this is highest in the first 12 months. This has been reported by a number of studies and may be due to two factors: the minimal control that babies are able to exert over-head position and movements, and their relatively inability to take avoiding or protective action during a fall or when confronted with an external hazard. Injuries affecting the upper limb are the second most common injury and peak in the 60–83 month group. This is probably because older children tend to throw up their hands to protect their head when they fall, thus placing their arms at increased risk of injury.

<sup>&</sup>lt;sup>21</sup> See <a href="http://www.ncbi.nlm.nih.gov/pubmed/23705679">http://www.ncbi.nlm.nih.gov/pubmed/23705679</a> and <a href="http://edition.cnn.com/2016/05/16/health/poisoning-deaths-and-injury-uk-teenagers-and-toddlers/">http://edition.cnn.com/2016/05/16/health/poisoning-deaths-and-injury-uk-teenagers-and-toddlers/</a> for more detail. Accessed July 2016.

<sup>&</sup>lt;sup>22</sup> ISD Emergency hospital admissions – "Poisoning emergency hospital admissions year ending 31 March 2015". <a href="http://www.isdscotland.org/Health-Topics/Emergency-Care/Publications/data-tables.asp?id=1611#1611">http://www.isdscotland.org/Health-Topics/Emergency-Care/Publications/data-tables.asp?id=1611#1611</a>

Almost all injuries sustained are in the home and they are also at higher risk of a wider range of injuries than other age groups including falls (falls from furniture and on/from stairs and steps are most numerous), poisoning (tends to be higher severity), choking and asphyxiation, drowning and scalds and burns (mostly from hot drinks, electrical appliances and some from hot bath water). Arguably the under-fives also require the most protection and advocacy compared to other age groups due to the inherently vulnerable nature of the very young.

Attendance at A&E (using a snapshot from one Scottish health board<sup>23</sup>) shows that underfive attendances are higher than many adult age groups and a higher proportion of them are admitted indicating the higher severity of injuries the under-fives often suffer in comparison to other age groups.

While inadequate adult supervision is a commonly cited risk factor, the circumstances are often complex, interacting with poverty, sole parenthood, and exposure to hazardous environments. Unintentional injuries for the under-fives tend to happen in and around the home<sup>24</sup> and are linked to a number of factors including:

- Child development<sup>25</sup> (see the sidebar page 19 for more detail)
- The physical environment in the home
- The knowledge and behaviour of parents and other carers (including literacy rates and other factors linked to increased deprivation such as family 'chaos' or 'stress')<sup>26</sup>
- Overcrowding or homelessness
- The (lack of) availability of safety equipment
- New consumer products in the home

Risky play has many benefits and minor bumps and scrapes are an inevitable part of growing up, and cannot be prevented, but serious injury is potentially avoidable by implementing evidence based interventions.

<sup>&</sup>lt;sup>23</sup> The data was taken from all A&E departments within a single Scottish health board. The data covers the period 01 April 2010 to 31 March 2015. The health board was selected as it has comparatively high data recording standards for A&E attendance for physical unintentional harm. <sup>24</sup> Public Health England *Reducing unintentional injuries in and around the home among children* 

under five years June 2014
<sup>25</sup> 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.

<sup>26</sup> Cree C, Kay A, Steward J. The economic and social cost of illiteracy: a snapshot of illiteracy in a global context, 2012.

www.worldliteracyfoundation.org/The\_Economic\_&\_Social\_Cost\_of\_Illiteracy.pdf Accessed on 1 April 2014.

## 5. Older People

#### 5.1 Key Findings

Older people in Scotland, particularly those over 75 and 85, are disproportionately affected by unintentional harm having higher death and serious injury rates than any other age group in Scotland:

- Over the past five years 46% of deaths as a result of unintentional harm are in the over 80 age group (588 deaths); 413 deaths were over 85 years of age<sup>27</sup>.
- The emergency hospital admission discharge rate is just over 1,000 per 1000 population for over 15s doubling to 2,440/1000 population in the over 65s and almost 4,000/1000 population in the over 75s<sup>28</sup>.
- This is the only age group where females have higher hospital admission and A&E attendance rates (even when accounting for the higher population of females compared to males at this age group) some of this is likely to be due to females of this age being more likely to suffer more serious injuries than males of the same age when they do fall.
- There is projected to be an increase in Scotland's population of older people, an age group disproportionately affected by unintentional injury and most likely to be hospitalised and die as a result of an unintentional injury.

#### **FALLS IN OLDER PEOPLE**

The impact of falls on this age group is particularly striking: Around 1% (6,000 per year) of falls result in hip fracture and the acute management of hip fracture alone cost NHS Scotland in excess of £73 million each year.

Older people living in care homes are three times more likely to fall than older people living in their own homes, and there are ten times more hip fractures than in other environments. Some of this is due to the type of older people that require to be cared for within a care home which may make them more susceptible to falls in the first place. Falls are more common due to age related changes such as deterioration in hearing, eyesight, blood pressure, reflexes, strength, mobility and balance. Conditions dementia also play a big part. Physical inactivity and some medications can also increase the risk of falls.

Due to the scale of the problem with falls in Scotland, and predicted increase in the ageing population, there is potential for more to be done around the education and prevention of falls at an earlier stage. A range of agencies come into contact with individuals who may be susceptible to falls at a later stage, and this engagement could be utilised to promote the benefits of exercise and active ageing, identify any trip hazards in the home, promote local services to reduce social isolation, and where required, provide referrals onto falls professionals who can provide expertise and support to remain safe and independent at home.

<sup>&</sup>lt;sup>27</sup> National Records Scotland (NRS) annual publications on Accidental deaths. The most recent publication is available at <a href="http://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/vital-events/deaths/accidental-deaths">http://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/vital-events/deaths/accidental-deaths</a>

<sup>&</sup>lt;sup>28</sup> NHS Information Services Division (ISD) annual publication on Unintentional Injuries. The most recent publication is available at <a href="http://www.isdscotland.org/Health-Topics/Emergency-Care/Publications/">http://www.isdscotland.org/Health-Topics/Emergency-Care/Publications/</a>

Figure 10 clearly illustrates the disproportionate balance across the age groups in relation to the individuals who are presenting to hospital as an emergency admission due to an unintentional injury.

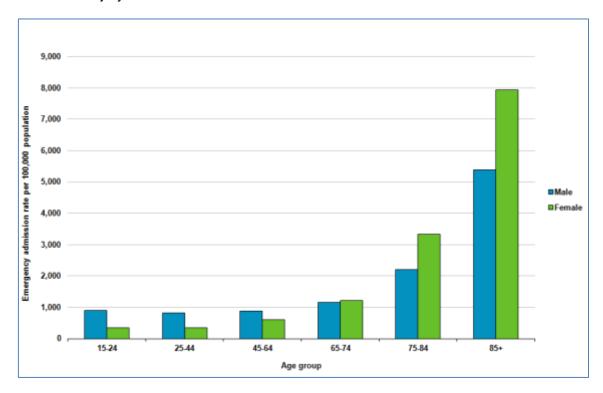


Figure 10: Emergency hospital admissions as a result of an unintentional injury; rate for adults aged 15 and over by aged group; year ending 31 March 2015

There is a clear increase in admission rates for individuals aged 65 – 74 compared to younger age groups; however the rates in the over 75s, and particularly over 85s, for both males and females, demonstrate a significant concern for the safety of our older generations. With the predicted rise in Scotland's population over the next decade it is very likely that emergency hospital admission due to unintentional injury will also increase.

#### 5.2 Cause and Injuries Sustained

Similar to the under-fives, over 90% of injuries to the older age group occur within the home.

In 2014/15 there were 23,632 emergency admissions to hospital for an unintentional injury in those aged 65 and over, with 87% of these admissions being the result of a fall. The death rate from falls is highest in this age group – particularly the over 75s – with 138.5 deaths/100,000 population from falls compared to 16 deaths/100,000 population as a result of a fall in over 15s. In addition to falls, older people are at a slightly elevated risk of burns and scalds, though falls far outweigh these types of incidents.

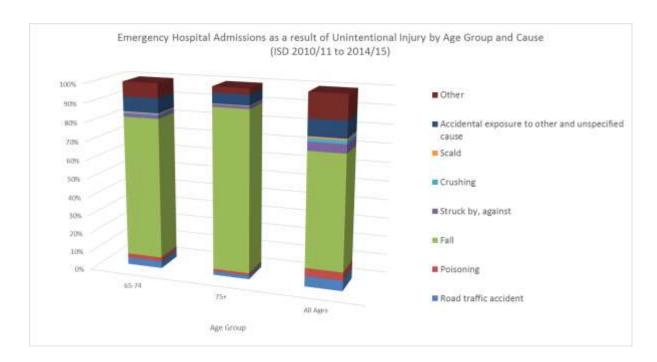


Figure 11 Emergency hospital admissions as a result of Unintentional Injury in Scotland by Cause and Age (ISD 2010/11-2014/15)

Fractures (particularly of the femur in the over 75 age group) and head injuries were the most common main diagnoses for adults who had an emergency hospital admission as a result of an unintentional injury, but some this is a reflection of the types of injuries that will result in a hospital admission rather than the nature of the injuries sustained as a result of an unintentional injury. Unintentional injuries (those that result in emergency hospital admission at least) tend to be more severe in this age group (as seen with the under-fives too) perhaps due to increase bone fragility in older people.

#### **DEMENTIA**

Research shows that people with dementia are three to eight times more likely to fall than people without dementia. In Scotland in 2016 there are an estimated 90,000 people living with dementia – around 86,500 of these are over 65.

Some of the common issues that relate particularly to home safety are:

- Difficulty remembering recent events
- Reduced attention span
- Difficulty processing visual information and impact spatial awareness
- Difficulty with sequencing and problems with making choices
- Impaired planning and abstract thinking

The projected increase in the elderly population means the numbers of people suffering from this condition is likely to increase too, with the subsequent impact on unintentional harm.

#### 5.3 Loneliness and Isolation

 Older people are more likely to be affected by loneliness and social isolation - amongst the older old (those aged over 80 years), rates of self-reported loneliness climb steeply to approximately 50%<sup>29</sup>.

- There are many reasons for this including retirement and bereavement. Older people are also often carers for loved ones which can lead to isolation.
- Low income, poor physical and mental health and cognitive and sensory impairment are all other factors.

An Age Scotland survey found that more than 80,000 people aged 65 plus in Scotland describe themselves as often or always feel lonely. Across the UK as a whole the figure is more than a million. Loneliness is a huge issue which affects people all year round. The survey results, from Age Scotland's sister charity Age UK, reveal that around two in five (39% or about 350,000) older people in Scotland say their TV is now their main form of company<sup>30</sup>.

The effects of loneliness and isolation on physical and mental health and wellbeing often overlap in older age giving a rationale to provide particular support to those going through the transition of growing older that may lead to loneliness and isolation. Factors include increased blood pressure, heart disease, poor sleep, depression, and a greater chance of developing dementia. In addition, there are also links with increase alcohol consumption, poor diet and exercise and smoking with the subsequent toll on health.

These effects are particularly important when we consider some of the contributory factors associated with unintentional injuries in the home. For example poor mobility and health can lead to falls, cognitive impairment can lead to poor decision making and forgetfulness e.g. leaving cooking unattended, and alcohol consumption and smoking which are key contributors to house fires.

#### 5.4 Population Change and Unintentional Injury

Scotland's population is projected to increase by nine per cent between 2012 and 2037; however this increase is not spread evenly across all age groups of the population as Figure 12 shows:

<sup>&</sup>lt;sup>29</sup> Age UK, 2010

<sup>&</sup>lt;sup>30</sup> Age Scotland (2014) *80,000 Scots aged 65+ lonely.* Available from http://www.ageuk.org.uk/scotland/latest-news/archive/more-than-80000-scots-aged-65-plus-always-or-often-lonely/

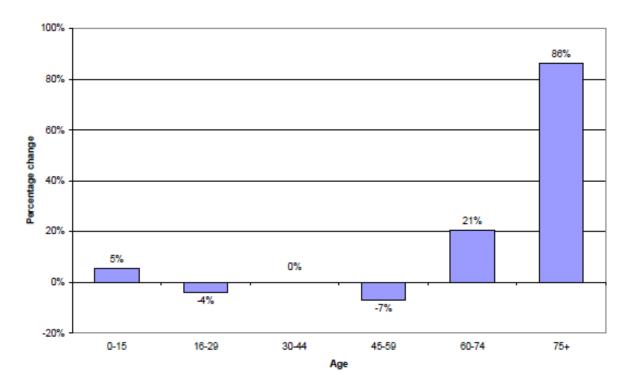


Figure 12: The projected change in Scotland's population by age group, 2012 – 2037 (National Records Scotland)

- The population aged under 60 is projected to remain fairly constant.
- The number of children (those aged 0-15) is projected to increase by 5% from 0.91 to 0.96 million. This increase is due to children in the 5-11 age group who are projected to increase from 383,000 in 2012 to 424,000 in 2037 (an increase of 11%).
- There is a projected small decrease in the 45-59 age group.
- There is a projected small increase in the 0-15 age group.
- The number of older people is projected to increase significantly especially the 75+ age group.

Household occupancy will also change as the population ages with increases in single occupancy homes (Figure 13) and in those headed by someone aged 65 or over; increasing links with loneliness. By 2037, there are projected to be 966,600 households headed by someone aged 65 and over, an increase of 54% from 2012. The increases in household numbers are even more striking when focussing on those aged 85 or over. The number of households headed by someone in this age group is projected to more than double from 77,400 to just over 200,000<sup>31</sup>. In addition to increasing the number of unintentional harm incidents this also has potential consequences for incidents of unintentional harm when social isolation and the ability to respond and raise alert to an incident is taken into consideration.

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<sup>&</sup>lt;sup>31</sup> National Records Scotland (2014) *Household Projections for Scotland, 2012-based.* Available from http://www.nrscotland.gov.uk/files/statistics/household-projections/2012-based/html/household-projections-2012-variant-household-projections.html#chp52

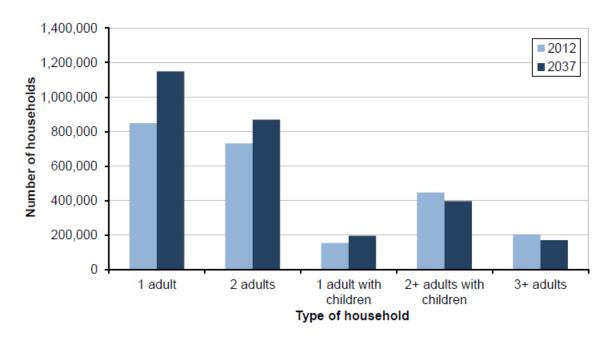


Figure 13 Projected number of households in Scotland by household type, 2012 and 2037. (National Records Scotland)

The population and household changes will potentially have a sizeable effect upon the number of individuals experiencing incidents of unintentional harm. In the absence of preventative strategies this will be extremely costly to public services in terms of response and treatment costs. It is therefore important that a coordinated approach is taken to focus on early education and intervention and there is a shift in the allocation of resources towards upstream engagement and identification of risk.

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## 6. Deprivation and Family Structure

#### 6.1 Key Findings

Unintentional harm can affect any individual or household regardless of economic background. However, analysis of a number of datasets, as well as international academic research clearly demonstrates that those individuals living in Scotland's most deprived communities are more likely to experience an incident of unintentional harm.

In Scotland the Scottish Index of Multiple Deprivation (SIMD) is used to measure deprivation at a local level. Datazones are divided into five group (quintiles) with decreasing levels of deprivation (from 5 to 1). The overall deprivation score is a combination of a number of indicators ('domains') including Employment, Income, Health, Education, Skills, and Training, Geographic Access to Services, Crime and Housing.

- In 2014/15 children in the most deprived areas had a standardised discharge ratio approximately 19% higher than the Scottish average. For adults, this was nearly 40% higher than the Scottish average
- Taking into account the age and sex breakdown of the population compared to Scotland there were more deaths from unintentional injuries in deprived areas than less deprived areas (the standardised mortality ratio was 49% higher in the most deprived area and 37% lower in the least deprived area compared to the Scottish average).
- Road traffic collisions and accidental dwelling fire rates also increase with increasing deprivation.

#### 6.2 Deprivation

The deprivation trend is shown for deaths and emergency hospital admissions as a result of unintentional harm, loneliness and social isolation, road traffic collision injuries, dwelling fires, and mental well-being; and is backed up by a significant body of academic study too. This fits with other policy areas on reducing inequalities and tackling poverty and with the focus of Phase 1 on victims of crime. This is on a sliding scale - it's not just people in the *most* deprived areas that experience it but that even those in *slightly* deprived areas experience unintentional injury disproportionately.

Deprivation is not the only factor of this type, a lot of academic research has identified that household structure is important and other factors that contribute to family 'stress' which include lone households headed by an older person, and households with one parent/carer and one or more young children.

Some of the higher prevalence in more deprived areas may be due to:

- Lower incomes (which is one measure of deprivation) could mean safety equipment is prohibitively expensive.
- Other factors which contribute to family stress and chaotic lifestyles and which are linked to certain aspects of unintentional injuries e.g. drug and alcohol misuse are higher within deprived areas.
- Poorer health within more deprived areas could mean falls and other things in older people are a) more prevalent or b) result in more serious injury when they occur due to poorer overall health.

Figure 14 shows that children aged under 15 living in the most deprived areas are more likely than children in the least deprived areas to have an emergency admission to hospital for an unintentional injury (approximately 19% higher than the least deprived areas).

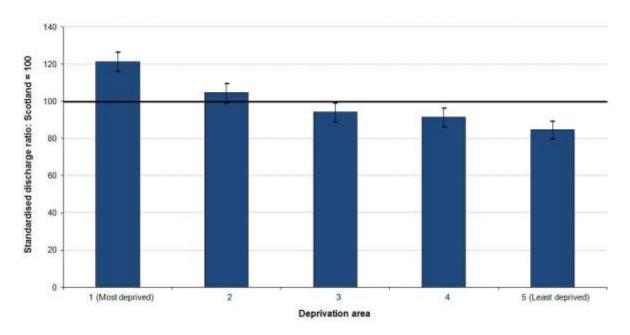


Figure 14: Emergency hospital admissions as a result as a result of an unintentional injury, children aged under 15 by deprivation quintile; year ending 31 March 2016 (Information Services Division)

This gap is even more evident when looking at emergency admissions to hospital for an unintentional injury in adults aged 15 and over (Figure 15). The difference between the most and least deprived areas is almost 40%.

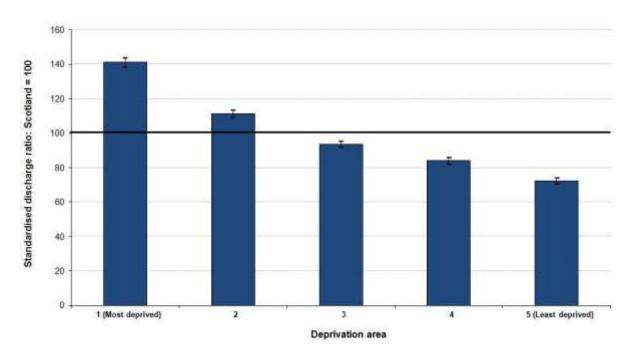


Figure 15: Emergency hospital admissions as a result of an unintentional injury, adults aged 15 and over by deprivation quintile; year ending 31 March 2016 (Information Services Division)

Furthermore, deaths from unintentional injury in adults aged 15 and over during 2014 show that there were more deaths from unintentional injuries in deprived areas than less deprived areas (the standardised mortality ratio in 2014 was 49% higher in the most deprived area and 37% lower in the least deprived area compared to the Scottish average) (Figure 16).

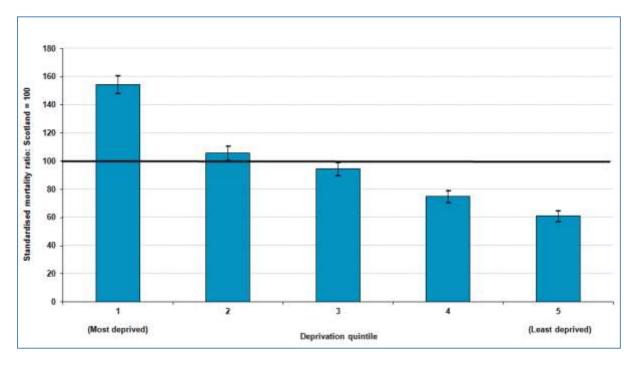


Figure 16: Deaths as a result of an unintentional injury, adults aged 15 and over by deprivation quintile, standardised mortality ratios and 95% confidence intervals (Information Services Division)

People within deprived communities are also more likely to experience for dwelling fires and road traffic collision injuries.

- In the main there are higher numbers of road traffic collisions within more deprived areas<sup>32</sup>. Additionally, people from more deprived areas are more likely to be injured in a road traffic collision (irrespective of where the collision occurs). As a result engineering measures that modify the physical and traffic environment are useful where accidents occur, but wider policy measures in the places where the casualties come from should also be implemented.
- Accidental dwelling fires are more prevalent in more deprived areas the accidental dwelling fire rate in the 15% most deprived areas of Scotland is over double the rate seen in areas that are not within the 15% most deprived areas.

#### 6.3 Prevention and Inequality

Prevention strategies that involve the enforcement of legislation across all boundaries and environments improve the safety of the whole population equally, however the European Child Safety Alliance in their 2012 child safety report cards<sup>33</sup> highlight that in situations where laws and regulations do not apply retrospectively this can increase inequality: for example, a requirement for thermostatic mixing valves that only applies to new or refurbished buildings could increase inequalities if the most at risk families are the least likely to live in buildings impacted by the requirement. Giving consideration to the impact 'blanket' legislation or policies may have on particular groups or locations (e.g. rural/urban etc) is important in ensuring well-intended interventions does not disadvantage any group. In addition, as highlighted in the recommendations in sections 1.2 and 7 in this summary report, there is the need to develop targeted recommendations to particular at risk groups (e.g. the 0-5s and their parents/carers, the over 65s and people living in more deprived areas).

The same report<sup>34</sup> highlights that countries who are further ahead in addressing inequalities in child injuries are those who have analysed the issue to better understand the risks and then adopt actions that address the specific risks. The National Strategic Assessment for Unintentional Harm taken the first step to better understand the issues but following this up with actions that address these specific risks will be key to affecting change.

<sup>&</sup>lt;sup>32</sup> Child Pedestrian casualties and deprivation. James Green, Helen Muir and Mike Maher. Accident analysis and prevention 43 (2011)

<sup>&</sup>lt;sup>33</sup> European Child Safety Alliance in their 2012 child safety report cards http://www.childsafetyeurope.org/reportcards/info/scotland-report-card.pdf

<sup>&</sup>lt;sup>34</sup> European Child Safety Alliance in their 2012 child safety report cards http://www.childsafetyeurope.org/reportcards/info/scotland-report-card.pdf

## 7. KEY PRIORITIES AND RECOMMENDATIONS

In order to identify a range of priorities and recommendations to support a coordinated approach to tackling unintentional harm in Scotland an event was held in November 2015 with a range of key stakeholders representing both the public and third sectors. As part of the workshop participants were asked to think about the evidence in the presentation which summarised the strategic assessment, and their own experience, and suggest the three main priorities for BSC Phase 2. Although participants expressed their ideas in different ways, five main priorities emerged.

#### 7.1 Priorities

Theme	Comments
Deprivation	<ul> <li>The approach to addressing unintentional harm should link to the needs of local communities, focusing on tackling inequality and building community capacity.</li> <li>There are opportunities to work in partnership when engaging vulnerable and at risk people to maximise contacts and education around unintentional harm.</li> <li>This priority links with clear national focus on tackling inequality and should be explicitly reflected in relevant strategy and policy e.g. health inequalities work and work on poverty and inequality.</li> <li>Evidence suggests that offering home safety audits in the course of routine home visits, particularly to disadvantaged families could result in improvements to unintentional harm rates. Access to follow-up equipment in addition to education is a necessity here.</li> </ul>
The Under- Fives	<ul> <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.</li> <li>This priority links with clear national focus on early years and children and young people and should be explicitly reflected in relevant strategy and policy.</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> <li>Evidence suggests that offering home safety audits in the course of routine home visits, particularly to disadvantaged families could result in improvements to unintentional harm rates. Access to follow-up equipment in addition to education is a necessity here.</li> <li>Some evidence indicates that installing thermostatic mixing valves to hot water sources and installing hardwired smoke detectors and sprinklers in all properties (or particular properties where people are at a greater risk of unintentional harm of this type) would reduce scalds and injuries from fire.</li> </ul>

#### • There should be a particular focus on falls.

- This is an increasingly important area due to Scotland's ageing population and associated rise in the number of people living alone.
- Any reduction will have potential impacts on health and social care costs.
- The merger of health and social care could be a possible influencer to assist in streamlining services and keep people safe within their own homes

# The Over 65s

- There are clear opportunities to focus on prevention. This may mean shifting resources.
- This priority links with clear national focus on community-based care and ageing well and should be explicitly reflected in relevant strategy and policy
- Evidence suggests that offering home safety audits in the course of routine home visits could result in improvements to unintentional harm rates.

  Access to follow-up equipment in addition to education is a necessity here.
- Some evidence indicates that installing thermostatic mixing valves to hot
  water sources and installing hardwired smoke detectors and sprinklers in all
  properties (or particular properties where people are at a greater risk of
  unintentional harm of this type) would reduce scalds and injuries from fire.

## Strategic data gathering, analysis and sharing

- 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.
- We need to understand what works and why and adapt these principles.
- 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.
- Linking data sets at a national level will assist to provide a clear picture.
- There is a need for more on understanding the psychological component of unintentional harm.
- 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.
- 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 unintended positive outcomes around unintentional injury.
- 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.
- 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.
- 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.

## Bridge gap between strategy and delivery

- Need for clear national policy, targets, statement of intent or statutory levers to focus multi-agency issues off unintentional harm.
- Potential to develop a national prevention strategy for unintentional harm.
- There is a need to develop local assessments and/or mapping to help inform the picture of unintentional harm at a community level.
- Individuals should feel empowered to better understand risks and make safe choices to live safely with a negligible risk of unintentional injury.

Participants were then asked to identify the essential next steps that would make a real impact on unintentional harm in Scotland. These next steps, and the priorities identified above, have helped to inform the recommendations listed below.

#### 7.2 Recommendations for Action

- 1. Clear leadership, improved ownership and better communication and coordination of activity for unintentional harm prevention; particularly within the public health sector of statutory agencies such as health boards and central and local government. The problems need to be tackled in a more coordinated manner utilising joint resources to provide preventative interventions and reduce risk. Supporting BSC Board members and Phase 2 executive/steering group members to develop networks which are able to respond to the findings within the strategic assessment is a key part of this.
  - a. A national strategy for unintentional harm or at least for the identified priority areas should be developed - there is some evidence that those countries and agencies adopting these strategies have achieved greater progress in promoting safety; this has certainly been evidenced by the improvements Scotland's road safety framework has contributed to. This document would:
    - i. Be informed by the evidence, communities and partners.
    - ii. Clearly outline the scale of the problem in Scotland and identify key priority areas setting out how everyone can contribute to the agenda and encourage people to work together.
    - iii. Identify clear lines of responsibility, nationally and locally.
    - iv. Ensure unintentional harm is seen as a key priority for a range of partners and is integrated into local community planning arrangements.

- v. Include examples of effective practice and prevention programmes that could be adopted locally and nationally to reduce injuries within specific groups.
- vi. Support the greater gathering and analysis of data around unintentional harm in order to fully appreciate the scale of the problem.
- vii. Include a performance framework measurement and evaluation framework.
- b. 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.
- c. The priority-setting process, in addition to the strategic assessment data analysis makes it very clear that all policies and organisations that deal with themes like inequality, poverty and deprivation, children and young people, older people and public health in addition to local community planning and community safety plans and public health strategies should all make explicit reference to unintentional injury at some point. This should involve engagement with the organisations involved in the aforementioned.
- 2. Enhancing capacity and infrastructure and improved joint working. Specialist skills and training are required and Phase 2 is taking place in the current climate of decreases in home safety and road safety officers and other specialist roles in unintentional injury prevention. Financial resources are also important data from UK Clinical Research Collaboration quoted by Nicholl showed that injury contributes 6.6% of UK Disability Adjusted Life Years (DALYs)<sup>35</sup> yet receives only 0.3% of health research funding in 2004-05. Improved joint working becomes even more important in this context.
  - a. Based on the findings of the Strategic Assessment initial prioritisation of national activity should focus on the themes of deprivation, 0-4 years and 65+ years; and more broadly home safety ensuring existing policy areas and partners learn from the wider findings of the strategic assessment.
  - b. At a local level CSPs should be supported to adopt injury prevention as a core priority. This should also be mirrored by the integrated Health and Social Care Boards with clear communication and joined up working between the

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<sup>&</sup>lt;sup>35</sup> One DALY can be thought of as one lost year of "healthy" life. The sum of these DALYs across the population, or the burden of disease, can be thought of as a measurement of the gap between current health status and an ideal health situation where the entire population lives to an advanced age, free of disease and disability. Source: World Health Organisation

- two forums. A wide range of partners need to take responsibility for unintentional harm and this should be evident in their plans and frameworks.
- c. Enhancing the role of practitioners with a role to play in the prevention of unintentional harm such as health visitors, Scottish Fire and Rescue Service officers, early years practitioners and learning from existing joint working is important. Developing community networks and 'community intelligence' should also be a key component. Linking in with RoSPA, Health and Social Care Partnerships, schools via the Curriculum for Excellence, care providers, play providers etc. should all begin to contribute to enhancing capacity and improving joint working.
- d. Learning from practise in areas with statistically significantly low levels<sup>36</sup> of unintentional harm and/or areas where there unintentional harm is a priority<sup>37</sup> and sharing approaches that work from existing evidence of good work in Scotland and elsewhere is an important part of this.
- 3. More evidence principally in the form of injury surveillance including basic information about the injury sustained and demographic information and details of the the injury mechanism, where it occurred and what the individual was doing at the time of the incident can all be used to develop and target approaches to prevent unintentional injuries.
  - a. There is a requirement to improve the collation, recording and sharing of data in relation to unintentional harm. This data should be used to inform future preventative activity.
  - Cost benefit analysis and robust evaluation of different interventions should be undertaken with evidence of effective practice published and widely shared.
  - c. CSPs and partnership should be supported when undertaking local assessments to include unintentional harm and embed national priorities.
- **4. Tangible actions and interventions** including community-led work which focuses on altering behaviour; education; promoting environmental change within the community; or passing and enforcing legislation, seek to change social norms about acceptable safety behaviours. A combination of interventions targeted and more general are likely to be most effective at preventing unintentional injury<sup>38</sup>.

<sup>37</sup> For example Fife and South Lanarkshire community safety partnerships have unintentional harm as a priority. A number of others have fire and/or road safety as a priority.

<sup>38</sup> There is a lot of information on what works in injury prevention within Appendices 1 and 2 that accompany the strategic assessment.

<sup>&</sup>lt;sup>36</sup> ISD are currently analysing this data.

- a. Following on from approached taken by Phase 1 of the BSC a small number of pilot/demonstrator sites should be identified to champion a coordinated approach to unintentional harm bringing together a range of partners and exploring effective practice. These should be areas of higher deprivation, areas with higher populations of under-fives or over 65s or places with higher incidence of unintentional injury.
- b. Identify geographical areas of immediate need to enable directed action, monitoring outcomes and undertaking cost benefit analysis to champion positive results.
- c. Identify a small number of tangible actions that make a recognised difference and provide additional resources for these. Encourage people to try and test ideas, and share information about what works.
- d. Targeting physical prevention mechanisms and education to priority populations<sup>39</sup> and geographical areas<sup>40</sup> this links to the importance of robust injury surveillance being used to inform these interventions.
- e. Design, technology and legislation. The wider environment physical, social and emotional is crucial to the generation or avoidance of injury risk and much of this is controlled only through technology and legislation.

<sup>&</sup>lt;sup>39</sup> Under-fives, Over 65s and Areas of higher deprivation.

<sup>&</sup>lt;sup>40</sup> Areas of higher deprivation, Places with higher populations of under-fives and over 65s, Places with higher than average incidences of unintentional harm.